

WEBINAR TRANSCRIPT

Nuclear Energy Innovation and Modernization Act (NEIMA) Section 108

This document provides the transcript from a public meeting (webinar) that was held on August 8, 2019, to discuss the nuclear power plant decommissioning process and identify best practices and lessons learned for establishment and operation of local community advisory boards (CABs) associated with power reactor decommissioning activities.

Coordinator: Welcome and thank you for standing by. Your lines have been placed in a listen only mode until the question-and-answer session. At that time if you will like to ask a question you may press star 1. There will also be written questions held within the speaker's room. Today's question is - today's conference is also being recorded. If you have any objections you may disconnect at this time. I will now turn the call over to Neil Sheehan. Thank you. You may begin.

Neil Sheehan: Thank you very much (Anita). I apologize for being just a few minutes late. We were just trying to allow people some time - extra time to join us. So we'll get going. Good afternoon or good morning if you are in the West. Thank you for joining us this afternoon.

My name is Neil Sheehan. I'm in the Office of Public Affairs in the NRC's regional office in King of Prussia Pennsylvania. I'm joined today by several of my colleagues from the Agency's Office of Nuclear Material Safety and Safeguard otherwise known as NMSS.

We're here today to conduct a webinar which will present information on the decommissioning process for commercial nuclear power plants as well as

explain the role of and receive feedback from you on community advisory boards.

We will try to avoid indenting you with acronyms during this presentation but some are unfortunately inescapable. One you will hear repeatedly today is NEIMA (N-E-I-M-A). That stands for the Nuclear Energy Innovation and Modernization Act. This legislation was passed by Congress in late 2018 and signed into law by President Trump on January 14 of this year. NEIMA has several requirements for the NRC one of which is why we are here today with this webinar.

Section 108 of NEIMA requires the NRC staff to prepare a report to Congress on best practices for community advisory boards in the communities around decommissioning nuclear power plants. It also requires the staff to hold a minimum of 10 public meetings within the emergency planning zone of decommissioning plants.

Since we can't hold meetings at every plant presently decommissioning or those that have announced their intention to permanently shut down, we are conducting this webinar to reach a broad audience interested in decommissioning and community advisory boards.

This webinar is also being recorded so that we can capture the presentation and the discussion.

Our goal within this webinar will be to provide you with an overview of how the NRC oversees the decommissioning process with the recognition that this will be a new process for many of you who may live or work in community surrounded plants that have recently shutdown or announced plans to do so. We want to demystify some of the steps involved in this process.

With me here today are the webinar presenters - Bruce Watson, Kim Conway, Zahira Cruz and Ted Smith all from the Reactor Decommissioning Branch in NMSS. All are experienced decommissioning project managers and Bruce serves as their supervisor.

Next slide please.

First, some background information on our presenters. Bruce Watson has been with the NRC since March 2004 and has managed both the decommissioning of reactors and nuclear material sites. He was the Lead Technical Reviewer for the termination of the Trojan, Maine Yankee, Rancho Seco and Big Rock Point reactors as well as the Cornell University of Research reactor.

In May 2010 he was appointed to his current position as Branch Chief responsible for power and reactor decommissioning project management.

He has a bachelor's degree from Virginia Tech and certified by the American Board of Health Physics. He has more than 35 years of experience in the field of health physics.

Kim Conway began her career with the NRC in 2006 as an engineer in the Office of Nuclear Reactor Regulation. She is currently a Project Manager in the Reactor Decommissioning Branch where she is the lead for the decommissioning activities associated with the Three Mile Island unit 2, Prairie unit 1 and Indian Point unit 2 nuclear power plants.

Kim has over ten years of decommissioning experience and managed licensed terminations at the step-on company material site, the Department of Veterans

Affairs Research Reactor Facility and the State University of New York at Buffalo Research Reactor Facility.

Zahira Cruz joined the NRC in August 2003 as a technical reviewer in the Office of Nuclear Reactor Regulation then transferred to the Office of New Reactors in 2006 and joined NMSS in 2011. She is currently a Project Manager in the Reactor Decommissioning Branch and has responsibility in the decommissioning projects at Dresden 1, Peach Bottom 1 and Oyster Creek.

Ted Smith has been with the NRC since 1999 and has managed both the decommissioning of power reactors, research and test reactors as well as nuclear material sites. He was the project manager for the termination of the Cabot Reading and Revere sites, the Connecticut Yankee Nuclear Power Plant, the Leslie Wilbur Research Reactor at the Worcester Polytechnic Institute and the Ford Research Reactor at the University of Michigan.

Combined with time he worked with the Navy and DOE he has more than 30 years of experience in the fields of nuclear reactors and environmental management.

Okay. Having done those introduction I will now like to turn things over to Bruce to get the presentation fully underway.

Bruce Watson: Thank you Neil. Before we discuss the NRC's overall decommissioning process let's review the Nuclear Energy Innovation and Modernization Act Section 108 assignments and the actions the NRC has taken to comply with the law.

The law was issued on January 14, 2019. Section 108 requires a report identifying best practices for the establishment and operation of local Community Advisory Boards or CABs for decommissioning nuclear power plants -- including lessons learned from such organizations. The report is due to the Congress by July 14, 2020.

The actions were assigned to the Reactor Decommissioning Branch in NMSS. A federal register notice soliciting requests for public meetings to discuss CAB best practices was issued March 18, 2019.

The public meeting locations were determined in June 2019 and there will be clearance for a questionnaire associated with CAB best practices and lessons learned should be available next week on our Web site. Next slide.

As Neil mentioned part of the reasoning for conducting this webinar is to provide an opportunity for any interested party to provide feedback and input on the NEIMA section 108 best practices report no matter whether they are able to attend on the scheduled public meetings or not.

There is significant public interest on the topic of CABs. Only a limited number of local public meetings can be held in the vicinity of decommissioning plants.

We believe this webinar offers the opportunity to participate for those areas where the meetings will not be held. This webinar also helps inform local communities in advance of upcoming public meetings and the additional meetings to gather feedback from stakeholders on CAB best practices. Next slide please.

However, if you are interested in attending one of the NEIMA section 108 public meetings near a decommissioning or soon to be decommissioned nuclear power plant the tentative schedule is listed here. Some of the meeting details and logistics are still being finalized but the most up to date information is available on the NEIMA Section 108 public Web site listed on this slide. Next page please.

As shown on this map the public meetings will be held in locations that ensure geographical diversity within the United States with priority given to states that one, have a nuclear power plant currently undergoing the decommissioning process and requested a public meeting under the provisions of NEIMA and accordance with the Federal Registrar Notice published March 18, 2019.

Now I will turn it over to Kim to discuss the overall decommissioning process.

Kin Conway: Thanks Bruce. Before we elaborate on the decommissioning process we thought it would be useful to provide a simple definition and the goal of decommissioning.

As we state on the slide the NRC's overarching objective is to ensure any residual radioactivity is within federal limits but the site might be released for unrestricted use in the future.

So how the decommissioning process actually work? The NRC requirements are designed to protect workers in the public throughout the decommissioning process and the public and the environment after the plant's license is terminated.

The NRC has strict rules governing nuclear power plant decommissioning and the storage of spent nuclear fuel.

The NRC communicates with the public during the decommissioning process in many ways including publicly available licensing documents and inspection reports, public meetings, congressional briefings and updates to state and local government officials.

The NRC also strongly encourages the creation of community advisory boards or CABs to enhance the free flow of information about decommissioning activities between the licensing local officials and the public. We will talk more about the establishment of CABs as well as those that are already in existence later in the presentation.

Even before a plant shuts down activities are ongoing that will help with the decommissioning process. While operating the license maintains records important to decommissioning such as financial records, records related to radioactive stores and material history of the site and newer reports of plant operations and radiological requirements monitoring reports.

Finally once the license has decided to permanently cease operations other planning activities begin including identification and selection of a decommissioning strategy which we will discuss later and site characterization.

The licensee can also prepare a decommissioning planning document called the Post Shutdown Decommissioning Activities Report or PSDAR before the plant shuts down.

There are several steps that take place in conjunction with the permanent shutdown of a U.S nuclear power plant. Each steps are spelled out in the NRC regulations. Once the reactor has been operated for the last time the plant owner must first submit to the NRC a written certification of the permanent seization of operations within 30 days of the decision to not continue operations. Next.

When the nuclear fuel has been permanently removed from the reactor vessel the owner must submit another written certification to the NRC.

Once these certifications have been made by law the company is not authorized to reload fuel into the reactor vessel and operate the plant. To operate the plant again the owner would need to apply for a new operating license.

Prior to or within two years of permanent shutdown the NRC requires the submittal of the plant's PSDAR which provides a general overview of the proposed decommissioning activities and schedule as well as the associated costs.

This slide contains more information on the details that should be found in the plant's PSDAR.

The purpose of the PSDAR is to provide the NRC and the public with a general overview of the company's preferred decommissioning activities. It is also designed to inform the NRC staff of expected activities which will help guide to agency's oversight.

The estimated costs for decommissioning are also included in the report as well as an affirmation of decommissioning and dismantlement activities can be completed consistently with the site's existing environmental report.

Since the PSDAR only provides information on the plans for decommissioning the plant and is not a federal action, the NRC does not explicitly approve the report. As with any report made to the NRC we review the PSDAR to determine if it meets our regulatory requirements.

The NRC will review the PSDAR within 90 days of receipt to confirm that the licensing plan decommissioning activities will not put further police to the site for possible unacceptable use resulting in significant environmental impacts not previously reviewed or result in there no longer being reasonable assurance for adequate funds available to decommission.

