392.

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

BEFORE THE COMMISSION

In the Matter of

Metropolitan Edison Company, et al.

Three Mile Island Nuclear

Generating Station, Unit 1

Docket 50-289 SP
(Restart)

AAMODT COMMENTS CONCERNING RESOLUTION OF THE RESTART PROCEEDING IN RESPONSE TO COMMISSION ORDER OF SEPTEMBER 11, 1984

D803

INTRODUCTION

By order of September 11, 1984, the Commission provided an additional opportunity for the parties to present their positions concerning the mechanism for resolution of the Restart Proceeding.

On August 15 of this year, we brought to the Commission's attention the single matter which the Commission must, in good conscience, resolve before proceeding with its review or providing for a hearing of any other issues. This is the matter presented in our motion of June 21, 1984 which showed that:

(1) The health of residents in elevated areas northwest of TMI is a matter of concern. The cancer death rate is six to eightfold that expected.

(2) The flora in the same areas show effects that can be caused by high doses of radiation.

(3) Many individuals in the same areas who were outside during the initial days of the accident at TMI-2 experienced effects that can be caused by high doses of radiation. These effects included metallic taste, reddening of the skin, hair greying and loss, and diarrhea.

(4) The Licensee was the sole monitor of radiation releases during the initial days of the accident.

(5) The Licensee claims to have lost the original radiation survey records and the forms and calculations of the two engineers who performed offsite dose calculations around 7 a.m. the morning of the TMI-2 accident.

Until the environmental impact of the accident, particularly as it relates to adverse health effects among the neighboring population has been openly and fully resolved, the consideration of other issues is

is grossly inappropriate and a waste of agency and party time and other resources. If, as we suggest, the Licensee concealed evidence of high radiation releases, denial of the license would be mandatory.

We have included our view concerning resolution of the matter of the training of operators simply to provide additional justification for a postponement of the consideration of that issue until the health/radiation issue has been resolved.

PROPOSAL FOR RESOLUTION OF ISSUES

1.o Resolution of the Health/radiation Monitoring Issue.

1.1 Introduction.

In a motion of June 21, 1984, we asked the Commission to investigate the human and floral health effects discovered during the course of a citizen survey conducted in three areas of high elevation northwest of TMI. We contended that the releases of radioactivity on the initial days of the accident were much greater than the Licensee admitted, based on the experiences on those days of a number of residents residing in the area. Since the Licensee alone monitored the radiation releases during the early days of the accident and since original survey records, the worksheets of engineers who read the dome monitors and made initial predictions of offsite doses (of the order of 10 and 40 R/hr) and TMI-2 filters are all claimed to have been lost, we further contended that these records were more likely intentionally destroyed. For this reason, we motioned the Commission to delay any decision concerning restart until the matters of radiation dose and GPU's actions are resolved.-

reasonably described as a radioactive plume from the TMI-2 plant. (This experience was related in Affidavit 6 of the June 21 motion.)

An NRC Staff member at TMI, David Collins, stated during a telephone conversation about the Staff memo of September 12 that the Staff is assured that there is no threat to the health and safety of the residents of the home where alpha radiation was measured and, there is therefore, no justification for pursuing the source of this radiation. Admittedly, the alpha radiation that was detected emanated from the cracks of the railing and the signal at the surface of the railing was weak, but it was constant, except where the railing had been shielded by the person's body (when she leaned over the rail to call the cat).

The NRC Staff, as well as EPA and DER staffers, obtained soil samples from three locations, however we understand all agencies expect to take two months to complete their testing.

As noted above, we requested EPA to provide its analyses of soil sampling in areas identified northwest of TMI. We have not, as of this date, been provided with this information although we understand it now exists at the Middletown office.

We continue to receive information from residents in the TMI area which suggests the immediate presence of high levels of radiation. This includes the observation and pictures of dandelion leaves over 30 incles long. We described these flora effects to Dr. James Gunckel of Bridgewater, N. J., an authority on ionizing radiation effects in plants. (Dr. Gunckel had examined a number of plants from the TMI area earlier this year and provided an affidavit included in the June 21 motion.) In a telephone conversation on October 2, Dr. Gunckel stated that the effects that are presently being observed, of which the giant dandelion leaves are an example, are not mutations from prior fallout

but the result of radiation presently in the soil.

1.3 Action the Commission Must Take.

The Commission must, consistent with their charge to assure public safety, give the matter of health effects number one priority. Soil testing must be expedited without compromising the results. (We understand that the delay is imposed by scheduling of equipment.)

The Commission must provide the scope and schedule of the review of the health data by CDC. (NRC sent the June 21 motion to CDC on August 31. however CDC has not contacted us to view the raw data.)

