UNITED STATES NUCLEAR REGULATORY COMMISSION

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BRIEFING ON URANIUM RECOVERY

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TUESDAY,

MARCH 2, 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

DALE E. KLEIN, Commissioner

KRISTINE L. SVINICKI, Commissioner

PANEL 1- NRC Staff

BILL BORCHARDT, Executive Director for Operations

PATRICIA BUBAR, Deputy Director, Environmental Protection and Performance Assessment directorate, Division of Waste Management and Environmental Protection, FSME

ANDREA KOCK, Chief, Environmental Review Branch, Division of Waste Management and Environmental Protection, FSME

BILL VON TILL, Chief, Uranium Recovery Licensing Branch, Division of Waste Management and Environmental Protection, FSME

KEITH MCCONNELL, Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate, Division of Waste Management and Environmental Protection, FSME

PANEL 2- Federal Representatives

ROY SIMON, Associate Branch Chief for Prevention, Drinking Water Protection Division, U.S. Environmental Protection Agency

JONATHAN EDWARDS, Director, Radiation Protection Division, U.S. Environmental Protection Agency

FRANK MARTIN, Deputy Chief, Solid Minerals Division, Bureau of Land Management, U.S. Department of Interior

PANEL 3- Stakeholders

DONALD MCKENZIE, Administrator, Land Quality Division, Wyoming Department of Environmental Quality

GEOFFREY FETTUS, Senior Project Attorney, Natural Resources Defense Council

KATIE SWEENEY, General Counsel, National Mining Association

SUSAN JABLONSKI, Director, Radioactive Materials Division, Texas Commission on Environmental Quality

P R O C E E D I N G S

CHAIRMAN JACZKO: Well, good morning. Today we will be focusing on the licensing aspects of new uranium recovery facilities during our Commission meeting. And I think we need to look no further than the country's experience with uranium mining and milling activities in really the early years of the nuclear power development to appreciate the importance of the regulatory work that we do.

Many of those early sites are dealing with significant environmental challenges, notably, groundwater contamination. That may take years or even decades to resolve. And I think it's this work that we do in this area in particular that puts the environmental protection in the NRC's mission for environmental protection. I mean, this is really, in many ways, what the work is about here, is it is that piece of our public health and safety mission that deals with those environmental issues as we address that.

So today, we find ourselves in a very different situation. With an increase price for uranium, we have a lot more interest in the potential for new uranium recovery facilities and even for restarting existing ones.

So right now, we are in the process of strengthening our licensing and oversight programs. And I think as an agency, we have taken a lot of steps to take that process and make it more efficient and effective, and ultimately with the goal of making sure that we protect

public health and safety and the environment.

The Commission meeting we have today is a long one. We have three panels. We will first hear from the staff, and they will tell us a little bit about what they are doing to deal with these issues and achieve our important mission.

We will then hear from a second panel. The officials from the Environmental Protection Agency and the Bureau of Land Management will discuss some of their related activities. And then finally, we will hear from a diverse panel of stakeholders, which include State and Government regulators and advocacy representatives.

And I would just remind everyone today is going to be a long meeting, we have a lot of different speakers, so if everyone can stick to their -- we have a nice little clocks for everybody to follow, and if they can stick to their time and leave the Commission an opportunity to ask questions and engage in dialogue, and we will do our best to stick to our time, too.

So with that, if there are any comments from my fellow Commissioners.

Okay. Bill.

MR. BORCHARDT: Good morning. Along with the interest in new reactors being constructed in this country, there's been a corresponding increase in the development of new uranium recovery capacity in the United States. In December of 2008, the staff provided

a briefing to the Commission on the current status of NRC's uranium recovery program. In today's Commission meeting we will provide an update to that meeting.

Just make a couple of points before I turn over to the staff. One is that the exact details of the future are uncertain. And, in fact, the current budget that we have and the budgets that we have proposed for the out years will allow us to complete the work that we think is most likely to come before us. But it would not allow us to do all of the work that would be required to be done if every letter of interest and potential applicant actually came forward to the NRC.

So, we have done our best guess, we have done our best estimation of what work will come before us, and that was the basis for that budget.

Also, as a result of next to no activity in this area over a period of about 20 years, we made the very conscious decision to let our regulatory infrastructure, the regulatory guidance, the Standard Review Plans fall a little bit out of date. We are and the staff is actively working on updating those documents. But we recognize that needs to be done, but it was a conscious decision utilizing the resource as most efficiently as we thought we could over the past 20 years.

So we really appreciate the stakeholder involvement in this process and the update of those documents.

With that, I'm turning over to Keith McConnell.

MR. McCONNELL: Thanks Bill. Good morning, Mr. Chairman, Commissioners.

Can I have Slide 3, I guess. Thanks.

My presentation this morning is going to provide an overview of NRC's uranium recovery new licensing program. My colleagues here at the table will address much of what I discuss in more detail. This slide provides, if it's up there, the topics that I will address.

Slide 4, please.

What we wish to convey this morning is that we are completing our licensing actions for new expansion and restart facilities in a timely fashion and are taking the necessary measures to improve the program, to make it more efficient and effective.

At the outset of the surge of new applications, we set a 2-year post-acceptance goal as the metric for completing our licensing actions. We knew this would be a challenging goal to meet because it's been 20 years since we received an application and because it includes factors that are largely beyond our control, such as the ability of applicants to provide timely responses to requests for additional information. We are striving to meet this goal, and as experience is gained and the regulatory framework is improved and stabilized, we expect to be able to exceed the metric.

In that regard, we are aggressively working with others in the uranium recovery process to make it more integrated and

transparent. This includes working with States and other Federal Agencies to integrate the licensing process and avoid unnecessary overlap; working with industry to ensure that we receive high quality applications; and working with Native American Tribes and other parties to ensure that they have the opportunity to be involved in the process and that their concerns can be addressed.

Slide 5, please.

We are also looking internally to identify ways we can make the review process more efficient and effective. Some of our specific measures are:

We have instituted an enhanced acceptance review approach that allows 90 days to evaluate whether an application is materially complete and of high quality. This enhanced acceptance review process has led to the withdrawal of two of the applications that we received, but they were subsequently resubmitted after the deficiencies were corrected. We believe that as experience is gained, both by the NRC staff and industry, this 90-day period for acceptance review can be reduced.

We have completed the Generic Environmental Impact Statement for in-situ uranium recovery facilities in June of 2009. The CIS serves as starting point for site-specific reviews, and as Patty and Andrea will address later this morning, will result in ensuring efficiencies in completing our obligations under the National Environmental Policy Act.

Finally, we are working with the Office of Research and the Center for Nuclear Waste Regulatory Analysis in San Antonio to update, consolidate and improve the regulatory guides and standard review plans that are out of date.

Slide 6, please.

In terms of policy issues that may come before the Commission in the near term, they all come in the form of rulemaking activities.

In March of 2006, the Commission directed the staff to initiate a rulemaking tailored to groundwater protection and in situ uranium recovery facilities. Such a rulemaking must conform to the Environmental Protection Agency's or EPA's 40 CFR 192, which sets the standards for uranium recovery facilities.

We continue to develop a draft proposed rule, and have been working with EPA to address their concerns, particularly in the area of groundwater monitoring after restoration. I would note that we do anticipate providing that rule to the Commission in draft form in April of this year.

In conjunction with our own rulemaking, we are following EPA's efforts to review and potentially revise 40 CFR 192. Under the Uranium Mill Tailings Radiation Control Act, EPA is required to consult with both NRC and the Department of Energy should it revise those standards. EPA is here today in the next panel and can address the timelines for that rulemaking effort.

Finally, the Office of General Counsel has drafted a rule for the definition of construction as it applies to Part 40 licensees, including in situ recovery licensees. That rule is now before the Commission. I think it's SECY-10-0018.

Slide 7.

Although we have been largely successful to date in keeping up with the volume of work related to new uranium recovery facility licensing, we continue to face a number of challenges.

First, as Bill mentioned, we are challenged to accurately predict the applications expected to be submitted. Our forecasts are based on Letters of Intent we solicit and other interactions we have with industry, but these are largely a reflection of the price of uranium at that time. The dynamic nature of the price of uranium, as well as industry itself, causes uncertainty in our budget formulation, which relies on the current projections of license application submissions to predict budgets 2 years into the future.

We address this uncertainty by taking a measured approach to budgeting and hiring. The strategy has been successful to date and there are sufficient resources available to complete work expected this fiscal year, but other applications that may come in in future years could prove to be a resource challenge to us.

A second area where uncertainty challenges the uranium recovery program is regulatory uncertainty. As I have noted, both the NRC and EPA are working on rulemakings that could change

the framework for licensing new facilities, and we are updating the regulatory guidance in parallel with our licensing reviews. This regulatory instability has led to frustration on the part of industry. We understand this frustration and working to address it.

Finally, Mr. Chairman, as you mentioned in your opening remarks, the legacy of widespread contamination from past uranium recovery mining and milling operations in the '50s, '60s, '70s and '80s still confronts us today. Some mills that ceased operations 20 to 30 years ago are still actively remediating their sites. This legacy of contamination is a source of great concern to members of the public and Native American Tribes in those areas and also to the NRC staff. Although we believe the framework is in place to avoid such legacy sites in the future, building public confidence in our licensing actions is a continuing challenge.

And with, that I'll turn it over to Bill von Till, who will talk about our operations.

MR. VON TILL: Thank you, Keith, good morning Mr. Chairman, Commissioners. As Keith mentioned, I will discuss the status of uranium recovery program operations.

Next slide, please.

My discussion topics will include the status of new application reviews, projections for future applications, communication with industry, guidance revisions and groundwater protection.

Next slide, please.

To date, we have received six applications for new in-situ recovery facilities, five in Wyoming and one in South Dakota. The first three applications are in the late stage of the review process. Staff is working with the applicants on remaining open issues and preparing final supplemental environmental impact statements. The Powertech Dewey Burdock application is currently under review. The Uranium One Jab and Antelope review is on hold at the applicant's request, due to issues dealing with the Sage Grouse in Wyoming. Andrea Kock will talk more later about this scope of the Sage Grouse issue. Uranium One Ludeman application is undergoing an acceptance review.

Next slide, please.

Since the resurgence in the uranium industry in 2006, the timing for new application arrivals has been dynamic. This slide illustrates current projections for the receipt of future applications based on letters of intent. Fifteen applications for new facilities and expansions of existing facilities are estimated over the next several years. Staff keeps a table on the public website showing projected applications and this table is updated monthly. We frequently request revised letters of intent from potential applicants to better project future work.

Next slide, please.

During this presentation, you will hear from staff on our increased effort with outreach to Native Americans, Federal and State

agencies and stakeholders. Since the industry has voiced some concerns with communication and their ability to comment on guidance, I will focus on that.

It has been challenging for the staff to take on multiple license application reviews while at the same time addressing outdated guidance documents. Staff feels that a large effort to communicate with industry and the public has taken place in many forms. There have been numerous publicly noticed meetings with applicants on site specific reviews. The staff participates in the annual National Mining Association uranium recovery workshop to discuss multiple issues.

Staff held a public workshop with industry in November of 2009, in Denver, Colorado, mainly to discuss issues related to health physics reviews of license applications in relation to regulatory guides. In addition, staff provided the public and industry the opportunity to comment on a regulatory information summary dealing with preconstruction at uranium recovery sites.

Next slide, please.

Staff is revising many of the outdated guidance documents in the uranium recovery program. This is being implemented in parallel to license application reviews and other work in uranium recovery. Staff is currently revising the standard review plan for in-situ recovery application reviews and ten regulatory guides.

In addition, the staff has issued three regulatory

information summaries dealing with the topics of preconstruction, groundwater restoration and licensing of in-situ recovery satellite operations. As guidance documents are revised, we plan to have an open process and provide the public with an opportunity to comment. It is important to acknowledge that industry has expressed concerns about this dynamic and real-time process, and we are working to address this.

