AUG 18 1983

Docket No.: 50-423

APPLICANT: Northeast Nuclear Energy Company

FACILITY: Millstone Nuclear Power Station, Unit 3

SUBJECT: SUMMARY OF PUBLIC MEETING HELD IN WATERFORD, CONNECTICUT TO CONSIDER ENVIRONMENTAL IMPACT OF THE PROPOSED OPERATION OF MILLSTONE 3

On July 21, 1983 at 7:00 pm the NRC staff held a public meeting in Waterford, Connecticut. This meeting was part of the NRC's environmental impact review of the application for an operating license for Millstone 3 and was scheduled to follow the staff's environmental site visit conducted on July 20 and 21, 1983. The purpose of the meeting was to give members of the public an opportunity to tell their environmental concerns about Millstone 3 directly to the NRC staff.

Initial coordination of the meeting was established through a telephone call by the Project Manager, followed by a letter from the Assistant Director for Licensing to Mr. Lawrence Bettencourt, First Selectman for the Town of Waterford (Enclosure 1). Advance publicity was made through a press release issued by the NRC Region I Office of Public Affairs (Enclosure 2) and newspaper advertisements in the Hartford Courant, Hartford, Connecticut; The Day, New London, Connecticut and; the New Haven Register, New Haven, Connecticut. Arrangements were made for a transcription service to be funded by the NRC.

Approximately 35 people attended the meeting. These included members of the public, utility employees, the NRC Senior Resident Inspector, and representatives from local news media. The meeting was moderated by Mr. Lawrence Bettencourt, First Selectman for the Town of Waterford. Mr. Bettencourt established a sign-up list for persons wishing to address the NRC staff.

The meeting began with an introduction and welcome by Mr. Bettencourt followed by brief comments from Mr. B. J. Youngblood and Ms. E. L. Doolittle of the NRC staff concerning the staff's environmental impact review for Millstone 3. Opportunities to speak were then provided to those people on the sign-up list by the order in which their names appeared. A transcript of the proceedings is attached as Enclosure 3. All persons present and whose names appeared on the sign-up list had an opportunity to discuss their concerns with the staff.

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The meeting adjourned at 7:35 pm.

Original signed by:
Elizabeth L. Doolittle

Elizabeth L. Doolittle, Project Manager
Licensing Branch No. 1
Division of Licensing

Enclosures:
As stated

cc w/encls.: See next page

OFFICE	DL:LB#1	DL:LB#1					
SURNAME	EDoolittle/lg	BJYoungblood					
DATE	08/17/83	08/18/83					

MEETING SUMMARY

AUG 18 1983

Document Control (50-423)
NRC PDR
L PDR
PRC System
NSIC

LB#1 Rdg.
M. Rushbrook
Project Manager E. L. Doolittle
Attorney, OELD
T. Novak

NRC PARTICIPANTS:

E. Doolittle
J. Youngblood
G. LaRoche
J. Lehr
M. Wangler
P. Easley

OTHERS:

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Senior Vice President
Nuclear Engineering and Operations
Northeast Nuclear Energy Company
Post Office Box 270
Hartford, Connecticut 06141

cc: Gerald Garfield, Esq.
Day, Berry & Howard
One Constitution Plaza
Hartford, Connecticut 06103

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Mr. Michael L. Jones, Manager
Project Management Department
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Electric Company
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Mr. Thomas Murley
U. S. Nuclear Regulatory Commission,
Region I
631 Park Avenue
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Mr. Brian Norris
Public Affairs Office
U.S.N.R.C. - Region I
King of Prussia, Pennsylvania 19406

ENCLOSURE 1

JUN 20 1983

DIST:
Document Control (50-423)
NRC PDR
L PDR
NSIC
PRC System
LB#1 Rdg.
MRushbrook
EDoolittle
Attorney, OELD
EJordan, OIE
JTaylor, OIE
ACRS(10)

Mr. Lawrence Bettencourt
First Selectman
Town of Waterford
200 Boston Post Road
Waterford, Connecticut 06385-2898

Dear Mr. Bettencourt:

Subject: Nuclear Regulatory Commission Staff Open Meeting in the Town of Waterford

On July 20 and 21, 1983, the Nuclear Regulatory Commission staff will visit the Millstone 3 Nuclear Power Station. This visit is part of the review process for the environmental impact statement associated with the recently docketed application for an operating license. Several state and Federal agencies are being invited to attend the visit and provide their input to the NRC staff.

