

8-6-72

UNITED STATES ATOMIC ENERGY COMMISSION

Before the Commission

Docket No. 50-289

in the matter of

Metropolitan Edison Company,

et al

(Three Mile Island Nuclear Station Unit 1)

ADDENDUM TO PETITION FOR INTERVENTION

The petitioners hereby amend and add to the Petition for Intervention pursuant to the answer of Metropolitan Edison Company et al and the answer of the A E C Regulatory Staff in response to the Petition to Intervene filed by the Citizens for a Safe Environment and the Environmental Coalition for Nuclear Power. The designated alphabetical references the contentions shall follow the original Petition for Intervention, and where the same letter appears in this addendum, it was the purpose of the petitioners to supercede the statement of the original contention. The numerical references to the paragraphs herein do not reflect the numbering order of the original petition.

1. The Environmental Coalition for Nuclear Power is an unincorporated association comprised of those organizations listed in the exhibit attached hereto and made a part hereof. The membership of the various organizations listed herein comprises nearly 10,000 individuals who live in the States of Pennsylvania and New Jersey, including residents of the Harrisburg - York area. The membership duly authorized the Executive Officers of the

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Coalition to act on its behalf, to intervene in these proceedings, and to raise the contentions set forth in the original Petition to Intervene and the Addendum hereto. The individual members of the Coalition are grieved individuals as citizens of the States of Pennsylvania and New Jersey. They, collectively, agree with the allegations of injury herein. Similarly, the Citizens for a Safe Environment is an unincorporated association comprised of citizens and residents of the Harrisburg area. Mary Virginia Southard is the Chairman of the Citizens for a Safe Environment. Her residence is 1450 Market Street, Harrisburg, Pennsylvania. The other officers of the Citizens for a Safe Environment include John J. Simon, Co-Chairman, and Malcolm P. Northam, Secretary-Treasurer. All the officers reside in Harrisburg or its suburbs. At a meeting of the Citizens for a Safe Environment in July, 1972, authorized the aforementioned Executives to represent their interests, they as individuals agreed, collectively, with the allegations of injury set forth in the Petition for Intervention.

2. The following addendums to the Petition for Intervention;

(c) the plant has not been designed and constructed in accordance with Part 100 and Part 50 of the Commission's Rules in that the applicants analysis of maximum credible accidents and releases therefrom is not the worst maximum credible accident and therefore the designed basis/^{accident}resulting from the applicants analysis is in error, particularly because the worst maximum credible accident would reach the containment, including by airplane accidents or sabotage or the worst maximum credible accident would be an accident more grievous than a LOCA or rod drop accident. The worst credible accident would be a breach of the containment and/or a loss of coolant accident in combination with the

failure of the emergency core system and/or the simultaneous drop of more than one rod. (h) add to that which has already been stated; the metals used in the construction of the reactor and primary containment vessel will not be able to withstand such phenomena as, but not limited to, neutron bombardment, stress loading and unloading cycles, and corrosion so that the metals will not be either embrittled or in any way weakened so as to endanger the public health or safety over the lifetime of the plant. Further, the plant is not designed so that the feed water control system can be safely operated over the full range of operating conditions, especially as it relates to the inner action between the feed water control system, control valve in the reactor cooling system. Additionally, the core spray nozzles are subject to bending which could occur through refueling operations. It has not been established that the spray nozzles will not bend under the worst conditions. And furthermore, autocatalytic effects can occur within the reactor core affecting the safe operation of the plant. The plant has not been designed to adequately protect against high velocity missile impact. The plant has not been designed to withstand the dangers, hazards, and damages resulting from hydraulic pressures (water hammers) flying missiles and other mechanical failures in the inner action of the same on the containment, piping, valves and all other systems in an accident which may occur in combination with the same. (i) add to the statement in the original petition; the applicant has not established adequate measures have been taken to prevent industrial sabotage or espionage from those who are not enemies of the United States. The plant is situated on a flood plain and has not been designed for the worst flood case. Lack of said design will affect the health and welfare of the public. The daming system in the vicinity of the reactor will further affect the flood

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stage and the safe operation of the plant. (q) add to the statement set forth in the original petition; the construction of the containment was not in accordance with applicable engineering and construction codes, particularly with reference to the construction, design, building of the containment including the pouring of concrete. Further, petitioners contend that the quality controls and testing of pumps, valves, and control systems through all operational frequencies and all possible hydraulic transients that might arise has not been adequately demonstrated.

