August 11, 2000

Mr. Harold B. Ray
Executive Vice President
Southern California Edison Company
San Onofre Nuclear Generating Station
P.O. Box 128
San Clemente, CA 92674-0128

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2, AND 3 - COMPLETION OF LICENSING ACTION FOR GENERIC LETTER 96-05, "PERIODIC VERIFICATION OF DESIGN-BASIS CAPABILITY OF SAFETY-RELATED MOTOR-OPERATED VALVES," (TAC NOS. M97097 AND M97098)

Dear Mr. Ray:

On September 18, 1996, the U.S. Nuclear Regulatory Commission (NRC) issued Generic Letter (GL) 96-05, "Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves," requesting each nuclear power plant licensee to establish a program, or to ensure the effectiveness of its current program, to verify on a periodic basis that safety-related motor-operated valves (MOVs) continue to be capable of performing their safety functions within the current licensing bases of the facility.

In a letter dated November 14, 1996, you informed us of your plan to perform the actions requested in GL 96-05 at the San Onofre Nuclear Generating Station (SONGS), Units 2 and 3. In a letter dated March 13, 1997, you provided a description of the MOV periodic verification program at SONGS and stated that the plant was implementing GL 96-05. On December 30, 1998, you submitted a request to implement a risk-informed inservice testing (IST) program at SONGS as an alternative to the applicable requirements in the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code*.

As part of your request to implement a risk-informed IST program at SONGS, you stated that MOV testing would be conducted in accordance with ASME Code Case OMN-1, "Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor Operated Valve Assemblies in LWR Power Plants, OM Code 1995 Edition, Subsection ISTC," and its commitments to GL 89-10, "Safety-Related Motor-Operated Valve Testing and Surveillance," and GL 96-05. On June 17, 1999, you submitted additional information regarding the proposed risk-informed IST program at SONGS, along with a summary of the then-current results of the MOV periodic verification program. On September 28, 1999, you provided further information on your proposed risk-informed IST program and its response to GL 96-05. On November 30, 1999, you submitted a revised description of your proposed risk-informed IST program.

On December 6 to 10, 1999, the NRC conducted an inspection at SONGS to determine whether your MOV program was consistent with your commitments on GL 96-05 and satisfied the recommendations of GL 96-05. The inspection results are provided in NRC's Inspection Reports 50-361 and 362/99-18 (dated January 4, 2000). On March 27, 2000, the NRC issued a

safety evaluation (SE) concluding that your proposed implementation of a risk-informed IST program at SONGS was authorized based on the demonstration by you that the proposed program provides an acceptable level of quality and safety.

The NRC staff has completed its review of your submittals and applicable NRC inspection reports for the MOV program at SONGS. Based on our review, the staff finds that you have established an acceptable program to verify periodically the design-basis capability of the safety-related MOVs at SONGS. As discussed in the enclosed SE, the staff concludes that you have adequately addressed the actions requested in GL 96-05. Please be advised that the NRC staff may conduct additional inspections at SONGS to verify the implementation of the MOV periodic verification program is in accordance with your commitments in your submittals; this NRC SE; and the NRC SE dated March 27, 2000, on the risk-informed IST program at SONGS.

This completes our effort under the technical assignment control (TAC) numbers M97097 and M97098 and the TACs are closed.

Sincerely,

/RA/

L. Raghavan, Senior Project Manager, Section 2
Project Directorate IV & Decommissioning
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 362

Enclosure: Safety Evaluation

cc w/encl: See next page

safety evaluation (SE) concluding that your proposed implementation of a risk-informed IST program at SONGS was authorized based on the demonstration by you that the proposed program provides an acceptable level of quality and safety.

The NRC staff has completed its review of your submittals and applicable NRC inspection reports for the MOV program at SONGS. Based on our review, the staff finds that you have established an acceptable program to verify periodically the design-basis capability of the safety-related MOVs at SONGS. As discussed in the enclosed SE, the staff concludes that you have adequately addressed the actions requested in GL 96-05. Please be advised that the NRC staff may conduct additional inspections at SONGS to verify the implementation of the MOV periodic verification program is in accordance with your commitments in your submittals; this NRC SE; and the NRC SE dated March 27, 2000, on the risk-informed IST program at SONGS.

