

Marvin I. Lewis
6504 Bradford Terrace
Phila. PA 19149
1-6-80.

In the Matter of USNRC Docket No. 50-289, ThreeMile Island .

Marvin I. Lewis , Intervenor, Interrogatories to the Various
Participants In the USNRC Docket No. 50-289 Proceedings.

The following interrogatories are directed at those intervenors with Psychological stress contentions: specifically, those intervenors referred to on Page 19 of the Board's Order of December 18 , "we are permitting discovery to proceed on those contentions as if they were admitted by this order." (CEA,PANE,Newberry, Aamodt, etc.) (10CFR 2.740(b)).

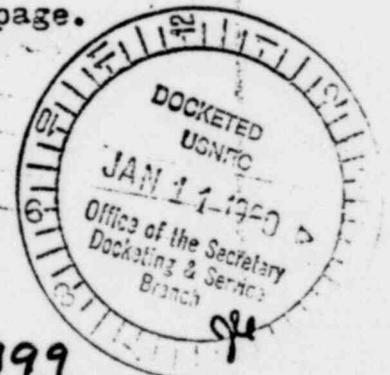
Psychological Stress Interrogatories Follow:

- PS 1. In order to evaluate the present design and ~~design~~ design philosophy, Q/A, etc ., some idea of what the surrounding populace most fears will be let loose from an accident at TMI#1 needs be determined. Since these people are particularly traumatized by reports of radioactive isotopes in the environment, some idea of what would they most fear and would therefore prefer be fully held in filters is asked.
- PS 2. Considering only the psychological stress issue, are the allowables in 10CFR 51, ~~10CFR 51~~, 10CFR 20, 40CFR 190 ,Reg Guide 1.109 , ALARA concept adequate for filter design or is more stringent design of filtering effectiveness indicated and why?
- PS 3. Are there any particular isotopes that the people in the surrounding area most fear? Please specify which completely. Krypton 85 ;not just noble gas.

Interrogatories for suspended licensee on next page.

1815 298

5001280199



Interrogatories to be answered by suspended licensee, MetEd /.
 Pursuant to 10CFR 2.740(b) , I request that the suspended licensee or his legal representative answer the following questions within the time limits of 10CFR 2.710. Please tell me the name of the person who actually put the answer together, and in the case of technical questions, tell me the name of the technical person who researched the answer. Telephone numbers and mail addresses would also be helpful if there is no objection.

SP 1. I am not sure what accident scenarios most aptly describe the accident scenario. Also, I do not believe that I have seen a definitive statement of the accident by the utility. I have, of course, read many newspaper accounts originating at Met ED , but I would like to give Met Ed a chance to tell its own story on the record.

Which accident scenario most aptly and accurately describes the accident at TMI#2 on 3/28/79? (If you refer to Restart report, ^{most} Nureg 0600 etc , please give page numbers which you feel are/accurate or most misleading.)

SP 2. Using the scenarios in SP 1 above, what particular items, materials, filters or what-have-you failed to allow radioactive contamination to escape. ~~xxxxxxx~~ Be specific. Answer as to which item failed to allow which isotope to get out. Describe entire pathway ,but refer back to previous parts of your answer to reduce redundancy and lengthiness. A table is suggested. Include where in the Restart Report this particular pathway is eliminated or repaired.

<u>Isotope</u>	<u>Pathway</u>	<u>Reference for repair at TMI#1</u>
Xe 133	Cracked Vent	Restart Report Page ?????
	(Describe pathway)	Nureg 0600 P ?

etc.

SP 3 Please give a description or accounting over time of what radioactive isotopes escaped at TMI#2 and the causes. (Pathways, Curies , rate of loss.) ~~XXXXXXXXXX~~
 A table is suggested.

SP 4. What the Vent header actually cracked as described in the Kemeny Commission Report , Page 103?

SP 5. Please put in or supply a schematic or working drawing of where the vent header is. (Working drawing preferred.

SP 6. Please put in a description of cracks: How ~~extensive~~,^{extensive}, how caused, Failure reports, etc.? Just generally or specifically tell the story of why there were cracks in the vent header and why they were not fixed.

SP 7. If the vent header also exists on TMI#1, Is it cracked? If so will it be fixed before restart? How? Put in maintenance reports, or job tickets or name of artisan who did work.

SP 8. Is there a program to assure no repeat of cracking in the Vent Header at TMI#1? Is it long or short term? Where is it referred to in the Lessons Learned Nuregs? Page Nos.

