

From: Nanette Gilles
To: Eddie Grant; Tom Mundy
Date: 11/12/04 9:58AM
Subject: Draft Requests for Additional Information - Emergency Planning

Please find attached a package of preliminary questions, in the form of draft requests for additional information (RAIs) for the Clinton ESP review. These questions pertain to the staff's review in the area of emergency preparedness. A hard copy of these draft RAIs was given to Mr. Grant during a public meeting at NRC headquarters on November 10, 2004. Exelon may request a phone call to seek clarification on the questions before they are issued by letter. Please contact me to let me know if you wish to arrange such a call or if you have other questions.

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Subject: Draft Requests for Additional Information - Emergency Planning
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nrc.gov owf2_po.OWFN_DO DMB1 CC (Daniel Barss)	Delivered	11/12/04 09:58AM
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Exelon Early Site Permit (ESP) Application
Emergency Plan
Requests for Additional Information (RAI)

RAI No. 13.3-20

Provide the following information regarding the Evacuation Time Estimates (ETE) for Clinton Power Station:

(NOTE: RAIs a through j relate to Section II.A. "Evacuation Time Estimate Analysis" in Supplement 2 to NUREG-0654.)

- a) Discuss the rationale for not including shadow or voluntary evacuation.
- b) Provide site specific distributions for hospitals, nursing homes and correctional facilities addressed in the 1993 ETE Study or describe other studies that were used to arrive at the assumption that these facilities would commence evacuation between one to two hours after the 15 minute notification.
- c) Regarding the 1993 ETE Study, provide a separate analysis of the evacuation time estimates for special populations for normal and adverse conditions.
- d) Regarding the 1993 ETE Study: Discuss the basis for neighbors and State/local authorities contributing one vehicle per household for the transport-dependent (non-auto-owning) population. Provide site-specific data regarding how many non-auto-owning households are in the plume exposure pathway EPZ. Provide the methodology for determining the transport-dependent population. Provide an estimate of the number of auto-owning residents versus transport-dependent residents. Provide information on the initiation/mobilization time distribution for transport-dependent population. Provide a separate estimate of the time required to evacuate the transport-dependent population.
- e) Clarify whether the characteristics for each segment analyzed in the 1993 ETE Study are for the narrowest section or bottleneck, if the roadway is not uniform.
- f) Regarding the roadways that were driven and verified in May 2002, discuss any road changes identified including new or changed access points, roadway condition, and whether new roadway constrictions have been constructed that may reduce the capacity of sections of the route.
- g) Discuss how the NETVAC model accounts for traffic control or whether the ETE is reduced if these traffic control measures are implemented. Clarify whether existing traffic control devices will prevail during an evacuation or traffic control points will be manned by emergency personnel for traffic control.
- h) Discuss why there is such a small difference in the ETE for the evacuation of the entire plume exposure pathway EPZ between the winter weeknight adverse conditions and normal conditions in the 1993 ETE Study.
- i) Regarding the 1993 ETE Study, discuss the basis for the assumption that 50,000 people in 16,500 additional vehicles will enter the evacuation route during the Apple and Pork Festival. If park and ride or shuttles are used during the event, discuss the dependency of the people attending the festival on public transportation to get to their vehicles. Discuss whether any of these vehicles will return home to pack or pick up relatives prior to evacuating the plume exposure pathway EPZ. Discuss the estimated time to mobilize from the festival to start the evacuation. Provide trip generation times for this event.
- j) Since the 1993 ETE Study adds 50,000 people to the transient population for the Apple and Pork Festival, discuss the basis for the population estimate of 22,000 people per day for the

festival that is used in Section 2.3.4, "Analysis - Special Event," in the EGC ESP Emergency Plan.

(NOTE: RAIs k through v relate to Section III. "Early Site Permits - Major Features of the Emergency Plans" in Supplement 2 to NUREG-0654.)

k) Provide a full-size copy of Figure 1.2 "EPZ Evacuation Network" in the Clinton Power Station 1993 Evacuation Time Estimate. The plume exposure pathway emergency planning zone, evacuation routes, evacuation areas, shelter areas, and relocation centers in the host areas are not clear on the copy provided on the compact disk.

l) Explain the assumption of an automobile occupancy factor of 60 students per bus and 40 residents per bus for special facility populations. Provide specific information regarding whether vans or ambulances will be needed in addition to the buses. If vans and ambulances are needed, provide information on whether they are included in the vehicle estimate.

m) Provide information on whether pass through traffic affects the roadway capacity and the ETE within the plume exposure pathway EPZ evacuation routes.

n) Explain why the NETVAC model input files in Appendix 3 assign Area Types identified as '4' or Residential for the entire plume exposure pathway EPZ.

o) Discuss the roadway characteristics, traffic control measures and area types that support the NETVAC model runs.

p) Provide the assumptions regarding hotel/motel population estimate of 39 people per day.

q) Provide a reference for the community college enrollment.

r) Provide trip generation times for the migrant worker population and the transport-dependent population. In addition, discuss the availability of buses, drivers and the process for mobilizing these populations during an evacuation. Discuss whether evacuations can occur in a single trip or if return trips are necessary.

s) Explain why the automobile occupancy rate is assumed to be different for Clinton Power Station than other factories.

t) Provide information on the automobile occupancy rate for migrant workers. Are these workers considered transport dependent? Provide trip generation times for these workers.

u) Provide on-road travel and delay times, as well as the estimated number of cars evacuating, for each segment.

v) Since the additive reporting format for time estimates when probability distributions are used is not included in the 1993 ETE Study, provide the percentage of the population as a function of time.