ATTACHMENT 1

SUPPLEMENT NO. 1

TO THE

SAFETY EVALUATION REPORT

BY THE

OFFICE OF NUCLEAR REACTOR REGULATION
UNITED STATES NUCLEAR REGULATORY COMMISSION

IN THE MATTER OF

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

THREE MILE ISLAND NUCLEAR STATION
UNIT 2

DOCKET NUMBER 50-320

15.0 ACCIDENT ANALYSES

Radiological Consequences of Accidents

General

As noted in the Safety Evaluation Report, we had previously concluded that with a containment leak rate of 0.[illegible] percent per day and a dose reduction factor [illegible] the offsite dose guidelines of 10 CFR Part 100 would be [illegible]

We have reviewed the revised spray additive system [illegible] in Section [illegible] this supplement, and conclude that this system, although slightly less effective [illegible] iodine washout than the system originally proposed in that it does not remove [illegible] organic form of iodine, results in a sufficiently [illegible] elemental form to meet the offsite dose guidelines of 10 CFR Part 100 [illegible] leak rate of 0.[illegible] percent per day. Table 15.1 has been [illegible] the offsite doses resulting from the postulated loss-of-coolant accident.

[illegible] Design Basis Accident Assumptions

In the Safety Evaluation Report, we [illegible] assumptions [illegible] acceptable spray additive system [illegible]

[illegible] Iodine removal by the [illegible] spray system was [illegible]

Sprayed containment volume	[illegible]
Unsprayed containment volume	[illegible]
Mixing rate between sprayed and unsprayed regions	[illegible] volumes [illegible]
Iodine removal coefficients	
Elemental	10.0 hour[illegible]
Organic	0
Particulates	[illegible] hour[illegible]
Elemental iodine decontamination factor	100

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TABLE 15.[illegible]

POTENTIAL OFFSITE DOSES DUE TO DESIGN BASIS ACCIDENTS

[illegible]	Two Hour Exclusion Boundary (610 Meters) Thyroid (rem)	Two Hour Exclusion Boundary (610 Meters) Whole Body (rem)	Course of Accidents Low Population Zone (3218 Meters) Thyroid (rem)	Course of Accidents Low Population Zone (3218 Meters) Whole Body (rem)
[illegible] Accident	280	0.2	108	[illegible]
[illegible] Maximum Range Dose			< 1	
Fuel Handling [illegible]	46	3		[illegible]
Steam Generator Tube Rupture	6	1		
Steam Generator Tube Rupture with Iodine Spike	76	1		
Steam Line Break	1	< 1		
Loss of Offsite Power	1	< 1		
Loss of Offsite Power with Coincident Iodine Spike	1	< 1		
Gas Decay Tank Rupture	Negligible	3	Negligible	1
Rod Ejection**				
Case I	24	< 1	11	1
Case II	102	2	19	1

** Actual rod ejection doses will not exceed the doses for Case I (released through the containment) or Case II (released through the secondary system).