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UNITED STATES
NUCLEAR REGULATORY COMMISSION

In the matter of:

TMI-2 RADIOACTIVE RELEASE

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TMI-2 RADIOACTIVE RELEASE

Commission Conference Room

Room 1130

1717 H Street, N. W.

Washington, D. C.

Tuesday, Feburary 12, 1980

The Commission met, pursuant to notice, for presentation of the above-entitled matter, at 11:50 a.m., Victor Gilinsky, presiding.

BEFORE:

VICTOR GILINSKY, Commissioner

RICHARD T. KENNEDY, Commissioner

JOSEPH HENDRIE, Commissioner

PETER A. BRADFORD, Commissioner

TAPE 5/1

COMMISSIONER GILINSKY: We are here to get a brief update on the TMI-2 situation.

Mr. Stello told us about it yesterday and we would like to hear how things stand as of today. Please, go ahead.

MR. STELLO: Okay, I believe yesterday I indicated that the leak was isolated and the two pumps are now on standby could be used if needed.

The time they were isolated yesterday was at 2:40 in the afternoon which was about an hour and forty minutes after the leak started.

They have isolated the leak and found that the leak was caused not by a failure in a pressure transmitter by a swage loft fitting that was off a small instrument line, I believe it was about three eighth inch line that came off and that was the source of the leakage, that has been isolated.

I indicated yesterday that the the areas in the building that did go up to about the order of 10^{-7} microcuries per cc from their normal levels which are around 10^{-9} to 10^{-10}, microcuries per cc in the auxiliary building.

This relatively high level of activity existed in the area around where the problem existed.

There are other areas in the auxiliary building which were several orders of magnitude lower in activity.

Since I briefed you yesterday, there have been some calculations made, at least two different ways to try

to get an assessment on how much activity was involved that could have gone into the auxiliary building atmosphere which clearly did if it was 10^{-7} and possible, eventually find its way into the environment.

One way in which to bound that number was to look at the total amount of crypton that is in the primary coolant itself and assume that level of crypton was in the water in the makeup tank and that all of that crypton from the water got into the atmosphere and that would give you numbers that would be on the order of 200 to 300 milicuries of crypton.

They removed the charts from the monitors in the filter system which originally yesterday I told you that they did not see any perceptible change that the individual standing there looking at them, they were not able to see anything that they would quantify a change, but when they took them off and measured them to see what they would get from the measurements on the monitors, they indicate that the same ballpark kind of numbers.

Now, these are not calculations that I think anyone wants to put a great deal of precision into because we are dealing with very, very small quantities of radioactive material, but they are on that same --

COMMISSIONER GILINSKY: Put you put theses in context? Are they -- how do they compare with releases from operating plants, or whatever?

MR. STELLO: A total release of 200 milicuries --

Dick, maybe you can help me, It would be a very, very small fraction of even Appendix I.

MR. VOLLMER: Calculation that were performed in our evaluation of the licensees proposal to vent a crypton from the containment, and the containment we are talking about 50 thousand curies and the whole body dose, assuming average meteorology to the long-term release would come out to be -- at the closest offsight point -- two-tenths of a miligram for the discharge of all 50 thousand curies during average meteorology.

COMMISSIONER GILINSKY: How many curies are we talking about here?

MR. STELLO: 300 milicuries.

COMMISSIONER GILINSKY: 300 milicuries.

MR. VOLLMER: .2 to .3 curies.

COMMISSIONER GILINSKY: I see.

MR. VOLLMER: So, we are down by a factor for several hundred thousands and meteorology yesterday, as you probably well know, was very good, it was very windy.

So, the does could hardly be anything significant.

MR. STELLO: There are two instruments, one in Goldsboro and the other is in the --

MR. VOLLMER: At the observation center.

MR. STELLO: -- observation center.

MR. VOLLMER: And they did not see any change in those instruments.

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That again, you would not expect the quantity of radioactive material that you are talking about to have really had any offsight affect and that is what I think -- still it was including yesterday and still very reasonable conclusion that you did not have anything going offsight that you would probably, with the best of instruments you would not even be able to pick up.

COMMISSIONER GILINSKY: Does this call forth any NRC action, do we respond to the event in any way?

MR. STELLO: Yes, immediately on notification from people in the control room, with the onsight team that is there monitored the activities from --

COMMISSIONER GILINSKY: The ceiling off of that line?

MR. STELLO: Yes.

COMMISSIONER GILINSKY: What about the further clean up of the auxiliary building?

MR. STELLO: And they are monitoring that now and still going on. The auxiliary building is returned to levels which are just about what they are prior to the leak.

COMMISSIONER GILINSKY: They have cleaned it up?

MR. STELLO: Well, the levels in the atmosphere will have to go into the cubicle --

COMMISSIONER GILINSKY: And the radioactive water goes down into some sump?