Along with the submission of the PSDAR the licensee must notify the NRC before performing any decommissioning activity in consistent with that actions in schedule described in the PSDAR including changes that significantly increase the decommissioning cost.

During the NRC's review of the PSDAR we publish a notification in the federal registrar to inform the public of the receipt for the PSDAR and to foster comments.

The NRC also hosts a public meeting in the vicinity of the decommissioning nuclear plant typically within 90 days of receiving the PSDAR to collect further feedback on the decommissioning plant outlined in the PSDAR.

As a side note, the plant's owner can commence major decommissioning work such as starting to dismantle plant components 90 days after the PSDAR is received by the NRC.

There are different courses of actions for plant owners as they plan for decommissioning. They may decide to pursue immediate dismantlement which are referred to as the decon alternative.

Under decon the structures and equipment related to nuclear power production are decontaminated and removed. Once the demolition and decontamination work is completed the plant owner will need to demonstrate that any remaining radioactivity meets the criteria for unrestricted release of the property.

Another option for plant owners is placing the facility in storage for a period of time and then proceeding with dismantlement and cleanup work at a future date. This alternative is referred to as Safe Store (SAFSTOR) and it involves preparing the structures for a long term storage and then monitoring them throughout the storage period.

Preparations for SAFSTOR will include draining pipes and pumps, de-energizing electrical systems and securing various structures.

Plant owners may also use a combination of SAFSTOR and Decon. As an example they may do some dismantlement work or abandon systems in place not long after the plant permanently shuts down. Then put the facility in storage for many years before resuming the remainder of the deconstruction.

Again confirmatory surveys of any remaining radioactivity will need to be performed once the dismantlement work is eventually completed.

Keep in mind that it takes many years to construct a power plant and decommissioning a nuclear power plant typically takes about 7 to 10 years. Another way to think of it is a giant deconstruction project with miles of cable and pipes removed and tons of material hauled away.

Under the NRC's regulations nuclear power plant decommissioning must be completed within 60 years. Keep in mind this refers to the portion of the nuclear site that were used for nuclear power production and do not involve for example returning the entire site property to Greenfield condition.

The basis for the 60 year timeline is that 50 years in SAFSTOR to allow radioactive decay of the shorter live radioactive materials plus 10 years of radiological decommissioning work to terminate the NRC license.

It is not uncommon for Greenfielding to occur after the termination of the NRC license such as with the Maine Yankee site shown at the bottom of the slide.

At the top of the slide is a photo that Bruce took at Rancho Seco in California. The plant was permanently shut down in 1989 and the reactor license terminated in 2009. The owner has not demolished any of the structures and has built two combined cycle generating units at the site to take advantage of the transmission lines and switches and the availability of a source of cooling water.

I will now turn it over to Zahira to discuss the NRC's continued oversight during decommissioning.

Zahira Cruz: Thanks Kim. When a reactor ceases operation the NRC works to ensure safety and security continues. Specifically NRC ensures there is a continuous oversight process for operational safety controls, security measures and emergency preparedness remain sufficient to protect the public health and safety.

The NRC inspection program for the decommissioning of nuclear power plants as well as the Dry Fuel Storage Inspection Program are well defined and consistent. These programs are outlined in NRC inspection manual chapters 2561 and 2690 respectively.

The key objectives of these programs are to verify that the dry fuel is being safely and securely stored, decommissioning activities are being conducted safely and site operations and license termination activities are performed in accordance with federal regulations.

When carrying out these programs our key focus is on safety and security.

The NRC's Decommissioning Inspection Program ensures that appropriate oversight continues after safe plant shutdown removal of the spent fuel from the reactor. Specifically a reactor decommissioning inspection manual has procedures designated as core which are required to be performed annually and ones listed as discretionary which are performed as needed based on activities and known issues at the site.

I want to emphasize that oversight inspections and monitoring are performed throughout the decommissioning process. During these inspections the NRC verifies that controls and methods for the safe storage of radioactive material including site structures and equipment are being maintained in accordance with regulations and license requirements.

In addition an NRC inspector will be on site for major work activities at the site and at least one per year. Examples could include the demolition of a major structure. The removal of a significant component such as the reactor vessel. And the transfer that spent fuel from the plant's spent fuel pool to a dry cask storage.

The NRC can take enforcement action against the plant owner should violations be identified during these activities.

Now we will like to address questions that frequently come up in regards to managing spent fuel during and after the decommissioning and our review and oversight of those activities.

The most asked question is what becomes of the spent nuclear fuel that's left behind from the plant operation? And the correct answer is that in most cases it is removed from the spent fuel pool to be stored on site in a dry storage installation. Often fuel and independent spent fuel storage installation or ISFSI until an interim or long term disposal solution is available.

At all nuclear sites with ISFSIs the casks seat on a reinforced concrete pad in a protected area of the plant. The casks themselves are robust storage units approved by the NRC for use throughout the nuclear industry. Typically, the fuel sits in a stainless-steel cask that is surrounded by a thick concrete overpack.

Vents at the bottom and at the top allow for conductive airflow to keep the fuel cool. The NRC inspectors who specialize in spent fuel pools are on site when the ISFSI pad is being built and are there of course during the actual fuel movement at each site.

Another question we receive with some frequency is whether the plant's spent fuel pool remains safe during decommissioning? And the answer is yes. All spent fuel pools are safe. Spent fuel pools are typically 40 or more feet deep and with at least 20 feet of water covering the spent fuel pool to provide safety and to allow for fuel assemblies to be moved while its submersed.

The walls of the pools are typically four to six feet thick with a steel reinforced concrete and a fuel liner. The pools are located in the most secure areas of the plant which are protected by armed guards and security barriers.

In addition once the fuel is placed in the spent fuel pools it cools off relatively quickly which further reduces the risk posed by the spent fuel over time.

Spent fuel pools in a U.S nuclear power plant are designed to withstand all credible severe natural events including floods, tornadoes, earthquakes, tsunamis and hurricanes.

Spent fuel pool safety is ensured by maintaining a sufficient level of cooling water above the fuel even during accident conditions. Under all conditions public health and safety are ensured by strictly regulated design features and operational practices.

So how are changes made for nuclear power plants once they are in the decommissioning process? Typically, this is done via license amendment and exemption requests from plant owners, which outline the technical, regulatory, and safety bases for the desired changes.

The NRC reviews and must explicitly approve these requests before the proposed change can be made.

The NRC can also issue orders requiring the plant owners to take safety or security actions. This process is the same for operating and decommissioning of the power plants.

Looking ahead the NRC is in the process of developing nuclear relations after decommissioning. The draft version of those regulations is now under review, with completion expected in 2021. An overarching goal of these regulations is to create a more standardized approach when it comes to decommissioning activities.

We could do a whole separate webinar on what the upcoming changes may entail, but that said, there is a significant amount of information on the proposals on our website and we would be willing to share more information with those interested in the topic.

Now I will turn it over to Ted to talk about the steps of decommissioning and then the final approaches being used to accomplish those steps.

Ted Smith: Thanks Zahira. Now that we've discussed the regulatory and oversight changes that the plant owners and NRC make at the facility entering decommissioning. It's time to talk about the typical steps to dismantle and decontaminate the plant.

There are several phases in the decommissioning process. This graphic shows in a generic sense the way those phases play out. The phases include - initial activities, major decommissioning in storage and license termination activities.

We already discussed the initial activities that occur after a plant has permanently shut down but before any dismantlement work gets underway. But to reiterate, when the plant permanently shuts down the owner must submit a written certification to that effect to the NRC within 30 days.

When the nuclear fuel is permanently removed from the reactor vessel the owner must submit another certification to the NRC. That submittal signals that the owner has surrendered authority to operate the reactor or load fuel into the reactor vessel. This eliminates the obligation to adhere to certain requirements needed only during reactor operations such as maintenance requirement for systems no longer used.

The plant owner will prepare the plant for decommissioning. This will involve de-energizing and securing certain plant systems, performing site modifications and usually moving all spent fuel into dry cask storage systems.

De-energizing and securing systems can include draining liquids out of vessels, valves and piping and de-energizing electrical components.

Systems and equipments needed for spent fuel storage and handling will remain intact.

Prior to or within two years of permanently shutting down the plant the owner must submit a post shutdown decommissioning activities report to the NRC. That PSDAR may be submitted prior to the plant shutting down but it must be submitted within two years after shutdown.

With respect to actual decommissioning and dismantlement work can owner can initially use up to 3% of its certified funds for decommissioning planning

activity. Then 90 days after the NRC has received the PSDAR the owner can begin major decommissioning activities without specific approval.

These activities include permanent removal of major components such as the reactor vessel, steam generators, large piping systems, pumps and valves. During this process low level radioactive waste may be shipped to an approved disposal facility.

The NRC's criteria for unrestricted release of a nuclear power plant site once decommissioning work has been completed is less than 25 millirems per year to an average member of the public and radioactivity removed to As Low As Reasonably Achievable or (ALARA).

The company may seek the unrestricted release of unaffected portions of the site as they become available before all site decommissioning work is completed. But in order to do that the plant owner must request permission from the NRC, a public meeting must be held in the vicinity of the nuclear power plant to discuss the proposed partial site release.

Such releases of portions of sites have occurred at numerous operating decommissioning plants all subject to approval by the NRC.

Near the end of the decommissioning process the plant's owner is required to submit a licensed termination plan. This is within two years of requesting the expected termination of the license.

