

METROPOLITAN EDISON COMPANY
JERSEY CENTRAL POWER & LIGHT COMPANY
AND
PENNSYLVANIA ELECTRIC COMPANY

THREE MILE ISLAND NUCLEAR STATION UNITS 1 AND 2

Application for
Class 104b Utilization Facility Operating License

DOCKET NO. 50-320

Applicant herewith submits three signed originals and 197 additional copies of Amendment No. 4 to the Environmental Report Operating License Stage Three Mile Island Nuclear Station containing responses to the NRC Request for Additional Information addressed to Supplement II Environmental Report Operating License Stage - Unit 2. This report is submitted in response to Mr. Regan's letter of July 14, 1975.

METROPOLITAN EDISON COMPANY

ATTEST:

RL Ruth
Assistant Secretary

BY RC Mohr
Vice President

Sworn to and subscribed before me this 25th day of August 1975.

Robert C. Klemmes
Notary Public

NOTARY PUBLIC
Reading, Berks County, Pa.
My Commission Expires 12/31/1978

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THREE MILE ISLAND NUCLEAR STATION

UNIT 2

AMENDMENT 4

RESPONSES TO NRC REQUEST FOR ADDITIONAL INFORMATION

THREE MILE ISLAND ENVIRONMENTAL REPORT

SUPPLEMENT II - OPERATING LICENSE STAGE

Metropolitan Edison Company
Jersey Central Power & Light Company
Pennsylvania Electric Company

64-284

AMENDMENT 4
INSTRUCTIONS

THREE MILE ISLAND NUCLEAR STATION, UNIT 2
ENVIRONMENTAL REPORT - OPERATING LICENSE STAGE

Amendment 4 is the applicant's response to NRC Request for Additional Information concerning Supplement II to the Environmental Report submitted on February 28, 1975 in support of the applicant's application for a license to operate the Three Mile Island Unit 2 Nuclear Generating Station.

The following pages of Supplement II to the Environmental Report are to be deleted; and, where appropriate, revised pages dated 8-26-75 should be inserted.

Remove

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August 26, 1975
64-285

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APPENDIX VI

RESPONSES TO USNRC REQUEST FOR ADDITIONAL INFORMATION
CONCERNING TMI ENVIRONMENTAL REPORT SUPPLEMENT II

1. Provide an estimate, by county, of the location of residence of the operating work force of Three Mile Island - Unit 2.

Response

The distribution of the TMI-1 staff county residences provides an accurate estimate of TMI-2 operating work force residence. As of August 1, 1975, the county-by-county residence of the TMI-1 residence was: Dauphin County - 44.8%, Lancaster County - 22.8%, Lebanon County - 21.9%, York County - 4.0%, Berks County - 4.3%, Cumberland County - 1.6%, and Others - 0.6%.

of \$673,000,000 produces \$302,850,000 of funds for construction provided by investment subject to the Capital Stock Tax. At the rate of 1%, this produces an annual tax of \$3,028,500 which was rounded to \$3,029,000.

Pennsylvania Public Utility Realty Tax

The state imposes a tax on all lands, buildings, towers, smokestacks, and other structures (but not transmission and distribution towers and lines) owned by public utilities. The rate is 3% per year of depreciated original cost. The estimated original cost of the structure account and cooling towers for TMI Unit 2 is \$204,344,000, which produces a tax in the first year of \$6,130,000. The amount will decrease each year by 3% of the accumulated book depreciation.

Pennsylvania Corporate Net Income Tax

The Pennsylvania Income Tax imposed on corporations is at the rate of 9.5% on a base that is essentially the equivalent to federal taxable income before the deduction for the state income tax.

The comments with respect to income tax deduction and tax normalization included with Federal income taxes pertain to this tax as well. There is no equivalent to the investment tax credit available under the state laws.

Pennsylvania Gross Receipts Tax

This tax is imposed, at the rate of 4.5% on utilities making sales of electricity (and certain other utility services) to ultimate consumers and to any wholesale customers not subject to the tax on gross receipts.

The base for computing the gross receipts tax was determined by computing the revenues necessary to support the return on capital invested in TMI Unit 2 and the expenses, taxes, and depreciation associated with the operation of the station.

It is believed that this is the only tax associated with the operation of TMI Unit 2 that would be affected by the level of generation from this station. If, for example, TMI Unit 2 were inactive for refueling or major maintenance, it is expected that the incremental costs of replacement energy would be recoverable from customers. Such incremental costs would increase the revenue base subject to the gross receipts tax.

