UNITED STATES NUCLEAR REGULATORY COMMISSION

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BRIEFING ON THE FUEL CYCLE OVERSIGHT

PROCESS REVISIONS

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THURSDAY

APRIL 29, 2010

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The Commission met at 9:30 a.m., the Honorable Gregory B. Jaczko, Chairman, presiding.

COMMISSIONERS PRESENT:

GREGORY B. JACZKO, Chairman

KRISTINE L. SVINICKI, Commissioner

GEORGE APOSTOLAKIS, Commissioner

WILLIAM D. MAGWOOD, IV, Commissioner

WILLIAM C. OSTENDORFF, Commissioner

ALSO PRESENT:

NRC Staff:

MARTIN VIRGILIO, Deputy Executive Director for Materials Waste, Research, State, Tribal and Compliance Programs

CATHERINE HANEY, Deputy Director, Office of Nuclear Material Safety and Safeguards

DANIEL DORMAN, Director, Division of Fuel Cycle Safety and Safeguards, NMSS

LUIS REYES, Regional Administrator, RII

JOSEPH SHEA, Director, Division of Fuel Facility Inspection, RII

Stakeholders:

JANET SCHLUETER, Director, Fuel and Materials Safety, Nuclear Energy Institute

MICHAEL BOREN, Regulatory Compliance Manager, U.S. Enrichment Corporation

SCOTT MURRAY, Manager, Licensing & Liabilities Nuclear, Global Nuclear Fuel

ROBERT LINK, Manager, Environmental, Health, Safety, & Licensing, AREVA

JENNIFER WHEELER, Licensing and Integrated Safety Analysis Manager, Nuclear Fuel Services

LINDA CATALDO MODICA, Chair-Fuel Facility Working Group, Sierra Club Nuclear Issues Activist Team

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

CHAIRMAN JACZKO: Good morning, everyone.

We have our oversight meeting this morning, or actually our meeting this morning on the oversight approach for fuel cycle facilities. And this, I would note, is the first meeting where we have our full complement of Commissioners. So we welcome Commissioner Apostolakis this morning.

He is no stranger to this building. And he has been with us for -- with the agency in one capacity or another for quite some time. So, we welcome him.

The meeting today is, as I said, to talk about the Commission's process for doing oversight of the fuel cycle facilities. And I think as I have looked back at this issue, it is clear that we have a history of starts and not a history of finishes on this issue.

So, hopefully today will be the start of the finish on, I think, an enhancement to our oversight process.

As I look broadly at the principles that I

think would be important in improving our oversight process for the fuel cycle facilities, we are looking ultimately at something that is predictive in nature, that provides a degree of openness and transparency, that I think begins with a fundamental baseline type of inspection, consistent inspection program for all the facilities, and then ultimately, it's just a way to ensure how we assess the significance of problems that we identify and having a very systemic way to do that and then a systematic way to take those findings and determine what action is appropriate by the agency.

So that seems to me the core principles that I see with this issue. And I think there's a lot more detail, certainly, that would need to be worked out and talk about timing and how we can accomplish everything we need to accomplish.

So I look forward to a very productive meeting today to hear about the staff's approach. Then we will hear from stakeholders who can talk to us about what they see, I think, as the challenges and the advantages of a new system. Again, trying

to figure on how we get to the end point.

The Commission has in front of it a voting matter, a paper with staff recommendation for a way to proceed. And today I think is just an opportunity to flesh out the staff's position and the other positions. And ultimately, the Commission will have an action to take to respond to that paper.

So, with that, I would turn to my fellow Commissioners, if they want to make comments.

Commissioner Svinicki.

COMMISSIONER SVINICKI: Thank you, Mr. Chairman.

As you describe, we do have a paper in front of us, but I still think that today's interaction will be very, very valuable in informing us in acting on that matter. And obviously, the paper is where we will document whatever the Commission's outcome and the instruction that will provide to the staff.

But there has been tremendous staff work and engagement with the industry that's already gone

on. I'll have some questions about some of that engagement and some of the issues that are alive.

I do want to note, Mr. Chairman, that we are now complete, and I welcome our new colleague. And as I prepared for today's meetings, I was thinking I know I will really benefit from his expertise on risk assessment and I think that just as a colleague, that will really inform this issue and I look forward to hearing the questions and views he will express today.

Thank you.

CHAIRMAN JACZKO: Commissioner Apostolakis?

COMMISSIONER APOSTOLAKIS: Thank you, Mr. Chairman and Commissioner Svinicki, for the kind words. This is the first time I am sitting on this side of the table. The view of the audience is certainly better. And, of course, my voice decided to betray me today on my first public hearing, so I'll do my best to try to be understood later.

CHAIRMAN JACZKO: Commissioner Magwood.

COMMISSIONER MAGWOOD: Thank you, Chairman.

Let me also add my welcome to Commissioner Apostolakis. Looking forward to working with him and learn about the dirty details of PRA from him as we go forward.

This is a subject I find very interesting. I started my career working in fuel cycle issues and facilities, and the breadth of issues associated with fuel cycle facilities is something that I would like to discuss with the staff as we go forward with this to see exactly how we can best put an oversight process in place that assures safety. So I have a lot of questions about this, and I look forward to it.

By the way, this is the first Commission meeting where I actually know most of the people at the table, so I feel like I'm beginning to get into this whole Commissioner business. So I appreciate your help in all this. Thank you.

CHAIRMAN JACZKO: Commissioner Ostendorff.

COMMISSIONER OSTENDORFF: Thank you, Mr. Chairman. I add my welcome to George here to join this group. I appreciate very much the hard

work that's been done by the NRC staff on this issue and also the thoughtful inputs and discussions by other stakeholders.

I know these are complex issues, and I have had some experience with one of a kind facilities in my time at the Department of Energy dealing with uranium, plutonium in the nuclear weapons complex, so I realize this is a very different area from that of the commercial reactor plant business.

So, I'm really looking forward to learning today and asking some questions. I thank you for being here.

CHAIRMAN JACZKO: With that, Marty, I turn it to you to begin the staff presentation.

MR. VIRGILIO: Thank you, Chairman.

Good morning, Chairman, and good morning, Commissioners. On behalf of our Office of Nuclear Material Safety and Safeguards and our Region II staff, I want to thank the Commission for providing us this opportunity today to talk to you about our vision with respect to the future of the fuel cycle

oversight process.

With me today I have our Regional Administrator, Luis Reyes from Region II and Joseph Shea. Joe is responsible for the division that has oversight of the fuel cycle facilities in Region II.

And on my right I have Cathy Haney, who is the Deputy Director of Office of Nuclear Material Safety and Safeguards, and Dan Dorman, who is the Division Director responsible for the fuel cycle facilities in MNSS.

So, with that I just want to give you a brief overview. The evolution of the fuel cycle oversight process I think has been ongoing since its creation. It was modeled after the systematic performance of licensee -- systematic assessment of licensee performance, a SALP program that we had for the reactor fleet back in the 1970's, and it has evolved since its inception. And it has evolved slowly but continuously. And that's, I think, consistent with our value for continuous improvement for all of our important processes.

But the staff -- while the staff has made

some headway in this area, I would say that it has not been much, and has not been done in a most efficient and effective way. And that is why we step back today. And, I think, we as the staff, and most of the stakeholders that we have interacted with, believe that there are better ways to move forward and make the process more risk-informed, make the process more performance-based, make the process more open and transparent, and make the process more predictable.

Those are some of the attributes that we see in the reactor oversight process today. And you will hear a little bit more about where we think we are today and where we think we want to be as the presentation is made to you.

I would like to say that the staff, and I believe that the staff has been working very closely with the industry representatives and other stakeholders all along throughout this process. We believe that the proposed schedule that we have included in the Commission paper and we have outlined for moving forward is a reasonable schedule

that will allow all the stakeholders to meet their other needs, and particularly what we have heard from the industry representatives with respect to the cumulative impacts of everything that we have ongoing today as initiatives.

And I want to say that on behalf of the staff, we are very conscious of those cumulative impacts, and we would never do anything that would distract the industry from their safety and security mission. That is critical as we have laid out the schedule that we want to make sure that we are sensitive to other activities that they have ongoing.

The Commission paper that, Chairman, as you mentioned, is at the heart of this briefing, and it details the history of the oversight process, the pros and cons of various alternatives we have considered, and our vision for making the process a better process.

We intend, through this briefing, to provide you enough detail, nothing that's not in the paper, but to give you an opportunity to ask us some

questions about, maybe, other issues that are on your mind to help you make your decision about this issue.

With that, let me turn it over to our Deputy Director of MNSS, Cathy Haney.

MS. HANEY: Thank you, Marty.

Chairman and Commissioners, what I would like to do is to elaborate a little bit on the Chairman's remarks that we have been involved with -- this has been a long process for us and we have been working on this since around 2000, for 10 years -- and just to highlight an area where as Marty said, we are focused on cumulative impacts on our stakeholders as well as internal to NRC, where that has come into play in the past also.

My hope in doing this is to establish a framework for Joe and for Dan to go into a greater depth on the particular aspects of the plan that's in front of you.

As I said, for the purpose of today, what I would like to do is to go back to the year 2000. And 2000 is when we revised Part 70. It was a major

revision to Part 70. One of the major actions in that particular timeframe was requirement for the licensees to develop qualitative, integrated safety analyses referred to as ISAs, and then also in those to identify the items that are relied on for safety.

Of course, concurrent with the rule change, we are also considering any changes that are needed in our inspection programs. They tend to go hand in hand, looking at rule changes and how we would implement that particular rule.

As we moved forward with this focus on the inspection program, we, again, interacted with the Commission in 2001. And at that point, the Commission directed us to proceed with a proposed new fuel oversight program, however, cautioning that it should not negatively impact the implementation of the revised Part 70. So, again, a direct reference to being cognizant of any cumulative effects in our areas.

Moving on into 2002, we, during that timeframe, had numerous interactions with our

stakeholders regarding the implementation of the rule. At that time it became apparent that we probably needed to step back on revising the oversight program and focus on the implementation of the rule.

So, at that point the Executive Director for Operations recommended to the Commission that we to step back and focus on the implementation of the rule.

Over the next 3 years, although we did step back on revising the oversight program, it wasn't put completely to rest. We, as Marty indicated, are always looking for continuous improvements in any of our particular activities. But we did focus on developing the infrastructure for the review of the ISAs that were being submitted by the licensee.

The next milestone or touch point on the oversight program came about in 2005. And that was linked to an agency action review meeting. And in particular in that meeting, the Commission directed us to evaluate the feasibility of developing

objective transparent risk-informed and performance-based facility specific performance indicators for the licensees. Again, picking up on some of the words that I am sure you saw in the paper with regard to transparency, risk-informed, and objectivity.

We moved a little bit forward with this, however, for various reasons. We suspended that activity in the 2006 time frame. But, again, between 2006 and 2008 we were very active. We were not sitting back at MNSS resting.

I would break our activities during that time frame down into three specific areas: One, we were continuing to develop and improve the risk-informed tools that we had at our hands.

We also reviewed and completed our review and approval of the initial ISA summaries, that was done in 2008.

And then during that time period, we worked -- supported the IG as they did an audit of the fuel cycle regulatory framework. And one of the recommendations that came out of that audit, I would

like to point out now, which was that the staff fully implement a framework for fuel cycle oversight consistent with a structured process such as the reactor oversight process.

Staff agreed with that recommendation and moved forward into conducting that activity. And that evolved into a steering committee that was formed between -- was co-chaired with Region II and MNSS to move forward to help guide the staff on moving forward and revising the oversight program.

