Docket No. 50-461

Illinois Power Company
ATTN: Mr. J. S. Perry
Senior Vice President
Clinton Power Station
Mail Code V-275
P.O. Box 678
Clinton, IL 61727

Dear Mr. Perry:

SUBJECT:

DOCUMENTATION REQUEST TO SUPPORT THE CLINTON POWER STATION MOTOR OPERATED VALVE INSPECTION

I would like to inform you that we intend to perform a Generic Letter (GL) 89-10 motor-operated valve (MOV) inspection at the Clinton Power Station on May 9-13 and May 23-27, 1994. This will be a Phase 2 inspection in accordance with Temporary Instruction 2515/109. The inspection's main focus will be your GL 89-10 program implementation. Specifically, we will review your evaluation of differential pressure/full flow test results and the use of available data to justify assumptions and update your programmatic assumptions. We will also review issues raised during the Phase 1 inspection (NRC Inspection Report No. 50-461/93002(DRS)).

The attachment to this letter lists information normally utilized during the inspection. To facilitate the inspection, I request your assistance in having this information available at the beginning of the inspection.

We have found that a short MOV program implementation status summary is an effective way to supplement the documentation and enhance information exchange. If you desire to make such a presentation, we suggest it be held immediately following the entrance meeting. However, we request that the presentation be no longer than one hour in duration.

If you have any questions regarding the attachment, or the inspection itself, please contact me (708) 829-9731 or John Jacobson of my staff (708) 829-9736.

Sincerely,

ORIGINAL SIGNED BY GEOFFREY C. WRIGHT

9404140013 940406 PDR ADDCK 05000461 Q PDR

G. C. Wright, Chief Engineering Branch

Attachment: As stated

See Attached Distribution

RIII WDP Pegg 04/5/94 Jac n 04/5/94

Clayton 04/6/94

RIII //ec/ Wright 04/ 5/94

IE-01

Distribution

cc w/attachment:
J. Cook, Vice President & Manager
Clinton Power Station
R. Phares, Director, Licensing
OC/LFDCB
Resident Inspectors, Clinton,
Dresden, LaSalle, Quad Cities
Project Manager, NRR
Nathan Schloss, Economist, Public
Utilities Division
K. K. Berry, Licensing Services Manager
General Electric Company
Chairman, DeWitt County Board
State Liaison Officer
Chairman, Illinois Commerce Commission

bcc: PUBLIC IE-01

ATTACHMENT

GENERIC LETTER (GL) 89-10 INSPECTION

DOCUMENTATION REQUEST

The following is representative of material used during a Phase 2 motoroperated valve (MOV) inspection. It will significantly aid in inspection efficiency if the information is available at the beginning of the inspection.

- 1. Your current GL 89-10 program description, including position papers or other program support documents.
- 2. The valve number and noun-name for each valve in your program.
- 3. "Target Margin Calculations" for each MOV in your program, or other documents that contain the equivalent information, including:
 - a. Motor: AC or DC, nominal voltage rating, nominal torque, speed.
 - Actuator: manufacturer, type, size overall gear ratio, application factor, assumed efficiencies.
 - c. Valve: Manufacturer, type, pressure rating, disc area used in calculations, stem diameter, assumed valve factor, assumed stem friction coefficient, pitch and lead.
 - d. Design Basis Conditions: differential pressure (DP), system pressure, worst case motor voltage, fluid temperature and flow conditions, and ambient accident temperature conditions.
- 4. Information on valves that have been tested and the type of test performed (static or dynamic design basis test). The following information is of specific interest: valve factor observed for each valve which was DP tested, test DP, stem friction coefficients observed during static and design basis testing, percentage of load sensitive behavior observed during the DP test, and thrust observed at torque switch trip under static and DP conditions.
- 5. Procedures for:
 - a. Calculating DP requirements
 - Determining torque switch settings
 - c. Preventive and corrective maintenance on MOVs, including postmaintenance testing requirements
 - d. Performing DP and static testing
 - e. Evaluating MOV test results

- f. Performing degraded voltage calculations
- Trending MOV parameters and failures g.
- 6. The schedule for testing and maintenance of MOVs during the period of the inspection.
- MOVs in safety-related systems which were not included in the GL 89-10 7. program and the reason for not including them.
- 8. Specific justification for not performing design basis testing on MOVs included in the program.
- 9. An MOV staff organizational chart and appropriate phone numbers.
- 10. P&IDs for systems which include GL 89-10 MOVs.
- 11. A schedule of expected testing and completion projections for GL 89-10 commitments.
- 12. Results of degraded voltage studies.
- Results of MOV sizing and switch setting calculations, if different than 13. 3, above.
- 14. Evaluations and corrective action, if appropriate, to address various information notices pertaining to pressure locking and thermal binding of MOVs.
- 15. Diagnostic equipment manufacturer, devices used, and assumed accuracies.
- 16. Information on MOV failures since January 1, 1992.
- 17. The last two MOV program self-assessments.
- 18. Information on completed and proposed modifications to enhance MOV capability.
- 19. The following areas will also be addressed during the inspection:
 - Justification for generic assumptions for valve factors, stem friction coefficients under degraded and non-degraded conditions. and load sensitive behavior.
 - b. Test information feedback into your GL 89-10 program. Specifically, steps taken to update programmatic values for valve factors, stem friction coefficients, and load sensitive behavior based on the results of your testing program.

- Assessment of ambient temperature effects on MOV motors, including actions taken (and planned) in response to the recent Limitorque Part 21 Notice, "Torque at Elevated Temperatures," dated May 13, 1993.
- d. Actions planned to justify design basis capability for MOVs which will not be subjected to DP testing.
- e. Justification demonstrating that static testing (performed to comply with the periodic verification recommendations) is sufficient to demonstrate that MOVs can perform their design basis functions, if applicable.
- 20. Trends, problems, or other information obtained through the MOV trending program, if any, and the resulting changes/corrective actions.
- 21. Response to IN 93-98 regarding MOV motor brakes. If response is not complete, please be prepared to discuss progress to date.
- 22. The status of your actions in response to items identified in GL 89-10 Inspection Report No. 50-461/93002(DRS).