This completes our effort under the technical assignment control (TAC) numbers M97097 and M97098 and the TACs are closed.

Sincerely,
/RA/
L. Raghavan, Senior Project Manager, Section 2
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Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-361 and 50-362

Enclosure: Safety Evaluation

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

LICENSEE RESPONSE TO GENERIC LETTER 96-05, "PERIODIC VERIFICATION OF DESIGN-BASIS CAPABILITY OF SAFETY-RELATED MOTOR-OPERATED VALVES"

SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3

DOCKET NUMBER 50-361 AND 362

1.0 INTRODUCTION

Many fluid systems at nuclear power plants depend on the successful operation of motor-operated valves (MOVs) in performing their safety functions. Several years ago, MOV operating experience and testing, and research programs sponsored by the nuclear industry and the U. S. Nuclear Regulatory Commission (NRC), revealed weaknesses in a wide range of activities (including design, qualification, testing, and maintenance) associated with the performance of MOVs in nuclear power plants. For example, some engineering analyses used in sizing and setting MOVs did not adequately predict the thrust and torque required to operate valves under their design-basis conditions. In addition, inservice tests of valve stroke time under zero differential-pressure and flow conditions did not ensure that MOVs could perform their safety functions under design-basis conditions.

Upon identification of the weaknesses in MOV performance, significant industry and regulatory activities were initiated to verify the design-basis capability of safety-related MOVs in nuclear power plants. After completion of these activities, nuclear power plant licensees began establishing long-term programs to maintain the design-basis capability of their safety-related MOVs. This safety evaluation (SE) addresses the program developed by Southern California Edison Company (the licensee) to verify periodically the design-basis capability of safety-related MOVs at the San Onofre Nuclear Generating Station (SONGS), Units 2 and 3.

2.0 REGULATORY REQUIREMENTS

The NRC regulations require that MOVs important to safety be treated in a manner that provides assurance of their intended performance. Criterion 1 to Appendix A, "General Design Criteria for Nuclear Power Plants," to Part 50 of Title 10 of the *Code of Federal Regulations* (10 CFR Part 50) states, in part, that structures, systems, and components important to safety shall be designed, fabricated, erected, and tested to quality standards commensurate with the importance of the safety functions to be performed. The quality assurance program to be applied to safety-related components is described in Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50. In Section 50.55a of 10 CFR Part 50, the NRC requires licensees to establish inservice testing (IST) programs in accordance with the American Society of Mechanical Engineers (ASME) *Boiler and Pressure Vessel Code*, and more recently the ASME *Code for Operation and Maintenance of Nuclear Power Plants*.

In response to concerns regarding MOV performance, the NRC staff issued Generic Letter (GL) 89-10 (June 28, 1989), "Safety-Related Motor-Operated Valve Testing and Surveillance," which requested that nuclear power plant licensees and construction permit holders ensure the capability of MOVs in safety-related systems to perform their intended functions by reviewing MOV design bases, verifying MOV switch settings initially and periodically, testing MOVs under design-basis conditions where practicable, improving evaluations of MOV failures and necessary corrective action, and trending MOV problems. The staff requested that licensees complete the GL 89-10 program within approximately three refueling outages or 5 years from the issuance of the generic letter. Permit holders were requested to complete the GL 89-10 program before plant startup or in accordance with the above schedule, whichever was later.

The NRC staff issued seven supplements to GL 89-10 that provided additional guidance and information on MOV program scope, design-basis reviews, switch settings, testing, periodic verification, trending, and schedule extensions. GL 89-10 and its supplements provided only limited guidance regarding MOV periodic verification and the measures appropriate to assure preservation of design-basis capability. Consequently, the staff determined that additional guidance on the periodic verification of MOV design-basis capability should be prepared.

