

THE CLEVELAND ELECTRIC ILLUMINATING BLDG . SS PUBLIC SQUARE

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Dalwyn R. Davidson SYSTEM ENGINEERING AND CONSTRUCTION

October 15, 1981

> Mr. Robert L. Tedesco Assistant Director for Licensing Division of Licensing U. S. Nuclear Regulatory Commission Washington, D. C. 20555

> Perry Nuclear Possir Plant Docket Nos. 50-440; 50-441 Response to Request for Additional Information -Effluent Treatment Systems

Dear Mr. Tedesco:

This letter and its attachment is submitted to provide draft responses to the concerns identified in your letter dated August 27, 1981 in regard to Effluent Treatment Systems.) is our intention to incorporate these responses in a subseque.t amendment to our Final Safety Analysis Report.

Very Truly Yours,

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Dalwyn R. Davidson Vice President System Engineering and Construction

DRD: mlb

Attachment

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cc: M. D. Houston G. Charnoff NRC Resident Inspector



ETSB 6.5-1 Does not mention testing requirements for specific intervals between tests and does not specify testing following painting, fire, or chemical release.

Response

Distribution of air flow to HEPA fillers and charcoal absorber beds is tested as recommended by Position C.5.b and C.5.c of Regulatory Guide 1.52. FSAR Section 6.5.1.4.2 will be revised to reflect this position. ETSB 6.5-2 No provision for control room recording of system air flow rates or pressure drops. No provision for measurement, indication, or recording of total system pressure drop ($\Sigma\Delta p$). No provision for status indication in control room of deluge valve positions, valve/damper operator position, or fan status.

Response

The response to this question will be provided by November 30, 1981.

ETSB 6.5-3 Total system ZAp not provided. No provision for indication and recording of system flow rate in control room. Section 6.5.1.6, FSAR, references Section 6.5.3 for instrumentation and actuation requirements; correct reference is Section 7.3.1.

Response

The response to this question will be provided by November 30, 1981.

- ETS& 6.5-4 Items not consistent with ANSI N509 and Regulatory Guide 1.52: - Unit outlet flow not shown to be indicated or recorded in control room.
 - Component or system pressure drops (Δp, ΣΔp) not indicated or recorded in control room.
 - No status indication in control room of deluge valve position, valve/damper operator position.
 - Section 6.5.1.5, FSAR, references Section 9.4.1 for instrumentation and actuation requirements; correct reference is Section 7.6.1.9.

Response

The response to this question will be provided by November 30, 1981.

ETSB 11.2-1 Applicant should provide information relative to conformance to R.G. 1.140 guideline.

Response

A detailed comparison of the design of non-ESF charcoal filter systems to the recommendations of Regulatory Guide 1.140 is presently provided in Table 12.3-3 of the FSAR. ETSB 11.4-1 With respect to the monitoring, sampling and analysis of process and effluent screams under accident conditions, the applicant has not as yet made his detailed submittal on items identified in Sections II.F.1-1 and II.F.1-2 of NUREG-0737; therefore, these must be identified as open items.

Response

CEI is currently evaluating two methods to provide iodine monitoring during accident conditions.

The first uses a Silver Zeolite cartridge evaluated with a single channel analyzer set for the 0.364 Mev gamma of Iodine 131.

The second method, published by C. Distenfeld and J. Klemish, Brookhaven National Laboratory, uses a silver impregnated silica gel canister which has a low affinity for noble gases while retaining a high affinity for iodines. The silica gel is then measured with a GM Tube inserted into the canister and the reading converted to an iodine concentration.

Evaluation of the methods to provide iodine monitoring during accident condition will be completed in October, 1982. Appropriate detailed information on the number and type of samplers, sample media, flushing methods and sample analysis system will be provided at that time. Procedures and training will be provided to personnel for post-accident iodine sampling.

High range noble gas monitors are to be added to the effluent flow paths, i.e.:

- a) main plant unit vent
- b) beater boy/turbine building vent
- c) off-gas vent

These monitors will provide range extension to include the high level noble gas concentration in accordance with Regulatory Guide 1.97 and NUREG 0737. Power is to be derived from the diesel backed 120 VAC bus