

May 25, 1971

Docket Nos. 50-329 ✓  
and 50-330

Consumers Power Company  
Attn: Mr. Russell Youngdahl  
Senior Vice President  
212 West Michigan Avenue  
Jackson, Michigan 49201

THIS DOCUMENT CONTAINS  
POOR QUALITY PAGES

Gentlemen:

We need additional information to complete our review of the modification to the waste disposal system proposed in Amendment No. 20 to your application for a construction permit for the Midland Plant Units 1 and 2. In addition, we require certain financial information in addition to that submitted in Amendment 20. The additional information required is indicated in the enclosure. Your response should be submitted as an amendment to the application.

Sincerely,

Original Signed by  
Peter A. Morris

Peter A. Morris, Director  
Division of Reactor Licensing

Enclosure:  
List of Additional  
Information Required

- cc: Arthur W. Murphy, Esq.
- Dr. David B. Hall
- Dr. Clark Goodman
- Anthony Z. Roisman, Esq.
- Robert Lowenstein, Esq.
- Richard G. Smith, Esq.
- Harold P. Graves, Esq.
- William J. Ginster, Esq.

69  
8006170 950  
F April 28

OFFICE ▶	Myron M. Cherry, Esq.	PWR-1/DRL	AD/PWRs	OGC	DRL
	Milton K. Wessel, Esq.	Murphy/pjf	Denton	JK	Schroeder
SURNAME ▶	James A. Kendall, Esq.	Muller	DeYoung		Morris
	James N. O'Connor, Esq.	5/29/71			5/17/71
DATE ▶	Algie A. Wells, Esq.	5/9/71	5/21/71	5/17/71	5/21/71

REQUEST FOR ADDITIONAL INFORMATION

MIDLAND PLANT UNITS 1 AND 2

A. WASTE DISPOSAL SYSTEM

- 1.0 Modify Figures 11-2, and Figures 1-2 through 1-7 as appropriate, to indicate the modifications made in the waste disposal system and the location of the additional equipment that will be added to the facility.
- 2.0 Modify your responses to questions 11.1 and 11.3 of the list of additional information attached to our letter of September 26, 1969, to indicate the effect of the proposed modifications on (1) your estimate of the amounts of radioactivity on an isotopic basis (including tritium) that would be released daily and annually from the proposed Midland plant, (2) the list of the seismic Class I and Class II equipment, components and/or structures in the radwaste system, and (3) the estimate of the maximum radioactivity levels in each of the tanks and the liquid and gaseous radwaste systems and the minimum available holdup times. Explain the basis for your estimates considering each of the components of the waste disposal system and explain why it would not be practicable to further reduce the radionuclides to be released by modification of size, capacity or design.
- 3.0 Indicate if your analysis of the rupture of a gaseous radwaste decay tank presented in Section 14.2.2.5 of the PSAR is valid for the modified system.
- 4.0 Justify your estimates of the volume of radioactive wastes generated from both Units in light of recent operating experience with pressurized water reactors.
- 5.0 Because of leakage from the primary system, the containment atmosphere will contain tritiated water vapor. Discuss the effect of this tritium on your ability to perform in-service inspection and maintenance within the containment during plant operations.
- 6.0 It will be necessary to purge the containment atmosphere before extended maintenance operations, such as refueling, can be conducted inside containment. Indicate the dose that will result from the purging operation at the site boundary. Include tritium in your analysis.

- 7.0 Discuss the consequences of a failure of the "low tritiated water makeup storage tank."
- 8.0 Discuss the means you will employ for the ultimate disposal of the tritiated water which will accumulate after several years of plant operation.
- 9.0 Laundry waste generated during operation of the plant will not be processed by evaporation but rather will be discharged directly to the environment, after filtering, if the radioactivity, determined from sample analyses, is within acceptable limits. Provide an explanation of why it is not practicable to treat these wastes further prior to release.
- 10.0 Provide an analysis of the maximum annual exposure of individuals offsite that could result from the intake of radionuclides via air, water, and food. Include the dose conversion used in determining the exposure and factors, assumptions, and the references used as well as the following:
  - (1) The radionuclides that are released from the Midland plant.
  - (2) The bases for estimating the potential reconcentration of radionuclides in meat, crops, dairy products, and marine life.
  - (3) The bases for estimating rates of consumption of meat, crops, dairy products, and marine life by individuals.

B. FINANCIAL INFORMATION

- 1.0 The total "yearly cash requirements" as shown on page 6 of Amendment 20 for Units 1 and 2 are the same as given on page 5 for the total estimated costs of the plant. Please clarify since the latter figure represents total capital costs, including imputed interest and other items not requiring cash. Also, indicate how much is included in Appendix A for Midland, i.e., is it \$576,100,246 or less? Indicate if this figure is exactly the same as "cash requirements" on page 6. If not, state the reason why it is not.
- 2.0 Provide an estimate as to how much, if any, of the bond issues due in 1975, 1976 and 1977 is to be refinanced.

3.0 Complete the "sources of funds" section of Appendix A for 1972 through 1975. Provide the anticipated amounts to be supplied from each of the following sources:

- (1) Internal sources (net).
- (2) Equity financing.
- (3) Debt financing.

In responding to this question, it is not necessary to provide specific dollar figures. An estimate within a range of figures for each group will be sufficient. Specific dollars are not essential but the parameters of a range of figures within each of these 3 groups are required.