On September 18, 1996, the NRC staff issued GL 96-05, “Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves,” requesting each licensee establish a program, or ensure the effectiveness of its current program, to verify on a periodic basis that safety-related MOVs continue to be capable of performing their safety functions within the current licensing bases of the facility. In GL 96-05, the NRC staff summarized several industry and regulatory activities and programs related to maintaining long-term capability of safety-related MOVs. For example, GL 96-05 discussed non-mandatory ASME Code Case OMN-1, "Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor Operated Valve Assemblies in LWR Power Plants, OM Code 1995 Edition, Subsection ISTC," which allows the replacement of ASME Code requirements for MOV quarterly stroke-time testing with exercising of safety-related MOVs at least once per operating cycle and periodic MOV diagnostic testing on a frequency to be determined on the basis of margin and degradation rate. In GL 96-05, the NRC staff stated that the method in OMN-1 meets the intent of the generic letter with certain limitations. The NRC staff also noted in GL 96-05 that licensees remain bound by the requirements in their code of record regarding MOV stroke-time testing, as supplemented by relief requests approved by the NRC staff.

In GL 96-05, licensees were requested to submit the following information to the NRC:

a. within 60 days from the date of GL 96-05, a written response indicating whether or not the licensee would implement the requested actions; and

b. within 180 days from the date of GL 96-05, or upon notification to the NRC of completion of GL 89-10 (whichever was later), a written summary description of the licensee’s MOV periodic verification program.

The NRC staff is preparing an SE on the response of each licensee to GL 96-05. The NRC staff is conducting inspections to verify the implementation of GL 96-05 programs at nuclear power plants as necessary.

3.0 SONGS GL 96-05 PROGRAM

In a letter dated November 14, 1996, the licensee stated that it would perform the actions requested in GL 96-05 at SONGS Units 2 and 3. In a letter dated March 13, 1997, the licensee provided a description of the MOV periodic verification program at SONGS and stated that the plant was implementing GL 96-05. On December 30, 1998, the licensee submitted a request to implement a risk-informed IST program at SONGS as an alternative to the applicable requirements in the ASME *Boiler and Pressure Vessel Code*.

As part of its request to implement a risk-informed IST program at SONGS, the licensee stated that MOV testing would be conducted in accordance with ASME Code Case OMN-1, and its commitments to GL 89-10 and GL 96-05. On June 17, 1999, the licensee submitted additional information regarding the proposed risk-informed IST program at SONGS, along with a summary of the then-current results of the MOV periodic verification program. On September 28, 1999, the licensee provided further information on its proposed risk-informed IST program and its response to GL 96-05. On November 30, 1999, the licensee submitted a revised description of its proposed risk-informed IST program.

On December 6 to 10, 1999, the NRC conducted an inspection at SONGS to determine whether the licensee's MOV program is consistent with its commitments to GL 96-05 and satisfied the recommendations of GL 96-05. The inspection results are provided in NRC Inspection Report (IR) 50-361 and 362/99-18 (dated January 4, 2000). On March 27, 2000, the NRC issued an SE concluding that the licensee's proposed implementation of a risk-informed IST program at SONGS is authorized based on the demonstration by the licensee that the proposed program provides an acceptable level of quality and safety.

In its letter dated March 13, 1997, the licensee stated that it is implementing the actions requested in GL 96-05 at SONGS. The licensee provided a summary of its comprehensive process of periodic maintenance, performance verification testing, and performance trending to maintain the capability of MOVs within the scope of the program to perform their safety function. In its letter dated September 28, 1999, the licensee reported that stroke-time testing for high-risk MOVs in the GL 96-05 program would initially be retained in accordance with the frequency specified in the ASME Code of record at SONGS. The licensee established plans to conduct periodic static diagnostic tests of all GL 96-05 MOVs at least every three refueling outages, not exceeding 6 years. The licensee established bounding margin requirements for motor-operated gate valves in its GL 96-05 program with periodic dynamic testing specified if those requirements cannot be achieved. The licensee evaluated the capability of motor-operated globe and butterfly valves in its GL 96-05 program and established provisions to address industry experience for long-term performance of those MOVs. The licensee elected not to participate in the industry-wide Joint Owners Group (JOG) Program on MOV Periodic Verification because of the large number of valves (WKM design) at SONGS that are unique and dissimilar to valves installed at other nuclear facilities.

