October 25, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
METROPOLITAN EDISON COMPANY (Three Mile Island Nuclear Generating Station, Unit No. 1)	)	Docket No. 50-289 SP (Restart-Management Remand)

LICENSEE'S ANSWER TO TMIA'S MOTION TO EXTEND DISCOVERY PERIOD FOR SPECIFIC, NEWLY-DISCOVERED EVIDENCE

Discovery on the Dieckamp Mailgram issue closed by Order of the Board on October 15, 1984. On October 22, TMIA moved for an extension of the discovery period to November 8, to conduct discovery on "five limited items." The request seeks an opportunity for additional interrogatories on Licensee, production again of an original document previously produced for inspection, and more than a dozen additional depositions, where most of the individuals have already been deposed. The basis for the request is alleged newly-discovered evidence. Licensee opposes the motion.

The first of the "five limited items" would entail interrogatories to Licensee and a deposition of Mr. Keaten. The TMIA objective would be to determine whether Mr. Keaten made certain notes on March 29 or March 30 based on information from Mr. Broughton, the substance of which Mr. Keaten then passed to Mr. Dieckamp.

This is not a new subject. TMIA has had Mr. Keaten's notes since September 15, 1984. Mr. Keaten has testified that his conversation with Broughton, at which time he first got a good rundown of what had happened, occurred on Friday morning (March 30); he has further testified he then called and briefed Dieckamp. I&E Interview of R. Keaten (June 1, 1979). Broughton, too, has testified on this subject. Broughton testified in his recent deposition that he briefed Keaten, but wasn't sure of the date. Broughton Dep., p. 68. When referred to Keaten's notes by TMIA, however, Broughton indicated that the first two pages after the "3/29/79? - 3/30" entry looked like information transmitted on the 29th, while the information on the third and subsequent pages ("present status") was not information that he understood on the 29th. Id., pp. 70-72. It is the information on these later pages which interests TMIA. Mr. Dieckamp as well has stated that his briefing by Keaten occurred on the 30th. Licensee's Response to TMIA's First Set of Interrogatories and Request for Production, Response to Interrogatory 16, September 4, 1984. In sum, all three individuals involved have already testified on this

subject, and two of them have previously been deposed by TMIA. Their testimony plainly is that the information of interest to TMIA was transmitted from Broughton to Keaten and then to Dieckamp on March 30, not on March 29.

TMIA now wants additional discovery based on its review on October 15, 1984, of the originals of the Keaten notes.1/ They point to their observation of two dates and two different colors of ink on the original as prompting the need.

The two dates referred to in the notes have appeared on copies made as early as October 1979, and clearly do not constitute a recent modification to the notes. The original of this page has been compared to the copy provided to the NRC/SIG on October 19, 1979, and the date entries are the same. TMIA fully recognized the disparity in the dates (29 v.a.v.30) at least as early as October 5, 1984, in its deposition of Mr. Broughton. Similarly, TMIA's reliance upon the color difference between the two dates as a basis for further discovery is without merit. Mr. Keaton has advised that he inserted the second date sometime after the accident when he realized he had made an error as to the date of the notes; he is willing to provide an affidavit to that effect.

The second of the "five limited items" would entail Licensee's production for inspection by an unnamed expert in

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1/ TMIA's characterization that the inspection "was permitted only last Monday, October 15," omits that the request was made only on October 8 and Licensee located and made the originals available on the 15th with TMIA's concurrence.

Washington of the original strip chart which recorded the pressure spike. The TMIA objective is "to determine if a careful examination of the strip chart will disclose the precise time at which the early portion of the strip chart was cut off from the recording drum." TMIA cites as its basis that it discovered only on October 15 that the strip chart was cut at about 10:00 p.m. on March 28, 1979.

TMIA's assertion that this is new information is simply wrong. NUREG-0600, which issued in 1979 and is one of the investigative reports the parties earlier stipulated as evidence, indicates the strip recorder chart was cut at 10:15 p.m. on March 28. What is significant, however, is that the pen lines were uninterrupted on the chart until the 29th.

