UNITED STATES OF AMERICA

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NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING

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TUESDAY

January 28, 1997

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The Public Hearing was held at the Saxton Volunteer Fire Company Hall, Eight & Norris Street, Saxton, Pennsylvania, Ms. Norma Ickes, Chairman of the Bedford County Commissioners, presiding.

PRESENT:

Representing GPU Nuclear

G. A. KUEHN

SYLVIA J. MORRIS

Representing the Nuclear Regulatory Commission

ALEXANDER ADAMS

JOHN WHITE

DR. MICHAEL MASNIK

GENE HOLLER

NEIL SHEEHAN

THOMAS DRAGOUN

PRESENT: (Cont.)

Representing the Nuclear Regulatory Commission

LEE THONUS

ETOY HYLTON

Bedford County Commissioners

GARY EBERSOL

DICK RICE

Representing State Representative Dick Hess

JAMES KEIFFER

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PROCEEDINGS

7:00 p.m.

MS. ICKES: Good evening. We have an annoying hum here, and we want to turn this off and get rid of it.

Speaking of annoyances, driving here tonight, I had someone behind me almost the entire way who had their left headlight on high beam, so I feel like I'm here with right eye abuse. Unfortunately, they live in Riddlesburg, and they followed me here almost the entire way.

I am Norma Ickes, I'm Chairman of the Bedford County Commissioners, and I was delighted when a few months ago Al Adams called and asked me to chair this meeting.

The Commissioners of Bedford County are very concerned with the dismantling of the reactor, and we are very anxious to take part in the process.

With me here tonight are my fellow Commissioners, Dick Rice, and also Gary Ebersol.

I would stress to you that this is an information gathering meeting. It is not any formal public hearing. I would ask you to take note that it will be transcribed.

At the end of the meeting, and you will see on

your agenda, there is a public comment portion. And when you give your public comments, we would ask that they be done at the microphone. You will see the one back here, it doesn't have that annoying hum and it will be turned on.

We also have a transcriber here with us tonight. When you ask your question, please give your full name and spell your last name. If she has any problem hearing anything, she will raise her hand, and then you will need to repeat.

So we will then move on, also, to the fact that there is our agenda and other information in the back of the room. So if you do not have an agenda, at this point, would you raise your hand and we will see that you get one.

I would also ask that at some point, break would be a very good time, if you have not already done so, and are going to make a public comment, that you sign that sheet in the back, and also note that there is another sheet. This sheet will put you on a mailing list.

And in the interest of saving trees, we would ask that you share information. When this task force, and when the process is completed, then the mailing list will stop.

Also, keep in mind that the information from

the meeting, tonight, will be kept on permanent record at the Saxton library, so you can always look at it there if you don't care to keep copies for yourself.

We will have a bound transcript copy of all overhead slides, all the materials that are presented tonight. And if you have any information that you want to contribute to that, you can do so. If it is just a few sheets, it will be included. If it is a larger amount of material, then it will be at the discretion of the transcriber to make a summary of that material.

I would encourage you, during the break and at the end of the meeting, to stop and talk with those who are representatives of the Nuclear Regulatory Commission, and for those of you who are part of the media, we would ask that you hold your questions outside of the building or this general meeting area, and again, confine that to the break time or after the scheduled meeting.

I will now turn this meeting over to Al Adams, a representative of the Nuclear Regulatory Commission.

And before I do that, I would speak for all residents of the county. And when I think about this whole process, I think about the three C's. And that would be to exercise for all of us caution.

There is a healthy amount of caution needed here, whenever this process unfolds. Also, concern. We

are very concerned. Our county is in your hands.

And the third C that I think of is credibility. We are looking to your credibility to provide us with a safe process.

Al?

MR. ADAMS: Thank you. Can everybody hear me?

Good evening. My name is Al Adams, I'm the NRC licensing project manager for the Saxton facility. I work in the Rockville, Maryland, NRC headquarters.

I have a number of other NRC people with me. I'd like to introduce them. Also from the Rockville office is Mike Masnik. He is the acting section chief of the decommissioning section of the non-power reactors, and decommissioning project directorate.

Also with us is Paul Harris, he is a licensing project manager in our office. We have with us, also, Eugene Holler. He is an attorney from NRC headquarters with the office of the General Counsel.

Lee Thonus, he is a project manager from our project office at Three Mile Island. From the NRC region 1 office in King of Prussia, Pennsylvania, is Thomas Dragoun, a project scientist who is responsible for the inspection program at Saxton, and John White, who is Tom's supervisor, and chief of the radiation safety branch.

From the Region 1 public affairs office, is

Neil Sheehan. Can I have the next slide, please?

The purpose of tonight's meeting is to provide you with some information on the decommissioning of nuclear reactors, to share with your our experiences in the oversight of decommissioning activities, to explain the Commission's regulations on decommissioning, and where the Saxton facility fits into the regulatcry framework, and to allow the licensee to discuss the decommissioning of Saxton.

First a few words about NRC. NRC was formed in 1975, succeeding the Atomic Energy Commission, to regulate the various commercial and institutional uses of nuclear energy.

NRC has responsibility to protect public health and safety. We accomplish this by three principal regulatory functions.

We establish standards and regulations, we issue licenses for facilities and users of nuclear material, and we inspect facilities and users to assure compliance with the requirements.

NRC places high priority on keeping the public informed of its work. This is the reason for being here today.

At this point it might be helpful to explain some terms that come up frequently, when discussing

decommissioning. Two of these terms are "radioactive activation and radioactive contamination."

Radioactive activation is the process of inducing radioactivity, or making something radioactive by irradiation. Activation can only occur when the reactor is operated, and only in material near the reactor core that interacts with the neutrons produced by operation of the reactor.

Steel that is inside the reactor vessel, and has been irradiated by neutrons during the time the plant operated, becomes activated.

Radioactive contamination is the deposition of radioactive material in a place where it is not desired.

For example, the inside of a pump may be contaminated on its surfaces by contact with elements in water that were activated when the water passed through the neutron field in the core of the operating reactor.

The pump could be decontaminated by removing the radioactive contamination by washing. This decontamination process may produce some radioactive waste that is disposed of, off-site, but may allow the pump to be released for unrestricted use.

On the other hand, no amount of scrubbing on the surface of activated metal in the reactor vessel will remove the atoms scattered throughout the interior of the

metal that have become radioactive due to activation.

That piece of metal will have to be physically dismantled and disposed of off-site. Items that are activated or contaminated or both are found at the Saxton facility.

Two other terms that may be used frequently during a discussion of decommissioning are "radioactive decay and half life."

The nucleus of a radioactive atom is unstable, and wants to disintegrate by the emission of charged particles, or photons. This is called radioactive decay.

The amount of time it takes for radioactive substance to lose half of its activity by radioactive decay is the half-life.

For example, a common element found in the steel used in reactors is cobalt. The radioactive activation of cobalt usually produces a radioactive isotope of cobalt called cobalt 60.

It has a half-life of about five and a quarter years, and decays into non-radioactive nickel. As an example, if we assume there was 100 ounces of cobalt 60 at Saxton when it shut down in May 1972, there would be about four ounces of Cobalt 60 today, and about 96 ounces of nickel.

This means that 96 percent of Cobalt 60 will

decay away over a period of 25 years.

Now I would like to talk, in general, about decommissioning of reactors. There are definite stages in the life of a nuclear reactor, including planning, construction, licensing, operation, and finally decommissioning and license termination.

The purpose of decommissioning is to remove the facility safely from service, and reduce residual radioactivity at the facility and site to a level that permits the release of the site, and termination of the NRC license.

The focus of the NRC is limited solely to the safe removal of the radiological hazards resulting from the operation and use of the facility.

For example, if the licensee has decontaminated structures to levels that meet the release criteria, it is possible that a site could be released and the license terminated, with structures remaining on-site.

At that point, the fact that a licensee may or may not choose to spend additional funds to remove buildings from a site, is outside our regulatory oversight.

One aspect of decommissioning is removing the facility safely from service. At Saxton, the facility was removed from service in the early 1970's. Once a facility

permanently ceases operations, the systems at the facility of continuing regulatory concern, are principally those used for the safe storage of irradiated spent fuel.

At Saxton, the fuel and some other radioactive components were removed from the facility during the 1972 to 1974 time frame.

In 1975 the facility was placed into a form of long-term storage, that is now called SAFSTOR, to allow radioactive decay of activated and contaminated components.

Once the residual levels of radioactive materials are reduced to below certain criteria, either by decontamination or dismantlement and disposal off-site, the NRC for the facility and site can be terminated.

Before the license is terminated, the licensee has to perform an extensive final survey that proves to the NRC that the site is clean enough to terminate the license.

The NRC may do a confirmatory survey, to be certain that the site is clean enough. Once the license is terminated, the NRC no longer has any regulatory oversight over the facility or site.

This is the ultimate goal of decommissioning, termination of the license.

So to summarize, decommissioning is the

removal of the facility from service, and the reduction in the levels of radioactivity at the facility and the site, to levels that will ultimately result in the termination of the license.

NRC oversight activities relate directly to the proper decontamination and dismantlement of the facility, to protect public health and safety.

Now that I've provided some background on decommissioning I would like to talk a little about our experiences with decommissioning reactors in the United States.

We have had 15 nuclear power reactors permanently cease operations and begin decommissioning since the early 1960s. Also, about 80 research and test reactors have been decommissioned, and have had their licenses terminated.

I have put a few selected facilities on the slide. There has been a fair amount of experience in the area of decommissioning. A number of nuclear power plants licensed by NRC are in long-term storage. The condition is called SAFSTOR.

Some nuclear power plants are actively being dismantled, and one, the Shoreham plant, has had its license terminated.

The Fort St. Vrain plant in Colorado is also

very close to having its license terminated. Trojan and Yankee Rowe are currently undergoing active decommissioning.

Shippingport was under Department of Energy jurisdiction, but is another example that decommissioning can be completed safely.

Please note that Saxton, which was licensed for power levels up to about 35 megawatts, is much smaller than some of the other facilities we have dealt with.

NRC also has a number of experienced personnel who are working on oversight of decommissioning activities. Some of these people are with us today.

For example, Mike Masnik and Lee Thonus were involved in the oversight of the clean up of Three Mile Island Unit II for many years. And Mike is the project manager for the Trojan nuclear plant, which is now undergoing active decommissioning.

Gene Holler is a legal expert on decommissioning rules and regulations, and has worked with our group on many decommissioning issues. I have been project manager for 11 decommissionings and 9 license terminations.

In the region, Tom Dragoun has been the inspector for three decommissionings and two license terminations.

On my slide about the status of shut down reactors, I show that we have some facilities that are in long-term storage, or in decontamination and dismantlement.

Our regulations require licensees to establish if dismantlement should begin immediately, or if the facility can be stored in a safe, stable condition for some period of time, before the licensee begins dismantlement.

The licensee may even conduct a partial dismantlement, followed by a storage period, ending with final dismantlement. This is the path that Saxton has taken.

Our regulations say that under normal circumstances, the licensee has 60 years after shutdown to complete decommissioning.

The decision to dismantle immediately or place the facility in storage is a licensee decision. This decision is reviewed by the NRC to ensure that whatever approach is planned, there is acceptable assurance that it would be conducted safely.

NRC performed the generic environmental impact study that looked at decommissioning options, and we determined that as long as the licensee complied with our regulations, either option, or a combination of options

could be acceptable.

One of the principal reasons for arriving at this conclusion is because the risk to public health and safety, and to the environment associated with licensee activities at nuclear reactor facilities undergoing decommissioning, is significantly less than when the plant was operating.

The risk at Saxton significantly decreased with the cessation of operations, and the removal of fuel from the site, and continues to decrease during the storage period, due to radioactive decay.

This reduction in risk is so significant, that many of the regulatory requirements associated with plant operation are no longer needed.

For example, many of the detailed technical requirements applicable only to an operating plant, such as operating parameters and surveillance requirements were gradually removed from the license starting in 1972, based on a detailed evaluation by the NRC staff of the risk.