Again, numerous interactions with stakeholders during this time period we issued a Federal Register Notice soliciting comment, also held numerous meetings with them, trying to be as open and possible, as we could possibly be and to engage them in developing the process.

This went forward into November of 2009, when we did suspend activity on moving forward in that path forward, specifically, with regards to Commission direction and also budget limitations.

But we did not step back, again, and not continue forward progress as we like to make.

That's the time period where we developed the paper that you have in front of us, and what we were under the -- our objective at that point was to develop a plan that would have an integrated and phased approach to risk inform the fuel oversight committee. That is the paper that's been mentioned a few times this morning and that will go into greater depth on it.

And with that framework, hopefully that provides a basis for Joe's presentation, as well as Dan's. But before moving to them, I would like to turn it over to Luis, who will provide for you a perspective on the Region.

MR. REYES: Thank you, Cathy.

Chairman, Commissioners, good morning. I just have some brief remarks.

But I would like to give you a perspective. In my position as Regional Administrator in Region II, I do have the privilege on behalf of the Commission to execute all the escalated enforcement that the ladies and gentlemen in the second panel receive. So, I have the honor

of calling them and informing them of the agency actions in that regard.

I happen to also have to do that with a third, 33 reactors in the fleet. And you cannot, being in my chair, compare the escalated enforcement, the additional inspections, the supplemental activities that we move on and the need for enhancing risk tools and uses with the fuel facilities, because it comes across when you do all this, in my personal opinion, that we are not helping to incentivize the licensees to use a corrective action program to identify issues early by giving them credit for that.

And in terms of our decision to where to put our resources, we don't use completely all the tools of risk insights to make those decisions. So, I just want to share that with you. It's not because I'm that knowledgeable. It just happens to be it gets funneled through me and you can’t help but in that day-to-day activity realize that there are opportunities to enhance our oversight.

I'm very sensitive about the workload that

the licensees have. And I think that speed moving forward is a real discussion that we should have. But in terms of direction, from my opinion, clearly there are some enhancements that the agency could take advantage of and I think it would benefit both sides.

Thank you. I'll turn it over to Joe now, who will start the real meat of the presentation.

MR. SHEA: Good morning, Mr. Chairman and Commissioners. To set the stage for Dan's discussion of the path forward, I want to take a couple minutes to describe the structure and implementation of the current oversight program that we do have for fuel cycle facilities.

On slide 3, the oversight program can be viewed as having three essential elements, and those elements would include inspection, enforcement and performance assessment.

With regard to the inspection element, the current program is governed by NRC Manual Chapter 2600, which lays out the roles and responsibilities within NRC for carrying out the inspection and

oversight program, it identifies the different inspection regimes that can applied to the range of facilities which includes core inspection, reactive inspection and supplemental inspections.

This manual chapter also specifies the number of inspection hours which are performed for each facility type across the range of inspection disciplines.

With regard to enforcement, non-compliances with regulatory requirements at the fuel facilities are currently treated under the NRC's enforcement policy, using the traditional enforcement approach. The revision to the enforcement policy or a revision is pending before the Commission provided up under SECY-09- 0190.

And that retains the use of traditional enforcement but enhances the sample base guidance provided for fuel cycle facilities by using the regulatory structures and concepts included in Subpart H, the ISA portion of Part 70, if you will.

On the third element, performance assessment, it was made reference earlier to the

systematic assessment of licensee performance previously done under reactors. And the current program for fuel facilities is much like that, consists of periodic reviews of performance at each facility. And that periodicity or that duration of that period can range from a nominal 12 months for the category one facilities to a nominal 24 months for the category three and other facilities.

The assessment period itself, the duration of that can be changed by the staff, depending on the collegial view of performance of that facility for the assessment period. And similarly, the staff can use the -- or does use the performance review to revise for the coming period of performance, the inspection resources that will be applied at that facility.

In terms of implementation of the program itself, the implementation of the inspection and the assessment elements of the program were shared between the Office of Nuclear Material Safety and Safeguards and Region II. MNSS does have lead responsibility in inspection space for criticality

safety and material control and accountability. And Region II has the lead for other aspects of facility performance.

The Office of Nuclear Security and Incident Response does have a role in managing both the program and implementing portions of the program for security oversight.

On slide 4, it's the staff's observation that the current oversight program is adequate to execute the NRC's Strategic Plan, safety and security strategic outcomes, as they are articulated in the supporting strategies. And the staff also observes, though, that the current plan has evolved and will continue to evolve slowly within that existing framework.

The staff is of the position, though, that the approach to making the improvements can be better focused around a more rigorously developed and articulated framework. And with that, we would be able to move more efficiently through a revision process.

Slide 5. In SECY-10-0031, the staff

requested that the Commission approve the staff's plan to develop a fuel cycle oversight process revision. And the purpose or goal of the proposed projects is to develop an oversight process that is more risk-informed, that is more performance-based, that is more predictable and provides a more transparent assessment of licensee performance. And Dan will touch on some of the details of that in a few minutes.

I would like to take a few minutes in the next couple of slides to characterize some of the elements of the existing program with regard to the attributes of being risk-informed, transparent, predictable.

Slide 6.

The current inspection program has been incrementally revised in the year since the implementation of the integrated safety analysis program to use the ISAs that were developed by the different facilities, submitted to the staff and approved to use those at tools for the inspectors to plan their inspection activities at the site.

For example, inspection procedures with regard to plant modifications and maintenance activities are examples of inspection activities that the inspectors use the ISA as a guide to what to look at.

However, the current oversight program also contains a number of programmatic inspection activities, inspection procedures in areas as diverse as management of operations to material, control, and accounting, and still contain requirements for inspectors to conduct nonperformance-based activities such as reviewing organization charts, reviewing training records and examining procedures for conformance to license documents, things that are not necessarily inherently indicators of the facility's performance.

In the previous slide, I remarked that the fuel facility program uses the traditional enforcement approach, and in this approach, the enforcement policy supplements provide guidance, but very little in the way of clear opportunity for considering risk information.

The revised policy, which is pending before you, does adopt a framework and terminology of Subpart H, and for future instances of enforcement where, for example, there is a straightforward violation with regard to the proper control and management of an item relied on for safety. The new policy and the guidance that the staff would develop to implement that should provide for a more streamlined decision-making on enforcement.

Slide 7. The current licensee performance assessment process is currently conducted by considering, among other things, the accumulation of enforcement actions that have occurred over an assessment period.

The licensee performance review process, as described in Manual Chapter 2604, takes the approach that the conclusions regarding licensee performance are reached by a consensus of NRC staff view conducting the process and acknowledges or is structured so that it's a quality of licensee performance. That's a judgment that the staff

brings to the table in a very qualitative way, is the basis for the collegial discussions.

To the extent that an accumulation of enforcement actions over a period may include some escalated enforcements, or the facility may have incurred a reactive inspection over that period, the staff can consider this, and to a limited extent, the process can be considered somewhat risk-informed.

However, overall, it is a very qualitative review, reminiscent of the SALP process that was referenced earlier and which was used in the reactor oversight until 10 years ago.

Slide 8. With regard to predictability in the current process, one area I would like to highlight is the NRC's decision-making threshold for dispatching inspections and assigning resources to inspections.

For decision-making on reactive inspections, those that occur principally in response to an event or a condition that were notified via the reporting requirements occurs at a

site, current guidance on making a decision whether we need to dispatch in a near term way additional inspection resources, that guidance is in Management Directive 8.3, and it does have some deterministic criteria that the staff uses to make those decisions. But unlike the decision-making process for reactive inspections and reactors, there are no quantitative thresholds currently contained in that guidance.

And, so, in terms of predictability, there are not infrequently questions from the stakeholders, the licensees and others how we made that decision and on what basis. And in the end it is on a qualitative basis from Management Directive 8.3.

With regard to the enforcement process, while the revision to the enforcement policy to adopt the structures and terminology of Subpart H will streamline enforcement for certain types of violations that may occur, the staff is aware that there is, in fact, a substantial degree of variability between licensee methods and details by

which any individual licensees prepared the ISA's.

Consequently, I think the staff recognizes that with the pending policy, there will be a limit to the degree to which the ISA informed enforcement policy will actually improve the efficiency and predictability or enforcement decision.

So we believe that even though the proposed policy is a step forward, there will be -- there remains other opportunities to find ways to risk inform the enforcement process. And again, Dan will touch on some of those.

Slide 9. In my description of the current licensee performance assessment process, I indicated the outcomes of that process can include supplementing the core inspection at the site for an upcoming period, and can include changes to the length of the assessment period itself.

However, there is essentially nothing in the current guidance that would allow an outside reader to be able to predict the outcome of those decisions based on looking at whatever performance evidence might be available like enforcement or

reactive inspections.

So, the process did not clearly include thresholds for those kind of decisions in changing inspection resources or periodicity for the process.

And finally on slide 10, with regard to transparency, we will note that the enforcement inspection results are generally publicly available. That is, they are put into ADAMS, with exceptions for security and security-related activities.

However, the availability of this information through various diverse portals and platforms does not really exist in the fuel program like it does in the reactor program, and so we believe there is opportunity to enhance the accessibility of the information. That is, while it is public, we think it can be made more accessible. And we see a project like this as the opportunity to take that on, as well.

And related to what I remarked previously about the use of traditional enforcement, the lack of clear guidance on consideration of risk in determining severity levels, then the decisions made

by the staff in our enforcement deliberations to either mitigate or escalate a severity level, again, lack transparent, because there is not a clear nexus to risk consideration in the guidance. So, thus the staff can be challenged to explain those decisions and the transparency of how we reach those.

So that's in a nutshell an overview of the current program. And I would like at this point to turn it over to Dan to talk about some of our proposals for taking it forward.

MR. DORMAN: Thanks, Joe.

Looking to the future on slide 11, we put before the Commission our proposal of the path forward. In the attachment to the SECY Paper, we included both a graphic depiction and a description of a general oversight framework that we will see a number of familiar attributes relative to the ROP where you had taken inspection finding, put it through a structured process for determining the significance of that finding, and then that would feed an action matrix where it would be clear the basis for the

staff's actions in terms of enforcement and any changes in the inspection program.

The plan touches in all of the areas that Joe has described. We would look to increase our risk insights into the inspection procedures in the baseline inspection program, as well as taking a broad look at the program itself and the need to redefine and refocus the inspection, perhaps remove some of the programmatic elements that Joe touched on and focus more on performance-based issues.

We propose to build a significance determination process that will use the existing ISAs, and I will go into that a little bit more.

And we envision in performance assessment that we would have an action matrix, something akin to what exists on the reactor side, but looking more at the fuel facilities and redefining what the levels would be and the actions that would be associated with such a matrix.

And finally in enforcement, we are envisioning that we would move toward a different process other than the traditional process.

And I will touch a little bit more on that later. But one of the pieces that we will need to consider in that is the corrective action programs of the licensees. And, again, I will touch on that briefly later.

Going to slide 12, as the Commission requested, we laid out a schedule of the activities over the next several years. The focus of the first year to year and-a-half of the effort would be on developing a technical basis for this. And I will touch on that a little bit more in another slide.

We would also start to work on the process development in some of the framework documents in terms of manual chapters during that period. But we would envision that, really, after we have gotten through the core of the technical basis development, would be when we would be really putting -- fleshing out the details of the implementation.

And we envision a transition period where we would, having already gotten stakeholder comments and put these procedures in place, that we would have a pilot implementation period before we got

into a full implementation. And throughout this period, we, of course, will be engaging all of our stakeholders to make sure that we have their perspectives considered in the development of the process.

