

March 1982

TECHNICAL EVALUATION OF THE LICENSEE'S RESPONSE TO
NUREG 0737, ITEM II.E.4.2, POSITION 7,
CONTAINMENT ISOLATION DEPENDABILITY--
HIGH RADIATION SIGNAL TO PURGE/VENT VALVES

By

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INTRODUCTION AND BACKGROUND

As a consequence of the incident at TMI-2, implementation of a number of new requirements has been recommended for operating reactors. These new requirements are described in NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980. The NRC staff has requested licensees to verify that these TMI action plan requirements have been met. This report provides an evaluation of the response to Action Plan Item II.E.4.2, Position 7, by the designated licensees.

DESIGN BASIS OR REVIEW CRITERIA

Position 7 requires that containment purge/vent isolation valves must close on a high radiation signal.

The NRC staff has determined that any purge/vent isolation valves sealed closed during plant operating modes 1 through 4, in accordance with SRP 6.2.4, Item II.6.f. (NUREG 0800) satisfy the requirements of Position 7 without a radiation closure signal, since these valves are not expected to be open following an accident.

The evaluation of the licensee response is to verify that purge/vent isolation valves that are not sealed closed by plant technical specifications in plant operating modes 1 through 4 close automatically on a high radiation signal. The evaluation does not include a review of radiation monitor location, quality, redundancy, nor isolation/separation from non-safety systems.

EVALUATION AND CONCLUSIONS

Based on our review of the documentation listed in the attachment, we conclude that the following plants satisfy the requirements of the Review Criteria detailed above and meet the Position 7 requirements of II.E.4.2, NUREG-0737:

<u>PLANT</u>	<u>TAC NO.</u>
1. Arkansas 1	44828
2. Beaver Valley	44830
3. Calvert Cliffs 1	44837
4. Calvert Cliffs 2	44838
5. Cook 1	44842
6. Cook 2	44843
7. Cooper	44839

	<u>PLANT</u>	<u>TAC NO.</u>
8.	Duane Arnold	44847
9.	Indian Point 2	44857
10.	Indian Point 3	44858
11.	La Crosse	44860
12.	Monticello	44865
13.	North Anna 1	44867
14.	North Anna 2	44868
15.	Palisades	44873
16.	Point Beach 1	44877
17.	Point Beach 2	44878
18.	Salem 1	44886
19.	Surry 1	44890
20.	Surry 2	44891

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ATTACHMENT

NUREG 0737, TASK II.E.4.2
REVIEW DOCUMENTS

A-1

<u>REACTOR</u>	<u>LICENSEE</u>	<u>ACCESSION NO.</u>	<u>DATE</u>	<u>REMARKS</u>
ARKANSAS, Units 1 and 2	Arkansas Power and Light Co.	NRC letter	- 3/30/79 ^a	Pos. 6 (Unit 2)
		8012290188	- 12/19/80	Pos. 5 and 7
		8101060355	- 12/31/80 ^b	No Information
		8003030250	- 2/22/80 ^a	Pos. 7 (Unit 2)
		8103090535	- 2/27/81 ^b	Pos. 5
		8103160490	- 3/11/81	Pos. 5
		8104080398	- 3/31/81	Pos. 5
		NRC letter	- 1/4/82	Pos. 6
BEAVER VALLEY, Unit 1	Duquesne Light Co.	8101050321	- 12/31/80	Pos. 5 and 6
		8107100255	- 7/1/81	Pos. 7

^aSupporting document from B-24 issue data base.^bDocuments received 4/13/81 for review of Position 5..^cUpdated material received 9/24/81.^dUpdated material received 12/4/81.

ATTACHMENT (Continued)

NUREG 0737, TASK II.E.4.2
REVIEW DOCUMENTS

REACTOR	LICENSEE	ACCESSION NO.	DATE	REMARKS
CALVERT CLIFFS, Units 1 and 2	Baltimore Gas and Electric Co.	7912190403	- 12/14/79 ^a	Pos. 1
		8004100277	- 4/7/80 ^a	Pos. 7
		8012190117	- 12/15/80	Pos. 6 and 7
		8101060333	- 12/30/80	Pos. 5
		8101270611	- 1/23/81	Pos. 1 to 4
		8108180126	- 8/11/81 ^c	Pos. 7
		NRC letter	- 10/20/81 ^d	II.E.4.2
		8112140191	- 12/7/81 ^a	Pos. 6
COOK, Units 1 and 2	Indiana and Michigan Electric Co.	8101130217	- 1/8/81 ^c	Pos. 5, 6, and 7
		SER	- 10/30/81 ^d	
		EGG-EA5098	- 3/80 ^a	Pos. 6
		NRC letter	- 10/30/81	Pos. 5 and 6
COOPER	Nebraska Public Power District	7912280542	- 12/18/79 ^a	Pos. 7 and Pos. 1
		8101050466	- 12/30/80	Pos. 5 and 6
		8107070348	- 6/30/81	Pos. 7
		1183-4149	- 6/80 ^a	Pos. 7
		NRC letter	- 10/26/81	Pos. 6

^aSupporting document from B-24 issue data base.^bDocuments received 4/13/81 for review of Position 5.^cUpdated material received 9/24/81.^dUpdated material received 12/4/81.