SP 9. According to some newspaper reports, some filters in the auxiliary building did not work because they got wet. This was echoed ,but not verified word for word in NUREG 0600 Page IA 1 thru 123. Also there were a few confusing references in the Kemeny Commission report referring back to staff reports which I could not find.

Therefore, I ask

Did the filters in the auxiliary building of TMI#2 stop working because they got wet? or

Did the filters in TMI#2 stop working because of some other reason?

Or did the filters in TMI#2 work fine?

If all of the filters in the auxiliary building worked fine -well within design limits and the design limits allowed & very little contamination out- skip the following questions. ^{SP 10 + 14}

If , however , more radiation escaped the auxiliary building filters or from the auxiliary building by any other path than a cracked vent header , please answer the following questions. ^{SP 10 + 14}

Please put in references and page numbers used in your answer.

SP 10. Which scenario most aptly and correctly describes what happened in the auxiliary building of TMI#2 with particular emphasis on how the filters got wet? Ref and Page ~~xxxxxxx~~ numbers.

POOR ORIGINAL

1815 300

SP 11. How much humidity can the filters work withstand before loosing effectiveness as a filter? Use advertising literature or ANSI or other non - NRC ED or non - NRC literature preferably. A graph is suggested. Plot a well defined loss of filtering effectiveness against moisture in the air for various rates or volumes of air passing thru filter.

SP 12. Put in a schematic of ~~xxx~~ auxiliary building showing where all filters are, which got wet, which stopped working. Use working drawing wherever possible.

SP 12. Which filters were reduced in effectiveness by what cause? A table is suggested. Elaborate at your discretion for clarity.

SP 13. Describe the filters in the auxiliary Building of TMI#1 which are in a similar position or use to these filters which failed in TMI#2.

SP 14. Describe what actions have been taken so far and will be taken to eliminate the same filter problem in TMI#1 as happened in TMI#2. Put in a schedule, where the item is referred to in the Lessons Learned, NUREG 0600, Restart Report, or any other reference deemed appropriate by the suspended licensee with Page numbers.

Do not skip the following questions even ~~xxx~~ if the filters did not get wet. See instructions on bottom of Page 3 ~~xxx~~ which states that questions SP 10 thru 14 may be skipped if filters did not get wet.

SP 15. Using the Board's test in the second paragraph of Page 14 Dec 18 Order:

"The rule that contentions which use the actual events at TMI as a base and then ~~xx~~ add or change a credible specific occurrence or circumstance, set forth sufficiently specific accidents which have a close nexus to the TMI accident. These contentions are therefore admissible." I ask

Have the filters been analyzed for how they will perform in the scenarios which have been accepted from other interviewers? Will they be adequate? Specifically Sholly's added contentions.

1815 301

POOR ORIGINAL

SP 16. Using the various scenarios in SP 15, what unexpected, unusual, or previously unanalysed radioactive contamination or isotope may be generated-and in what volumes and curies-which may or may not have an adverse effect upon the usefulness of the filters in the auxiliary building?

Interrogatories to be answered by Staff under 10CFR 2.720(h)(2)(11).

POOR ORIGINAL

NRC 1. What actions in the Long term and Short term actions are specifically related to filters? Vent header?

NRC 2. How are the answers in NRC #1 specifically going to help the filters and vent header work correctly and adequately in a repeat of the 3/28 accident at TMI#1?

NRC 3. There is a large new filter on the auxiliary building at TMI#2. In a repeat of the TMI#2 accident at TMI#1, would such a new filter be required on TMI#1?

NRC 4. If the answer to NRC 3 is yes, will such a filter of similar design of application be placed on TMI#1 before restart?

NRC 5. If the answer to NRC 4 is no, explain why such a new filter will not be needed in a repeat of the TMI#2 accident at TMI#1.

NRC 6. Krypton 85 seems to be leaking unexpectedly according to Bob Arnold, Met Ed. Will any catchments or filters be placed on TMI#1 in order to reduce the leakage of Kr 85 after TMI#1 has a similar accident to TMI#2. Will this be done before restart? after another accident? When?

NRC 7. Where are the cracks which are allowing the release of Krypton 85 at TMI#2? Have these areas been inspected and repaired at TMI#1?

NRC 8. List the isotopes which got out, when, how much (vol. and curies) by date and hour if possible. If in the references, merely give page numbers.

NRC 9. Using the Table S-3, compare the allowables with the actual releases. Was the utility in violation? Is this violation specified in NUREG 0600 or Lessons Learned? Page 3/.

NRC 10. Contact suspended licensee and state if you agree or disagree with his answers to Lewis Interrogatories. 1815 302