Going to slide 13, a little bit more on the technical basis development, we believe that the ISA, as laid out in Subpart H, is a useful tool for focusing the staff's oversight efforts.

We envision that we would develop a screening tool that would use the information from the ISAs to identify items of the lowest safety significance that we would screen to put in the licensee's court for corrective actions. That process would rely on a corrective action program at the facilities.

These facilities do not have an overt regulatory requirement for a corrective action program the way the reactors do. So we would envision including in the baseline inspection process a problem identification and resolution inspection that would support the assumption of a

robust corrective action program to take the issues for licensee action.

And then for issues that do not get screened out as very low safety significance and warrant further review to assess their safety significance, we envision developing a flow chart to demonstrate a logic structure that would then be used to engage with the affected licensee's ISA. This recognizes that there is substantial diversity among these licensees in terms of their operations and the processes that they conduct, the hazards that they have, as well as a diversity among the licensees on the methods that they use to demonstrate compliance with Subpart H

So each of their ISA processes has unique attributes. So rather that building site specific unique notebooks, we would envision having a logic structure that the staff would then be able to use to engage each licensee.

As we develop that, we envision using existing performance history, enforcement history, to look at inspection findings and evaluate them

through this process as we develop it. We also envision that we will probably have to hypothesize some higher significance findings to truly test the program.

And we will also be looking at -- we recognize that the certificate holders under Part 76, the gaseous diffusion plants, do not have a requirement for an ISA; however, we believe that we will be able to work this with their safety basis to engage them in this structured process, as well.

Slide 14. We recognize that one of the challenges in this area will be a definition of thresholds for staff actions and for significance assessment. These are not quantified risk assessments. Mostly they are qualitative ISAs.

We looked at two options and described them in the paper of a qualitative or quantitative approach to defining thresholds and to the significance determination process. Recognizing that the existing ISA's are largely qualitative, the quantitative option that we looked at, would look at developing generic quantitative information to apply

to particularly human error probability aspects of the events that tend to get into these more significant issues.

That would be a significant additional undertaking, and we think that the number of issues that we expect to go through this process on a yearly basis is relatively small. And, so, the benefit is, of pursuing that additional effort, the staff recommended we pursue the qualitative option at this time.

In slide 15 in the area of risk-informing, we used the ISA's in the new facilities for the enrichment facilities for LES and USEC to prioritize the focus of the operational readiness inspections in the IROFS that had -- the items relied on for safety that had the greatest impact. And building on that experience, the staff believes we can incorporate similar insights into the baseline inspection program.

As I mentioned, then the ISA would then also feed the significance determination and ultimately the enforcement policy and the thresholds

for an action matrix.

We do recognize that this is a challenging undertaking. In slide 16, I think we already touched briefly on the diversity of operations and activities, as well as the diversity of the approaches to the ISA among the different licensees and the certificate holders.

We recognize that we have a lot of other things on the industry's plate right now in terms of regulatory initiatives and generic issues that call on the licensees' organizations to provide meaningful comment on agency initiatives. And it's partly for that reason that we have stretched this out from what we were looking at a year ago over several years.

We think there are some issues that we need to work through in the near term to resolve as we prepare into this relative to the ISA implementation.

Performance deficiency was a definition that we had discussed in the public meetings with the licensees last year. And we recognize that

there are some reservations that they have relative to a staff proposal that we would look at not only things that had a clear regulatory violation nexus, but issues where the regulatory violation was perhaps not as clear but there was apparent safety significance. And that's an area that we will continue to have stakeholder dialogue.

And I already touched on the corrective action aspect.

On page 17, we have described in the paper that we will come back to the Commission on a biennial basis to provide status reports. We envision as policy issues arise throughout this process, we will use that opportunity to bring issues to the Commission.

I think we have described in the paper our proposal to defer a focus on performance indicators as they are envisioned in reactor oversight process, but we will continue to look for quantitative measures that we could use that would be an effective indicator of licensee performance and support our oversight process.

The risk surrogates and thresholds will be one of the challenging issues where I would envision that relatively early in the process we will be bringing our thoughts to the Commission on that.

The incorporation of safety culture is an issue that will be tied into the development of the oversight process, and we will continue to follow the development of the safety culture policy statement and keep the Commission informed of our thoughts on implementation.

I touched on performance deficiency.

Safety/security interface was an issue recently raised in the ACRS's review of our Standard Review Plan that we will be considering also.

Finally, in the Commission paper on Slide 18 we acknowledge that we have described an approach, there are other ways to do this, incremental approaches to it.

We have proposed a holistic approach to the total oversight program. And we recognize that the Commission could choose other alternatives. And so at this point, we will be awaiting the

Commission's decision on our proposal.

Finally on slide 19, as Joe said, we believe the current process is adequate but warrants improvement. That we have made some improvements along the way, but we think that we can improve the total program using the existing ISAs.

The proposal we laid before you would have full implementation in 2014. And so the staff will now await the Commission's direction on what we proposed.

MR. VIRGILIO: Thank you, Dan.

That completes the staff's presentation. We are ready for questions.

CHAIRMAN JACZKO: Thank you. We will begin with Commissioner Svinicki.

COMMISSIONER SVINICKI: Thank you. I know, Mr. Chairman, with a full Commission you need us to be ever more mindful of the time than we have in the past, so that will require me to try to be succinct, and not always my strong suit but I will try.

Just a bit of commentary, I think that the

scene setting, Marty, that you did, and Cathy and Luis, I think, what I was reflecting on there is a couple of things.

One is that we talk about the experiences and development of the ROP. And one of the things I think that NRC is rightfully very proud of is that the ROP works as well as it does, because an oversight program is something -- it is not hard to put one in place but it's exceedingly hard to do well.

And, therefore, I think that -- I know we have pulled in some people into the fuel cycle oversight development that have experience with the development of the ROP, and I think some of those battle-hardened veterans know how hard this is to do thoughtfully and to have something in place that is really indicating to you and monitoring the things so that it is not giving you assurances that you shouldn't have.

So, again, I credit all the hard work that's been done and the fact that this is something that is difficult to do, although the agency has a

very successful track record in the ROP. And I am glad we are drawing upon that experience.

Now, this will make no one feel like I'm going to be succinct by pulling out this document, but what's interesting, Luis, is you talked about the high level principles. And I have been trying to review some of the public meetings and these transcripts are in ADAMS for anybody who has the intestinal fortitude to look through them.

But I looked through them to try to understand how our communication is and how our engagement has been going with stakeholders. And what I interpret here is the notion of being more risk-informed and having better predictability and the high level principles that, again, our three scene setters talked about.

I think that there is good alignment on that. And, so, it becomes a question of not the where are we headed, but how do we get there. And I am back again to how difficult I am sure it was in the ROP, as I have heard from people who worked on development.

But in looking at transcripts, I feel there is some high level disconnects. And I don't know -- the one in particular I was looking at was from last fall. It was from October 6, 2009, a category two public meeting. And thematically I felt like although the dialogue went on for many hours, that there was some issues that were returned to that I think were disconnects.

One, Dan, is something that you alluded to, performance deficiency. And, again, there is a discussion in here about looking beyond the regulations. And I think many of you were either at this meeting or you have talked to your colleagues who are at this meeting, and a Mr. Gibbs, who I think is an employee of NRR was fielding a lot of the answers to the questions.

But he made a comment in here -- and the reason I have this is I didn't want to paraphrase. But Mr. Gibbs says -- he is referring to -- again, there is a lot of back and forth, but he says, "As we talked the regulations and commitments, meaning voluntary commitments by the licensees, by

themselves may not address all significant safety or security risk aspects. Just an acknowledgment that we would be interested in performance deficiencies that may not involve regulations."

So, Dan, that is what you were talking about. And the discussion in the public meeting was about standards and looking at licensees that have adopted standards. And I think there was a suggestion that perhaps they would not have an incentive to go beyond the regulations if they felt that that put them at some jeopardy.

Would anyone like to react kind of thematically to this notion that the revised fuel cycle oversight process would be extra regulatory or have aspects of that?

Dan, since you touched, maybe you would like to touch on that.

MR. DORMAN: Yes. I think you have described well what the industry concern was. I would take it one step further, as I think they expressed in those meetings a concern that they administratively control things in their facilities

at a level tighter than the regulatory requirements. And if we are going to go cite against those, that would be a disincentive to do so, which clearly we do not want to provide that kind of disincentive.

I think that where the staff was coming from with the performance deficiency definition is, again, going back to the underlying principle in the ROP and a recognition that an inspector may find a safety concern that they have difficulty linking to a specific regulatory requirement, but we can put through a risk- informed review process and may come out with a risk significance to that, although there may not be a clear regulatory finding.

I would expect that that would be the rare circumstance. Our underlying assumption is that our regulations are sufficient to provide reasonable assurance of adequate protection of public health and safety. So, we would expect that to be the exception and not the norm.

COMMISSIONER SVINICKI: And I appreciate, because you did acknowledge that this an issue that

you will continue to have engagement with the stakeholders and the regulated community on it. I think it is important, obviously, that we calibrate and at least they understand what our expectations are for development of the oversight program.

The other thing that I would just emphasize that I think smeared throughout some of this public record and transcripts are the fact that the industry has said that they have not been able to provide the level of detailed comments that they would like, because we're still talking at a very philosophical level about some of these terms that we're using.

And it was interesting, Miss Wheeler, who was a participant in this meeting, and I think that she represents NFS and she just says, "The reason why you don't see a lot of substantial comments, is we don't know what to comment on yet." And she says, "We are not able to give you anything more than the general comments you have received."

And Mr. Vias, who is an NRC employee, says, “By themselves the four major

documents we handed out are overwhelming, and we know that."

So I appreciate, and I know you are sensitive to that. I know we will continue to work at the quantity of the types of documents at various levels that we are trying to share. I think that our stakeholders are trying to give meaningful input, I think we are trying to hear it. There is a real commitment to listening and understanding in here by the NRC staff. I encourage you to continue that. Thank you.

I went over anyway, and I told you I was going to try.

CHAIRMAN JACZKO: Thank you.

Commissioner Apostolakis.

COMMISSIONER APOSTOLAKIS: Thank you, Mr. Chairman.

The basis for performance-based risk informed oversight process is -- there are two elements to it. One is the performance requirements. And the other is the methodology that will be used.

So in comparing with reactor oversight process, there, of course, we have the core damage frequency and the larger, the release frequency.

Now, in this document that I read, I don't think there was anything that mentioned performance measures, metrics. And if you look at 70.61, there are performance requirements that have to do with dose, that have to do with intake, and so on. And I'm wondering why these cannot be used as a starting point for developing performance metrics?

I'm sure they will not solve all your problems, but at least you have a starting point to replace the core damage frequency, and so on. If you care to respond to this, please?

MR. DORMAN: Sir, the quantitative metrics that are provided in the performance requirements within the ISA structure form a -- they define the sequences that a licensee needs to evaluate for the identification of items relied on for safety. The Subpart H does not drive the licensee or the staff to require the licensee to quantify anything relative to those sequences.

So there is not, within the existing ISAs there is not a -- well, we have that ultimate hazard threshold, we don't have the underlying data to build that to define the outcomes in that quantitative way. So that would be further development.

MR. REYES: If I could maybe go at a higher level.

These facilities, the hazard, most of the time, is chemical, and it is only to the workers on site. So, the radioactive hazards measurement may not give you what the worst accidents that we are protecting against. So the hazards, really, are the chemical hazards instead of the radioactive hazards. So, it presents a difficulty in using the references you were talking about.

