TMI Program Office
Attn: Mr. John T. Collins, Deputy Director
U. S. Nuclear Regulatory Commission
c/o Three Mile Island Nuclear Station
Middletown, Pennsylvania 17057

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
TMI Worker Registry

This letter is prepared in response to the first comment of your letter, NRC/TMI-80-121, dated August 5, 1980, in which the NRC makes recommendations concerning a TMI Worker Registry which might be of value in potential studies of the effects of radiation.

For the purposes of the proposed TMI Worker Registry, you recommend that a worker be defined as "any person who has been issued a personal radiation dosimeter at the TMI nuclear facility since March 28, 1979". Met-Ed/GPU has provided summary dosimetry information on all such personnel to the NRC Radiological Health Standards Branch and has arranged to continue supplying these data.

However, Met-Ed/GPU considers the proposed definition of a worker as it would apply to the intended purpose of the worker registry, to be impractical. As explained to NRC personnel in each meeting about the Worker Registry, thousands of people who were monitored in 1979 were visitors and other personnel who received little or no radiation exposure. Met-Ed/GPU has little additional information on most of these people. Besides making it difficult for NRC to obtain information other than dosimetry data, use of this general definition of a worker would have the following disadvantages:

1. Met-Ed/GPU is not aware of any technical reason to study personnel with little or no radiation exposure, unless it would be to use them as a control group for comparison with those who received higher exposure. However, selection criteria for the large number of personnel at TMI in the period after the accident were different from selection criteria used at other times. Therefore, the extensive work NRC would have to perform to obtain detailed data on this group would appear to be of little value.

2. Criteria for wearing dosimeters have gradually been changed in 1980 to exclude many non-radiation workers who have been routinely monitored in the past, but received essentially no occupational radiation exposure at TMI. Comparing the group of personnel now monitored with the group monitored last year would not be valid. It does not appear reasonable to increase the size of the group considered in the TMI Worker Registry to include those personnel who are no longer being monitored.
3. The personnel monitored who have had little or no radiation exposure from TMI have received tens of thousands of manrem from background, medical diagnoses, and work other than at TMI. The total radiation exposure for all those monitored at TMI Unit 2 since March 28, 1979, has been 1150 manrem. According to risk estimates made by those who have analyzed large amounts of scientific data, these TMI Unit 2 radiation exposures would add less than one cancer case to a group of people who for other reasons will have thousands of cancer cases. Inflating the size of the group in the TMI worker registry would appear to make more difficult what already seems to be an impossible job, namely, finding any health effects from radiation work at TMI.

4. The data below show that in the applicable period nearly all radiation exposure at TMI has been received by ten to twenty percent of those monitored. The definition NRC recommends using would cause the worker registry to include five to ten times as many people as needed to include all those who received more than 0.1 rem at TMI.

<table>
<thead>
<tr>
<th>Numbers of People Monitored for Radiation Exposure at TMI</th>
<th>All 1979</th>
<th>8 Months 1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>10848</td>
<td>8502</td>
</tr>
<tr>
<td>Visitors</td>
<td>2784</td>
<td>4097</td>
</tr>
<tr>
<td>No measurable exposure</td>
<td>6873</td>
<td>6354</td>
</tr>
<tr>
<td>Greater than 0.1 rem</td>
<td>1907</td>
<td>800</td>
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</tbody>
</table>

Met-Ed/GPU recommends NRC revise the definition of worker for the proposed TMI worker registry to exclude visitors and to exclude most of the others who receive little or no radiation exposure.

Sincerely,

G. K. Hovey
Director, TMI-2

GKH:LJL:dad

cc: Bernard J. Snyder