The plant must address each of the following. Site characterization. Remaining site dismantlement activities. Plans for site remediation. Detailed plans for final radiation surveys for the site. Updated estimates of remaining decommissioning costs. And a supplemental environmental report describing

any new information or significant environmental changes associated with the final cleanup.

The licensed termination plan requires NRC approval of these licensed amendments. But before approval can be given an opportunity to provide comments or request a hearing is published and a public meeting is held at the power plant to solicit public feedback.

Any remaining dismantlement remediation and radiological survey work will be performed in accordance with the license termination plan.

As part of the inspection process the NRC will conduct confirmatory radiological surveys and sampling to verify the licensee decommissioning results.

The NRC typically uses a third party to independently conduct the confirmatory surveys.

When a licensee radiological survey demonstrates that the facility and site meet the applicable criteria and that they are suitable for unrestricted release and the NRC has confirmed through a review of survey reports, independent inspections and confirmatory surveys. Then the NRC issues a letter terminating the operating license.

To date all decommissioning plans have committed to releasing a site for unrestricted use meaning the final radioactivity will be below the NRC limits of 25 millirems of annual exposure and ALARA. And there will be no further regulatory controls by the NRC.

States can establish their own release criteria based on property ownership and state permits but those criteria are not part of the site's NRC license.

So using the process just discussed the NRC has gained extensive experience with the decommissioning of nuclear power plants including 11 facilities that are currently in active decommissioning. 11 other plants are in safe store which as we explained earlier means that they have been placed in a safe, stable condition and are being maintained by their owners pending dismantlement work in the future.

Four of the 11 plants in active decommissioning are expected to complete the license termination process by the end of 2020.

So examples of plants that have previously completed the decommissioning process are - Yankee Rowe in Rowe Massachusetts, Maine Yankee in Wiscasset Maine, Connecticut Yankee in Haddam Connecticut and Big Rock Point in Michigan.

The only NRC regulated facilities remaining at these sites are the independent spent fuel storages installations, ISFSIs.

Although the NRC's traditional decommissioning process has been used with success by many nuclear plants recently new business models are being implemented that give plant owners additional options and flexibility in completing the dismantlement and remediation of the facilities.

All these methods are subject to the same NRC rules and requirements but represent different methods for plant owners to leverage decommissioning resources from outside companies.

So one, the Utility Self-Performance they manage a decommissioning contractor. Examples will be Humboldt Bay and San Onofre.

In another model the utility transfers the licensee to a decommissioning company in Atlanta spent fuel are transferred back. Examples will be Zion and La Crosse.

And finally in the third model the utility sells the plant to a company who will decommission the plant and manage the spent fuel. Examples are - Vermont Yankee, Pilgrim and there are others who have announced similar projects.

The NRC does not promote one decommissioning business model over the other but does conduct detailed technical and regulatory reviews to establish the ability of decommissioning companies to complete site dismantlement and remediation activities in lieu of the plant owner. This includes the financial review and validation as well as the technical competency review.

These reviews are conducted as part of the licensure process in which the operating license for the decommissioning plant is transferred to a decommissioning company to complete the license termination process.

I'm now going to turn us back over to Bruce to talk about community involvement in the decommissioning process and the requirements of then NEIMA law itself.

Bruce Watson: Thanks Ted. First we would like to point out that there are already multiple opportunities for public participation in the decommissioning process. For example, each license amendment requesting including the license transfer that Ted just discussed allows for an opportunity to provide public comment and request a hearing.

The NRC also conducts public meetings in the vicinity of decommissioning nuclear power plants to discuss PSDAR contents, partial site releases and license termination plans.

The NRC staff are also frequently invited to speak on decommissioning topics at state and local government hearings, meetings and other events and routinely participate as guest presenters at existing community advisory board meetings. Which finally brings us to the topic in hand for today's webinar, best practices and lessons learned from community advisory boards of decommissioning nuclear power plants.

So what is a community advisory board? Well, there is no one-size-fits-all model for decommissioning CABs. Some of the general tendency of such organizations are listed on this slide. We should also point out that the CABs may have different names such as community engagement panels or citizens' advisory board or something similar.

As mentioned while the NRC does not have the authority to direct anyone to sponsor or to participate in the decommissioning process. For many years we have recommended that power plant licensee be involve with decommissionings, form a community committee or other advisory organization aimed at fostering communication and information exchange between the licensee and the members of the community that the decommissioning may affect.

As we will see in another slide this practices yield a good result at several facilities.

Okay. Just like there is no one-size-fits-all composition for decommissioning CABs neither is there a single set of topics for each board to consider as the plant is associated with progresses through the decommissioning process. Instead our observations and experience have been that each decommissioning CAB has adapts to the specific concerns of the community and region where the decommissioning is taking place.

Topics whose level of interest varies between the sites including transportation of radioactive waste, the socioeconomic impact of the plant being shut down and the interim and long term storage plans for spent nuclear fuel by engaging - actively engaging the community and obtaining local citizen views and concerns regarding the decommissioning process and the spent fuel issues.

Licensees can better understand and consider these issues, maintain better relations with local citizens and local communities can be kept informed of the decommissioning process.

If the CAB is formed early in the decommissioning process the CAB provides an organized forum in which the licensee serves the community by providing information on the decommissioning plans and activities. And the local community can provide feedback to the licensee and state officials on the plans for dismantling, demolition and spent fuel criteria and those criteria and waste transportation.

While site restoration is not an NRC concern once the license is terminated the CAB can provide important input to the licensee as to what the site will look like after all the radioactive material is removed and the future reuse of the site.

As I had already mentioned the concept of a decommissioning CAB is not new. Versions of these organizations existed at many of the earliest nuclear power plants to enter decommissioning. The experience gained and lessons learned from prior decommissioning projects have been well documented by the nuclear industry.

In 2005 the Electric Power Research Institute or EPRI published the Maine Yankee Decommissioning Experience Report. In this lessons learned report the nuclear industry recognized that engaging the local community and officially forming a CAB is a good practice.

Specifically the EPRI report states that the CABs can provide an important window for the public in the process of decommissioning and provide the opportunity for issues of local concern to be addressed both written within and without the strict process defined by the regulations.

This brings us to today where CABs exist at the majority of decommissioning nuclear power plants. Although with many different compositions and many forms depending on such factors as the CAB's sponsors, state requirements and topics of highest interest.

The NRC staff acknowledges the desire for and value of community involvement in decommissioning of a nuclear power plant. Power plant decommissioning is a complex project and the NRC believes that the impact of decommissioning and termination of a nuclear power plant reactor license needs to be communicated to the local community.

We have also observed that community interest in nuclear reactor decommissioning activities can vary depending on the location of historic

relationship between the licensee and the state and local governments, local labor unions and members of the public and other stakeholders.

As an independent safety regulator the NRC ensures that all members of the public are given a fair and equal opportunity to comment on the licensee's decommissioning plans through their license amendment process.

The NRC sponsored public meetings and other forums therefore the NRC does not officially recognize or endorse any specific special interest groups, public or private organization, community groups, coalitions or individuals. This approach ensures that one or more organizations do not dominate a public forum and allows members of the public to provide alternative and different views points and comments to the NRC. Next slide.

And now finally it's time to talk about the Nuclear Energy Innovation and Modernization Act and pull together all the information we have discussed regarding decommissioning and community advisory boards how all these things may be important for the NRC to fulfill its obligations under the NEIMA legislation.

NEIMA directs the NRC to submit report to Congress pertaining best practices before establishing an operational local community advisory board associated with power plants decommissioning activities including lessons learnt from existing boards.

As a part of developing this report the NRC is hosting this webinar and 11 public meetings to consult with state, communities within the emergency planning zone of a nuclear power plant and existing local CABs. At these meetings we hope to have comments on best practices and lessons learnt associated with the CABs at the decommissioning nuclear power reactors.

The results of these meetings along with any data received as a result of NRC's other information collection activities will be captured in the best practices report. The contents of this report will include - a description of the type of topics that could be brought before a CAB.

How the board's input could inform the decision making process for stakeholders or for various decommissioning activities.

How the board will interact with the NRC and other regulatory bodies to promote dialogue between the licensee and the affected stakeholders.

How the board could offer opportunities for public engagement throughout the phases of the decommissioning process.

A discussion of the composition of the existing community advisory board and the best practices identified during the establishment and operation of such boards including logistical considerations, frequency of meetings and the process of selection of board members et cetera.

In addition to hosting several public meetings to discuss best practices and lessons learnt associated with the decommissioning CABs, the NRC is issuing a questionnaire to solicit information from stakeholders on the topic that NEIMA Section 108 requires to be included in the report to Congress.

This questionnaire will be available very soon on NRC's NEIMA Section 108 public Web site and hard copies will be distributed during the upcoming public meetings. The questionnaire questions are captured on the next few slides and we welcome any initial feedback or comments on the CAB best practices when we get to the open discussion portion of this webinar.

Any interested persons may also submit a written response to the NEIMA Section 108 questionnaire using the response method as shown on a few slides from now.

In addition please feel free to distribute the questionnaire and any information about the agency's activity in response to Section 108 of NEIMA that you feel is relevant to any interested stakeholders in your area. The questions on this slide are focused on CAB logistics, the procedures for CABs and how the CAB operates including how board member input is used to inform decision making for the stakeholders and the licensee.

And that includes why the local CAB was established. How and when was the local CAB established? Is there a charter? What is the historical and current frequency of CAB meetings? What is the historical and current composition of a local CAB? And what is the selection process for board members? Their terms? The specific rules and protocols that the CAB follows? And specific logistics required to support the CAB meetings and other activities. And how the board input is used to inform decision making processes for stakeholders for the decommissioning process?