COMMISSIONER APOSTOLAKIS: But they do include chemical exposures, in theory?

MR. REYES: Yes, yes.

COMMISSIONER APOSTOLAKIS: It's is not as quantitative as the radiological --

MR. REYES: Correct. But you have to

include chemical releases.

COMMISSIONER APOSTOLAKIS: Well, then I have a philosophical problem. I don't know how you can have an action matrix if you don't have some metric. So you really have a major challenge in front of you.

But your question raises another more fundamental issue. You say that ISAs don't have the data, the ISAs do this, the ISAs that, 70.62 says that the ISA should provide a consequence and the likelihood of occurrence of each potential accident sequence.

Judging from what you told me, Dan, this is not done. Why not?

And let me tell you what my problem is. As you know, many of us on the reactor side didn't look at the ISA and get enthused by it. This is a major project here, a multiyear project. And if the ISA is the basis for it, it seems to me nobody will ever be able to change the ISA.

And I'm wondering whether there's a document someplace that gives me details as to how

the ISA differs from a PRA that is done for reactors, and what are the arguments for that difference?

I understand that the reactors we have a core we are protecting. You guys have hazards all over the place. But that cannot be the only reason.

So, is there such a document -- has anybody ever looked at the ISA with a critical eye and compared it with a PRA and said, yes, I can do what PRA does here, but I cannot do other things for these reasons? I think the critical evaluation of this type will be very important before we move on to developing this oversight process.

So, I'm wondering whether you have any thoughts about that?

MR. REYES: I don't know that in the review of the ISAs we did the concept you are talking about, which is trying to do the crosswalk.

COMMISSIONER APOSTOLAKIS: Right. And try to be -- I'm sorry.

MR. DORMAN: Just to your comment on

designating a likelihood. The ISA -- the requirements in Subpart H require the licensee to provide a qualitative or a definition of likely and unlikely and highly unlikely, but it's typically done in a qualitative manner.

COMMISSIONER APOSTOLAKIS: You are pushing me down. What is a qualitative --

MR. DORMAN: I'm only trying to describe what I have, sir.

COMMISSIONER APOSTOLAKIS: I think by qualitative you mean to have range and say likely, unlikely, which range must have some basis.

So, somewhere there, somebody said, anything between ten to the minus two, and ten to the minus four is unlikely. And I haven't seen that. I would like to see that.

I appreciate that you have a lot of uncertainty and you may not want to go with exact numbers, precise numbers, but, still -- I mean, there were some statements in the document like if you become quantitative, you become less transparent. I can never approve a document that

has a statement like that in it. That human error probabilities are very difficult to quantify?

This agency has been spending hundreds of thousands of dollars over the years doing that. In fact, right now the staff has been directed by the Commission to come up with a classification of problems and the appropriate human error models that apply to them.

And I think better integration of the MNSS side of the house with the reactor site would be very beneficial here. But to say that quantifying something makes it less transparent is just not acceptable, at least to me.

One final comment, if I may, unless you want to respond.

Okay, I have said enough.

Thank you, Mr. Chairman.

CHAIRMAN JACZKO: Commissioner Magwood?

COMMISSONER MAGWOOD: Thank you, Chairman.

It is easy to see this transition for Commissioner Apostolakis is going to be very, very difficult.

(Laughter.)

COMMISSIONER MAGWOOD: We will help you as much as you need during this difficult transition period.

What do I say after that?

First, let me make a comment about my colleague's concern about the lack of a clear comparison between PRA's and ISAs. I agree with that and support his desire to have some sort of analysis of that fashion. I think that would be very helpful in understanding this.

And I have actually -- when I was going through some of the background on this and reading some of the history, I saw that there is clearly a tension between sort of the old way and the new way in this entire process.

It sort of reminds me -- I think I have the right -- the B-36, for those who are aircraft history fans, which was a large bomber that was originally designed with propellers, and somewhere along the way somebody decided it was good idea to stick two jet engines on the either side. So you

had both -- you had a really horrible jet and a bad propeller-driven bomber, which was not very successful in either capacity.

And I wonder if that is kind of what we have created here, where we are sticking jets on a propeller-driven bomber? And are we trying to create a more modern process on a framework that really is an old not PRA-driven approach?

So in looking at this, I also recognize that on top of that difficulty, we are trying to apply this to a very broad range of facility types with different types of hazards. A conversion plant is not an enrichment plant, is not a plutonium processing plant. So this is a very, very difficult problem overall.

And I want to ask -- I want to direct this to Luis first, because he deals with this on the frontlines. In doing this, in going forward with this process, can you articulate what -- I don't want to sound too critical -- can you articulate what exactly were -- what improvements in our process where we have actually experienced? What problems are

we solving by doing this?

And are we creating more confusion than we are really solving the existing problems? Can you discuss that?

MR. REYES: Yes. I think that I can parallel for the last decade with the reactor side of the house improvements. And when Joe's staff is conducting inspections, he gave a couple of examples of things that we do in terms of the inspection program that we believe there is not a lot of benefit to it, because it is more in a compliance form than in a risk-informed selection of samples, selection of systems, selection of processes.

And that, to me, coupled with the current enforcement process, traditional enforcement policy ends up in an outcome where we are putting a lot of effort and the licensees are putting a lot of effort, and when you step back you say, is this really where we want to put our effort.

So the combination of factors, what I was trying to tell you was that the efforts of the regulator and the efforts of the licensee, in my view, could

be better served by putting attention in different areas.

And I'll ask Joe to chime in. And without going through a lot of examples, we can give you the examples, but you mentioned reviewing org charts. The sample when we look at a system or we look at a process, what to sample in the system? What to sample in the process?

The ISA gives you a general qualitative area, is this particular interlock important, more important than the other one? So you prioritize your resources and the countermeasures that prevent the hazard from being realized.

So, that's what we are searching for, how best to use our energy and the licensee to prioritize safety, to minimize the hazard, to reduce risk.

I don't know if I state it too high.

COMMISSIONER MAGWOOD: No. I appreciate that. And since we are running out of time, let me follow-up on Commissioner Apostolakis' question which is regarding the PRAs. Given that's the

objection, why are not PRAs a better approach to take to get there?

MR. REYES: I think the next panel will give you some thoughts on that. But I think what they will say is that because there's not a lot of detailed information like there is on the reactors, if you go to WASH-1400 in the 1970's, I mean, gives us a lot of, a quarter of a century of those techniques and information and all that.

And I'm speaking out of turn and I don't want to claim to be a PRA expert, I think you have one on that side of the panel, but it will tell you there are difficulties in getting that kind of information.

On the other hand, the chemical hazards, analysis and all that, there are processes and information in the chemical industry that give you insights, I would call them, insights on where some of the priorities should be, again, because of the chemical hazard being the predominant hazard of the facility.

And I welcome the second panel to touch

more precisely on that.

COMMISSIONER MAGWOOD: Thank you, Luis.

Thank you, Chairman.

CHAIRMAN JACZKO: Commissioner Ostendorff.

COMMISSIONER OSTENDORFF: Thank you, Mr. Chairman.

I want to thank the team here for a very well delivered brief and it has been helpful. I don't have a background in the process side on oversight elements here, so it is very helpful.

Cathy, your articulation of the background and the history was extraordinarily helpful for a newcomer to this, and I appreciate that.

I also do not have a background in PRAs, so I echo Commissioners Apostolakis' and Magwood's request for us to, perhaps, have a better understanding of the difference between the ISA approach and the PRA approach prior to moving forward on the policy paper.

I have a question really kind of directed to both Dan and Joe, and let you decide who wants to address it. But I noticed there have been some

thoughtful questions asked by my colleagues from the staff side on how does the oversight approach under the current system work from the staff perspective as well as the proposed qualitative approach, how that would work.

I would like to flip that a little bit and see from your perspectives would a licensee of the facilities, what behavior would be changed under this proposed approach or what specific changes might you envision as far as their operations or their ability to operate safely? I would like to see what is going to change on the licensee side? Whoever wants to take that.

MR. SHEA: I will.

One piece of the interaction between NRC and the licensee that I think could have a significant improvement and could drive a variety of behaviors on the licensees' part is the culmination of the licensee performance review process, where at the end of that process there is a public meeting between the staff and the senior management of those sites.

And the staff across the table looks to the senior managers in the eye and say, we, as your independent regulator, believe you have an area for improvement of such and such, and we believe that you need to focus more management attention on that area.

And my reflection in being in the position of having to make that statement to a senior manager is, if I don't -- if I as a senior manager don't hear something that is precise enough or actionable, I don't know what to do with what the regulator is telling me. An area for improvement in managing criticality is too broad.

So if I can, from my side of the table, have a process that allows me to give a much more precise characterization of what I think their performance challenges are, safety performance, regulatory performance challenges are, that will allow them to turn and marshal their resources toward safety much better than I can direct them to.

But I need to be able to build that on something that makes my final assessment and my

statement across the table credible.

COMMISSIONER OSTENDORFF: Let me just jump in real quick, criticality safety, let's just talk about that for a moment.

Are you saying under the current process a specific deficiency or observation that an NRC inspector or inspection team has is not communicated as a deficiency to the licensee?

MR. SHEA: At the individual violation level if there is an individual issue, the inspection process and the enforcement process can characterize that in a nutshell as here was the issue of such and such significance. I mean, within the limits of the traditional enforcement guidance that we have. But we can speak to the licensee management about that issue.

But when I step back as part of the oversight process, which is -- which includes the long-term performance, and I have to then take that criticality issue and maybe a minor -- a severity level four chemistry issue or chemical issue or maybe a RP issue, and roll those up and give an overall

characterization of their safety performance over a period of time, over the long term and communicate that both to them and to the public, the connecting those dots on individual issues is a challenge, and right now from my view is one that we don't have a good basis to tie those together.

COMMISSIONER OSTENDORFF: I know we just have a half a minute here, but, Dan, do you want to add anything there?

MR. DORMAN: I would agree with that on the performance assessment process. And I think to your question, the specific issues are communicated clearly in individual inspection reports. It is this roll up at the end of a 12- or 24-month period that may not be as clear.

And I think also in the enforcement process, I think both in the assessment process and in the performance process, the staff is challenged in the internal dialogues that lead up to engaging the licensee on these issues. There are typically a number of perspectives that come to the table initially, and as it works through the management

chain, refines and becomes a message to the licensee.

And to the extent that the licensee is also looking at the enforcement process and the LPR procedures, when they receive that, it may not be fully clear to them how the staff ended up where it is.

And we have had a couple of issues recently where we have had licensees coming back to us on proposed escalated enforcement actions and questioning why at this level.

So we hope that building a more structured and predictable and transparent process would alleviate some of those issues.

COMMISSIONER OSTENDORFF: Thank you.

Thank you, Mr. Chairman.

CHAIRMAN JACZKO: A couple of questions. One, I think there has been some suggestions about kind of a comparison between an ISA approach and the use of PRA's. How long does staff think it would prepare something like that?

MR. DORMAN: I would want to talk with my

staff before I committed to that. I think we have a senior risk adviser in MNSS, and he has background in both. He has been doing the ISA for 10 years but he was, for much longer than that, working in reactors with PRAs before that. But he would probably want to engage his peers in Research and NRR and NRO to achieve a consensus on that.

But I would commit to get back to you on a time that we would offer.

CHAIRMAN JACZKO: Just to get a sense, weeks, months, years?

MR. DORMAN: I would expect it would be months, not weeks, but not years.