So to summarize, there have been a number of reactors in the United States that have been permanently shutdown, are in the process of decommissioning, and have completed decommissioning and undergone license termination.

Decommissioning is a well established and

understood process, and the NRC staff has considerable experience on the oversight of these activities.

There is a reduction in regulatory requirements on licensees as decommissioning progresses. This reduction is based on the significant reduction in risk to the public due to permanent cessation of reactor operation.

I next want to talk a little about the regulations governing decommissioning. The decommissioning regulations are in addition to other regulations that the licensee must follow, such as those related to radiation safety.

Comprehensive regulations dealing with reactor decommissioning were promulgated in 1988. Based on the experience gained over the next seven years, the Commission extensively revised the regulations of 1996.

In July of 1996, the NRC published a final rule making that substantially changed the decommissioning process. I will discuss the relationship of the regulations to the Saxton decommissioning process.

The regulations require that each power reactor licensee submit a preliminary decommissioning cost estimate about 5 years prior to the projected end of operations.

Obviously, in the case of Saxton, the reactor was permanently shut down before a preliminary cost estimate was even required by the regulations.

However, they still have been collecting the funds necessary for decommissioning the facility, and have submitted decommissioning cost estimates to NRC.

The licensee is required to submit a written certification to the NRC within 30 days of the decision to permanently cease operations. And, again, when the fuel has been permanently removed from the reactor vessel.

Because the Saxton license was permanently modified in 1972 to allow possession but not operation of the facility, the rules specify that the required certifications have been submitted.

Saxton had started down the path for decommissioning and license termination, under decommissioning regulations that the NRC issued in 1988.

A decommissioning plan to decontaminate the containment vessel and its structures, systems and components, was submitted to NRC in February of 1996, followed by a decommissioning environmental report, and proposed decommissioning technical specifications.

The staff had these documents under review with a planned completion date of late fall 1996. When with the proposed amendment to NRC's decommissioning

regulations were published on July 29, 1996, the licensee requested that the review of the decommissioning plan and related documents be suspended, because of changes to the regulations which eliminated the requirement to submit a decommissioning plan, and the requirement that NRC review the plan.

The 1996 regulations state that within two years of permanently ceasing operations, the licensee must submit a post-shutdown decommissioning activities report, called a PSDAR, to the NRC with a copy to the affected states.

The purpose of the PSDAR is to provide the NRC staff with sufficient information to assure the proper NRC oversight of any significant decommissioning activities, to require the licensee to examine its plans for the funding of the decommissioning activities, and to require the licensee to examine its plans for decommissioning to assure that the activities will not result in environmental impacts that have not been previously considered.

For licensees like Saxton, that had a decommissioning plan under review by NRC, the regulations state that the decommissioning plan is considered to be the PSDAR.

The PSDAR must include a description of

planned decommissioning activities, along with a schedule for their accomplishment, an estimate of expected costs, and a discussion that provides the reasons for concluding that the environmental impacts associated with site specific decommissioning activities will be bounded by previously issued environmental impact statements.

The 1996 regulations require the NRC to notice the receipt of the PSDAR in the Federal Register, and make it available to the public.

We are also required to hold a meeting in the vicinity of the nuclear site, to allow the licensee an opportunity to present their plans for decommissioning of the facility, to describe the role of the NRC in the decommissioning of the facility, and to listen and respond to questions from members of the public.

This notice appeared in the Federal Register on December 19, 1996. This is why we are here tonight.

The licensee is prohibited from undertaking any major decommissioning activities until 90 days after they submit the PSDAR. Major decommissioning activities are those activities that result in permanent removal of major radioactive components, permanent modifications to the containment, or result in dismantling components for shipment that contain large amounts of radioactive material. We call it, containing greater than class C

waste.

Major components are those such as the reactor vessel, steam generators, pressurizers, large bore reactor coolant system piping, and other large components that are radioactive to a comparable degree.

The purpose of the 90 day period is to allow sufficient time for the NRC staff to examine the PSDAR, to publish notification of its receipt in the Federal Register, to hold a public meeting in the vicinity of the facility, to discuss the licensee's plans, and to conduct any necessary safety inspections prior to the initiation of major decommissioning activities.

Under the 1996 rule the NRC staff is not required to review and approve the PSDAR. As I stated earlier, the PSDAR must contain a description of planned decommissioning activities, along with a schedule for their accomplishment, an estimate of expected costs, and a discussion that provides the reasons for concluding that the environmental impacts associated, ~~would~~ with site specific decommissioning activities, will be bounded by previously issued environmental impact statements.

The staff examines the PSDAR, and makes a determination as to whether or not it provides the information required by the regulations. In addition, the staff considers comments received from members of the

public.

If the information provided is not consistent with the requirements of the 1996 rule, then the NRC staff will require the licensee to amend their submittal, prior to allowing major decommissioning activities.

If the licensee's submittal complies with the information requirements of the 1996 rule, then the NRC staff will document this in a memorandum that will be placed on the docket.

For the Saxton facility, the staff is in the process of comparing the information contained in the decommissioning plan, which turned into the PSDAR, with the informational requirements stated in the 1996 rule.

As I stated earlier, one of the reasons for this meeting is to listen and respond to questions from the public. Your questions and comments tonight, as well as any written comments, will be considered by the staff, and addressed in a memorandum the staff will place on the Saxton docket.

The staff hopes to complete determination of the licensee's compliance with the regulations, and considerations of public comments, by the end of March.

Although the Saxton PSDAR was considered to be submitted more than 90 days ago, the licensee has not started any major decommissioning activities.

This is because there is a requirement in the Saxton license that GPU shall not dismantle or dispose of the facility, or property occupied by the facility, without prior approval of the Commission.

The technical specifications state that the licensee is prohibited from taking any action which results in alteration of the containment vessel, removal of major radioactive components, or results in dismantling of components.

These requirements can only be changed by amendment of the facility license. The licensee submitted a request for license amendment to change these requirements, and make other changes to the license and technical specifications to support decommissioning activities.

The licensee also submitted an updated safety analysis report, which described the current facility condition, and updates the accident analysis, to include accident scenarios applicable to active decommissioning conditions.

The NRC staff currently has the proposed changes to the facility license and technical specifications under review. The staff is also reviewing the environmental report that was submitted with the decommissioning plan.

This environmental report is now being used to

support the environmental assessment which the NRC will prepare for decommissioning activities that will occur after the license amendment is granted.

This license amendment request will be noticed in the Federal Register, providing for a 30 day comment period, and an opportunity to request a hearing.

The licensee's application and NRC correspondence related to it, can be found in the local public document room for Saxton, located in the Saxton public library.

After approval of the license amendment, the licensee could begin to perform major decommissioning activities without specific NRC approval, using a process described in the Commissions regulations, contained in the Code of Federal Regulations, Title 10, Section 50.59, also know as 10 CFR 50.59.

10 CFR 50.59 allows licensees to take certain actions without getting prior approval from the Commission, unless the action requires a change in the technical specifications, or raises an unreviewed safety question.

The licensee has to perform a review to determine if they can take the action they want without prior NRC approval. The review also contains justification if the licensee determines that no

unreviewed safety question exists.

The licensee is required to maintain records of their reviews, and send in reports to NRC. The licensee's process for performing these reviews, and the reviews themselves, are carefully evaluated during NRC inspections.

The new rule also imposed some additional requirements on decommissioning activities by the licensee. The licensee is prohibited from performing any decommissioning activity that would foreclose the release of the site for possible unrestricted use, result in significant environmental impacts not previously reviewed, or result in there no longer being reasonable assurance that adequate funds will be available for decommissioning.

Once the staff has amended the license and examined the PSDAR, the regulatory road is clear for the licensee to begin decommissioning in earnest.

The NRC staff will be actively involved in on-site inspections, and reviewing licensee documentation of the safety basis of their activities.

The NRC staff would continue to have interactions with the public and the affected states.

Two years prior to the planned termination of the license, the licensee would submit a ~~licensee~~ license

termination plan. The license termination plan will include a site characterization, identification of remaining dismantlement activities, plans for site remediation, detailed plans for the site termination radiation survey, a description of the end-use of the site, if restricted, an updated site-specific estimate of remaining decommissioning costs, and if needed, a supplement to the environmental report, describing any new information or significant environmental change associated with the licensee's proposed termination activities.

The NRC staff will notice the receipt of the license termination plan in the Federal Register, make the plan available for public comment, and afford an opportunity for a hearing on the plan.

The NRC will also hold a public meeting in the vicinity of the site, to allow the licensee to explain the license termination plan to the public, to discuss the remaining NRC activities associated with terminating the license, and to allow the public to ask questions.

NRC approval of the license termination plan will be made by license amendment, which would authorize implementation of the license termination plan.

The licensee then continues to clean up the site and perform the final radiation survey. The NRC staff will continue to provide oversight during this

process, and retains the option of performing our own confirmatory survey of the site.

The Commission shall terminate the license if it determines that the remaining activities have been performed in accordance with the approved license termination plan, and the terminal radiation survey, and the associated documentation demonstrates that the facility and site are suitable for release.

So this is the decommissioning process that Saxton will follow. There are a few aspects of this process that are unique to Saxton. Saxton will probably be the first license taken to termination under these new regulations.

Your questions and your comments are always welcome. Here is the mailing address, phone number, fax number, and electronic mail address for Tom and myself.

I would now like to introduce you to John White from NRC Region 1, who will tell you about the decommissioning inspection process, and what will happen at Saxton when decommissioning activity starts.

After John speaks, we will be happy to take questions about our presentations.

MR. WHITE: Good evening. My name is John White, I'm Chief of the Radiation Safety Branch, NRC Region 1.

I'd like to take this opportunity to re-introduce you to Tom Dragoun. Relative to the inspection process that NRC conducts, has conducted in the past here at Saxton, and will conduct in the future, Mr. Tom Dragoun is the principal inspector. He is a senior project scientist in the NRC Region 1, and he is responsible for the coordination and the conduct of most of the inspection activities that will be conducted here at Saxton.

Just a couple of minutes to explain the inspection process that we intend for Saxton. Relative to decommissioning, the purpose of our inspection process is generally to obtain information, by direct observation, and to directly verify that the licensee is, in fact, conducting decommissioning activities in a safe manner.

That is our principal concern, and our principal objective relative to our inspection program.

In most facilities that undergo decommissioning, spent fuel is part of the process, and is a major aspect of our inspection effort, because this fuel is still highly radioactive, and is remaining on-site in a spent fuel pool.

In the case of Saxton -- in the case of Saxton, this is not a factor. As Al pointed out, the fuel at Saxton was removed from site some 25 years ago, so there is no fuel remaining at Saxton.

The other part of our inspection process is to verify and validate that all the activities that the licensee conducts relative to decommissioning of the site, are done in strict accordance with our rules and regulations, with the license conditions that are imposed, and with the commitments that the licensee has made to the NRC relative to decommissioning.

Our procedures for conducting an inspection are formalized, and are directed to a number of different activities. The ones that are displayed here are some of those activities.

They include, but are not limited to these activities, management and organizational effectiveness of the operating organization at Saxton. We also look at the licensee's ability to conduct self assessment and audits, and identify their own problems, and correct those problems.

We also look at design control, decommissioning control, work process control. An important aspect of this is an activity called 50.59, that is in reference to 10 CFR 50.59, which allows the licensee to make changes in the facility as is currently described in their safety analysis report, and make a determination that prior to making such changes, that they do not -- that those changes do not constitute an unreviewed safety

question.

So our inspection activity will be directed to looking at the licensee's process and their conduct of these types of evaluations.

We will also be looking at maintenance and surveillance activities that the licensee needs to conduct. Decommissioning of a facility that is contaminated is a rather large, health physics event.

It involves radiological controls, radiation protection, and so a large aspect of our program is devoted to the licensee's ability to control the exposure to the people who work there, control the exposure to the environment, and to impact on the environment, and to monitor and control any effluents that are caused by this decommissioning activity.