Next slide, please:

Since most of the operations of an in-situ recovery facility occur in the groundwater, monitoring and restoration of groundwater is fundamental to the protection of human health and the environment, and is therefore a large focus of staff oversight of these facilities. During the operation of a well field, groundwater monitoring is implemented to assure that recovery fluids are contained to the production zone and to protect adjacent aquifers. Once operations have ceased for a particular well field, it is essential that restoration begins in a timely manner and continues until standards are met.

During the December 11, 2008 Commission briefing on uranium recovery, stakeholders raised concerns regarding historical environmental impacts for in-situ recovery facilities and the lack of readily available data. At the Commission's request on July 10, 2009, staff submitted a report summarizing historic data for the three NRC-licensed operational in-situ recovery facilities. The staff identified a total of 11 NRC-approved well field restorations.

Although not all parameters were restored to background levels, the primary restoration goal, staff only approved alternate levels after it was demonstrated they would have no adverse impacts on adjacent groundwater use outside the exempted aquifer.

Staff also reviewed historical data on groundwater impacts from production fluid excursions from well fields and well construction failures. The data indicate that excursions and well failures do occur and have the potential to impact surrounding aquifers. However, extensive groundwater monitoring and corrective actions for excursions ensure that impacts are promptly detected, controlled and properly mitigated so that adverse impacts are avoided.

In summary, through license conditions, the staff requires sufficient groundwater monitoring and restoration of in-situ recovery facilities to ensure that public health and the environment are protected.

I'll now turn the briefing over to Patty Bubar. Thank you.

MS. BUBAR: Thank you, Bill.

Good morning, Chairman and Commissioners. Today I will be discussing some of the improvements we have made in completing environmental reviews for uranium recovery.

May I have the next slide, please.

The topics that I will be covering are listed on this slide.

Next slide, please.

The Generic Environmental Impact Statement or the

GEIS was prepared to identify the impacts of in-situ recovery facilities for four regions in the western United States where NRC has regulatory authority. The GEIS is a starting point for the National Environmental Policy Act or NEPA analyses for site-specific applications for new in-situ recovery facilities.

Public comments on the draft GEIS expressed concerns that the impacts considered were not based on enough site-specific information. Commenters also expressed concern that opportunities for public comment provided to support preparation of the GEIS were not focused on specific applications.

So in response to these comments, the site-specific NEPA strategy was changed from issuing a site-specific Environmental Assessment or EA to a site-specific supplemental Environmental Impact Statement or an SEIS tiering from the Generic Environmental Impact Statement.

The SEISs will be issued for public comment, just as the EAs for new applications were going to be issued for public comment. And the applicable sections of the GEIS will be incorporated by reference into the site-specific SEISs.

If the GEIS analysis cannot be incorporated by reference, then further site-specific analyses will be completed. This revision in NEPA strategy improves the efficiency and consistency of NRC environmental reviews for in-situ recovery applications, and we believe it is responsive to public concerns, thereby increasing public

confidence in the process.

This approach eliminates the potential for unanticipated schedule delays due to having to complete an EIS when significant effects were determined from an EA. That is, a FONSI was not able to be published.

Additionally, this revision in the strategy continues to provide a savings of approximately $1 million per assessment and 6 months of review time.

Next slide, please.

Three public scoping meetings were held for the GEIS in 2007 in New Mexico and Wyoming. After publishing the draft GEIS, eight public meetings were held in four different states to receive comments on the Generic Environmental Impact Statement. As discussed in the earlier slide, public comments will be gathered on the draft SEISs for new applications.

Next slide.

In September 2008, as the NRC began preparation of NEPA documents for the first group of new in-situ recovery applications, the staff determined that both NRC and the Bureau of Land Management or BLM have responsibilities under NEPA for sites involving Federal land. The NRC and the BLM have prepared a Memorandum of Understanding or MOU. This MOU provides a framework for a cooperative relationship and identifies the responsibilities of each agency.

The intent of the MOU is to improve interagency communications, facilitate the sharing of special expertise and information and coordinate the preparation of NEPA documents associated with NRC licensing actions and BLM administration of public lands.

During development of the MOU, the agencies met multiple times to understand the roles and responsibilities of each agency. Due to differences in the agency's missions, the scope and purpose of the NEPA reviews will not be the same.

Additionally, it became clear that unless applicants submit the NRC's license application and a BLM Plan of Operations concurrently, the timelines for coordinated environmental review would not coincide. Nevertheless, the NRC and the BLM have agreed to coordinate in-situ recovery environmental reviews closely to ensure that portions of each agency's environmental reviews can be incorporated by reference.

I would like to reemphasize that the maximum level of efficiency will be gained if applicants submit a Plan of Operations and an NRC license application simultaneously, so that the timelines for the agency's NEPA reviews coincide and agency resources are aligned. And Frank Martin from BLM will actually elaborate on how we will be using this MOU.

Next slide.

A strategy was prepared and published which articulates

the NRC's approach to promote government to government relations between itself, and Federally-recognized Indian Tribes that have a known interest in, or may be particularly affected by NRC's regulation of uranium recovery facilities.

In addition to these site-specific government to government interactions, the NRC staff is focusing on government to government meetings that will allow more communication and understanding of the NRC licensing process for uranium recovery. Government to government meetings were set up with the Navajo Tribes, the Acoma, the All Indian Pueblo Council and two Pueblo Tribes, the Zuni and the Laguna. And additionally, we continue to meet with Tribal governments to discuss site-specific issues. And Andrea will discuss that in more detail.

Next slide, please.

In addition to the GEIS saving $1 million and 6 months of review time per assessment, the staff has been working on several other mechanisms and activities that should help gain efficiencies. In 2008, the staff realized that there is benefit to reviewing the resource needs over a 5-year period.

That 5-year look helped the staff realize that further efficiencies and predictability could be gained if multiple support contracts were put in place to allow flexibility. So an acquisition strategy was written, and Chairman approval was requested and received to put three contracts in place to assist the staff with

completing the NEPA reviews.

A key component of that strategy is a 3 to 5-year contract with the Center for Nuclear Waste Regulatory Analysis or CNWRA. Additionally, contracts with a 8-A firm as well as an Indefinite Deliverable Indefinite Quantity or IDIQ contract are being put in place.

Over the last year, the staff has also been working on guidance, templates and other tools such as a database of previous NRC NEPA documents to provide not only efficiency but enhanced knowledge management.

To help expand the knowledge base of the FSME staff and to help ensure consistency in how the agency approaches NEPA, the FSME office has initiated an intragency working group and steering committee with representatives from the Office General Counsel, the Office of Nuclear Material Safety and Safeguards, the Office of Nuclear Reactor Regulation, and the Office of New Reactors.

And finally, integration between the safety and environmental review processes continue. We have focused on integrating the budget formulation processes and the review processes to help build confidence that the environmental review and safety reviews are consistent in their rigor, timing and usefulness.

Next slide.

Finally, we continue to manage the processes and resources to allow for timely and transparent decision-making. We

recognize there are challenges, as has been discussed, such as the number and timing of applications which need to be recognized, anticipated and managed.

The public interest in uranium recovery projects is growing and we will need to ensure our processes allow adequate recognition of the need for the public to understand the process and provide us their input. The contract with the Center for Nuclear Waste Regulatory Analysis is in place, and we are moving to put two new contract vehicles in place with an 8-A and several companies under an IDIQ mechanism.

And finally, we will remain diligent in optimizing our interface with BLM to allow for sharing of information and elimination of duplication between the two agencies.

I thank you for the opportunity to review this information, and I will now turn it over to Andrea Kock.

MS. KOCK: Thank you, Patty.

Good morning, Chairman and Commissioners. I will be discussing the status, the accomplishments and the challenges associated with environmental reviews for uranium recovery facilities.

Next slide, please.

Slide 24 contains the topics that I will be going over today.

Next slide, please.

As Bill mentioned, we currently have ongoing reviews for

six new uranium recovery milling applications that we received in 2008 through 2010. As the environmental and the safety reviews are integrated, each safety review contains also an environmental review.

Staff has made significant progress. For example, on June 5, 2009, the Generic Environmental Impact Statement for in-situ recovery facilities was issued, and on December 11, 2009, we issued three Supplemental Environmental Impact Statements for new uranium recovery milling applications. The comment period for these documents ends tomorrow.

Our environmental review schedules are set to meet a licensing goal of completing the licensing action within 2 years of the date the application is accepted. The public nature of the NEPA process, delays in response to the staff's requests for additional information, the potential for litigation or staffing constraints can extend this timeline.

The first three environmental reviews that tier from the GEIS will be completed slightly after the 2-year mark due to delays in response to the staff's request for additional information, extension of the comment period on the Supplemental Environmental Impact Statements and the lack of infrastructure to support the reviews early in the process.

Completion of these documents near the 2-year mark will be an accomplishment, given these challenges and given the staff's efforts to increase the public participation in our process.

Next slide, please.

Over the last year, the staff has applied the experience that we gained to improve our environmental review process and the public's understanding of this process. In order to ensure that our stakeholders understand that the GEIS is a starting point, not a replacement for, a site-specific review, the staff met with stakeholders at the July 2009 National Mining Association meeting to discuss the purpose and the use of the GEIS. We expanded the discussion of the intended use of the document in the GEIS and the associated Supplemental Environmental Impact Statements, and we emphasized the intended use of the GEIS in our Federal Register notices and press releases that were issued for the reviews that tier from the GEIS.

The staff also emphasized this point during meetings with other agencies and non-governmental organizations while doing site visits and information gathering for our environmental reviews.

As Patty mentioned, we also fully integrated our environmental and safety project plans and project teams to gain efficiencies and to ensure that the staff schedules and evaluations are aligned.

Bill mentioned that the staff has provided you with a summary of the groundwater impacts at ISR facilities. We have used this information from this summary, as well as other information from the safety review to provide the public with more information in our

NEPA documents about the operational impacts of ISR facilities.

One issue that has been critical is the need for timely and complete information from applicants, both in the initial license application, as well as in response to the staff's request for additional information.

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The staff's experience with the first few uranium recovery environmental reviews has highlighted some of the associated technical challenges.

Bill referred to the importance of groundwater in the staff's reviews. And clearly explaining these complex systems has been a challenge in a public document. To clarify the associated groundwater requirements, the staff added information to the Supplemental Environmental Impact Statements issued in December to emphasize the NRC and other agency requirements for protection of groundwater during ISR operations.

The safety and the environmental review teams have also worked closely together to ensure consistent and quality technical review.

Protection of Sage Grouse is becoming an increasingly important issue in the western United States, and the species is under consideration for listing as an endangered species by the United States Fish and Wildlife Service. The staff is currently working closely with State of Wyoming and the BLM to assess any additional

mitigation which might be required by these agencies given status of the species.

Many of the sites that the staff has received applications for contain sites of cultural significance. In such cases, we have worked closely with the State historic preservation officer to develop mitigation plans that are satisfactory to all parties.

And due to remoteness of these locations, socioeconomic impacts can also be important in our environmental reviews. We meet with local governments to ensure we obtain the most up-to-date information and to obtain information on the socioeconomic response to fluctuations in the uranium recovery industry.

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The staff continues to extensively coordinate with local, State, Federal agencies tribes and other interested stakeholders. We contact agencies with jurisdiction or interest to obtain their input, and we have also taken steps to ensure that all interested stakeholders have an opportunity to provide insights early in our reviews.

In addition to requesting public comments on the Supplemental Environmental Impact Statements for new applications, the staff has entered into more formal arrangements for the coordination such as the MOUs that we developed with the BLM and the State of Wyoming. We have extensive and regular contact with

the BLM and the State of Wyoming to discuss the status of applications, the roles of each agency and the areas where our reviews overlap.

The staff has fully integrated BLM interactions into our project plans to ensure that we are involving BLM to the fullest extent under the MOU.

And recognizing that EPA has a critical role in the review of groundwater impacts, we have coordinated extensively with the EPA. For example, we held a call on October 6, 2009, during which we discussed with EPA their perspectives on groundwater issues associated with ISRs.

We also coordinated our reviews early in the process with the EPA, and we have committed to notifying EPA when the staff begins information gathering for our environmental documents.

In addition to the outreach that Patty discussed, we interact with Native American Tribes to inform them of the status of our reviews and solicit input on the scope of our environmental documents. And on a site-by-site basis, we are considering the need for more extensive outreach, including formal government to government meetings.