CHAIRMAN JACZKO: It seems a key piece of the changes that we would want to make in this process, in many ways get to trying to -- I think, Luis and Joe, you talked a little bit about it, focusing our resources more on the things that are ISA significant, however you want -- maybe safety significant maybe is the best way to characterize it right now with the ultimate impact, then, of some things that are clearly of low safety significance

or non-safety significance, which may, nonetheless, be regulatory requirements that we reduce our action related to those kind -- or direct oversight or inspection related to those kind of things.

And the tradeoff there, I guess, is that we rely more on the corrective action program for that. To what extent right now do we -- do licensees Part 70 and of course Part 40 and the GDPs, to what extent do they have corrective action programs already?

I guess that is a question I can ask the other panel, as well. But I don't know what the staff's sense is.

MR. SHEA: I don't know if I can say that they all have, but I would say if not all, nearly all of them will have a corrective action program of some sort.

Sometimes it is site based, sometimes if a facility that is part of a large corporation it will be a derivative of what that -- that large corporation. So there are quite a bit of variances between them. And there may or may not be informed by

INPO guidance and that sort of stuff, but they will have some sort of corrective action programs.

CHAIRMAN JACZKO: We would not be starting from scratch if that were a component of the end product?

MR. REYES: Correct. And my point earlier was we have noticed in the last decade on the reactor program that because we incentivize the licensees to if it is a lower level issue that they properly identify in their corrective action and move forward, that we would put our attention someplace else. The sophistication and effectiveness of those programs have really increased, have really increased because the values is there. If you solve the problem, you get to the root causes and you correct them, not only is it a benefit for them, they don't get the extra oversight from us.

So the incentivizing on using that ends up with a more sophisticated and effective root cause program. And we have seen that in the last decade with the reactor program.

CHAIRMAN JACZKO: Well, it is clear this is not an easy process. And I think Commissioner Apostolakis hit on a good point, which is the importance for sure of having a good solid technical foundation for whatever ultimate, I guess, really significance determination process or performance measures that we would have as part of this program.

I tend to personally think that there is a lot of work we can do in continuing to develop, and develop the program while that work continues to go on to see what the underlying fundamental foundation is.

And as I was reviewing the staff's paper, there is significantly more detail in the attachments about the kinds of things that the staff would be doing. And that does, I think, get to some of the issues, I think, Commissioner Apostolakis raised about having developing those specific performance practices. That would be something that would need to be done, and it seems the staff does have an approach to do that.

But I think it certainly is a worthwhile

question to ask about whether we have ever really looked at the ISA and the PSA and to see what they can do and how that can work together. So I think it is a good point.

The last comment I would make, this will be, the Commission will soon be having the agency action review meeting coming up, and I want to say -- I'm looking around for someone who will be able to correct me, but I think this will be the first time that we may not have a reactor at the agency action review meeting. And it is likely we will see fuel cycle facilities at the agency action review meeting.

And I think, to some extent, that is a reflection of the advantage of the ROP. Three years ago, four years ago, we had one facility, Palo Verde, in front of the Commission. Through the ROP we were able to provide a clear understanding to the licensee of where we believed their performance deficiencies were. They were able to provide a program to address those deficiencies, and those deficiencies have been corrected to the point that

they are though longer in front of us.

So, I think having that more systematic approach in the end will ultimately -- and as I think Commissioner Ostendorff raised the question, ultimately be an enhancement to safety. But, clearly, there are things that will need to get worked out in the interim. So, I appreciate your comments.

This is certainly, I think, an important topic. I mean, if the Commissioners want an additional quick round of questions, I am more than happy to do that.

Commissioner Svinicki, do you have any other questions?

COMMISSIONER SVINICKI: No.

COMMISSIONER APOSTOLAKIS: I would like to say that maybe I gave you the wrong impression earlier. I do get excited sometimes. I'm sorry if I appear to be too negative, but I do appreciate the difficulty that is in front of you. It's really a very challenging project. And, I mean, we can talk about it for a long time and try to use the

experience from the ROP.

For example, there was -- you mentioned earlier, Dan, I think, that the methods are different that the licensees are using. Well, why is that acceptable?

I mean, in the reactor site, we develop regulatory guide 1.200 precisely to remedy that. So there is a lot we can learn, I think, from there.

So I do appreciate the challenges in front of you, but and I'm looking forward to, in fact, interacting with you and other members of the staff to utilize the experience from the reactor side to the maximum extent possible.

Thank you, Mr. Chairman.

CHAIRMAN JACZKO: Well, thank you much. We will now hear from our stakeholder panel.

We had an interesting discussion from the staff about the -- I think the interest they have in moving forward with a new approach to doing our oversight activities, our oversight review. Clearly, this is a challenging effort but I think it's one whose time has come and is worth the effort

ultimately to put in place. But an important piece I think for the Commission is to have a good understanding of what the impacts would be on licensees, what the views of the members of the public would be about how we can make this program the most effective so we will start with Janet Schlueter who is the Director of Fuel and Materials Safety from the Nuclear Energy Institute. Janet, I'll turn it to you for your presentation.

MS. SCHLUETER: Thank you. Good morning, Mr. Chairman and Commissioners. And we appreciate the opportunity to present the fuel cycle industry's views on NRC efforts to enhance the oversight process today.

As you stated, my name is Janet Schlueter and I'm the Director of Fuel and Material Safety at the Nuclear Energy Institute. For background, NEI is the organization which establishes unified nuclear policy on matters affecting a wide variety of users and industries and we address generic regulatory issues as well.

With me at the table are four representatives of the 15 fuel facilities, and we

have other representatives in the audience today.

Next slide, please. We have three key messages in today's presentation. They are: That the fuel facilities are operating safely. NRC's current process is adequate but could be improved. And the industry will continue to support the NRC's efforts in this regard.

In addition to my brief opening and concluding remarks, our four part presentation will demonstrate a concerted and coordinated industry effort to identify potential oversight process enhancements while maintaining facility safety, including radiological, chemical, occupational and environmental.

Our first speaker will be Mr. Mike Boren. Mr. Boren is the regulatory compliance and nuclear safety manager at the USEC's gaseous diffusion plant in Paducah, Kentucky.

Mr. Boren will provide a review a high level overview of diversity of the fuel cycle facilities.

Mr. Scott Murray who is the licensing and

liabilities manager at the G.E. Hitachi's Fuel Facility in Wilmington, North Carolina, will then discuss our mutual goals and our collective efforts to identify viable enhancements to the current process.

Following Mr. Murray will be Mr. Robert Link. Mr. Link is the environmental, health, safety, and licensing manager for the AREVA Fuel Manufacturing Facility in Richland, Washington. Mr. Link will highlight the key tenets of an enhanced oversight process, some of which are modeled after the reactor oversight process but must be customized to the risk profile and diversity of the fuel facilities.

Ms. Jennifer Wheeler, who is the licensing and integrated safety analysis manager at NFS in Irwin, Tennessee, will then describe a path forward for continued industry and NRC engagement on this initiative.

Next slide, please. First and most importantly, we must emphasize that safety first is industry's daily operational philosophy. And due to the vigilance of the safety managers here

today, their staff and their respective organizations, the fuel facilities are operating safely and they stand ready to support the domestic and international growth of commercial nuclear power.

It should also be noted that industry firmly believes that NRC has established itself as a credible safety regulator of fuel facilities. And they have in place today an adequate oversight program that is not broken or in need of immediate repair.

That being said, we agree with the staff that there are opportunities for improvement by making the process more objective, predictable, and transparent to all stakeholders, and by integrating some available data and risk information that could inform the process and help us collectively prioritize our resources on our higher risk activities.

We encourage NRC to engage industry in a measured and meaningful manner to help achieve our mutual goals. Specifically, this effort should be prioritized with other ongoing regulatory issues and

implemented in a step-wise and on a time line that does not inadvertently divert resources from our safety mission.

As such, we are pleased that the staff paper describes a four-year time line for process development and implementation.

Finally, we supported NRC's effort last year on this initiative and we will continue to do so.

As such, we were somewhat surprised the staff paper is silent on how and when NRC plans to involve the industry in this important initiative. The brief three sentence discussion in staff paper entitled " Stakeholder Interactions" does not meet our, or we expect most stakeholders', expectations for meaningful engagement. Now, I'll turn to Mr. Boren to begin our presentation.

MR. BOREN: Good morning, Commissioners and Mr. Chairman. We appreciate the opportunity to discuss this important process. It is one that I happen to have been involved in for over 10 years

and feel it warrants some improvements, but as Janet said, we do not feel that it's currently in a state of desperate need of repair. But I want to take a few minutes to highlight the diversity of the facilities in the fuel cycle complex.

As we move forward to - as we look forward to working with the NRC staff and other stakeholders to improve the oversight process, we must consider the diversity of the fuel cycle facilities operating in the U.S. today.

This complex diversity of regulations, operations, and risk profiles sets the fuel cycle industry apart from the reactor sector, and presents some unique challenges as we move forward with this process. These 15 facilities were licensed and certified under three distinctly different sets of regulation because of their operational and risk profile differences.

There's one uranium conversion facility operating under Part 40, one operating gaseous diffusion plant under Part 76, and the reminder of the facilities under Part 70.

Even the Part 70 facilities vary widely in operations, license conditions and risk profiles that range from Category I to Category III fuel fabrication facilities to the newly constructed centrifuge enrichment facility. Conversely, all reactors are licensed under the same CFR Part 50 and have very similar operations and risk profiles.

Due to the high radiological risk potential to the public, the reactor regulatory requirements are more robust and the regulatory burden is thus great.

This consistency of regulations, risk, and operations makes the ROP workable for that sector. The diversity of fuel cycle regulatory requirements, operations and risk make using the ROP a challenge.

In the past, we've met with challenges on that track and those same challenges exist today. To be workable for the fuel cycle group, we feel the new FCOP must incorporate the flexibility to accommodate this wide spectrum of operations and risk profiles.

One example for the need for flexibility relates to how the significance determination process might be utilized as we move forward in improving the FCOP. The fact that the safety analysis of these facilities is qualitative makes utilization of quantitative ROP-style significance determination process problematic. And we realize that within the oversight process there is some qualitative nature. And there is a quantitative basis to some of our safety analysis. But, in general, it is qualitative.

In addition, with the complexity of the ROP significance determination process, we believe would result in undue administrative burden on facilities at the generally chemical risk that they operate.

The industry understands and agrees with the NRC's goal to better align its oversight resources with potential risk, that is the right thing to do. The current process of allocating oversight resources is not well understood by the industry and stakeholders.

For example, full-time resident inspectors are assigned to all three CAT one facilities but then to one gaseous diffusion facility. No other fuel cycle facilities have resident inspectors and none are planned at the new enrichment facilities.

The process for allocating these resources does not appear to us to be risk-informed, nor is it transparent to us or the stakeholders. We look forward to working with the staff and Commission to implement improvements in the oversight process that incorporates risk insights and the flexibility to accommodate this very diverse group of facilities. Thank you very much.

CHAIRMAN JACZKO: Mr. Murray?

MR. MURRAY: Thank you Mr. Chairman? Commissioners. As Janet indicates today in her opening remarks, those of us invited here to represent the fuel cycle industry are pleased to continue the discussions on improving the regulatory oversight process.

The industry and NRC both have common goals regarding oversight, that is, to ensure no

undue risk from public health and safety results. And to ensure the probabilities of accidents with the potential to adversely affect public, health and safety remain low. Can I have Slide 5, please.

The current NRC fuel cycle oversight process is based primary on experience, expert judgment, and takes into consideration our performance based on compliance and defense-in-depth. It is currently however, considered by many to be too subjective since the results may not be repeatable and seem to vary from review to review.