In a separate related matter, the NRC staff plans to have an open meeting with the public on the evening of July 21, 1983. The purpose of this meeting is to provide an opportunity for members of the public to tell their environmental concerns directly to the NRC staff in order to assist the staff in determining the scope of the environmental review.

The NRC appreciates your kind offer to provide a suitable meeting facility and moderate this meeting.

As discussed during your conversation with Elizabeth Doolittle on May 19, 1983 the following arrangements are being made:

1. The date and time will be July 21, 1983 from 7:00 pm to 10:00 pm.

2. Twelve members of the NRC staff will be present.

3. The NRC will provide a transcription service.

4. The NRC will issue a press release approximately one month before the meeting is scheduled to take place.

5. The purpose of the meeting is for members of the public to tell their concerns regarding the effects of operation of Millstone 3 on the environment directly to the staff. The meeting is not intended to provide for the resolution of issues, but there may be some discussion of the review process. Additionally, this meeting is only for hearing environmental concerns and therefore comments from members of the public should not include those areas of interest that are more properly included in the safety review.

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OFFICIAL RECORD COPY

You are encouraged to contact Elizabeth Doolittle on 301-492-7134 if you have additional questions.

Your support of this meeting will help ensure that the environmental impact statement for Millstone 3 will provide a complete and accurate assessment of the effects of operation of the plant on its environment. The NRC staff appreciates your support, and the interests of the public will be better served by your having participated in the process.

Sincerely,

A. Schwencer

for Thomas M. Novak, Assistant Director
for Licensing
Division of Licensing

Enclosure:
Agenda

OFFICE	DL:LB#1	DL:LB#2	DL:AD/L				
SURNAME	E. Doolittle/lc	BJYoungblood	TMNovak				
DATE	06/16/83	06/17/83	06/20/83				

NUCLEAR REGULATORY COMMISSION STAFF

ENVIRONMENTAL REVIEW

PUBLIC MEETING

AGENDA

I. Opening remarks by moderator.

1. Introduces himself.
2. Welcomes persons attending the meeting and the NRC staff.
3. Invites the NRC staff to introduce themselves.

II. Introductory remarks by the NRC Assistant Director for Licensing.

1. Explains purpose of the meeting.
2. NRC Project Manager summarizes background.
3. Allows each member of the staff to introduce themselves and briefly describe areas covered in their portion of the review.
4. Asks moderator if he wishes to make any administrative remarks to guide the conduct of the meeting.

III. The moderator determines which persons desire to express environmental concerns to the staff and invites them to speak. The NRC Assistant Director for Licensing coordinates the staff response.

IV. Approximately 15 minutes prior to the end of the meeting, the moderator terminates the public discussion with the staff. The Assistant Director for Licensing summarizes his assessment of the meeting.

V. Closing remarks by the moderator.

ENCLOSURE 2

NUCLEAR REGULATORY COMMISSION

OFFICE OF PUBLIC AFFAIRS, REGION I
631 Park Avenue, King of Prussia, Pa. 19406

NO. I-83-81
Contact: Karl Abraham
Brian Norris
Tel: 215/337-5330
337-5000

Tuesday, July 12, 1983

NRC STAFF TO HOLD PUBLIC MEETING TO CONSIDER ENVIRONMENTAL IMPACT OF THE PROPOSED OPERATION OF MILLSTONE UNIT 3

The Nuclear Regulatory Commission (NRC) staff will hold a public meeting in Waterford, Connecticut July 21, 1983 to hear comments on what impact the operation of the Millstone Nuclear Power Station, Unit Number 3 may have on the environment. The nuclear power facility is under construction about 5 miles southwest of New London, CT.