In response to concerns during development of the GEIS that the process would decrease public involvement, the staff has also gone a step beyond what is a required and we placed advertisements in local newspapers soliciting information on what should be

considered in our reviews.

And in addition to meeting with local and State governments and Tribes, we have reached out to stakeholders that we know are interested in UR projects to also gather their perspectives.

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In conclusion, the staff continues to address challenges and apply experience that we have gained from reviews completed to date. Significant progress has been made. We have continued extensive outreach with local, State and Federal agencies, Native American Tribes and other interested parties to ensure our decisions are based on the most accurate information and that all perspectives are considered.

We thank you for the opportunity to discuss uranium recovery program this morning. This concludes the staff's presentation, and we welcome your questions and comments. Thank you.

CHAIRMAN JACZKO: Well, thank you. Right on the nose. It is clear the staff has gotten the efficiency and effectiveness message.

I wanted to start, Bill, with the other piece probably of the review process, which is the safety piece. When we last met, one of the things that the Commission asked the staff to look into was to just take a look at what had happened at various facilities, and you provided a good summary and a good response to the Commission.

One of the things I just want to explore a little bit is what it means. You talked, I think -- I think, Bill, you touched on this a little bit about some of these excursions. And I thought I would kind of go through what's in the paper, so we kind of have the framework here.

What you told us is that there were about 60 events, I guess as we characterize them, events of excursions from -- I guess I'll just read what's here, and then we will know.

With regard to the migration of production liquids toward the surrounding aquifer, each licensee must define and monitor a set of non-hazardous parameters to identify any unintended movement toward the surrounding aquifer. Exceedance of those parameters result in an event termed an excursion.

Excursion events are not necessarily environmental impacts, but just indicators of the unintended movement of production fluids. The data show over 60 events had occurred at the three facilities. These are the three facilities that under groundwater restoration and monitoring. And for most of those events, the licensees were able to control and reverse them through pumping and extraction at nearby wells.

Most excursions were short-lived, although a few of them continued for several years. None had resulted in environment impacts.

So, the good news in the end, none of them had resulted in environmental impacts. I guess the part I wanted to ask is maybe

you can characterize a little bit more what is meant by "unintended"? Why are these occurring? You know, if we go through and is it a problem with our analysis, we don't fully understand the hydrogeology? How are these occurring if we have a good program in place?

MR. VON TILL: That is a good question. First of all, there is monitoring, extensive monitoring involved with each well field to detect excursions on the horizontal side and also wells in the aquifers above and below to detect these excursions.

And excursions can occur if during operations the production fluids may get little bit away from the core area of production, and then hit into one of the monitoring wells. And that would be an excursion right there. Then they have to pull it back in.

Also, you can have well construction failures. The industry is required to do MIT testing, mechanical integrity testing, on all these wells. We have had thousands of wells at these facilities. And they have to do mechanical integrity testing. But some well failures do occur, and then an excursion can take place, either in the horizontal aquifer surrounding the production or an aquifer above or below.

And so, we have extensive requirements upon these licensees to report these excursions and detect the excursions through the groundwater monitoring system, and then to take corrective actions on these excursions. But they can occur.

You have a lot of piping under the ground, miles of piping from the wells to the header houses to the production facilities, and, so, some events can occur. But the point I would like to make is we have a lot of monitoring in place to detect these and then take care of them.

CHAIRMAN JACZKO: Are there things that we can be doing to put in place maybe a better framework to minimize -- I don't know if I have anything to compare the 60 events at the three facilities. We certainly have more well fields in areas that will be going into a period of monitoring.

So, with those new ones that are coming, are there things we can be doing now to minimize that number so that the unintended ones become even less frequent?

MR. VON TILL: I think so. And we discussed these kinds of issues at the annual National Mining Association workshops. But, for example, some of the licensees are putting cameras in some areas of header houses to better detect potential spills that may occur from the wells themselves and the piping. Upon inspection, we have discovered that the industry has stepped up their efforts to try to avoid these types of excursions and spills and to take care of them in a more timely manner. So, we are working towards that.

CHAIRMAN JACZKO: Good. Well, I think that's good. It certainly, I think, is valuable information for us. I think the staff put together that document was useful, and it's good to hear that you are

taking advantage of that information and applying it with the newer facilities.

I wanted to touch base to a slightly different topic. I suspect an area that we are going to hear a little bit from some of the stakeholder panels later is on the definition of construction for uranium recovery sites. I think there is a lot of interest. It is an issue I think we discussed at the last meeting as well, about how we should address that issue.

I know the staff has sent us up a paper -- I think, Keith, you touched on that -- to address that. And that's under review by the Commission right now.

One of the things that where there, perhaps, seems to be a difference of opinion right now is on whether or not we can really delineate those aspects of a uranium recovery facility that have public health and safety impacts from those that don't. And those that don't would then more likely fall into that kind what we have called preconstruction activity, which would not necessarily require a full NRC review before that activity could occur.

Is it the sense of the staff that there is a good way to delineate those and we have a good sense of what kinds of things would be safety significant, and therefore, not part of that preconstruction and what would not?

MR. McCONNELL: Yes, I believe we do. We believe we can tie the activities of the in-site recovery facility to that nexus to

safety discussion.

Principally, it's the construction of the wells, the injection and extraction wells, the construction of the mill itself that involves the processing of these fluids.

So I think there is a good basis to move forward in terms of defining what is and what is not in terms of Part 51 construction, because I think there's a fairly clear delineation.

CHAIRMAN JACZKO: So, and perhaps more importantly or most importantly, things like the wells themselves wouldn't necessarily fall under that preconstruction definition?

MR. McCONNELL: Well, we believe because they have to be construction just as you had the discussion with Bill in terms of excursion, because excursions are important in terms of protecting public health and safety, the construction of the wells themselves does have a nexus with safety in our view.

CHAIRMAN JACZKO: Okay. Thanks.

I guess this is a question I will save for our folks from the Environmental Protection Agency.

One of things -- and this is not so much a question as is, perhaps, a comment -- by design, we let some of the guidance documents lapse and I think it is okay at a certain time. Obviously, now, we perhaps would wish we had not done that, but that's perfectly fair and we all make those decisions.

Going forward, do we -- in your sense, Bill, do you have

the resources you need to do the work now to get the guidance documents where we want them to be?

MR. BORCHARDT: Yes. I think there is good progress being made. It won't happen instantaneously, but it is certainly headed in the right direction.

CHAIRMAN JACZKO: Well, I certainly encourage you to continue doing that. And I'm sure giving all the interesting things you can do, updating guidance documents does not always rise to the list of the most interesting, but it is important, and it's certainly, I think, does create some uncertainty with all the stakeholders, because as things are changing, then people don't necessarily have a clear expectation. But I still think it's the right thing to do, to update some these.

I'm sure some of these guidance documents are probably 30 years old, in some cases. And, so, they can really benefit from our updated understanding of how to approach these issues and how to tackle things.

So, I encourage you to continue to work on that and move forward where we can.

One of the issues in that area of kind of updating guidance and updating the aspects of how we do things really has to do with the so-called Part 41 or the efforts to kind of create an in-situ recovery specific regulation.

Maybe you could -- Keith, I don't know if you're the right

person could touch on where we stand with that activity and what your sense is of how that will move forward?

MR. McCONNELL: Well, as you're probably aware, that activity was, I think, in 2001, the Commission determined not to pursue a complete revision to in-situ recovery facilities, given the state of the industry at that time.

From my perspective, the conditions that existed then are not too different than what exists now in the sense that we only have a few operating licensees. Yes, today we have perhaps a few more on the horizon, but given the uncertainty in the industry, you know, I don't know that right now, the effort to completely revise the regulations to make a separate Part 41 would be worthwhile.

Now, it would have to be based on what your perspective and what our perspective is of the industry in, say, 3 years from now. And I think, as Bill has indicated and as I have indicated, we don't really have a clear crystal ball in terms of what the industry will look like in 3 years.

CHAIRMAN JACZKO: Well, that may be something we can get a better handle on with some of the later panels.

But as I said, Bill, we have all made those decisions to postpone things that perhaps we wish we would have not done. Now, I wasn't actually on the Commission. I don't think anybody here is responsible for that decision, but as a continuing body, we are all responsible for the actions of former Commissions when the

Commission did decide not to pursue the Part 41 at that time.

So, I think it is something to for us to continue to look at. If the issue really comes down to one of a fee structure and ultimately, paying for this activity, that's something that perhaps we can look at to try to address.

As I think we did with some of the other rulemakings that we were doing the -- looking at the groundwater restoration standards, the Commission made a decision at the time that we would deal with that through annual fees rather than changing it specifically to licensees, because I do think in the end, for everyone, it is probably better to have a specific regulation in this area if we can. So maybe it is something we can continue to explore.

With that, I will turn to Dr. Klein for questions.

COMMISSIONER KLEIN: Thanks for a good presentation. You talked at lot about -- I think both Bill and Keith -- of uncertainty. Is the uncertainty due to our regulatory process or the price of uranium?

MR. BORCHARDT: Price of uranium is just the big driver.

COMMISSIONER KLEIN: Just checking. Just checking

MR. BORCHARDT: Well, from our perspective, anyway.

COMMISSIONER KLEIN: Could you remind us, Keith, on what fluid that you used in ISR?

MR. McCONNELL: It's basically just a oxidizing fluid.

It's fairly benign in the sense it's usually sodium bicarbonate or hydrogen peroxide that is injected into ore horizon to oxidize the ore horizon and release the uranium.

COMMISSIONER KLEIN: When I had first heard of ISRs, and Susan, obviously, is familiar with this from the State of Texas, but I had visions of it being some kind of a caustic solution that was pumped down that was going to contaminate everything. I was surprised when I went out to Wyoming and found out that it was a fairly benign activity.

MR. McCONNELL: In other countries, they do use more caustic solutions. In fact, they use acidic solutions.

COMMISSIONER KLEIN: In terms of the uncertainty, in terms of how many ISRs or recovery applications we have, I assume you stay in close consultation with the industry to note what's occurring and what is not occurring?.

MR. McCONNELL: Yes, we do. As Bill mentioned, we have the annual meeting with the NMA, National Mining Association, where we get a lot of our information. But also, we are in contact with them pretty much on a monthly basis. And we do solicit the letters of intent annually to help us with our budget formulation.

COMMISSIONER KLEIN: One thing I was surprised at, I looked at the -- we obviously have a large number of Agreement States, but if you look at the number of Agreement States that handle uranium recovery, it is only about six.

Why is that? Is it due to just the areas in which uranium is recovered or lack of interest for a number of years, or why the difference between the number of Agreement States versus those that handle ISR or uranium recovery?

MR. McCONNELL: Well, Don McKenzie is here from Wyoming, and he can probably address that better than I can.

My interpretation would be that, again, with the state of the industry, it has been largely dormant for 20 years and now picking up. And so there could be an increase from states like New Mexico and the State of Wyoming to become Agreement States for 1182 byproduct material.

But I think from my perspective, it's mostly just the state of the industry and whether the investment by the State would have been worthwhile in terms of the benefit to the industry and the benefit to the public.

COMMISSIONER KLEIN: I was just surprised when I looked at that to see the number of Agreement States that did not handle uranium recovery. That was the surprise.

MR. BURNS: Didn't New Mexico turn it back in --

MR. McCONNELL: In 1986, New Mexico turned their 1182 byproduct material, part of the agreement back to the NRC. And part of the reason was, again, the state of the industry at that time, because most of the mills were closing down.

COMMISSIONER KLEIN: Thanks.

You had talked a little bit, Keith, about the legacy sites. What role, if any, does the NRC have in these legacy sites?

MR. McCONNELL: Well, there are two roles. There are two types of legacy sites. One under the Uranium Mill Tailings Radiation Control Act, there are Title I facilities where the Department of Energy has a responsibility to remediate those sites. They were not licensed on or after 1978. So DOE goes in and remediates those sites. We have a role with respect the Title I, in that we review the long-term surveillance plans and groundwater corrective active action plans for those sites. And then, they become under 40 -- Part 40.27, they became general license sites with the NRC.