Federal Income Tax

The issuance of equity capital for TMI Unit 2 was assumed to have a cost of 10% for preferred stock and 14% for common. The required return for equity capital is therefore \$39,707,000 composed of \$6,730,000 for preferred stock return and \$34,977,000 for return on common stock ($\$673,000,000 \times 10\% \times 10\%$ and $\$673,000,000 \times 35\% \times 14\%$). This return on equity, of course, requires sufficient revenues to generate taxable income, and in turn income taxes. The companies all use accelerated depreciation for income tax purposes, with normalization of the tax expense of post 1969 expansion property by recording deferred income taxes for the tax expense difference between what is actually paid and what would have been paid had straight line depreciation, with Class System lives, been used in reporting taxable income in the income tax return.

2b. Provide a depreciation schedule for the plant and its effect on future tax payments.

Response

Estimated Depreciation Schedule for TMI-Unit 2
and Effect on Tax Payments (Thousands of Dollars)

Book Basis of Property \$630,000
 Tax Basis of Property 460,000
 Annual Book Accrual Rate 3-1/3%
 Income Tax Life 16 Years
 Income Tax Depreciation Method - Sum of Years Digits

Year	Annual Depreciation Accrual (A)	Income Tax Depreciation (B)	Income Tax Reduction Associated with Depreciation (C)	Deferred Income Tax Accrual (D)	Accumulated Deferred Income Taxes at Year End (E)
1978	\$ 21 000	\$ 54 118	\$ 28 650	\$16 474	\$16 474
1979	21 000	50 735	26 859	14 683	31 157
1980	21 000	47 353	25 069	12 893	44 050
1981	21 000	43 971	23 278	11 102	55 152
1982	21 000	40 589	21 488	9 311	64 463
1983	21 000	37 207	19 697	7 520	71 983
1984	21 000	33 825	17 907	5 729	77 712
1985	21 000	30 443	16 117	3 938	81 650
1986	21 000	27 061	14 326	2 147	83 797
1987	21 000	23 679	12 536	356	84 153
1988	21 000	20 297	10 745	(1 435)	82 718
1989	21 000	16 915	8 955	(3 226)	79 492
1990	21 000	13 533	7 164	(5 017)	74 475
1991	21 000	10 151	5 374	(6 808)	67 667
1992	21 000	6 769	3 580	(8 599)	59 068
1993	21 000	3 354	1 779	(10 390)	48 678
1994	21 000			(12 170)	36 508
1995	21 000			(12 170)	24 338
1996	21 000			(12 170)	12 168
1997	21 000			(12 168)	-
1998	21 000				
1999	21 000				
2000	21 000				
2001	21 000				
2002	21 000				
2003	21 000				
2004	21 000				
2005	21 000				
2006	21 000				
2007	21 000				
	<u>\$630 000</u>	<u>\$460 000</u>	<u>\$243 524</u>	<u>-</u>	<u>XXXX</u>

3. Estimate the percentage of the total estimated annual expenditures for supplies and materials related to the operation of TMI - Unit 2 will be expended locally. For the purpose of this question, local may be defined as an area including Harrisburg and other communities within 15 miles of the plant.

Response

As was noted on page v-iii, procurement policies are set in accordance with PUC and FPC requirements and not solely on a geographical basis. It is estimated, however, that local (as defined above) expenditures will not exceed 5% of the total expenditures for materials and supplies.

5. Estimate the number of angler-hours expended annually in York Haven Pond.

Response

During the period May 1974 through April 1975, an estimated 12,526 fishermen fished approximately 22,352 hours. An estimated 16,644 fish were caught and of these 7,530 were kept by anglers.

References

Hough, Jack L., 1958, Geology of the Great Lakes, University of Illinois Press, Urbana, pp. 296, 313.

Kauffman, Marvin E., January 14, 1967, Geologic Investigation of Three Mile Island and Vicinity, Franklin and Marshall College, Lancaster, Pennsylvania.