> The investigator reviewed the original combined wide-range 0-100 psig (BS-PT-4388-2) and narrow-range -5-0 +10 psig (BS-PT-4388-1) chart. The chart shows that, on March 28, 1979, at approximately 1350 hrs, two peaks occurred. The narrow range goes off scale and the wide range peaks at about 28 psig. A portion of the charts had been cut out from the original Strip Chart. The cutout section of the chart was matched to the two adjacent sections and carefully reviewed for pen disruptions that could be expected if the chart was removed on March 28, 1979, in order to make copies and then returned to the recorder. The chart has a written notation that indicates "chart removed, March 29, 1979 at noon."
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> * * *
>
> The cut section has an early cut line at 0200 hrs March 28, 1979, and a late cut line at 2215 hrs. The chart runs out about 1200 hrs (noon) on March 29, 1979.

> The possibility that copies of the reactor building pressure trace were made on March 28, 1979, appears possible but unlikely. The reviewed originals had no obvious pen disruption to confirm this. The CRO later expressed reservations as to whom he talked to and when. NRC personnel do not recall a xerox copy in the control room on March 28, 1979.

NUREG 0600 pp. I-4-50 to I-4-51.

Licensee should not be required now to produce this chart in Washington. TMIA asked on October 8 to inspect the original; it was produced for inspection on October 15 in Harrisburg with TMIA's concurrence. As TMIA knows, this original chart is securely kept at TMI and is only removed for inspection so long as a courier is with it at all times. TMIA has had its opportunity to inspect this document, it did, and to require its production again after the close of discovery and in Washington so that an unnamed expert can review it, is unwarranted, particularly since it has been reviewed previously for the very same purpose and the fact that it has a cut which appears at about 10:00 p.m. on March 28 has been widely known for five years.

The third of the "five limited items" for additional discovery would entail the depositions of more than 10 persons. The TMIA objective would be to question them about what reference was made to hydrogen by Mr. Kunder at a meeting they attended in late afternoon on March 29, 1979. The basis for this late request is assertedly new information from an Abramovici deposition on October 15. In fact, it is not new information

at all and would involve redeposing some six individuals whom TMIA has already deposed.

Abramovici testified in his June 11, 1979 I&E interview that on the second day (March 29) George Kunder had a feeling hydrogen in the containment was high and that he (Abramovici) had recommended setting up a recombiner. There was concern for hydrogen, but also concern for breaking containment integrity by hooking up the recombiner. There was also concern for the risk of a detonation with hydrogen concentration in the recombiner. I&E Interview of J. Abramovici (June 11, 1979) at 12-16.

Kunder has testified that on Thursday (March 29) or Friday (March 30) when he met with the task force of GPU engineers, one of his concerns was "long term hydrogen generation . . . you know, from the interaction of the spray chemicals and the aluminum in the building." He stated at the time he was not aware of a zirc-water reaction. SIG Deposition of G. Kunder (Sept. 18, 1979) at 75. Kunder also testified on Sept. 3, 1980, that his concern was with long-term hydrogen generation "due to the interaction of aluminum and materials in water." He remembered having this concern at the meeting on the 29th and voicing it then at the end of D. Wilson's presentation. NRC Interview of G. Kunder (Sept. 3, 1980) at 52-55.

Abramovici's October 15 deposition says nothing different -- only that there was a concern for hydrogen expressed by Kunder and installation of the hydrogen recombiner was

discussed. He does not remember any discussions about how the hydrogen might have been produced. Abramovici Dep. at 44.

Nor does TMIA's reliance on the Crimmins questionnaire response provide a basis. The Crimmins questionnaire has been available to TMIA since September 11, 1984; TMIA first reviewed a copy of it on September 11. In any event, TMIA has mischaracterized the Crimmins response to the questionnaire. That response appears consistent with the Kunder and Abramovici statements cited above.

In short, there is not cause to extend the discovery period now to require depositions of more than ten individuals, more than half of whom already have been deposed, because the information upon which TMIA relies to seek extension is simply not new.