And relative to that, to verify that their effluent monitoring and control program is in accordance with our rules and regulations.

As we conduct inspection activities at Saxton, our inspections are performance based. We will always be looking at how the licensee is performing.

If we identify declining trends in this performance, we will rapidly identify that to a licensee, and we will expect rapid response on the licensee's part, in terms of identifying the root causes for those

declining trends, and effective corrective action to ameliorate that process.

The other part of our inspection program will be to assure that we have allocated the correct resources to inspecting the decommissioning process. While Tom is the principal inspector, and will be conducting most of these inspections at the facility, depending upon the activities that are conducted, there may be need to involve other NRC inspectors or other NRC specialists to review certain activities that are being conducted at the facility.

The specialists may include fire protection specialists, health physics specialists, occupational safety and health specialists, and any other contractors that we may see or need to be employed, or need to be engaged in the inspection process, and Tom will be coordinating those activities.

So that is, in a nutshell, what our inspection program is about, and what we intend to accomplish relative to the Saxton decommissioning activity.

Thank you.

MR. ADAMS: Questions?

MR. NOVAK: My name is Karl Novak, N-O-V-A-K, as required by the requirement here, first name Karl, K-A-R-L.

You talked about inspections. Essentially, are you going to have people on the site while they are working? I mean, somebody from NRC on the site while they are working on this, during the eight hour day, or twelve hour day, or whatever it might be?

MR. WHITE: We will not have a resident inspector on the site. Our inspection program is a program that will be looking at those activities that were displayed here in the view graph, but we will also be conducting activities of major component dismantlement and removal.

Any major significant activity that a licensee does relative to their decommissioning plan, we will have an inspector on site to review that. Shipping of rad material that is an outcome of this decommissioning process, we will review that, also.

But we will not have a resident inspector assigned to this site. So our inspections will be conducted over a period of time, to just give you a base line for thinking about it, this may be -- you know, to begin with, as the licensee progresses through initiating this decommissioning, we may be up here, this year, maybe four to five times, to look at various activities. But we will not have a resident on site.

MR. NOVAK: But you will be here if anything

is put -- is taken out and is put on a truck, or whatever you are going to put it on for transportation, is that true?

MR. WHITE: Any major activity that takes place, we plan to be here.

MR. NOVAK: You plan -- you will be here, or you plan to be here?

MR. WHITE: For major component removal, major shipping activities, it is our plan to be here, to have an inspector here. Tom, you want to make a comment?

MR. NOVAK: You didn't answer my question.

MR. DRAGOUN: We have a telephone conference, once a week, every Wednesday at 1:30. The conference involves NRC headquarters, the region, people at the site. And what we do is we review the activities of the past week, and the activities for the coming week.

And during that conference we discuss essentially what has been done in terms of major work, and what is planned to be done in terms of major work. So although we are not on the site, we are in quite frequent communications with the site.

MR. NOVAK: Thank you. One of the primary things I'm very concerned is the transportation of this material. Have you planned to take it through Bedford County?

I mean, what are your routes of removal of this material.

MR. WHITE: The licensee has not advised us of what their routing is, but we will inspect that when the time comes.

MR. NOVAK: Is there any involvement of NRC after it leaves the site, or is it just sort of every man for himself?

MR. DRAGOUN: Let me address your question just a minute ago. I have already reviewed their program on site for the control of shipments from the site. Part of that was driven by the fact that the NRC regulations, and the Department of Transportation regulations changed this past year, in April, to bring this country in line with the rest of the world, essentially.

And during that review of the program, I was accompanied by a representative from the Commonwealth, a fellow by the name of Ken Singh, because they were interested in -- the state is also interested in transportation of material, obviously, through the state.

And the results of that were, everything looks fine. Now, they had not made a major shipment yet. The last shipment was in 1994 when they took quite a bit of dirt off-site, and that was observed.

Their next shipment is going to be some

asbestos that they removed from the inside. This is mildly contaminated with radioactive material. That is prepared to go. And while we are here, for this meeting, that is one of the subjects that we are going to review, take a look at their preparations, the paperwork, what arrangements they made, and so on.

The state fellow was supposed to be here, but couldn't make it because of the condition of the roads.

MR. NOVAK: Let's go on with transportation. How about the emergency response management team; have they been trained to take care of accidents that possibly might happen along the way with regards to these shipments?

MR. DRAGOUN: Well, the emergency response depends on what happens. The truck driver is always given training when they take the shipment. And of course it depends on what kind of shipment it is, just how hazardous its classification, in other words.

That notification is made by the truck driver, if he has a problem, and if he is able to make it. He calls phone numbers that are given to him by GPU. That, in turn, turns on an appropriate response.

The NRC does not have a response team. However, the various states on the path to the disposal sites do have response teams. But the training that they

get, I'm not familiar with that.

MR. NOVAK: So essentially the response team that we have in this county really hasn't had any training, is that what you are telling me?

MR. DRAGOUN: No, I didn't say that.

MR. NOVAK: Does anybody know the answer to that?

MR. DRAGOUN: The transportation of material on the public roads is a function of the Department of Transportation. The NRC has regulations about preparing shipments. Once a shipment rolls off a site, the DOT rules kick in.

And exactly what the DOT requires for a local response teams, I'm not sure.

MR. NOVAK: I see. Then, possibly what we should have this evening is a representative from the Department of Transportation, is that what you are telling me?

MR. DRAGOUN: I think to answer your questions on over the road transportation, yes, that is correct.

MR. NOVAK: So there are no regulations from the NRC with regards to the transportation of waste from nuclear sites, from one point to another, is that what you are saying?

MR. DRAGOUN: There are NRC regulations for

the preparing of the shipment, how it has to be packaged, the container that it is in. For instance, containers have to pass tests where they have to be filled up with wet sand and raised to a certain height and dropped on the edge, on concrete, and stuff like that.

We have regulations for that, yes, we do. So preparing the material for shipment, and then the paperwork like the notifications that have to be made if there is a problem, that is all done before the material leaves the site, and various protection measurements, the shipment has to be surveyed to make sure that the dose rates coming off of it meet DOT requirements.

MR. NOVAK: Well, I guess really basically what we need then, to close the circle on this, and have some kind of an input with regards to what is going to take place in the way of training of our emergency management people here in this county, and also what, if they are notified when these shipments go, and what the requirements are from the Department of Transportation.

Because I think without that closing of that loop, I think we are sort of, you know, left out here without sufficient information on what is going to happen here in the county, and what possibly might happen.

So we make sure that we have the safety and the health of the people in this county taken care of.

Are there any expectations as far as the route of movement; is that all up to the company, or do you get involved in that?

MR. DRAGOUN: Well, some shipments, depending on their classification, some are controlled route quantities. In other words, there are certain roadways that are allowed and certain that are not allowed. But exactly what the -- what those control routes are in this area, I'm not -- I don't know at this point.

It is possible, like when they take out the reactor vessel itself, they are planning to ship that intact, filled with concrete. That will probably be most probably a route control quantity.

And so that will -- and not only is there avoiding population areas and so on, but there is also things like overhangs on the road, and bridge capacities, and a lot of other considerations.

MR. NOVAK: Where is this waste going?

MR. DRAGOUN: That is not our --

MR. NOVAK: That is not your responsibility?

MR. DRAGOUN: Right.

MR. ADAMS: You can ask that of the licensee after their presentation.

MR. DRAGOUN: But there are two general facilities available in the country, right now. One of

them is in Utah, in Clyde, Utah, and the other is in Barnwell, South Carolina.

MR. NOVAK: I think I've exhausted all my questions, thank you.

MR. ADAMS: Any other questions?

MS. GIBSON: Mine are much simpler. My name is Alicia Gibson. My question is, when you were going over the decommissioning, I'd like to know whose idea or who was responsible for submitting the license, was it the people in Saxton that said they wanted the nuclear power plant dismantled, and then they went ahead and got together and submitted that the license should be formed, or was it like the NRC, or was it the --

MR. ADAMS: Is your question, who decides it is time to decommission?

MS. GIBSON: Yes. Who decided that the containment was going to be dismantled?

MR. ADAMS: That is a licensee decision.

MS. GIBSON: Who is the licensee?

MR. ADAMS: Saxton Nuclear Experimental Corporation and GPU Nuclear are joint licensees.

MS. GIBSON: So they decided, they kind of came in and took a look at the plant and decided that it should be removed?

MR. ADAMS: Yes.

MS. GIBSON: And then when it goes to South Carolina, I just read in the newspaper that it goes to a river. Are they going to take the stuff and dump it in the river, or are they going to take and put it someplace very safe, so that it doesn't cause any harm to the air, the water, the land?

MR. ADAMS: You mean South Carolina?

MS. GIBSON: Yes.

MR. ADAMS: That is a licensed facility for disposal of nuclear waste.

MS. GIBSON: But do they put it in the river?

MR. ADAMS: No, it goes in the ground. And I'm not an expert on this, but --

MS. GIBSON: Right, but it goes in the ground. Why did it say river in the newspaper, like they were sending it to the river?

MR. ADAMS: I didn't see the newspaper. Oh, okay. You are talking about Savannah River?

MS. GIBSON: Yes, is it the town or the river?

MR. ADAMS: That is a location, that is the location in South Carolina where the U.S. Department of Energy has a facility.

MS. GIBSON: All right.

MR. ADAMS: And in the 1970s, the spent fuel from the facility went to the Savannah River facility. It

wasn't dumped in a river or anything like that.

MS. GIBSON: That is just like a town?

MR. ADAMS: That is the name of the town, the place is Savannah River.

MS. GIBSON: Okay. That answers my questions, thanks.

MR. FULLER: My name is Ernest Fuller. Following up on the transportation question, if you folks, as I understand it, would allow them for instance, to take the reactor vessel out and take it out of the containment vessel, have it sitting outside, but then they might -- South Carolina might decide to close their site again, in which case the reactor vessel would be sitting out in the flood plain.

How is that possibility dealt with in terms of letting them go ahead without having a clear transportation and disposal plan?

MR. DRAGOUN: Well, you have to keep in mind that there are many things that have to be coordinated to actually have this happen.

Now, one of the areas the NRC gets involved in, we would have to approve it as a package, and that has not been done yet. It kind of relates to the other gentleman's question, what is the NRC's responsibility?

And our responsibility, essentially, is to

make sure that the container or the package that is being used to ship the material, meets certain criteria.

At this point GPU has not come to the NRC and asked for approval of the container, essentially the vessel to be shipped.

MR. FULLER: But you are giving, theoretically, assuming you approve their current plan, you are giving them permission to take it out of the containment vessel, and put it out on the ground somewhere nearby, according to their plan.

They can do that without having prepared any -- you know, having a guarantee of where it is going to go or how it is going to be transferred?

MR. DRAGOUN: We haven't reviewed their plan, yet, and I don't believe that they've got one, or if they have one, they haven't shown it to us.

But clearly, there is a review process that has to go on, the 50.59 process, to make sure that there is no unreviewed safety questions. And taking the vessel out and having it stay on site for some period of time, being subjected to flooding or something like that, and if that becomes an unreviewed safety question, then they would have to come back to the NRC.

MR. MASNIK: Mike Masnik. This process of certifying this container is quite an elaborate process,

and they have to assure that it can meet a certain number of tests.

Additionally, this sort of activity has been going on quite frequently with steam generators. And a number of them have been moved from the Northeast. They just recently moved some out west.

Sure, it is possible that after they remove this from the vessel, or from the containment, that Barnwell could close, if that is indeed where they were going to plan to ship it.

But the licensee would be required to safeguard this reactor vessel such that, you know, it would not be affected by high water or any other natural --

MR. FULLER: But wouldn't it make sense to get the whole thing planned before you started?

MR. MASNIK: Well, certainly, certainly. And yes, that is --

MR. FULLER: So are you going to make sure that they have the whole thing planned before they start?

