

# PHILADELPHIA ELECTRIC COMPANY

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AUG 17 1984

Mr. A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Docket Nos: 50-352  
50-353

Subject: Limerick Generating Station, Units 1 and 2  
Meteorological and Effluent Treatment Branch  
Wide Range Accident Monitor Calibration Factors

Reference: PECO and NRC Conference Call 8/15/84.

File: GOVT 1-1 (NRC)

Dear Mr. Schwencer:

As discussed with the Meteorological and Effluent Treatment Branch reviewer in the reference conference call please find attached the additional information requested concerning the High Range Noble Gas Effluent Monitor Calibration Factors.

Sincerely,

*John Gallagher*  
*for*  
*J. S. Kemper*

RJS/gra/08168403

cc: See Attached Service List

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## ATTACHMENT 1

### LIMERICK GENERATING STATION WIDE RANGE ACCIDENT MONITOR CALIBRATION FACTORS

The Wide Range Accident Monitor detector calibration factors were evaluated using the Loss-of-Coolant Accident source term presented in LGS FSAR Table 15.6-16.

Since the isotopic mixture of the source term changes as a function of time following shutdown, the detector response also changes. Over the time period from reactor shutdown to four days after shutdown, the calibration factor changes by a factor of four. From four days to 30 days, the calibration factor is constant.

In order to maintain the system accuracies within a factor of two in accordance with Regulatory Guide 1.97, Rev. 2, the calibration factor can be changed at appropriate intervals following reactor shutdown. The calibration factor is calculated on the basis of either the expected isotopic mix (FSAR) or isotopic mix determined from a grab sample.

On the basis of the FSAR source term it will be appropriate to change the calibration factor at approximately 3 hours, 7 hours, 12 hours, 24 hours, 2 days, and 4 days following reactor shutdown.

JWB/dg/08168402

|   |                           |
|---|---------------------------|
| cc: Judge Lawrence Brenner                      | (w/enclosure)             |
| Judge Peter A. Morris                           | (w/enclosure)             |
| Judge Richard F. Cole                           | (w/enclosure)             |
| Troy B. Conner, Jr., Esq.                       | (w/enclosure)             |
| Ann P. Hodgdon, Esq.                            | (w/enclosure)             |
| Mr. Frank R. Romano                             | (w/enclosure)             |
| Mr. Robert L. Anthony                           | (w/enclosure)             |
| Maureen Mulligan                                | (w/enclosure)             |
| Charles W. Elliott, Esq.                        | (w/enclosure)             |
| Zori G. Ferkin, Esq.                            | (w/enclosure)             |
| Mr. Thomas Gerusky                              | (w/enclosure)             |
| Director, Penna. Emergency<br>Management Agency | (w/enclosure)             |
| Angus Love, Esq.                                | (w/enclosure)             |
| David Wersan, Esq.                              | (w/enclosure)             |
| Robert J. Sugarman, Esq.                        | (w/enclosure)             |
| Martha W. Bush, Esq.                            | (w/enclosure)             |
| Spence W. Perry, Esq.                           | (w/enclosure)             |
| Jay M. Gutierrez, Esq.                          | (w/enclosure)             |
| Atomic Safety & Licensing Appeal Board          | (w/enclosure)             |
| Atomic Safety & Licensing Board Panel           | (w/enclosure)             |
| Docket & Service Section                        | (w/enclosure - 3 copies)) |
| James Wiggins                                   | (w/enclosure)             |
| Timothy R. S. Campbell                          | (w/enclosure)             |