The fourth of the "five limited items" TMIA proposes for additional discovery would entail interrogatories to Licensee and four additional depositions. The TMIA objective would be to pose questions about whether Mr. Porter took a "second set of data" from incore thermocouples on March 28, 1979. As grounds, TMIA cites Mr. Lentz's testimony at an October 15 deposition and Mr. Yeager's testimony at an October 10 deposition.

Licensee has neither the Lentz nor the Yeager deposition transcripts and thus cannot confirm TMIA's representation as to the testimony. Arguendo that TMIA accurately represents the Lentz and Yeager deposition testimony, there still is no cause for additional discovery which would require redeposing four individuals whom TMIA has already deposed.

The Lentz testimony as TMIA describes it is that he "learned within a few days after the accident that Ivan Porter had taken a complete set of 51 or so in-core thermocouple temperatures on the first day of the accident." These readings, taken with a digital voltmeter (DVM), are the "second set." That Lentz heard such a thing from someone a few days after the accident is hardly probative of whether Porter took such readings, particularly when contrasted with the considerable testimony of Porter and the instrumentmen who worked for him who actually were involved in taking the readings. Lentz clearly was not involved. TMIA's account of Yeager's testimony is new only in Yeager's alleged observation that the instrumentmen did not have time to take 51 readings (and thus, as is only speculated, Porter himself must have.) Yeager may well be confused about how long it took to get readings. In fact, the time consuming effort of wire-shifting and reattaching was necessary only for what has been referred to as the "first set" taken by a fluke or type K thermocouple reader. However, the technicians shifted for "the second set" to a DVM with a probe which obviated the need to attach and reattach wires for each reading. It is this second set which TMIA questions.

The prior testimony on this subject of incore thermocouple readings is legion.

Porter has testified that on the morning of the 28th, he tried to get incore readings from the computer, but quite a few were off scale (Porter I&E 5/21/79 at 14.) Porter went down to

the cable room with several instrument foremen and technicians. They took a thermocouple reader (fluke) and DVM. Porter left for the control room and returned several minutes later. When he returned, the instrumentmen had taken about four readings with the thermocouple reader. (Porter I&E 5/21/79 at 17; Porter I&E 7/2/79 at 11; Porter NRC/SIG 10/30/79 at 4-5.) Porter told them to go ahead and use the DVM (for convenience, not confirmation of fluke readings). (Porter NRC/SIG 10/30/79 at 10, 28-29.) At that point or maybe after a few DVM readings were taken, Porter left. (Porter NRC/SIG 10/30/79 at 10, 15-16). He did not stay for a complete set of readings. (Porter I&E 7/2/79 at 11; Porter I&E 9/24/80 at 4.) He did not return to the cable room. (Porter NRC/SIG 10/30/79 at 14; Porter I&E 9/24/80 at 6.) Porter knew the instrument men were going to take more DVM readings, but did not instruct them to do so. (Porter NRC/SIG 10/3079 at 14.) Porter may have been subsequently told that a complete set of all readings had been taken, but doesn't remember. (Porter I&E 7/2/79 at 11; Porter NRC/SIG 10/30/79 at 15.) Skip Bennett was the lead foreman. (Porter I&E 9/24/80 at 4-5.)

Yeager has testified that he and Wright went down to the cable room with a type K thermocouple reader to measure temperatures at various incore input locations, not specifically given, because the computer was off scale. They took about 10-12 readings. Gilbert, Bennett and Porter joined them after about the second reading, and Bennett took notes of the

readings. Porter disbelieved the thermocouple reader readings and wanted verification; so Gilbert or Bennett got a DVM. They checked the readings originally taken with the thermocouple reader and the readings agreed. Porter left. (Yeager I&E 6/20/79 at 10-18.)

Wright has testified that he was told to take some random readings on the incores, because the computer was reading off-scale. After they had taken about five readings, Porter came down. The data was erratic and Porter wanted them to try another means of taking the data. He thinks that Bennett suggested using the DVM. They got the DVM, perhaps ten minutes later, and "measured every input . . . ." (Wright, I&E 6/15/79 at 7-9.) Bennett wrote down the data in the computer book. (Id. at 27.)

