UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 21, 1994

Docket No. 50-397

Mr. J. V. Parrish (Mail Drop 1023)
Assistant Managing Director, Operations
Washington Public Power Supply System
P. O. Box 968
Richland, Washington 99352-0958

Dear Mr. Parrish:

SUBJECT: CLOSEOUT OF GENERIC LETTER 89-10, SUPPLEMENT 5, "INACCURACY OF MOTOR-OPERATED VALVE DIAGNOSTIC EQUIPMENT" (TAC NO. M88021)

On June 28, 1993, the NRC staff issued Supplement 5, "Inaccuracy of Motor-Operated Valve Diagnostic Equipment," to Generic Letter (GL) 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance." Supplement 5 requested nuclear power plant licensees and construction permit holders (1) to reexamine their motor-operated valve (MOV) programs and to identify measures taken to account for uncertainties in properly setting valve operating thrust to ensure operability, and (2) to evaluate the schedule necessary to consider the new information on MOV diagnostic equipment inaccuracy and take appropriate action in response to that information. Within 90 days of receipt of Supplement 5 to GL 89-10, licensees were required (1) to notify the NRC staff of the diagnostic equipment used to confirm the proper size or to establish settings for safety-related MOVs, and (2) to report whether they had planned action (including the schedule) to address the new information on the accuracy of MOV diagnostic equipment.

The staff has reviewed the responses and has found that, for the most part, licensees and permit holders have been actively addressing the uncertainties regarding the accuracy of MOV diagnostic equipment. The increased inaccuracy of MOV diagnostic equipment can raise questions regarding (1) the adequacy of torque switch settings to provide sufficient thrust while not exceeding thrust or torque structural limits and (2) the capability of actuator motors at current settings. In their responses, licensees and permit holders indicated that many MOVs had the potential for underthrusting or overthrusting as a result of the higher than expected inaccuracy of MOV diagnostic equipment. Consequently, some licensees reported that MOVs have been retested, adjusted, or modified to resolve the concerns regarding the accuracy of MOV diagnostic equipment.

In its response dated August 31, 1993, the licensee stated that it uses MOV diagnostic equipment manufactured by ITI-MOVATS, including the TTC, SSR and SST. The licensee stated that it may combine this equipment with commercially available stem or yoke mount strain gauges. The licensee stated that it had used the ITI-MOVATS TMD in the past. In March and April 1992, 115 MOVs that

were set up using the TMD had been evaluated in accordance with ITI-MOVATS Engineering Report 5.2 The MOVs were found to be acceptable either through analysis or retesting conducted in spring 1992. The licensee stated that the use of yoke-mounted strain gauges, when calibrated in the closed direction, might overpredict thrust for the open direction. Yoke-mounted strain gauge testing methodology was still being reviewed. During the NRC inspection in September 1993, the staff found that the licensee had applied no measurement error adjustment to the data obtained from the TMD when testing was performed under dynamic conditions. In Inspection Report 50-397/93-23, the staff assigned this issue as an open item pending inspector review of the application of ITI-MOVATS Engineering Report 5.2 to dynamic test data. During a future inspection, the staff will discuss the licensee's resolution of the MOV diagnostic equipment accuracy issue.

This completes NRC staff efforts on TAC No. M88021. If you have any questions regarding this issue, please call me at 301-504-1352.

Sincerely,

ORIGINAL SIGNED BY:

James W. Clifford, Senior Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

cc: See next page

DISTRIBUTION:

Docket File	JClifford
NRC & Local PDRs	DFoster-Curseen
JRoe	OGC
EAdensam	ACRS (10)
TQuay	KPerkins, RIV, WCFO
AHansen	TScarbrough

OFC	LA:DRPW	PM:PDIV-2	D:PDIV-2
NAME	DFoster-Curseen	JClifford:pk	TQuay
DATE	6/21/94	6/21/94	6/21/94