Here is the second half of the NEIMA Section 108 questions. These questions are focused on CAB operations. What deep topics are discussed? And what opportunities for the members of the public to engage in these discussions? What interactions does the CAB have with regulators?

Such questions as who sponsors the CAB's expenses? What kinds of activities are included in the budget? What topics have been or could be brought before a CAB? What are the topics that could be useful to stakeholders understanding the decommissioning process? What interactions the local CAB has with the

NRC and other regulatory bodies? How does the CAB offer opportunities for public engagement throughout all the phases of the decommissioning process?

In general what are the advantages of having a local CAB? And in general what are the disadvantages of having a local CAB?

Here are the final questions along with some questions for decommissioning plants where CABs have not been established. Has the licensee or state ever considered the establishment of local CABs? Was it considered? What are the reasons for not establishing a CAB?

How does the licensee or state provide opportunities for public engagement throughout the decommissioning process?

And in general what are the advantages and disadvantages of the CABs - of not having a local CAB?

So now that we have talked through the topics required within the NRC's best practices report and gone over the specific questions we came up to try and capture the information for decommissioning CABs. All that remains is to ask you to provide feedback to us on these issues.

Obviously we will be taking those and listening to feedback in today's webinar but there are also several other ways to provide comments as outlined on this slide.

Receiving stakeholder feedback and ensuring that this request for information reaches the maximum number of affected persons is very important to those of us working to implement the requirements of NEIMA Section 108.

I hope that we will have a productive discussion today and that folks will take the time to welcome all portions of the NEIMA questionnaire to make sure that the NRC has a good cross-section of decommissioning CAB data for which to draw our conclusions for the NEIMA Congressional report.

Electronics will be available - some of those will be available in a few days. We did some information clearing requirements we were just fitting up. Your feedback again is very important to us. And we want to thank you on behalf of the NEIMA 108 Section Working Group for taking the time to attend this webinar and share your perspective on best practices and lessons learnt from decommissioning CABs.

And now I will turn it back over to Neil.

Neil Sheehan: Okay. Thank you to all our presenters and we are getting close to the Question and Answer section of the webinar. Before we transition to the discussion portion I wanted to provide you with a couple of additional decommissioning information resources.

This slide shows you the numerous sources of NRC information on decommissioning, spent fuel storage and more. They can be found on our public Web page at www.nrc.gov by looking under the radioactive waste tab.

I would also recommend our YouTube videos on decommissioning which are also available on the public Web site.

Next is a page that provides the links to several guidance documents and other information resources related to the decommissioning process.

As for this presentation it is already available via the page on our Web site containing the notice for this webinar. If you go to our main Web page again which is www.nrc.gov and click on August 8 on the calendar you will be able to access that page and see the slides.

If you have any further questions or comments on the NEIMA Section 108 webinar please do not hesitate to contact our Public Affairs Office. The contact information can be found on the slide and the NEIMA Section 108 Working Group is available via the listed resource email.

We have been receiving questions or comments electronically throughout this presentation and we will get to those in just a moment. However, before we do that there was another separate request we would like to ask of you to make sure we get the proper feedback on this webinar.

There will be an easy way to provide feedback if you go to the meeting notice for the session again on the NRC public Web site there is a simple form you can fill out to provide feedback about how we have done communicating during this webinar and what we could do to improve going forward.

Okay. Lastly again we want to thank you for your interest and participation in this presentation. We also want to just talk a little bit about some ground rules before we get to the Q&A. We would ask that you be concise. We would ask that you try not to repeat comments or questions that have already been offered.

And we will try to get to as many comments as we can but please keep in mind that there are over 300 people registered for this webinar and we have until about 3 o'clock allotted for this. So there will be a limit as to how many we are able to get to.

At the same time we would like to point out that there will be opportunities to comment at the upcoming public meetings and in writing and as for the public meetings we have noted that there will be a series of these across the country coming up within the next several months.

So with that I'm going to ask Bruce to try to address some of the written questions we've received as we've been undertaking this webinar and then we will begin to take some verbal questions.

So Bruce, do you want to go ahead and begin answering some of those...

Bruce Watson: Yes. Thank you Neil. The staffers here have been looking at the written comments as they have been coming in. We will start out with a few of those. I do want to mention again that the slides that were presented today are available on the NEIMA Section 108 page on NRTC's Web site.

So as Neil said there was over 300 people registered, we apparently have 266 people in attendance today on the webinar. So there is a considerable interest in this webinar and of course the general topic of citizen advisory panels.

We have a number of specific questions to CABs which I'm glad we have. I wanted to note that we are in the process of still scheduling some of the meetings due to availability of specific people we wanted - we have invited to the meetings along with staff availability and along with having venues and contracting those venues.

We still have not I think formally scheduled the CAB meetings at Indian Point, Kewaunee, Zion and I think Crystal River yet. So we are still working

on those. So the other ones should be on the Web site very soon and the information.

One of the questions here is, does the NRC pay for public citizens to be members of the CABs? And the other question here that I think poignant to that is are licensee required to participate in CAN meetings? And what is sponsoring CAB meetings?

Well, let me start out by saying first of all there is generally two types of CABs and by sponsor I mean they are organized either by the state they are in by legislation or by the licensee who is decommissioning the nuclear power plant. We consider them the sponsor of the CAB.

Since they are sponsored by those entities there is no reimbursement from the NRC for people to participate in those CABs and I don't know of any remuneration from the sponsors and generally those are volunteer positions that people are asked to participate with the CAB.

What are the powers of the CAB?

The CAB is there to receive advice from the public in the local vicinity. To interface with the local utility and of course I'm sure the members of the CAB may have their own opinions about the decommissioning which they are going to also share with the licensee.

And of course on the reverse side of that the licensee can share the information with their plans and anticipated schedules of activities that may impact the local community on the decommissioning activities.

One of the questions here is, does the NRC participate in CAB meetings?

I wanted to mention that again we are an independent safety regulator. We do not endorse any participation by anybody on these CABs in the respect that we are not a participant or a member of the CAB.

We maintain our independence by listening to the CAB meetings or go attending them. As I did say we do participated when invited as guests to give these presentations on specific issues related to the power plant decommissioning.

Neil Sheehan: All right. Bruce, maybe we should start to take some questions from the phone at this point?

Coordinator: Sure. We will now begin the Question and Answer...

Neil Sheehan: So Operator...

((Crosstalk))

Coordinator: Yes.

Neil Sheehan: No. I'm sorry. Please go ahead and queue up the first call please.

Coordinator: Sure. We will now begin the Question and Answer session. If you will like to ask a question please press star 1. Our first question comes from (Richard Webstar). (Richard), your line is open and you may ask your question.

(Richard Webstar): Hello. So I have two questions. One is about CABs and one is about the decommissioning process. The CABs question is how are CABs hampered by

lack of available to expert funds and inability to require the licensee to supply request of information?

And the cost part of the question is, the cost estimates I understand have been coming down for decommissioning but is there any empirical data to support that reduction in cost?

Neil Sheehan: Okay. Bruce, would you like to talk about these two. The lack of - the first question whether or not it's an issue as far as available expertise for the CABs? And then secondly has the cost been coming down for decommissioning projects?

Bruce Watson: Well, I will say that on the first part the NRC does not provide any financial support to the CABs in order to hire or contract technical expertise. We will leave that up to the sponsor of the CAB or whoever runs the CAB if they felt they needed that type of help.

Secondly as far as decommissioning funding goes, the NRC reviews the decommissioning funds on a standard which we call reasonable assurance that they have sufficient funds to complete the decommissioning.

Obviously a decommissioning fund is an estimate and that estimate is based on the utility they are to collect from the revenue authorized by the public service commission. The actual status of those funds is up to them but we look at it from a minimal standpoint is there sufficient funds. Today all of the plants that have gone in to decommissioning have had a reasonable and adequate fund to decommission the plant.

So whether it be an estimate it's exactly what it is. Most plants have more than sufficient funds to decommission the plant at least from our perspective and from a radiological decommissioning standpoint.

Ted Smith: I would add one other - this is Ted Smith - thought on the cost estimate. So some of this estimate is tied to the new business models where in their estimates because of better - more advanced planning by licensee and transfers they are transitioning into decommissioning quicker.

And so you are seeing some savings from the plant staffing requirements drawing down faster and completely drives those campaigns quicker and so obviously if you do things faster there is a cost saving associated. So I think that's one factor that's affecting that overall number.

Bruce Watson: Thank you for that question.

Neil Sheehan: Okay. Mr. (Richard), are you satisfied with those answers?

(Richard Webstar): Well, on the CABs that wasn't really an answer. It was really a statement of facts that they are not funded. My question is (unintelligible).

Neil Sheehan: I'm sorry. You are breaking up a little bit there.

(Richard Webstar): Sorry. My question is, could the CABs perform better if they did have access to expert funds to ensure reviewing what could be rather than what is?

Bruce Watson: I would have to respond that that's a rhetorical question and I don't know that there would be any real benefit from that. But that's a rhetorical issue. A theoretical issue that we really can't respond to via what if.

(Richard Webstar): I know. But let me just say where you are trying to identify how CABs could be improved you need to do some what if thinking.

Bruce Watson: Well, I would accept that as a recommendation or as compliment that...

((Crosstalk))

Bruce Watson: Yes. Go ahead Ted.

