

**OFFICIAL TRANSCRIPT OF PROCEEDINGS  
UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION**

**Title: SAXTON TERMINATION PUBLIC  
MEETING**

**Case No.:**

**Work Order No.: NRC-1312**

**LOCATION: Saxton, PA**

**DATE: Thursday, May 25, 2000**

**PAGES: 1 - 84**

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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SAXTON TERMINATION PUBLIC MEETING

Saxton Volunteer  
Fire Company Hall  
8th and Norris Streets  
Saxton, PA 16678  
Thursday, May 25, 2000

The above-entitled meeting commenced, pursuant to  
notice, at 7:00 p.m.

PARTICIPANTS:

- DAVID J. THOMPSON, Chair, Bedford County Board of Commissioners
- ALEXANDER ADAMS, Jr. Sr. Project Manager, USNRC, NRR
- SAM NALLUSWAMI, Project Manager, USNRC, NMSS
- THOMAS F. DRAGOUN, Reactor Inspector, USNRC, NRR
- G. A. KUEHN, GPU Nuclear
- ROBERT HOLMES, GPU Nuclear
- BOB NELSON, Section Chief, NMSS
- ~~LARRY PITTIGLIA~~ PITTIGLIA, NRC
- RICHARD CLEMENT, NRC
- NEIL SHEEHAN, Public Affairs Office, Region I, NRC
- ~~ETOY HILTON~~ HYLTON, NRC
- LEDYARD MARSH, Chief, REXB, DRIP, NRR, USNRC

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

[7:00 p.m.]

1  
2  
3 THOMPSON: I'd like to welcome everyone tonight to  
4 the Saxton Nuclear Experimental Corporation Facility, the  
5 presentation of the license termination plan.

6 My name is Dave Thompson, and I'm the Chairman of  
7 the Bedford County Commissioners. Again, welcome everyone  
8 to tonight's meeting.

9 I would like to stress, too, that this is a  
10 meeting to exchange information. This is not a hearing.

11 The meeting is being transcribed to provide a  
12 record of any comments made.

13 There is an agenda for the meeting, and it is  
14 found in the back of the room. If someone does not have an  
15 agenda, if they would please raise their hand at this time,  
16 and we'll make sure they get one.

17 When you present your questions about a specific  
18 presentation, it should be asked at the end of the  
19 presentation. Anyone desiring to make a statement on the  
20 nuclear license termination plan will wait till the public  
21 comment period after the presentations.

22 If anyone desires to make a statement, please sign  
23 up in the back. The time for statements will be limited so  
24 that all who want to speak will have an opportunity.

25 In the interests of time, we will cut off speakers

1 who go over the allotted time. The NRC will accept written  
2 statements or other written material on the subject if  
3 people have more material than time allows for.

4 And people need to speak up and state their name,  
5 and spelling, because this is being recorded for the record.

6 There is a second signup sheet in the back that  
7 asks for your name and address. Providing your name and  
8 address will put you on the temporary mailing list to  
9 receive any future correspondence on Saxton decommissioning.

10 Once the NRC takes final action on Saxton, you  
11 will no longer receive documents. In the interest of saving  
12 trees, we're we're encouraging everyone to go on the NRC  
13 website for tonight's proceedings. Single copies of the  
14 transcription will be mailed to anyone who signs up for one.

15 Since this meeting is being transcribed, like I  
16 said before, we'd like for you to stand up, state your name  
17 before you question or make your comment. And if you have a  
18 difficult name, please spell it for the transcriber, but  
19 just in case, spell it anyway so we can have it for the  
20 accurate record.

21 Also, if you have a question or comment, raise  
22 your hand and wait till the speaker recognizes you. When  
23 recognized, please move to the aisles and use one of the  
24 floor microphones right there.

25 If you do not and ask a question from your seat,

1 the transcriber will likely not hear the question.

2 We will bound into the transcription, a copy of  
3 all overhead slides you will see tonight. If you have  
4 material that you would like to place into the transcript,  
5 please give it to the NRC Project Manager.

6 If it is a few pages, I am sure he'll include it;  
7 if it's more than a few pages, he will likely ask that you  
8 just provide a summary page.

9 The NRC Project Manager will review the  
10 transcription before he mails it out, and will make any  
11 minor changes to correct obvious errors in what was said.

12 This will be done by pen and ink, so the words as  
13 originally transcribed will be preserved. Since this is an  
14 informational meeting and not part of any formal  
15 proceedings, speakers do not get the opportunity to correct  
16 their statements before it is released to the public.

17 This is principally in the interest of getting the  
18 transcription out to the public as soon as possible.

19 I encourage people to talk to the licensee and NRC  
20 representatives during the break and after the meeting. We  
21 want to exchange information.

22 And I wish to ask the media present to conduct any  
23 interviews outside the hall or auditorium, preferably after  
24 the break or after the meeting. An NRC Public Affairs  
25 Official is present to talk to the media.

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1           And few administrative issues: Anyone that needs  
2 the use of the restroom facilities, they're in the rear.

3           Okay, so I guess we're ready to get started. At  
4 this time, I'll turn the program over to Al Adams, Sr.  
5 Project Manager, U.S. Nuclear Regulatory Commission, Office  
6 of Nuclear Reactor Regulation.

7           ADAMS: I'm interested in how many members of the  
8 public are here tonight?

9           [Show of hands.]

10          ADAMS: Okay, great. I'd like to start by  
11 introducing my supervisor, Tad Marsh, who is the Chief of  
12 Events Assessment, Generic Communications, and Nonpower  
13 Reactors, to give us a welcome and say a few comments.

14          MARSH: Great. Just a few comments: Welcome  
15 tonight. We're glad you're here.

16          The purpose of tonight's meeting, overall, is to  
17 present to you, the LTP and also to discuss with you, what  
18 we're going to do, how we're going to review the LTP.  
19 That's our part of the presentation.

20          Also, the licensee will be presenting their <sup>plans</sup> ~~plant~~  
21 to you as well.

22          The purpose is not only to present but also to  
23 hear from you, comments, concerns, questions that you may  
24 have on the plan. This is part of our process, and it's an  
25 important part.

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The Commission is very interested in engaging the public and obtaining feedback from you on this important review.

A little word about the sequence tonight: Sometimes in public meetings, we hear the licensees present their plan, their technical issue first before the Commission presents its presentation.

Tonight we're a little bit reversed. You're going to hear the Commission give its presentation first, and then comes the licensee.

So if you <sup>have</sup> ~~hear~~ questions in our presentation about the technical issues, you may want to hold off those questions until you hear the licensee's presentation, because those questions may be answered.

You don't have to; you can ask the question at any time you'd like. But in terms of sequence, it's a little bit the cart before the horse.

Again, welcome. We're glad you're here. We look forward to a productive meeting. Al?

ADAMS: Thanks, Tad. Well, good evening. As was said, my name is Al Adams. I'm the NRC Licensing Project Manager for the Saxton Facility.

As such, I'm the principal NRC point of contact at NRC Headquarters in Rockville, Maryland for decommissioning of the Saxton Facility.

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1           There are some other people in the room tonight  
2 from NRC, and I'd like to introduce them. From our Office  
3 of Nuclear Materials Safety and Safeguards, who is  
4 conducting the technical review of the Saxton License  
5 Termination Plan is Bob Nelson. Bob is the Section Chief of  
6 in the Decommissioning Projects Branch.

7           Sam Nalluswami, Project Manager for the technical  
8 review; Larry <sup>Pittiglio</sup> ~~Pittiglia~~; Richard Clement, are some of our  
9 technical reviewers.

10           Also with us is Tom Dragoun, and he's the Reactor  
11 Engineer who is responsible for the inspection program at  
12 Saxton.

13           From our Region I Public Affairs Office in King of  
14 Prussia, is Neil Sheehan, Public Affairs Officer.

15           And helping us at the table is Etoy <sup>Hilton</sup> ~~Hilton~~.

16           May I have the first slide? Now, the purpose of  
17 tonight's meeting is to provide you with some information on  
18 the license termination process for reactors and to listen  
19 to your questions and comments.

20           During the rest of my presentation, I will provide  
21 some general background information on decommissioning, and  
22 discuss the regulatory process for decommissioning the  
23 Saxton Facility, both where we have been and where we're  
24 going.

25           Sam will discuss NRC requirements for license

1 termination plans, and outline the NRC license termination  
2 plan review process. Next, Tom Dragoun will talk about  
3 inspection activities that NRC will carry out to support  
4 license termination.

5 Finally, after the break, the licensee will  
6 describe activities at the site, and the license termination  
7 plan.

8 Now, I'd like to start with a few words about the  
9 sponsors of tonight's meeting, the Nuclear Regulatory  
10 Commission. The NRC was formed in 1975, succeeding the  
11 Atomic Energy Commission, to regulate the various commercial  
12 and institutional uses of nuclear energy.

13 NRC has responsibility to protect the public  
14 health and safety. We accomplish this by three principal  
15 regulatory functions:

16 We establish standards and regulations, some of  
17 which you will hear about tonight.

18 We issue licenses for facilities and users of  
19 nuclear material, for example, the license termination plan  
20 is approved by NRC by a licensing action.

21 We inspect facilities and users to ensure  
22 compliance with our requirements, as we have done and will  
23 continue to do for the Saxton Facility.

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

1 tonight.

2 Now, I'd like to talk in general about  
3 decommissioning of reactors. There are definite stages in  
4 the life of a nuclear reactor, including planning,  
5 construction, licensing, operation, and finally,  
6 decommissioning and license termination.

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

12 The focus of the NRC during decommissioning is the  
13 safe removal<sup>of</sup> the radiological hazards resulting from the  
14 operation and use of the facility.

15 The first task in decommissioning is removing the  
16 facility safely from service. At Saxton, the facility was  
17 removed from service in the 1970s.

18 The fuel and some other radioactive components  
19 were removed from the facility during the 1972 to 1974  
20 timeframe. In 1975, the facility was placed in a form of  
21 long-term storage now called <sup>SAFSTOR</sup> ~~Safety-Store~~ to allow decay of  
22 radioactive material.

23 The licensee takes various steps to reduce the  
24 amount of radioactive material onsite. The most visible of  
25 these steps at the Saxton Facility was removal of the large

1 components, reactor vessel, steam generator, and  
2 pressurizer.

3           Once the residual level of radioactive materials  
4 are reduced to below certain criteria, either by  
5 decontamination or dismantlement and disposal offsite, the  
6 NRC license for the facility and site can be terminated.

7           Before the license is terminated, the licensee has  
8 to perform an extensive final survey that proves to the NRC  
9 that the site meets regulatory requirements for license  
10 termination.

11           Once the license is terminated, the NRC no longer  
12 has any regulatory oversight over the facility or site.  
13 This is the ultimate goal of decommissioning, termination of  
14 the license.

15           So, to summarize, decommissioning is the removal  
16 of a facility from service, and reduction in the levels of  
17 radioactivity at the facility and site, to levels what will  
18 ultimately result in the termination of the license.

19           NRC oversight activities relate to the proper  
20 decontamination and dismantlement of the facility to protect  
21 the public health and safety.

22           I'd like to finish my presentation by talking  
23 about the regulatory process for decommissioning, and where  
24 the Saxton Facility is in the process.

25           The regulations governing decommissioning are in

1 addition to other regulations that the licensee must follow,  
2 such as those related to radiation safety.

3 Comprehensive regulations dealing with reactor  
4 decommissioning appeared in 1988. Based on experience  
5 gained over the next seven years, the Commission extensively  
6 revised the regulations in 1996.

7 In July of 1996, the NRC published a final  
8 rulemaking that substantially changed the decommissioning  
9 process to that followed today.

10 The current radiological criteria for license  
11 termination, which Sam will talk about in the next  
12 presentation, became effective in August of 1997.

13 The licensee is required to submit<sup>WRITTEN</sup> certification  
14 to the NRC within 30 days of the decision to permanently  
15 cease operations, and again when the fuel has been  
16 permanently removed from the reactor vessel.

17 Because the Saxton license was permanently  
18 modified in 1972 to allow possession but not operation of  
19 the facility, the rule specified that the required  
20 certifications have been submitted.

21 Saxton had started down the path of  
22 decommissioning and license termination under the  
23 decommissioning regulations that the NRC issued in 1988. A  
24 decommissioning plan to decontaminate the containment vessel  
25 and the structures, systems, and components was submitted to

1 the NRC in February of 1996, followed by a decommissioning  
2 environmental report and proposed decommissioning technical  
3 specifications.

4 The NRC Staff had these documents under review  
5 when changes to the NRC decommissioning regulations was  
6 published on July 29th, 1996, which took effect on August  
7 28th, 1996.

8 At that time, the licensee requested that the  
9 review of the decommissioning plan and related documents be  
10 suspended because of changes to the regulations which  
11 eliminated the requirement to submit a decommissioning plan,  
12 and a requirement that the NRC review the plan.

13 The regulations state that the licensee must  
14 submit a post-shutdown decommissioning activity report -- we  
15 call it a PSDAR -- to the NRC.

16 The purpose of the PSDAR is to provide the NRC  
17 Staff with sufficient information to assure the proper NRC  
18 oversight of any significant decommissioning activities, to  
19 require the licensee to examine its plan for funding of  
20 decommissioning activities, and to require the licensee to  
21 examine its plans for decommissioning to assure that the  
22 activities will not result in any environmental impacts that  
23 have not been previously considered.

24 For licensees like Saxton, <sup>that had a</sup> ~~to have~~ decommissioning  
25 plan under review by NRC, the regulations state that the

1 decommissioning plan is considered to be the PSDAR.

2 Next slide. Okay the next slide is there.

3 The regulations require the NRC to notice receipt  
4 of the PSDAR in the Federal Register and make it available  
5 to the public. We are also required to hold a public  
6 meeting in the vicinity of the nuclear site to allow the  
7 licensee an opportunity to present their plans for  
8 decommissioning of the facility, to describe the role of the  
9 NRC in decommissioning of the facility, and to listen and  
10 respond to questions from members of the public.

11 The PSDAR meeting was held here on January 28th,  
12 1997. I'm wondering how many folks that are here tonight  
13 were at that meeting? Anybody?

14 [Show of hands.]