41. Applicant's cost benefit analysis fails to substantiate the monetary costs set forth as conclusions in Section 11 of the Environmental Report. Petitioners contend that all costs and figures set forth in the Environmental Report must be substantiated by full & competent evidence and not set forth as conclusions of analyses that are not made a part of the record.

42. The cost benefit analysis is incomplete in that there is no analysis of the difference in the output between a coal plant and a nuclear reactor unit as far as the potential operating capacity during the lifetime of the plant and annually.

43. The applicant has failed to set forth the equations used in its cost benefit analysis; and therefore, any conclusions derived from any equations used not within the record should be stricken as a matter of evidence.

44. In the cost benefit analysis, the applicant has failed to establish reliability index to establish the probability of occurrence of the load exceeding the available generating capacity with and without the proposed facility in order to fully demonstrate the needs and benefits for the facility.

45. The applicant's cost benefit analysis does not adequately consider the environmental costs resulting from radiation effluents, especially from waste

disposal, transportation, injuries to employees of applicant and possible mutation to plant and animal life.

46. The applicant's low level radiation analysis is incomplete in that there is no analysis of the synergistic effect resulting from the combination of low level effluents from the plant with other radio-active and non radio-active pollutant in the environment.

47. The cost benefit analysis is incomplete in that the applicant has not analyzed the environmental costs of the aquatic life, and the effects on the food chain resulting from the operation of the plant.

48. The cost benefit analysis is incomplete in that the applicant has not analyzed the indirect cost to the ratepayers and taxpayers including insurance supplements under the Price-Anderson Act, research and technological assistance through the Atomic Energy Commission, past, present and in the future.

49. The applicant's discussion of heat dissipation to the water is incomplete, and the applicant failed to establish by competent evidence what effect, if any, there is on water used by radio-active effluents into the water, especially tritium and the consequence of the added heat to the water resulting from the operation of the plant.

50. The applicant has failed to adequately analyze the environmental costs resulting from the operation of the plant in that the applicant has failed to analyze the additional radio-active background resulting from the operation of this plant in combination with the operation of proposed nuclear plants, including Peach Bottom, Units 2 and 3 and the proposed Limerick Reactors, Units 1 and 2. The Environmental Report is incomplete in that no event probability considerations are established and analyzed, particularly event probabilities

various reactor accidents including loss of feed water pumps, loss of flow, primary system pipe rupture, operator error, emergency core cooling system failure, air craft crash, truck accidents, multiple rod drop and rupture of the primary containment.

51. The cost benefit analysis as set forth in the Environmental Report is inadequate in that it does not include the cost of the Three Mile Island Juniata and Three Mile Island Bechtelsville 500 K.V. line segments. The applicant has not established by competent, admissible evidence that construction of those lines would take place even without the proposed facility being constructed and operated.

52. The applicant has not established by competent, admissible evidence in Part 3 of the Environmental Report there would be no significant thermal or fogging effects to the environment through the operation of the plant.

53. The quality assurance in the construction of the plant has not been verified by the applicant by showing that the construction schedule and records of the construction actually conform to and complied with the design of the facility.

54. The assumptions used by the applicant in Part 6 of the Environmental Report especially concerning rod cladding integrity are without foundation both factually and evidentiary.

55. The low level release analysis by the applicant is inconclusive in that it fails to establish a probability of releases resulting from operational, transient conditions, including high pressure water hammers, valve failures and minor operational errors. Further, the analysis fails to fully evaluate the effects and dosages from all radio-active effluents from the plant,

particularly tritium.

Respectfully submitted,

Citizens for a Safe Environment
Environmental Coalition on
Nuclear Power

By: Laurence Sager
Attorney for Petitioners

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COMMONWEALTH OF PENNSYLVANIA)
)
COUNTY OF DAUPHIN)

SS:

Before me, a Notary Public in and for said Commonwealth and County, personally appeared Herbert C. Goldstein, Esquire on behalf of Citizens for a Safe Environment, the petitioner herein, who being duly sworn according to law deposes and says that the facts set forth in the foregoing petition for leave to intervene are true and correct to the best of his knowledge, information and belief.

X Herbert C. Goldstein

Sworn to and subscribed before me
this 6 day of September 1972

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Homer C. Bradley

HOMER C. BRADLEY, Notary Public
My Commission Expires May 8, 1975
Harrisburg, Pa. Dauphin County