MR. MASNIK: Before they go, we do a review from the beginning to the end.

MR. FULLER: Okay. So before they have permission, I thought from what was said earlier, they've submitted their plan more than 90 days ago. They have a

tech spec change coming up.

The tech spec change does not talk about where the reactor vessel is going to go. If you folks approve that tech spec change, the scenario I presented is possible.

Does that mean that you are going to wait to approve the tech spec change until they've provided the transportation plan?

MR. MASNIK: No. You have to understand that the tech spec change allows them to start the process.

MR. FULLER: Right.

MR. MASNIK: Moving a package like that requires an additional review. And that additional review will take some time, it is an additional submittal to the NRC, and it is somewhat independent from the license amendment process.

It is a certification process to certify the reactor vessel as a shipping container, basically.

MR. FULLER: Okay, so --

MR. MASNIK: So it is another process.

MR. FULLER: So basically you are saying, as far as the NRC is concerned, they are assuming they get their tech spec change for other reasons, not related to transportation, you will let them take the reactor vessel and the other internals out of the containment vessel,

stick them out in the flood plain, and wait for whenever they decide to get together a transportation and disposal plan, and you will deal with approving that at that later date?

MR. MASNIK: No, I'm not saying that.

MR. FULLER: No? Okay. I'm confused.

MR. MASNIK: The approval process -- the approval process for the shipping container occurs prior to the movement of this -- of this -- the vessel.

MR. FULLER: Prior to movement off-site.

MR. MASNIK: No -- well, yes. It can't move off-site.

MR. FULLER: Right.

MR. MASNIK: But normally what happens is that they are not going to move that vessel until they get the approval from the NRC as a package.

MR. FULLER: Is that a requirement that you have, or is that just up to the whim of GPU Nuclear?

MR. MASNIK: Well, it is -- there are a lot of interplays, here. I mean, we wouldn't allow them to remove the vessel from the reactor building unless it was in a condition that we could assure that it could be safely stored on the site. So, I mean it wouldn't happen that way.

MR. FULLER: Well, they've spoken of, you

know, taking it and going off quickly, and --

MR. ADAMS: Mr. Fuller, I think we discussed these 50.59 safety reviews that have to be done. I think it would be very difficult to do this review successfully if the end point of the review was that this is going to sit outside indefinitely.

I'm not saying it is an impossibility, but if it is going to end up not moving off the site, the licensee has to show that they can pass the 50.59 test, that there is no unreviewed safety question here.

MR. FULLER: But that is after the fact?

MR. ADAMS: No, they have to do this -- this 50.59 has to be done before the action is taken.

MR. FULLER: But you folks don't review it until later, so they might have already gone through and done this, because they thought it was okay, and then you come back and say --

MR. ADAMS: Well, no, that is why we talk to them from week to week. That 50.59 review, we would, through the inspection process, look at it.

MR. THONUS: For the convenience of the Court Reporter, I'm Lee Thonus.

They can't just set a package of radioactive material outside someplace, regardless of whether they are going to ship it or not, radioactive material has to be

controlled in a proper radioactive material storage area. That is part of the code of Federal Regulations.

They have to have it someplace that is locked and controlled. They can't just set it on the ground outside someplace.

MR. FULLER: That seems to be all they said in the plan that they had. There may be more detail that they haven't made public in the plan, but they just speak of taking it out with a crane, and sticking it in a lay-down area. That is what the plan says.

MR. ADAMS: The PSDAR, it requires a schedule of major activities, it doesn't require the details.

The details would have to be filled in as part of the licensee performing the safety review required by 50.59. At that point, that is where all the details would be filled in by the licensee, and the licensee has to determine that they don't have an unreviewed safety question, or that it doesn't create a need for a tech spec amendment.

If they can't pass those tests, then it can't be done using 50.59, and it has to -- it becomes a licensing issue.

MR. FULLER: Okay, but that is up to them to make that determination under the current rules. You would review that later, but initially it is up to them?

MR. ADAMS: It is their responsibility to do the 50.59 review if they want to take the action. No 50.59 review, no action. Not only do they have to do the review, but you have to successfully -- you have to come to a successful conclusion.

MR. FULLER: Another question. What are the decommissioning standards that they are going to actually be using? I know there is a current guide that is decades old, and there are some proposed regulations that unless they've been approved recently --

MR. ADAMS: Do you mean release criteria?

MR. FULLER: Yes.

MR. ADAMS: As we speak right now, the release criteria that are in place right now, are the ones that you refer to. Reg guide 1.86, which discusses levels of contamination on components, and there is a 5 micro R per hour above background, three foot from surface of interest.

Those are the current requirements, today. As you mentioned, there is a proposed rule making that may change that. They will have to follow, at the time of termination, they will have to follow whatever regulations are in effect at that point in time.

MR. FULLER: Now, as I understand it, the new regulations are somewhat more strict than the current

ones, at least as currently thought. And GPU has, in their plan, said they are going to follow the new regulations.

Are you saying, do they have to do what they said in the plan, or can they do whatever happens to be the law at the time they take out a particular package?

MR. ADAMS: Take a particular package where?

MR. FULLER: Well, off-site, or release the site.

MR. ADAMS: Well, release of site, license termination, at the time they apply for -- if we terminate the license on July 15th, 2000, that is the regulations they are going to have to meet at that time, at the time we terminate the license. Am I right, Gene?

MR. HOLLER: That is correct.

MR. FULLER: So even if the NRC still hasn't changed the regulations, the fact that GPU in their plan says they are going to meet the new standards, if those aren't in effect, you would not require them to meet what they said in their plan?

MR. ADAMS: GPU has to meet the regulations that are in effect at the time of license termination. You are talking about the decommissioning plan. You have to realize that now the decommissioning plan has turned into a PSDAR.

MR. FULLER: Right.

MR. ADAMS: Which is a different type of document.

MR. FULLER: Right, and I'm trying to find out, you know, whether that actually controls anything, or it is just something on a piece of paper. I mean, they've made various commitments in that plan, and I'd like to know whether those are things that you and the NRC, assuming that you've decided that it is acceptable, are going to hold them to it.

MR. HOLLER: The licensee submitted its decommissioning plan which is now the PSDAR, then under the current decommissioning rules, the staff of the NRC reviewed it to see if it comported with those rules.

Mr. Fuller has raised the question, what if the licensee has indicated that it will do something above what the regulations may require? May they change those in the future?

Part of the new rule that addresses the PSDAR, the post shutdown decommissioning activities report, requires the licensee to inform the NRC, which again would be a public document that will be available on the docket, that they intend to change their PSDAR, their post shutdown decommissioning activities report.

So in sum, my answer to you is, if the

licensee has submitted commitments, or what they plan to do, they meet or exceed the current regulations are, changes of those would have to go to the NRC as part of the process, and then dealt with accordingly.

MR. FULLER: Okay. But as I understand what you are saying, if your rules haven't changed, you certainly would not be able to -- as an example, say the current rule is you go to one, and the new rule, they've committed to go to half, and the rule that it is one doesn't change in the next five years, and they come in and say, well, we want to go to one rather than the half that we said that we would go to, you don't have any reason to say no to them, and therefore they would be able to use the less restrictive standard.

MR. HOLLER: Except, and perhaps Mr. Fuller, I think you've given us a good example of why the current rule takes the approach it does. We are talking about the termination of the license, how they would leave the site at termination.

If I may reiterate some of what Mr. Adams presented, the way the rule is set up now, when it comes to termination of the license, the licensee submits its survey plan, what it still requires to be dismantled and several other things.

That presents an opportunity, one, it is

presented to the public; two, there is an opportunity for comment, and more importantly, before that termination plan can become effective, it is made effective by an amendment to the license. and so therefore, there would also be an opportunity for a hearing.

And so, in sum, I'm saying to you, situations such as you've described, where there was a change, and before that license can be terminated, there is an opportunity both for public comment, and to request a Hearing on the final termination plan by interested members of the public.

Have I addressed your question, Mr. Fuller?

MR. FULLER: I think so. Not with what I would like, but you've addressed it.

One specific question I had, in their responses to your questions when it was still a decommissioning plan, that they sent in in July, on page 32 there was a very specific commitment by GPU that they would meet the 4 millirem per year EPA water limit, even though that wasn't in current regulations, no matter what.

As I understand it, then, they really wouldn't be held to that at this point, unless the new standards go in?

MR. DRAGOUN: Both the EPA and the NRC

regulate affluents. What you are talking about is a TEDE exposure, via the water pathway, only.

MR. FULLER: Right.

MR. DRAGOUN: Now, we have an understanding, a memorandum of understanding with the EPA, and that -- also for affluents, like if something was going to go out the stack, it has to meet the clean air act, all right?

We have an understanding with the EPA that we will enforce their regulations, but it is not an NRC regulation. Does that answer your question?

MR. FULLER: No, my question was whether they would be legally bound to that no matter what you and the EPA decide in the future.

MR. DRAGOUN: They have to meet the four millirem dose, TEDE dose by the water pathway. That is an EPA regulation. They don't have the option of not doing it.

MR. FULLER: Right. Currently, but that is also up for potential change, as I understand it. And my question is, whether what they've written in their plan, where they commit to something specific, if it is not required by law or regulation, are they going to have to follow their plan, or are they going to be allowed to do whatever the regulations allow?

MR. DRAGOUN: They put this in their plan, but

it is a law, it is the law of the land.

MR. FULLER: Currently, but it is also up for potential change.

MR. DRAGOUN: Well, that may be so, then that will change. They put it in their plan, but it exists as an EPA requirement, whether it is in their plan or not, and this also applies to every other facility undergoing decommissioning.

MR. FULLER: Did the NRC give prior written approval for the construction of the decommissioning building that was built out there this year, or last year?

MR. ADAMS: The decommissioning support facility?

MR. FULLER: Yes.

MR. ADAMS: Yes, that was approved by license amendment.

MR. FULLER: I think I should let someone else ask questions if they want to. I do have some others.

MR. ADAMS: Mr. Fuller, during the break please come talk to me.

MR. TYDEMAN: My name is Jim Tydeman, and I live about a half mile from here.

To follow up on the transportation question, there is talk that after -- anything radioactive that is going to be shipped off-site, after it leaves the site it

is going to be primarily the responsibility of the Department of Transportation; their regulations will basically --

MR. DRAGOUN: I guess I'm sorry if I didn't make myself clear.

The NRC has regulations for preparing the shipment.

MR. TYDEMAN: Right, I understand.

MR. DRAGOUN: To go on the road. Once it is on the road, Department of Transportation regulations kick in. Once it gets to the destination, though, the NRC rules kick in again.

It is a transfer of material from one licensee to another licensee, so the NRC is involved at both ends of the process, but not in the middle.

MR. TYDEMAN: Okay. My question is, we are talking the U.S. Department of Transportation, Penn DOT, or both? As far as Department of Transportation.

MR. DRAGOUN: The Federal DOT, Department of Transportation, yes, 49 CFR.

MR. TYDEMAN: Is the Pennsylvania Department of Transportation also formally involved in this?

MR. ADAMS: We don't know, sorry.

MR. TYDEMAN: I have a number of questions regarding the decommissioning plan that I would like to

submit in writing, and I want to make sure -- there is a 90 day period in which, or a 30 day period, in which I can make comments or ask questions of the decommissioning plan.

When does that kick in, when does that actually start, and to whom should I address those questions?

MR. ADAMS: The Federal Register Notice had the formal address for submitting comments or questions. I don't believe the Federal Register Notice had a specific date we would accept comments until, but we are going to be doing, you know, looking at the PSDAR to bring this to closure.

So it was noticed in the middle of December, so it has been about a month, now. So I'd say probably anything I get within the next 30 days, I can sit down and think about.

MR. TYDEMAN: I have one question I'd like to ask right now about the safety analysis report. In that, GPU states that they didn't consider that it was likely for the vessel to rupture as a result of a material handling accident, so there was no consideration given to that, what the potential for an accident like that would be.