15 ADAMS: So, what's happened since our last public  
16 meeting? While submission of the PSDAR would normally allow  
17 a licensee to start major decommissioning activities after a  
18 90-day waiting period, this is not the case for the Saxton  
19 facility.

20 This is because there was a requirement in the  
21 Saxton license that GPU Nuclear not dismantle or dispose of  
22 the facility or the property occupied by the facility  
23 without prior approval of the Commission.

24 The Saxton Facility technical specifications  
25 stated that the licensee was prohibited from taking any

1 action which resulted in alteration of the containment  
2 vessel, removal of major radioactive components, or resulted  
3 in dismantling of components.

4 These requirements could only be eliminated by  
5 amendment of the facility license.

6 The licensee submitted a request for license  
7 amendment to change these requirements and make other  
8 changes to the license and technical specifications to  
9 support decommissioning activities.

10 The licensee also submitted an updated safety  
11 analysis report that described the facility condition, and  
12 updated the accident analysis to include accident scenarios  
13 applicable to decommissioning conditions.

14 The licensee submitted an environmental report  
15 that described the environmental impacts of decommissioning  
16 activities.

17 After a detailed review by the NRC, Amendment  
18 Number 15 to the Saxton license was issued on April 20,  
19 ~~1988~~  
1998.

20 After approval of the license amendment, the  
21 licensee began to perform decommissioning activities in  
22 accordance with the facility license, the regulations, and  
23 the PSDAR.

24 These decommissioning activities are still  
25 underway.

1 Two years prior to the planned termination of the  
2 license, the licensee submits a license termination plan.  
3 Sam will talk about the contents of the license termination  
4 plan.

5 Saxton submitted a license termination plan to NRC  
6 in February, 1999, which, after NRC acceptance review, was  
7 determined to contain insufficient information to initiate a  
8 detailed review.

9 Over the next months, the licensee's staff <sup>met</sup>~~meet~~  
10 three times with the NRC Staff in meetings that were open to  
11 the public, to discuss revising the license termination  
12 plan.

13 A revised license termination plan was submitted  
14 to NRC on February 2nd, 2000. The acceptance review found  
15 that the information provided in the revised license  
16 termination plan was sufficient to begin a detailed  
17 technical review which is currently underway.

18 The licensee was informed of the results of the  
19 acceptance review.

20 The NRC Staff noticed receipt of the license  
21 termination plan in the Federal Register on May 15, 2000.  
22 The notice also provided opportunity for written comments to  
23 be submitted by the public.

24 The regulations do not identify a specific comment  
25 period, but <sup>we</sup>are requesting the written comments within 60

1 days of this meeting.

2 This will allow the NRC Staff to consider your  
3 comments as we perform our review of the license termination  
4 plan.

5 That brings us to tonight. As I stated earlier,  
6 one of the reasons for this meeting is to listen and respond  
7 to questions from the public.

8 Your questions and comments tonight, as well as  
9 any written comments submitted tonight, will also be  
10 considered as we perform our review of the license  
11 termination plan.

12 Next slide. Now, I would like to discuss the next  
13 steps in the regulatory process for Saxton, and some other  
14 activities that are planned.

15 The license termination plan is a supplement to  
16 the safety analysis report for the Saxton Facility. NRC  
17 approval of the license termination plan will be by license  
18 amendment, which will authorize implementation of the  
19 license termination plan.

20 Because the license termination plan is approved  
21 by license amendment, the normal regulatory process for  
22 issuance of an amendment to a power reactor will be  
23 followed.

24 A legal notice called Notice of Consideration of  
25 Issuance of Amendment to Facility License, Proposed <sup>No</sup> Notice

1 ~~of~~ Significant Hazards Consideration Determination, and  
2 Opportunity for Hearing, will be placed in the Federal  
3 Register in the next 45 days for the license amendment to  
4 approve the license termination plan.

5 This notice will open a 30-day window to request a  
6 hearing on the license amendment. If you would like more  
7 information on this process, please talk to me during one of  
8 the breaks.

9 I'd like to make two points not directly related  
10 to the license termination plan review that I think are  
11 important: The first is that <sup>a</sup>the meeting that will be open  
12 for public observation is scheduled for May 30th, 2000, from  
13 10:30 to noon, between the NRC and the Saxton GPU Nuclear  
14 Staffs.

15 The meeting will take place at NRC Headquarters in  
16 Rockville, Maryland. The purpose of the meeting is to  
17 discuss license termination plan and review schedules.

18 The second item is that the licensees have  
19 submitted <sup>request</sup>~~requests~~ for license amendment to make changes to  
20 the organizational and administrative <sup>controls</sup>~~control~~, technical  
21 specifications to reflect changes to GPU Nuclear  
22 organization following the sale of Oyster Creek.

23 The Staff has this request under review. A  
24 Notice of Consideration for that license amendment will  
25 appear in the Federal Register on May 31st, 2000.

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1           This is not the notice for the license termination  
2 plan, so don't get your notices confused.

3           So, back to our discussion of license termination,  
4 over the next several months, the NRC Staff will continue to  
5 review the license termination plan. The licensees will  
6 continue to clean up the site while the license termination  
7 plan is under review.

8           The licensee will perform<sup>the</sup> license termination  
9 radiation survey based on information contained in the  
10 license termination plan.

11           The NRC Staff will continue to provide oversight  
12 during this process, and will perform our own confirmatory  
13 survey of the site as needed.

14           The Commission will terminate the license if it  
15 determines that remaining activities have been performed in  
16 accordance with the approved license termination plan, and  
17 the license termination radiation survey and the associated  
18 documentation demonstrates the facility and the site are  
19 suitable for release.

20           So, this is the decommissioning process that  
21 Saxton will follow from here on out. There are a few  
22 aspects of the entire process that were unique to Saxton.

23           Saxton will probably be the first nuclear power  
24 reactor license taken to termination under the new  
25 regulations for regulatory process and release criteria.

1 I'd like to emphasize again that your questions  
2 and comments are always welcome. On the screen are the  
3 mailing address, phone number, fax number, and electronic  
4 mail addresses for Tom and myself.

5 The last thing I'd like to talk about is how to  
6 get information on activities at Saxton. Like everyone  
7 else, NRC has a website.

8 At the top of the slide is the location of the  
9 website. The Saxton license termination plan has been  
10 placed on the NRC website at the second location given.

11 Click on Decommissioning and you'll see a short  
12 statement about Saxton information and some links to <sup>the</sup> license  
13 termination plan. The NRC has also gone to electronic  
14 storage of documents.

15 Because of this, local public document rooms such  
16 as the one at the Saxton Library are no longer supported by  
17 NRC. Historical documents continue to be held at the  
18 Library, and it's my understanding that the licensees  
19 continue to place some documents there.

20 I looked this afternoon and there was a copy of  
21 the license termination plan at the Saxton Library.

22 Our Branch continues to send some information  
23 directly to the library, so the library still continues to  
24 get some information, even though it's not an official  
25 public document room.

1           The NRC now has an electronic reading room. I  
2 have some instructions on how to get there. From the NRC  
3 home page, click on Public Electronic Reading Room. The  
4 first time you visit, you have to download some software  
5 from the NRC site to your computer.

6           Click on How Do I Install ADAMS, and follow the  
7 instructions.

8           You can tell if you're a <sup>lucky</sup> ~~luck~~ person or unlucky  
9 person if the company <sup>you</sup> works for names a major computer  
10 system with the same last name as yourself.

11           [Laughter.]

12           ADAMS: You also find out who your friends are in  
13 a big hurry. Before, when I would walk by the boss's  
14 office, he'd be saying that Adams has done it again, I'd  
15 keep moving. Now, I have to stand outside and continue to  
16 eavesdrop until I find out if it's me or the computer  
17 system.

18           So, after installing the software, come back to  
19 the Reading Room home page and click on Launch. You'll get  
20 a warning about using the government computer system. It's  
21 a pretty impressive warning.

22           Click on okay, and this will take you to a login  
23 page. Log in as Guest, and click okay. On the next screen,  
24 highlight Publicly Available Records, and click Tools. That  
25 will drop down a menu with two choices on it.

1           One of the selections is ADAMS Find, and on the  
2 next screen, you can enter the docket number and after you  
3 enter, <sup>as</sup> ~~is~~ shown on the slide or it won't work.

4           And you can also enter other search attributes,  
5 date, and things like that. And next you should click Find  
6 Now.

7           It will do a search and at the top of the screen,  
8 you can select View, and if you click on View, click on Show  
9 Criteria, a list of documents from the search will be found.

10          You can go and double-click the document titles,  
11 and the document itself will appear on the screen and you  
12 can read everything that's in the NRC public document room.

13          MR. MARSH: Has anyone tried that here? Has  
14 anybody?

15                 [No response.]

16          MARSH: No, all right.

17          ADAMS: I'll admit, it's not the easiest system in  
18 the world. Good luck, and as you're working with it, you  
19 can take solace in that it's the same system the employees  
20 use as far as conducting searches.

21          Tom Dragoun and I were at the Library this  
22 afternoon. They have not configured their computers to use  
23 the electronic reading room, and also they have not  
24 configured their computers with the proper software that you  
25 can read the license termination plan online.

1           So, we've asked them if they would consider making  
2 some changes, and I think they're going to think about it.

3           Thank you for your attention. That finishes my  
4 remarks. Next up is Sam. He's going to talk about the  
5 license termination plan review process and the standards.

6           NALLUSWAMI: Good evening, ladies and gentlemen,  
7 and thank you, Mr. Chairman, for this opportunity for  
8 allowing us to make the presentation here.

9           As Al mentioned, my name is Sam Nalluswami, and I  
10 will spell my last name for you, N-a-l-l-u-s-w-a-m-i. It is  
11 given in the agenda. Thank you.

12           And as Al mentioned, the purpose of the license  
13 termination plan is to terminate the license. That is the  
14 main purpose of the license termination plan. So my  
15 presentation is broken down into four main parts. The first  
16 part is the purpose of this meeting, and the next part is  
17 the regulatory process, or regulatory basis. And the third  
18 one is the process involved in the review of the license  
19 termination plan. And the last one, that is the fourth one,  
20 is the current status of the Saxton license termination  
21 plan. So that is the order in which I will be making my  
22 presentation.

23           As Al mentioned, please hold any questions that  
24 you may have till the end, and we will try to answer them to  
25 the best of our ability.

1           That slide shows the purpose of this meeting. The  
2 purpose of this meeting is to provide information to the  
3 public and also to solicit information from the public on  
4 this license termination plan. And, also, it is a  
5 requirement, based upon the regulatory rules of the NRC,  
6 based upon the Code of Federal Regulations that is available  
7 publicly, in Chapter 10 of Part 50 of these regulations,  
8 that is the second bullet given there, 50.82(a)(9)(iii),  
9 that is the regulatory basis for this meeting, to address  
10 the LTP and to answer any questions on the LTP.

11           The next step is the regulatory requirements or  
12 regulatory basis. The same chapter 10 of the regulatory  
13 rules and Section or Part 50.82(a)(9) gives the requirements  
14 for the license termination plans for the decommissioning of  
15 nuclear power reactors, as given in the first bullet.

16           And another important requirement, based upon the  
17 10 CFR Part 20, Subpart E is the radiological criteria for  
18 termination of the license. Now, based upon Saxton's  
19 license termination plan, they are looking for an  
20 unrestricted release of the site for unrestricted use  
21 conditions. For that purpose, the radiological dose  
22 criteria is 25 millirem per year based upon NRC regulations.  
23 That is given in the 10 CFR Part 20 Subpart 1402. That is  
24 available in this document.

25           Just for your information, the background natural

1 radiation in this area, in the area of the Saxton plant, is  
2 about 60 millirem per year, so that gives you an idea about  
3 how much this criteria requires the decontamination or the  
4 remediation of the area. So that is the regulatory  
5 radiological criteria required for decommissioning of the  
6 site.

7 Next slide, please. The review process involved  
8 in the license termination plan consists of various topics.  
9 The license termination plan, which is available for public  
10 review, consists of eight sections, and those sections will  
11 address the regulatory requirements for release of the site.  
12 And they include, the order in which it is given, the first  
13 section is the site characterization -- after the general  
14 introductory section, the second section is the site  
15 characterization. Basically, site characterization includes  
16 the radiological contamination of the site, both the type  
17 and quantity of the radiological materials and, also, the  
18 aerial extent of the radiological contamination.

19 You may ask, how is that determined? Now, various  
20 instruments are used for the determination of the  
21 radiological contamination. Therefore, the sensitivity of  
22 the instrumentation is very important for measuring,  
23 detecting and measuring the radiological contamination, and  
24 that is explained in this section on site characterization.

25 And the next section is the remaining

1 dismantlement activities. That means there is already some  
2 work that has been completed previously in the way of -- by  
3 way of the remediation and decontamination. There is some  
4 more work to be done and that is also explained in Section 3  
5 of that LTP. LTP is the abbreviation for the license  
6 termination plan.

7           And the next section is the detailed plans for the  
8 remediation, site remediation. This section borrows  
9 information from the site characterization section because  
10 we have to know what kind of contamination is there and how  
11 much is there, how wide it is, so that the remediation plan  
12 can be prepared properly. So this section, detailed plans  
13 for the site remediation, addresses those issues.

14           And the next section in the license termination  
15 plan is the plan for the final site radiation survey. When  
16 they say final radiation survey, once the remediation is  
17 completed, once it is cleaned up, the licensee will measure  
18 the remaining or the residual radiological contamination at  
19 the site, and, in this survey, the plan will go through the  
20 procedures for performing this radiological survey. So that  
21 is discussed in this section.

22           On the next section is the approach used to  
23 demonstrate compliance with the radiological release  
24 criteria, which means, as I mentioned earlier, the  
25 radiological release criteria is 25 millirem per year, the

1 dose criteria. That is given in the 10 CFR, Subpart E, Part  
2 20.1402. So that gives the dose criteria, and that will be  
3 performed by using dose modeling and other procedures, and  
4 that is discussed in that section.

5 And the next section gives the cost estimate for  
6 cleaning up of the site, an updated cost estimate. So the  
7 licensee has submitted the best cost estimate that they can  
8 come up with for remediating the site. So that will also be  
9 reviewed by the NRC and it will be -- if there are some  
10 comments, the comments will be provided, so that is the  
11 procedure that is used.

