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June 6, 2002
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U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington DC 20555

Oyster Creek Generating Station
Facility Operating License No. DPR-16
NRC Docket No. 50-219

Limerick Generating Station, Units 1 and 2
Facility Operating License Nos. NPF-39 and NPF-85
NRC Docket Nos. 50-352 and 50-353

Subject: Exelon/AmerGen Comments on the Draft Report on Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants

Reference: NRC letter dated April 1, 2002, "Draft Report on Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants"

The enclosure to this letter provides a response to the request contained in the Reference for review of the subject draft NUREG. Our comments on the data pertaining to Oyster Creek and Limerick Generating Stations are enclosed.

Should you have any questions or require any additional information please contact Mr. Paul F. Czaya at 610-765-5952.

Sincerely,

Michael P. Gallagher

Michael P. Gallagher
Director – Licensing, Mid-Atlantic Regional Operating Group

A001

Enclosure: Exelon/AmerGen Comments on the Draft Report on Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants

c: Regional Administrator - NRC Region I
NRC Senior Resident Inspector - Oyster Creek
NRC Senior Resident Inspector – Limerick Generating Station
NRC Project Manager, NRR - Oyster Creek
NRC Project Manager, NRR - Limerick Generating Station
Director, Bureau of Nuclear Engineering, New Jersey Department of Environmental Protection
Director, Bureau of Radiation Protection – Pennsylvania Department of Environmental Resources
OC File No. 02038

Enclosure

Exelon/AmerGen Comments

Draft Report on Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants

Oyster Creek

1. Table 4: Brown & Root is the architect-engineer indicated for Oyster Creek in this table. Burns & Roe was the architect-engineer for Oyster Creek.

2. Table 5: The number of very heavy load lifts (>30 tons) is given as 504. A closer approximation would be derived as follows:

   For each refueling the number of lifts for the reactor building crane:

Cavity shield plugs	85 tons	8 plugs moved twice each outage	16 lifts
Drywell head	62 tons	remove/install	2 lifts
Reactor head	75 tons	remove/install	2 lifts
Steam separator	44 tons	remove/install	2 lifts
Equipment pool plugs	39 tons	4 plugs, moved twice each outage	8 lifts
		Total	30 lifts

   At the time of the NRC site visit (8/2000) to Oyster Creek, the plant had undergone 17 refueling outages. Therefore, the number of refueling related very heavy lifts would be 510.

   Thirty-three (33) spent fuel cask shipments to Oyster Creek from the West Valley reprocessing facility (circa 1985) were made using a TN9 cask weighing approximately 40 tons. Two (2) cask shipments for a fuel pool cleanup project conducted in 2000 utilized a cask weighing approximately 35 tons.

   Each of the above cask shipments involved 4 load lifts: 1) from the truck bay to the operating floor for cask preparation to enter the spent fuel pool, 2) from the cask preparation area to the spent fuel pool for loading, 3) to the preparation area from the pool for closure and decontamination, and 4) from the preparation area to the truck bay for shipment. The 35 cask shipments, therefore, required a total of 140 very heavy lifts. Combined with the very heavy lifts for refueling, the total is 650.

Limerick

Table A3: The abbreviation for Limerick is missing in the "Plant Name Abbreviations" list. LIM is used in Table A1.

Table 8: Load drop calculations for very heavy components

Page 37: last column (calculation outcomes)

For the Drywell head tilted drop, the document notes: "punching shear capacity appears to be high (240 psi), compressive strength of concrete appears to be high, E for concrete appears to be high." These values are based upon the compressive strength of concrete (fc') being 5000 psi, which is the actual compressive strength of concrete used on the refuel floor (El. 352') according to construction specifications.

For the Drywell head flat drop, the following information requires correction:
$\mu < 1.5$, 8.72 allowable 8.72
This information should be corrected to read: $\mu < 1.5$, allowable 8.72.

Page 39: 8th column (Assumptions)

For the Stoplog tilted drop the following information requires correction:
Contact area = 1.3 ft^2
The correct information is: Contact area = 1.63 ft^2.
For the Stoplog Flat drop, following information requires correction:
Contact area = 135 ft^2
The correct information is: Contact area = 15 ft^2.

Page 40: 8th column (Assumptions)

For the Steam Dryer Assembly flat drop the following information requires correction:
Contact area = 5.61ft^2
The correct information is: Contact area = 7.92 ft^2.
Interface force = 5.12 E6 #
The correct information is: Interface force = 7.22 E6 #.
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Page 41: last column (calculation outcomes)

For the Shield plugs tilted blunt drop on drywell head the following information requires correction:
Once the effective load of the plug is reduced from 170 K# to 79 K#...
The correct information is: Once the effective load of the plug is reduced from 170 K to 79 K...
Also, the following:
In the sentence "Increased the capability of the head toy", replace "toy" with "by".

General

Some of the figures in Section 2.2 are misaligned with the text and/or captions.