At this point in time, can you say whether you

would concur with that?

MR. ADAMS: I can't. Our review of that, well, what we are reviewing is the technical specification application, and in that it refers to the safety analysis done on the SAR, that is under review at the moment, and I can't tell you what conclusions we've reached at this point. It is still -- anything we are doing is still preliminary.

MR. TYDEMAN: Okay. Would that be something that you will review, though?

MR. ADAMS: We look at all -- you know, we look at all aspects of the safety analysis that is submitted with the support, the technical specification changes.

MR. TYDEMAN: Okay, that is it.

MR. DRAGOUN: Don't go away. I want to make an amendment to your original question about the transportation.

Once GPU ships some material and goes on the road, although the DOT regulations kick in as soon as it gets on a public road, the licensee, GPU, does not lose responsibility for that material, okay?

MR. TYDEMAN: We hope they don't lose it.

MR. DRAGOUN: Pardon?

MR. TYDEMAN: We hope they don't lose it.

MR. DRAGOUN: Yes, for instance, if it gets lost, if it doesn't arrive at its destination, if there is an accident on the road, the truck goes off the road in bad weather or something like that, it is still GPU's responsibility, okay?

So I didn't want to give the impression that there is -- that once it passes the doorway, you know, they are not accountable anymore, that is not true.

The rules, though, that apply to that situation for over the road transportation, come from DOT.

MR. TYDEMAN: Okay.

MS. ICKES: Before we take our scheduled break, we have another speaker who has registered. Mr. Baker, do you have questions at this time?

MR. BAKER: After the break or now?

MS. ICKES: We will do your questions now, because you are registered. This will be the final question before the break, there will be opportunity, again, after Mr. Kuehn from GPU Nuclear.

MR. BAKER: First I want to thank Perry Carmel and Joe --

MS. ICKES: Would you please identify yourself?

MR. BAKER: Excuse me, Gene Baker, we have

Bedford County carpenters on the project which pay their taxes, and quite frankly, in Liberty Township and Pacific, we are Bedford County.

We have like 40 carpenters in this county, and I would think that the -- Ms. Ickes and Dick Rice and Ebersol, I hope you people back us on stressing the people here on local people, you know, they are paying their taxes in their cars and their gas and the restaurants and the whole thing.

And my question, then, is I understand that you people plan on bringing some of your people from the other plants to do a lot of this work, and --

MR. ADAMS: That question is probably best to be held after the GPU --

MR. BAKER: After the other people talk?

MR. ADAMS: Yes.

MR. HOLLER: I think Mr. Adams is telling you, the question is best addressed to the GPU Nuclear representatives, the licensees on those types of plans, and who they plan to --

MR. ADAMS: You are not asking the NRC a question, are you?

MR. BAKER: No.

MR. ADAMS: Okay.

MR. BAKER: Do I need to talk later?

MR. ADAMS: Yes. And if you have a question for the licensee, after the licensee gives their presentation.

MR. BAKER: Okay. Mine is strictly a labor issue, a local labor issue. And, by the way, I did -- when I placed four carpenters in there, there was two democrats and two republicans.

(General laughter.)

MS. ICKES: We are very pleased to learn of your bipartisan operation.

At this time we will take a break for 15 minutes. I would, again, encourage you to interact with the people representing the NRC, and I believe that GPU nuclear is pretty much gathered over there.

So let's have some healthy interaction -- some more GPU people are here. Again, if you would care to make public comments, I would ask you to sign the registry in the back of the room.

Also with us is Mr. Jim Keifer who is representing our State Representative Dick Hess. Jim, would you please stand up?

So if there are any concern you would like to relay to Representative Hess, please see Jim Keiffer.

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(Whereupon, the above-entitled matter went off the record at 8:20 p.m. and went back on the record at 8:35 p.m.)

MS. ICKES: Can I have your attention, please? Would everyone take their seats.

I'm sticking to my role as the cracker of the whip, I'm pleased to have this session reconvened. Checking your agenda you will note that next on the schedule we will have Gerald Kuehn from GPU Nuclear.

After we have finished with that presentation around 9 o'clock, there will be time for questions and public comments, plus remarks, and we hope to wrap this up around 10 o'clock.

I'm hearing a lot of comments about the uneasiness that is felt for the transportation of these nuclear products.

At this time I hear from GPU nuclear, discussion for next month. Would it be possible to have someone from the Department of Transportation come, or even for the April -- you know, for the March or April.

I think that we need to schedule the appropriate people. Okay, that will be addressed.

So at this time Mr. Kuehn will take the podium.

MR. KUEHN: Good evening. As Norma said, I'm

Gerald Kuehn. I'm the vice president of the Saxton Nuclear Experimental Corporation, which we finally called SNEC. And more importantly, I'm program director for GPU nuclear for the decommissioning project at Saxton facility, which we call the SNEC facility, so I'll try to refer to it as that, as we go along.

With me tonight is Mr. Art Rome he is vice president and director of nuclear safety and technical services for GPU nuclear.

GPU nuclear is responsible to SNEC corporation for the decommissioning of the facility. So the staff we use, the expertise we use, comes from GPU nuclear. A subsidiary of GPU, as I think most of you know.

Prior to my assignment to the SNEC facility, I was director of radiological and environmental controls, and occupational safety for GPU, which included TMI, Oyster Creek Station in New Jersey, and Headquarters in Parseipiti.

Prior to that three year assignment, I was operation director, or senior site director for the TMI II dismantlement, recovery from the accident.

I mention those two experiences of mine, because I think they are very important, and they demonstrate that GPU nuclear has applied resources to the SNEC facility project, that lend themselves well to what

we have ahead of us, which is the safe decommissioning, safe for the public, safe for the workers of the SNEC facility.

Along with my transfer to this project, several members of my staff, in fact 80 percent of my current Saxton staff have experienced directly in supervising and managing the recovery effort at TMI II.

As I think we all know, that was a challenging project, it was done safely, and we can directly apply what we learned there to what we are about to do at Saxton, keeping safety first and foremost.

I'm going to talk about dismantling the containment vessel, we will get a look with some of the overheads we have as to what that containment vessel looks like and what it is

And I intend to spend about 20 to 30 minutes going through the particulars of the decommissioning, and I'll break down what we are going to talk about as we go through that.

After my presentation, if there are any questions as there were with the NRC, I'd be glad to answer those. If I'm unable to answer any of the questions, our communications department will record those, and we will get back to you either through the Citizen's Task Force, which I'll talk about, or directly,

if that is appropriate.

What we are going to cover as we go through my presentation is the history of the Saxton facility, when it operated, why we decided to decommission now. I know that is one of the questions we had earlier of the NRC, who decided to decommission, and why did they decide to. I'll talk a bit about that.

Our recent dismantlement activities, which have been allowed to be done by NRC, with NRC's permission, prior to the decommissioning itself. The schedule and costs as we see it now, which has been submitted to the NRC.

In other words, what we intend to do and what time frame, the cost of the project as we see it projected. Major aspects of decommissioning, including that reactor vessel that we talked about, that some questions were asked about, and I'll talk some more about that, and a bit about the transportation of that, as we see it.

Safety oversight, which is a key ingredient, the way we have the program put together, so that we are assured that we have independent oversight, and in-company oversight, through the process.

And finally we will talk about community involvement. Community involvement today is a very

important aspect of what we've done so far, and will be throughout the project until completion, until we reach what we call green field, or pre-release of the site.

And that is accomplished through the Citizen's Task Force, which has been put into place in the Saxton area.

Early history of the plant. The plant operated from 1962 to 1972 for a ten year period. It produced electricity during that period, but was primarily a research and training reactor.

Some of the operators at TMI, in fact, had their initial training at the SNEC facility back in the '60 to '70 time frame. And foreign reactor operators were trained at the facility.

It was also a research reactor in that some new nuclear applications were first tried at the SNEC facility, and tried successfully.

That ten year period was twice as long as the facility was designed to operate, in fact it went twice as long as planned for, initially.

This first view we have the facility, a couple of pointers on what is there to look at. When we talk about the containment vessel and what is left to do on-site, we are talking about this dome-shaped structure.

To give you a feel for size, it is about 50

feet in diameter, 50 feet above ground, and a similar shaped portion underground. So 50 feet underground, and again, 50 feet in diameter.

All of what we have to do, or the lion's share of what we have to do, is inside that containment. The reactor vessel is in there, the steam generator, all the major components, small components, piping and systems which we have to disposition as we decommission the site.

In the foreground, in operating days, you see the control and auxiliary building, and that contained the control room, much like the nuclear reactors, they have a control room. Laboratories, and other facilities, there.

In the background, here, the rad waste disposal facility, processing of rad waste occurred in that building, and there was a pipe connection between that and the reactor building and the control auxiliary room.

You can't see very clearly, but in this bottom left-hand corner is a piece of the old coal station, which existed alongside the SNEC facility, the nuclear reactor facility at the time.

Our steam unit, which produced in the SNEC facility, went to that coal plant, and we utilized one of their turbines and generators to produce electricity.

It was an eight megawatt plant, compared to

the larger five, six, seven hundred megawatt plants that we see today, operating. It was very small, and yet it was able to supply about 8,000 to 10,000 people with electricity, when it produced electricity.

One of the things that is an advantage of the SNEC project, and the NRC pointed this out, is that we don't have any fuel assemblies on-site, either new or unused, or spent fuel assemblies.

The majority, by far, of the radioactivity associated with the nuclear facility resides in the spent fuel at that facility. And so facilities who are facing decommissioning have the problem of contending with the spent fuel, be it storing it in the spent fuel pool, or putting it into a dry fuel storage situation, both of which have to be approved by the NRC.

That fuel, as we said earlier, was shipped in the early '70s to the Savannah River Project, where it resides today, as far as I know. It has been transferred back to the government, so that we no longer have the responsibility for that fuel. That makes our job a lot easier.

We still have radiological and safety challenges, but the lion's share of the radioactivity is not something we need to be concerned about.

This is an example of a true fuel assembly

that you see here -- that is obviously a new fuel assembly, or he wouldn't be standing that close to it. Since it is the majority of radioactivity after activated, and after it is used for fission, if you will.

That would have to be underwater for shielding during an operating period. So that is a new fuel assembly being loaded into the core.

Why decommission now? There are four primary reasons for why we've elected to decommission now. As you know, the plant shut down in 1972. There has been deterioration which has been occurring since 1972, and although we've maintained the facility, we haven't worked our pumps or pipes, or painted structures, for the most part.

So as you can see, in this picture, there is some rust in various areas of the plant. There is concrete which has cracked over the years.

The second, and maybe the most important reason, is that this site at Saxton was not designed to be a rad waste repository. It is not licensed to hold rad waste for any period of time. It is in the 100 year flood plain, and we think it is time to get the material, the radioactive material, off the site, and return that site to free release.

The condition of the building and the

components in the building is not getting any better, it is getting worse. The technology exists today, point number 3, to do this job, as the NRC has said, several decommissionings have been successfully completed, there are others that are underway now.

And finally, the fourth, we have the experienced people to do the work. People who have done dismantling activities at Saxton, in the buildings which were contaminated, decontaminated, and dismantled those buildings.

People who have the experience of TMI II as I mentioned earlier. If we wait, we may lose that experience. There are even people inside GPU Nuclear today who worked at Saxton, who trained at Saxton, as I said, so that experience is available for us.

I'm not getting any younger, I could be gone five years from now, probably will be, by retirement or whatever.

So let's use the experience we have, and do it now, when we are able and ready to do it safely, and efficiently.

Recent dismantlement activities. In 1986 to 1990, we completed decontamination of some major structures on site. As I pointed out in the earlier pictures, in the foreground here is the rad waste disposal

facility, the pipe tunnel I talked about going between there and containment, and the control and auxiliary building that you can see in the left side of the containment, were all decontaminated and dismantled, surveyed and through acceptance by the NRC, we were allowed to dismantle those facilities, including the pipe tunnel that runs between there, and some other structures which aren't shown in this picture.