The public meeting is part of the NRC staff's environmental impact review of an application for an operating license for the facility. The application was recently submitted to the NRC by the Northeast Nuclear Energy Company. Northeast Nuclear Energy represents fifteen New England utilities that own the Millstone Unit 3 reactor.

Although a full environmental assessment was made before construction permits were issued, NRC regulations require a second assessment at the operating license stage of the licensing process. During this review, any new or different information is considered that was not considered at the construction permit stage.

The meeting will be held in the Public Meeting Room of the Waterford Complex, located at 1000 Harford Road, Route #85 in Waterford. It will begin at 7 p.m. and conclude at 10 p.m. At the meeting, members of the public will have an opportunity to express their views on the impact that allowing the Millstone Unit 3 facility to operate may have on the environment.

ENCLOSURE 3

UNITED STATES OF AMERICA

NUCLEAR REGLATORY COMMISSION

ENVIRONMENTAL REVIEW OF

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 3

PUBLIC MEETING

Public Meeting Room
Waterford Complex
1000 Hartford Road
Route #85
Waterford, Connecticut

Thursday, July 21, 1983

The public meeting commenced, pursuant to notice, at 7:00 p.m.

BEFORE A PANEL CONSISTING OF:

L. BETTENCOURT, Moderator
J. YOUNGBLOOD
E. DOOLITTLE
G. LaROCHE
M. WANGLER
J. LEHR
P. EASLEY

P R O C E E D I N G S

MR. BETTENCOURT: Good evening.

My name is Lawrence Bettencourt. I am the First Selectman of the Town of Waterford. I will be acting as the Moderator tonight for the Nuclear Regulatory Commission Staff Environmental Review Public Hearing.

I would like to welcome all of you here tonight to the Town of Waterford.

At this time I would like to introduce Mr. Joseph Youngblood of the NRC staff who then will introduce his fellow workers.

MR. YOUNGBLOOD: Thank you, Mr. Bettencourt.

Good evening, ladies and gentlemen.

My name is Joe Youngblood. I am Branch Chief of Licensing Branch One in the Division of Licensing of the Office of Nuclear Reactor Regulation.

We are in the beginning phase of the operating license environmental impact review for the Millstone 3 power plant.

As recommended in the Council of Environmental Quality Guidelines, members of the NRC staff have scheduled this meeting with the public to solicit your concerns regarding environmental impacts associated with plant operations.

Your comments will assist the staff in

assuring that the scope of their environmental review will include the local area's environmental concerns.

There are a number of staff members here tonight. Each has a special area of review within their discipline and they can respond to questions concerning the scope of their review.

At this time I would like to introduce Ms. Elizabether Doolittle who is the Project Manager of the NRC's Safty and Environmental Reviews of Millstone 3. Elizabeth will brief you on the scope and the status of our review and have the staff members introduce themselves.

After this we will return to our Moderator, Mr. Bettencourt, for comments and any questions concerning the scope of our review.

Elizabeth.

MS. DOOLITTLE: Good evening.

My name is Elizabeth Doolittle, as Joe has said. I am the NRC Project Manager for Millstone 3 and I am responsible for coordinating the staff's review of the operating license application for Millstone 3.

I have some slides that I would like to show to go over a little bit about the NRC's licensing process. So I will get up and show those.

(Slide presentation.)

MS. DOOLITTLE: The purpose of our meeting, as we have said, is to give you an opportunity to tell your environmental concerns about Millstone 3 directly to the staff.

This is part of the NRC's environmental impact review of the operating license application for Millstone 3.

We are just beginning our view. So we are not really in a position to answer a lot of questions about our evaluation since we have not completed it yet.

Basically we are here to hear your input so the staff can consider your areas of concerns when they are doing their assessment.

I would like to point out that this is not a hearing. It is an information gathering session for the staff.

(Slide.)

To put our meeting into perspective, I would like to talk a little bit about the NRC licensing process and how the staff will do its environmental impact review for Millstone 3.

The NRC has what is referred to as a two-stage licensing process.

