



Carolina Power & Light Company
P.O. Box 10429
Southport, NC 28461-0429

MAR 20 1998

SERIAL: BSEP 98-0058

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324/LICENSE NOS. DPR-71 AND DPR-62
GENERIC LETTER 89-10 MOTOR-OPERATED VALVE PROGRAM COMMITMENTS
RELATED TO PROGRAM CLOSURE

Gentlemen:

In letters dated June 21, 1995, (BSEP 95-0247) and April 12, 1996, (BSEP 96-0138) the NRC was informed that the Brunswick Steam Electric Plant (BSEP) had completed implementing a Motor-Operated Valve (MOV) program in accordance with NRC Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing And Surveillance," based on completion of the necessary testing and preparation of MOV setup calculations needed to demonstrate MOV capability under design bases conditions. These calculations were prepared using the best available information at the time and, as such, Carolina Power & Light (CP&L) Company considered BSEP GL 89-10 closure notification letters to be accurate at the time of issuance.

Since the issuance of BSEP GL 89-10 closure notification letters, additional information that could potentially impact BSEP MOV setup calculation assumptions became available. In addition, during the NRC GL 89-10 closeout inspection conducted at CP&L's H. B. Robinson Steam Electric Plant (HERSEP) in September through November 1996, programmatic implementation concerns were identified. CP&L recognized that some of these concerns were potentially applicable to the BSEP GL 89-10 MOV program. The "CP&L GL 89-10 Corporate Improvement Plan" and the "1997 Improvement Plan & Schedule For The Brunswick Motor-Operated Valve Program" were developed to address these concerns.

The NRC conducted an inspection of the BSEP GL 89-10 MOV program from August 18 through August 27, 1997. During this inspection the NRC identified that although enhancements to the BSEP GL 89-10 MOV program had been initiated since the HBRSEP GL 89-10 inspection, additional information/actions were needed to support NRC closure of GL 89-10 for

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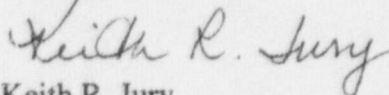
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BSEP. In a letter dated October 2, 1997, (BSEP 97-0408) the NRC was notified of further actions being taken to improve the program and to support NRC closure of GL 89-10 for BSEP.

From March 2 to March 6, 1998, the NRC conducted additional inspection activities to assess program closure readiness. As part of the inspection activities, items were identified that are necessary to support closure of the GL 89-10 program. This letter supersedes BSEP 97-0408 and identifies the actions necessary to support program closure of GL 89-10 at BSEP. Enclosure 1 details the remaining program actions and Enclosure 2 lists the regulatory commitments.

Please refer any questions regarding this submittal to Mr. Warren Dorman, Supervisor - Licensing, at (910) 457-2068.

Sincerely,



Keith R. Jury
Manager - Regulatory Affairs
Brunswick Steam Electric Plant

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Enclosures:

1. Generic Letter 89-10 Program Actions
2. List of Regulatory Commitments

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cc (with enclosures):

U. S. Nuclear Regulatory Commission, Region II
ATTN: Mr. Luis A. Reyes, Regional Administrator
Atlanta Federal Center
61 Forsyth Street, SW, Suite 23T85
Atlanta, GA 30303

U. S. Nuclear Regulatory Commission
ATTN: Mr. Charles A. Patterson, NRC Senior Resident Inspector
8470 River Road
Southport, NC 28461

U. S. Nuclear Regulatory Commission
ATTN: Mr. David C. Trimble, Jr. (Mail Stop OWFN 14H22)
11555 Rockville Pike
Rockville, MD 20852-2738

Ms. Jo. A. Sanford
Chair - North Carolina Utilities Commission
P.O. Box 29510
Raleigh, NC 27626-0510

ENCLOSURE 1

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324
LICENSE NOS. DPR-71 AND DPR-62
GENERIC LETTER 89-10 PROGRAM ACTIONS

During the week of March 2 through March 6, 1998, a close-out inspection of the Brunswick Steam Electric Plant (BSEP) Generic Letter (GL) 89-10 program was conducted by the NRC. As part of the inspection activities, a number of items were identified as prudent commitments to support closure of the GL 89-10 program. The items are listed below.

1. Schedule of Margin Enhancement Modifications

As part of a commitment to implement the enhancement modifications identified and scheduled in the BSEP Motor-Operated Valve (MOV) Improvement Plan, the following schedule has been established for the MOVs listed in Tables 1-1 and 1-2 below.