Then there is the Title II site, which were the commercial mills that were licensed on or after 1978. We have licensing responsibility for the remediation, so the licensees remediate those sites and we oversee those in the non-agreement states. And basically some of them, and New Mexico as I mentioned, are still in remediation now, even though they shut down, 20 to 30 years ago.

COMMISSIONER KLEIN: Thanks.

Well, Bill, you had a slide number 11 that showed the future workload? How does that future workload compare in the Agreement States that handle this? Do you know what their numbers look like?

MR. VON TILL: For example, Texas is kind of a mirror image of what we are seeing. They have existing operating facilities

and they are seeing applications there.

We also are seeing some new applications in the State of Colorado which is an Agreement State. The Pinon Canyon conventional mill application they received and getting ready to receive their first in-situ recovery application from Powertech called Centennial in which there is a lot of interest in that project, near the Wyoming border.

And also, some interest in you in Utah, which is an Agreement State as well, and so we do have a list of the potential sites and we maintain a lot of coordination with the Agreement States on where they are in the process.

We had a field trip down to Texas about a year ago or so. It was a very good trip to meet with the Texas regulators to see what they are going through to try to learn from our common interest as well.

COMMISSIONER KLEIN: So in terms of just the sheer numbers do the Agreement States have more than we have?

MR. VON TILL: No, not really, I got the list right here. Texas looks like a number of applications maybe Texas can comment on this later but looks like a few applications they are reviewing. The State of Colorado is reviewing one conventional application with some future ones and that's really it right now. I know there is some activity in Utah but not an application yet..

COMMISSIONER KLEIN: So the bulk of them is still

handled by NRC.

MR. VON TILL: The bulk of them is in Wyoming, South Dakota and so forth.

COMMISSIONER KLEIN: you talked on I think one of your Slide 13, you talked about where you're doing some parallel licensing reviews, what kind of impact does that have on facilities that are already licensed?

MR. VON TILL: We are basically juggling a lot of different things in the recovery program as we ramped up since 2006, 2007. First, we have the operational facilities. We have 2 in Wyoming, one in Nebraska that we do inspections on we do a lot of licensing reviews there.

We have the decommissioning facilities that Keith mentioned where we have a lot of activity and we have all these new applications. And in parallel, we are working on the guidance documents so it's been a challenge for us to take care of all these things at the same time and we try to make priorities in doing our work.

COMMISSIONER KLEIN: So probably, communication, communication, communication is important?

MR. VON TILL: Exactly.

COMMISSIONER KLEIN: Well, Patty, you talked a little but the NRC/BLM MOU. How long has that been in effect?

MS. BUBAR: Charlie Miller signed that back in October

so just a few months in effect. So the first 3 supplements SCISs, for public comment were not developed while – they were developed prior to that MOU being signed but we did try to live up to spirit of the MOU for those first 3 SCISs by sharing information. But it was signed, I think the date was in October.

COMMISSIONER KLEIN: So it has not been in effect long enough to see any modifications

MS. BUBAR: No and Frank Martin will talk a little bit about what they are doing to get it out to their field offices but we are just beginning to live under it.

COMMISSIONER KLEIN: Andrea, you talked about a two year time line in that we missed a few? How much did we miss it by? Was it close?

MS. KOCK: Right now, we have the first 3 reviews that are on going and for those 3, we missed by one month and one case, anticipate missing it by one month and in another case, it's about 7 months. So there is a span of a few months there.

COMMISSIONER KLEIN: After we do a few of them, do you think there will be any efficiencies gained where the two years could be reduced with no compromise in safety?

MS. KOCK: Definitely. A portion of the delays we have experienced as I mentioned were due to lack of infrastructure, early in the reviews and what I meant by that, we were really focusing on developing the GEIS and we were looking to get that in place so we

could continue to gain efficiencies.

So some of our effort was taken away from the early reviews to focus on the GEIS. And on the environmental side, a lot of our work is contracted, so we were focusing a lot on putting our efforts into the acquisition strategy that Patty spoke about and now that we have approval to move forward with that. I think those two things are going to help us a lot.

COMMISSIONER KLEIN: Great. Thank you. No further questions.

COMMISSIONER SVINICIKI: Thank you for your presentations. I just have a few quick questions. To turn again to Slide 11 we're showing there in projected workload for FY11, it's a bit of a spike there in new facilities. And I would just ask the question, maybe for Keith or Bill. But if uranium prices stay where they are right now, would you agree, there is some uncertainty that there would really be that many new facility applications because isn't it right now the spot market is $41-dollars or something like that. So it's not very high right now.

MR. VON TILL: you're absolutely correct. As I looked today, it was $41.75 and that does dictate a lot of when some of these applications come in. The long term price is around $60 a pound. We've seen this spike kind of shift out because of the economic situation.

COMMISSIONER SVINICKI: Is that what happens with

like the Letters of Intent is that rather than indicating to the NRC that they don't intend to apply ever, do they tend to shift their intent out a year by year adjusting to depending on the prices.

MR. VON TILL: We've seen both. We've seen some come off a list and a lot of them shift. I would say with the in-situ recovery facilities, there is less uncertainty because of the capital investment necessary for those as opposed to maybe a heap leacher conventional. But most of them have been sliding out. But the majority of them, they remain on the list but, slid out a bit.

COMMISSIONER SVINICKI: Okay, thank you. And we heard a turn of phrase that we use frequently here at NRC, "complete high quality applications." I think Patty, you mentioned that. Bill might have mentioned it as well. And I think there was a point in the slide about based on an acceptance review period, at least a couple of applications were withdrawn and augmented and resubmitted. Was there any commonality in the area there that was either insufficient and needed to be augmented or in general, as we do the acceptance reviews, are there areas of the application that tend to generate the most request for additional information?

And again, we need to keep of course insisting upon complete and high quality applications but I think to the extent where we can let it be known, these are the areas that we tend to find that are thinner than other areas maybe we can avoid even seeing those kinds of issues arise. Was there any kind of pattern?

MR. McCONNELL: The answer is no. One of the applications had issues with respect to meeting a dose standard at the boundary of the facility. The other had issues principally related to groundwater protection and deep disposal wells, and how to dispose of the byproduct material.

I think overall, we would judge the quality of the application as quite high. But I think what is needed is to gain experience and have the dialogue between the staff and Industry. And we did that last year's at National Mining Association meeting, we had a lessons learned discussion.

COMMISSIONER SVINICKI: I was going to ask about that, if applicants that are about to come in, do they look at prior sets of RAIs so they can learn from that and kind of do a cross check. So it's certainly these larger national meetings are an opportunity to repeat that and maybe talk thematically about how to improve the quality of applications. So I appreciate that you're doing that.

Patty, you talked about the fact that efficiency is improved if the plan of operations to BLM and the licensing application are submitted concurrent. Is that what we see happening or were you kind of putting that out as more of an aspirational reminder to folks?

MS. BUBAR: That has not been what we seen happening.

COMMISSIONER SVINICKI: is there some benefit to maybe not submitting them concurrently, say if they can get further

through our licensing review do they then have information that they can use to better develop their plan of operations or maybe vice versa.

MS. BUBAR: There may be a benefit in terms of the completeness of what they submit, but not a benefit in terms of scheduling.

COMMISSIONER SVINICKI: Because it is a trade off for them, really.

And then, we at NRC was in receipt of a letter from the National Mining Association and I think there were similar ones from some of the state mining associations regarding general concerns about the promulgation of the regulatory information summary and some concerns that there was perhaps a change in requirements in the RIS. And I think to be fair to the NRC, I think that there was some routing issues because this was not submitted on any docket or any kind of open rulemaking where we kind of know that mail that comes into the NRC generally, we kind of know where to direct it. So my understanding is there's not been a staff response. And my question would be, do we intend to respond the concerns outlined in that letter?

MR. McCONNELL: As you noted, we have just became aware of this letter today or recently anyway. We have not responded specifically to the issues raised in this letter but similar issues have been raised in other fora. A letter we sent a couple of months ago the law firm of Tony Thompson addressed similar issues in terms of what the appropriate standards for restoration are. So we have addressed

this issue, but we would intend to address this specific letter also.

COMMISSIONER SVINICKI: Thank you for that. That's the end of my questions. Thank you.

CHAIRMAN JACZKO: Well, thank you for a good presentation and for a thorough answer to the questions, we will now transition our next panel of Federal partners.

Thanks.

NEXT PANEL

CHAIRMAN JACZKO: We will now hear from our next panel, Jonathan Edwards, Director of the Radiation Protection Division, U.S. Environmental Protection Agency, Roy Simon, who is the Associate Branch Chief for Prevention in the Drinking Water Protection Division of the U.S. EPA, and then Benjamin Martin, who is the Deputy Chief of the Division of Solid Materials of the U.S. Bureau of Land Management. So we will begin with Mr. Edwards.

MR. EDWARDS: Good morning. I'm Jonathan Edwards, Director of EPA's Radiation Protection Division in the Office of Radiation and Indoor Air. Thank you for the opportunity to appear before the Commission.

Today I'm going to briefly discuss our division's regulatory and environmental protection activities concerning uranium extraction.

EPA's Office of Radiation and Indoor Air derives its environmental authority for uranium extraction facilities from multiple statutes.

ORIA, in accordance with its authorities under the Uranium Mill Tailings Radiation Control Act, or UMTRCA, the Atomic Energy Act, the Clean Air Act, and other governing environmental protection statutes, carries out a number of roles concerning uranium and thorium extraction facilities which are licensed by the Nuclear Regulatory Commission, and NRC's Agreement States, as well as the Department of Energy in its oversight of closed uranium mill tailings impounds - impoundments, excuse me.

EPA has a standard setting role under UMTRCA. Under UMTRCA, Congress directed EPA to establish radiological and non-radiological standards which were to be incorporated into NRC and D0E regulations for oversight of uranium and thorium milling activities and byproduct materials.

In doing so, ORIA's standards for uranium and thorium mill tailings, which are located at 40 CFR Part 192, were originally issued in 1983 and last updated in 1995 for groundwater protection provisions at inactive mill tailings impoundments.

ORIA is currently undertaking a review of its 40 CFR 192 regulations for uranium extraction facilities. These regulations have not been substantially changed to recognize the environmental challenges faced by significantly increased use of in-situ leaching

recovery technology, as well as possible use of heap leaching by the uranium industry. Nor have they been revised to incorporate potentially relevant recent changes in EPA groundwater and drinking water standards, as well as the most recent updates in good science for radon and radiation protection since the rule was last revised.

Environmental justice considerations for potential impacts of extraction facilities on disadvantaged populations, Tribal populations, as well as children's health must now be taken into account and in consideration as a result of executive orders and agency policy.

The regulatory standards will be re-examined in light of the fact that ISL recovery in heap leaching facilities are returned to the public and private use after decommissioning, unlike conventional mills which are overseen by DOE in perpetuity.

Following the lead of the EPA administrator, ORIA has undertaken extensive effort to provide public information and outreach as it reviews these regulations, and will be utilizing a number of web 2.0 public information meetings and hearings and other means to obtain public input to it's regulatory process.

We intend to hold regular meetings with the NRC and DOE staff and management as well as with the IS course member agencies to minimize differences as the reviews progress.

Specific efforts will be included to engage the CRCPD, the Organization of Agreement States, non-Agreement States, Tribes,

industry and environmental organizations.

ORIA is also reviewing its NESHAP's radon emissions standards for uranium mill tailings facilities.

EPA was authorized under the Clean Air Act to develop national emissions standards for hazardous air pollutants, and issued it under 40 CFR, Part 61, Subpart W, for radon emissions for uranium mill tailing impoundments in 1989. As a result of the settlement agreement concerning a review requirement for this regulation, ORIA is now re-examining its radon emission standards in this particular regulation, and doing so with recognition of the environmental challenges faced by significantly increased use of ISL recovery technology by the uranium industry.

While EPA moves forward on its reviews and possible revisions of these regulations, the agency will be consulting with the NRC and D0E.