The first stage is called the construction permit stage. When a utility decides it wants to build a

nuclear power plant it needs to apply for and be issued a construction permit from the NRC before construction can begin.

Prior to the time the plant is ready to operate, the utility must apply for and be issued an operating license before fuel can be loaded into the reactor.

The NRC's review procedures for both stages are fairly similar.

Millstone 3 is not in the beginning of the operating license stage of licensing.

(Slide.)

To give you an idea of some of the major licensing activities that have occurred on Millstone 3, at the beginning of the CP stage, the Northeast Utilities' CP application was accepted by the NRC on February 10th, 1973.

After the staff did a detailed review of the application, the construction permit for Millstone 3 was issued on August 9th, of 1974.

Eight years later the Northeast Utilities submitted their operating license application for Millstone 3. This was on October 29th, 1982.

The staff did a preliminary review of the application to determine its completeness and then

accepted the application or document on February 3rd, 1982.

The operating license application for Millstone 3 included two major documents which all utilities are required to submit as part of their application.

One is the Final Safety Analysis Report which describes the safety aspects of the plant design and how they conform to NRC regulations.

The other document is the Environmental Report. It describes the changes in those aspects of the design and anticipated operation of the plant which interface with the environment and have taken place since the enviornmental report was submitted at the CP stage.

The staff reviews these two documents separately and issues separate evaluations for each review.

When we docketed the application, a notice was published in the Federal Register as well as the Hartford Courant, the Daily News in Springfield, Massachusetts and The Day. The notice said that we had received the application, are considering issuing an operating license and gave the opportunity for anyone interested to request a hearing. No hearings have been requested.

As I said, the NRC is now beginning its

detailed review of each of these documents.

(Slide.)

I would like to mention that the application, including those two documents, as well as all the correspondence between Northeast Utilities and the NRC regarding Millstone 3 is on file and accessible to the public in two places.

One is the NRC's Public Document Room, PDR, which is located in Washington, D. C., and the other is the Millstone Public Document Room, which is located in the Waterford Public Library on Route 156 in Waterford.

All of this information is available to you simply by asking.

(Slide.)

As I mentioned, the environmental report of the operating license stage emphasizes new or different information since the construction permit stage.

At the construction permit stage the NRC did a detailed review which was published in the form of their Draft Environmental Statement related to construction of Millstone 3. This was in June of 1973.

The NRC then issued a Final Enviromental Statement related to construction of Millstone 3 in February of 1974.

Our meeting tonight and our visit to Millstone

3 will lead to the preparation of the Draft Environmental Statement related to operation of Millstone 3. This DES is scheduled to be issued in April of 1984.

Our Draft Environmental Statement will address any new or different information now considered during the CP stage.

At the time we issue our DES we will publish a notice in the Federal Register saying that it is available and it will be soliciting comments from anyone who is interested and the comment period will be 45 days.

After we receive the comments, evaluate them and respond to them, we will issue our Final Environmental Statement. This is scheduled for November of 1984. As I said, it will contain the comments received on the DES and the staffs' responses and changes in assessments as a consequence of the comments or new information.

(Slide.)

After issuing the FES, this will be the end of the staffs' environmental review.

The next step in the licensing process will be for the staff to present its findings to the Commission so that they can decide whether to issue the operating license for Millstone 3.

If the Commission so decides, then the NRC will issue the operating license for Millstone 3, which is

scheduled to be November 1st of 1985. This is the time when Northeast Utilities plans to complete construction of Unit 3.

(Slide.)

To give you an idea of the kinds of information we are considering during our review and which you will find in the draft environmental statement and a final environmental statement, I have made a list here.

The types of information we are looking into and which will be discussed are impacts on land use, impacts on water use, impacts on aquatic ecology, impacts on terrestrial ecology, radiological impacts, occupational radiation exposure and environmental impacts of postulated accidents.

Along with the handouts that are on the back table, I included two tables of contents. One is from the Final Environmental Statement at the CP stage for Millstone 3 and the other is from a more recent Final Environmental Statement just to kind of show the changes in format, although the information contained is similar. That will give you an idea of more of the details that we consider in our statement.