That was good experience for us, we learned from that experience. The surveys had to be redone at one point, because we were on a learning process then. That was done safely without occupational injury, and with radiation exposures to the workers that were well within what we had projected.

So that is good experience. Those facilities are all gone, and what we have left to contend with now, as I said, is the containment vessel, which you see in this shot. That is kind of a before and after, if you will.

You can see that we have graded and seeded the area after having removed those support structures. That is what the site will look like when we are finally done in removing that containment vessel.

One of the other things that was done, in 1994 we shipped contaminated soil from the site. As we

sampled, surveyed, and looked at the areas involved in the rad waste disposal facility, a water storage tank, which was a large tank with radioactive water in it that had some leakage problems during operation, we found ground that was contaminated slightly above background, in most cases.

That soil had to be removed, we don't have a ready way to clean soil, so it was shipped to Utah to a disposal facility, in the bags that you see. In total there were some 56,000 cubic feet of soil shipped.

As I recall, and Bob correct me if I'm wrong, there were 100 truckloads of that soil removed from site. So that soil is gone, was shipped successfully, and is a big part of what we had to do in the yard area around the containment vessel.

There is still some soil involvement in and around the containment vessel itself, and we will have to contend with as we go on with the decommissioning.

But the majority of the site, other than that containment vessel and the adjacent area, is free released at this point.

In January of '96, as the NRC said, we submitted our decommissioning plan to the NRC. The new rule occurred after January of '96, which said that we needed a PSDAR, or post-shutdown decommissioning

activities report.

That plan that we submitted became, upon our request and the NRC's approval, the PSDAR. What we have is, as Al Adams, submitted the PSDAR in the form of the decommissioning plan.

In January of '97, one of the things we were allowed to do in the interim, before now and approval of the decommissioning plan, was work on asbestos removal. These are preparations for decommissioning. Asbestos on piping in the plant was deteriorating, as many other things are inside containment.

For the workers to do their maintenance and surveillance, that asbestos was a hazard for them, so we wanted to get rid of the asbestos, we petitioned the NRC to be allowed to do that, and we were granted permission to remove the asbestos.

This month we finalized removal of the asbestos, and what is left to be done now is that we are putting up some vacuum cleaners and doors and filters, which were associated with that work. So that is the end of the asbestos inside containment.

It is good to have that out of the way, so that we can go into decommissioning without having to worry about asbestos exposure to the workers.

Scheduling costs. We intend, as the NRC has

said, to begin decommissioning work this year, 1997, having completed preparations for that work, we are poised and ready to do the work, do the decommissioning.

We expect that that process will take us -- I get a break.

(Problems with the PA system.)

MR. KUEHN: Okay, we are back in business. Thank God for the break, I forgot something in my presentation.

(Problems with the PA system.)

MR. KUEHN: One of the things I forgot as I was going through the preparation, that we've been allowed to do, is the construction of what we call the decommissioning support building, or DSB.

That building was constructed to facilitate decommissioning.

(Mike was turned off.)

MR. KUEHN: Please note that it is not my fault if I go longer than 30 minutes.

The decommissioning support building that you see in the foreground was constructed by a local construction company, using local people. It's purpose is to accommodate material we bring out of the containment vessel as we decommission, pumps, piping, and things I will talk about in another diagram I'm going to show you,

will be prepared and packaged for shipment in that building.

And so at the containment vessel, there will be an opening cut in the side of this containment vessel which leads into, with a monorail, that can handle equipment, to the decommission support building. We are not allowed to cut that hole in containment until we have permission to decommission the facility. So we built the building, we've attached the containment, but we haven't cut the hole into the containment vessel to accommodate material that is going to come out.

Okay, I said we were starting this year, we are anxious to go, we are ready to go. The NRC approval, we hope, is coming in the first quarter of the year.

When we get that permission we expect it to take until 2000 to complete the project. Our current schedule says that the majority of the work will be done by mid-1999, with final site restoration to occur between then and the time we are authorized to terminate the license, or the NRC terminates our license.

In the end of '99 we ought to be able to restore the site for free release, which is our intent.

The cost is estimated at 22 million dollars, in 1995 dollars, when that cost estimate was done. That dollar amount is an estimate, and it is only an estimate.

I fully expect we may have to adjust that as we go along, and I say that specifically because of rad waste costs, which are uncertain at this time, at best.

And who knows in three years from now what they may be when we are ready to do some of the final shipments.

So that may require an adjustment which we will accommodate as necessary, but 22 million is the expected figure.

The major aspects of decommissioning. The containment building remains intact. Bob, if you could show that? During the decommissioning. I think this is a key issue that I'd like you to understand.

This containment vessel that we are required to maintain in containment integrity form, during decommissioning, is a three-quarter inch steel structure, which is continuous above ground and below ground, so it is kind of a lipstick tube, if you will, in giant size. Again, 50 by 50 above ground, 50 below ground.

That containment vessel will remain intact, and containment integrity will be required throughout decommissioning. We will have to cut some holes in it, which will be designed and engineered to not break containment integrity, because we will ensure air flow into the containment, and not out of it.

But when we have done the final survey, and are allowed to do final survey, and after the public meeting that discusses our termination plan, we will then, and only then, take that containment vessel down.

So all work to remove, to cut piping, to get the reactor vessel out, will all be done inside that containment. And where we are capable of doing it, brought into the decommissioning support building that we showed.

Obviously, the reactor vessel is too big to do that with, but most small components and other components will be handled through that decommissioning support building.

On that diagram is a pretty simplistic view of other piping systems, paints, pumps and components, heat exchangers, these are small components which we will remove from containment, in their entirety, and dispose of as radioactive waste, in most cases.

That means we will take them up into that tunnel that we created between the containment vessel and the decommissioning support building, by monorail into that building, and they will be packaged and prepared for shipment, and then out that decommissioning support building, and on to a truck for disposal.

The larger components, which are the reactor

vessel that you see depicted here, the steam generator here, and the pressurizer, are bigger challenges, obvious, just because of their size.

The reactor vessel, for example, will be some 100 tons with all its support equipment when we ship it.

And as the NRC has indicated, we will load that vessel, inject into that vessel a cellular-like concrete, to immobilize it. Those kinds of projects are projects that will require a lot of oversight, overview, and NRC advisement, as we go, so that we understand what we are about to do, and review our work process for doing that.

The citizen's task force, which I referred to earlier, and will talk a little bit more about, is our connection with our citizens of Saxton, so that they know what we are about to do, and are advised ahead of time so they can talk to us, ask questions of us, and we think that has been, to date, and will continue to be an important aspect of our interface with the community during decommissioning.

And certainly that reactor vessel removal is a key issue. For example, in our preliminary plans for removal of that vessel, intend to cut a hole in the top containment, to get a large crane from off-site, with a vendor who is familiar with this kind of work, and has

done this kind of large component removal, lift that vessel through the ceiling of that containment vessel, and out onto a preparation area for preparation for shipping.

None of that, and maybe this will help to answer one of the questions that has been asked so far, will be done until we have designed the program to prepare that vessel, to remove that vessel from containment, to prepare it for shipment, to certify it as a shipping package, to obtain the proper equipment to ship it, trucking, all the permits required, the bridges, the roads, the things we have to worry about to get it on the road and shipped to disposal, will be in place, will be reviewed by the NRC and approved before we touch that vessel to remove it from the containment.

And there is a lot of work involved with these three components, as you can imagine. We have put out a bid specification recently to some ten companies who will bid doing that work for us.

Again, we at GPU Nuclear are responsible for that, and every other aspect of this decommissioning. But we will contract with somebody who has experience on large equipment removal, radioactive equipment removal, which involves the engineering required to prepare the package, the lifting of the package, the preparation of the truck and the transport to a safe burial site.

As we see that site, today, it is probably Barnwell, South Carolina. We have been in contact with Barnwell, we've talked to them about this vessel, and they are anxious to bury the vessel for us and believe they can accommodate it.

Again, this is all preliminary, and we are waiting for the issuance of that bid specification, and suggestions back from companies on the bid list to say how they would do it, and we will pick one.

It is important that we get going with that, because as I said, that is a big piece of what we have to do in decommissioning.

The structures that you see depicted here in light grey are concrete, for the most part, and some reinforcing steel.

The activation which Mr. Adams talked about that occurs in a nuclear power plant has activated some of that concrete, so it has become radioactive.

So some portion of this concrete will need to be removed by methods called scabbling, for example, where you break the surface concrete up and collect that as radioactive waste, and then hopefully leave behind clean.

And we will survey as we do that work to make sure that we get down to a clean layer of concrete so that

we can leave that in place.

We don't intend to remove any more of the structure underground than we need to when we decommission. But if it is radioactive above our authorized release limits, then we will have to remove the material.

We talked about the final survey, or the NRC did, some. We will submit a plan which includes that survey, and there will be public meeting to accommodate questions regarding our final survey, and how we intend to terminate the license.

So there will be another opportunity, as Mr. Adams said, for the public to participate.

Oversight is another aspect of decommissioning that I want to touch on, before I close. We have, by way of independent oversight, certainly the Nuclear Regulatory Commission who can come and inspect any time, announced, unannounced, or otherwise, and have done and will do both, I'm sure, in the future.

Inside the company, we have two committees who oversee what my staff and I are doing during the decommissioning. One committee is the nuclear safety compliance committee, which is made up of outside individuals with fairly senior titles who oversee with representation on-site, occasionally, much like the NRC

inspector would arrive, and report directly to the President of GPU Nuclear.

So my boss Art, for example, could get a report from the President of the company that said, you are not doing what you are supposed to be doing at Saxton, you let Kuehn do something he shouldn't have done, and Art can get in trouble, because that SNEC has the ability to go over Art's head, also.

The Chair of that Committee, is Admiral Trost who some of you may recognize as an ex-Chief of Naval Operations. So there are pretty heavy hitter people in that committee, and they aren't gentle about the way they hold our feet to the fire on the things that we need to do, and do safely at the SNEC facility.

The second committee is a rad safety committee, which is part of our general office review board. That committee was created, specifically, to oversee the Saxton decommissioning, as we do it.

There is expertise on that committee, both in company and out of company, including the director of environmental controls, the director of radiological controls, and others on that committee, who have specific expertise on areas that apply to the decommissioning.

So we, again, answer to that committee. Some members of our citizen's task force have had opportunity

to go to a couple of those meetings, and I think if you ask them, they will tell you that it is a pretty up front tough questions, that we are asked, we the staff who are doing the decommissioning, and it is not a very gentle process to go through, for us.

But out the other end comes a more responsible project management than we had going in. So it is good criticism, and it is constructive, and it has been helpful to us, and will be throughout the project.

Community involvement is my last point. We have, and I don't know if Sylvia is still here, waving her hand, with triplets, I might add. Is it all right for me to say that, Sylvia? Too late. We are proud of her triplets.

Sylvia is our on-site communications representative. Sylvia is from the area, has interfaced with the citizens of the area. When back from leave, she will be full time, again, on-site in supporting the Saxton project, and has been a lot of help to us in interfacing with the community, and keeping you advised of what is going on, on-site.

We have a community newsletter which is coming out quarterly, right, Sylvia? Bi-monthly right now. And that, again, is an effort to keep the citizens informed of what is going on.

The citizen's task force is a group which was put together, initially, with Sylvia's help but now is independent of GPU Nuclear, but meets monthly. And meets with the intent of learning about what we are doing on-site.

I, for example, am asked to present, at each meeting, current status, what we've done since the last meeting. Maybe more importantly, what we intend to do on future work, before the next meeting.

That task force has been a big help to us in listening to what the community has to say. I hope we've been responsive to them. We certainly intend to be, and will continue to be in the future.

But to listen to their questions and what the people are concerned about, is something that we will be receptive to, throughout the process. We'd like to see more members of the public come to those meetings. They are open to the public, not just to task force members.

A turnout like we have tonight would be great to see. We don't see many people behind the task force, usually, but we certainly encourage more people to come.