Ted Smith: I would comment saying, I think having just like in the ETI SAFSTOR process was that the technical assistant have grants available to communities - - because the issues are complex and technical and it's very difficult for laypeople to totally understand them without having an expert on their side. And they have to rely on company expertise they may only get one analysis which is what the company has already done rather than a different perspective.

So I would suggest that NRC looks at what EPA in the super fund area and considers that that would be a good model.

Bruce Watson: Ted, thank you for your comment. We are familiar with the EPA Grant Program.

Neil Sheehan: Thanks for the comment. We appreciate it. Operator, could we have another call please?

Coordinator: Yes. Our next question comes from (Alex Cullen). (Alex), your line is open and you may ask your question.

(Alex Cullen): Yes. Thank you. Can you hear me Bruce?

Bruce Watson: Yes.

(Alex Cullen): Okay. Great. I have I think two questions. First I think the statute prescribes that the new way is to do a best practices for local community advisory boards. So it seems to me that there is at least one central and primary function that must be met to be within this scope of this survey which is that it is an advisory board.

That the primary function of the entity is not merely to promote dialogue or to do public relations or to educate the public but it is to serve as an advisory board and it would ask that you focus on that as a central criterion when you go about evaluating the various entities that are out there.

My second question is, noting that we are talking about advisory boards there is an excellent best practice model available almost the gold standard which is the Federal Advisory Committee Act which of NRC is subject to in the statute.

And NRC regulation of 10CFR Part 7 prescribe - define what an advisory board is, prescribes selection criteria, composition criteria and other criteria which represent I think in a significant way the federal government's thoughts as to what constitute - as to what an advisory board should look like.

And although we are not talking about deferral advisory boards here today we are talking about local advisory boards I think the criteria and standards of the FACA are an excellent starting point. So I'm asking you would you consider - having considered FACA - and I think I agree with Mr. (Webstar) that your job is not simply to serve the existing boards that are out there but it is to

come up with a report that will tell congress what the best practices are and would be for advisory boards.

So my two questions are - one, advisory needs to be a central function of the boards you are serving and the standards that you come up with and not just education.

And two, FACA should be used as a model. Can you tell me have you thought about those two concepts?

Bruce Watson: I think we are familiar with both areas and we are also considering them. So I appreciate your comments. Neil, can we go to a couple of the written ones?

Neil Sheehan: Yes. Let's go to several of the written ones now and then we will go back to the phone.

Bruce Watson: All right. One of - a good question here is, is there a deadline to comment or submit questions on the Web site for the CABs?

We are currently going to be requesting feedback by mid-November on the process and by then we will have all the public meetings well completed.

One of the comments is that people understand that this meeting is being transcribed?

Yes. This is true. The transcription will also be made publicly available on our Web site so you can go back and review it if you certainly chose to.

All of our public meetings are going to be transcribed and so they will also be setup on our Web site. Let's see here.

Neil Sheehan: Right. Bruce, they will be available on Adam's Electronic Document System when that's concluded?

Bruce Watson: Right.

Neil Sheehan: Yes. Okay.

Bruce Watson: Let's see. One of the questions is, is what powers or authority do CABs have?

I think you are going to have to look at the charters to find out what they are authorized to do and not authorized to do. As is by the name advisory panel or advisory board they are to provide advice to who they serve -- it could be either feedback for the state, to the government agencies, it could be for the local community. It depends on the charter and what it actually says.

Let's see here. One of the questions here, is it possible for a licensee to complete decommissioning, terminate the license but still have the site in a restricted use status?

I can tell you that we have regulations for restricted use. To date we have regulated and overseen over 80 complex decommissioning sites including 10 nuclear power plants and all of those have been released for unrestricted use. And so while we have regulations for that particular condition no facilities have been left behind with restricted conditions for after completing decommissioning. They have all met those criteria and - have met that criteria.

I will point out to you that seven of those 10 power plants that have been shut down still have dry fuel storage facilities which are under license. And so there are certain restrictions with that particular piece of property and the

immediate vicinity with it. But that's still under license and that will be obviously decommissioned at a future date when the fuel is removed from the site.

With that Neil, do you want to go through the phone?

Neil Sheehan: Sure. Operator, if you could once again provide us with one of the questions from our callers.

Bruce Watson: Well, Neil, I don't hear any Operator. So we can go a few more of these written questions if we chose.

Coordinator: Yes. I'm sorry. I do apologize I was grabbing the name. Go ahead.

Neil Sheehan: So Operator, please go ahead. We will take another call.

Coordinator: Okay. I was grabbing the name for you. (Dana Gilmore) is the next question. (Dana), your line is open and you may ask your question.

(Dana Gilmore): Yes. I had a couple of questions. I have been to both the Diablo Canyon CAB and the San Onofre and having the licensee run it makes for a very one-sided operation. I would encourage people to have a state operation.

Maybe you can get the licensee to fund that and one of the differences is if you could have the moderator and just be a moderator and not a participant. We have (David Vistra) here at San Onofre who basically cuts people off and sets unreasonable rules. In Diablo Canyon they have a moderator that just does that and keeps everything going. A huge, huge difference.

We refer to the San Onofre community engagement panel as the community engagement panel. So that's some feedback.

And I would like to know is it possible to delegate some of the awardee from the NRC to the states so that they can actually, you know, enforce some higher safety standards or would that require a law change? Do you know?

Neil Sheehan: Could you clarify that a little bit more Ms. (Gilmore) what you mean by higher standards?

(Dana Gilmore): Well, higher safety standards. You know, I know the NRC can delegate some authority to the states for other radiological issues because they do the same thing for decommissioning. Could they legally have the authority to delegate some safety enforcement and allow the states to have maybe even a higher minimum standards? Is that something you can legally do?

Neil Sheehan: Well, state standards have to be at least on a par with federal standards but I will let Bruce provide some additional details.

Bruce Watson: In general we do not delegate the regulatory responsibilities for Part 50 licenses which is what the nuclear power plants are licensed to. In general though I can tell you that there has been agreement made between the licensees and some of the power plants to lower some of those standards in which the site will be decommissioned.

If I remember correctly Maine Yankee has agreed to a 10 millirems standard at the Maine Yankee decommissioning which is well below - which is below our regulatory standard but yet we weren't part of that negotiation.

But we can delegate that authority as long as the requirements either meet or exceed or better than our standards then it's up to the state to - then we are fine with it. Okay.

Neil Sheehan: Is that what you were trying to get at Ms. (Gilmore)?

(Dana Gilmore): So if the state wanted to have a higher standard on something you wouldn't object to that?

Neil Sheehan: Are you referring to radiological safety standards?

(Dana Gilmore): One of my concerns is the - one of the things is you allow the destruction of the spent fuel pools for decommissioning even though the waste is still there and there is no other option to re-canisterize the waste. And right now you give exemptions that allow the pool to be destroyed even though there is no other option for that. So we are sitting here with no plan B if the state wanted - would you support a state that wanted to keep the pools?

Bruce Watson: If we supported that then they would not be able to decommission the plant and terminate that part of the license. So that would be up to the utility on how they want to maintain the facility into the future. Obviously the NRC regulations would require them to complete the decommissioning within 60 years. So it would really be up to them.

As far as the state wanting to place additional requirements on the licensee. I don't think we would necessarily agree with that especially at least in this forum where we wouldn't know the specifics of it in order to make a comment on it either way. Thank you for your comment.

Neil Sheehan: Yes. We were just pointing out that the public should not be left with the impression that without the spent fuel pool there is nothing that can be done if a problem develops with a dry cask. They could use a Hot Cell...

(Dana Gilmore): Well, there are no Hot Cells in the country large enough to replace canisters. The Cascanian Hot Cells in Idaho National Lab that was used for the cask store inspection that was destroyed in 2007. The existing Hot Cell at Idaho is not designed for that. It's way too small and there are no other Hot Cells. So we have a leaking canister at San Onofre where basically - what's your plan?

Neil Sheehan: Let me clarify. I was referring more to a portable Hot Cell with a larger cask I - which a damaged cask can be replaced. But we are getting a little off track way now so...

(Dana Gilmore): Just to respond - let me just respond to that. I know other is other people. There is a transcript where (River) told the (unintelligible) review board they determined a portable Hot Cell is not feasible for this purpose. So you might want to get some updated information that you are relying on and I can provide the evidence if you need it.

Neil Sheehan: I appreciate the comment. Thank you very much.

Bruce Watson: Thank you.

Neil Sheehan: Operator...

((Crosstalk))

Neil Sheehan: Yes. Sorry, Bruce.

Bruce Watson: I was going to go through a couple of the written ones just to make sure we got them in. The question is, is the NRC ultimately planning to create regulations for CABs roles, functions, powers and composition or will this remain within the local purview?

As I said in the presentation we do not have the authority to require the creation of a citizen's advisory board or any other locale established community group within the Atomic Energy Act. So we can't even - we will not be able to create regulations to that fact unless the Congress gave us that authority.

Let's see. The next question is, who tracks abnormal events during DECONS and will the CAB be made aware of the events? What type of records does the CAB have access to?

Well, let me just go back to our inspection program. Our inspection program is very transparent unless it's associated with security or safeguards information. So therefore all inspection reports are publicly available and so the CAB has access to that as are any of your licenses activities are associated with the inspect program.

I want to reiterate that the inspection program continues throughout the decommissioning process and that the plant continues to be inspected until the license is terminated which means that the licensee has demonstrated to us that the site meets the radiological criteria for licensee termination.

So in addition to inspections, inspection reports such things as any events that happen on site those are also publicly available and so the public will have all to all those types of records.

Let's see here. Can there be - can decommissioning funds be used to establish and support CABs?

