Nuclear Operating Company
South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

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

South Texas Project
Docket Nos. STN 50-498, STN 50-499
Supplemental Response to Generic Letter 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves"

References:

1. "Safety Evaluation on Joint Owners' Group Program on Periodic Verification of Motor-Operated Valves Described in Topical Report MPR-1807," Thomas H. Essig, NRR, to Thomas V. Greene, Westinghouse Owners' Group, dated October 30, 1997
2. Generic Letter 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves," dated September 18, 1996

Pursuant to the request of the Nuclear Regulatory Commission (reference 1), the South Texas Project submits this response regarding implementation of the Joint Owners Group Program on Motor-Operated Valve Periodic Verification. The NRC staff has concluded that the program provides an acceptable industry-wide response to Generic Letter 96-05 (reference 2) for valve age-related degradation. The attachment describes how the program has been implemented at the South Texas Project.

If there are any questions, please contact either Mr. R. P. Murphy at (512) 972-8919 or me at (512) 972-7162.

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PLW

Attachment: Implementation of Joint Owners' Group Program on Motor-Operated Valve Periodic Verification

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c:

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SOUTH TEXAS PROJECT

IMPLEMENTATION OF JOINT OWNERS' GROUP PROGRAM ON MOTOR-OPERATED VALVE PERIODIC VERIFICATION

References:

1. "Safety Evaluation on Joint Owners' Group Program on Periodic Verification of Motor-Operated Valves Described in Topical Report MPR-1807 (Revision 2)
2. Correspondence from Thomas P. Gwynn, NRC, to William T. Cottle, HL&P, "Closure of NRC Review of South Texas Generic Letter 89-10 Program" (March 2, 1995)
3. Correspondence from T. H. Cloninger, HL&P, to NRC Document Control Desk, "180-Day Response to Generic Letter 96-05" (March 17, 1997)
4. Joint Owners' Group Report MPR-1807, Revision 2: "Joint BWR, Westinghouse and Combustion Engineering Owners' Group Program on Motor-Operated Valve (MOV) Periodic Verification"

Compliance with the Joint Owners' Group Program

The safety evaluation issued by the Nuclear Regulatory Commission for the Joint Owners' Group Program on Motor-Operated Valve Periodic Verification (reference 1) requested the following actions by licensees implementing the program:

> **Individually notify the NRC of plans to implement the JOG program described in Revision 2 of the topical report. Participating licensees must justify any deviations from the JOG program.**

As stated in reference 2, the Nuclear Regulatory Commission determined that the South Texas Project Motor-Operated Valve testing program meets the intent of Generic Letter 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance," and that all significant issues had been resolved. This testing program includes testing of motor-operated valves in the program at least once every three cycles, not to exceed five years. The program provides for dynamic testing of eight motor-operated valves, including six gate valves, one globe valve, and one butterfly valve.

As stated in reference 3, the South Texas Project is a member of the Joint Owners' Group. The South Texas Project is committed to participation in the Joint Owners' Group dynamic testing program. The Joint Owners' Group Periodic Verification Program as outlined by MPR-1807 Revision 2 (reference 4) was issued by the Joint Owners' Group in July 1997. The South Texas Project has evaluated the Joint Owners' Group Periodic Verification Program, MPR-1807 Revision 2, against the South Texas Project's program and found that there are no significant differences.

The Nuclear Regulatory Commission has reviewed MPR-1807 and issued a safety evaluation (reference 1). This has also been reviewed by the South Texas Project to

identify opportunities for further enhancement of the South Texas Project testing program. Identified items will be tracked to resolution.

As required by the Joint Owners' Group program, the South Texas Project is providing the results of dynamic testing of four valves; this includes two gate valves, one globe valve, and one butterfly valve. These valves are included in the South Texas Project dynamic testing program. The South Texas Project will consider the Joint Owners' Group program testing results in identifying changes to the South Texas Project program and in evaluating the results of South Texas Project valve testing, both static and dynamic.

Justification of Motor-Operated Valve Risk Categorization Methodology

Generic Letter 96-05 states that risk insights may be used to prioritize valve test activities, such as frequency of individual valve tests and selection of valves to be tested. In addition, Generic Letter 96-05 indicates that the importance of a valve should be considered in determining an appropriate mix of exercising and diagnostic testing. The Joint Owners' Group Periodic Verification Program includes a description of static testing which utilizes a determination of the importance of a valve to determine the frequency of testing. The Joint Owners' Group program also states that each utility is expected to use plant-specific or other generic criteria for determining the risk categories for each motor-operated valve.

Although the Westinghouse Owners' Group has prepared a "Risk Ranking Approach" which the NRC has reviewed, the South Texas Project does not plan to utilize their evaluation methodology. Instead, as indicated in reference 3, the South Texas Project is in the process of completing a risk-informed performance-based approach for the South Texas Project Periodic Verification Program which will address the safety significance categorization of motor-operated valves. This is based on the comprehensive South Texas Project Probabilistic Safety Assessment previously completed and reviewed by the NRC, deterministic considerations (including motor-operated valve performance margins) and the current licensing basis blended with integrated decision-making through the expert panel process. This approach uses the South Texas Project risk ranking methodology that has been reviewed and accepted by the NRC in our Graded Quality Assurance Program. The report and the process of categorization will be completed in 1999. The conclusions of the approved report and the results of the evaluation will be considered for inclusion into the existing South Texas Project Periodic Verification Program.