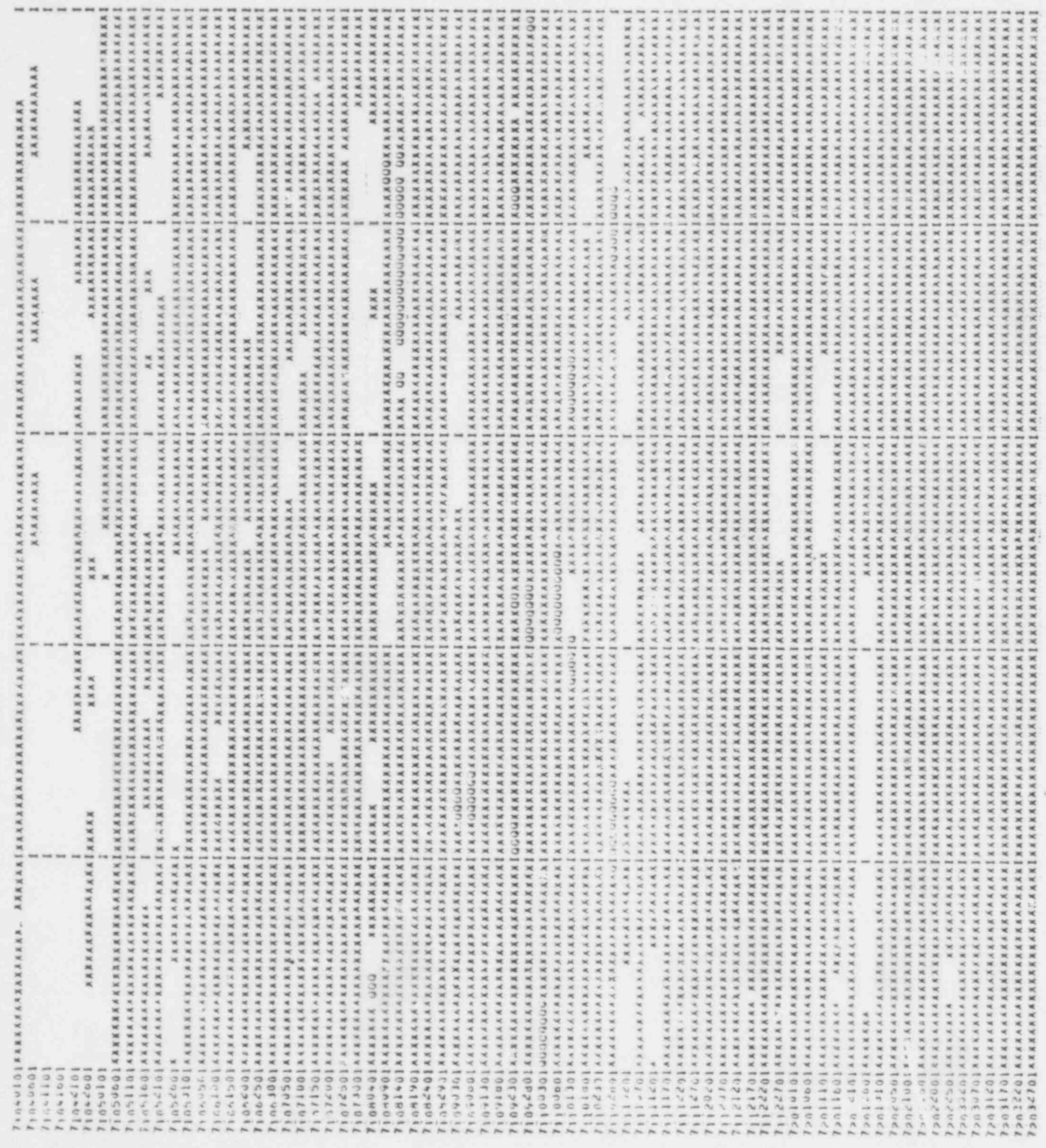
Peltier, L. C., 1949, Pleistocene Terraces of the Susquehanna River, Pennsylvania, Geological Survey Bulletin G-23.

Stose, G. W., 1927, Possible Post-Cretaceous Faulting in the Appalachians, GSA Bull., v. 38, p. 493-504.

Urry, W. D., 1942, The Radio-Elements in Non-Equilibrium Systems, American Journal of Science, N.S., v. 240, pp. 426-36.

Figure 3

DELTA TEMPERATURE 150-50 FT.



8. Provide a description of the operational phase onsite meteorology monitoring program as related to the environmental effects of plant operation, including the meteorology information indicated in Regulatory Guide 1.21.

Response

The meteorological monitoring program will be in conformance with TMI-Unit 2 Technical Specification 4.15. Joint frequency tables in conformance with Regulatory Guide 1.21 can be compiled from data taken from the digital recording system or reduced from strip charts.