As required under UMTRCA, ORIA will been consulting with both agencies as it moves forward on its review of 40 CFR Part 192, and will provide information to them on the review of the NESHAP Subpart W as well. EPA is pleased to provide advice to the industry as its moves forward to develop new NRC regulations for environmental protection of groundwater resources at ISL extraction facilities. ORIA is concerned about the potential environmental impact of ISL recovery operations and we're dedicated to ensuring they comply with our environmental and radiation production standards,

and in particular, ensuring that there is adequate technical information on which to base rule language concerning post-closure monitoring.

We have not had the opportunity to review the most recent revision of the NRC proposed draft rule, prepared in response to previous comments, so we are unable to discuss our views on them today. Our advice to the NRC, though, through its working group as it develops its draft ISL recovery groundwater protection regulations, should not be construed to imply or confer that the administrator's concurrence has been gained with the rule.

The agency will independently comment on the draft rule when it's released for public comment and separately review the final rule before a decision is made on whether or not to concur on these regulations before their publication.

We have encouraged the NRC staff to move forward in its development of proposed regulations for ISL groundwater protection.

It is our belief that additional public input from publication of a draft rule on this topic will assist both the Nuclear Regulatory Commission and EPA in evaluating regulatory approaches and options for this important issue.

However, the possibility does exist that public input and information developed by EPA in its own separate rulemaking process for 40 CFR Part 192 could result in different standards, which might require the industry to revise its regulations after they've published in

final form.

So communication between all parties will be crucial. Thank you for this opportunity to speak before the Commission.

I will turn to my colleague from the Office of Water at EPA, Roy Simon.

MR. SIMON: Thank you again for inviting us today. EPA'S Office of Water has authority for the Safe Drinking Water Act's underground injection control program.

We work closely with John in the NRC over the past couple of years for the same goal of improved protection of groundwater at the ISL sites. We at EPA hope and expect this cooperation will lead to improved groundwater rule and analysis at the ISL sites.

Safe drinking water act in 1974 established underground injections control program requiring EPA to determine the need for and promulgate minimum requirements for state and Tribal regulations sufficient to protect underground sources of drinking water. EPA published rules in the early 1980's so that injection wells do not endanger these underground sources of drinking water.

The EPA can delegate UIC primacy enforcement authority to states and Tribes and has done so for 33 states and 2 Tribes, and we have shared primacy with 7 states. EPA directly implements in 10 states. UIC program regulates activities throughout the life of the injection well, including siting, construction, operation,

monitoring and closure.

There's five current classes. Most relevant classes are, class one, deep wells for hazardous and nonhazardous waste, and class 3 wells, that inject fluids that dissolve the minerals in underground rock formations. And I want to be clear that UIC program regulates only injection, not production.

A mining site must have both an NRC license and UIC well permits. All UIC wells will be permitted by either EPA or a state that has UIC primacy authority. Where injection is into an underground source of drinking water, an exemption must also be obtained.

For SCIS activities, the EPA has an obligation to review and comment on the supplemental environmental impact statements for ISL sites. After NRC or BLM develops them, EPA will comment on these SCIS documents, whether they are located in the EPA-UIC EPA direct implementation states, or in the UIC primacy states. EPA's comments are particularly focused on the breadth of the analysis in each SCIS, factual basis and supporting information for analysis, and statements in the document, and the options provided for avoiding adverse impacts of activities at each site.

EPA's analysis and comments are finalized by the affected EPA regions where ISL sites are located in consultation with headquarters.

Thanks again for the opportunity to talk to the

Commission today about the ISL sites and the UIC program. We look forward to continuing cooperation ensuring that these sites protect groundwater.

CHAIRMAN JACZKO: Thank you.

Mr. Martin.

MR. MARTIN: I'm here to discuss BLM's role in uranium in-situ recovery projects on mining claims. The next slide, please.

First, we need to talk a little bit about BLM's role in mineral leasing, which is actually quite complex. We will not be getting into any of the complexities.

Essentially, we manage 750 million acres of Federal minerals, about 29 percent of the surface area of the U.S. BLM manages mineral development in a number of different ways on Federal lands. For instance, on lands which have been acquired after they have previously been patented by government, then citizens or American companies may lease uranium.

They may stake mining claims on unpatented land. And so today, what we're going to be talking about since the focus has been on Wyoming, and that's where the active -- I understand, the active applications are on BLM land – so we'll just be talking about mining claims. Next slide please.

Again, the BLM manages abut 750 million acres of Federal mineral estate, and that is a picture, essentially, of where this mineral estate occurs throughout the country. So we have a pretty

broad sweep in our activities. We manage the minerals that -- whose surface is managed by BLM, as well as all other Federal minerals including those who surface is management by the Fire Service, Department of Defense, the various other government agencies, Now, let's go the next slide.

Mining claim regulation -- surface use. There are three levels of surface use under the mining claim regulation. The first is casual use, which involves a negligible disturbance not requiring mechanized equipment. So they do not have to notify BLM of casual use nor is there any NEPA activity, EAs or EISs.

The second level of us is notice level operations, where less than five acres are disturbed, and they must notify BLM and provide reclamation bonding for whatever disturbances they do create, but no NEPA is done on this, because it's not a Federal action, it's a notice.

And then finally, the plan of operation stage. These are larger surface disturbances -- or surface disturbances with more profound environmental impacts, and they require BLM approval of the mining plan and the reclamation plan, which must be submitted to BLM, called the plan of operations, an EIA or and EIS, and also full cradle to grave reclamation bonding. And next slide please.

Just so that we'll understand, BLM has a more distributed organization in terms of authority than the Nuclear Regulatory Commission does. Authority flows from the BLM director,

on this simplified org chart, down to the State directors. Then down from the State director to the actually, district managers in some states, and through them, where district managers exist, to the field managers, and finally to the NEPA staff.

And so decisions as regards NEPA actions, and for that matter, the decision to permit or approve the plans reside on the shoulders of the field manager. I'm in the minerals and realty directorate, which is a staff function. We manage six solid minerals programs, all of which have a different set of legal requirements, which is why we're focusing here. Next slide please.

Now, as far as the BLM-NRC-MOU, it was a pleasure to work with your staff. I had that pleasure, as well as many of our other staff on this MOU. We had quite a time because the agencies have differing needs and requirements, as you might imagine, but we managed to get a document completed that we feel is most likely to address, as best we were able to come up with, the needs of the regulated community out there, as well as the needs of the public.

We have distributed that MOU as a PDF to all of our offices, through our state deputy directors, the mineral deputy directors who would then distribute it to their mineral staffs and have done so. We have a quarterly mining law conference call in which every one in the mining law program of any rank whatsoever is invited to participate and frequently do and speak up and the MOU implementation is discussed regularly on those conference calls.

We are cooperating with the NRC in a number of industry outreach series of meetings and workshops to be held in Wyoming and Colorado, Colorado because Denver is convenient. We are also providing information -- as a matter of fact this week at our booth at the Society of Mining Engineers, where we are also recruiting for the Federal intern program for the minerals program. So we are sort of killing two birds with one stone there. Next slide please.

The way forward. Well, BLM field offices will be cooperators on future NEPA documents, where possible, and it is their intention that where that is not possible, certainly if there have been NEPA activities that NRC has been involved with, then we will adopt those to the maximum extent that we can and attempt to make sure there is no duplication of effort here and no duplication of cost and to try to make this process as efficient as possible.

To take maximum advantage of cost and schedule efficiencies, and this is probably the most important point that I have to make, to take maximum advantage of these potential efficiencies, the applicants absolutely have to understand the process, and it is not a simple process.

We have got the EPA, we've got the NRC, we've got BLM, we've got the Wyoming DEQ folks, and the various others who regulate this activity in one way or another, and all of those processes have to be clearly understood by the applicant, and it has to be preferred to time, its applications and responses to information

requests and so forth so, as to achieve the efficiencies which are otherwise available to us and, as you all have already discussed this morning, there is a possibility of some schedule slippage as a result of the economics of uranium at the moment, and that's always a possibility.

Let me assure you, we have a lot of experience with this and, in fact, we can expect to see that sort of thing. And it is a key aspect of this, that the applicants, whatever else they do, they stay on top of it, because if they don't, it's going to take them longer and it's going to possibly cost them more money. We will try to keep the money out of it but it certainly will take them longer.

We also have an MOU with the Wyoming DEQ and we work very closely with those folk out in Wyoming, in the Wyoming state office and the field offices. We have a wonderful relationship, I might add, and so they worked with us integrally whenever -- to approve mining plans.

Finally, I would like to say that the Bureau of Land Management is very pleased that we have a M0U with the Nuclear Regulatory Commission, and we look forward to increased coordination and cooperation with the NRC in the future as we work together to deliver, safe, efficient and environmentally responsible energy to America. Thank you.

CHAIRMAN JACZKO: Thank you, Mr. Martin. I appreciate your comments. I just had a couple of questions. Mr.

Edwards, Mr. Simon, maybe I can take advantage of you being here to -- trying to educate me a little bit because, I think, one of the biggest challenges we face in this area is, one, we don't have -- certainly at the NRC we don't have specific regulations for uranium recovery facilities, so we've been taking advantage of other regulations that we've developed, and I think that that's make things a little bit confusing for us and, I think, for the public and for lots of folks in terms of exactly what our requirements are.

So both of you are here, and part of the complication then gets in between the differences between the underground injection control program and then, from our perspective, our licensing program and then how that has an impact on the air and water side of things, so -- or radiation side of things.

So, one, I wanted to ask a question on process first, and maybe you can just give me both your best understanding of how you think all of these things fit together? The first one is on our efforts to put in place a specific in-situ recovery regulation. Right now I think there, my understanding, there is still some discussion between us and EPA about the post-closure monitoring, that that seems to be the area where there is some disagreement. And I actually, I think, was pleased to hear you say that you think we -- that everyone would benefit if we were to continue to move forward, recognizing there might be some differences in our approach versus your approach, and those would eventually be resolved through your rulemaking

ultimately. We've been holding off in the effort to try to get better alignment between the two agencies, but, if that seems to be your position, then that certainly gives us an opportunity to consider moving forward and put it out for public comment. As you said, we will probably only inform your process going forward. Am I understanding that piece of it correctly?

MR. EDWARDS: Absolutely Chairman. It is our belief, and we have been supportive of the NRC staff working on the draft ISO groundwater rule, that it is a good idea to go forward. Of course it isn't the Nuclear Regulatory Commission's call on whether you want to do that because there is that possibility that as we go through our own update of UMTRCA that we will learn things from stakeholders and public hearings and other scientific reviews and analysis that does cause us to change the standards and perhaps differ from where the NRC draft rule may propose, and then ultimately go.

But at this point, we're very encouraged with our discussions with your staff, and we believe that a rule out there probably would lend to better consistency and certainly be a step forward, again, assuming that the rule ends up where we all agree it needs to be, over what we have right now.

CHAIRMAN JACZKO: Well, I appreciate that. Just one more point to clarify, what is your sense of the timing of your effort, is it a 2, 3 year process, or maybe longer than that?

MR. EDWARDS: Absolutely. I'd be more than happy to

share with you a little bit of our thinking on the timing on this. Typically, EPA rules take about 3 to 5 years to reach ultimate final, and of course, that's sometimes through a pretty elaborate OMB process.

For this particular rule, the last several months, we've assembled a work group to put together the preliminary draft blueprint on where to go with the regulation, briefed our senior management. And were very close to concurrence within the agency on our detailed analytical blueprint that lays all of this out.

It's our projection for about the next year or so, a number of scientific analysis, economic analysis, outreach efforts or whatnot will be undertaken. We have seven task force groups that we put together under the internal work group that are tackling these things and then ultimately go through peer review on the scientific elements of that study. That should take at least a year or so, optimistically, and then we move to where does the rule need to be revised, what are the option selections, and then drafting that rule and then going through the OMB process.

So our best good faith advice to you right now is sometime in 2012, the summer of 2012 optimistically, would be the time we'd have a proposed rule out for public comment, and then depending on the comments we receive there and things we learn from NRC's rule, if you decide to go forward, then, would of course, impact how long it takes to move to final on that. That's our best

guess timing on that though, Chairman.

