

The reporting requirements and the application requirements contained in Appendix I of 10 CFR Part 50 have been approved by the U.S. General Accounting Office under Clearance Number B-180225 (920071). This clearance expires June 30, 1978.

Docket No. 50-346

Distribution:

Docket File ~~FILED~~ FEB 19 1976  
 NRC PDR IE (3)  
 Local PDR L. Engle  
 TIC M. Rushbrook  
 LWR #4 File J. Collins  
 M. Williams \* ACRS (16)

Toledo Edison Company  
 ATTN: Mr. Lowell E. Roe  
 Vice President  
 Facilities Development

Edison Plaza  
 300 Madison Avenue  
 Toledo, Ohio 43652

bcc: J. R. Buchanan, ORNL  
 T. A. Abernathy, DTIE

POOR ORIGINAL

Gentlemen:

RE: DAVIS-BESSE NUCLEAR POWER STATION, UNIT 1

On May 5, 1975, the Commission published Appendix I to 10 CFR Part 50 which set forth numerical guides for design objectives and limiting conditions for operation to meet the criterion "as low as practicable" regarding releases of radioactive materials in effluents from light-water-cooled nuclear reactors. Section V.B of Appendix I requires the holders of permits or licenses authorizing the operation of light-water-cooled reactors, for which application was filed prior to January 2, 1971, to file with the Commission by June 4, 1976:

1. Such information as is necessary to evaluate the means employed for keeping levels of radioactivity in effluents to unrestricted areas as low as practicable, including all such information as is required by paragraphs 50.34a(b) and (c) not already contained in his application; and
2. Plans and proposed Technical Specifications developed for the purpose of keeping releases of radioactive materials in unrestricted areas during normal reactor operations, including expected operational occurrences, as low as practicable.

In a letter to you from D. Muller dated June 17, 1975, we indicated that the staff was in the process of developing guidance for licensees required to file information with the Commission under the provisions of Section V.B of Appendix I. This guidance is set forth in Enclosure 1.

Enclosure 1 makes reference to proposed Regulatory Guides 1.AA thru 1.FF. These guides have been published in draft form and are available in the Commission's public document room. Copies of these guides are being forwarded to you under separate cover. We are preparing additional guidance regarding the formulation of Technical Specifications to implement Appendix I which will be forwarded to you in the near future. It is recommended that proposals to modify Technical Specifications related to Appendix I be deferred pending the completion of this guidance in order to obtain a consistent format for radiological effluent release Technical Specifications.

OFFICE ➤

SURNAME ➤

DATE ➤

|  |  |  |   |  |  |
|--|--|--|---|--|--|
|  |  |  |   |  |  |
|  |  |  | R |  |  |

FEB 19 1976

Enclosure 2 provides a list of information we will need to evaluate your facility.

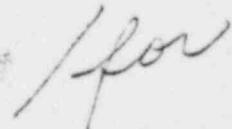
The staff is in the process of determining whether plants for which application was filed prior to January 2, 1971, can be treated in a manner similar to the treatment given to later plants in the Commission's September 4, 1975, Amendment to Appendix I. On this basis, the information called for by Enclosures 1 and 2 would be sufficient to determine compliance with the criteria set forth in Section II, paragraphs A, B and C of Appendix I and the design objectives set forth in the Concluding Statement of Position of the Regulatory Staff in Docket RA-50-2, which is reproduced as an Annex to Appendix I as amended September 4, 1975. If further information is required to satisfy a plant specific assessment under Section II.D of Appendix I, we will so inform you at a later time.

Within 30 days of the receipt of this letter, you should inform us of the measures you intend to adopt or propose to meet the requirements of paragraph 50.34a. We suggest that a meeting between your staff and the AEC staff be arranged shortly thereafter to discuss the submittal of data and methods of evaluation.

Sincerely,

Original Signed by

W. R. DeYoung



R. C. DeYoung, Assistant Director  
for Light Water Reactors  
Division of Project Management

enclosures:

1. Guidance to Holders of Permits to Construct or Licenses to Operate Light-Water-Cooled Reactors for which Application was Filed Prior to 1/2/71 to Meet the Requirements of Appendix I to 10 CFR Part 50
2. Additional Information Needed from Holders of Permits or Licenses to Construct or Operate Light-Water-Cooled Reactors for which Application was Filed Prior to 1/2/71