The licensee is applying risk insights in responding to GL 96-05 at SONGS through implementation of ASME Code Case OMN-1 as part of its risk-informed IST program. In its letter dated November 30, 1999, the licensee stated that each MOV within the scope of the risk-informed IST program at SONGS is being categorized as a High Safety Significant Component (HSSC), Potentially High Safety Significant Component (L-H), or Low Safety Significant Component (LSSC). The licensee reported that testing of HSSC MOVs will be

performed in accordance with ASME Code Case OMN-1, and its GL 89-10 and 96-05 commitments. HSSC MOVs with a passive function will be tested per the ASME Code of record as defined in 10 CFR 50.55a. Additionally, the licensee stated that MOV stroke-time testing will initially continue per the Code of record, but that an extension may be implemented following accumulation of sufficient data. The licensee stated that testing of L-H and LSSC MOVs will be performed in accordance with ASME Code Case OMN-1, and its GL 89-10 and 96-05 commitments, at an initial interval not to exceed 6 years until sufficient data exist to determine a more appropriate test frequency. L-H and LSSC MOVs with a passive function will be tested per the Code of record, except at a test frequency not to exceed 6 years based on an evaluation of the design, service condition, performance history, and compensatory actions, as applicable.

4.0 NRC STAFF EVALUATION

The NRC staff has reviewed the information provided in the licensee's submittals and IR 99-18 describing the program at SONGS to verify periodically the design-basis capability of safety-related MOVs in response to GL 96-05. The staff reviewed IR 96-10 (dated December 13, 1996) which provided the results of an inspection at SONGS to evaluate the licensee's program to verify the design-basis capability of safety-related MOVs in response to GL 89-10. The staff also reviewed the NRC SE dated March 27, 2000, accepting the licensee's proposed implementation of a risk-informed IST program at SONGS. The NRC staff's evaluation of the licensee's response to GL 96-05 is described below.

4.1 MOV Program Scope

In GL 96-05, the NRC staff indicated that all safety-related MOVs covered by the GL 89-10 program should be considered in the development of the MOV periodic verification program. The staff noted that the program should consider safety-related MOVs that are assumed to be capable of returning to their safety position when placed in a position that prevents their safety system (or train) from performing its safety function; and the system (or train) is not declared inoperable when the MOVs are in their nonsafety position.

In IR 96-10, the NRC staff reported that the GL 89-10 program at SONGS consisted of 178 MOVs with 89 MOVs in each reactor unit. The staff did not identify any concerns with the scope of the GL 89-10 program in that inspection report. In IR 99-18, the staff found that the scope of the licensee's MOV periodic verification program is consistent with the recommendations of GL 96-05. The staff also noted, based on discussions with licensee personnel, that MOVs placed in a nonsafety position for operational reasons, testing, or maintenance were either determined to be capable of returning to their safety position or declared inoperable when so positioned.

The NRC staff considers the licensee to have made adequate commitments regarding the scope of its MOV program.

4.2 MOV Assumptions and Methodologies

Licensees maintain the assumptions and methodologies used in the development of their MOV programs for the life of the plant (a concept commonly described as a "living program"). For

example, the design basis of safety-related MOVs are maintained up to date, including consideration of any plant modifications or power uprate conditions.

In IR 96-10, the NRC staff reviewed the licensee's justification for the assumptions and methodologies used in the MOV program at SONGS, and the maintenance of those assumptions and methodologies based on the licensee's review of in-plant and industry information. In IR 99-18, the staff evaluated the ongoing activities at SONGS to maintain its MOV program. As part of that evaluation, the staff identified an instance where the licensee's differential pressure assumption for the operating requirement for a shutdown cooling suction containment isolation valve was not appropriate. The licensee determined that the operability of this valve and the other shutdown cooling suction isolation valves was not affected. The staff established an unresolved item in IR 99-18 for the licensee's review of the design-basis assumptions for other safety-related MOVs. The staff closed this item in IR 00-06 (dated May 30, 2000) based on follow-up review and the specific tracking of this item in the licensee's corrective action program.

With the actions underway by the licensee, the NRC staff considers the licensee to have adequate processes in place to maintain the assumptions and methodologies used in its MOV program.