CHAIRMAN JACZKO: Well, I appreciate that. And we certainly will not hold to you that but it's good to get a sense of what your thoughts are on the timing.

Now, if I could just beg your indulgence to try and explain to me how the underground injection control program fits into our regulatory program and how all that works together.

MR. SIMON: There has to be a license for the UIC wells -- excuse me, a permit, along with the license from NRC. When we looked at the different jurisdictions within the different states, it does get a little complex, depending on if it's an agreement or non-Agreement.

CHAIRMAN JACZKO: Your Agreement, rather than our Agreement State, which makes it even more complicated.

MR. SIMON: The NRC has Agreement States and non-Agreement. We have primacy states and direct implementation. Given the four permutations and putting them together, it requires the different entities within each state have linkages as the permits and license process goes forward.

So as I understand it, I think there's the license process goes forward, then the UIC permit the applications come to UIC and the permits process goes forward. There's one last piece, which is called the opt for exemption process, and that has to go through EPA's review after the, what we call owner-operator, I guess the

business, puts their application forward and puts their information forward to go through the opt for exemption.

When all that gets done, I think the BLM probably has a role, depending on which -- so I'm not exactly sure how BLM plays into it, but when all that gets done, I think then the process gets finished, the permits, the license, and then I guess, mining starts.

CHAIRMAN JACZKO: And the permit -- and your permit is valid while the well exists, and then you have requirements on post-closure, or do you not have requirements there?

MR. SIMON: There is a whole set of post-closure -- the UIC process doesn't end because it protects our groundwater. So that, whether it's excursions during mining or movement after all the mining is done, I mean the UIC program maintains the process. Now the permit is only for the mining. But the UIC program is required under the Safe Drinking Water Act to protect groundwater from the movement of fluid out of the mining zone into any underground sources of drinking water, wherever they may be outside the mining site.

CHAIRMAN JACZKO: So that extends post-closure.

MR. SIMON: Yeah. It goes on, yes. The authority does not change to protect groundwater.

CHAIRMAN JACZKO: Thanks. I appreciate that. And with that, I will turn to Dr. Klein.

COMMISSIONER KLEIN: Well I thank you for your

cooperation. It is good that Federal agencies play well together, so I appreciate the good cooperation I think we've had between both EPA and BLM. I guess the question what could the NRC do to make the process better? In other words, it sounds like the biggest difference now is just post-closure monitoring; is that correct?

MR. EDWARDS: Commissioner, specifically with the NRC's draft ISL rule, we -- we have the latest revision. We just haven't had a chance to look through it carefully and to put the appropriate scientific and technical analysis around it and what not. We will do that and get back with the appropriate staff that are developing that rule here at NRC.

But again, I'm very hopeful and optimistic that we will be able to come to a good understanding of what a draft rule looks like there.

COMMISSIONER KLEIN: In terms of looking at the in-situ recovery, I'd indicated earlier I was surprised when I went out to Wyoming, and seen an actual field that was in place, and it was much different than what I had perceived it might have been. To your knowledge, has there been any problems with ISRs in terms of groundwater issues?

MR. EDWARDS: I would like to take a look at more information before I could say if there really is no lack of concern there, Commissioner. At this point, I wouldn't say that we're not concerned about that issue.

COMMISSIONER KLEIN: But there's no -- you haven't identified any particular issue at this point with contamination from ISRs?

MR. EDWARDS: I'm not knowledgeable.

MR. SIMON: I don't know. I don't have the analysis to give you an answer on any of the current ones or on the future, but I think you were asking about current sites. I just don't have the information, but we are happy to get back to the commission with whatever information we have.

MR. EDWARDS: One thing I will say Commissioner, as I was describing our path forward on the updated UMTRCA rule, this upcoming year, with these task forces working on various scientific issues but that is one of the things we will be looking at and combing through pretty carefully, and so at this point, I apologize, I'm just not well informed enough to give you any feedback on that, but certainly the scientific and technical process we are a undertaking to update 40 CFR 192 will better inform us of those issues.

COMMISSIONER KLEIN: Well, thanks. Well Frank, I noticed -- I'm glad you called that a simplified org chart. I'd hate to see the complicated one. The curiosity -- you talk -- it looks like your field managers have a lot of autonomy?

MR. MARTIN: They do. They have a lot of authority, subject, of course, to the supervision of the district managers and the State directors. They absolutely do.

COMMISSIONER KLEIN: How do you coordinate consistency from field office to field office? We always have a challenge even within the NRC of making sure we are consistent between our four regions. It looks like you have a few more field offices. How do you do your consistency?

MR. MARTIN: Well, you put part of your finger on it. We typically play well together, all of us do. We exist to serve, essentially in my office, we exist to serve these folks with their information needs, with their concerns about legal matters and so forth. But essentially what I haven't shown here is that there is also a deputy director and several associate directors, and the deputy director and the associate directors have other executive leadership team series of conference calls meetings monthly, I believe, if not weekly. And if any issues come up with respect to these matters, we will see to it that they come up at those meetings, so that the State directors have two different independent sources of information from below, you know, upward reporting as well as, you know, reported from headquarters as well. And this way proceeds the BLM by a consensus of these parties. It is typically carried out reasonably promptly.

Another issue that always is impactful is that we have a lot of constituents, there's a lot of interest groups whose interests are quite diverse. Part of what we have to work with and to help people with is coming to some kind of consensus decision, particularly in the more controversial areas, and some of these might be grazing, for

instance., wild horse and burro, if you read the newspapers, have been an issue lately, and of course, mineral development.

And we work through typically a public process, much of it NEPA related but typically there is considerable public input there.

So you might say our field managers are bombarded from all directions with advice and help. Somehow they have to develop a consensus through a process with their staffs, to come up with some rational decision that, as one wag put it, makes everybody equally unhappy. Hopefully that's not the case.

COMMISSIONER KLEIN: That's the consistency, right. Well, I'd like to thank you for your cooperation on the MOU. It was nice to see that come to closure. And as it develops, if there's modifications, you be sure to let us know. .

MR. MARTIN: We sure will. We don't anticipate any problems at all. You guys are great to work with.

COMMISSIONER KLEIN: Thank you.

CHAIRMAN JACZKO: Commissioner Svinicki.

COMMISSIONER SVINICKI: Thank you. I'll start out, Mr. Martin, by adding to what Dr. Klein just said, that I have heard only good things from the NRC staff in terms of working with the BLM on the MOU. So your compliments about working with us are certainly reciprocated on this side of table and with the agency at large.

I took some careful notes here. I appreciate, Mr. Edwards, you're going through, I had the same questions as the

Chairman on some of just the timing and path forward on the rulemaking, so I've taken some careful notes. So we don't need to cover that again.

You know, maybe this is just my personal curiosity, but we heard about -- we don't have fish and wildlife service but we heard a little bit from the NRC staff about the Sage Grouse potential listing there, and there has been an issue out west for a long time. I'm not an Endangered Species Act expert, so I don't -- is there some sort of time frame within which there might be a decision about the Sage Grouse? And so I don't - I mean, I'm kind of throwing this out, and I'm looking at my poor BLM colleague here thinking you're the closest, maybe to --

MR. MARTIN: I'm not intimately familiar with all the issues involved with the Sage Grouse but in different parts of the state, I understand that, Sage Grouse population varies considerably, and I'm not sure the extent of which it's, and how well it is understood, but is exactly why pressures occurs.

I have heard different biologists say different things but --

COMMISSIONER SVINICKI: So it sounds like an underactive study, there is still a lot of field work to be done.

MR. MARTIN: My understanding is that the potential for listing the Sage Grouse in various parts of the west has been on the table, probably, for 30 years or so. And it all depends -- everybody, the agency certainly -- the surface management agencies themselves

certainly are working very hard to get those Sage Grouse populations up. If we get the little devils to cooperate with us, and so it's constantly on the radar and it's never far from our thoughts. Those field managers thoughts that I was referring to particular in the Sage Grouse efforts.

COMMISSIONER SVINICKI: I'm tempted to make some bad jokes here, but I will avoid it in the interest of time and other things and so I just close by thanking you, as my colleagues have done, for working together. I think we best serve the American public when regulatory agencies and those with kind of touch points of authority and jurisdiction work together to reconcile issues so that we can do that work and communicate that clearly to the public. I think we serve them well when we coordinate, as is evident here today. So thank you all. Thank you.

CHAIRMAN JACZKO: Well, I want to thank you for your willingness to come and suffer through our questions and some of our comments. If there is any information you want to provide to follow-up, please do that. We appreciate your working with us and our ability to work together on a lot of these important issues. Thank you.

We will have about a five minute break now.

(Break taken)

NEXT PANEL

CHAIRMAN JACZKO: We will now start the final part of our meeting today. We'll hear from stakeholders. We'll start with Susan Jablonski, who is the Director of the Radiation Materials Division of the Texas Commission on Environmental Quality representing an Agreement State program here. And then we will hear from others after. Susan.

MS. JABLONSKI: Thank you Mr. Chairman, Commissioners. It's nice to be here to talk about uranium recovery. In Texas as well we have experienced the resurgence of uranium mining. It has been several decades since we looked at new applications. I know that we've been talking about statistics, we currently have 3 applications pending technical review right now and have issued the first license in January of this year to a company in about two decades.

One major point of that issuance of license is that it was issued with no public comment on either the final draft license or the site specific environmental analysis that was published associated with that. I'm going to kind of reflect on why we think that is true for this pretty major endeavor in the area of uranium recovery.

In 2007, the Texas legislature looked at the regulatory programs particularly for uranium recovery as well as radioactive waste and management and disposal. And looked at a reorganization

or realignment within the state of how we would gain efficiencies in our programs and look at more regulatory certainty as well as the public input process for those activities.

Included with that was the uranium recovery program and reclamation of former sites, both ISL sites and conventional mining sites, Title II sites. As part of that legislation, to implement it, my agency, the Texas Commission on Environmental Quality, was given additional authorities and formed a new division to focus specifically on radioactive material, and over time has also brought together the underground injection program as an alignment that made sense for our agency to look at uranium recovery as well as other aspect of radioactive materials. As part of the implementation of that legislation, there were two phases of rulemaking. As you can imagine, there was a significant amount of public input into the process and a lot of interest in the reorganization.

We attempted two phases. The first was to take on the applications that were pending in front of us and simply transfer the responsibility from the other agency, the Department of State Health Services, to the Texas Commission on Environmental Quality.

The second phase of rulemaking really looked at more efficiencies and revamping the process to bring us into the decade that we are currently in. And this included a significant revisit of the uranium recovery rules for underground injection as well as some additional changes to our radioactive material licenses.

There were 7 public meetings associated with that second phase of rulemaking and a lot of extensive work and comment that went into coming up with a rule that was consensus building with not only the regulated community, but also the public and the policymakers in our state. There was much focus as we have heard today on groundwater monitoring, aquifer restoration and also how we would handle licensing and permits in the public involvement in this.

As part of the reorganization, the Texas legislature also gave statutory priorities for looking at, first, a disposal site for 1182 byproduct material as statutory priority, as well as new applications for ISL in the reclamation of former sites that had been languishing within our state.

And so to come back on the path towards reclamation, we really have looked at those sites and brought them back into, I would say, active reclamation, which had not been the case for several decades. The State had really back-burnered those issues because of funding and resources, and the legislature provided additional funding and impetus for the agency to look at those sites and get them back toward reclamation.

In the process of updating also guidance and the things that go along with that, we, as you heard from the NRC, have some significant challenges trying to balance both the statutory priorities as well as looking at revisiting guidance and other documents that help us do our jobs. As new rulemaking is looked at from both the NRC

and the EPA, what Texas would like is at least to have some recognition of some flexibility for programs that have fit radioactive material licensing as well as its underground injection program, that is a delegated program, into kind of a unique mix for our state, where the State is a administering a full program through a consolidated division.

Just last week, we underwent our IMPEP review by the NRC, including uranium recovery indicators, and for the first time since 2001 our program has closed all pending issues, and I feel like we are finally on the track towards really looking at both new licenses as well as the reclamation of sites that are still in our state.