The Commission must direct the Staff to initiate a program to monitor properties in the TMI area, particularly those at high elevations northwest of TMI. Many lives may be a risk. Does the ingestion of food grown in these areas pose a threat to the health of resident who consume home-grown food? Do food products from farms in the area pose a threat to consumers? Is there an ever-present hazard to children and animals who romp in the vegetation and play on the ground? Are the trees in forested areas recycling the radionuclides when the leaves fall? Will raking and burning of leaves pose an additional health hazard? (We have made some measurements which indicate radioactivity in tree leaves.) Are we observing the effects of neutron bombardment?

The Commission must determine Licensee's knowledge of personal experiencies of residents described in affidavits of the June 21 motion. Did the Licensee know that farmers northwest of the plant can no longer frow clover seed and have had difficulty growing other crops and graden vegetables since the accident? Did the Licensee have knowledge of the widespread experience of metallic taste? Was the

Licensee aware of reports of reddening of the skin at the time of the accident, blisters on lips, greying and loss of hair or persistent diarrhea?

Following the August 15 meeting, the Commission requested the Staff to provide any information in their possession concerning the experiences of residents as well as the Staff's reply (if any) to Rep. Stephen Reed's letter of August 1979 describing residents' experiences. (This letter was attached to the June 21 motion.) On September 5, 1984, we requested the Commission's provision of [illegible] information to the parties, and we repeat this request.

2.0 A Hearing to Examine the Matters of Leak Rate Falsification at Both Units.

The hearing of the leak rate falsification matters should proceed and be expanded to include environmental impact, particularly as it effects public health.

The Office of Investigations (OI) believes that it has sufficiently resolved management responsibility for the leak rate matters to permit restart of Unit 1. However, we would call the Commission's attention to the NRC rules of practice and procedure which do not permit the resolution of important safety issues by a single party, even the NRC Staff. The investigations of OI have not been entered into the record of the proceeding and are, therefore, not a legal basis for a Commission decision.

While the Commission could make a decision immediately effective on the basis of review of extra-record evidence (the OI investigations), what confidence can the Commission now have in the Staff's findings? The Staff kept these issues of leak rate falsification out of the Restart Proceeding, where they should have

been the first evidence considered. Can the Staff's investigations be trusted?

The Commission cites (in its order) a conclusion from the OI investigations that we find incredible. This concerns Michael Ross, manager of TMI-1. Oi has found that Ross did not have any knowledge of leak rate falsification at Unit 2 because he was only on duty a few hours each month. This is not a reasonable basis for OI's conclusion. Ross testified in the "Cheating" hearing that few matters are held in secret in the plant. Ross testified to his frequent intercharges with operators with whom he worked. Ross was in daily contact with the manager of Unit 2. How could Ross not have had knowledge of daily futile attempts to obtain a good leak rate at Unit 2?

3.0 Provide Unequivocal Proof that Operators and Managers are Competent.

3.1 Background.

The Commission's August 9, 1979 Order (at Item 1(e)) required that before restart the Licensee provide definitive proof that the operators could handle the TMI-1 plant under all conditions. Following two hearings which considered this matter, there is no reliable evidence of the operators' and Managers' capabilities.

What exists is evidence that some operators and managers passed the NRC licensing exam in October 1981 after a second retake, that many failed and that the NRC exam is not a reliable, valid measure of the capabilities of the operators. The other evidence supporting the operators' capabilities was an audit and report contracted by the Licensee. This was the work of the OARP committee.

The most noticeable detraction from the original OARP report was the disparity between the content of the report and the conclusions. The report discussed a number of significant deficiencies in simulator training and instructor qualifications, and poor results on the audit. These and other problems were not reflected in the summary or conclusions of the report.

Two committee members appeared in the main hearing to support the original OARP report. However, both of these members were psychologists by training and experience, and they admitted that they had no knowledge of nuclear subjects. The psychologists were the only committee members who observed the training program firsthand, so there was no credible discussion of the content and effectiveness of the Operator Accelerated Retraining Program, designed in response to the Commission's August 9 order. Another committee member with nuclear expertise was at the plant but simply evaluated a single aspect of the use of a new process (dubbed Decision Analysis) to be used by shift supervisors and managers in the event of a transient.

The Licensee, if it disagrees with the above assertion concerning the participation of the original OARP committee members, could clear the air by providing sworn affidavits from each member of the original committee describing with specificity his participation in the original committee review and his independent conclusions at that time.

No reliable information supporting the adequacy of the training of operators and managers exists on the restart record. Judge Milhollin did, however, produce some reliable evidence of the inadequacy of training by questioning operators during the "Cheating" hearing.

The extra-record evidence provided by the Licensee and the NRC Staff is difficult to assess. In the first place, there are serious

conflicts in this information. Three audits, contracted by GPU during the years 1982-3 found serious deficiencies in the training program. These audits were reported in September 1982 by Data Design Lab and In February 1983 by RHR and BETA.