Table 1-1

Unit 1 MOV Margin Enhancement Modification Schedule	
Tag Number	Scheduled Date of Margin Enhancement Modification Completion
1-E51-F007	Before the end of start up testing for the next Unit 1 refuel outage B112R1 which is currently scheduled for the second quarter of 1998
1-G31-F001	Before the end of start up testing for B112R1
1-G31-F004	Before the end of start up testing for B112R1
1-E11-F004A *	Before the end of start up testing for the Unit 1 refuel outage B113R1 which is currently scheduled for the second quarter of 2000
1-E11-F004B *	Before the end of start up testing for B113R1
1-E11-F028A	Before the end of start up testing for B113R1
1-E11-F028B	Before the end of start up testing for B113R1

Table 1-2

Unit 2 MOV Margin Enhancement Modification Schedule	
Tag Number	Scheduled Date of Margin Enhancement Modification Completion
2-E11-F004D *	Before the end of start up testing for the next Unit 2 refuel outage B214R1 which is currently scheduled for the second quarter of 1999
2-E11-F028A	Before the end of start up testing for B214R1
2-E11-F028B	Before the end of start up testing for B214R1
2-E51-F007	Before the end of start up testing for B214R1
2-G31-F001	Before the end of start up testing for B214R1
2-G31-F004	Before the end of start up testing for B214R1

*** Will be modified if testing indicates a modification is required to obtain greater than 10% design margin.**

2. Differential Pressure (DP) Test Schedule for Gate, Globe, and Butterfly Valves

As part of a commitment to implement the testing identified and scheduled in the BSEP MOV Improvement Plan, the following gate, globe, and butterfly valve testing schedule has been established for the MOVs listed in Tables 2-1 through 2-4 below.

Table 2-1

Unit 1 Schedule for MOV Gate and Globe Valve DP Testing			
Tag Number/Type	Sensor Installation	DP Test Target Date *	DP Test Commitment Date
1-E21-F031A/ gate	B112R1	August 1998	4 th Quarter 1998
1-E21-F031B/gate	B112R1	September 1998	4 th Quarter 1998
1-E11-F068A/globe	B112R1	July 1998	4 th Quarter 1998
1-E11-F068B/globe	B112R1	August 1998	4 th Quarter 1998
1-E41-F001/double-disk gate	B112R1	June 1998	4 th Quarter 1998
1-E11-F024A/globe	B113R1	March 2000	3 rd Quarter 2000
1-E41-F008/globe	B113R1	April 2000	3 rd Quarter 2000

Table 2-2

Unit 2 Schedule for MOV Gate and Globe Valve DP Testing			
Tag Number/Type	Sensor Installation	DP Test Target Date *	DP Test Commitment Date
2-E21-F031A/gate	B214R1	May 1999	4 th Quarter 1999
2-E21-F031B/gate	B214R1	May 1999	4 th Quarter 1999
2-E11-F068A/globe	B214R1	June 1999	4 th Quarter 1999
2-E11-F068B/globe	B214R1	June 1999	4 th Quarter 1999
2-E41-F001/double-disk gate	B214R1	June 1999	4 th Quarter 1999

Table 2-3

Unit 1 Schedule for MOV Butterfly Valve DP Testing		
Tag Number **	DP Test Target Date*	DP Test Commitment Date
1-SW-V19	September 1998	4 th Quarter 1998
1-SW-V117	February 1999	2 nd Quarter 1999
1-SW-V106	October 1998	1 st Quarter 1999
1-SW-V294	December 1998	1 st Quarter 1999
1-SW-V679	October 1998	1 st Quarter 1999
1-SW-V680	December 1998	1 st Quarter 1999

Table 2-4

Unit 2 Schedule for MOV Butterfly Valve DP Testing		
Tag Number **	DP Test Target Date*	DP Test Commitment Date
2-SW-V13	June 1999	3 rd Quarter 1999
2-SW-V680	December 1998	1 st Quarter 1999
2-SW-V36	April 1999	3 rd Quarter 1999
2-SW-V3	April 1999	3 rd Quarter 1999
2-SW-V105	September 1999	4 th Quarter 1999
2-SW-V106	April 1999	3 rd Quarter 1999
2-SW-V679	October 1998	1 st Quarter 1999
2-SW-V102	September 1999	4 th Quarter 1999
2-SW-V103	April 1999	3 rd Quarter 1999

*** DP Test Target Dates are the dates currently scheduled for valve testing. Actual test dates could change due to unforeseen circumstances.**

**** An identical valve in a similar application may be substituted.**

3. Ball Screw Rate of Loading (ROL) and Efficiency Test Schedule

As part of a commitment to implement the testing identified and scheduled in the MOV Improvement Plan, the following ball screw valve testing schedule has been established for the MOVs listed in Tables 3-1 and 3-2 below.