We have been continuing to work with the Department of Energy and the Title II sites, and working on modeling that would allow to us move those toward transfer. We have contracts in place where we are getting some assistance, and both the renewed interest of uranium applications as well as added workload associated with the program consolidation. So, we feel like we have provided both a protective and transparent regulatory process in our state that is successfully working, and it's taken a lot of effort and about two years in the making of creating rulemaking that we have both confidence of our licensees and applicants, as well as the public to provide that regulatory oversight.

So I'm very encouraged by the discussions between the EPA and the NRC as working together and ongoing, so that those rulemakings doesn't provide unintended consequences in our state

and for the program that we are already implementing.

And thank you for the opportunity to speak today.

CHAIRMAN JACZKO: Well, thank you. We'll now turn to Donald McKenzie, who is the Administrator of the Land Quality Division at the Wyoming Department of Environmental Quality. Mr. McKenzie.

MR. MCKENZIE: Chairman, Commissioners: In the time allowed, I have chosen to give you an update on four items that were raised by Wyoming in December of 2008. The first would be the presence of NRC in the west; second would be the role of Wyoming and the Environmental Impact Statement assessments; the third would be with respect to privacy or Agreement State status; the last was the interest of Wyoming to enter into an agreement with the NRC.

What a difference a year makes. With respect to a presence by NRC in the west, I no longer feel that's warranted. There are two reasons for that. One is the level of activity that we have seen, and the other is the continued success, I believe, we have had with the NRC in communicating with my staff.

I commend Bill von Till for his commitment to the communications that we have on a regular basis as well as his recent efforts to bring out one of your hydrologists to speak to my hydrologists, which I felt was a very beneficial meeting, and I hope we can do more of that as necessary in the future.

The role of Wyoming and what are now the

supplemental EISs began with the State expressing an interest to be a cooperating agency. We had multiple discussions with Patty Bubar in our governor's planning office, and after about 6 months, the decision was made that Wyoming would withdraw its request to be a cooperating agency. So we have commented on the drafts of supplemental EISs just like every one else. Those were submitted yesterday.

With respect to what I would call primacy and you would call an Agreement State, you know, Wyoming, I understand looked at this some time ago, and as things tend to go, we are back in a cycle where I have been asked to consider that again. I made that request probably over a year ago but I think I need to hookup with someone like Keith McConnell and see what criteria is required as part of that status and see what the options may be for Wyoming.

The last issue that I raised in 2008 was the idea of an agreement between the State of Wyoming and the NRC. As Mr. Martin alluded to, Wyoming is very proud of our success with the BLM and entering into what we call an MOU. We think that's been a great success. I believe it promotes understanding between the different agency staff as well as providing a framework for industry and the public as far as how the two agencies interact in the State. I don't know what would be amenable to the NRC in terms of what you call an Agreement but I do see a benefit in pursuing this. And I believe Mr. McConnell has expressed an interest to at least begin dialogue

with me on that topic.

An item that was raised during the last session of this meeting was Sage Grouse in Wyoming. I was not planning on speaking to that, but I think I can. Just so you know the determination of listing or not to list is scheduled for March 8. There is also, I understand, an intermediate designation between being listed and not being listed. The terminology escapes me right now. But I believe if there's an intermediate category determination, then there would be a year where that listing would still be evaluated and the state management program would be reviewed. Sage Grouse is a huge issue for our state. It affects not just in-situ uranium, of which we have at least two in-situ applications in the door that are in what are called core Sage Grouse areas, but it involves bentonite, oil and gas development. So it has huge repercussions for our state and energy development. I will conclude my updates, and I'm certainly going to answer any kind of questions or comments you have later. Thank you.

CHAIRMAN JACZKO: Well, thank you Mr. McKenzie. Sounds like progress has been made, so that is always a good update in some areas. We'll now turn to Jeff Fettus, who is the senior project attorney at the Natural Resource Defense Council.

MR. FETUS: Thank you very much for having Mr. Chairman and Commissioners. Thank you very much for inviting me back. I'm glad I kept my computer open because I quickly rewrote my

comments to respond to several matters here, so hopefully I'll be brief and concise for you.

First, aside from appreciating being here, I am disappointed that I find so little has changed since we were last here about a year and a half ago. Since 1999, the Commission, and this was a different Commission than the 3 of you at that point, has acknowledged that the rules and requirements for ISL mining have been essentially gerry-rigged and ad-hocked from another time and place, for another set of processes. And the Commission even made that acknowledgment explicitly in one of its decisions.

It's time to move forward. In fact, it's past time to move forward. Nearly 2 years ago when I was last here, I requested that the draft groundwater rule be made public. I do so again, I am pleased to hear that I guess it's coming out next month. So I understand, and I hereby renew my request that the draft groundwater rule be made public because I think, again, it is past time for the public to understand where the NRC is going.

I understand in the first set of very helpful comments from staff on where things are that industry has expressed frustration with the potential for not knowing regulatory stability. I can assure you that the public feels the same way. The licensing rules have been splintered and inadequate. You have seen my filings before on the Commission on those issues. They remain the case. We are going to, hopefully in the very near to future, provide some significant

analysis of what has happened with groundwater restoration. We will provide that to the Commission as soon as we are able. We have funding issues as well. And we will hopefully be moving forward on that.

But, if I could respond to one thing from Commissioner Klein, we've actually found quite to the contrary, ISL mining has been anything but benign in terms of its impact on groundwater resources for the west. Those are preliminary conclusions and we hope to have them in the very near future and be able to share them with the NRC as well as all interested parties.

Procedurally, let me go to a couple of comments on the NEPA issues. The final GEIS was issued last summer, and it has finally come into full effect through the Supplemental Environmental Impact Statements that have their comment period closing tomorrow.

We will be commenting on them. I'm not done with my comments, of course, because I'm a lawyer. If you wait until the last minute, it only takes a minute. You're going to receive a whole host of comments that you may not be surprised to find that we have found the documents lacking on a host of fronts. And to quickly touch, I only have a minute and 45 seconds, so I'm quickly moving through them. The failure of comprehensive analysis of groundwater protection and what has transpired, the July 2009 document in our estimation confirmed most of what I said to the Commission in our last meeting in December of 2008, I believe those are the correct dates, that

essentially the groundwater was never restored.

The Commission can make an assessment that it won't be a problem for the future, but for all intensive purposes, those groundwater resources were never restored to baseline and they will essentially be sacrificed, and we have seen this repeatedly with ISL mining sites.

Regarding cumulative impacts, the failure of the agency to address the cumulative impacts either in the final GEIS or in the tiered documents, many of the questions that were posed in the -- that we posed to the draft GEIS, sorry to use the acronym, many of the question that we posed, I believe we posed over 90, from our estimation, only 16 were even addressed. Essentially the can was kicked down the road into supplemental EISs, and we were disappointed to find that the supplemental EISs don't answer, and again, I'm still doing the final count of most of our questions. And what's most disspiriting is a lot of our questions certainly challenge a lot of the conclusions but a lot of our questions were also technical, serious, how does the process work questions.

And we felt they were an opportunity for the agency to address a whole host of technical issues that could aid public confidence. That opportunity was not taken. And we will detail those in comments to the Commission tomorrow.

And finally, on the cumulative impacts, I think the Sage Grouse issue is a very good example of, again, where the agency had

an opportunity to be more forward-looking on how it analyzed its wider environmental impacts of these mining sites and the SEISs note the issue but don't go into nearly the detail and perhaps should have been held off to look at where the BLM is going to be going, where the Department of Interior is going to be making its final conclusions. And I also have the same estimation of what I have understood, that it was March 8 for the Sage Grouse determination, and I concur with everything there. Okay, thank you.

CHAIRMAN JACZKO: Well, thank you Mr. Fettus. And now, we have our final speaker, Katie Sweeney, who is the General Counsel of the National Mining Association.

MS. SWEENEY: Thank you very much, Chairman Jaczko. Commissioner Svinicki and Commissioner Klein. I appreciate the opportunity to be here today to provide some industry perspectives on NRC's regulation of uranium recovery. And I will say, I did not see the staff's presentation in advance or anything, but I was very interested to note that we have a lot of the same issues on our list of things that we consider successes and the some of the same challenges.

So one of industry’s biggest challenges is regulatory certainty. It's hard to plan, it's hard to attract the investment dollars that are needed to bring projects on line without regulatory certainty. Companies need to know the rules of the game. It's great to know what the permitting time frames are, what are the regulations, policies,

procedures that need to be followed. Consistency in application of regulations and policies is also critically important.

Changes to regulations need to be done and compliance with the Administrative Procedures Act, so that everybody knows and understands what's being proposed, what the changes will is be, and has the opportunity to comment on those. And strong agency defense of its programs and regulations, or as one of the staff earlier said gaining public confidence in licensing actions is also very important.. A wise Commissioner once reminded me that it wasn't the NRC's job to promote nuclear power or the use of domestic uranium.

CHAIRMAN JACZKO: Was that me?

MS. SWEENEY: It may have been. Sound familiar? And it's not. While there are many reasons that it's in society's interest to promote nuclear power and to wean ourselves off foreign sources of uranium, that is not the jurisdiction of NRC. So where do and should the NRC and industry's interests overlap. I think it is this regulatory certainty issue.

It's in the interest of the industry, NRC and the public to have a strong, protective regulatory program for uranium recovery. The industry's need for certainty actually fits very well with the NRC's commitment to risk-inform, performance based regulation. Underlying NRC's commitment is when NRC proposes a new regulation, the alternatives considered must include a performance-based alternative that enhances the focus of the effectiveness of the agency's

regulatory program, and I think we talked a lot today about the effectiveness. And I wanted to just mention a couple of examples where we think that the NRC has made a lot of progress and has moved forward very efficiently, and the industry appreciates that and our opportunity to be involved in these efforts.

And the first one, which has been mentioned several times today, and I'm just going to go straight for the acronym, is the GEIS for in-situ uranium milling facilities. NMA was very supportive of the development of this document. We believe it is an efficient use of NRC's resource. It will allow NRC to address the multitude of applications that may be coming in while still adequately, protecting health, safety, and the environment.

Another example is the BLM-NRC MOU, which we've talked about earlier today. And one thing I did want to emphasize, and Patty Bubar said this earlier, the GEIS isn't a path to circumvent environmental regulations or review or scrutiny of individual projects, and as she discussed, you know, with the SEISs, NRC has gone the extra step to make sure the public has additional information and additional opportunity to comment.

Okay, uncertainty example is the standards for groundwater protection at in-situ recovery facilities. I think that there is some question, and this was raised in that letter that was referenced by Commissioner Svinicki, what are the standards today? What is the NRC's view on the current standards that apply? Are they UMTRCA

groundwater standards, the EPA standards of 40 CFR Part 192? Are those currently applicable, or is that the goal of the rulemaking? And there certainly some confusion on industry's part, and there were some discussion earlier about some of the slower responses to request for additional information by applicants. And this is one of the issue that the applicants didn't know how to respond to, and one of the delays was they were trying to get some additional feedback from NRC on NRC's legal view. As a matter of law are these applicable now or is this something that's going to be addressed in the rulemaking? Are these applicable as a matter of Commission policy?

Our view is that we need the rulemaking to make these standards applicable as a matter of law, and we thought NRC shared that view until the RIS came out, and as discussed earlier, we do have some questions on how that's being interpreted and whether that RIS imposes new requirements and should have been given -- the public should have been given an opportunity to comment on the RIS.

We appreciate NRC's willingness to attend and initiate meetings to promote communications, to go over the lessons learned, and I think to identify challenges and possible solutions. That's one of the purposes of that NMA workshop, and we think that's been great assistance to the licensees and to the public.

And I think I'll just end there because my time is up. But we have some questions about the revisions to the Reg Guides, too -- some of which are really that old, like the Standard Review Plan for

in-situ uranium recovery operations. It's only 2003. So not all them are 30 years old.

CHAIRMAN JACZKO: Well, thank you for those comments, and thank all of you for your presentations.