(Slide.)

The staff has spent the last two days at the Millstone site and surrounding areas gathering information

to start their environmental impact review.

Yesterday we toured the site and toured the surrounding areas.

This morning we held a meeting with Northeast Utilities and the NRC to ask questions we had during our tour and also to ask questions that were raised during the preliminary review of the environmental report.

Several state and federal agencies were invited to our meeting in order that they could give us their input on areas that should be considered during our view.

Our meeting here tonight is to hear your inputs on what you think is important and that the staff should be considering in their environmental impact review.

I would like to say again that there are some handouts in the back and anyone that would like to speak should sign up.

Before I turn the meeting back over to Mr. Bettencourt, I would like the staff to introduce themselves and a say a little bit about what their area of review is in the environmental impact assessment.

MR. LaROCHE: I am Dr. Germain LaRoche. My interest is in the effect of the operation of Unit 3 and its transmission facilities on land use and terrestrial

ecology.

MR. LEHR: My name is John Lehr. I am a environmental engineer in the Environmental and Hydrologic Engineering Branch in the Office of Nuclear Reactor Regulation. My interest in the Millstone 3 review will be on chemical discharges and water quality.

MR. WANGLER: I am Mike Wangler. I am a health physicist with the Radiological Assessment Branch in the Office of Nuclear Reactor Regulation. I am primarily interested in the dose consequences of routine releases of liquid and gaseous effluents from Millstone 3.

MR. EASLEY: I am Pat Easley, a nuclear engineer in the Accident Evaluation Branch. I analyze the environmental effects of severe accidents.

MR. BETTENCOURT: Thank you, gentlemen.

I would like to start the public meeting. We have a list that has been put on the corner table for those people who wish to speak. We have two places that you can speak from. If you are bashful and do not want to come up to the platform, there is a microphone at the end of the pillar there. Just push the buttom and you will be able to speak. If you care to, you can come up and sit at the table here.

I ask when you speak that you give your name and then spell your last name so that the recorder can

properly record it.

The first individual I would like to call is Mr. John Paskavitch.

MR. PASKAVITCH: I am John Paskavitch and I come from Brooklyn, Connecticut. I would like to make this statement to the group, and I have a copy for each one in the group.

Your main concern, your main purpose in conducting this hearing is to abide by the letter of the law regulating the nuclear industry.

My purpose is to remind you that your job is to protect the health and safety of people living near the Millstone Nuclear Complex.

The NRC has been derelict of duty in performing its prime obligation. No health studies have been conducted by your agency to prove ingested, inhaled and whole body doses of low-level radioactive gases to the most vulnerable living downwind from the nuclear generators is causing health damage.

If these studies are not conducted by your agency, then how can you say you are protecting our health and safety?

For example, when Three Mile Island Unit 2 was venting 20 curies of radioactive carcinogens to the most vulnerable living downwind from the plant, the wind was

blowing in a northwesterly direction. Fifty-four hours later pregnant women and young children were moved to Hershey, Pennsylvania, a town in the plume's path. If the NRC has health studies on this group, I request the data.

In the Three Mile Island charade, one group of vulnerables were studied for health damage. The Pittsburgh doctors were puzzled to find a hundred percent increase in thyroid malfunctions in their new born one year after the emissions. The city doctors scratched their heads. They were a hundred miles away from the Island's plant.

One thing the NRC did not tell them was that at the time of the dumping the wind was blowing in their direction.

Now if your agency was doing its job, this man-made radiation disease could have been prevented. Your evacuation and siren warning system is just a feeble attempt to address the problem. Your dereliction continues.

This evening you are asking for citizen input on the impact of Millstone 3. I am asking you to educate and inform the citizens of our State of the potential for health damage from permitted radio-poison emissions from the plant.

I ask you to conduct the epidemiology studies in Connecticut's heaviest nuclear fallout zone and prove

to us that shortening of life and radiation induced diseases are not occurring. Prove to us that the most vulnerable living near and working within the plant are not receiving any health damage.

There is my speech.

MR. BETTENCOURT: The next speaker on the list is Richard Schrum.