12 And the last section is the supplement to the  
13 Environmental Report. See, the <sup>licensee</sup> ~~agency~~ has already submitted  
14 an Environmental Report, and after the clean-up, after the  
15 remediation of the site, the remaining radiological  
16 contamination at the site may cause some environmental  
17 impact. So this supplemental report will address those  
18 issues, what kind of impact the remaining radiological  
19 contamination at the site will have on the environment.

20 So these are properties covered in the LTP.

21 Okay. The next slide shows the steps involved in  
22 the review of the license termination plan. As Al mentioned  
23 before, the first step is the administrative acceptance  
24 review, number one. And that step will involve -- it does  
25 not involve any technical review of the document, it will

1 simply consist of -- it will consist of an administrative  
2 review to make sure that all the items are covered in the  
3 document. So once we know that all those items required are  
4 covered in the document, then we approve that document.  
5 That is why it is called an acceptance review. That was  
6 done in March of this year, so the licensee was informed in  
7 March of this year.

8           And the next step is the technical review, that is  
9 what is going on right now. The technical review is  
10 currently being performed and, based upon the technical  
11 review, if there are some deficiencies in the information,  
12 or if there are some gaps in the data that is submitted by  
13 the licensee, we will request additional information, and  
14 that is a next step.

15           Once the review is completed, we will send a  
16 letter asking for additional information, that is what we  
17 call RAI, request for additional information. So that is  
18 the third step.

19           Then, based upon the review after getting all the  
20 information, once we receive the information from the  
21 licensee, the next step is the -- we review, already we have  
22 reviewed the document and then we prepare what they call the  
23 safety evaluation report and the environment assessment,  
24 based upon the data that was submitted by the licensee. And  
25 that is performed, that is what we call a Safety and

1 Environmental Review.

2           Once we receive the information to satisfy all the  
3 regulatory requirements, then the license termination plan  
4 will be approved by a license amendment. And then, at that  
5 time also, there may be an opportunity for a hearing. So  
6 that is the step number 5 that is shown on the slide.

7           As I mentioned before, the license termination  
8 plan may propose either for unrestricted use conditions or  
9 for restricted use conditions. As we understand right now,  
10 the licensee is asking for unrestricted release conditions.  
11 So that is the current proposal by the licensee.

12           And another requirement is, once the licensee  
13 decides to terminate the license, the license termination  
14 plan is supposed to be submitted two years, at least two  
15 years before the termination date, as the licensee has in  
16 mind. That is a requirement by the regulatory rules.

17           And, also, there is a requirement that there  
18 should be a public meeting to be held near the site to  
19 discuss the LTP, which is supposed to be within 90 days  
20 after the acceptance review is completed. So the acceptance  
21 review is completed in March, now we are conducting the  
22 public meeting here in May of this year. It should be  
23 within 90 days, so that is within 90 days.

24           To help the licensee and the NRC staff in  
25 performing their responsibilities, there are some NRC

1 documents available. The first one is the Regulatory Guide,  
2 we call sometimes Reg. Guide, 1.179. That contains the  
3 "Standard Format and Content of License Termination Plans  
4 for Nuclear Power Reactors." That is just to help the  
5 licensee to prepare the document, LTP.

6 The other document, NUREG-1700, that is called the  
7 "Standard Review Plan." That is helpful to the NRC staff  
8 for evaluating the nuclear power reactor license termination  
9 plans. And Larry <sup>Pittiglia</sup> Pittiglia, our colleague in our group, he  
10 is the author of that report, and it is also available for  
11 your use. And they have just published the final draft, the  
12 final one was published just last month.

13 And the next document available is NUREG-1575. We  
14 call it "Multi-Agency Radiation Survey and Site  
15 Investigation Manual." For short, it is called MARSSIM,  
16 M-A-R-S-S-I-M. That is the document that the licensee will  
17 be using to prepare the radiological survey plan. So, that  
18 will be the guidance document that will be used for that  
19 purpose. So, we review the radiological survey plan based  
20 upon that information in the document and we also use it for  
21 reviewing the radiological status of the plan, and so that  
22 is also available. I think it is also available in the NRC  
23 web site.

24 The next step is the current status of the Saxton  
25 LTP review process. The LTP was submitted in February of

1 this year. And, as I mentioned, the administrative  
2 acceptance review was completed in March of this year, and  
3 that was informed. And currently, the Safety and  
4 Environmental Review, including the technical review, is  
5 going on, it just started last month. And, in fact,  
6 currently, we are holding the public meeting in May of this  
7 year. And based upon the review, technical review, we will  
8 be sending requests for additional information. Our best  
9 estimate at this time is September of this year. So that  
10 will be -- that is the current status of the review process.

11 The principal areas of concern or focus related to  
12 the license termination plan are the detailed plans for the  
13 final radiation/release survey. See, once the license  
14 termination plan is approved, the licensee is going to  
15 perform the remediation or clean-up. Once the clean-up is  
16 completed, then they will prepare ~~really~~ a radiological  
17 survey of the site and that will be submitted in the  
18 radiological survey report. That is a key item.

19 Then the approach used to demonstrate the  
20 compliance with the radiological criteria is provided in the  
21 10 CFR Part 20, Subpart E. As I mentioned, that is in this  
22 document here. And it can be for unrestricted release use,  
23 release conditions, or for restricted release conditions.  
24 Right now the proposal is for unrestricted use conditions.

25 And, also, the requirement is to submit, the

1 licensee has to prepare an updated site-specific cost  
2 estimate for the decommissioning of the site. So that is  
3 also included in the LTP.

4 So that completes my slides. Briefly, to  
5 summarize my presentation, the considerations are the  
6 decommissioning activities will comply with the NRC  
7 regulations. That is a very important consideration. The  
8 next consideration is the decommissioning activities will  
9 not adversely affect the public health and safety. And the  
10 last consideration is the decommissioning activities will  
11 not cause significant or adverse impact to the environment,  
12 so that is an important consideration.

13 So, based upon all these issues, there are four  
14 actions that will take place. The first action, once we  
15 have all the information, satisfactory information to  
16 satisfy the regulatory rules, the LTP will be approved with  
17 a license amendment, as I mentioned before, that is number  
18 one. Number two, the licensee will go and perform the  
19 remediation or clean up all the site. And the third step,  
20 they will do the final radiological status survey and submit  
21 a radiological report. And we will review, make sure that  
22 the information satisfies the regulatory criteria. And when  
23 that step is finished, the last step is the termination of  
24 the license by a public -- by a license amendment. That  
25 will be the last action that will be taken. These are the

1 four actions that will take place in this process. Thank  
2 you.

3 ADAMS: Next, Tom is going to talk about the  
4 inspection program at Saxton to confirm the license  
5 termination plan.

6 DRAGOUN: My name is Thomas Dragoun, I am the  
7 assigned inspector for the Saxton facility. Saxton <sup>presented</sup> ~~present~~  
8 some unique regulatory aspects because it is licensed as a  
9 power reactor and yet it was never intended to generate  
10 power, it really was a research facility, it was a research  
11 reactor. So the inspection program that was used at Saxton  
12 was based on that fact, in other words, it is a large  
13 research reactor.

14 There are some specific requirements that the  
15 Saxton facility had to meet. We have NRC regulations in  
16 Title 10. Part 19 has to do with worker training, Part 20  
17 has to do with radiation protection. Part 50 is the  
18 operating license. Part 61 deals with classifying wastes  
19 and Part 71 dealt with shipping.

20 In addition to inspecting against those  
21 requirements, I also review compliance relative to the  
22 Department of Transportation regulations. These concern  
23 over the road shipments and, of course, there were a lot of  
24 over the road shipments, because the intention of this  
25 program is to remove the radioactive material and ship it

1 off site. So we have DOT regulations 49 CFR Parts 171, 172  
2 and 173. Now, we are not qualified as DOT inspectors,  
3 however we do review shipments to make sure that they met  
4 DOT requirements.

5 In addition to DOT, we have the OSHA regulations.  
6 These are the industrial safety regulations. These concern  
7 things like lifting and rigging and cranes, electrical  
8 safety, scaffolding, ladders, hardhats, safety glasses,  
9 safety shoes, and industrial hygiene. So those matters were  
10 also reviewed during the course of the inspections.

11 And then we have the technical specifications  
12 which have specific requirements for a quality assurance  
13 program, the control of radioactive effluents, the  
14 environmental monitoring program, the off-site dose  
15 calculation manual, fire protection. And last but not  
16 least, each job, each major evolution that was done on site  
17 was done in accordance with a written work instruction, so  
18 the use of the work instructions were reviewed also.

19 The objective of the inspections was to determine  
20 if the dismantlement and decontamination of the Saxton  
21 facility is conducted safely and in accordance with  
22 regulatory requirements and licensee commitments.

23 Actually, we started very early to make sure,  
24 before decommissioning started, that the people, the  
25 equipment, the policies, the procedure<sup>s</sup>, the management

1 structure, et cetera, were in place before the work actually  
2 began. Now, the NRC inspection program is based on a policy  
3 of "Trust, but verify." In other words, we trust the  
4 licensee is intending to do the right thing, and we just  
5 periodically verify that. We are also alert to any  
6 declining performance, and that is a thing we look for.

7 The inspection method consists of using  
8 experienced, qualified inspectors and specialists. I have  
9 access to people within the agency who help me out when it  
10 comes to reviewing some highly technical area. And the  
11 approach was to observe work, to review records and to  
12 interview personnel to get information. These site visits  
13 were scheduled to coincide with major tasks when the program  
14 was being stressed. Each inspection resulted in a report,  
15 so all the findings were documented. And we used a graded  
16 approach to safety. The more safety significant an activity  
17 was, the more attention it got.

18 We also spent time talking on the phone in between  
19 the site visits to verify what was going on, and to try to  
20 identify major evolutions to be inspected.

21 And, lastly, the inspection method was preemptive.  
22 In other words, we tried to review the work before it  
23 happened to make sure that the preparations were in order  
24 and then actually review the work.

25 I am happy to report that to date there has been

1 no enforcement needed at the Saxton facility. Since the  
2 soil remediation project began in 1994, there have been 10  
3 on-site inspections, of which six occurred in the period of  
4 1998 to 1999. That is an important period because  
5 decommissioning actually began in 1998. There has been no  
6 violations of any requirements. There has been no major  
7 program weaknesses observed.

8 For the future, this program of inspections will  
9 continue, and as we move into the phase of final surveys, we  
10 may use Oak Ridge Institute of Science & Engineering as an  
11 independent contractor to come on site and to essentially  
12 inspect the techniques being used by the Saxton people to do  
13 their final survey. This will be a review of the equipment  
14 being used, the procedures being followed, the personnel  
15 being used and so on, because the final survey is actually a  
16 review of very low levels of radioactivity.

17 And depending on the outcome of the ORISE's  
18 assistance reviews, we may have ORISE do an independent  
19 survey, in other words, come on site with their own  
20 equipment, take their own samples and do their own  
21 laboratory analysis. And that is all I have.

22 THOMPSON: Thank you, Tom. At this time the floor  
23 will be opened to questions on the NRC presentation. Again,  
24 I remind you, please stand, state your name and spell it for  
25 the record. Also, if you could come up to the mike and ask

1 your question, it would be appreciated.

2 ADAMS: Questions on anything we have said?

3 Ernie.

4 FULLER: My name is Ernest Fuller, F-u-l-l-e-r. I  
5 have a number of questions, and if I go on too long, please  
6 stop me and let someone else ask some, and then I hope I can  
7 come back if there is still time.

8 One, regarding the steps in the LTP review, you  
9 speak of an opportunity for a hearing once the license  
10 amendment is approved. Assuming that a hearing is  
11 requested, can GPU go ahead with what they plan to do, or do  
12 they need to wait until the completion of a hearing?

13 ADAMS: I can answer that. The opportunity for a  
14 hearing is given before the license amendment is approved.  
15 The Federal Register notice that will appear within the next  
16 45 days will give opportunity for that hearing, and so that  
17 is when the opportunity will be given, not when the  
18 amendment is approved.

19 And the answer to your second question is, if  
20 there is a determination that there is no significant hazard  
21 consideration associated with the amendment, then the  
22 amendment can be approved as the hearing process is going  
23 on, so the license amendment will not be held up for the  
24 completion of the hearing process. If there is a finding of  
25 a significant hazard consideration, that is a different

1 approach.

2 FULLER: How do you expect members of the public  
3 to be able to make an intelligent decision about whether to  
4 request a hearing if we have to request it before you have  
5 asked your questions and gotten responses to them? So that  
6 we would have to do it on the basis of what is an incomplete  
7 document.

8 ADAMS: That is a good question. You have to make  
9 your decision on what to do based on the information that is  
10 on the record, and if the case is that the announcement or  
11 the opportunity for a hearing occurs before the RAI process  
12 has started or has been completed, you will have to make a  
13 decision based on what information is out there.

14 One thing we can look into is maybe holding off on  
15 that notice until we are further along in the process but I  
16 can't guarantee if we can do that tonight. That is  
17 something we would have to look into. That is a legal  
18 question.

19 FULLER: This plan as proposed includes a lot of  
20 different things. Some are major thing<sup>s</sup>, some are minor  
21 things, and the plan states that a number of the things in  
22 it can be changed either with or without internal procedures  
23 to GPU.

24 Sometimes they have to go through a more formal  
25 process but what basically with the approval of this plan is

1 set in stone without GPU coming back to the NRC for approval  
2 of a change and what can be changed at any time.

3 ADAMS: I think I understand your question.

4 I am going to have to defer. Bob, have we decided  
5 yet what attributes of the license termination plan would  
6 need a license amendment to change once we approve the plan  
7 or is that something we are still working on?

8 NELSON: Bob Nelson, with the NRC.

9 It is really part of the review process. The  
10 licensee proposes in their plan and we review that and  
11 decide what can be changed without our prior review so that  
12 is still in the process.

13 If you have some specific comments on that we  
14 welcome hearing them.

15 FULLER: The outbuildings were cleaned up with an  
16 earlier standard that was used in terms of release criteria.  
17 Are the standards that are being used at this time more  
18 strict, less strict? Does what was done before meet the  
19 current standards?