Certainly I think what's clear is that there is lots of room for lack of clarity here. I think it's one of the simplest things I've heard is the -- or the area where there's the most commonality, probably the best way to do regulatory change. I think the Commission got pretty far in 1999 with the so-called Part 41, which would establish a new regulatory framework, and I think it's something, as we perhaps conclude this meeting, my fellow Commissioners could chime in on whether or no they think that's something worth exploring the Commission reviving that rulemaking and moving that forward.

We perhaps took it more piecemeal to just try and look at groundwater restoration standards and that's the rulemaking I think the Commission has been involved in right now and I certainly think it would be a good thing for to us put that out there publicly. I think we heard from EPA that is something they would be comfortable with. So that would at least establish where we are. I think, on this issue of the groundwater restoration and where we are for current licensees, my understanding, and I will limit this to my understanding, which is limited in its scope to how I put the facts together, is that I think for a while we've been fairly consistent in our approach to groundwater protection, that ultimately this comes from a combination of statutes,

regulations and policy decisions by the Commission that essentially leave us with three criteria for groundwater restoration, the primary one being restoration to initial -- or to initial condition.

The second one being some kind of alternate or some kind of deviation from that. And the third then, I forget where we get to the third one, but it's less restrictive than the first two -- the middle two.

But that's in my understanding, that's where the big concern is, whether we go to -- and the staff has approved alternate concentration limits, which is kind of the second step in there, in some cases. But the goal is always restoration to the initial standard. That's been my understanding of where we are, and as I saw, the RIS that we issued, and Katie which you referenced, I think referenced in the letter, the staff reiterated that that's a position which follows from a series of essentially statutory requirements and then, following that Commission decisions about how we would regulate ISL facilities as 1182 or the waste from those as 1182 would fall into 1182 by-product material.

So that's where the Part 40 standards come in and get captured. That's my understanding. I'm sure everybody in the room here, probably, has a different interpretation of what exactly that means and at some point, OGC will have to kind of tell us exactly what they think the legal interpretation is. So I have not really gotten to a question yet.

But, you know, I think from the standpoint of what the

agency did with the RIS, I think the intention of the RIS was to clarify that position so that we have a good understanding for applicants. As they come forward, they know what they need to do to respond. That may not be something every one agrees with. I think there is a logical decision or logical basis for coming to that conclusion and how we get there. So, I'm certainly, if anybody wants to comment on, that I'm certainly open to hearing.

MR. FETTUS: Mr. Chairman, thank you. First, the way I understand the regulatory process for restoration is as follows: first, restoration to background; second, restoration to MCLs; third, the third step is alternative concentration. So --

CHAIRMAN JACZKO: I think I got MCL and then the ACLs confused.

MR. FETTUS: And second, I'm not familiar with the staff's, with what elicited the NMA's recent letter, so I would like to request that we get a copy of that, if that's possible.

CHAIRMAN JACZKO: We can provide that. Part of the problem is that it hasn't gotten enough public notice but that's certainly something we can do to facilitate some of the understanding about this.

MR. FETTUS: And is there a change in that understanding? Maybe Katie can -- is there a change in what I said? Was I basically right as far as how you understand the law too?

MS. SWEENEY: Yes. We have the same confusion. I

guess our question is why do we need this ground water restoration rulemaking if NRC is, as a matter of law, saying that the EPA 192 standards apply right now? For us, we have always been kind of a Commission policy, where it's been tailored to address ISR facilities because, obviously, it was an invention for conventional mining and milling, it was not for in-situ recovery.

So we always thought it had been kind of gerry-rigged and kind of made to fit the in-situ recovery through some tailoring, through policy but now the RIS, the way we were reading it anyway, was that it applies -- the 192 standards apply right now as a matter of law, and that has a lot of practical implications, particularly as it concerns point of compliance and point of exposure issues, because they are different in in-situ recovery facilities than they would be at a conventional.

CHAIRMAN JACZKO: And I appreciate that, and I'm sure I'm going to make everybody nervous because I'm going to try and give more of my thoughts on this. I'm making Larry nervous. I think the, and as I have always understood this issue, I agree, I think that has always been the legal standard, which is why we were exploring a change because I think there had been some interest that maybe that was not an appropriate standard and that may be something that could be reconsidered and re-evaluated. And so I think, and moreover, I think as you said, accurately, it has been pieced together because we had UMTRCA, and we then had our Part 40,

which was really designed initially for traditional uranium mining, but we have to figure out a statute and framework on which to make the licensing decisions that we have made with regard to ISR or for at the time ISL facilities. So I think we have done that. I'm looking at Larry, and he's not too nervous so far. You know, we have done that, and it's been a consistent legal basis all along. That does not mean we can't improve it with more specific regulations because this is not the only issue in which there is some deviation. I think there are other pieces of Part 40 that don't necessarily directly apply to ISR facilities, so one, having a full regulatory framework designed that is designed around -- or for ISR facilities would be the best preference.

I think the groundwater was a piece of that, to try and just clarify what is our current interpretation, but I think it's all based on what is currently the prevailing -- I mean, in the end, it has to be the prevailing legal position, and we have to issue these license under some authority, and that's been our interpretation, that the authority is the 40.192 standards do apply.

I mean, I think you heard that is the EPA's position, that's the provisions they intend to be revising that would be impacted by groundwater provisions. So I think those have generally been the standards that folks have understood. So, I've probably spent far too much time on this and, again, I don't know if anybody wants to have any comments. I didn't hear from this end of the table. But you'd rather stay out of it, I can understand.

MR. MCKENZIE: Well Mr. Chairman, I can at least share that in Wyoming our restoration definition is pre-mine quality or better, and the statutes also provide for an alternate restoration but that has to go through another oversight body above my Department for that to happen.

MS. JABLONSKI: And in Texas, we've taken a combination of those approaches, but it is consistent with what's been repeated here today, and it's both the permit working under UIC in concert with the license, and so one is not independent of the other. They are very much working in concert. And so that's why we are watching closely how that would be impacted with some kind of requirement to have one exclusively, either in the license and one exclusively in the permit would cause us to revamp the system that we have worked out in our own state.

CHAIRMAN JACZKO: Can I just ask for one clarification. You're an Agreement State under our program. Are you a -- was that primacy -- so you are a primacy under EPA. So you have both the EPA and the NRC piece at the state level.

MISS JABLONSKI: Yes, Mr. Chairman.

CHAIRMAN JACZKO: And Wyoming, you are not an Agreement State under our program. Are you a primacy under EPA program?

MR. MCKENZIE: For the UIC, yes.

CHAIRMAN JACZKO: For the UIC you are. So you're

kind of a slightly different combination.

Well, again, I appreciate your comments. I didn't really get too many questions in there, but Dr. Klein.

COMMISSIONER KLEIN: In terms of the activity that you see both in Texas and Wyoming, I assume that you saw the spike of activity when the price of U-308 went up. Are you seeing now a decrease in intensity now that the price has come down.

MISS JABLONSKI: I think us, as well as the NRC have reported that there is kind of a longer lag time than anticipated that's occurred. But still definitely an interest. We've got folks coming in on a regular basis talking about when they might make application. So we are still seeing the spike, it's just now the period of those applications has been extended over a couple of years as opposed to a year and 18 months which was originally projected. .

COMMISSIONER KLEIN: So maybe stretched out as opposed to canceled.

MISS JABLONSKI: Yes.

COMMISSIONER KLEIN: What about Wyoming?

MR. MCKENZIE: In Wyoming the expiration has dropped off considerably. We were very active with drilling projects throughout the state. In terms of applications, all I can say is for the Ludeman application which I believe is now in with the NRC as well as the State of Wyoming, that there seems to be some delay as to when that was proposed to come in. But I can't speak to the other

applications because I'm only aware of one other that may be coming down the road here.

COMMISSIONER KLEIN: Well, Susan, you probably heard that we have a timeline of two years. You know, once we sort of get organized -- once you get organized, what is your target for the license review time?

MS. JABLONSKI: We plan to do it under two years, about 18 months is the projected timeline. So I'm sure my licensees and applicants are listening to me right now but that is our plan to get it on a more consistent time basis. Part of the transfer was that problem, that things were left languishing and really weren't on a predictable time schedule. And so that's one of our big pushes right now. We are actually tracking that on a regular basis, and have a structure to get us in that timeframe, so about 18 months.

COMMISSIONER KLEIN: Thanks. Well, I guess Donald, I will have a question for you. Did I hear you say that Wyoming, might want to be an Agreement State?

MR. MCKENZIE: Well, I was at least asked to look into that possibility. I hear all kinds of things from different areas, but it's one of those items I was asked to look into, yes.

COMMISSIONER KLEIN: You'd commented that, Jeff, that you had some examples of groundwater issues with ISRs. Could you just kind of tell me in general what they were and what states it occurred in?

MR. FETUS: We looked at -- we had a hydrologist look directly at some sites in Wyoming, and some of the sites that are undergoing restoration, or where restoration even concluded. And we've come to preliminary assessment that the sites were permanently contaminated.

COMMISSIONER KLEIN: So mainly Wyoming?

MR. FETUS: Mainly Wyoming, yes..

COMMISSIONER KLEIN: Katie, normally when we do things like regulatory guidance and RISs, it's to make things more understandable. Would you prefer that we did not issue IRS 2009?

MS. SWEENEY: Just that one. No we actually in our -- in NMA's letter, we actually requested that you rescind the RIS and put it out for comment because we believe it does represent a change from the way NRC's long-standing policy has been, which is implementing those standards through license conditions and not as a matter of law, the EPA regulations. Not that we're opposed to those standards because when we talked to EPA and NRC about the standards that should apply, I know there was a lot of discussion about what role does the UIC program play? And what about the UMTRCA standards? And I think there was general agreement at the end that the UMTRCA standards made the most sense and, of course, NRC has to conform with the EPA general applicable standards anyway. But it's really -- there are a lot of practical differences between saying it applies now and having a rulemaking

come along that formalizes that process.

COMMISSIONER KLEIN: Thank you. No more questions.

COMMISSIONER SVINICKI: I want to thank you all for your participation today. I think I've enjoyed the dialogue and the Q & A of my colleagues. I think this will be an odd comment in terms of the transcript, but I think had the clearness of head today to sit in a chair and form a quorum, but I'm not sure I had the clarity, given my coughing and sneezing over here. A lot of complex issues have been raised, and so Mr. Chairman, last night, in preparing for the meeting and today, I've learned a lot about the fact that there was movement towards a Part 41 and there was apparently a reconsideration of that. So I would like to acquaint myself a little bit better with the history of kind of why that was considered and why it was decided. I think some of it had to do with wanting to get reconciled with EPA, and that always sounds like kind of a good idea to me, but certainly we heard from our EPA participants here today not to wait for them.

So I think what the EPA stated we should move forward and then we could elicit public views on what we put forward. But I think he said, "Well, then, EPA will move forward with its rule making and ultimately, we would determine the issue." So I'm not sure in terms of clarity. I guess I don't know the answer. I need to do more thinking about what it means for to us move forward with something if ultimately a different rulemaking by somebody else has the potential,

and I didn't know if they were telegraphing something in terms of saying they will stick to their view on post-closure and other things. So it seems to me to kind of reconciled and align that upfront, and maybe some of the thinking on why we didn't move forward.

But I will study that, and again as we're hearing from a number of participants, the one thing they are owed is some clarity, and we need to work with our Federal partners. It was the reason I asked about the NRC staff responding to the concerns that were raised about the RIS and how we move forward, because we don't owe any particular answer, but we owe an answer. And I noticed that our General Counsel was also taking notes. So when things are stated as a question as a matter of law, I would like to get some legal advice on that question as well. So I don't have any additional questions, but it was a good meeting. Thank you.

CHAIRMAN JACZKO: Well, I just want to say, thank everybody for their participation. I think it is always -- you have great meetings with the staff and it's rare that we all get to sit down with groups of stakeholders like this and hear from all of you. I think it always leaves us with some important lessons. Certainly this was one of those meetings where I think we did a lot of listening. I don't think we really did any deciding. And I think but that's always never a bad thing. sometime just to listen. We got a lot of good information. So we appreciate your being here. The other people who came and provided information and staff as well. Thank you for the meeting.

We are adjourned:

(Whereupon, the meeting was adjourned)