MR. SCHRUM: Hi. My name is Richard Schrum. I live in East Lyme, Connecticut. I have four children right now and my wife is going to have No. 5 hopefully next month.

We live about ten miles away from Millstone 3. The East Lyme schools are all closer to Millstone 3. I think they are about four to five miles away from Millstone 3. So in case of an emergency planning impact, I understand that the children are supposed to be taken from the schools away from the Millstone 3 area.

We don't have a lot of faith in the Town of East Lyme and we don't know if they have ever done any emergency evacuation drills at the schools. We know that they don't have enough school buses to carry all the children themselves.

We hope the Nuclear Regulatory Commission, at least my wife and I hope that they will look into evacuation procedures for children at schools, and before

they grant the operating license for Millstone 3 that they ensure to the Town of East Lyme has a good plan and has at least tested it.

That is all I have.

MR. BETTENCOURT: Are there any other individuals who wish to speak?

MR. COTTER: Yes.

MR. BETTENCOURT: Will you please give your name and then spell your last name.

MR. COTTER: Yes, I will.

My name is Cotter, C-o-t-t-e-r. I am a summer resident of Waterford at Pleasure Beach. I live directly across from Millstone.

In 1969 and '70 when the initial discussion took place, one of the things that was talked about was that the Millstone plants would be very quiet. They wouldn't make a lot of noise and they wouldn't pollute.

They are the worst neighbors in the world. They make more noise over there and the noise comes from two sources. One is the constant use of a bull horn that goes on night and day and it has for years, and, secondly, and much more insidious and worse than that is the steady humming sound of the turbine, the generator.

It is on the east side of the plants, it must be, and it is improperly baffled. I have been told this by

some of the PR people who no longer are with Northeast Utilities. It creates a noise like a giant bumblebee, like a beehive.

It has denied me and my family the use of our porch because we face directly into the west, looking at the Millstone plant. I used to sleep out there very frequently at night and I don't do that any more.

My question to you, if you are going to and as you must put the turbine at Millstone 3, I wish you would consider putting it on the west side of the plant so that the people in Niantic might hear this loud numming noise for a change instead of the people on Millstone Point.

Thank you very much.

MR. BETTENCOURT: Are there any other individuals who wish to speak?

(No response.)

MR. BETTENCOURT: I say again, are there any other individuals who wish to speak?

(No response.)

MR. BETTENCOURT: Hearing none, I am going to turn it over to Mr. Youngblood.

MR. YOUNGBLOOD: I am not sure that I can respond to your questions satisfactorily.

There are some studies on TMI, but I am not familiar with what the detail is on them. The impact after

the first preliminary studies were made with regard to the doses was a three-agency task group that reviewed the data on this and projected that all of the small doses togetner, that if you extrapolated it you would have possibly one early death as a result of these releases from possibly cancer. This is within the 50-mile radius.

Within this population grou there are 325,000 cancers. To ferret out which one of those might have been caused as a result of this release would be awfully difficult to do. I mean your statement to prove that there are no health effects, it is way down in the very low noise level. It is a very good question to ask because it is almost impossible to answer.

The evacuation of schools, I thought I would bounce this back to our moderator and ask him what the status of that is. He says that they are going to have another drill here in another month or two and you are one of the first areas that conducted drills. This comes under the Federal Emergency Management Administration.

Is there any light that you can shed on this at this point?

MR. BETTENCOURT: We are required by the Nuclear Regulatory Commission to conduct emergency operation preparedness drills which are reviewed and critiqued and graded on. East Lyme is one of those

municipalities that has to participate and does participate in the drill testing.

I cannot speak for East Lyme. I can speak for for Waterford in our contingency plans and in our operational plans. We have evacuated a different school during each of the test periods to our host community in Wethersfield. We plan to do the same thing in the drill that is scheduled for October with a different school. We do this for educational purposes for the students and for the teachers, and when we evacuate, we evacuate everybody from the teachers to the principal to the costodians to the students.