And as I said, the task force has also been a part of some of the meetings we have, in oversight of the project.

We also have an independent inspector provided

by Penn State. Roger, are you still here? Yes, Roger Granlund is in the audience. Roger, again independent of what we are doing, and doesn't report to me, but in fact reports to the citizen's task force on surveys he does, sampling he does, oversight of our activities, our procedures, and has taken under his wing one of the citizens from the citizen's task force, Charlie who is here, I think, to try to educate the public some more about what does it mean to look at a nuclear facility, a nuclear operation, and what do you look for, and how you operate the instruments that you survey with, to tell how well they are doing out there.

So I think that education of the citizen's task force has helped, and I'm sure Roger appreciates the help, too, with his work load.

Roger's number, up on the screen. Please note that. He is free to answer questions at any time you call. If you get a message from Roger's phone, he will certainly get back to you and answer your questions.

In conclusion, I would just like to say that I think we have an experienced staff in place, which will serve us well to decommission the facility. We are ready to do it, we are technically capable to do it. We have enough layers of oversight in place to make sure that we dot the Is, cross the Ts, and don't forget the big

picture, if you will, as we go forward.

And we have the citizens, and the citizen's task force also available to feed back to us the citizen's concerns, and for us to advise as we go forward, so that there aren't any surprises.

We are ready to do it, and we think now is the time to do it, and we appreciate your support in trying to get it done.

I'd be glad to take questions.

MR. BAKER: Gene Baker, again. I guess you are the guy I need to talk to. And I apologize for not mentioning Sylvia, she has been fantastic out there, too.

We had six carpenters on our project, we are down to two now. I'm hearing rumors that you people are going to be bringing people in from different plants to do a lot of this work.

That was one of my concerns, because the people I have are from Bedford County, and quite frankly, five of them from Liberty Township.

And Ms. Ickes and Mr. Ebersol, and Mr. Rice, they've always been helpful, we've had some city councilman here and things like that. So put the pressure on them to hire local people.

MR. KUEHN: The workers from other plants that Gene is referring to are GPU workers? I'm sorry, GPU

nuclear workers, in particular.

As we look at the future of power production in GPU, it is obvious to us that we have to do things smarter, more efficiently, and that means probably with fewer people in the future.

And so bargaining unit people that we have associated with our plants at TMI and Oyster Creek, may well be downsized in the future, or deferred to other projects.

This project is a prime place for some people to come to, to stay employed by GPU. Some of them have 20, 25, 30 years of experience or seniority with the company.

I met with Art and other vice presidents in headquarters to discuss this issue. And what we have concluded is that we think the best mix for the project, from now forward, is if we have both company people assuming they are willing to volunteer to come to Saxton to do the work, and local people out of the union hall that Gene is talking about.

So ideally, Gene, we intend to have a mix of company and bargaining unit people from the sites, basically, and hope to continue to use your carpenters and laborers and some others, as the numbers will allow us.

MR. BAKER: The second phase, so to speak, as

far as Raytheon is there now, and the asbestos, you say those companies -- you have no idea what company has the next phase or whatever?

MR. KUEHN: Somebody correct me from the company if I'm wrong, but I believe Raytheon got our contract for supporting of TMI and Oyster Creek in the future, so that is a done deal.

So Raytheon would, again, be the contractor for that kind of support in the future. And I'd like to add, for Gene's benefit, I do appreciate the work we got out of the carpenters and laborers that did the asbestos work.

These were people who weren't familiar with working in a nuclear facility, went through our training for radiation workers, and did a fine job for us with asbestos removal. We appreciate their dedication and the good job they did for us.

MR. BAKER: Item that is way over head, I'll let smarter people take care of that. But I do appreciate the local involvement, and I hope you can keep that on a 90/10 deal.

MR. KUEHN: Noted, thank you.

MR. BAKER: Thank you.

MR. KUEHN: Other questions?

MR. POWERS: My name is Rylan Powers. What

time of year are they planning to remove this reactor?

MR. KUEHN: The reactor vessel itself, as I said, the removal has not been completely planned, yet, and it is more a timing issue than anything. How long it takes us to prepare the package which the NRC will review for approval to go ahead and ship, the package certification, the arrangements with the company that removes the vessel and loads it and provides the shipping to the burial site.

I don't know now what time of year that will be. We will be required, however, I can tell you by the NRC's review of our preparation of that shipment package, to meet levels of exposure of radiation associated with that shipment, that are safe for the public, including the kids in school, the kids on the street, and whoever else might be in the area when we do that shipment.

It is not something that typically we would try to adjust who is where when we ship. It will be safe for the city streets as it goes through.

MR. POWERS: But you don't have like a ball park figure, even?

MR. KUEHN: A ball park figure?

MR. POWERS: Yes.

MR. KUEHN: Well, if I give you one, he is going to pin me down. I don't want to do that. I would

guess that probably near to the end of the year, '97, we would hope to get it done. But that is pretty aggressive, there is a lot to be done, a lot of certification and approval to be done between now and then.

MR. POWERS: What are they going to do about four to five hundred high school students, in school, less than a quarter of a mile away, and the one hundred to two hundred elementary kids in school, about three-fourths of a mile away?

What are they going to do about all the kids in school, are we going to have like a day off, or --

MR. KUEHN: What I'm saying to you, Rylan, is that if we are allowed to go forward with the shipment, not if, but when we are allowed to go forward, where those kids are won't make any difference, because the NRC will not allow us to move one wheel off-site with that shipment, until the radiation levels are such that they are safe for the public, as simple as that, it won't go anywhere.

MR. POWERS: And you said that the reactor the trailer that it is on, the cement and everything is going to weigh about 100 tons?

MR. KUEHN: Yes.

MR. POWERS: Well, there are two bridges, if you go up around there is a bridge, if you go straight out

there is a bridge. The bottom bridge, the weight limit is two tons, and the other bridge it is four tons.

How are they going to move something across a bridge that --

MR. KUEHN: Excellent question. That is a good one. Saxton is going to build us a new bridge, didn't you know that?

(General laughter.)

MR. KUEHN: Part of the certification for that shipment will require us to --

MR. POWERS: You are going to get yelled at.

(General laughter.)

MR. KUEHN: Excuse me. I'd better say that on the microphone. Part of the certification will require us to evaluate the roadways, the bridges, the overpasses, the little dinky bridge right outside of Saxton that is right adjacent to the site property, obviously won't carry that.

We will have to bridge that. Not we, but a construction company that we hire as part of this large component removal, will have to bridge that bridge, if you will, with a structure that will support that weight.

MR. POWERS: If that thing would happen to fall off, the reactor, let's hope not. But how many millirems of radiation will be released per minute, maybe?

MR. KUEHN: That package will be required to be shielded so, again, that it meets the transportation requirements, and the NRC's requirements for us to ship it as a package. If that fell off the truck, for example, remember that that reactor vessel was designed to hold operating pressure in an operating nuclear reactor, which is thousands of pounds of pressure.

It has five-inch thick walls of solid steel. So if it rolled off, it would roll off, and I doubt -- I'm not an engineer by degree, but I doubt if it would crack or break open.

If it did, I take you back to something Mr. Adams said. That reactor vessel radioactivity content is because of activation. It is the atoms inside that vessel that are radioactive. They are not going anywhere if it breaks.

They don't fly out into the air and take off for the grade school or the high school, it is not what they do. They stay right there on the ground, we would control that area, rope it off, and then disposition the vessel if it had fallen off.

That kind of leads me into another piece that I'd like to address, and that is responsibility for that shipment off-site. We own that vessel, we own every package that we ship off-site, but when it leaves the

site, we are no longer, we GPU Nuclear, no longer responsible for it.

The Department of Transportation regulations must be met, but the State of Pennsylvania is responsible for responding to any incident involving that shipment, between here and the time it reaches this burial site.

That doesn't mean the state wouldn't pick the phone up and say, GPU Nuclear we want your health physics technicians to help us with this, you are closer, please respond, and I'm sure the company would do that.

But the ultimate responsibility for emergency response, for the roadways chosen for the path to the burial site, are with the state of Pennsylvania, as they are in every other state or Commonwealth in the nation. This isn't unique to Pennsylvania. It is the way rad waste is handled in this country.

MR. POWERS: Well, if you rope it off, that is not going to -- you can't rope off radiation and tell it where it can't go.

MR. KUEHN: I can't rope off radiation?

MR. POWERS: I hope not.

MR. KUEHN: I have three things going for me with radiation, time, distance and shielding. If I stay away from it in time, if I spend most of the time at home and not near that vessel, that is going to reduce my

exposure, right?

Distance, the further away I can stay, the better. Radiation drops off very rapidly with distance, and I'm talking 10s of feet, 100s of feet. So we would rope it off to a safe level, where it wouldn't be an exposure problem to anybody, because nobody could get near it.

Shielding, it will already be shielded, as I said, to NRC's specifications for shipment.

MR. POWERS: Well, how is it going to affect about a quarter of a mile where the high school is? Will we be evacuated, or --

MR. KUEHN: I'd have to do some fancy calculations, Rylan, and I'd ask the rad engineers to do that, to say what would a dose rate be at a quarter of a mile. It depends on what the dose rate is on contact of that vessel.

But we certainly would look at that before we ever ship it, we'll know what the dose, the millirem per hour that you were talking about is, before we ship it.

MR. POWERS: Thanks for your time, that is about it.

MR. KUEHN: You are welcome, thanks for the question. Any other questions?

MR. NOVAK: My name is Karl Novak. You said

something about it costing 22 million dollars. Is that based on what they are presently charging at Barnwell for disposition of this type of material?

MR. KUEHN: No, that is based on what they were charging in 1995. Today what they are charging is being discussed. The Northeast alliance, for example, that is a lot of utilities going together to get the best rad waste disposal fees that we can get, is working with the various waste repositories to try to figure out what the dollar costs are going to be.

We just don't know at this time. So as we are prepared to ship, and for example those asbestos packages that we have ready to ship, we are bartering with the waste disposal facilities for how much we can do it for.

So it is kind of a floating number, at this point. And, obviously, of that 22 million, waste disposal is a real big chunk, and a big variable at this point.

MR. NOVAK: I well understand that. The thing that I want to know is who is paying for this? Are the stockholders paying for it, are the bondholders paying for it, or are the users of electricity paying for it?

MR. KUEHN: Karl, you are paying for it if you are a rate payer in Pennsylvania or New Jersey. Are you?

MR. NOVAK: Yes, I am. So essentially we are paying for this, but the bondholders and the stockholders,

they are not chipping in at all, is that what you are saying?

MR. KUEHN: No, decommissioning funds have been and are being collected for the decommissioning of the SNEC facility. The owners of this facility were, in the past, at its inception, Pennsylvania Electric, Jersey Central, and Metropolitan Edison Companies, in varying percentages.

As a result of regulations, those companies are allowed, through rates, to collect from the customers at set rate by the PUC for the decommissioning process.

We have collected some monies, and we continue to collect now for that 22 million dollars.

MR. NOVAK: So essentially the bondholders and the stockholders are completely protected, they do not pay for any of this action, is that what you are saying?

MR. KUEHN: I'd have to ask the attorney how to answer that one. I don't know what protected means in the legal sense. But the funds to support decommissioning and to pay for the decommissioning are rate payer funds.

MR. NOVAK: Essentially, simply stated it means that they are protected from the standpoint that they do not have to chip in any of their expected return on their investment, because of this event?

MR. KUEHN: I'll defer to you on that Karl,

I'm not a finance guy.

MR. NOVAK: Well, that is the point I was trying to make.

The containment vessel, which is a rather hefty piece of equipment, that is going into another container, or is that going --

MR. KUEHN: You are talking the reactor vessel itself?

MR. NOVAK: Yes.

MR. KUEHN: Not the big dome, but the small reactor vessel? That reactor vessel, incidentally, so that you have a feel for what we are talking about, is about as wide as the spread of my arms, and about three times as tall as I am, and it is a cylinder. So that is the size we are talking about, a lot of weight for the size.

