

2/2/83

PKC

See Attached Listing

Gentlemen:

SUBJECT: MODIFICATION OF VACUUM BREAKERS ON MARK I CONTAINMENTS  
(GENERIC LETTER 83-08 )

In the latter stages of the generic resolution of the Mark I Containment Long-Term Program suppression pool dynamic load definition, a potential failure mode of the vacuum breakers (connecting the ring header inside the torus to the drywell) in the chugging and condensation oscillation phases of blowdown to the torus during a LOCA was identified. In the "Mark I Containment Program Full-Scale Test Program Final Report" (NEDE-24539-P) it was reported that during the first full-scale test (M1), which had the highest initial vacuum breaker opening pressure, damage to the vacuum breaker pallet hinge and latching magnet occurred. In subsequent tests run at a lower opening pressure, with the vacuum breaker strengthened, damage was limited to the pallet sealing gasket which did not affect operability.

At the time this was discovered, the generic phase of the Mark I Containment Long-Term Program was nearing completion; however, the Mark I Owners Group did commit to resolve this issue. Two vacuum breaker owner groups were formed, one for those with Atwood Morrill vacuum breakers that is using MPR as consultants, and one for those with GPE vacuum breakers that is using NUTECH as consultants. It is our understanding, based on a September 10, 1982 meeting with General Electric and the Mark I Owners Group, this effort has been completed and the results have been applied to obtain plant specific resolutions.

Although this issue was not included within the scope of the Mark I Containment Long-Term Program as identified in NUREG-0661, these vacuum breakers provide protection to maintain containment integrity and, as such, are subject to staff review. Therefore, we request that within 30 days of receipt of this letter you provide a commitment to submit the results of the plant unique calculations which either formed the bases for modifications to the vacuum breakers or provide the justification for their as-built acceptability. Schedules for completion of any modifications should also be included in your response.

It is suggested, if possible, that the resolution of this issue be submitted with the Mark I Long-Term Program - Plant Unique Analysis Report for post-implementation review.

This request for information was approved by the Office of Management and Budget under Clearance Number 3150-0091 which expires October 31, 1985.

Sincerely,

TDAR-5  
INFO-LTR.  
X RD-9A  
MARK I  
12/14

Attachment: See Jacket

8302030089

Darrell G. Eisenhut, Director  
Division of Licensing

OFFICE	cc: Service List							
SURNAME	DL:ORB#2	DL:ORB#2	DL:ORB#2	DL:AD:OR	DL:AD:SA	D:DSI	DAE	
DATE	SNorris	BSIgel	DVassallo	GLairas	FMiraglia	RMattson	RVollmer	DEisenhut

Utility

Plant Name

Mr. Donald P. Dise  
Vice President - Engineering  
c/o Miss Catherine R. Seibert  
Niagara Mohawk Power Corporation  
300 Erie Boulevard West  
Syracuse, New York 13202

Nine Mile Point Nuclear Station, Unit No. 1  
50-220

Mr. P. D. Fiedler  
Vice President and Director  
Oyster Creek Nuclear Generating Station  
P. O. Box 388  
Fork River, New Jersey 08731

Oyster Creek Nuclear Generating Station  
50-219

Mr. Edward G. Bauer, Jr.  
Vice President and General Counsel  
Philadelphia Electric Company  
2301 Market Street  
Philadelphia, Pennsylvania 19101

Peach Bottom Atomic Station, Units 2 & 3  
50-277  
278

Mr. A. Victor Morisi  
Manager, Nuclear Operations  
Support Department  
Boston Edison Company  
25 Braintree Hill Park  
Rockdale Street  
Braintree, MA 02184

Pilgrim Nuclear Power Station  
50-293

Mr. J. B. Sinclair  
Licensing Engineer  
Vermont Yankee Nuclear Power  
Corporation  
1671 Worcester Road  
Framingham, Massachusetts 01701

Vermont Yankee Nuclear Power Station  
50-271

Mr. Harry Tauber  
Vice President  
Engineering & Construction  
Detroit Edison Company  
2000 Second Avenue  
Detroit, Michigan 48226

Enrico Fermi Atomic Nuclear Power Plant, Unit 2  
50-341

Mr. R. P. Douglas  
Manager-Licensing and Analysis  
Public Service Electric & Gas Company  
80 Park Plaza (T16D)  
Newark, New Jersey 07101

Hope Creek Generating Station, Unit 1  
50-354

Utility

Mr. Hugh G. Parris  
Manager of Power  
Tennessee Valley Authority  
500 A Chestnut Street, Tower II  
Chattanooga, Tennessee 37401

Mr. E. E. Utley  
Executive Vice President  
Carolina Power & Light Company  
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Raleigh, North Carolina 27602

Mr. J. M. Pilant, Director  
Licensing & Quality Assurance  
Nebraska Public Power District  
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Mr. L. DelGeorge  
Director of Nuclear Licensing  
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Chicago, Illinois 60690

Mr. Duane Arnold  
Chairman of the Board and Chief  
Executive Officer  
Iowa Electric Light and Power Company  
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Cedar Rapids, Iowa 52406

Mr. Leroy W. Sinclair  
President and Chief Operating Officer  
Power Authority of the State of New York  
10 Columbus Circle  
New York, New York 10019

Mr. J. T. Beckham, Jr. (16/333)  
Vice President - Engineering  
Georgia Power Company  
P. O. Box 4545  
Atlanta, Georgia 30302

Mr. W. G. Council, Vice President  
Nuclear Engineering and Operations  
Northeast Nuclear Energy Company  
P. O. Box 270  
Hartford, Connecticut 06101

Mr. D. M. Musolf  
Nuclear Support Services Department  
Northern States Power Company  
414 Nicollet Mall - 8th Floor  
Minneapolis, Minnesota 55401

Plant Name

Browns Ferry Nuclear Plant, Units 1, 2 & 3

50-259  
260  
296

Brunswick Steam Electric Plant, Units 1 & 2

50-304  
325

Cooper Nuclear Station

50-298

Quad Cities Nuclear Power Station, Units 1 & 2

50-254 265

Dresden Nuclear Power Station, Units 2 & 3

50-237  
249

Duane Arnold Energy Center

50331

James A. FitzPatrick Nuclear Power Plant

50-339

Edwin I. Hatch Nuclear Plant, Units 1 & 2

50-321  
866

Millstone Nuclear Power Station, Unit 1

50-245

Monticello Nuclear Generating Plant

50-263