POOR ORIGINAL

cc: with enclosures  
See next page

|         |               |         |          |           |
|---------|---------------|---------|----------|-----------|
| OFFICE  | LWR #4        | LWR #4  | LWR #4   | AD:LWR    |
| SURNAME | MRushbrook/lm | LEngle  | WRButler | RCDeYoung |
| DATE    | 2/11/76       | 2/18/76 | 2/19/76  | 2/19/76   |

Toledo Edison Company

- 3 -

FEB 13 1975

cc: Mr. Donald H. Hauser, Esq.  
The Cleveland Electric Illuminating Company  
P. O. Box 5000  
Cleveland, Ohio 44101

Gerald Charnoff  
Shaw, Pittman, Potts and Trowbridge  
910 17th Street, N.W.  
Washington, D. C. 20036

Leslie Henry, Esq.  
Fuller, Seney, Henry and Hodge  
300 Madison Avenue  
Toledo, Ohio 43604

POOR ORIGINAL

|           |  |  |  |  |  |  |
|-----------|--|--|--|--|--|--|
| OFFICE ▶  |  |  |  |  |  |  |
| SURNAME ▶ |  |  |  |  |  |  |
| DATE ▶    |  |  |  |  |  |  |

ENCLOSURE 2

Additional Information Needed from Holders of  
Permits or Licenses to Construct or Operate  
Light-Water-Cooled Reactors for Which  
Application was Filed Prior to January 2, 1971

1. Provide the information requested in Appendix D of Draft Regulatory Guide 1.BB or 1.CC, as appropriate.
2. Provide, in tabular form, the distances from the centerline of the first nuclear unit to the following for each of the 22-1/2 degree radial sectors centered on the 16 cardinal compass directions.
  - a) nearest milk cow (to a distance of 5 miles)
  - b) nearest meat animal (to a distance of 5 miles)
  - c) nearest milk goat (to a distance of 5 miles)
  - d) nearest residence (to a distance of 5 miles)
  - e) nearest vegetable garden greater than 500 ft<sup>2</sup> (to a distance of 5 miles)
  - f) nearest site boundary

For radioactivity releases from stacks which qualify as elevated releases as defined in Draft Regulatory Guide 1.DD, identify the locations of all milk cows, milk goats, meat animals, residences, and vegetable gardens, in a similar manner, out to a distance of 3 miles for each radial sector.

3. Based on considerations in Draft Regulatory Guide 1.DD, provide estimates of relative concentration (X/Q) and deposition (D/Q) at locations specified in response to item 2 above for each release point specified in response to item 1 above.

POOR ORIGINAL

4. Provide a detailed description of the meteorological data, models and parameters used to determine the X/Q and D/Q values. Include information concerning the validity and accuracy of the models and assumptions for your site and the representativeness of the meteorological data used.
  
5. If an onsite program commensurate with the recommendations and intent of Regulatory Guide 1.23 exists:
  - a) Provide representative annual and monthly, if available, joint frequency distributions of wind speed and direction by atmospheric stability class covering at least the most recent one year period of record, preferably two or more years of record. Wind speed and direction should be measured at levels applicable to release point elevations and stability should be determined from the vertical temperature gradient between measurement levels that represent conditions into which the effluent is released.
  
  - b) Describe the representativeness of the available data with respect to expected long-term conditions at the site.
  
6. If recent onsite meteorological data are not available, or if the meteorological measurements program does not meet the recommendations and intent of Regulatory Guide 1.23:
  - a) Provide the best available meteorological data in the format described in item 5.a above.

- b) Describe the representativeness of the available data with respect to onsite and near site atmospheric transport and diffusion conditions, and with respect to expected long term conditions at and near the site.
  - c) Provide a description of the meteorological measurements used for collection of the data presented. This description should include the location of the sensors with respect to the power plant(s) and other prominent topographic features (including buildings) and accuracy of the instrumentation.
  - d) Provide a commitment to establish a program to meet the recommendations and intent of Regulatory Guide 1.23, or provide sufficient justification to allow the present program to remain unchanged.
7. Describe airflow trajectory regimes of importance in transporting effluents to the locations for which dose calculations are made.
8. Provide a map showing the detailed topographical features (as modified by the plant, on a large scale, within a 10-mile radius of the plant and a plot of the maximum topographic elevation versus distance from the center of the plant in each of the sixteen 22-1/2 degree cardinal compass point sectors (centered on true north), radiating from the center of the plant, to a distance of 10 miles.

POOR ORIGINAL

9. Provide the dates and times of radioactivity releases from intermittent sources by source location based on actual plant operation and, if available, appropriate hourly meteorological data (i.e., wind direction and speed, and atmospheric stability) during each period of release.