It's a good question. I really don't have an answer. Since they are sponsored by the state or by the utility I'm not sure. I know that the ones that are sponsored outside the - by the state are definitely not using decommissioning funds. The trust funds for decommissioning plan are in a separate bank trust and they are only to be used for decommissioning activities at the site.

Let's see. Are there anymore - can there be more than one CAB for the same site that represent different jurisdictions such as the one for the state and one for the local community?

I'm going to have to answer that with I guess there could be. We don't regulate them. We don't sponsor them and it will be up to the local community to have more than one citizen's advisory group whether they have differing opinions or whatever the case is for the reason for different groups.

So the answer to that is, I guess there could be more than one. I'm ready to go back to the phone.

Neil Sheehan: Yes. Let's go back to the phones. Operator, if you could give us another caller please.

Coordinator: Yes. The next question comes from (Barbara Warren). (Barbara), your line is open and you may ask your question.

(Barbara Warren): Thank you. Yes. I have two questions. One is, is there going to be - you know, I'm a little confused about the public process with NRC. Is there going to be like a federal registrar notice and an opportunity to comment on your whole

program or are we just commenting on those questionnaires that you presented to us?

Neil Sheehan: Well, I think we will be publishing a number of federal registrar notices for the - and meeting notices for the public meetings. We have the Web site where you can provide any comments you. We've specifically tailored this questionnaire which will be coming out hopefully early next week to kind of tailor the types of questions that we need that we think need to be in the report.

However, people are welcome to provide whatever comments on the process or through the citizen community advisory panels as a whole through our Web site if they chose to.

Kim Conway: We also have the NEIMA resource email.

Neil Sheehan: Yes. And then slide...

(Barbara Warren): What was again that Web site to go to? Will you be notifying us about that?

Bruce Watson: The Web site is already available. It was in the slides and...

(Barbara Warren): Oh. Okay. I will look at that. Okay.

Neil Sheehan: Yes. And also there is an email address where you can send comments directly. And you can find that Web page just by doing a search on our Web site put NEIMA (N-E-I-M-A) will take you to that Web page.

(Barbara Warren): Okay. Good. So then I do have another question and it's important. What about - what about sites that have other risks? In other words there are existing

risks at the site that just happen to be there for a particular nuclear power plant for example, earthquake risk. And I'm speaking specifically of a plant that was never really analyzed for earthquake risk when it was originally permitted.

Bruce Watson: Well, the plants were constructed in - were designed and constructed based on the - I guess the hazard such seismic hazards and risks for the area and so...

(Barbara Warren): No. I'm saying that they didn't know about the earthquake risk until after the plant was built.

Bruce Watson: Well, I'm sure that that will be analyzed as part of our ongoing oversight of that particular facility.

Neil Sheehan: Yes. And if I could just add Bruce. After Fukushima two of the areas that we really focused in on were seismic and flood risk and the plants were all required to take a fresh look at any earthquake risk they might have. And for those plants that were at a higher risk we certainly pay closer attention.

(Barbara Warren): So would that come into play for the decommissioning and would it still be on your radar screen? Risks like that will they still on your radar screen during the decommissioning process?

Bruce Watson: the answer will be, yes. How are the actual safety risks are reduced because the plant is no longer operating, the fuel has been removed from the reactor itself and placed in a safe condition where you can't have a reactor accident. So those considerations are taken into account.

I know at one plant in the North East - Mid West, excuse me. We had continued with flooding and there is still another one in the Midwest we have

issues with flooding that we continue to make sure they try to implement the proper mitigation actions to prevent the flood from flooding.

(Barbara Warren): I think the most common thing will be that the spent fuel pool is still being used and loaded with fuel and that's going to take some time for that to be moved out. So that's probably the most common problem that you are going to find. So would that be something you would be looking at as part of decommissioning if there is like an earthquake risk for example?

Neil Sheehan: Well, I will just reiterate that as part of the Fukushima review we did look at the spent fuel pool and its safety designing consequences for earthquakes. So I think that's already been a major undertaking by the agency since Fukushima.

(Barbara Warren): But that's exactly not true because you basically decided to - all of the recommendations including from the National Academy of Sciences you decided to only take one recommendation instead of all five. So for spent fuel pools that represents a huge risk that hasn't been addressed.

Neil Sheehan: Well, your point is well taken. We'll just add that one of the biggest focuses as soon as the plant shuts down is to get fuel out of the spent fuel pool and into dry cask storage. And that typically takes place within several years and the risk profile of the plant changes pretty dramatically once its shutdown and certainly once they have all the fuel in a dry cask storage it changes again. So...

(Barbara Warren): So that's going to have to be looked at. But I think the high burn of fuel presents a problem because it has to stay there for so long. So anyway I will leave it at that...

Neil Sheehan: Thank you for your comment. We need to get back to the CAB.

(Barbara Warren): Thank you.

Neil Sheehan: Thank you very much. Operator, if we could take another call please.

Coordinator: Yes. Of course. (Marvin Luis) is the next in line. (Marvin), your line is open and you may ask your question.

(Marvin Luis): I guess I will be the last caller so I will you a real one. Why in the world are we being subjected to any more casks when the rest of the world is using (unintelligible) 10 inch thick casks (unintelligible) out of stainless steel? This is ridiculous. If there is a minor accident and (unintelligible) is not known for minor accidents, it's known for major accidents.

Well, we have a 9095 section here that almost fell luckily we got enough funding in and enough time to build it up. But this is it. I mean, this is the kind of advisory committee that is held in great disgrace.

We'd have problems here. We are going to have tens of thousands - tens of thousands tons, not pounds but tens of thousands of tons of material if the criteria is reasonable.

If the criteria is of course lowered and lowered and lowered so that we don't have to pick up every bit of radiation we are going to have - and this is the kind of information that is knocked into these advisory groups because the information is controlled by an agency that's been captured by the utilities namely the NRC.

Bruce Watson: Thank you for your comment Mr. (Luis). We will like to get back to some of the written comments or questions.

The first one is, is there criteria for being a member of a CAB? If so, who establishes the criteria?

The actual charter for the CAB generally identifies the participants. What sector of the community they are from and maybe they are a special interest group or not. But in some cases like the state of - a couple of state chartered ones they are political appointees by various people in the state whether if it's the Attorney General or the Governor or other people.

So the criteria is varied as we said in the presentation for the CABs and their charters and their sponsors.

What is the legal or regulatory mechanism for a CAB to influence the decommissioning process?

As I have mentioned before the CABs are an advisory group so the mechanism is they report to whoever their sponsor is and they can provide that feedback either with the licensee or to the NRC as part of the reporting I want to say - as a mechanism to provide that information to the NRC either in a letter or other recognition of an issue that they would like to have evaluated.

The next question is what do you know - do you know what Congress is going to do with the report? Do you think they may act regulations related to the CABs?

To be honest we can't predict what the Congress will do with the information however they obviously have a purpose in mind in putting it into the law that we will conduct this activity. So once we make the report I'm sure that

Congress will have the opportunity to do whatever the Congress chooses to do with it and we'll see what happens.

Here is a comment with a question. The public meetings were referred to during the presentation as CAB meetings however we are not aware of any CABs at some sites. Are these meetings actually CAB meetings or just general public meetings?

As I mentioned before the CABs generally have a charter. It describes how and when and what type of meetings they will. It will also describe whether those meetings are open or closed. The ones that I have been to observe were open public meetings where the public was invited to join and observe and in some of them the public could make comments.

So it's really up to the CAB charter and obviously the CAB Chairman to follow the charter and follow the rules for public engagement. Ted, do you want to add something?

Ted Smith: But our meetings which may be described as CAB meetings are NRC's sponsored meetings to talk about CABs and get feedback about best practices for CABs. So all of those meetings are publicly available and we are really wanted to encourage folks to give your feedback on those. So those are not CAB sponsored meetings intentionally.

Bruce Watson: Okay. The next question is someone mentioned that they can't see all the questions that are being submitted. But we will be publishing the transcript and all the feedback from this call and the webinar will be transcribed and will be available on the Web site.

Another question we have is, your report is not due back to the Congress until July 2020, does this mean that the Oyster Creek CAB is more than a year away at the earliest?

I know we are going to be holding a meeting at Oyster Creek this fall. They do have a group that I believe is sponsored by the utility or the licensee. I don't think they go by the name CAB.

Kin Conway: Like a forum?

Bruce Watson: Yes. They have a public interest forum or something along that line. So they do have somewhat of an organized group to provide feedback to the licensee and also for the licensee they talk to the certain - I guess members of the public.

We are not aware of the actual charter or who the members are but I know when we held a public meeting there for the post shutdown decommissioning activities report we had a number of people mention that they were participants in that organization and they were local citizens.

Neil Sheehan: But Bruce, just to clarify, that's not tied in any way to our report to Congress whether they have a citizen's group down there or not, correct?

Bruce Watson: Yes. Well, we want to get the best practices and that some of the things that they do a very good things and that we will consider them.

Ted Smith: But it would impede them from forming a CAB if they wanted to. They don't need to...

Bruce Watson: Yes. They aren't here for that.

Neil Sheehan: No. Not at all. Bruce, how about if we go back to the phone?

Bruce Watson: Okay.

Neil Sheehan: Okay. Operator, if you could give us another caller please?

Coordinator: Yes. Our next question comes from (Daniel Thompson). (Daniel), your line is open.