20 ADAMS: ~~How~~<sup>^</sup> the standards used to be a Regulatory  
21 Guide for contamination and radiation fields and now the  
22 release criteria are based on what we call pathway analysis.

23 NALLUSWAMI: I'm sorry?

24 ADAMS: The question was how the release criteria  
25 in Reg Guide 1.86 and the 5<sup>micro-R</sup> per hour compare to the 25

1 millirem pathway that we are now using. Are the old release  
2 criteria more stringent, less stringent?

3 NELSON: Bob Nelson again with the NRC. I think  
4 in almost all cases with the radionuclides that we are  
5 concerned with here, the release criteria in 1.86 and the  
6 dose limit are significantly less than the release criteria  
7 that would be applicable for the 25 millirem dose standard,  
8 to meet the 25 millirem dose standard?

9 FULLER: Less strict or lower?

10 NELSON: Lower. 1.86 is lower, more strict.

11 FULLER: The list of remaining tasks in the plan  
12 doesn't include removal of the dome. As a specific  
13 question, can GPU change their mind about whether that would  
14 be done beforehand or is it one of the things that you would  
15 not allow them to change?

16 NELSON: What was the question again?

17 ADAMS: The way the plan is written now, it  
18 assumes that the dome remains through license termination.  
19 GPU has in the past spoken of taking the dome down and then  
20 doing license termination before taking the dome down first.

21 Is that something that they could change without  
22 going through a regulatory process with the NRC?

23 NELSON: I won't give you a firm answer but the  
24 answer is probably yes. If the dome has been decontaminated  
25 and they have completed their final survey and they can

1 demonstrate that it is clean then unless there was some  
2 impact that we had identified during our review it is likely  
3 that they could take the dome down prior to license  
4 termination.

5           Again, don't take that as a firm answer. It's  
6 still something we have to look at as part of the change  
7 process.

8           ADAMS: Anyone else have any questions?

9           THOMPSON: Hearing none --

10          ADAMS: Hearing none, you are back up to bat.

11          FULLER: One of the things in the plan is that  
12 they set up different classes of things for survey -- Class  
13 1, 2 and 3, and they suggest that they would use the <sup>50.59</sup>~~50.50~~  
14 process for changing something from a higher class to a  
15 lower class.

16           Is that information going to be available to the  
17 public for its review at some point and will the public  
18 learn about that before the license is terminated?

19          ADAMS: Let me address 50.59 reviews in general;  
20 50.59 is a regulation that allows licensees to make changes  
21 to the facility as described in the safety analysis report  
22 to procedures described in the safety analysis report and  
23 allows licensees to conduct tests and experiments not  
24 described in the safety analysis report if the change to  
25 procedure or test or experiment does not involve what we

1 call an unreviewed safety question.

2 An unreviewed safety question is what the licensee  
3 is going to do create a new type of accident, is what the  
4 licensee going to do make an existing accident worse, is  
5 what the licensee is going to do change the basis in a  
6 negative -- that is the basis of a technical  
7 specification -- I am paraphrasing the regulations very  
8 liberally.

9 We can open up the book and read it directly to  
10 you if you want, so that is basically what the 50.59 process  
11 is. Because the license termination plan becomes a  
12 supplement to the safety analysis report the regulations in  
13 50.59 apply, so that is the beginning.

14 Will 50.59 apply? The question is if the licensee  
15 can successfully go through that review, yes. How does the  
16 NRC find out about these changes? There is a requirement in  
17 the regulation that the licensee submit a periodic report of  
18 changes they have made under 50.59 and those changes are  
19 looked at by Tom as he does inspections, so that is the  
20 process.

21 How would you find out about this? The periodic  
22 reports required by the regulation are public documents.  
23 They <sup>go</sup> do into the public document room. Any member of the  
24 public has access to them.

25 PITTIGLIA: Larry Pittiglia, NRC.

1 I think the issue you raised was really related to  
2 Class 1, Class 2 and Class 3 areas. Certainly going from a  
3 Class 2 or Class 3 to a Class 2 area we would not have any  
4 problem with it because as the survey is conducted they may  
5 determine or find additional contamination by MARSSIM and  
6 the plan they are required to do some additional survey  
7 work, and of course moving into another area increases the  
8 classification and the amount of investigation required.

9 The question of taking, say, something from a  
10 Class 1 and reducing it to a Class 2 area, and the Class 1  
11 classification for example may well be based on historical  
12 site assessment and available information, certainly that  
13 would be something that as we go through and review the  
14 process and as we approve -- you were asking what are  
15 specific areas of concern or things that we are concerned  
16 about -- and certainly highly visible things like the DCGLs  
17 and the downgrading of a classification may be something  
18 that we will specifically -- may address in the changed  
19 conditions.

20 It would be hard for me to understand the basis  
21 for going from one classification to another, meaning  
22 reducing it, unless there was just a major mistake in a  
23 historical site assessment.

24 I don't know if that is any help to you.

25 ADAMS: Can I add -- that was my next point.

1 There's other things that the NRC may decide are technical  
2 specifications, and no matter what the answers are that  
3 50.59 questions, something that is a technical specification  
4 or license condition can only be changed by license  
5 amendment, so if <sup>a</sup> change like that becomes one of the items  
6 that becomes a technical specification or license condition,  
7 then the 50.59 process would not apply to that change. It  
8 would have to be approved prior to the change by NRC.

9 Does that answer your question, between the both  
10 of us?

11 FULLER: Somewhat. It is certainly an encouraging  
12 answer. I mean the plan as presented says that they would  
13 use the 50.59 process to do this.

14 The plan also speaks of the use of professional  
15 judgment. That is a question for them -- sorry.

16 The plan outlines an \$8 million trust fund  
17 deficit, and I know I have asked this question a number of  
18 times, as to how the NRC is planning to deal with this  
19 deficit in this case.

20 ADAMS: I think that that is an issue that was  
21 under review and will be reviewed as part of the license  
22 termination plan review and resolution will be reached.

23 MARSH: How will they know the answer to that  
24 question? Will that be something that we put in the safety  
25 evaluation or something that --

1 ADAMS: Part of what we review as part of the  
2 license termination plan are the financial arrangements, and  
3 I believe as part of your SER you will address that issue.

4 ~~PITTIGLIA~~ <sup>Pittiglio</sup> Larry ~~Pittiglia~~ <sup>Pittiglio</sup> again.

5 Yes, the updated site specific cost estimate, and  
6 if you go back and look at NUREG-1700, one of the reasons  
7 why we do ask for an updated, detailed site specific cost  
8 estimate for the remaining activities is to look at the  
9 funding that is available and to see if there is a shortfall  
10 and what are the mechanisms to put in the money to meet the  
11 remaining decommissioning costs.

12 When we make a finding that approves this plan,  
13 those items will be addressed to our satisfaction or the  
14 plan won't be approved.

15 So I know you are concerned about the deficiency.  
16 As we go on with the detailed review, we are going to look  
17 at that. We are going to look at the commitment on the  
18 funding mechanisms to provide that money to complete the  
19 decommissioning.

20 FULLER: One final thing. A part of the 50.59  
21 process that isn't clear that whatever it is used for, and  
22 that is whether -- you spoke of the reports being available  
23 to the public. I assume that is the inspection report that  
24 basically says it was looked at?

25 ADAMS: Well, let me clarify that. There's two

1 types of report. 50.59(b)(2), I will read the regulation,  
2 says, "The licensee shall submit a report containing a brief  
3 description of any changes, tests and experiments including  
4 a summary of the safety evaluation of each. The report may  
5 be submitted annually or along with the FSAR updates as  
6 required."

7 So it is a separate report like an annual report  
8 like they submit now. It is a separate 50.59 report that  
9 gets submitted annually to 50.59 changes. It could be part  
10 of the annual report but it is annually submitted, so that  
11 is how the information gets on the public docket.

12 How the NRC looks at that information is through  
13 the inspection process and that would be something Tom would  
14 look at as he goes through the inspection.

15 DRAGOUN: I would like to add something to that.  
16 Tom Dragoun, NRC.

17 Keep in mind that the classification of areas is  
18 designed to focus licensees on areas most likely to be  
19 contaminated and to put less emphasis on areas that were not  
20 contaminated, but as they get into the survey, the final  
21 survey, they are going to get information that supplements  
22 what they, the information that they had as part of their  
23 site characterization.

24 So the 50.59 process is a way for them to consider  
25 the new information that they got and to classify an area

1 either more stringent or less stringent based on the latest  
2 information.

3 But also keep in mind that there is an overall  
4 quality assurance on this that they have to submit a final  
5 survey results, and in the final survey results when they  
6 prove that they met the 10 CFR 20, Subpart E criteria -- in  
7 other words the dose is 25 millirem or less under the  
8 scenario that they choose, that there is a review that  
9 occurs at that point by the NRC and that review would  
10 include all of the changes that were made in the survey as  
11 they were doing the survey and as they gather more  
12 information, as they make changes.

13 For instance, they found this tunnel outfall, so  
14 they had to reclassify an area because of that information,  
15 so the end result is they have to meet certain criteria and  
16 we want them to focus on the areas of greatest  
17 contamination, the areas most likely to cause a problem in  
18 exposure after release of a site. Does that help?

19 FULLER: Well, I understand that part. My  
20 concern, and perhaps it should be expressed later, is a  
21 comment rather than a question. What I was trying to get  
22 clear is that this appears to not be part of the public  
23 process and so the public can only comment on it, so to  
24 speak, if it finds out about it, long after the fact.

25 That is a concern, so I guess that should come

1 later.

2 DRAGOUN: Yes. We do have the in-process reviews.  
3 There is an annual report required where they summarize all  
4 of the 50.59 changes that they made.

5 Also, there is a 50.82 requirement which says they  
6 cannot do anything that would jeopardize the eventual  
7 release at a site, so the 50.59 has to be supplemented by  
8 that requirement, but you're right. The public doesn't get  
9 to see it nor do we get to see it in process, but we  
10 certainly get to see the final result, and if the final  
11 result is acceptable then you have to give them credit that  
12 they made the right changes.

13 ADAMS: You are concerned with a reclassification  
14 that would result in an area being looked at less closely,  
15 less stringently -- unless I didn't get the beginning of  
16 that -- that is what your concern is?

17 FULLER: That is what I am concerned with.

18 ADAMS: And what I think I am hearing you say is  
19 that is something you would like to see the NRC maybe make a  
20 license condition versus a change that the licensee can make  
21 without NRC approval?

22 FULLER: Right. That's certainly true. I would  
23 also however like the public to actually know what the basis  
24 of any 50.59 thing that happens and hear about it in a  
25 timely manner.

1 One other question, and I am glad you reminded me.

2 The tunnel in the plan as submitted is not  
3 classified in any way. The note says basically that they  
4 don't know enough about it yet.

5 Can you folks approve this plan before those areas  
6 are classified in some way or another?

7 ADAMS: Part of the site has not been classified  
8 as yet. There is a note in the LTP that says they don't  
9 know enough about it yet. Can the plan be approved without  
10 those areas being classified?

11 <sup>PITTIGLIA</sup>  
<sup>Pittiglio</sup> PITTIGLIA: No. What will happen -- I'm sorry.  
12 Larry Pittiglia.

13 What will really happen for the areas that are not  
14 classified at this time, you will see in our REIs we are  
15 going to go back to them and say "x" area was not  
16 classified, please provide a classification. We are not  
17 going to approve the plan without a classification.

18 Now MARSSIM, as you will know, has many  
19 classification areas including unaffected or <sup>non-impacted</sup> ~~nonimpacted~~  
20 areas, but we will make sure that the MARSSIM classification  
21 process is applied to all of the areas. We will not approve  
22 the plan without having an area classified.

23 Now you may not agree with the classification but  
24 the area will be classified.

25 ADAMS: Larry, do you want to do the slide?

Pittiglio

1 PITTIGLIA: Yes. You asked the question regarding  
2 the financial. These were -- basically I brought this  
3 slide. You are not the first one, believe it or not, to  
4 have asked me this question. Of the many license  
5 termination issues, certainly funding is a question that  
6 comes up.

7 When we conduct our review these are the things  
8 that we look for. I mean we go in and we look at the  
9 estimate of the remaining decommissioning costs to make sure  
10 that they are reasonable. We compare the estimated costs  
11 with the funds that are present, document how the instrument  
12 will be increased if necessary, if there was something that  
13 changes, confirm that the financial instrument required is  
14 funded to the amount of the estimate, and if it isn't, if  
15 there is a deficit, the LTP must indicate the means for  
16 assuring that adequate funding will be available.

17 I think that pretty much kind of hits on the  
18 points that I identified to you earlier, but if you go look  
19 at NUREG-1700 in a nutshell that is a summary of how<sup>we</sup> conduct  
20 our review and those are the things we need to resolve  
21 before we can make a finding on the LTP.

22 FULLER: Thank you very much.

23 ADAMS: Any other questions on the NRC  
24 presentations? Why don't we take a 15-minute break and come  
25 back at 8:30 and during the break the NRC Staff will be more

1 than glad to talk with you and answer any additional  
2 questions or comments you might have.

3 [Recess.]

4 ADAMS: Are we ready? I would like to turn the  
5 podium over to Joe Kuehn, who is the Vice President of the  
6 Saxton Nuclear Experimental Corporation and the Program  
7 Director for the decommissioning of Saxton. Joe?

8 KUEHN: Thank you, Al. I will just take a minute.  
9 I would like to add my welcome to everybody to the welcome  
10 that you got from the Bedford County Commissioners Office  
11 and the Nuclear Regulatory Commission.

12 This is really not our, GPU Nuclear's, meeting.  
13 It is the public's meeting and we are here to answer  
14 questions, which I am sure we will have the opportunity to  
15 do when we finish our presentation.

16 That presentation is going to be done by Bob  
17 Holmes, to my right. Bob is a member of our Decommissioning  
18 Engineering Group in GPU Nuclear and works routinely and  
19 full time on the SNEC Project, so he's very knowledgeable as  
20 to what we have done, what we are doing and what we are  
21 about to do, so without further ado, I will turn it over to  
22 Bob and we'll certainly be here to answer questions when Bob  
23 finishes. Thank you.