That won't necessarily go into another container. However, it may be shielded by wrapping lead and attaching or welding materials to it to shield it. It may be in a can for contamination control purposes.

Those are some of the particulars which have not been decided yet in how we are going to prepare that for shipment, and how the NRC authorizes us to ship it.

MR. NOVAK: Now, whatever type of outside wrap, if you will, is going to be put together on this,

will that be actually tested in reality, or will that be tested by computerization?

MR. KUEHN: Tested in reality in that we will take dose rates with survey meters before we put the shielding on and after to make sure that we've effected the dose reduction that we need in order to be able to ship it.

So we will take real time empirical data to determine that we've done the right thing.

MR. NOVAK: Okay. The other thing too is there is going to be a future time when you finally give up this site. Now, will this site be inhabitable by people at any time, or will it be something that will have to be roped off or fenced off for eternity?

MR. KUEHN: There will be no ropes, no fences, no nothing other than property boundaries if Penn Elec decides to hang on to the property, and doesn't want people near the switchyard, for example.

Radiologically there will be no restrictions, it will be a free release site, you could build a house there, you could inhabit that, you could put a garden out, eat the vegetables, drink the water out of a well, you will be able to live there, literally.

MR. NOVAK: So everything, basically, will go back to background, is that what you are saying?

MR. KUEHN: No, I did not say everything will go back to background. I said that -- what I meant to say the levels at which we are going to be allowed to leave that site when the NRC finalizes and says, we agree that you've met the final survey criteria that we established for you, may be above background, but not at a level that exceeds what we are allowed to leave that site at, or exceeds what free release criteria are for that site.

MR. NOVAK: And what level is that at this time?

MR. KUEHN: Right now, we are waiting for final resolution from the NRC on what that final release criteria will be.

If you've read our submittal and our plan you will see that we submitted 15 millirem per year, as what we believe the number is today. If that number changes, we will go with whatever the regulations say at the time.

MR. NOVAK: Could that change in the future?

MR. KUEHN: You may want to ask the NRC that question. It could change in the future, I suppose. I don't want to speak for them.

MR. NOVAK: I know it is being discussed, time and time again, primarily between the Department of Energy and the NRC, it seems to be the ever ending football, if you will.

MR. KUEHN: I think, Karl, it is important that we keep in mind, and the citizen's task force has heard me say this a couple of times. That 15 millirem, 20 millirem, 20 millirem, those kinds of numbers are well within the natural variation of living in Denver, Colorado, versus Harrisburg, Pennsylvania, where I live.

Those kinds of variations are common, so it is not a level of exposure that is a health concern to anybody.

MR. NOVAK: Okay, thank you very much.

MR. KUEHN: Thank you.

MR. FULLER: My name is Ernest Fuller, again.

I first had a question for the NRC representatives if you are still willing to answer questions.

MR. ADAMS: Can we finish GPU's questions first?

MR. FULLER: Okay. There was an analysis that was supposed to be finished in December of whether there would be any greater than class C waste generated.

Has that been completed, and what are the results?

MR. KUEHN: No, I'm not in receipt of a final analysis, yet. There is still material that we are studying, sampling and analyzing to determine where we are

with final amounts of greater than class C, if any, and what levels of waste we have, at what volumes.

MR. FULLER: When are you planning to have that information, then?

MR. KUEHN: I'm not sure at this time, Ernest, when we will have the final report on that.

MR. FULLER: What is the problem that it wasn't able to be ready when you said it was going to be ready.

MR. KUEHN: I don't recall having said that that was ready. If I said that, you will have to remind me of when.

MR. FULLER: In a letter to the NRC, dated July 18th, on page 21, you indicated that you would be finished by -- with that information then. But apparently not.

MR. KUEHN: By what date does that say?

MR. FULLER: July 18th.

MR. KUEHN: I can't imagine why we would have been that specific with July 18th, but in any event, our --

MR. FULLER: July 18th was the letter, you said you would have the information by the end of the year.

MR. KUEHN: By the end of the year. I haven't

seen that report, that doesn't mean the report isn't out yet. It hasn't been reviewed by me, yet.

Our D&D group, or our engineering support for the project is working to characterize and finalize the waste streams that we have, the shipments that we will have to make in the future, and some of that work is not done yet.

MR. FULLER: In that same response to questions, on page 34 you indicated that you hadn't made any estimate yet of the public -- the dose to the public from these activities.

Have you completed figuring out what the dose to the public might be, yet?

MR. KUEHN: You are talking from the shipments?

MR. FULLER: I'm talking from the whole decommissioning process, I assume.

MR. KUEHN: We don't anticipate any measurable dose to the public as a result of the activities that we are going to undergo during decommissioning.

Can I say, no, there will be no exposure to the public? Absolutely not. I can't say that. But measurable dose, we don't anticipate there being any dose.

When we finalize decommissioning, we will meet the criteria established by the NRC at that time. And,

again, I said our target number right now is 15 millirem per year. So I will be able to say to you and everybody in the Saxton population will receive less than 15 millirem per year, or I won't be able to terminate the license and walk away from it.

That is the dose to the public, as best as I can tell you.

MR. FULLER: That is after you are gone. I'm talking about during the process.

MR. KUEHN: During we don't anticipate any additional dose, measurable dose to the public as a result of decommissioning activities.

MR. FULLER: So you are not going to estimate anything, since it is just not going to exist?

MR. KUEHN: I'm estimating it is going to be not measurable.

MR. FULLER: Okay, so you are estimating, then.

MR. KUEHN: I'm answering your question, Ernest, as best as I can. Never say never.

MR. FULLER: Also, apparently, you do plan to release some water with low levels of radioactive tritium in the Juniata, possibly, during this process?

MR. KUEHN: Yes. There is a likelihood of some liquid releases during decommissioning. We don't

have a large decontamination facility, here. However, there will be some water used in decontamination. The scabbling process.

We have some barrels of water, currently, that are inside containment that we have to dispose of. A logical way to do that would be to clean that water with portable processing systems which we would contract to come on-site, to clean, to filter that water if you will, much like you filter your water at home, if you do that.

That filtrate, or that filter media that is used to filter the radioactive materials out would be packaged and shipped as radioactive waste. The water, in turn, would be discharged after we had done a batch sampling, recirculation and sampling of that water to make sure that it meets release criteria, and then we would be able to discharge that to the river.

That release criteria and the calculations we have to do, are conservative calculations which assume that the public drinks the water out of the river, eats the fish from the river, stands beside the river, and is directly exposed to whatever radiation we release.

Those kinds of liquid releases are typically less than a millirem, you know, per year to the person from that release. We are talking fractions of a millirem to a millirem. So they are not high levels of material

released into the river, and will be within the NRC's regulations for those releases.

MR. FULLER: Your decommissioning plan makes reference to a lot of GPU procedures and quality assurance plans and things like that. Is it possible for a member of the public to see what those are?

MR. KUEHN: We don't typically make our procedures and plans available to the public to scrutinize. It is not something that we do. If the citizen's task force has a particular procedure or something that we are about to do that we are curious about, I'd be glad to explain it to the citizen's task force at the meeting, and bring a copy of the procedure with me.

I mean, we don't have anything to hide in the procedures, but if I brought the public all the procedures, we'd line all these tables with procedures, and it would be difficult to understand and interpret.

I would rather have the opportunity at the citizen's task force meeting to explain what process it is you are wondering about.

MR. FULLER: Okay. And right now your plan, as you said, indicates that you plan to clean up the site to the 15 millirem limit?

MR. KUEHN: Yes.

MR. FULLER: You also said that you would meet whatever requirements the NRC had at the time. If the NRC were to change the requirements to say, 25 millirem which is one of the possible outcomes they predicted, what standard would you clean up to?

MR. KUEHN: We will clean up to the standard in place at the time of license termination, or our submittal for the termination plan.

MR. FULLER: Okay. So you may not clean up to a 15 millirem standard?

MR. KUEHN: If they change it to 10, I'm going to meet 10. I'm going to do whatever the regulations say I have to do. If I have to go down, I'll go down, if I have to go up, I'll have that leeway to go up.

MR. FULLER: The NRC requires you to go up?

MR. KUEHN: Pardon?

MR. FULLER: The NRC requires you to go up?

MR. KUEHN: I didn't say they required me. I said, I would meet the regulations at the time --

MR. FULLER: But you just said that.

MR. KUEHN: -- of license termination.

MR. FULLER: Okay. That was my last question for you.

MR. KUEHN: Thank you. Any other questions of me before the NRC comes back up? Anything at all?

(No response.)

MR. KUEHN: Thank you.

MS. ICKES: At this time, does anyone have any formal comments that they would care to make?

(No response.)

MS. ICKES: No. Al?

MR. ADAMS: We've paid for the place until 10, so I'm willing to answer more questions. Anybody?

MS. ICKES: If you do not step to the mike, the transcriber cannot record it, so you must be at the mike.

MR. TYDEMAN: Do you plan to have any further --

MS. ICKES: Identify yourself, please.

MR. TYDEMAN: Jim Tydeman, again. Do you plan on having any additional meetings like this?

MR. ADAMS: The next planned meeting of this type would be at the license termination stage. As we go through the process, there is always the possibility that we will have meetings with the licensee, like we have in the past.

And as, in the past, those are public meetings, they will be notice, the public will be aware of those meetings, and they are invited to attend.

You've attended many meetings that we've had

with the licensee.

MR. TYDEMAN: Right.

MR. ADAMS: So that will continue, if we have meetings of that type. But this type of forum, the next one that would be planned would be when the license termination plan is put in.

MR. TYDEMAN: Okay.

MR. FULLER: Just following up on that last question, my name is Ernest Fuller. There had been public meetings or meetings that were made public between the NRC and GPU over the past many years, as you mentioned.

The last one was early last year, and apparently now you are having weekly telelphone conversations with GPU to deal with things. Is it possible either to somehow make those meetings more public so people can see them, or are you having public meetings to discuss what is going on, or what?

MR. ADAMS: They are not public meetings.

MR. FULLER: I know.

MR. ADAMS: I mean, we pick up the phone and talk to licensees all the time.

MR. FULLER: Right.

MR. ADAMS: And the licensees talk to us, to facilitate our regulatory process. The public meetings, the meetings that we've had with the licensee in the past

have been to discuss specific aspects of licensing actions we have taken.

The weekly telecons we have with the licensee, as Tom explained, we ask, what have you done last week, what do you plan to do next week. That is basically the essence of the conversation, and we are doing that so that we are on top of what is going on there.

And if the licensee says to us, well, next Tuesday we plan to do this and it is something that we feel is significant, then we have forewarning, and we can plan to be on-site and observing.

Do you have anything to add, Gene?

(No response.)

MR. ADAMS: The telephone calls are not, you know, everything we do is not a public meeting, or else it would be really hard to do things.

MR. FULLER: I understand that.

MR. ADAMS: Just like inspections occur, and they are not public meetings. So -- I mean, that is the best I can answer your question.

If something is raised, if something comes to the level where we would need to have a significant discussion with the licensee, say, to understand their tech spec amendment request that they have in front of us, we would have a public meeting like in the past.

So if they are coming to us to sit down and we are talking significant issues, then that is a public meeting.

MR. FULLER: I guess there hasn't been anything like that for the past year, then?

MR. ADAMS: No, there hasn't. Any other questions?

(No response.)

MR. ADAMS: I'd like to thank you for coming, I'll remind you again that if you have any comments you want to make on the PSDAR you can submit them to us in writing, you have our address, the Federal Register Notice has the address, and comments on the PSDAR will be considered as we look at the informational requirements.

MS. ICKES: I want to thank you all for attending, and remind you that the next meeting of this group will be held in March. Sylvia, I'm not sure of the date, the 10th?

March the 10th, yes, at 7 o'clock. We hope to see continued public involvement in this project. Thank you.

(Whereupon, the above-entitled matter was adjourned at 9:37 p.m.)