Gilbert has testified that he and Bennett went down to the cable room. Porter, Yeager and someone else were there and had started to take some readings. They took a few more. Gilbert did not have much of a role. He doesn't know if a full set of readings were taken. He testified that after Porter got all the information Porter wanted, everybody packed up and left. (Gilbert, I&E 9/30/80 and Hart 10/16/79.)

Bennett has testified that he and Gilbert went over to Unit 2 to take incore readings from the remote multiplexer. (Bennett, I&E 6/19/79 at 5.) He saw Wright, but Yeager had already gone to the cable room. (Id. at 8.) Bennett, Gilbert & Wright went and joined Yeager, who had unlocked the multiplexer

and identified the computer points but had not yet taken any readings. (Id. at 9.) Bennett didn't remember if Porter was there. (Id.) Bennett states that they took the first 2-3 readings and converted them to temperatures. (Bennett I&E 9/29/80 at 5.) Porter was there then, but didn't stay long. (Id. at 5-6.) After they took the first couple of readings, Bennett decided to have the technicians take a complete set of readings, and they switched to a DVM. (Bennett I&E 6/19/79 at 12.) Bennett recorded the readings in a computer point identification book. (Bennett I&E 6/19/79 at 17.) Either Wright or Yeager actually took the readings. (Bennett I&E 9/29/80 at 5.) They took a complete set of DVM readings and then converted them to temperatures. Id. Porter had only directed Bennett to take a few readings, not a complete set. Id. at 11. Porter was only present for a few of the readings. Id.

With all this pre-existing testimony by those most directly involved, it is not reasonable on the speculative bases cited by TMIA to suggest cause exists now to extend discovery to inquire further as to these readings, including the redeposing of four individuals at least two of whom were not even involved in the readings.

The fifth and final "limited item" upon which TMIA seeks discovery beyond the discovery period would entail deposing Mr. Morrell. The TMIA objective would be to question him "concerning his notes and information he received about the TMI accident on March 28 and early March 29." As the basis, TMIA states:

> TMIA did not receive the Morrell notes until October 18, 1984, when TMIA counsel conducted a review of all documents produced in response to TMIA's First Request for Production. These notes were evidently added to GPU's response since the last review of these documents conducted by TMIA counsel on October 8, 1984.

TMIA's bald claims are absolutely groundless and there is no basis for claiming newly-discovered evidence. The Morrell notes were produced with Licensee's initial document production in early September. TMIA in fact first reviewed the very file containing the Morrell notes to which they refer on September 15, 1984. There have been no additions to the file containing the Morrell notes since the initial production in early September. There is no basis upon which to extend discovery to depose Mr. Morrell.

For all the reasons stated above, Licensee opposes TMIA's request to extend the discovery period for further inquiry in the five areas which are the subject of TMIA's October 22, 1984 Motion.

Respectfully submitted,

SHAW, PITTMAN, POTTS & TROWBRIDGE

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Dated: October 25, 1984

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	Docket No. 50-289
METROPOLITAN EDISON COMPANY	)	(Restart-Management Phase)
	)	
(Three Mile Island Nuclear Station, Unit No. 1)	)	

CERTIFICATE OF SERVICE

I hereby certify that copies of "Licensee's Answer to TMIA's Motion To Extend Discovery Period For Specific, Newly-Discovered Evidence," dated October 25, 1984, were served on those persons on the attached Service List by deposit in the Unites States mail, postage prepaid, this 25th day of October, 1984, or where indicated by an asterisk (*) by hand delivery, the evening of October 25 or morning of October 26, 1984.

Respectfully submitted,

Ernest L. Blake, Jr., P.C.

DATED: October 25, 1984

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BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

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METROPOLITAN EDISON COMPANY	)	Docket No. 50-289 SP
	)	(Restart Remand on Management)
(Three Mile Island Nuclear Station, Unit No. 1)	)	

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