We have sufficient transportation planned to take care of our programs here in the Town of Waterford. I am sorry, sir, I cannot answer your question for East Lyme. I would advise and suggest that you contact the Civil Preparedness Director in East Lyme who, I am sure, will be able to provide you with that information.

MR. LEHR: I would like to respond a little bit to what Mr. Cotter had stated. At this point your comments about bull horns is not something that is entirely new to us. It has been a problem at a number of construction sites. That is typically a construction permit review item in this case.

The subject of noise from operation will be an

area investigated in the operating license environmental review in which the noise from the facility with three units will be examined.

We found that one of the most significant noise sources are the main transformers from the plant. I don't know that we have really singled out turbine noise before as being a particular problem. I will tell you that the turbine location is set for Unit 3.

MR. COTTER: On the east side of the building?

MR. LEHR: Well, it is central to the turbine building. I am not sure that I can say it is to the east side of the site or anything. I don't believe that it really is. But the subject of noise from the three units combined during operation, particularly the examination of pure tones which might emanate from the transformers in particuar in the switch yard is an area that we do investigate and attempt to recognize audibility problems off-site from pure tones which have the potential for annoyance that you are speaking of. So this will be an area that will be investigated during the operational phase.

As far as the bull horns are concerned, I have't raised any questions in that area with Northeast Utilities.

MR. COTTER: There have been several cases in

the past several years where your sound engineers came over to my house and put their instruments out and listened to the noise and agreed that it was coming from there and thought they might be able to control it. someway, but nothing has ever happened. Apparently they can't baffle it properly.

MR. YOUNGBLOOD: Did they indicate to you what the decible level was?

MR. COTTER: No, I don't recall that they did that. My house sits up high and it is right at the edge of the water and it does pick up the sound.

MR. YOUNGBLOOD: But you have talked to the utility about this problem?

MR. COTTER: Yes. What I am concerned about is when No. 3 goes on line because the noise is very high right now. It isn't at the moment because Millstone 2 is shut down and you can tell the difference. But I am surprised that with the state of the art you have that you can't baffle it so it doesn't emit this constant humming sound.

MR. LEHR: Are you referring to the bull horn noises?

MR. COTTER: No, no, I am talking about the transformers or the turbine that is creating that noise.

MR. LEHR: Transformer noise can be baffled and

can be controlled and to a large extent made inaudible offsite. The paging system, the nature of that system is to be heard above the background noise so that system accomplishes its purpose.

Unfortunately at a site like Millstone where you have a highly reflective surface with all the water area around it some noise propagation offsite is almost unavoidable.

I don't believe we have had any NRC people taking noise measurements offsite. Perhaps the Northeast Utilities people have, but, to my knowledge, we haven't had any NRC people.

MR. COTTER: They came from Northeast Utilities, the sound engineers. They came over on several occasions and listened to the noise. It is there and it is very obvious.

MR. YOUNGBLOOD: We will look into it.

MR. COTTER: Thank you.

MR. YOUNGBLOOD: I can't guarantee you anything, but we will look into it.

Are there any other comments?

MR. WANGLER: I would like to make a point. The first gentleman implored the NRC to do some studies of the consequences, the health effects of exposure to radiation.

There are a number of scientific groups that

are attempting to do this mostly through animal studies much like animal studies are being done for various other agents, such as food agents and that type of thing.

There are some scientific bodies such as the National Academy of Science, such as the UNSCEAR, United Nations Scientific Committee on the Effects of Atomic Radiation that have been looking directly into the matter of the effect of radiation on humans and mostly through the effects of the atomic bombs at the end of World War II.

There has been some quantification of the effects of radiation on humans. Unfortunately, the numbers that have come out of these studies, the Hiroshima and Nagasaki bombs that were dropped affected a large number of people, and the numbers that have come out of these studies have been very small.

As Mr. Youngblood mentioned, unfortunately these numbers are so small that they get lost in the noise level of the normal incidents of cancer. So it is very difficult to pull out any particular cancer as being caused by radiation.

Certainly if you have a large enough population exposed to radiation at a high enough dose level, then you should be able to see it.