24 HOLMES: Good evening everybody. It's Bob Holmes,  
25 H-o-l-m-e-s, with GPU Nuclear. I would like to welcome

1 everybody. I see a lot of familiar faces and better yet I  
2 see a few unfamiliar faces, and that is always a good sign.

3 Copies of the handout that I have up on the board  
4 are available on the table if you didn't get one. I know  
5 the extreme angle over there makes it tough for you to see  
6 the screen, so if you want to move over, feel free.

7 I would like to point out two people that haven't  
8 been mentioned yet that are critical in our process. The  
9 NRC mentioned their interest in an open process and  
10 communicating with the public. GPU has the same interest as  
11 the Saxton Project.

12 A couple of people who are key to that are Sylvia  
13 Morris, to my left, standing, in the lovely knee brace over  
14 here. Sylvia is a full-time communications representative  
15 for the Project. She is based on site and is available by  
16 phone. Her number is in several of the handouts that are  
17 available over there for public relations materials.

18 Another person who is a key player in our Project  
19 is Roger Granlund from Penn State, sitting over here  
20 directly in front of the podium. There is a brochure or a  
21 handout on the table that describes Roger's role in the  
22 Project as the Independent Inspector representing Bedford  
23 County and the Commissioners in the decommissioning process.  
24 I wanted to mention those folks also.

25 .After about a two-year construction period,

1 Saxton's facility reached initial criticality in 1962, and  
2 that is really a milestone that establishes the beginning of  
3 plant operations for Saxton. Originally intended to operate  
4 in a short scientific and research program and operated for  
5 10 years and finally shut down in May, 1972, as the NRC  
6 mentioned, from 1972 to 1974 the spent nuclear fuel was  
7 removed from the site, sent to an Atomic Energy Commission  
8 facility in Savannah River, South Carolina, and the facility  
9 was placed in a condition very similar to what today is  
10 defined as "safe store" -- it was stabilized, the facility  
11 was locked and periodically monitored to make sure the  
12 conditions hadn't changed.

13           It really stayed that way until the late 1980s  
14 when from 1986 through 1992 these outbuildings that were  
15 mentioned previously in one of the question periods were  
16 demolished after being decontaminated. We used the term  
17 "remediated" and I have that in my presentation. That  
18 shouldn't confuse anyone. It simply means we have removed  
19 the majority of the radioactivity. We have stabilized the  
20 facility and any other hazardous materials that might be  
21 present and in this case we went ahead and demolished those  
22 buildings.

23           After a very extensive survey process and the  
24 submittal of a report to the Nuclear Regulatory Commission,  
25 they then approved that license change and we went ahead and

1 demolished the buildings.

2 It was also mentioned that in 1994 there was a  
3 soil remediation campaign. We shipped about 30 rail car  
4 loads of soil to a facility in Utah for disposal. Some of  
5 that soil remediation is ongoing and will be continuing  
6 during the termination phase and decontamination phase we  
7 are in now.

8 Perry Carmel is the Site Supervisor. He is here  
9 tonight. His folks are continuing that effort onsite along  
10 with other remediation processes.

11 As was mentioned, in April, 1998 the license  
12 amendment was authorized and we started really fullscale  
13 decommissioning on the site. That license amendment  
14 authorized us to undertake the major activities necessary to  
15 terminate the license by decontaminating the site, removing  
16 those components that were radioactive.

17 As was mentioned, again in February, 2000 we  
18 submitted our license termination plan for review and  
19 approval. It is a fairly lengthy process, as the NRC has  
20 already described, and I am going to touch very briefly on  
21 some of those processes.

22 Go ahead, Art.

23 Very briefly, in this slide and in your handout,  
24 probably more visible in your handout, in the upper left  
25 corner you see the facility as it used to be, kind of a

1 promotional photo really that was taken shortly after  
2 startup. The containment vessel is the large central dome.  
3 The control and auxiliary building here in the foreground --  
4 that was an on grade structure. That was one of the  
5 structures that was demolished in 1992. You see a tunnel  
6 that is running here underground. You just see the surface  
7 of it, a tank, and a stack for release, and then this was a  
8 radioactive waste processing building.

9 All of those facilities were previously released  
10 and demolished, leaving onsite principally just this large  
11 containment vessel here which is 50 feet in diameter and 106  
12 feet in total height. Now about half of that is  
13 underground.

14 You see a later photo that shows the overall site  
15 here as it was in 1985, just before the start of or  
16 resumption of decommissioning activities.

17 The tunnel that several people have mentioned this  
18 evening -- I know Mr. Fuller asked about it and Joe Kuehn  
19 answered some questions later about it during the break --  
20 that tunnel runs on the other side of the substation this  
21 way, and then makes a turn toward the river in this  
22 direction. The river is in the foreground. We are up on  
23 the mountain on the opposite side of the river taking the  
24 photograph, so that tunnel runs from here on this side of  
25 the substation and then under the end of the substation out

1 toward the river. The majority of that tunnel is pretty far  
2 under the ground.

3 Then a later photo in '97 just prior to the start  
4 of operations as the site appears today -- of note, those  
5 outbuildings have been demolished and we erected a structure  
6 that we called the decommissioning support facility to help  
7 us with the decommissioning process.

8 We package waste materials in there and it helps  
9 our people dress out and get into the building and get them  
10 back out in an efficient manner.

11 Of course, the predominant structure that you see  
12 is this containment vessel behind that decommissioning  
13 support facility.

14 I will address later one of Mr. Fuller's questions  
15 about out plans for the containment vessel, and that might  
16 clear that up. I hope it clears it up, and I'll answer any  
17 questions that you have toward the end.

18 Again, I mentioned the LTP was submitted in  
19 February, 2000 and the review is in progress. An important  
20 point that has been mentioned, we expect and we will receive  
21 a request for additional information by the NRC that will be  
22 a series of questions to clarify what we have said in the  
23 LTP or to ask for additional information.

24 We will be given a certain period of time to turn  
25 around those answers and submit that and then likely it will

1 result in a revision to the license termination plan prior  
2 to approval.

3 It was also mentioned that the license amendment  
4 process is how the facility is actually authorized to be  
5 terminated. We have a formal license through the Nuclear  
6 Regulatory Commission to conduct activities on the site and  
7 carry out the decommissioning. Right now that license would  
8 stay in effect unless there was an amendment to terminate it  
9 and that is this process that Mr. Adams and others from the  
10 NRC described earlier tonight.

11 There is an opportunity for comment on the  
12 amendment process as was described and a lot of these  
13 documents are posted on electronic sites where you can view  
14 them.

15 HOLMES: One of the things we're doing now,  
16 because if we wait for approval, we wouldn't be ready to  
17 implement the license termination plan, is to develop these  
18 final status survey implementing procedures.

19 You'll see throughout the plan, this term, final  
20 status survey, and the abbreviation, FSS. That's the  
21 process through which we'll actually verify the site meets  
22 the termination criteria that was mentioned before.

23 And that termination criteria is very important to  
24 our process, and a very important thing to understand. We  
25 plan on releasing the site to the standard of less than or

1 equal to 25 millirem per year, and that's a standard above  
2 the background that's received by people in the area.

3 But there are two important considerations beyond  
4 that 25 millirem number which is the federal standard.  
5 That's what the regulator, in this case, the NRC, holds us,  
6 the licensee to in order to release the site for  
7 unrestricted use.

8 And that's very important. There are several  
9 other ways we could release the site in a restricted fashion  
10 at higher levels, but we've chosen to release it for  
11 unrestricted use.

12 What that means is just what it says; after  
13 license termination, there would be no restrictions on the  
14 part of the NRC on future use of that site.

15 We've decided to meet several additional  
16 requirements, one that's a requirement of the law that  
17 really was just touched on, and that's ALARA. I spoke with  
18 some people at the break about that.

19 ALARA is a term that stands for As Low As  
20 Reasonable Achievable. The regulation and the Company's  
21 policy requires us to remediate the site to a level that is  
22 as low as reasonably achievable.

23 Now, reasonably brings into account a lot of  
24 considerations in terms of total risk. It does bring in a  
25 consideration involving cost, and so we will actually exceed

1 or better this 25 millirem per year number.

2 Now, an important point noted on the slide, that's  
3 all pathways. What that means is, that's all the possible  
4 routes of exposure that an individual might have.

5 And in this case, it's a family living on the site  
6 in many cases, and they receive exposure through many  
7 different pathways. So we're saying that the site would be  
8 less -- a person living on the site in generally the worst  
9 conditions, would receive less than 25 millirem per year  
10 above background as a result of being on the site.

11 But another point that I'd like to make is that  
12 one of those important pathways is groundwater. Obviously,  
13 I could sink a well on the site, I could drink that water, I  
14 could cook food in it. I could irrigate my crops with it, I  
15 could water animals that I might later eat with it.

16 And so groundwater is an important pathway, and  
17 we're going to limit potential exposure from groundwater to  
18 equal to or less than 4 millirem per year. We have  
19 committed to that in the license termination plan.

20 As we presently see it in the schedule, and as  
21 shown on the slide, we are planning on license termination  
22 April 30th, 2001, so just over a year from now.

23 It's important to note -- and this will play into  
24 my remarks relative to Mr. Fuller's question -- that doesn't  
25 mean we're done at the site at that point. That means the

1 site has been released from its license and we can then  
2 restore the site.

3 And that would be our plan. After site  
4 termination from the license, we would then demolish the  
5 containment building and other structures and move forward  
6 with that process, following termination.

7 Go ahead, Art. I'd like to mention -- and I'm not  
8 going to repeat what was said earlier, but I'll mention some  
9 of the agencies we interface with from a regulatory  
10 standpoint.

11 Obviously, the Nuclear Regulatory Commission and  
12 many of the representatives are here today, and they have  
13 discussed the applicable regulations.

14 Of note for us in the process being discussed  
15 today, 10 CFR 50.82, which is a section in the book that was  
16 shown earlier, describes this license termination process  
17 and the effort we have to go through to demonstrate we meet  
18 the criteria.

19 In our case, also the U.S. EPA, is one of the  
20 regulators that we deal with periodically. Of course, they  
21 regulate hazardous, toxic wastes, impacts to the  
22 environment, and so we interface with the EPA as necessary.

23 And it was mentioned earlier from Tom Dragoun, our  
24 inspector, that the Department of Transportation, in this  
25 case, the U.S. Department of Transportation, oversees many

1 of the shipments.

2 OSHA is an important aspect for maintaining  
3 industrial safety. Again, the NRC has a memo in which they  
4 conduct some of those inspections. And also in  
5 Pennsylvania's case, the Pennsylvania Department of  
6 Environmental Protection, the Bureau of Radiation  
7 Protection, is another one of our periodic regulators that  
8 we've interfaced with. In fact, one of their  
9 representatives is here tonight, Michael Murphy.

10 They have a group of people in Harrisburg and at  
11 other locations who periodically stop at the site, view our  
12 progress, with particular interest in rad shipments. And  
13 we've briefed their department on our plans, periodically,  
14 also.

15 Our effort basically is to keep these regulatory  
16 agencies informed, to ensure they're aware of our  
17 activities, and answer any of their questions. Of course,  
18 they all conduct periodic inspections.

19 I'd like to get into the actual license  
20 termination plan contents. A couple of information sources  
21 were mentioned earlier.

22 This is the actual license termination plan. It's  
23 a pretty big document. In 20 minutes, we're not going to  
24 discuss it with any specificity whatsoever.

25 It is available now on the website for the NRC.

handy  
1 That's a pretty handy reference. It's a large document, so  
2 when you try to download it, it's going to take you some  
3 modem time on the computer.

4 It's also available in the Saxton Library, and in  
5 addition, I think we've supplied each of the Citizens Task  
6 Force members with a copy, so there are quite a few members  
7 of the Citizens Task Force who have this and that's  
8 available, I'm sure, from them also.

9 The sections of the LTP are listed here in the  
10 handout. General information is basically as stated. It  
11 provides an overview of the plan, a little bit of a summary  
12 of what's going to be contained within.

13 Section 2 is very important, as was mentioned by  
14 some NRC representatives. Section 2 is characterization.  
15 This is how we currently see the site.

16 Here is the site from a radiological perspective,  
17 principally, as we know it today. Now, it's a summary.

18 The actual characterization report is thicker than  
19 this document, so we've summarized much of that  
20 characterization data, put it in Chapter 2, and if you were  
21 look through that, you'd find an awful lot of tables. So  
22 the summary basically identifies the site criteria and lists  
23 where we are in the process and what the site is like.

24 It has fed these area classifications. You have  
25 heard tonight, these impacted and non-impacted areas,

1 Classes I, II, and III. It's a fairly confusing process.

2 But they're shown on this map behind Art Paynter  
3 who is ~~slipping~~ <sup>bringing</sup> the slides for me. And I encourage you to  
4 take a look at it after the presentation.

5 What we are required to do and what we have done  
6 is preliminarily break the site down into area  
7 classifications by potential impact by radiological  
8 contaminants.

9 For instance, on this map, the yellow areas are  
10 what are known as Impacted Class I; in other words,  
11 radiological contaminants have impacted it; they are Class I  
12 which is the highest level, meaning that they will receive  
13 the greatest scrutiny and survey.

14 They are then surrounded by other areas; the  
15 magenta is a Class II Impacted, blue is a Class III, and  
16 everything else is preliminarily classified as non-impacted;  
17 in other words, our operations have not impacted it to a  
18 measurable degree that we would need to survey it.

19 Another important point in Section 2 is background  
20 data. We cannot release the site to this standard without  
21 comparing it to the background in the area. The 25 millirem  
22 is a very low standard.

23 You heard Sam mention earlier what the background  
24 to an individual in the area is. We're a small fraction of  
25 that background.

1           So when we compare the site to background, which  
2 fluctuates; it changes; we need to have a good idea of what  
3 that is. And we've sampled extensively, the soil in a  
4 surrounding area from 10-15 miles to establish background.

5           And we'll be taking samples and surveys of  
6 structures and materials that are similar to those in the  
7 site, but which have not been affected by its operations.

8           We list the instrumentation and methods that were  
9 used in there for characterization, and then we draw some  
10 conclusions to help support these area designations.

11           Now, area designations are actually discussed in  
12 detail in Section 5. I think that as Mr. Fuller pointed  
13 out, for instance, in Section 5, the tunnel is listed, but  
14 has not yet been classified.