MR. STELLO: Yes, and from there it can be pumped over to tanks.

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It automatically drains into a sump and then from there it is pumped from an auxiliary sump over into tanks.

COMMISSIONER HENDRIE: You do not have to go in and wash down the cubicle any place there has been a splash of this stuff --

COMMISSIONER GILINSKY: Right, that is what I am wondering about.

COMMISSIONER HENDRIE: -- that we trace liquid boric contamination but the gases by this point must be pretty well limited to the crypton and there is not much of that. So, the atmospheric burden sounds like it is in good shape.

MR. STELLO: I guess there is one other fact that I mentioned yesterday, and I think I would like to expand on because the numbers are different.

I gave you some numbers yesterday and based on the entry that they made going back into the auxiliary building to look at what the problem was I think the number that I indicated was a total exposure of 10mr for one individual out of eight thousand counts for a minute of contamination localized and another individual.

Since then they have made several other entries into this cubicle.

One entry they had to make to isolate it, close the valve in the system when they had the problem.

I think there were a total now of about twelve

individuals involved and what I asked for were maximum numbers, and the maximum number that I have is a total exposue to an individual of 160mr gamma and the maximum --

COMMISSIONER KENNEDY: 160 mr?

MR. STELLO: mr; and a maximum beta -- these are not for the same persons -- of 150mr beta.

The individual that actually turned the valve had extremity doses of 75mr on the hand, and 60mr on the chest, and it varies for the twelve individuals.

That compares to the quarterly dose which is three thousand or more. So, there has not been any indication that there would be any over exposures of plant workers as a result of handeling the leak.

COMMISSIONER GILINSKY: Do you draw any particular conclusions to the fact of a leak other than the water had already been cleaned up?

MR. STELLO: Well, no. I think a conclusion, if one needs to keep in mind is that there is obviously an awful lot of radioactive water in the building and in the plant and that one has to be careful in operations and try to do what one can to clean up the water as quickly as it can be cleaned up.

Things such as a failure of an instrument line is not something that I would put off as very remote category. So, something like what has happened over there is not something that I would calculate as something

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that I would characterize as something we should have concluded was unlikely.

The kind of problem that you have for maintenance is obviously very, very difficult of the contaminated water. I think, you clearly want to do what one can to get rid of that contaminated water.

That is being done at the best of the ability at the moment.

The health effects in terms of health and safety of the public I draw the conclusion that there are not health effects to the public --

COMMISSIONER GILINSKY: There is not any change in procedures on anything in the way that things are being handled there that you see being called for --

MR. STELLO: No, we still continue to check each step that the licensees take before he takes the step and before he made the entries and the assessments that were made and assured that the proper precautions have been taken and the people working in the plant and assuring that the equipment that was being used and there is still obviously quite a bit of redundancy available to cope with contingencies. We are still on the passive pressure control system of these two pumps that they shut off when this leak happened and are now back on standby status and could be used if you wanted to.

Eventually, their plan is to go back after they

made an assessment and that will be done very carefully, as it should be.

COMMISSIONER KENNEDY: What steps can be taken to move more rapidly with the processing of that water?

MR. STELLO: Well, I think that the -- as I understand the present difficulties with the EPICORE system, they are now looking at a different residence that can be used but that is only to process the water that is in the tank.

The next question that has to be handled is the process of the water in the sump in the primary coolant itself. It is my understanding proposals will be in?

MR. VOLLMER: We haven't as yet received a proposal to the licensees for the primary system water but we have been involved and he has requirements in terms of design criteria and is proceeding with a design for it --

MR. STELLO: Is the sump proposal and the facet to sump water due in the Spring?

MR. VOLLMER: It was probably due in and we are waiting for it.

COMMISSIONER GILINSKY: Anything else we ought to know?

MR. STELLO: In which subject?

COMMISSIONER GILINSKY: Okay, thank you very much.

MR. STELLO: Incidentally, I should add that I received a phone call last evening, it must have been about seven, seven-thirty or so with the results of these calculations.

The reason I didn't give them to you yesterday, is because I did not have them.

MR. VOLLMER: We have a public meeting in Middletown this evening in which we are scoping meetings on environmental impact statements which shall be moderating, so it should be a rather lively meeting.

COMMISSIONER GILINSKY: You will not reply with peopl who have hand written questions?

MR. VOLLMER: No, we never have. I was surprised to hear that. I am not sure that John was addressing, was supposed to be addressing the Goldsboro Counsel and I am not sure how that came about, but we have never required the questions. We have always taken questions.

COMMISSIONER GILINSKY: Well, he means having a meeting which was scheduled to cover another subject.

MR. VOLLMER: Well, rather broad subjects, I think, but I am not sure whether counsel h[illegible]riginally anticipated the attendance they got from the loud speakers.

COMMISSIONER GILINSKY: Okay, thank you very much.

(Whereupon the meeting adjourned at 12:30.)