

THE TEXAS A&M UNIVERSITY SYSTEM

TEXAS TRANSPORTATION INSTITUTE

COLLEGE STATION TEXAS 77843-3135

TRANSPORT OPERATIONS PROGRAM

(713) 845-1535

February 22, 1982

Mr. Charles Barth
U. S. Nuclear Regulatory Commission
Office of the Executive Legal Director
Washington, D. C. 20555

Dear Mr. Barth:

The following is in response to the February 12, 1982 supplemental information supplied by E. A. Borgmann of Cincinnati Gas and Electric. The supplemental information was provided in response to a February 2, 1982 letter from Mr. B. J. Youngblood requesting a revised evacuation time submittal. The basis of my review is NUREG 0654, Appendix 1, a site visit to the Zimmer EPZ and my experience with nuclear power plant sites around the U.S.

Response to Item 1.

The data on the evacuation road network (Table 1 and Figure 1) is comprehensive and well presented. The capacities are shown to be in excess of the 1000 vehicles per hour used in the evacuation time estimate study.

The merging of three primary evacuation routes, near Alexandria, has been appropriately considered as indicated in Figure 1 and the supporting text.

The population data (929 residents) supports the lack of a capacity problem in Felicity.

Response to Item 2.

The supplemental data indicates that New Richmond is the only area where capacity is a consideration at vehicle demands in excess of those used in the study. The CG&E material also indicated the increased time required using a higher number of vehicles. Adequate consideration has, therefore, been given to this issue.

Response to Item 3.

The question of bottlenecks has appropriately been addressed and explained.

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Response to Item 4.

Revised population data has been provided and its impact evaluated. Adequate consideration has, therefore, been given to this issue.

Response to Item 5.

Consideration has been given to the impact of various plant activities on evacuation times. No further consideration appears appropriate.

Response to Item 6.

The areas subject to flooding and sliding have been identified. The necessary information is, therefore, available for decision-making. I do take exception to the statement on page 20 "... the road presents no special considerations for normal, adverse, or any other evacuation scenario." Certainly if a roadway were to become blocked due to sliding or flooding, special consideration would include alternative routing or removal of the blockage. The previous comment notwithstanding, the potential flooding and sliding locations have been identified and the appropriate action can be taken if required. The issue has, therefore, been considered as requested.

Response to Item 7.

The response to Item 7 adequately addresses the question.

Response to Item 8.

Provision has been made to identify the location and numbers of transportation dependent. This method is certainly superior to estimating their number. Adequate resources also appear to be available to handle the transportation dependent within the time frame necessary to handle the general population.

Response to Item 9.

The response to Item 7 adequately addresses this question.

Response to Item 10.

The response adequately explains the inappropriateness of comparing the two studies.

Response to Item 11.

The adverse weather scenario is "conservative" based on the intended purpose of an adverse weather scenario. The word "conservative" is used in the sense that the time estimate is likely to be in excess of the time actually required

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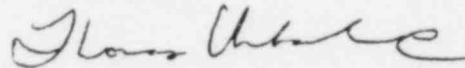
for typical rain or light snow conditions. It should be noted that evacuation time estimates should not be overly "conservative" because their purpose is to select between alternative protective actions.

Response to Item 12.

The conclusion that Clermont County plans not to evacuate into Brown County will have little effect on evacuation time estimates appears to be reasonable. No change in the evacuation time estimate appears to be warranted.

In conclusion, the supplemental data supplied by CG&E is sufficient to consider their evacuation time estimate study to be a reasonable estimate of evacuation times and consistent with the guidance of NUREG 0654.

Sincerely,



Thomas Urbanik II
Assistant Research Engineer

TU:bb

cc: Mitzie Solberg
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