(Daniel Thompson): Thank you. I'm the Vice Chairman of Trinity Advisory Panel for Maine Yankee and I was of (unintelligible) at the time that the plant shutdown and the biggest question on everyone's mind was what's going to happen to taxes in town. But we've gotten through all those questions and I just want to commend you folks for looking for the best feedback you can.

But you haven't mentioned the fact that we spent a lot of time talking to the so-called Congressional Blue Ribbon Panel that advised - that was looking at these very same things which may have led to the legislation for Section 108 - - I don't know. But there is a wealth of information in the Blue Ribbon Panel input from us and others and my question is, are you going to be considering that? Are you going to be looking at that and use it hopefully?

(Brian Harris): I - Mr. (Thompson), this is (Brian Harris). Are you referring to the Blue Ribbon Panel that was dealing with the disposal of spent fuel pool and the sighting of that? Is that the Blue Ribbon Panel that you are referring to?

(Daniel Thompson): Yes. Yes. That is the one. It actually included a lot of best practice information from our - because we were one of the very first nuclear plants to decommission and our community advisory panel we called it and still do call

it's still operating. We meet once a year now although we were meeting every month. So it's, we think it successful. And the information that way made to the blue ribbon, gave to the cap ribbon panel would be a wealth of information for you folks to draw for best practices it seems to me.

Neil Sheehan: Right.

Bruce Watson: Right I appreciate the comment. Yes we'll look at that. We have been in contact with a Mr. Don Hudson. I think he's with, associated with the organization in Maine.

(Daniel Thompson): He is the chairman I have the vice-chairman.

Bruce Watson: Okay. Then I believe he is going to attend one of our public meetings and we'll appreciate that he's able to do that.

(Daniel Thompson): Yes.

Man: And we've also...

Bruce Watson: We're looking forward to his feedback.

Man: And we've we also looked at the (epi) report on...

Bruce Watson: Right.

Man: ...(unintelligible) advisory board lessons learned.

Bruce Watson: Yes.

(Daniel Thompson): Yes, right.

Bruce Watson: So thank you for your information.

Neil Sheehan: And by the way former NFC chair was a member of the blue ribbon commission Allison McFarland. So we're very familiar with the report. Thank you for your comments Mr. Thompson.

(Daniel Thompson): You're welcome.

Neil Sheehan: Would the operator be so kind as to give us another caller.

Coordinator: Yes. Next question comes to raise lots. (Ray Lutz). (Ray), your line is open.

(Ray Lutz): Oh okay, thank you very much, (Ray Lutz). I'm near the San Onofre site and we have the community engagement panel. And I have gone to the to the Diablo Canyon Safety Committee meetings as well. And (Donna Gilmore) does have a good point that these meetings are very different. The big problem with the community engagement panel at San Onofre is that it is run by the utilities. And we saw that they tend to suppress information about things that they don't want to report going on such as the canister drop incident.

They knew that that happened and they decided to basically lie about it and not tell us what happened. And so we've got to get something where these utilities that are responsible for doing the work are required to provide information to these advisory panels. Also maybe put them under oath when they come in. Maybe have it be a little more structured and fair so that it's not, so that the people on the panel are not handpicked by the utility to represent their point of view but have a more of a cross-section including a lot of the activists on the other side who are - tend to be very, very knowledgeable about

the situation and are usually left out with very short comments at the end of the meeting.

So there has to be - I know the utilities like to raise this one up as the gold standard or something but from the community standpoint it's far from it. We've got to find out a way to make sure that we can get the information out. And the other thing I'd like to complain about and put this into is the NRC's process for dealing with additional petitions for rule changes and enforcement actions I usually at the meetings you say oh well you can file these petitions and then we take, we'll take a look at it, well hardly.

I mean we filed the petitions for this suggestion helms. It goes into a black hole there's no meetings, there's no testimony, or anything else, no experts brought it basically goes into a black hole forever never to be seen again. And so you guys have got yourselves set up as a brick wall protecting this industry and your positioning now these sort of fake advisory boards set up to keep the public happy let them come in and vent at the advisory board meetings which have no power whatsoever and utilities don't have to say what's going on.

So I hope you don't actually go down this road. Make sure these advisory boards have some power maybe even to subpoena documents and forced the utilities to provide information because right now they power, they have no, they can't even the one community engagement panel is not an advisory board, it does not vote, it does not create an opinion about anything, it does not have any conclusions it's just a bunch of people talking and basically controlled by the utility. So that is not I want to make sure you understand we one at San Onofre is not the gold standard for a community advisement panel.

And basically I'd rather see a go beyond advisory. The term advisory means that their findings that they might make it these panels is nothing but advice

for someone else and it just sits on the floor and does nothing because that's what the NRC does. We put in these filings of petitions never to be heard from again. And so it's, so anyway that's my comment is to not make the San Onofre the gold standard. It needs to really be redone, refigured. Thank you.

Neil Sheehan: Thank you for your comments Mr. (Lutz). Operator, Bruce do you want to go to some more written questions or take some more calls?

Bruce Watson: I think I have maybe one more here.

Neil Sheehan: Okay.

Bruce Watson: And the question is, "Do you anticipate that the report to Congress in addition to representing, to presenting findings from the specific questions will also include information as to the decisions that have already been made by the NRC staff in the ongoing decommissioning rulemaking relative to cap issues?" I guess the status of the rulemaking is such that the staff has provided some draft proposed rules to the commission. Those were provided to the commission back in May. They are with the commission for their actions.

And so one of the processes is that the commission will evaluate those recommendations and provide us feedback on which direction on any specific issue they want us to take. So as far as the, this endeavor to influence the rulemaking on CABs it could I guess but it be it depends on whether the commission acts before the report goes out and goes to Congress. So it's really I guess a second, it's a guess on our part out what will happen. But it could or could not have an influence on the rulemaking that's in progress. And again the rulemaking is followed the process established by the commission for developing rulemaking so.

Neil Sheehan: Thank you.

Bruce Watson: That's...

Neil Sheehan: Yes.

Bruce Watson: ...the one I had. Let's see here. I've got one more here, "Were the questions in the questionnaire developed with the help of a professional polling or survey form?" They were based on the legislation. There were derived from directly from the regulations on what the report is supposed to, content is supposed to have been it. And so they were basically the questionnaire were developed from the legislation. We did not use a professional polling or survey form for that. We felt that the legislation was clear what they wanted and therefore the questions were matched to those, to the information and content that should be in that report. With that Neil we go back to the phone lines.

Neil Sheehan: Okay operator, if you have any other callers ready to go we'll be glad to try to answer their questions or take their comments.

Coordinator: Yes. The next one comes from (Rich Giannotti). (Rich), your line is open.

Neil Sheehan: Hi (Rich). Go ahead.

(Rich Giannotti): Okay, thank you very much. Yes just a couple of comments and maybe one or two questions. As it relates to spent nuclear fuel management because we have some members of the public on the phone I just wanted to point out that the reason the utilities are storing waste on-site is because we do not have a premier repository for spent nuclear fuel and high level waste in the US as of yet. And that responsibility is with the Department of Energy. So over the past three decades or so (unintelligible) has not been able to cite and license spent

nuclear fuel and (unintelligible) for the facility and utilities are forced to store waste on-site. So I wanted to point that out.

The other thing is that some states regulatory agencies they're required by their statute, a state statute to have advisory committee. For example in Pennsylvania just our program the Bureau of Radiation Program we have two advisory committees, one is the RPAC with its Protection Advisory Committee the other one is the (unintelligible) committee. Typically both the committees meet twice a year. They prepare and publish a report. And I wanted to point out that that's a mechanism for NRC to have, to receive input from the CAP is too if you're not going to attend the meeting is to receive the reports and look it over and see what issues and concerns the public is raising.

Finally, and I think that's important for an advisory committee to be beneficial not only to licensee but also to community it's very important to look at the composition advisory committee making sure that the, there is diversity of background experience in advisory committee. And maybe that's one area that NRC could provide some guidance. For example for decommission activity it would be very helpful to have somebody on the committee who has relation health physics background or perhaps maybe someone who is a geologist. So just having members of the community to be present and meet every so often I mean that's important but I think the licenses would appreciate that a lot more if not just for local committee it's not just gathering information but also they're providing input and improving the process. Thank you very much.

Neil Sheehan: Thank you. We really appreciate the comments and we'll check back with the operator. Operator, are there some other callers who would like to pose questions?

Coordinator: Yes. The next call, next question comes from (Madeleine Calibris). Sorry (Madeleine), your line is open.

(Madeleine Calibris): Yes, thank you. I'm, I have a question about the advisory board and how to get that set up. Right now we're just part of a public interest forum. But if the advisory board is going to be something that goes into the Congressional report then maybe we should try to start that. I don't even know how we go about starting that.

Neil Sheehan: Do you mind telling us which plant you're interested in?

(Madeleine Calibris): Oyster Creek.

Neil Sheehan: Oyster Creek thank you. Bruce, do you want to try to address that?

Bruce Watson:: Well I think the first step I would do would be to contact the Citizens Advisory Panel chairman's, chairpersons at the various different sites that have them and obtain a copy of their charters which kind of – which does outline the organization purpose and function. And that would be the first starting point I would have as a suggestion for forming a citizens advisory panel or group.

Like I said there is an information forum group at Oyster Creek that was a carryover from when Exelon was licensee. I don't know what the new licensee Holtec will be doing along those lines. But one of the things you can do is contact the licensee to see what plans they have. And I would talk with their Office of Public Affairs as the initial step in that process.