15           Section 5 is where that table is; it's Table 5-2,  
16 and that kind of explains our map up here.

17           Section 3 is really quite small, only a few pages.  
18 It discusses the remaining dismantlement activities.

19           What physical work remains onsite? That's really  
20 what is discussed in that Section; what work do we have to  
21 do to finish up the process?

22           Now, the question was asked during the section as  
23 to what our plans were with the containment vessel dome, the  
24 large structure remaining onsite.

25           And it's our intention to first release the site,

1 achieve free release and license termination, and then  
2 demolish that structure. In other words, we would survey it  
3 while it's largely intact, after being remediated.

4 The license would be terminated, and then much as  
5 we did with those outbuildings, using a similar process, we  
6 would demolish it through conventional demolition to below  
7 grade.

8 And so in the end, you wouldn't see that  
9 containment vessel dome there. By the time we're all done,  
10 the dome would be gone.

11 In fact, as was pointed out to me during the  
12 break, regardless of what the license termination plan says,  
13 there's a license requirement for that dome to be there.  
14 And so until the license is terminated, we can't remove the  
15 dome without an amendment, and that's not our plan.

16 Remediation plans are, again, a fairly small  
17 section, just a few pages, because it reiterates what's been  
18 stated in the PSDAR and our decommissioning plan.

19 It talk~~s~~ about our decontamination methods. How  
20 will we finish decontaminating the remaining contaminated  
21 areas, and what areas are yet to be remediated? What areas  
22 do we have left to do?

23 Now, a very large section, Section 5, is the final  
24 status survey plan as shown up here. It's a very large  
25 section. It's very complicated.

1           It really wraps up what several of the NRC  
2 presenters talked about as this MARSSIM document.

3           That's an interagency document that the Department  
4 of Energy, the Department of Defense, the Environmental  
5 Protection Agency, and the Nuclear Regulatory Commission  
6 have agreed on is an appropriate survey method to do what we  
7 want to do.

8           And it's a very large document, easily as large  
9 as this. In fact, I think someone had a copy of it with  
10 them earlier. It's really the bible at this time as to how  
11 the conduct these surveys.

12           We have taken those MARSSIM requirements and then  
13 rolled them into this section of the survey plan in summary.  
14 It talks about post-remediation surveys; in other words,  
15 it's not just a final survey that we conduct, but when we're  
16 done decontaminating an area, we go in and verify that we've  
17 achieved our criteria before we start a final survey.

18           So we know beforehand, that the area is ready to  
19 be surveyed. It talks about survey design and more  
20 importantly, quality assurance.

21           There will be independent representatives of our  
22 company who are verifying that we're doing the job  
23 appropriately, and more importantly, they will be taking  
24 duplicate measurements and readings and samples along with  
25 us, to run a check to make sure we're doing our job

1 properly.

2 And the NRC also mentions some checks they'll do,  
3 and I'll touch on those a little bit later.

4 There is a section on data collection. As you can  
5 imagine, there is a tremendous amount of data.

6 When we released those outbuildings, we surveyed  
7 almost 8,000 square meters of building surface, and we had  
8 some 75,000 measurements that were taken in those  
9 outbuildings, a tremendous amount of data.

10 And so this section describes how we'll handle  
11 that data, how we'll collect it, and how we're going to  
12 treat it statically, and how we're going to record it.

13 And then there is an assessment of that data.  
14 You're required to not just report it in raw form, but draw  
15 some conclusions about it. What does the data tell us?

16 Does the survey area meet its release criteria?  
17 Did I meet my goal and my requirement for the NRC? If not,  
18 I go back and repeat this process.

19 And then finally, there are the survey results.  
20 What do I do with those results?

21 And I included -- although I'm sorry that it's  
22 black and white in your handout, I'll throw a little color  
23 into our presentation tonight. Here are a couple of survey  
24 methods.

25 On the upper left, you see a technician who is

1 doing scanning. We would take an open land area and scan  
2 with a sensitive instrument, to ensure we didn't miss  
3 radioactivity in addition to our samples.

4 Now, in some cases today, that might be done in an  
5 automated fashion. You can see in the upper right, this  
6 Kawasaki Mule, as it's called, has been outfitted with some  
7 automated equipment, and a global positioning system on this  
8 stock.

9 And you can drive over large land areas and very  
10 reliably, very accurately, in a very sensitive manner,  
11 gather large amounts of data in a short period of time.

12 And it's likely we will employ technologies like  
13 this to scan some of these areas. You'll notice on our map  
14 over here, we've got an awful lot of magenta area to survey.  
15 That's some 28 acres of affected area.

16 It's difficult to walk over that. It's undulating  
17 terrain. It's difficult to survey that by hand, obviously  
18 very labor intensive. So we may involve some automated  
19 processes.

20 In the lower left, you see a technician who is  
21 taking, in this case, a fixed point measurement with an  
22 instrument that would likely be employed in our surveys and  
23 has been in others. Again, those may be supplemented with  
24 some large area surveys. You can see in the lower right, a  
25 gentleman who is taking a very similar type of a

1 measurement, in this case, a scan, and he's running an  
2 instrument over a large open survey area, and it was a  
3 parking lot in this case.

4 So there are some different techniques that we use  
5 to accomplish these surveys. Not shown here but of an  
6 important note are samples.

7 In addition to these surveys with instruments, the  
8 technicians will be involved with taking soil, water,  
9 sediment samples, for example, and in some cases, concrete,  
10 and will analyze those in a laboratory setting in which we  
11 can achieve our desired sensitivities.

12 It's very difficult to survey directly in the  
13 field, and so we'll take samples, prepare them, and run them  
14 through a laboratory process.

15 Go ahead, Art. The next section that I really  
16 wanted to talk about was this compliance with the  
17 radiological criteria, Section 6.

18 This is demonstration through what somebody  
19 mentioned was dose modeling. This criteria of 25 millirem  
20 is not something I can go out with a meter and measure.

21 I don't have a meter that tells me I'm at less  
22 than 25. I have to gather all this data, and in our case,  
23 put it in a computer model, in a dose assessment regimen,  
24 and determine that I've met it, verify that I've met it.

25 That section describes how we're going to do that.

1 In our case, we're going to use a code called RESRAD. It's  
2 a Department of Energy code that's becoming quite common  
3 throughout the industry for this.

4 That's tied to the next section on dose assessment  
5 in which we verify we've met our termination criteria of 25  
6 or less.

7 And, finally, the other thing that I mentioned,  
8 which was the ALARA analysis. We're required to remediate  
9 the site as low as reasonably achievable. It's not only our  
10 policy; it's a regulation.

11 Finally, there is an update on the site-specific  
12 decommissioning costs, and just to give you an idea of that,  
13 it's currently \$35.5 million. That's really from the start  
14 over a decade ago until now. That's not just the current  
15 three-year effort.

16 And then there is the supplement to the  
17 environmental report, all of one page. Previously, we  
18 submitted a rather large environmental report describing the  
19 site. All this does is talk about any changes to that, and  
20 there were a couple of very minor changes in there.

21 We talk about release criteria changes, person-rem  
22 dose to the workers, and we added the discharge tunnel  
23 presence in there as examples.

24 As a summary, we're going through this review and  
25 approval process. It's a license change for us.

1           We expect a request for additional information. I  
2 can about guarantee it.

3           And there are going to be a number of questions  
4 that we'll respond to over a period of time, and will likely  
5 result in a revision to the plan.

6           Following this approval, we will complete our  
7 final status survey, and that will be the data that's used  
8 to verify that we can terminate the license.

9           We'll have to demonstrate compliance with the  
10 release criteria and we'll do that through a very formal  
11 report. It will be submitted to the NRC and we'll make it  
12 available to the public, I'm sure, through a couple of  
13 means.

14           And finally, I'll touch briefly on something that  
15 I think either Tom Dragoun or Mr. <sup>Pittiglio</sup>~~Pittiglia~~ mentioned,  
16 confirmation surveys on the part of the NRC. Our experience  
17 in the past with other sites and likely with us, the NRC,  
18 contrary to many other license activities, generally  
19 provides a confirmation of what we've carried out.

20           In this case, they usually hire a contractor, and  
21 I think they mentioned ORISE, that's the Oak Ridge Institute  
22 for Science and Education, based down in Oak Ridge,  
23 Tennessee.

24           That is one of their major charges in the  
25 industry. They do this on a routine basis. In fact, they

1 were here to verify the release of the outbuildings in 1991.

2 So, ORISE sent a team in and performed  
3 confirmatory measurements in that case, and it's possible  
4 that they will return for this project.

5 And that really concludes my overview. Again, it  
6 was a very brief presentation on a large document. I didn't  
7 get into any specifics, but in that timeframe, it would be  
8 difficult.

9 I encourage you to look it over, and if you have  
10 any questions, I'm sure we'd be happy to answer it, and the  
11 NRC has a comment period on the LTP.

12 KUEHN: Questions for us?

13 BRUNER: What kind of access is there on the  
14 Internet for the report? My name is Kevin Bruner with  
15 Bedford Net News. I just want to know what the website  
16 address is for the report, which you said was on the  
17 Internet.

18 HOLMES: I don't want to speak for the NRC. This  
19 is Bob Holmes, but it's nrc.gov, and you go to the  
20 decommissioning section in there, and all the documents for  
21 not only Saxton, but a lot of the other decommissioning  
22 sites are posted in there.

23 I think our LTP just went in a couple of weeks  
24 ago, if I remember right. And there is a handout on the  
25 table that has all the addresses.

1 KUEHN: Ernest?

2 FULLER: Ernest Fuller, with some questions.  
3 First, if I could ask the NRC one?

4 They have mentioned that they're going to be  
5 cleaning up to a four millirem standard for water. Assuming  
6 that's in the final plan, will you folks make sure that your  
7 whatever, surveying and -- will actually confirm that they  
8 have reached that, since it's not a standard that the NRC  
9 has?

10 And will you allow them to change that standard  
11 without going through a public NRC process, again, if they  
12 choose to do that at some point?

13 ADAMS: I think I'll start with the last question  
14 first. They talked about a commitment. Licensees can make  
15 commitments and they can withdraw commitments.

16 So the answer is, no, we would not hold them to  
17 that number. All we can hold them to is our regulations.  
18 So, I mean, that's the simple answer, that we hold them to  
19 our regulations.

20 If they choose to go beyond those regulations,  
21 that's fine. They use the word, commitment, and licensees  
22 can withdraw commitments at any time. So if the commitment  
23 doesn't become a technical specification, and my guess would  
24 be at this point that commitment would not become a  
25 technical specification.

1           FULLER: How about the first part of the question  
2 as to whether you would, assuming they don't change that  
3 commitment, will you inspect to it?

4           DRAGOUN: Yes. In other words, if their criteria  
5 formally run by the water pathway, then that's -- they're  
6 going to have to prove by their survey that that criteria  
7 was satisfied.

8           And when we verify it, we will verify the four  
9 millirem.

10          FULLER: Following up on that topic, the survey  
11 results that are produced, will be able to show the actual  
12 dose that remains as opposed to just if you meet DCGLs, you  
13 will theoretically be below 25 millirem, but will you do a  
14 calculation to show what the actual resulting dose is?

15          KUEHN: We will have to with our sample results  
16 and survey results, turn that in to an actual dose,  
17 calculated by our dose modeling, yes.

18          FULLER: The phrase, professional judgment, is  
19 used as the way you're going to decide how to deal with  
20 outlying data in your surveys. How do you plan to document  
21 how that professional judgment has been used?

22          KUEHN: MARSSIM itself -- and, incidentally, we  
23 just -- many members of my staff and the D&D group and site  
24 people attended a three-day workshop on MARSSIM, a lecture  
25 series, if you will, on working some actual problems.

1           MARSSIM gives you guidance on how you identify,  
2 through survey, outliers and what you have to do  
3 statistically with those outliers when you find them.

4           They may indicate you need to take more samples,  
5 change your area classification. There are a lot of things  
6 that happen.

7           So it's professional judgment, but it's also  
8 guidance given in MARSSIM for that kind of situation.

9           I think professional judgment, Ernie, that we're  
10 talking about, if I can try to describe it to you, is you've  
11 got technicians that have been trained to take surveys in  
12 the field, and they see an instrument that acts erratically  
13 and goes, you know, high towards the high end of the scale,  
14 and they're judgment, they need to determine through their  
15 professional expertise, what cause that.

16           Is it real? Is it something that happened? Did I  
17 bump the meter? What did I do? That's the kind of  
18 professional judgment we're talking about, is do we believe  
19 the reading? Do we need to confirm it with a different  
20 instrument? Those kinds of judgments have to be made.

21           FULLER: My question is, how do you document that,  
22 that use of professional judgment? How do you plan to do  
23 that?

24           KUEHN: Well, the documentation would be if you  
25 had an instrument that acted erratically in the field, you'd

1 probably do a calibration check on it, or a source check to  
2 see if it was responding correctly, and that would be  
3 documented that you did that.

4 And the survey instrument, by serial number and  
5 calibration date, is documented on the survey form, so you  
6 have an ability to trace each instrument, each reading, back  
7 to an instrument that's calibrated.

8 That's the documentation that's required for all  
9 the surveys we do, and sample analysis.

10 FULLER: Are you planning to have information soon  
11 about how to classify the discharge tunnel?

12 KUEHN: It depends on what you mean by soon?

13 FULLER: Before they ask their questions in  
14 September, say?

15 KUEHN: Oh, yes. We intend to get into the  
16 discharge tunnel to remediate and do the things we need to  
17 do, which includes classification, this summer on the  
18 discharge tunnel. We don't want winter to happen and we  
19 have to be in there with frozen water and all the rest of  
20 what we would be facing then.

21 FULLER: Did you consider the use of a combined  
22 residential/farming scenario, including the use of the  
23 buildings, the structures as they are left as a source for  
24 calculating the DCGLs?

25 KUEHN: By the buildings, you mean underground

1 after we leave, that somebody has to go back in or elects to  
2 go back in? Yes, that's one of the things we are  
3 considering in DCGLs.