Fuel cycle facilities support principles to improve these regulatory oversight processes, to make it more risk-informed, predictable and transparent to the public, and the licensee. These seem to be common goals between us.

All of the industry representatives here today have been actively working with both NEI and NRC since really, the middle of last year on developing proposed revisions to this oversight process. And we participated in multiple teleconferences within Industry, five public

meetings with NRC.

And we plan to continue our support as our respective resources allow. As a result of these efforts, the Industry and NRC appear to agree on several common goals and objectives. This idea of making the oversight process more risk-informed, performance-based, predictable, transparent. And especially to make better use of our safety analyses efforts, this work we have done over the past 10 years that we spent a lot of time and effort for.

Effective oversight process should reduce our portion of collective efforts currently spent on minor issues of low or non-safety significance thus freeing up our limited resources, to focus on and prioritize efforts on the higher risk activities unique to each site. Use of the currently reported information or trended information is highly recommended.

For example, all of the Part 70 licensees currently provide NRC annual ISA summary updates, annual reports on radiation workers, annual material control reports, semi-annual reports on release

effluence and there are many others.

However, meeting these goals requires realistic expectations and the availability and continued involvement of the qualified persons both at the facilities and with the NRC. And opportunities for public involvement.

Each Part 70 licensee has invested considerable time as I mentioned, to develop this ISA and NRC has approved all of these.

Both the industry and NRC staff acknowledge that the ISA risk insights have not yet been systematically integrated into the inspection process yet need to be, should be to further risk informed inspections. And in fact, some of the recent inspection experience regarding the ISA seems to be focused on what we would consider administration issues rather than being safety or risk-informed.

We believe that a better use of our mutual resources could be realized by risk prioritizing inspection procedures and results which would then be further informed by a transparent significant determination process.

Now, I'll turn it over to Bob Link who discusses our vision of the tenets of enhanced oversight process.

MR. LINK: Thank you. I will discuss what we believe to be the most important tenets of an improved fuel cycle oversight process, and to provide some suggestions for improving the process in its development. I'll also touch on some of the challenges we mutually have in meeting the objectives already described.

While the framework concepts of an action matrix cornerstone and cross cutting areas including safety culture, are important, we believe it all starts at the definition of "performance deficiency." In our work last year with the staff, they promoted the definition of "performance deficiency," from the Reactor Oversight Program.

We provided an alternative definition for consideration which had risk-informed attributes focusing on performance that would constitute what we consider all stakeholders would see as true deficiencies, simply, what needs improvement.

We could not get an agreement. In fact, we could not get a working dialogue in this critical foundational feature.

We urge some of the critical basic components of an oversight process need to be resolved early in such an important effort. Another example of a foundation piece of the framework discussed last year was the significance determination process.

We agree this is a critical attribute of an oversight process to assure the proper perspective is assessed regarding a performance deficiency. The SDP has input not only to the performance deficiency treatment at the hand in accordance with the enforcement policy but to assure the risk-informed consistent outputs to the inspection activities, either in response to the issue itself or other insights in lessons learned, feedback loop, to the base lane inspections.

The attribute of predictability is critical in this aspect of oversight. The licensee, NRC, and all stakeholders should be able to assess

events and determine for themselves the events probable result in enforcement and inspection space. That's an objective, I think, that should be used to measure.

The use of corrective action programs voluntarily by the licensee to manage issues that enter the SDP should also be acknowledged and given appropriate credit within the SDP process and its inputs to enforcement and inspection. The SDP process coupled with performance deficiency definition should focus on the real issues and not use precious resources on administration aspects that can and should be measured within the licensee's corrective action program or other management measures.

As discussed by my colleagues, the licensees before you represent a small and highly diverse set of facilities as opposed to the greater than 100 homogenous power reactors. The use of performance indicators adds a level of complexity and potential lack of transparency to stakeholders. Their use appears to have limited value and are potentially confusing.

We do not recommend the use of performance indicators at this time with their consumption of limited resources to improve the process. We do endorse and support improved means of transparent communications to the industry and public but unless some significant effort is made to normalize the risk and significance between the ROP and the improved fuel cycle oversight process, the danger of the interpretation of equity between the reactor licenses and the fuel facilities is too great.

We would recommend a clear set of output communication standards separate from their reactor oversight process. We do support a mechanism for the risk-informed performance-based inspection process to have feedback into the inspections going forward.

This will provide a more efficient and effective use of resources by both the NRC and the licensees. While the emphasis always seems to be on what increased inspections may be needed, there should also be a means to allow decreased burden of inspection for demonstrated good performance

acknowledging the need for minimum oversight.

This can also be based on the verification of good to excellent management measures of the licensees such as effective configuration control, plant safety performance and voluntary corrective action program as examples.

One significant element is the need for developing the tools for the inspectors to risk-informed and performance-base the inspection modules and methods. We have yet to incorporate into the existing inspection manual, the means to do this in a consistent, predictable and transparent way. This is not a simple task and will require noteworthy resources in their development. We will speak to the need of a well developed work breakdown structure that is resource loaded for all parties for this project.

And finally, a necessary tenet of this improved process is the need for revisions to the enforcement policy or it's implementing manuals and guidelines at the very least. Without this predictable element, all improvements can be lost as

the licensees and staff will be driven by this important aspect of the oversight process.

During our recent effort, there appeared to be a reluctance on the part of staff to engage in a meaningful dialogue to identify any specific examples of how this element would be modified. Without this change, the entire improvement may be stymied or lost.

The need for commitment during the dialogue by all parties is going to be the determining factor in this initiative's success. The Industry supports and believes the oversight process can be improved. We need to determine what it looks like and then assign a priority and resources to get it done. Thank you.

MS. WHEELER: Good morning. The first point I would like to make on Slide 7 is that there -- I would like to echo the staff's recognition there needs to be a prioritizing of the FCOP effort against other NRC regulatory initiatives. For example, Part 70 working group products among others.

There are currently approximately 20 regulatory initiatives being tracked by industry. Several were initiated by industry in 2007 and supported by NRC staff in an effort to formally clarify specific Part 70 implementation issues.

Examples include Appendix A, reporting safety events, 70.72 facility change process, and soluble uranium intake consequence thresholds. Industry and NRC worked together, formed working groups for each of the issues, expended significant time and effort to develop consensus positions, and drafted guidance in some cases.

Yet, final guidance has not been issued for any of these initiatives to date. Two additional issues, dermal exposure and design features in the integrated safety analysis have been identified and are of concern to industry since it appears that NRC staff has revised its interpretation of a ten-year-old rule or its regulatory position on long standing matters.

Industry has requested and NRC has held several public meetings on these topics and we

appreciate NRC's willingness to discuss the issues. However, based on our experience with the working group initiatives, there is a lack of industry confidence that these regulatory issues can be brought to resolution in a timely fashion.

In the meantime, several licensees have received cited violations in these areas and NRC has raised these issues in the context of licensing actions in the absence of a clear regulatory basis for their modified regulatory position. All of these items directly affect the day-to-day operations of our facilities, in addition to being key to the ISA framework on which the FCOP will be based.

The second point I would like to make is there needs to be a detailed project plan as Bob mentioned with resource loading that can be supported by both NRC, industry, and other stakeholders. A project this large with support needed from multiple industry members, members of the public, as well as NRC headquarters, and Region II staff, needs a well developed project plan with a work breakdown structure and resource loading. It

should be developed with opportunities for input from all stakeholders.

The plan should be used to document the commitment of all parties to participate at the estimated resource levels and for the target dates identified, thus giving the staff, industry, other stakeholders and the Commission, assurance that the end goal is realistic and achievable.

Such a detailed approach would also allow industry and NRC to pro-actively plan ahead for necessary interactions thus providing the ability to balance this important effort with other regulatory initiatives, ongoing day to day assignments and our highest priority of supporting plant operations. In addition, the project plan should include consideration of developing success criteria.

The four year development implementation plan proposed in the SECY paper is a significant improvement over the timing suggested in 2009 whereby NRC planned to implement an enhanced program beginning late this year.

A comprehensively planned and measured

approach will enable all parties to participate at the level necessary to produce a quality product which I think is what we all want. Industry also believes that there is a need to define methods appropriate for measuring success and failure as an enhanced FCOP is implemented.

Such a monitoring and feedback process would encourage and allow for continuous improvement and foster timely implementation of program changes.

We look forward to discussions with NRC on the next steps and how industry can contribute to reaching our mutual goals for an enhanced oversight program.

Now back to Janet who will present our concluding remarks.

MS. SCHLUETER: Slide 8, please. As you have heard us all say, the Industry will continue to support this initiative as our resources allow and we do believe it should be prioritized with other ongoing regulatory issues that we are in active dialogue on with the NRC. We believe some of those issues do rank higher from a safety perspective and would provide greater regulatory stability than an

enhanced oversight process would.

We also support the early dialogue on the diversity of the facilities that Mr. Boren has gone over so that we can work with the NRC to identify the available data and information that is specific to each of these sites that could inform an enhanced oversight process.

In conclusion, the fuel facilities we believe are operating safely today. We do believe the oversight process is adequate but could be improved. And we will continue to work with the NRC to prioritize it and identify viable enhancements. So, again, we appreciate the opportunity to present these views to you today and we look forward to your questions.

CHAIRMAN JACZKO: Thank you. We will turn now to Linda Modica, who is the Chair of the Fuel Facilities Working Group, the nuclear issues activist team at the Sierra Club.

MS MODICA: Thank you Mr. Chairman and welcome to all the new Commissioners and we are glad that you now have a full team because a good leader

needs a team behind him to address all the issues that need to be addressed in the agency so good luck to you and all of you new members.

As you might know, the Sierra Club is the country's oldest and largest grassroots environmental public interest group and I'm here to present not only the Sierra Club's views as such but that the Sierra Club’s views are the same as the public views.

We represent the public in their concerns for environmental protection. And I come to you from Tennessee where there are three fuel facilities in our -- I mean three nuclear facilities in the neighborhood that I live in. And I consider it an area of Appalachia that I nickname atomic Appalachia. So this is kind of an introduction to an area of the country that has a complex of nuclear facilities, one of which is Nuclear Fuel Services down in Erwin.

Next door to it on the same property as Nuclear Fuel Services is a waste processing, nuclear waste

processing plant owned by Studsvik. And about 15 miles from there is a depleted uranium weapons manufacturer called Aerojet.

So and that's a State licensee. But it deals with radioactive materials. So we are pleased to be here basically to introduce the issue of how the public perceives NRC regulation.

We are I guess in your parlance, a stakeholder. We are obviously -- you have got the full court press going on over here and now I'm, what, the tight end -- I don't know, it's a mixed metaphor. But it's -- but I don't feel a minority. My father had given me broad shoulders. It doesn't bother me one bit.

We are encouraged -- if we can go to Slide 4, we are encouraged, the Sierra Club and the general public by the leadership of Chairman Jaczko. And something I didn't include in the slide is something I read later in an old New York Times article in the news there was at that time, Chairman Ivan Selin was the Chairman of the NRC and there was an unusual endorsement at that point of activist work

of the public's work, of the public clamoring with respect to the NRC that Chairman Selin gave and it was -- and that time is really reminiscent I think of now, this new time, at the Commission with your leadership, that it seems as if at least from your public statements, that you are recognizing the importance of public input to NRC decision-making.