On the other hand, the Rickover and new OARP Committee report, also contracted by GPUN, found training to be adequate.

It should be noted, in attempting to understand the conflicts in the various reports, that with the exception of the RHR and BETA reports, the audits were contracted for use in the Restart Proceeding. Some of the reports were extremely shallow, particularly the Rickover and new OARP committee report. The Design Data Lab report is an anomoly, being contracted, it would appear, to deflect the deficiencies in training which surfaced in the "Cheating" hearing and yet not being a patent endorsement of the training program. Understandably, Licensee has not promoted the Design Data Lab study, however it should be of interest to the Commission. (We discussed aspects of the study in our comments of February 18, 1984.)

3.2 Discussion.

Further hearing to consider the matter of operator training will probably not produce any reliable results. The same judge is presiding who was satisfied with the shallow testimony from Licensee and Staff witnesses. For instance, the Board under this judge assumed that a license condition of three additional days of training in TMI-2 events would cure the numerous deficiencies so readily apparent and identified in both the Commonwealth and Aamodt findings. (The fact that the

Commonwealth withdrew its findings and was satisfied with Licensee's promise of a bit more training should not have influenced the Board. See Condition 9, August 27, 1981 PID.)

An administrative hearing cannot assure that training has been effective for every operator or every crew. A hearing can only seek to prove that training is generally ineffective or generally effective. However, a single inappropriately-trained operator or manager called to perform in a time of emergency can undermine the plant's safety systems.

3.3 Conclusion.

The only viable means by which to determine whether or not an operator or manager is adequately trained is to test him/her on an exact-replica simulator of the TMI-1 plant. GPU expects to have an exact-replica simulator in place in mid-1985. The resolution of the training issue should await the availability of that simulator. In view of the preeminence of the health/radiation monitoring issue, delay in resolution of the training issue would be an appropriate conservance of agency and party resources.

The training issue should be explanded to include managers. There was testimony in the main hearing to the effect that managers, nearly all new to commercial nuclear power plant operation, would begin a course of study. This training has been included as a condition to restart. However, there has been no provision (other than Staff review) to determine whether the training has taken place or been effective.

4.0 Investigation of NRC Staff Performance.

The Commission is now becoming acquainted with the history of deliberate deception of the Staff concerning the falsification of leak rates at Unit 2. We asked to rebut the response of Harold Denton to Commissioner Asselstine's question as to why the Staff had not brought this matter into the Restart Proceeding in a timely manner. As we explained at that time, during the Public meeting on August 15, 1984, we, not the NRC Staff, raised this issue in the Restart Proceeding on April 18, 1983 (by motion of April 16, 1983).

We, and the public, deserve a truthful explanation from the Staff concerning their attempt to shield the leak rate matter from the Restart Proceeding and their continued deception when explaining their actions.

The public depends on the Staff to regulate nuclear plants in our neighborhoods. The Commission should not expect the public in the vicinity of TMI to be willing to accept restart of that plant under <u>any</u> licensee unless the Commission publicly identifies and roots out the people within the NRC Staff who were responsible for the lenient and illegal regulation of the TMI facilities.

The Commission should be aware that, in their first management decision, the Licensing Board adopted, almost without exception, the position and findings of the Staff. This entire decision is thus undermined by the lack of credibility of the Staff.

CONCLUSIONS

The Commission must assign the highest priority to the resolution of the cause of the severe health effects in elevated areas northwest of TMI. If the residents in this area have been put at risk, and many have died, because of Licensee's inadequate or deceptive practices in monitoring radiation releases during the initial days of the accident, denial of the license to operate TMI-1 would be the only responsible Commission decision. For this reason, it would be a waste of agency and party resources to pursue any and all other issues at this time. The exception would be the matters of leak rate falsification at both units because of the relevancy to the health issue.

The matter of the training of the operators should be decided by simulator examination of the operators on the exact-replica simulator of Unit 1, expected to be delivered in mid-1985. This issue should be extended to include the adequacy of plant-specific knowledge of the managers, most of whom have no operational experience with a commercial nuclear power plant.

The Commission should thoroughly investigate the performance of the Staff in the Restart Proceeding. When the regulatory staff is complicit with the licensee in covering the latter's violations and deceptions, the public is at risk.

Respectfully submitted,

Norman O. Aamodt

Marjorie M. Aamodt

October 4, 1984

This is to certify that the document AAMODT COMMENTS CONCERNING RESOLUTION OF THE RESTART PROCEEDING were served on the Commissioners, the Boards, Legal Counsel of the Staff, Licensee and Commonwealth, TMIA, and UCS by deposit in U. S. Mail, First Class on October 6, 1984.

Marjorie M. Aamodt

Marjorie M. Aamodt