4 FULLER: So it won't -- you actually won't be  
5 using a straight farming/residential-farming scenario?

6 KUEHN: That's right. We will go into those areas  
7 underground inside the containment vessel, for example, and  
8 do our surveys and the NRC, I assume, will confirm some of  
9 those surveys to our DCGL numbers before we backfill that  
10 area and can't get to it anymore. We will know before we  
11 backfill, what the DCGL situation is.

12 FULLER: Okay, but are those DCGLs going to be  
13 based on the building occupancy scenario only, which is a  
14 work scenario, or also include the potential for people  
15 living there?

16 KUEHN: Living underground? No, we don't consider  
17 -- and, Pat, maybe you can -- we don't talk about living  
18 underground. Go ahead Art. Art or Pat who developed these,  
19 can tell you more than I can.

20 PAYNTER: Yes, my name is Art Paynter, and I'm the  
21 Radiation Safety Officer. Ernest, there are two types of  
22 limits that we have established in the license termination  
23 plan. One is for surface contamination of structures.  
24 That's based on the NRC -- what we call defaults that were  
25 listed in the Federal Register.

1           With those defaults, then, we've modeled that  
2 using the D&D code for building occupancy for 70 years and  
3 come up with the other isotopes that weren't listed in the  
4 Federal Register.

5           The second part of that is for the soils and the  
6 surface contamination in the outside areas. We used RESRAD  
7 for that, using the residential/farming scenario. So there  
8 are two types of scenarios we used.

9           FULLER: But you didn't consider using a  
10 combination of those scenarios?

11          PAYNTER: No, because there are two different  
12 locations on the site.

13          FULLER: Are you folks planning to do any  
14 environmental monitoring at the site after the license is  
15 terminated?

16          KUEHN: We talked about that years ago now,  
17 Ernest, I think, rather than months. And we haven't decided  
18 what that will be or if it will be at this point.

19          And the reason that I say at this point that I  
20 don't know if we will, is because GPU Nuclear, for all  
21 intents and purposes, has no longer radiological control  
22 staff to rely on, to be able to do that.

23          We could contract for that kind of thing. There  
24 will be an oversight committee in place to oversee TMI-2,  
25 which will still belong to GPU until the finish of Saxton.

1           But once the license is terminated, of course, we  
2 have no requirement to any environmental sampling. Whether  
3 any is done or not or we decide to, we'll have to discuss  
4 between now and the time of license termination.

5           FULLER: Thank you.

6           KUEHN: One other thing that I wanted to allude to  
7 is that we talked about that containment vessel and when we  
8 take it down.

9           Keep in mind that when the license is terminated,  
10 and GPU still owns the land, as we will after license  
11 termination, that's then a GPU decision as to whether or not  
12 they want us to go ahead and cut the containment vessel  
13 down, dispose of it or do whatever we do.

14           So although our current intent is to restore the  
15 site, and that is, take that containment vessel down, GPU  
16 could decide between now and then that they don't want us to  
17 do that. And that would be as long as it was within the  
18 rules of the state land use and the rest of it. The NRC  
19 would be out of it at that point.

20           FULLER: Wouldn't that -- it would seem to me that  
21 if that's a potential scenario, that's one that you should  
22 use in figuring out what your DCGLs would be, instead of  
23 assuming that the thing isn't there and no one can live in  
24 it; that you would want a combination scenario of both  
25 farming and living in the -- you know, use of those

1 structures.

2 KUEHN: Well, that structure I'm talking about,  
3 now, just the containment vessel, the steel dome itself,  
4 above ground, will be released, free release, i.e., it can  
5 go to a landfill, not to a radioactive disposal site. So it  
6 could have no contribution to a dose in any scenario. It's  
7 clean. So I can do what I want with it, once the license is  
8 terminated.

9 The NRC would not allow me to terminate the  
10 license is that were a dose contributor, you know, that was  
11 above the limit.

12 FULLER: If it was above the limit?

13 KUEHN: Right. Anybody else?

14 [No response.]

15 KUEHN: Okay, thank you.

16 ADAMS: We're at the part of the meeting where we  
17 will accept comments on the license termination plan and  
18 only one person has signed up to make a statement or provide  
19 some comments and that is Ernest Fuller -- so the mike is  
20 yours.

21 FULLER: There are a number of comments I have on  
22 the plan as it currently exists, but I would like to first  
23 thank both GPU and the Bedford County Commissioners and also  
24 Roger Granlund and Penn State for putting together the  
25 Independent Inspection Program at the request of local

1 citizens, and it is both the past County Commissioners and  
2 current ones who have supported that, and I think that has  
3 made a tremendous impact in terms of people's trust of what  
4 has been happening out there lately.

5 In the past there were many problems with work not  
6 always being done correctly by GPU, going back to the first  
7 work in the early '70s and having an extra set of eyes and  
8 ears out there that knew what they were looking at has made  
9 a big difference and that is a comment to the NRC as well,  
10 because you should put it more into your requirements in  
11 general in this.

12 I think it is important for us to realize -- I was  
13 happy to hear that the NRC Staff realizes the background  
14 radiation here is about 60 millirem per year, actual natural  
15 background radiation. GPU is proposing a 25 millirem  
16 maximum dose. That would potentially be 40 percent of  
17 background radiation. It is not a small fraction  
18 potentially.

19 I am disturbed that the NRC changed its standards  
20 from stricter standards that the earlier work that was done  
21 and that GPU has decided to follow the new standards even  
22 though when the standards were originally being proposed and  
23 the proposal was that the limit be 15 millirem per year, GPU  
24 had indicated that it could indeed meet that standard here  
25 but has chosen not to do that.

1           I don't understand the part of the plan that  
2 speaks about the ALARA or As Low As Reasonably Achievable  
3 analysis that I read in the plan basically says since we are  
4 meeting this according to the regulations we don't have to  
5 do an analysis to go further, and I think GPU should be  
6 required to at least do that analysis. Since apparently the  
7 15 millirem release was considered possible five or six  
8 years ago it would seem to me you would need to do some  
9 analysis to justify not doing that if the NRC rule is really  
10 25 millirem plus ALARA and not have ALARA only work the  
11 other way.

12           I think GPU should make a clear commitment to  
13 continue environmental monitoring at the site. In the past  
14 GPU has said things have been cleaned up and they haven't  
15 always been. Other things have been discovered including  
16 some recently. We won't know about that. I know the NRC  
17 will let you give up your license but I think you should  
18 have more of a commitment to this area to continue some  
19 environmental monitoring.

20           I think there are real problems with the quality  
21 assurance and control as it is discussed at the moment, and  
22 I realize that is being done in the other technical change,  
23 but it appears that AMERGEN is going to be the company in  
24 charge of that, or at least that is a possibility, and at  
25 least one of the partners of AMERGEN has a very bad record

1 in England in terms of not providing adequate staff for that  
2 kind of work. I hope that that will not happen here.

3 I think that the residential farmer scenario  
4 should be combined with the occupation scenario if it would  
5 produce a more conservative DCGL. I think that should be  
6 considered.

7 I think the tunnel should probably be classified  
8 as Class 1 or at least significant parts of it based on what  
9 you know now, unless it is proven different by further  
10 evidence that you gather. I think the dome should  
11 definitely not be removed before termination and I think  
12 there is a potential for it to be removed, and that should  
13 not be allowed.

14 I think the NRC should require full funding for  
15 the costs of the plan in a trust fund and not depend on an  
16 IOU from GPU. There is a lot of change going on in the  
17 electric industry at the moment and the money should  
18 definitely be there.

19 I think some other things that should be  
20 definitely not able to be changed by GPU without going  
21 through a public NRC process in this is lowering any of the  
22 classes, moving an area from a Class 1 to a Class 2, for  
23 instance; changing the investigation or action levels  
24 within the measuring plan; and I also think that you should  
25 hold them to the 4 millirem and make them go through another

1 public process if they choose to change it.

2 I think most important is that the NRC should  
3 definitely conduct a full survey to confirm GPU's results.  
4 In the past in some of their cleanup attempts that has been  
5 required, and I think the only way that there's any  
6 potential for people in this community to feel that the  
7 place is completely cleaned up is if you folks at the NRC do  
8 your own survey and if GPU then commits to continue  
9 environmental monitoring at the site. Thank you.

10 THOMPSON: Thank you, Ernest.

11 Any further comments?

12 [No response.]

13 THOMPSON: Any other names on the list? Just  
14 Ernest? Ernest, you sure did your homework on this subject.  
15 I hope that both parties can get together and discuss some  
16 of the points you have provided with your presentation.  
17 Citizens like yourself make the whole process a lot more  
18 viable for all parties concerned. We appreciate your  
19 comments and your questions.

20 Several weeks ago the Bedford County Commissioners  
21 and Huntington Commissioners took a tour of the site and  
22 through my past work experience I was involved with several  
23 remediations with Duke Energy, mostly with PCB  
24 contaminations but a lot of the techniques and procedures  
25 are quite the same, and I can honestly say I think GPU is

1 doing an outstanding job of striving to make this a  
2 successful project.

3 I would like to thank the Citizens Task Force for  
4 keeping the County Commissioners informed on all the steps  
5 that are going on. Community involvement is the key to  
6 making any project successful.

7 Al Adams, NRC, thank you for inviting me to be  
8 part of the meeting.

9 If anybody else has any more remarks, bring them  
10 forth at this time --

11 [No response.]

12 THOMPSON: If not, then I will declare this  
13 meeting adjourned. Thank you.

14 [Whereupon, at 9:19 p.m., the meeting was  
15 concluded.]

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REPORTER'S CERTIFICATE

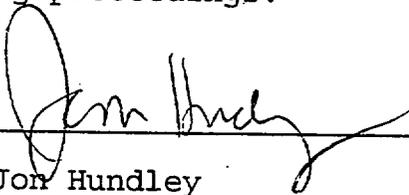
This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

NAME OF PROCEEDING: SAXTON TERMINATION PUBLIC  
MEETING

CASE NUMBER:

PLACE OF PROCEEDING: Saxton, PA

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission taken by me and thereafter reduced to typewriting by me or under the direction of the court reporting company, and that the transcript is a true and accurate record of the foregoing proceedings.



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Jon Hundley

Official Reporter

Ann Riley & Associates, Ltd.



*United States  
Nuclear Regulatory Commission*

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**SAXTON  
LICENSE TERMINATION PLAN  
PUBLIC MEETING**

**May 25, 2000**

*Alexander Adams, Jr.  
Senior Project Manager  
Events Assessment, Generic Communications and  
Non-Power Reactors Branch  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation*

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# PURPOSE

- **Provide information on the license termination process and provide an opportunity for public input**
  - **Discuss remaining regulatory process for decommissioning**
  - **Discuss requirements and NRC review of license termination plan (LTP)**
  - **Discuss inspection process during remaining site activities**
-

# **THE NUCLEAR REGULATORY COMMISSION**

**Regulates the use of nuclear energy to protect public health and safety by:**

- **establishing standards and regulations**
  - **issuing licenses after ensuring relevant standards and regulations are met**
  - **inspecting to assure compliance with regulations**
-

# **DECOMMISSIONING IN GENERAL**

**Decommissioning - To remove a facility safely from service and reduce residual radioactivity to a level that permits release.**

- **NRC focus is on removal of radiological hazards**
  - **First step is to remove facility safely from service**
  - **Licensee reduces levels of radioactive material on site**
  - **Licensee performs detailed final radiation survey**
  - **NRC may perform confirmatory survey**
  - **If release criteria and regulations are met, license is terminated and NRC oversight ends**
-

# **SAXTON DECOMMISSIONING MILESTONES**

- **Certification of permanently ceasing power generation operations - Deemed to be submitted for Saxton.**
  - **Certification of permanent fuel removal from the reactor - Deemed to be submitted for Saxton.**
  - **Submission of the Post-Shutdown Decommissioning Activities Report (PSDAR) - The Saxton decommissioning plan became the PSDAR on August 28, 1996, which contained:**
    - **Planned decommissioning activities**
    - **Activities schedule**
    - **Estimate of expected costs**
    - **Reasons for concluding that environmental impacts are bounded by previously issued impact statements**
-

# **SAXTON DECOMMISSIONING MILESTONES**

- **NRC noticed the PSDAR in December 1996 and held a public meeting on January 28, 1997, to provide information and gather public comment.**
  - **Because of license requirements restricting decommissioning activities, Saxton needed a license amendment to conduct decommissioning activities. Amendment 15 was issued on April 20, 1998.**
  - **Licensees conducted decommissioning activities as allowed by the facility license and regulations.**
  - **LTP and application for termination of license submitted to NRC by the licensees on February 2, 2000.**
-

## **SAXTON DECOMMISSIONING MILESTONES**

- **NRC published a notice in the Federal Register on May 15, 2000, of notice of receipt of the LTP and provides opportunity for written comments.**
  - **Public meeting tonight to provide information on the license termination process and provide an opportunity for public input.**
-

## **SAXTON DECOMMISSIONING - NEXT STEPS**

- **The LTP is a supplement to the Safety Analysis Report and is approved by a license amendment.**
- **A "Notice of Consideration of Issuance of Amendment to Facility License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing" will be placed in the FEDERAL REGISTER in the next 45 days.**

**This notice will open a 30 day window to request a hearing on the license amendment.**

- **A meeting (open to public observation) between NRC and Saxton/GPU Nuclear staff is scheduled for May 30, 2000, at NRC Headquarters to discuss LTP review schedules.**
-

## **SAXTON DECOMMISSIONING - NEXT STEPS**

- **The licensees have submitted a request for license amendment to make changes to the organizational and administrative controls technical specifications to reflect changes to the GPU Nuclear organization following the sale of Oyster Creek. A "Notice of Consideration of Issuance of Amendment to Facility License, Proposed No Significant Hazards Consideration Determination, and Opportunity for a Hearing" will appear in the FEDERAL REGISTER on May 31, 2000.**
  - **NRC will continue with the LTP review.**
  - **Licensees continue decommissioning activities on site.**
  - **Licensees perform termination survey. NRC will perform a confirmatory survey.**
-

# **SAXTON DECOMMISSIONING - NEXT STEPS**

- **The license will be terminated if the license termination plan was followed and the site meets the release criteria.**



## **NRC CONTACTS**

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# SAXTON INFORMATION

NRC web site is at <http://www.nrc.gov>

Saxton LTP is posted at <http://www.nrc.gov/OPA/reports>  
Click on "Decommissioning"

Documents related to Saxton can be found by clicking "Public Electronic Reading Room" on bottom of page.