So, if we could go to Slide 5 and just breeze through the view of fuel facility oversight from the vantage point of atomic Appalachia, and go to Slide 6, please. Some of the conditions we've got with respect to not only the fuel facility oversight process but other aspects of NRC operations, I mean, NRC decision-making, is that they seem to be stovepiped where divisions aren't communicating on a lateral level between one another, where enforcement actions are taken at the regional level and then at the national level, or here in headquarters. Decisions are made with respect to licensing which don't seem to be a function of -- the licensing decisions do not seem to be a function of enforcement actions that have

had to been taken in the past.

And that is especially important to note with respect to decisions that were recently made to license the processes regarding uranium hexafluoride at Nuclear Fuel Services where significant enforcement problems had occurred previously then and new license amendments were granted to the licensee.

So as I said before, Sierra Club is here to represent the public's interest. So I collected some of the headlines -- next slide please -- that have been written by members of the public, letters to the editor as indicators of public concern.

They are all intellectuals and I don't have to read them for you. But for the purpose of the public who's listening in on the webcast, I just would like to note the last headline: "Putting 42 chemicals into the river isn't polluting?"

And I think that was telling, also, of the issue of the chemical hazards that are being received by the community. Now, we'll just breeze through these editorial cartoons, please, if the AV

folk will stop though at Slide 10.

We've got an issue of -- in our community of rising non-Hodgkin's lymphoma cancer death rates. These data were plotted by the State Health Department. And I bring this up because of the question, I know it has been said a number of times by staff and by the Industry, that they consider the oversight process already adequate.

But then I would ask and the public asks, well, if it was adequate, then why are we seeing rising radiation-related cancer death rates in our communities?

And then if we could -- I know the Chairman has seen a number of those editorial cartoons so I won't belabor the point and they are -- please don't take this as a sign of disrespect. This is a picture -- I'm trying to give you a picture of how the community perceives the problem of having a nuclear facility in their backyard, actually.

So, if we could skip to Slide 14 where we've got -- I'll tell you, I'm a big fan and I

believe the public and my cohorts in the Sierra Club would agree that an approach that focuses on a robust safety culture at the fuel facilities is a way that will enhance the public's health and safety but also enhance the oversight process.

So we look forward to that being incorporated in the new regulations. And, finally, let's skip -- you all will have access, you all who are listening in will have access to all the slides, I believe. So, if we can go to the last slide which is "Why not zero?"

I know that there are the ALARA rules, or the ALARA approach. But just as the public has difficulty with the word phonzy parlance "finding of no significant impact," what's reasonable to some people is unreasonable to others.

And if you are on the receiving end of the pollutants then "zero" is the reasonable number. So, I would hope that there would be a consideration by the NRC for a zeroing out of exposures to workers, zeroing out exposures to the public, zeroing out releases to sewers. And zeroing out

inventory differences span many losses of special nuclear materials. Thank you for your time. I appreciate being here and I also want to on behalf of the Erwin community and Erwin Citizens Awareness Network, I invite all of you, please, to come to Tennessee.

CHAIRMAN JACZKO: Thank you for your presentation. We will began questions with Commissioner Svinicki.

COMMISSIONER SVINCIKI: Thank you, Mr. Chairman. I appreciate all the presentations. Ms. Modica, as I looked at transcripts, they do kind of a role call of who participated in the meeting and I am always looking to see if there are members of the public interest community such as yourself. And I know, though, that you have to balance, there is a tremendous amount of issues that you are following as an organization and also your resources are limited. And even I think the NRC alone throws so much paper out there to be looked at and reviewed.

So I appreciate your presence here today so thank you for that and for as much as you are

able to spread yourself across the issues, I appreciate it.

I know we throw a lot of stuff out there to be commented on. So thank you for that.

I would like to return -- for those of you, a number of you were at some of the public meetings that have been held with the NRC staff and your names are spread throughout the transcript. I was indicating with the staff panel that I thought that that was, it was a very candid engagement in some of the meetings and you covered some of the same concerns here today.

You might have covered them in a little bit more plain spoken way. When you have a day long meeting with staff, I know you have the luxury of being able to really dive into the issues. But it did appear to me, one theme that struck me as the stakeholders and the NRC staff are still talking definitionally about these very high level definitional issues of deficiencies and talking about significance determination, that it seems to me that you were expressing the fact that it is very

difficult to provide meaningful comment on things like inspection manual chapters and very detailed because if we're still engaging at the top tier level, it's difficult to provide comment on the detailed documents.

Would any of you like to make a response to that? I think that you have commented even as best as you could on some of the more detailed documentation, but do you think that some of the comment needs to be revisited as some of the top tier issues get resolved?

MR. LINK: Well, as I appreciate your diving into the detail of the transcripts and acknowledging that, there has been I'll admit a frustration, sometimes when we provided what we consider either alternate definitions specific or specific comments on some of the drafts, albeit documents that albeit are knowledged and there is some acceptance in that context, we don't sense what I call an engagement where at the end of that engagement I expect a productive outcome meaning that, and we don't expect anywhere all the time they will accept

our position or our positions are the right one, but to see some not -- taking that input and developing a specific milestone, call it a performance deficiency definition, so that critical cornerstone can then be moved on from and we know where that is going to be used. That's why we talk about foundational elements getting some structure and detail finished to move on into the other as expects of the process.

COMMISSIONER SVINICKI: I would note there has been comment on this side of the table about the paper that is in front of the Commission for voting and action. That was made publicly available, and a number of you have noted the timeframe the staff suggest. And I would just correct, a number of you called it a four year time frame. I think that the full implementation of the process is scheduled under the staff proposal, for January 2014 so that doesn't really give you any run time for development in 2014 and of course the Commission needs to evaluate this proposal. We've heard from Commissioner Apostolakis about potentially having some additional staff input to

that informing the Commission's views on that paper.

The Chairman inquired of the timeframe of the staff and said they would need to get back to us. So those details would need to be worked out as well. But I think at least two of you, Ms. Wheeler and Ms. Schlueter, you both expressed some positive steam about the timeframe.

I just want to verify that you did think that was adequate, January of 2014?

MS. SCHLUETER: It certainly was a more protracted schedule than what staff was discussing with us last summer. So I think Ms. Wheeler in her remarks did comment that any visibility that the staff could give us on a project plan of sorts that has milestones that we can predict better what are the points of engagement for the NRC; when will we discuss the higher level tenets or systematic approach to where are going? How do we get there; and then drilling down on specific documents and so forth itself will allow industry to ensure that it can dedicate the resources at the right time during that process.

So, yes, that timeline is certainly more attractive than the earlier one.

COMMISSIONER SVINICKI: So it was a comparative statement. It was relative to the earlier timeframe. And as a final question, there was discussion about the usefulness of examples and that in some cases often when a communication is unclear the parties agree that examples would be helpful. And I saw at least from the October public meeting that the staff had acknowledged that examples of some of what they were talking about would be useful and they committed to provide those. Have those been subsequently made public examples, and I didn't flag them so I won't take the time to look for this but have examples of some of the disputed interpretations of staff saying here is how we would apply this in a specific example? Are any of you aware that has been made public or posted?

Okay I'm getting that no one can confirm that. Thank you. I'll follow-up on that subsequently, I really shouldn't put you on the hook for answering that question. Thank you, Mr.

Chairman.

COMMISSIONER APOSTOLAKIS: Thank you Mr. Chairman. I got the impression that you ladies and gentlemen really don't care much about this. You don't think it's necessary and you don't see the benefits. I mean you gave us some general statements about prioritizing and so on which I really don't see how you can do with ISAs but -- so can you be a little more specific?

Do you think there are real benefits from this new oversight process? should the agency proceed and expend the resources required to develop this? I mean if everything is so great now, why do it? Can you give me one or two specific benefits? If you don't, that's fine, too.

MR. BOREN: No, I'd like to speak to it. I mentioned earlier, I have been doing this for off-and-on 10 years through the three initiatives that have been launched and stopped for various reasons. The sites work very hard at a very detailed level and especially the corrective action level.

We have learned over the years if you work at a very low level of threshold for mistakes or for errors, then you will prevent the larger mistakes and find yourself in compliance and you will find yourself operating safely.

The oversight process is currently not broken. That was our message. It works. NRC staff does a good job. They are very thorough at what they do and are technically oriented. What Joe was mentioning I believe would be my thoughts, that focusing their attention on a true safety aspect not looking so much at org charts or did you update an org when you made a management change, that doesn't seem to be a very risk-informed or useful way of using those resources.

We enjoy having two full time inspectors at our site. Their insights, they come in my office every day and say I was out in the plant and I saw this. It is not a big issue but it looks like something you won't be very proud of. And we're not. We go fix I. And we try to learn from it. Those insights are valuable. What do we would hope to gain from

this process? More recognition of our hard work over the years to build a corrective action program that identifies our own problems, fixes our own problems, where the NRC just has to come there and say we have inspected how you identified and corrected this problem and we either agree that you correct it fully and at the right level or we believe you've got more work to do. And we will take that and go forward with it.

So, what the staff verbalized as a benefit is very important to us. We believe in our corrective action program. We don't want NRC finding our problems. That's our job. So we believe that better risk-informing the process to where we get credit for the low level handling, the low level problems in house without NRC action is the right way to go. These are not brand new facilities.

We have been around a long time and doing this a long time. That is one example in my opinion where an enhanced oversight process would benefit?

MR. LINK: We see it as a benefit to be greater focused utilization of critical resources. That to me is the best element of the outcome. Now, that has to be achieved through some very useful and important attributes of the oversight process and how you form it, otherwise you can also devalue that outcome.

So if you sense some maybe anxiety on our part, it's because we have been through this attempt at least two if not three times already and those have been resource intensive by both parties which as the Chairman pointed out earlier without an outcome. So maybe we're a bit jaded by that history. Don’t take a message other than if we can meet the objectives of the outcome of this, the industry strongly supports those outcomes.

COMMISSIONER APOSTOLAKIS: One question for Ms. Modica.

I hope I pronounce it correctly. I'm very sensitive because of my own name.

CHAIRMAN JACZKO: We don't exactly have an easy list of names going across the club.

COMMISSIONER APOSTOLAKIS: This figure with years of counts of deaths rising, I am a little disturbed by it. You sort of implied that the reason why the number of deaths per 100,000 population is rising is the nuclear facilities. Has there been a study that showed this cause and effect there? Or is it just speculation?

MS. MODICA: There is was a study done by the regional epidemiologist for the State of Tennessee and she is the one who collected that data for Unicoi County which is the location of the Nuclear Fuel Services plant. And also the fuel, the low level waste processor Studsvik. No, she did not address a causation. And I didn't, I asked the question whether, because, well, when I included it in my presentation, I included it because non-Hodgkin's Lymphoma is one of the 22 cancers that is included in the Eocpa (Ph) Statutes as radiation-related.

And the epidemiologist had chosen all cancers. Actually there were other radiation-related cancers that Eocpa (Ph) covers; there

are 22. That also showed rising trends but I already had way too many slides so I couldn't give you all that. But I am happy to provide you with that entire study.

COMMISSIONER APOSTOLAKIS: I would like to see those studies very much.

COMMISSIONER MAGWOOD: Thank you. We all would like to see those studies. So when you receive those, I would appreciate seeing them. So, actually, I wanted to ask you a more general question in the same context.

I think obviously you have given a lot of to how the Commission has dealt with the nuclear facilities in the Tennessee region and maybe a little bit unfair question but give us a grade. How do you think the Nuclear Regulatory Commission has over the last, let's forward it a little bit, say, over the last decade, how have we done as a regulator on an A to E scale?

Don't be shy.