ATTACHMENT (Continued)

NUREG 0737, TASK II.E.4.2
REVIEW DOCUMENTS

<u>REACTOR</u>	<u>LICENSEE</u>	<u>ACCESSION NO.</u>	<u>DATE</u>	<u>REMARKS</u>
DIANE ARNOLD	Iowa Electric Light and Power Co.	7912310369	- 12/14/79 ^a	Pos. 7 and Pos. 1
		- - - -	- 12/31/80	Pos. 5 and 6
		8107070317	- 7/1/81	Pos. 6
INDIAN POINT, Units 1 and 2	Cons. Edison Co. of NY, Inc.	8003140208	- 3/11/80 ^a	Pos. 1
		8006110051	- 5/28/80 ^a	Pos. 7
		8103030722	- 2/26/81	Pos. 5, 6, 7, (Unit 2)
		8107070391	- 7/1/81	No Information
		NRC letter	- 11/29/81	Pos. 6 (Unit 2)
INDIAN POINT, Unit 3	Power Authority of the State of NY	- - - -	- 3/2/79 ^a	Pos. 7
		- - - -	- 12/28/79 ^a	Pos. 1
		x...x476	- 12/30/80	Pos. 5, 6, and 7
		8103040697	- 2/27/81 ^d	Pos. 1 to 4
		NRC letter	11/24/81	Pos. 6

^aSupporting document from B-24 issue data base.^bDocuments received 4/13/81 for review of Position 5.^cUpdated material received 9/24/81.^dUpdated material received 12/4/81.

ATTACHMENT (Continued)

NUREG 0737, TASK II.E.4.2
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<u>REACTOR</u>	<u>LICENSEE</u>	<u>ACCESSION NO.</u>	<u>DATE</u>	<u>REMARKS</u>
LA CROSSE	Dairyland Power Cooperative	7902140219	- 2/1/79 ^a	Pos. 7
		SER(SEPB-DUR)-	3/14/80	Pos. 7 and Pos. 1
		810....181	- 1/16/81	Pos. 5
MONTICELLO	Northern States Power Co.	7901091095	- 1/3/79 ^a	Pos. 7
		7911210410	- 11/14/79 ^a	Pos. 1
		8001230102	- 1/17/80 ^a	Pos. 1
		8003050529	- 2/26/80 ^a	Pos. 7
		- - - -	- 12/30/80 ^b	Pos. 5 and 6
		- - - -	- 1/30/81 ^b	Pos. 5
		8103100206	- 3/2/81 ^b	Pos. 7
NORTH ANNA, Units 1 and 2	Virginia Electric and Power Co.	NRC letter	- 11/13/81	Pos. 6
		8012190354	- 12/15/80 ^c	Pos. 5, 6, and 7
		8106260145	- 6/18/81 ^c	Pos. 5 and 7

^aSupporting document from B-24 issue data base.^bDocuments received 4/13/81 for review of Position 5.^cUpdated material received 9/24/81.^dUpdated material received 12/4/81.

ATTACHMENT (Continued)

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	<u>REACTOR</u>	<u>LICENSEE</u>	<u>ACCESSION NO.</u>	<u>DATE</u>	<u>REMARKS</u>
	PALISADES	Consumers Power Co.	- - - -	- 12/19/80 ^C	Pos. 5, 6, and 7
			7911270348	- 11/21/79 ^a	Pos. 6
			7911290378	- 11/27/79 ^a	Pos. 1
A-5	POINT BEACH, Units 1 and 2	Wisconsin Electric Power Co.	8012300404	- 12/23/80 ^C	Pos. 5, 6, and 7
			- - - -	- 2/4/81 ^b	No Information
			- - - -	- 3/31/81 ^b	Schedule Only
			8109220705	- 9/14/81 ^d	II.F.1.4, 5 and 6
			NRC letter	- 11/23/81	Pos. 6
	SALEM, Units 1 and 2	Public Service Electric and Gas Co.	SER (DSS)	- 3/22/79 ^a	Pos. 6 and 7 (Unit 2)
			7910160529	- 10/5/79 ^a	Pos. 6 (Unit 1)
			8101070329	- 12/31/80 ^C	Pos. 5
			8105040260	- 4/23/81 ^C	Pos. 5
			- - - -	- 12/22/81	Pos. 6

^aSupporting document from B-24 issue data base.^bDocuments received 4/13/81 for review of Position 5.^cUpdated material received 9/24/81.^dUpdated material received 12/4/81.

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NUREG 0737, TASK II.E.4.2
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<u>REACTOR</u>	<u>LICENSEE</u>	<u>ACCESSION NO.</u>	<u>DATE</u>	<u>REMARKS</u>
SURRY, Units 1 and 2	Virginia Electric and Power Co.	8012190354	- 12/15/80 ^C	Pos. 5, 6, and 7
		8106260145	- 6/18/81 ^C	Pos. 5 and 7

- ^aSupporting document from B-24 issue data base.
^bDocuments received 4/13/81 for review of Position 5.
^cUpdated material received 9/24/81.
^dUpdated material received 12/4/81.