

THREE MILE ISLAND NUCLEAR STATION -- DOCKET NO. 50-289

Supplementary Testimony on
Cost of Containment Repouring

By

Darrel A. Nash

Contention 10

"The extent to which the NEPA review concerning cost-benefit analysis and alternatives may not be complete in that the following point(s) have not been fully analyzed or included:

(d) The cost of containment repouring"

The Applicant has provided information that the cost to repair the Three Mile Island Unit 1 containment ring girder was approximately \$3 million. I believe this figure is essentially correct. It was not included in the cost benefit analysis because the analysis was made prior to the incurrence of these costs. Since its magnitude is a low percentage of total capital costs, it does not change the conclusions of the cost benefit analysis.

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October 26, 1973

THREE MILE ISLAND NUCLEAR STATION - DOCKET NO. 50-289

Supplementary Testimony on
the Costs of Alternative Facilities

By

Darrel A. Nash

Contention 10. The extent to which the NEPA review concerning cost/benefit analysis and alternatives may not be complete in that the following point(s) have not been fully analyzed or included:

- (e) The cost of the facility as opposed to alternative facilities to rate payers

Cost comparisons among alternative facilities include alternative fuel technologies, transmission routes, sites and labor rates and productivity. Fuel system alternatives are more fully treated in the Staff's testimony on (f) of this contention. Since fuel use is a continuous cost of operation over the life of the plant, both capital and operating costs must be included. On the basis of present value of these costs, it is found that for the utilization of the plant at 60 percent capacity factor the nuclear plant results in a savings of \$80 million over a coal plant and more than \$200 million over an oil plant. This margin widens as the capacity factor increases.

Estimates of transmission lines costs including the costs of rights-of-way and access roads for each site alternative are the following:

	<u>Thousand dollars</u>
Three Mile Island	2,840
Gilbert	3,730
Berne	4,967
Monacacy	4,504
Portland	5,738

Land values were approximately the same for each of the five noted sites except at Portland which would have involved the purchase of several homes. Three Mile Island had a market value at the time construction began of \$536,000 compared to Gilbert (the second overall lowest cost site) of \$533,000.

The applicant has extensive experience in labor cost and productivity. The lowest construction costs for the five sites considered were estimated to be at Three Mile Island.

These factors combine to indicate a nuclear plant at Three Mile Island is the least cost choice.