4.3 GL 89-10 Long-Term Items

In IR 96-10, the NRC staff closed its review of the MOV program implemented at SONGS in response to GL 89-10 based on the licensee's actions to verify the design-basis capability of its safety-related MOVs. In that report, the staff noted the licensee planned to perform dynamic tests of MOVs 2HV9348 and 3HV9306 to evaluate their previous unusual behavior. The staff also noted a lack of quality assurance involvement in the GL 89-10 program at SONGS. In IR 99-18, the staff reported that the licensee had conducted those specific MOV dynamic tests and evaluated the test results. The staff also found that the licensee had performed a recent self-assessment of the MOV program along with a series of quality assurance surveillances. Also, in GL 89-10, the staff identified pressure locking and thermal binding as potential performance concerns for safety-related MOVs. The staff is reviewing the licensee's actions in response to GL 95-07, "Pressure Locking and Thermal Binding of Safety-Related Power-Operated Gate Valves," and will issue an SE at the completion of the review.

In GL 89-10, the NRC staff recommended that MOV performance be trended on a long-term basis. In IR 99-18, the staff discussed the licensee's qualitative and quantitative trending of MOV performance. For example, the licensee prepares MOV performance indicator reports every 18 months following each refueling outage. The licensee trends quantitative MOV parameters such as thrust and torque margin for valve opening and closing strokes, stem friction coefficient, thrust pullout ratio for gate valves, average running motor current during valve opening and closing strokes, and peak motor current at control switch trip during valve closing strokes, as applicable. The licensee conducts a periodic review of qualitative trends through evaluation of the operating history of its GL 96-05 MOVs and industry MOV experience.

With the licensee's ongoing implementation of its MOV testing plans and trending program, no outstanding issues regarding the licensee's GL 89-10 program remain at SONGS (except pressure locking and thermal binding which will be addressed in a separate SE).

4.4 ASME Code Case OMN-1

In its letter dated June 17, 1999, the licensee stated that it would implement ASME Code Case OMN-1 in its entirety as an alternative to MOV stroke-time testing specified in the ASME Code of record at SONGS. As documented in the SE dated March 27, 2000, the NRC staff reviewed and accepted with certain conditions the licensee's proposed application of ASME Code Case OMN-1 as an alternative to the ASME Code MOV stroke-time testing requirements as part of the risk-informed IST program at SONGS. In that SE, the staff notes that the licensee has not completed the development of procedures for implementing ASME Code Case OMN-1 at San Onofre. The staff may review those procedures during a future onsite inspection. The NRC staff's acceptance of the application of ASME Code Case OMN-1 in the risk-informed IST program at SONGS as described in the SE dated March 27, 2000, is also applicable to the licensee's use of ASME Code Case OMN-1 in response to GL 96-05.

4.5 Valve Operating Requirements

In IR 96-10, the NRC staff reported that the licensee tested 142 of the 178 MOVs in the GL 89-10 program at SONGS under dynamic conditions to identify their operating requirements. This dynamic testing included 56 gate valves. In its letter dated March 13, 1997, the licensee stated that motor-operated gate valves in its GL 96-05 program would be sized and set using a valve factor to predict thrust requirements intended to bound any potential degradation in valve performance. As reported in IR 99-18, the licensee specifies that any motor-operated gate valve in the GL 96-05 program with an actuator that is not able to achieve a 0.8 valve factor or has less than 20 percent margin above the design-basis thrust requirement will be evaluated for dynamic testing. In its letter dated June 17, 1999, the licensee noted that this bounding capability criterion is based on such considerations as the observation of 0.65 as the highest valve factor during MOV testing at San Onofre, valve test results and friction studies by the Electric Power Research Institute, and initial test results from the JOG Program on MOV Periodic Verification. The licensee stated that low-margin gate valves will be dynamically tested at least every three refueling outages. The staff noted in IR 99-18 that the licensee is currently conducting periodic dynamic tests of nine gate valves that do not meet its bounding capability criterion.

