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MEMORANDUM FOR: Robert M. Bernero, Director Division of Systems & Reliability Research Office of Research

> Bernard J. Snyder, Program Director TMI Program Office Offfce of Nuclear Reactor Regulation

ARGONNE NATIONAL LABORATORY EVALUATION OF THE POTENTIAL 'S SUBJECT: FOR AND CONSEQUENCES OF RECRITICALITY DURING CLEANUP AND DEFUELING AT TMI-2

As part of the prepar tion of the Final Programmatic Environmental Impact Statement (PEIS) related to the decontamination and disposal of radioactive wastes resulting from the March 28, 1979 accident at TMI-2, Argonne National Laboratory (ANL) evaluated the potential for recriticality. Since almost all previous studies in this area have been done by RES, we are forwarding the ANL evaluation to you for your information. The evaluation concurs with previous NRC studies that the probability of recriticality is extremely low if reasonable precautions are taken. We note, however, that the evaluation differs with respect to specific physical processes that would occur in the unlikely event of criticality.

Should you wish to discuss the report or obtain any additional information you may contact Scott Newberry in the TMI Program Office. He can be reached on extension 28095.

> Bernard J. Snyder. Program Director TMI Program Office Office of Nuclear Reactor Regulation

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|     | L. | Barrett |
|     | R. | Weller  |
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FROM:

- H. Richings R. DISalvo C. Kelber
- U. Lynch
- S. Newberry
- C. Marotta

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| SURNAME | TMIPO:NKR<br>SNewberry/pf | RWeller   | BJSnyder | <br> | <br> |
| orrice  | TMIPO:NER                 | TMIPO:NRR | THIAONRR | <br> |      |