Table 3-1

Unit 1 Ball Screw MOV Testing and Evaluation Schedule		
Tag Number	Test Equipment Installation	DP Test and Evaluation Completion Date
1-E11-F068A	During B112R1	4 th Quarter 1998
1-E11-F068B	During B112R1	4 th Quarter 1998
1-E41-F001	During B112R1	4 th Quarter 1998
1-E11-F024A	During B113R1	3 rd Quarter 2000
1-E41-F008	During B113R1	3 rd Quarter 2000

Table 3-2

Unit 2 Ball Screw MOV Testing and Evaluation Schedule		
Tag Number	Test Equipment Installation	DP Test and Evaluation Completion Date
2-E11-F068A	During B214R1	4 th Quarter 1999
2-E11-F068B	During B214R1	4 th Quarter 1999
2-E41-F001	During B214R1	4 th Quarter 1999

4. Reactor Water Cleanup (RWCU) System Valve 1-G31-F004 Packing Adjustment

The valve 1-G31-F004 will be VOTES tested to verify the packing load during the B112R1 refuel outage currently scheduled for the second quarter of 1998.

5. Safety Evaluation Limitations of Electric Power Research Institute (EPRI) Performance Prediction Methodology (PPM) for Double-Disk Gate Valves.

Current setup calculations for Anchor Darling double-disk gate valves will be reviewed to ensure compliance with EPRI PPM Safety Evaluation limitations. The limitations will be incorporated into the appropriate MOV setup calculations. The review of current calculations and incorporation of the limitations into the setup calculations will be completed by August 1, 1998.

6. Industry Survey for Globe Valves to Confirm Acceptability of Valve Factor Assumption

An industry survey for globe valves of each type, size, rating, and manufacturer applicable to BSEP will be performed to provide further confirmation of the acceptability of the usage of a valve factor of 1.1 for non-DP-tested globe valves. The survey will be completed and confirmation made by July 1, 1998.

7. Residual Heat Removal System Valve 2-E11-F024B Torque Switch Adjustment

The torque switch for valve 2-E11-F024B will be adjusted to reduce the valve seating torque before the end of start up testing for the next Unit 2 refuel outage B214R1 which is currently scheduled for the second quarter of 1999.

8. A submittal will be provided by January 29, 1999, detailing the 1998 BSEP GL 89-10 MOV program "end-of-the-year" status.

9. A submittal will be provided by January 31, 2001, detailing the BSEP GL 89-10 MOV program status after the completion of the other commitments listed in Enclosure 2 of this letter.

ENCLOSURE 2

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
 DOCKET NOS. 50-325 AND 50-324
 LICENSE NOS. DPR-71 AND DPR-62
 LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by Carolina Power & Light (CP&L) Company in this document. Any other actions discussed in the submittal represent intended or planned actions by CP&L. They are described for the NRC's information and are not regulatory commitments. Please notify the Manager - Regulatory Affairs of any questions regarding this document or any associated regulatory commitments.

Commitment	Committed date or outage
Units 1 and 2 Motor-Operated Valve (MOV) Margin Enhancement Modification schedules will be implemented.	In accordance with the scheduled dates contained in Enclosure 1, Tables 1-1 and 1-2
Unit 1 and 2 Gate, Globe, and Butterfly MOV Differential Pressure (DP) Testing schedules will be implemented.	In accordance with DP test commitment dates contained in Enclosure 1, Tables 2-1 through 2-4
Units 1 and 2 Ball Screw MOV Testing and Evaluation schedules will be implemented.	In accordance with DP testing and evaluation completion dates contained in Enclosure 1, Tables 3-1 and 3-2.
MOV 1-G31-F004 will be diagnostically tested to verify the packing load.	By the end of the next Unit 1 refuel outage B112R1 currently scheduled for the second quarter of 1998
Current setup calculations for Anchor Darling double-disk gate valves will be reviewed to ensure compliance with the Electric Power Research Institute Performance Prediction Methodology Safety Evaluation limitations. The limitations will be incorporated into the appropriate MOV setup calculations.	August 1, 1998
An industry survey for globe valves of each type, size, rating, and manufacturer applicable to the Brunswick Steam Electric Plant (BSEP) Generic Letter (GL) 89-10 MOV program will be performed to confirm the acceptability of the usage of a valve factor of 1.1 for non-DP-tested globe valves.	July 1, 1998

Commitment	Committed date or outage
The torque switch for valve 2-E11-F024B will be adjusted to reduce the valve seating torque.	Before the end of start up testing for the next Unit 2 refuel outage B214R1 currently scheduled for the second quarter of 1999
A submittal will be provided detailing the 1998 BSEP GL 89-10 MOV program "end-of-the-year" status.	January 29, 1999
A submittal will be provided detailing the BSEP GL 89-10 MOV program status after the completion of the other commitments listed in this enclosure.	January 31, 2001