In its letter dated June 17, 1999, the licensee discussed the evaluation of potential degradation of the performance of motor-operated globe valves and butterfly valves in the GL 96-05 program at SONGS. As noted in IR 96-10, the licensee conducted dynamic tests of 43 standard globe valves, 20 rotating-rising stem globe valves, and 23 butterfly valves as part of its GL 89-10 program. The licensee does not believe that significant degradation in the dynamic performance of globe valves will occur based on its review of MOV test data and valve operating characteristics. With respect to butterfly valves, the licensee considers that significant bearing degradation would be identified during static diagnostic tests. The licensee has established sizing and setup requirements for globe valves and butterfly valves in its GL 96-05 program that are intended to accommodate any unexpected degradation. The staff reported in IR 99-18 that the licensee has established provisions to help verify its assumptions by evaluating industry information (such as being developed by the JOG Program on MOV Periodic Verification) and applying that information into the long-term periodic verification of motor-operated globe valves and butterfly valves in the GL 96-05 program at SONGS.

Based on this information, the licensee has established an acceptable program for establishing sufficient operating requirements for GL 96-05 MOVs at SONGS through a combination of high margin and dynamic testing of gate valves, and provisions to incorporate lessons learned from industry experience with globe valves and butterfly valves to address the effects of potential valve age-related degradation.

4.6 Motor Actuator Output

In its letter dated March 13, 1997, the licensee stated that static diagnostic tests of each MOV in the GL 96-05 program at SONGS will be conducted at least once every three refueling outages, not to exceed 6 years. In its letter dated November 30, 1999, the licensee provided a more detailed description of its plans for static diagnostic testing of the GL 96-05 MOVs based on the establishment of HSSC, L-H, and LSSC MOV categories. The licensee also noted that the static diagnostic test frequency for its GL 96-05 MOVs might be adjusted when implementing ASME Code Case OMN-1 as part of the risk-informed IST program at San Onofre.

The licensee monitors MOV actuator output by measuring several parameters during diagnostic testing, including actuator output thrust and torque, stem friction coefficient, and motor current, as applicable. The licensee lubricates the exposed stem thread of each GL 96-05 MOV every refueling outage. The licensee conducts preventative maintenance of the actuator of each GL 96-05 MOV as part of the static diagnostic test activity. Based on the results of this preventative maintenance, the licensee will determine whether disassembly of the MOV for more detailed inspection and stem lubrication is appropriate.

As reported in IR 99-18, the licensee evaluated the ac-powered MOVs in its GL 96-05 program using the updated guidance in Limitorque Technical Update 98-01 (July 17, 1998, Accession No. 9905060175), including use of actuator “pullout” efficiency and a 0.9 application factor. From this evaluation, the licensee identified reduced margins in the capability of several GL 96-05 MOVs to perform their safety functions. The licensee is determining a long-term method for predicting ac-powered MOV motor actuator output, identifying those MOVs needing adjustment or modification, and implementing those actions. The licensee did not identify any MOV operability concerns from the evaluation of its GL 96-05 MOVs in light of the updated ac-powered MOV output guidance.

In Technical Update 98-01, Limitorque reported that updated guidance to predict the performance of dc-powered MOVs might be provided in the future. In IR 99-18, the NRC staff found that the GL 96-05 program in each unit at SONGS includes five dc-powered MOVs. The licensee currently applies “pullout” efficiency and a 1.0 application factor in its sizing and setting calculations for the dc-powered MOVs. Although the 1.0 application factor is less conservative than the 0.9 factor applied to ac-powered MOVs, these dc-powered MOVs currently have at least 15 percent margin above their design-basis requirements. The licensee is also monitoring the ongoing industry effort to update the guidance for predicting dc-powered MOV motor actuator output and intends to address the new guidance as appropriate.

Any MOV operability concerns that might be identified in the future will be processed in accordance with established regulatory requirements and plant-specific commitments.

The NRC staff considers the licensee to be establishing sufficient means to monitor MOV motor actuator output and its potential degradation.

5.0 CONCLUSION

On the basis of this evaluation, the NRC staff finds that the licensee has established an acceptable program to verify periodically the design-basis capability of the safety-related MOVs at SONGS. Therefore, the staff concludes that the licensee has adequately addressed the actions requested in GL 96-05. The NRC staff may conduct inspections to verify the implementation of the MOV periodic verification program is in accordance with the licensee's commitments in its submittals; this NRC SE; and the NRC SE dated March 27, 2000, on the risk-informed IST program at SONGS.

Principal Contributor: T. Scarbrough

Date: August 11, 2000