But like I said you could also get the Citizens Advisory Charters from say from Pilgrim. I'm sure you can probably Google those things yes and talk to

your state and local officers, officials about possibly forming a state one. So those are the two general ways and then like I said get the charters from the other citizen advisory panels. You can probably Google those and get those fairly quickly because they're all listed as the program citizen's advisory panel or something like that and...

Neil Sheehan: Right and (DCAP).

Bruce Watson: Yes. So they're probably publicly available I'm sure. So that would be the first steps I would take if I were to have an interest in forming a citizen advisory panel.

Neil Sheehan: Does that answer your question Ms. (Calibris)?

(Madeleine Calibris): Yes it does. Thank you.

Neil Sheehan: Okay, thank you. Appreciate you calling in. Bruce, any more written questions?

Bruce Watson: Neil, we have no additional written questions.

Neil Sheehan: Okay, operator if you don't mind I'll just point out to everyone it's, we're coming up on ten of three. We - our intentions to wrap things up at 3 o'clock so we have time for a few more calls but we're getting near the end is so if you want to get in line please let the operator know. So operator, if you give us the next call please.

Coordinator: Yes. The next one comes from (Melvin Hodges). (Melvin), sir your line is open (Melvin).

(Melvin Hodges): Yes. I was concerned about, are there any other types of casks that other than the ones that we're you're currently using from Holtec that are thin casks are there others in other places around the world or that are being used that are alternatives to the current cask systems that we're using?

Bruce Watson: I'll answer that kind of briefly and it's kind of off the subject matter but yes there are additional types of casks around the world. However many of those manufacturers of those casks have not seemed to try and have those licensed in the United States. And so there, they are, there are ways of storing casks out there, storing spent fuel and the types of casks. I was going to point out that the casks designed in the United States are designed to be transported. Some of the casks in other parts of the world here are not necessarily designed to be readily moved the material to a permanent repository. So does that answer your question?

Neil Sheehan: Yes, I'll just point out that our - we have experts and they're also spent fuel management, Division of Spent Fuel Management. And unfortunately they're not on the call today because our focus is really on decommissioning citizen's advisory boards. But hopefully, you know, Bruce was able to answer that the best he could. So thank you very much. We appreciate the question. Operator, any other calls at this point?

Coordinator: Yes, yes sir. Next call comes from Jan Boudart. Jan, your line is open.

Jan Boudart: I'm with Nuclear Energy Information Service. And I just got some comments and some questions. My first comment is that everybody is a stakeholder. I do not like the term stakeholder because it implies that there are people out there who are immune to radiation and they would not be stakeholders which is ridiculous everyone is a stakeholder and everyone is under the influence of radiation because it knows no bounds. The second comment is, I want to

express how much I agree with the people who complained about the destruction of the fuel pools because there really is no other way to transfer the spent fuel from one cask to another without the use of a fuel pool. And at Zion we tried very, very hard to keep them in the fuel pool and it did not work.

And then I do have a question about the rules that around, that came from Fukushima Daiichi. My understanding was that the NRC developed some protocols that nuclear power plant had to follow because of the accident in Fukushima. And every nuclear power plant that applied for an easement of these rules it was granted and none of the nuclear power plants ever instigated the physical requirements to protect against a type of accident from flooding that, or earthquake that happened in Fukushima. And if I'm wrong about that if any of these rules were enforced I'd like at least one example from one power plant where they were required to make, to mitigate their physical plant to prevent this kind of an accident.

And my last question comes from the very last comment I thought that there were no casks in the United States that were ready for transportation particularly the ones at SONGS are not prepared to be transported. And I thought that any cask that is presently physically present at a nuclear power plant in the United States cannot be transported because it does not meet the requirements. And so you could correct me on that. I'd like to know examples of actual dry casks that are ready to go? Okay thank you.

Neil Sheehan: Thank you. I would say that both of those questions probably are outside the realms of what we're dealing with here today. There's a very well-established record on what the agency did in response to Fukushima. So that could probably fill another Webinar as far as the actions that we took so I don't know that we want to go down that road at this time. But and then with

respect to transportable casks again I don't want to have Bruce on the spot and pretend to be an expert in spent fuel storage or transportation when that's really not his area of expertise. So we would be able to get you an answer to that separately but we want to try to keep the focus today on citizen's advisory boards. Anything you want to add to that Bruce?

Bruce Watson: No, I had, the only thing I was going to comment on is that the NRC did implement a number of requirements from the post Fukushima events and issued numerous orders under the power plants to - for various, a number of various actions. Once a power plant does shut down and is defueled most of those requirements are no longer applicable because you can't have a reactor accident if there's no fuel in the reactor. And so as the I think Ms. Boudart noted that many of those have been rescinded because they're no longer applicable. So with that we can move on Neil. Thank you.

Neil Sheehan: Okay. We probably have time for one or two more callers. Operator, would like to give us another caller please?

Coordinator: Yes. The next call comes from (Kayleen Walker). (Kayleen), your line is open.

(Kayleen Walker): Hello. Let's see I, my experience near San Onofre where I live is that oftentimes the pointed questions that the rest of the NRC do go into a black hole and that's a bit discouraging. But I'd like to direct this, my comment to, are the listeners across the country and the concerned people. And I feel it's important for us to communicate what our experiences are and the lessons that we've learned. And I'd like to address you to sanonofresafety.org where it really is a deep a resource for technical documents and problems at San Onofre and solutions.

I think that the canisters that are being allowed to contain this waste the waste is the white elephant in this decommissioning process. So don't get confused with the speed of destroying the plant the containers there is no place to take it at this point. It's going to be on your site. They have the word stranded fuel, orphaned fuel. So the waste must be contained for the long term, and for the short term and for the immediate. If there were an incident what is the plan? And those questions, the question of what is the immediate action that would be taken if one of these welded canisters cracked a leak or worse these questions are not answered.

And so the outrage that you hear, that you heard from one caller the concerns from various people from San Onofre please heed our call. We've been very diligent about researching and trying to engage in the Community Engagement Panel which we call enagement panel. And but we're still looking for the best solutions to these problems.

And this is a problem and it's going to become a national issue. And Congress is trying to solve the problem and they been trying to solve it for 60 years and 60 years goes by really fast. And to think that all of these plants are going to be decommissioned within 60 years and still have fuel on site is something to consider. So anyway I think we need to communicate amongst ourselves sanonofresafety.org. Thank you.

Neil Sheehan: Thank you for your comments Ms. (Walker). So I think we have time for one more question, one more caller operator and then we're going to wrap things up. So please put somebody else on.

Coordinator: Sure. The next call is (Roger Weatherspoon). (Roger), your line is open.

(Roger Weatherspoon): Thank you and good afternoon. And hi Neil, how are you?

Neil Sheehan: Good afternoon (Roger).

(Roger Weatherspoon): Curious about the jurisdiction and if this is misplaced let me know. But many of the plants including Indian Point have a long history of radioactive liquids piling up underneath. And that covers many acres and (unintelligible). And I'm curious about the decommissioning process to what extent does it require dredging and removing the contaminated sediment underneath the plant itself or can that just be capped and walked away. How is it measured? Just what are the plans and who is responsible you or the EPA?

Neil Sheehan: Bruce, you want to answer that one?

Bruce Watson: Sure. So I guess the short answer is the licensee is responsible for cleaning up the site and remediation of the radioactive materials on the site. And they have to be the dose criteria of 25 millirem per year with the practice of ALARA to have the license terminated. With that in mind we implemented additional regulations back in 2012 which we called the Decommissioning Planning Rule which requires the licensees to perform monitoring of the sub surfaces near the plant where leaks are likely to happen.

And so is specifically at Indian Point we know that they have had a number of leaks. They also have been put in the wells that detect that early. And so that detection has caused them to go back and do repairs. And also the law requires that they continuously monitor those wells to ensure that the leaks were fixed. So we know that there is some contamination of the subsurface soils and so during the decommissioning process the licensee will characterize those - that - those areas and make plans to remediate them in order that they can be the license to termination criteria. So with that in mind it is the licensee

who will - is responsible for cleaning up the plant and meet the dose criteria's. So I think we're meeting our time criteria Neil.

Neil Sheehan: Right. And (Roger) I'll just add I mean there have been there have been plants that have had to remove soil or in some cases bed rock they would have to do whatever they need to to get to that release criteria. And as Bruce pointed out there has not been a plant to date that has not been determined to be releasable for under the unrestricted criteria.

(Roger Weatherspoon): Can you send me (unintelligible)?

Neil Sheehan: Pardon.

(Roger Weatherspoon): Can you send me some background on that or should I drop you a line later?

Neil Sheehan: Please do yes.

(Roger Weatherspoon): Well do. Thank you so much. And thanks Bruce.

Neil Sheehan: Okay. So I just want to thank everyone for taking time out of their day to take part in this Webinar. We know that time is a precious commodity and hopefully you got some useful information out of this. As Bruce pointed out this is a kickoff for this whole series of public meetings on (NEMA) that will begin August 21. And with that I will turn it over to Bruce for the final word.

Bruce Watson: Well thank you Neil. And I really want to thank everybody for taking the time out as Neil said to participate. I think the staff appreciates the comments. I hope we provided you with the information that you look forward as we progress in this endeavor I guess I'll call it to write this report for the

Congress. That you understand the information we're looking for and we are welcome, you know, we're looking forward to your comments and so that we can take those into consideration. As I said we will be holding 11 public meetings around the country and they will be the similar type meetings where we will do a short presentation at the site, at the venue and then collect comments from people. So again thank you for your time, appreciate all your input and again thank you again for your participation.

Coordinator: This does conclude today's conference. Thank you all for participating. You may now disconnect.

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