Our job here is to ensure that the radiation

levels from the Millstone site are kept within the regulations and as low as they can possibly be.

I am not sure if that adequately addresses your question.

MR. PASKAVITCH: No, it doesn't. It very poorly addresses the question. Can you give me a minute to counteract his remarks?

MR. BETTENCOURT: Mr. Paskavitch, I don't think he was through yet.

MR. PASKAVITCH: Well, he made a statement which is out of order.

MR. BETTENCOURT: It is not out of order. He is making a statement and you had the opportunity to make your statement. Now if you would be kind enough and listen to him, we would all appreciate it. If you care to speak after, you may.

MR. WANGLER: That concluded my remarks.

MR. BETTENCOURT: Mr. Paskavitch, would you like to continue now.

MR. PASKAVITCH: I asked you present documentation of infant fetus mortality around nuclear plants throughout the United States to prove to us that it isn't higher there. You don't mention Hiroshima and Nagasaki to us.

You mention the studies you are conducting now

around the Millstone plant and give me an example of a health study that you have conducted on atomic versus non-atomic workers, on the most vulnerable living near the plant.

Give me an example of that study you have made. Give me the documentation to prove that the low-level radiation coming out of that plant, the ingested, the inhaled and the whole body dose is not inflicting harm. Prove it.

You can't. You haven't got the studies.

MR. WANGLER: My point of the Nagasaki and Hiroshima studies, I was not trying to imply that this related to this. I was just trying to point out that we have got to have large numbers and you have got to have good statistics to come up with some numbers.

Now the doses that I have seen out of most reactors have been very small. My point is it would be very, very difficult to pull out any health effects from the routine effluents from a reactor from the normal cancers that one sees in this country. The normal incidence of cancer is from 15 to 20 percent, and the effects of radiation are a very small fraction of that.

I can't specifically name any studies. I know that there are studies in the literature that have attempted to look at worker exposure compared to

non-worker exposure. I think there are some studies done at the Portsmith Naval Yard that attempted to quantify some cancers due to radiation effects.

I will admit that there are not a whole lot of studies, but they are very difficult to do.

MR. BETTENCOURT: Thank you.

Is there anyone else who wishes to speak?

(No response.)

MR. BETTENCOURT:

I am going to ask three times.

A second time, is there anyone else who wishes to speak?

(No response.)

MR. BETTENCOURT: Mr. Youngblood was going to respond to Mr. Paskavitch's statements, but apparently he left the room.

MR. YOUNGBLOOD: I am not sure I am going to respond to what he said. But as a result of what he said, I would like to show this slide.

(Slide.)

It is a comparison of coal versus nuclear. This is a summary of current energy source mortalities per year for an 1,000 megawatt plant. The total if a plant is all nuclear is from .9 deaths to about 1.7 per year compared to coal which is 15 to 100 in a plant.

I think that shows that nuclear is far below what the ordinary standards are for power producing in our country. While you can say yes, a cancer will occur as a result of that, I would like to try and put it a little bit into perspective for those of you that might not be familiar with it.

That is about all I have got to say.

MR. BETTENCOURT: I will ask the question three times again.

Is there anyone who wishes to speak?

(No response.)

MR. BETTENCOURT: A second time. Is there anyone who wishes to speak?

(No response.)

MR. BETTENCOURT: A third time. Is there anyone who wishes to speak?

(No response.)

MR. BETTENCOURT: Hearing none, as Moderator I will conclude the public meeting and information session.

Thank you all for coming.

(Whereupon, at 7:35 p.m., the public meeting concluded.)

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CERTIFICATE OF PROCEEDINGS

This is to certify that the attached proceedings of the Public Meeting relating to the Environmental Review of the Millstone Nuclear Power Station, Unit No. 3 held in the the Public Meeting Room of the Waterford Complex, 1000 Hartford Road, route #85, Waterford, Connecticut on July 21, 1983, commencing at 7:00 p.m., was held as herein appears, and that this is the original transcript for the file of the Nuclear Regulatory Commission.

Mary C. Simons

Official Reporter - Typed

Mary C Simons

Official Reporter - Signature

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