OFFICIAL RECORD COPY DOCUMENT NAME: WNP88021.LT2

were set up using the TMD had been evaluated in accordance with ITI-MOVATS Engineering Report 5.2 The MOVs were found to be acceptable either through analysis or retesting conducted in spring 1992. The licensee stated that the use of yoke-mounted strain gauges, when calibrated in the closed direction, might overpredict thrust for the open direction. Yoke-mounted strain gauge testing methodology was still being reviewed. During the NRC inspection in September 1993, the staff found that the licensee had applied no measurement error adjustment to the data obtained from the TMD when testing was performed under dynamic conditions. In Inspection Report 50-397/93-23, the staff assigned this issue as an open item pending inspector review of the application of ITI-MOVATS Engineering Report 5.2 to dynamic test data. During a future inspection, the staff will discuss the licensee's resolution of the MOV diagnostic equipment accuracy issue.

This completes NRC staff efforts on TAC No. M88021. If you have any questions regarding this issue, please call me at 301-504-1352.

Sincerely,

ORIGINAL SIGNED BY:

James W. Clifford, Senior Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

cc: See next page

DISTRIBUTION:

Docket File	JClifford
NRC & Local PDRs	DFoster-Curseen
JRoe	OGC
EAdensam	ACRS (10)
TQuay	KPerkins, RIV, WCFO
AHansen	TScarbrough

OFC	LA:DRPW	PM:PDIV-2	D:PDIV-2
NAME	DFoster-Curseen	JClifford:pk	TQuay
DATE	6/21/94	6/21/94	6/21/94

OFFICIAL RECORD COPY DOCUMENT NAME: WNP88021.LT2

were set up using the TMD had been evaluated in accordance with ITI-MOVATS Engineering Report 5.2 The MOVs were found to be acceptable either through analysis or retesting conducted in spring 1992. The licensee stated that the use of yoke-mounted strain gauges, when calibrated in the closed direction, might overpredict thrust for the open direction. Yoke-mounted strain gauge testing methodology was still being reviewed. During the NRC inspection in September 1993, the staff found that the licensee had applied no measurement error adjustment to the data obtained from the TMD when testing was performed under dynamic conditions. In Inspection Report 50-397/93-23, the staff assigned this issue as an open item pending inspector review of the application of ITI-MOVATS Engineering Report 5.2 to dynamic test data. During a future inspection, the staff will discuss the licensee's resolution of the MOV diagnostic equipment accuracy issue.

This completes NRC staff efforts on TAC No. M88021. If you have any questions regarding this issue, please call me at 301-504-1352.

Sincerely,

James W Clifford

James W. Clifford, Senior Project Manager
Project Directorate IV-2
Division of Reactor Projects III/IV
Office of Nuclear Reactor Regulation

cc: See next page

Mr. J. V. Parrish
Washington Public Power Supply System

WPPSS Nuclear Project No. 2
(WNP-2)

cc:
Mr. J. H. Swailes
WNP-2 Plant Manager
Washington Public Power Supply System
P. O. Box 968
Richland, Washington 99352-0968

G. E. C. Doupe, Esq. (Mail Drop 396)
Washington Public Power Supply System
3000 George Washington Way
P. O. Box 968
Richland, Washington 99352-0968

Mr. Warren Bishop, Chairman
Energy Facility Site Evaluation Council
P. O. Box 43172
Olympia, Washington 98504-3172

Mr. H. K. Kook (Mail Drop PE20)
WNP-2 Licensing Manager
Washington Public Power Supply System
P. O. Box 968
Richland, Washington 99352-0968

Mr. Paul R. Bemis (Mail Drop PE20)
Regulatory Programs Manager
Washington Public Power Supply System
P. O. Box 968
Richland, Washington 99352-0968

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
Harris Tower & Pavilion
611 Ryan Plaza Drive, Suite 400
Arlington, Texas 76011-8064

Chairman
Benton County Board of Commissioners
P. O. Box 190
Prosser, Washington 99350-0190

Mr. R. C. Barr
U. S. Nuclear Regulatory Commission
P. O. Box 69
Richland, Washington 99352-0968

M. H. Philips, Jr., Esq.
Winston & Strawn
1400 L Street, N.W.
Washington, D.C. 20005-3502