MS. MODICA: I'm not shy. Well, there was a period that you might not be aware of where the

public was kept in the dark for three years called "the official use only period policy." That was an agreement between the DOE and NRC to basically keep the public in the dark with respect to enforcement actions, inspections, accidents, whatever was happening at Nuclear Fuel Services and BWXT in Lynchburg, Virginia. And that was definitely the low point. And at that period, the Commission abjectly failed to provide the public with any understanding of what it was, how it was protecting the public's interests.

It was very unfortunate. It was claimed to have been done as a result of 9/11 but it happened several years later and only for as I said for a three-year period. After that, there was a big dump of documents. And you know, a lot of what I say and what I know is as a result of reading the inspection reports and attending licensee performance reviews and having done that for a number of years.

So I've been at this for over a decade and have seen some improvements in outreach to the

general public and that's a real good thing. But as I mentioned before, we don't seem -- we don't see a vertical understanding or even a horizontal across the agency understanding of certain fuel facility problems. And also we see kind of a pointing of fingers where NRC would say it's a State issue and the State would say it's an NRC issue and that happens to us all the time.

And then, you talk to your local government officials and they say, well, it's the DOE, what can we do. These are private companies. So on average, I guess I would say about a "C."

COMMISSIONER MAGWOOD: That is better than I expected, actually. In that context, you know the conversation we have been having today about the oversight process, how much if we were to move toward being a B or an A in your view, how much of what needs to be corrected is process oriented and how much is doing the job that exists more effectively?

Can you characterize that somehow?

MS. MODICA: I tell you, we have known a number of inspectors and they live in our areas and we, they come to the meetings. We talk to them. They have a hard job. Their paperwork requirements are massive and their job is very difficult and we respect them greatly. And I applaud their work. Then we go to those good people and it is just terminology, I didn't seen to say anyone was bad at the NRC but they are especially doing hard work and they are at the facility, they are sometimes working night shifts and all that. That's hard stuff.

Then they send a report that's got maybe about six or eight carbon copies to be sent to various parts of the agency, sometimes with some major issue that's brought up this their report.

And it's hard to tell when you later have a license performance review, that might happen six months later or a year later that there had ever been either a reading of that report or certainly an appreciation for any of the findings by more senior management.

We had in it -- but some of -- I don't want to be unfair because there has been some turnover recently, retirements and you can understand that new people wouldn't know everything. But I'm coming to you from a community that, it will be honest to tell you, that the community knows more about your own inspection reports and your own audit findings, and your own LPRs and every other data that has been, or report that has been written than management of especially the new management of the Region II.

But use us as a resource and we are happy to share. And I will get you that data you ask for.

COMMISSIONER MAGWOOD: Appreciate your comments. Thank you very much.

COMMISSIONER OSTENDORFF: I thank all of the members of the panel for being here today, and it is helpful to hear from different perspectives. I want to go back to a line of questions, a little bit I had in the first panel with NRC staff, and specifically, with Dan and Joe on licensee behavior.

I'm mindful of the Chairman's comment in the

previous round of questions that dealt with perhaps some correlations between the Reactor Oversight Program and how we as an agency assess the operational safety of our current reactor fleet. And I want to draw that analogy to look at what you envision as being five or six years out from now if the new policy goes into play, with the qualitative approach recommended by the staff.

I want to maybe ask a specific question that deals with how you on your end as a licensee or representatives of different groups see that change in your behavior, how you operate.

I know Mike in a previous question from Dr. Apostolakis when he asked what are the benefits to this new oversight policy you had some helpful things to highlight the facility's corrective action plans and perhaps quite frankly be able to deal with lower significant issues in a more timely dispositional manner to focus on the more important issues; recognizing the diversity of the facilities and this is not a one size fits all question, I appreciate any comments from the industry representatives here for your facilities you represent, how do you see the proposed policy changing your operational safety posture or

how you do business? Whoever wants to address that?

MR. LINK: There have been a number of comments by ourselves as well as the panel this morning, a critical attribute assuming the oversight process recognizes the voluntary corrective action program, assuming they are inspected, and we understand that as a prerequisite, to assure that they are aggressive and detailed as Mike said to take the threshold well done below what I call regulatory concern, allow us to manage those issues because many of those are precursors or if not lower threshold issues, if you really do put good management measures in place, they will not grow into incident of concern.

COMMISSIONER OSTENDORFF: My apology. I did not provide enough explicit framework for my question. Let me ask you to be as specific -- and I understand the corrective action plan. Let's go aside from that and let's talk about does it affect your hiring practices, your infrastructure upkeep, your maintenance practices? Training qualification?

How does it change your every day way of doing business, not just the corrective action plan piece. I

apologize for that --

MR. LINK: I appreciate the clarification. I would believe again if the oversite process is crafted correctly, it would cause us to be putting more emphasis on the human factors of our operators, of material condition of our facilities to assure that we have preventive measures that are meaningful, reliable, in place. Those are the attributes I would suggest -- not that we don't have those today but the focus and the differentiation of which ones to focus on -- have greater detail.

MR. BOREN: Would it change a year from now would my facility be operating obviously differently? The answer to that would be "no." We would be looking at things through NRC's oversight and that is what we do. That is what my staff does. We interface with NRC to ensure that they have a clear understanding of issues and what's occurring at our site.

Again, back to us identifying issues, correcting our own problems. As an industry, we agree with a goal of the process being more

predictable. I don't like surprises. My management doesn't like surprises.

It's my job to keep them from getting surprised. So, if I had a process where every six months, every year, every two years, we would be able to status our -- I'm not sure compliance is the right word, but our activities in a way that the public would understand better, that would be more transparent as far as how the resources are being applied and spent, make sure we and the NRC are focusing on the real safety issues and not the administrative compliance type things, I would hope that the public would see that as an improvement. But would it change the way I fix a piece of equipment? No, it wouldn't.

COMMISSIONER OSTENDORFF: Thank you.

CHAIRMAN JACZKO: Well, I think there has been some very good questions. I just have a couple. I certainly am hearing I think a couple of different things. Commission Svinicki, I think raised a point that some of the higher level concepts may not be well defined yet, what we would

define as a deficiency, a performance deficiency.

At the same time I think that Commissioner Apostolakis raised an issue of wanting to get at more at the technical aspects that underlie any program we undergo or any new oversight process. The staff if their project schedule if I could, really put the emphasis early on, on the technical work, the technical basis development for whatever we would do.

And I think Ms. Wheeler, you talked about the new schedule being slightly more realistic and something that would fit better in your resource allocations. So maybe it is too broad a question but as we look to try to figure out how to put in place the right kind of program, is there a sense that we should be focusing first on the technical aspect of it, figure that aspect out, then get to issues like performance deficiency?

Or does that, which is the element that in your idea, would come first, or would be most important for us to focus on as we move step wise through putting in place a new program?

MS. SCHLEUETER: I think that we first need visibility of what the technical basis is and what it is not. That was not something that was discussed. Probably just wasn't relevant to the staff at the time or what have you. But without having visibility of that, it is difficult for us to determine where in the process we want to go back and address these higher level issues although they are very fundamental to moving forward.

CHAIRMAN JACZKO: Okay. So in that sense, the staff seems to have the right approach which is let's focus on the technical first, and then we will be able, perhaps, to address better the issues like what a performance deficiency is and we have that understanding of what the performance metrics would be, those kinds of things?

MS. SCHLUETER: To the degree that those discussions on performance deficiency, SDP, whatever, will inform their . technical basis, clearly we would like the opportunity to participate in that aspect of the process.

CHAIRMAN JACZKO: Mr. Boren, did you want add anything?

MR. BOREN:: It’s important and at some point you have to have both, the technical aspects, what’s the program, what’s the vision for the program, what’s it going to look like, and the framework, I guess. If you read the transcripts, I thought you would see pretty good alignment with the general framework that the staff had laid out. When we get into the details of what's a performance deficiency, you get us engaged because that's what we do.

When an inspector brings a finding to my office and characterizes it as a performance deficiency, we want to have a very clear understanding of what that means. And that it is at an appropriate level to deserve the resources that it is going to kickoff.

In other words, we are going to expend resources to address that issue, sometimes significant resources with relatively short staff. We do not want that to take our eye off of something else that could become a safety issue, so we want to stay at a high level and we want our people worried about safety issues not so much the lower level in the grass type stuff.

So while the definition of performance deficiency may seem like something we are bickering over an awful lot, it's that definition that will

generate entry into the process. And once you're in the process, then it's pretty structured. Then it's difficult to turn around and come back out. So it may seem very detailed but it is very important, also.

CHAIRMAN JACKZO: Well, I appreciate that. There is certainly a lot -- everyone keeps coming back to the same thing which is I think there seems to be a general sense that everyone agrees at the high level, there is something good to be done here.

And Ms. Modica I share your concerns about as a very senior level manager at this agency of going through inspection reports for the fuel cycle facilities is a very difficult task for me relative to the ROP for instance, because with the ROP I have aides to help me understand what is significant and what is the level of significance are.

I recall a visit to NFS Erwin and going through the licensee performance review for that year and there were findings, violations, whatever we call them in that context that ran the gamut from very administrative types of things to things that had significant safety impact. And yet as it was -- it

was presented, it is presented altogether without any relative ranking or relative acknowledgment of the significance of the different things.

So from a public communication standpoint I can understand that and I would certainly not want Luis to have to worry about those true compliance issues. I want him to be able to focused on the overall safety performance, those significant safety issues and ultimately that is one of the enhancements we can get from the program. Appreciate all of your comments.

We have now on the agenda just a brief opportunity for discussion with the Commissioners. I thought I would start I think with the one thing that I thought I heard clear agreement among Commissioners on, that is an interest to have from the staff, some kind of analysis and perhaps in the SRM we can work out the details of what that analysis exactly is, but to compare and contrast the ISA approach or the technical element of the ISA and the PSA as well seemed to be something that there was Commission consensus with.

COMMISSIONER SVINICKI: Yes, I think Mr. Chairman,

you also inquired, though, it would be good to know what staff's both schedule impact and I would add resources, I would like to know what it would take them to do that is important, and that of course would inform my view on what the sequencing, which is another thing you mentioned, is it truly something that would be an input to my vote on paper and also it just informs my view.

I have great respect for Commissioner Apostolakis but knowing exactly what staff thinks that would entail would be very informative I think to have.

CHAIRMAN JACZKO: Well, I think the staff should be able to provide resource estimates very quickly, so we can have that as we finalize the SRM. And Dan is nodding, so the record will reflect that Dan nodded. So we can be informed about that. The other point is to make sure Ms. Modica if you can provide that report to the Secretary of the Commission, then that can get circulated around to all the Commissioners and provide that.

Any other items that people thought immediately would come out of this?

COMMISSIONER SVINICKI: Of course this was a very detailed discussion and there were some really good proposals put forward by my colleagues so I look forward to looking at the transcript which I tend to do. Often, I think I asked someone or someone answered something and I find out it wasn't really in there. We had a pretty complicated discussion so I will be looking at the transcript as well. Thank you.

CHAIRMAN JACZKO: This has been for me a very informative meeting and I hope, sometimes we have a tendency in these meetings to figure out what all the problems are but I perhaps would leave I think with the comment Mr. Link made, Mr. Boren you made that at the high level, certainly there is a good sense and Ms. Modica, you indicated there could be some improvements in the process. I think we all recognize that there is a need to do it.

I would like to see us do it right, do it once, and not start again and stop again. So, take the time at the Commission to figure out the right path forward to having an enhanced process, whatever we

call it in the fuel cycle arena because that is a shared goal that everyone has, so appreciate the meeting and all the contributions. Thank you. We are adjourned.

(Whereupon, the meeting was adjourned)