You will need to download and run some software on your computer.

Login as "guest"

Select "Publicly Available Records System"

To search click on "tools" and select "ADAMS Find"

Enter the docket number as "05000146" and select "Find"

Select "View" from top of page and click on "Show Criteria"

List of Saxton documents will appear, double click on document to view.

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United States Nuclear Regulatory Commission

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**OVERVIEW OF SAXTON  
LICENSE TERMINATION PLAN**

**MAY 25, 2000**

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# United States Nuclear Regulatory Commission

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## **PRESENTATION/OVERVIEW**

- **Meeting Purpose**
- **Regulatory Basis**
- **LTP Review Process**
- **Status of Review of Saxton's LTP**



# United States Nuclear Regulatory Commission

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## **PURPOSE**

- **Provide the public/stakeholders information on LTP and an opportunity to provide input**
- **Conduct meeting near site, to discuss LTP, and address questions and or comments, 50.82(a)(9)(iii)**



## United States Nuclear Regulatory Commission

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### **REGULATORY BASIS**

- **10 CFR 50.82(a)(9) prescribes requirements for LTP's for decommissioning nuclear power reactors**
- **10 CFR Part 20, Subpart E prescribes specific radiological criteria for license termination**



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## **LTP REVIEW PROCESS**

**Reviewed to ensure that it addresses the regulatory requirements for release of the site and includes:**

- **Site characterization**
- **Remaining dismantlement activities**
- **Detailed plans for site remediation**



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- **Plans for the final radiation survey**
- **The approach used to demonstrate compliance with the radiological release criteria**
- **An updated site-specific cost estimate**
- **A supplement to the Environmental Report**



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## **STEPS IN THE LTP REVIEW**

- (1) Acceptance Review**
- (2) Technical Reviews**
- (3) Request for Additional Information (RAI)**
- (4) Safety and Environmental Reviews and**
- (5) Approved by license amendment with an opportunity for a hearing**



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**LTP may propose either:**

- **release for unrestricted use, or**
- **release under restricted-use conditions**

**LTP submitted at least two years before  
termination of the license**

**Public meeting must be held near the site to  
discuss the LTP, typically within 90 days after  
acceptance of LTP**



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### **AVAILABLE GUIDANCE**

- **Regulatory Guide 1.179, “Standard Format and Content of License Termination Plans for Nuclear Power Reactors”**
- **NUREG-1700, “Standard Review Plan for Evaluating Nuclear Power Reactor License Termination Plans,” Final Report, April 2000**
- **NUREG-1575, “Multi-Agency Radiation Survey and Site Investigation Manual”**



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## **STATUS OF SAXTON LTP REVIEW**

- **LTP resubmitted February 2000**
- **Acceptance Review Completed March 2000**
- **Safety and Environmental Review initiated, April 2000**
- **LTP Public Meeting, May 2000**
- **Request for Additional Information (RAI), September 2000**



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### **NRC's PRINCIPAL AREA OF FOCUS/CONCERN RELATED TO THE LTP**

- **Detailed plans for the final radiation/release survey.**
- **Approach used to demonstrate compliance with the radiological criteria (10 CFR Part 20, Subpart E) for license termination.**
- **An updated site-specific estimate of remaining decommissioning costs.**



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# **NRC Inspection Program**

**at**

**Saxton**

**Presented by Thomas Dragoun  
May 25, 2000**

# Requirements Inspected

NRC regulations: 10 CFR Parts 19, 20, 50, 61,  
and 71

DOT regulations: 49 CFR Parts 171, 172, 173  
(review only)

OSHA regulations: 29 CFR 1926 (review only)

## Technical Specifications:

- Quality Assurance Program
- Radioactive Effluent Controls
- Radiological Environmental Monitoring
- Offsite Dose Calculation Manual
- Fire Protection

Specific Work Instructions

## Inspection Objective

To determine if the dismantlement and decontamination of the Saxton facility is conducted safely and in accordance with regulatory requirements and licensee commitments.

## Inspection Method

- Use of experienced, qualified inspectors and specialists
  - Observe work, review records, interview personnel
  - Schedule site visits to coincide with major tasks
    - Document findings
    - Graded approach to safety significance
    - Telephone contact between site visits
    - Pre-emptive reviews

## Inspection Results to Date

Since the soil remediation project in 1994, there have been 10 inspections, of which 6 occurred in the period 1998-1999.

No violations of requirements have been observed.

No major program weaknesses have been observed.

## Future Inspections

Continue observation of remediation activities

Use ORISE to observe final radiation survey techniques and protocols

Potential ORISE independent confirmatory radiation survey



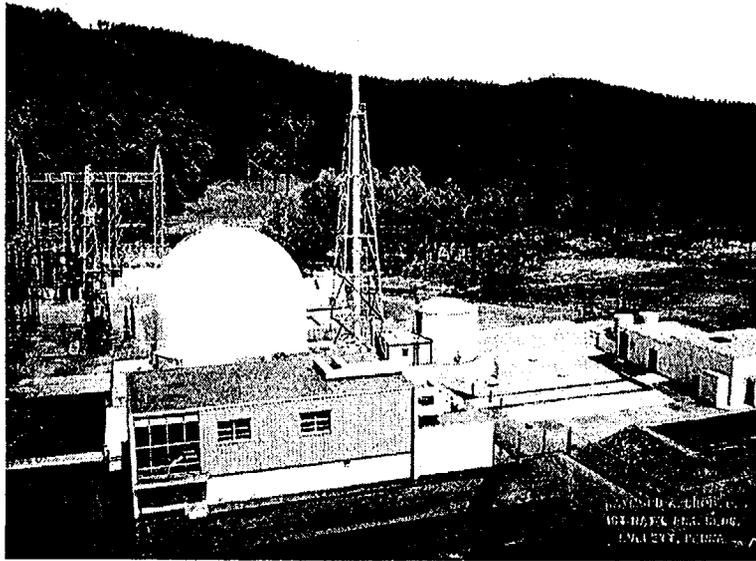
# **SNEC License Termination Plan**

**NRC Public Meeting  
May 25, 2000**

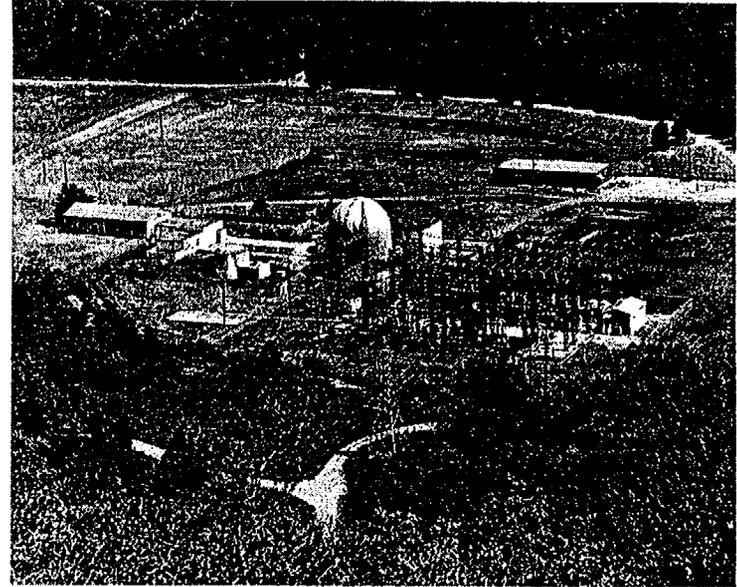
Robert D. Holmes  
D & D Engineering  
GPU Nuclear

# Background

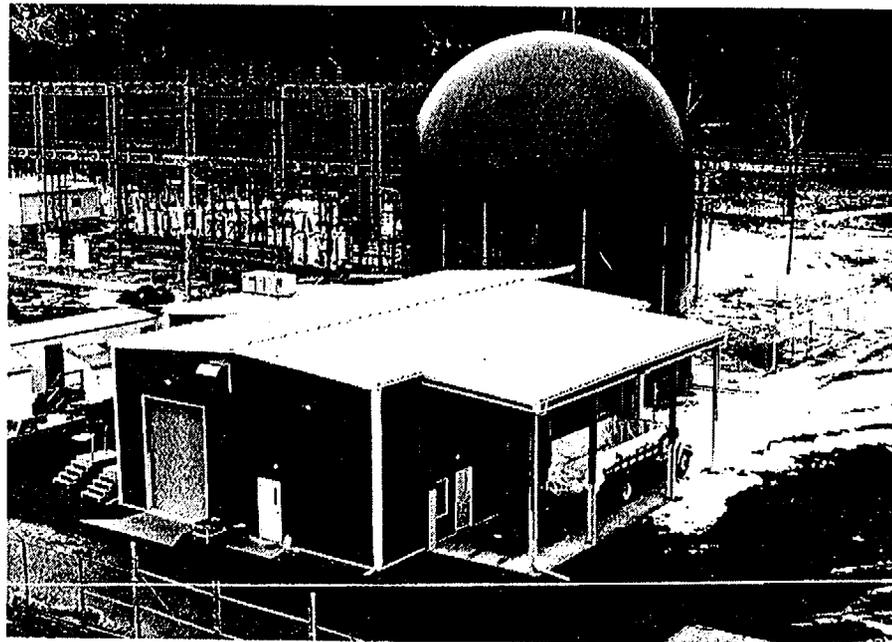
- April 1962 - Initial Criticality
- May 1972 - Final Shutdown
- 1986 - 1992 - Outbuildings Remediated, Released and Demolished
- 1994 - Soil Remediation Campaign
- April 1998 - License Amendment 15 authorizes decommissioning
- February 2000 - License Termination Plan submitted to NRC for review and approval



1962



1985



1997

# SNEC Facility Status

- LTP submitted February 2000
  - NRC Review in Progress
  - Request for Additional Information
  - License Amendment Process
- FSS Implementing Procedures in Development
- Termination Criteria - Unrestricted Release
  - $\leq 25$  mrem/yr all pathways
  - $\leq 4$  mrem/yr ground water
- License Termination - April 30, 2001

# Regulations and Agencies

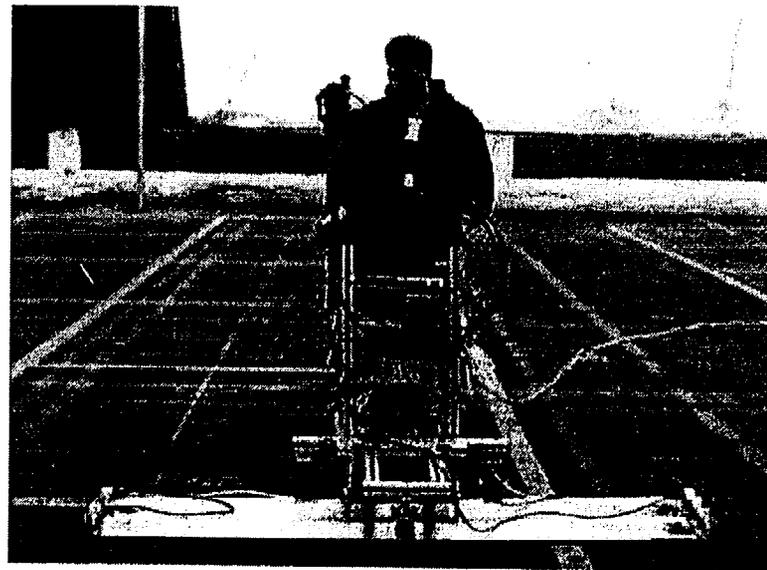
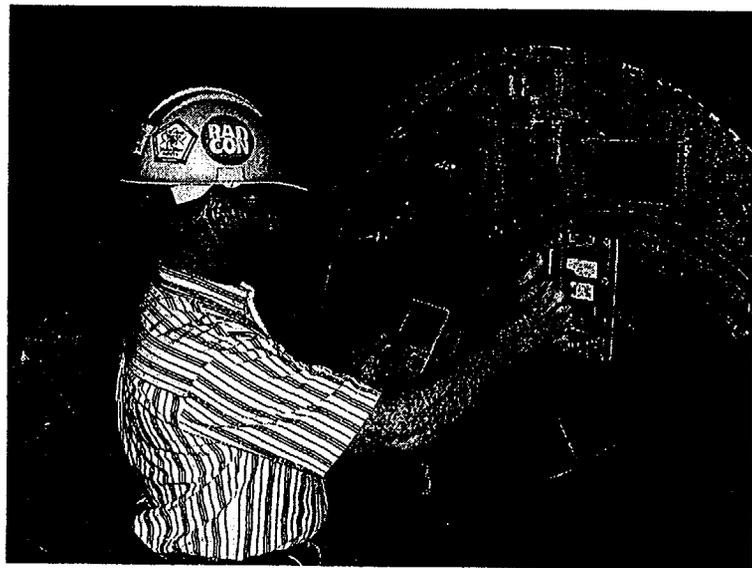
- NRC (Atomic Energy Act)
  - 10 CFR 50.82 - License Termination
- USEPA
- USDOT
- OSHA
- PaDEP BRP

# License Termination Plan Contents

- General Information
- Site Characterization
  - Radiological Status
    - Area Classifications
  - Background Data
  - Instrumentation and Methods
  - Conclusions
- Remaining Dismantlement Activities
  - Remaining Tasks
  - Waste Projection

# License Termination Plan Contents

- Remediation Plans
  - Decontamination Methods
  - Areas to be Remediated
- Facility Final Radiation Survey Plan
  - Overview
  - Post Remediation Surveys
  - Survey Design/Quality Assurance
  - Data Collection
  - Data Assessment
  - Survey Results



# License Termination Plan Contents

- Compliance with Radiological Criteria for License Termination
  - Dose Modeling
  - Dose Assessment
  - ALARA Analysis
- Update of Site-Specific Decommissioning Costs
- Supplement to the Environmental Report

# Summary

- SNEC LTP Review & Approval Process
  - Request for Additional Information
- Following LTP Approval - Complete FSS
- Demonstrate Compliance with Release Criteria
  - Formal Report
- License Termination
  - NRC Confirmation Surveys