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Docket Nos.: 50-348 50-364

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555-0001

Joseph M. Farley Nuclear Plant Inservice Testing (IST) Program Relief Requests

Ladies and Gentlemen:

NRC Safety Evaluation (SE) dated October 29, 1998 approved the Joseph M. Farley Nuclear Plant Unit 1 and Unit 2 Inservice Testing Program relief requests submitted as part of the 10-year IST Program update. However, portions of relief requests Q1P16-RR-V-3 and Q2P16-RR-V-3 were denied. The relief requests sought to group three service water to diesel generator check valves (V659, V660 and V661) for the purposes of a sample disassembly and inspection plan. The grouping was denied because valve V661 was a different size than the other two valves, V659 and V660.

SNC revised these relief requests to remove valve V661 from the valve group. On April 1, 1999 SNC submitted two new relief requests O1P16-RR-V-5 and O2P16-RR-V-5 that sought to extend the frequency of disassembly and inspection of valve V661 beyond the code required frequency. The NRC, by phone conversation on May 25, 1999, suggested that grouping the V661 valve from Unit 1 and Unit 2 into a single valve group would be acceptable and meet the NUREG 1482 guidance.

SNC is re-submitting relief requests Q1P16-RR-V-5 and Q2P16-RR-V-5 that seek to group the V661 valves from each unit into a sample disassembly and inspection group.

NRC approval of these relief requests is requested by October 16, 1999. If there are any questions, please advise.

Respectfully submitted,

Dave Morey

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AJP/maf v661 relief.doc Attachments:

- L Unit 1 IST Program Relief Request - Q1P16-RR-V-5
- II. Unit 2 IST Program Relief Request - Q2P16-RR-V-5

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U.S. Nuclear Regulatory Commission

cc: <u>Southern Nuclear Operating Company</u> Mr. L. M. Stinson, General Manager – Farley

> U. S. Nuclear Regulatory Commission, Washington, D. C. Mr. L. M. Padovan, Licensing Project Manager – Farley

U. S. Nuclear Regulatory Commission, Region II Mr. L. A. Reyes, Regional Administrator Mr. T. P. Johnson, Senior Resident Inspector – Farley

ENCLOSURE 1

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Unit 1

IST PROGRAM RELIEF REQUEST

Q1P16-RR-V-5

RELIEF REQUEST Q1P16-RR-V-5

Valve:	Q1P16V0661, Q2P16V0661
Other Valve No:	N/A
Drawing/Coord:	D-170119 Sht. 3/C-10; D-200013 Sht. 3/C-12
System:	Service Water (P16)
Category:	С
Class:	3
Function:	Units 1 and 2 Service Water Supply To DG 1-2A.
OM Code Test	Disassemble each check valve every refueling outa

OM Code TestDisassemble each check valve every refueling outage in accordance with ISTCRequirements:4.5.4(c).

Basis for There are no system design provisions to verify valve reverse flow closure quarterly, at cold shutdown or refueling outage. Therefore, per ISTC 4.5.4(c) these valves will be disassembled during refueling outages to verify operability. No relief is required for these valves per ISTC 4.5.4 (c) if each valve is disassembled every refueling outage. SNC is proposing to group these valves in a sampling disassembly/inspection group and disassemble Q1P16V0661 every other Unit 1 refueling outage and Q2P16V0661 every other Unit 2 refueling outage.

The valves within this group are of the same design (manufacturer, size, model number, and material of construction) and have the same service conditions including valve orientation. These valves meet the guidance of NRC Generic Letter 89-04, Position 2 for valve grouping for purposes of implementing a disassembly/ inspection sampling plan. In NUREG-1482, Appendix G, Comments on Section 4, "Supplemental Guidance on Inservice Testing of Valves," Comment and Response 4.1-3, the NRC has indicated that groups of check valves for disassembly and inspection from multiple units of like design and construction may be combined as stated below:

"It is acceptable to group valves from multiple units if two units are "identical," if the units will be subjected to the same service conditions, and if the valves otherwise meet the grouping criteria."

The burden justification for the proposed alternate testing sampling plan is detailed below:

The inspection history of valves Q1P16V0661 & Q2P16V0661 suggests there is no need for disassembly/inspection each outage, thus any additional expense in doing so would be an unnecessary burden. The past inspections of these valves dating back to 1984 have not detected any unsatisfactory conditions. On average, the disassembly/inspection history of these valves requires 6 mechanic man-hours in the plant. Additional costs associated with planning, approximately 50 man-hours for draining of systems in preparation for valve disassembly and inspection, scheduling, supervision, documentation, etc. are also required for this task.

In addition to incurring these unnecessary costs, disassembling both of these valves every outage will decrease diesel generator availability thus increasing the risk of core damage. The diesel generator system is composed of five generators. The service water cooling supply to each generator is train oriented. Thus each generator gets its cooling from either the "A" train or "B" train service water supply. The proposed disassembly/inspection plan for valve Q1P16V0661 (or Q2P16V0661) will ensure that its disassembly/inspection will be performed at the same time that the other "A" train service water supply check valve, Q1P16V0660 (or Q2P16V0660) is disassembled/inspected. The "B" train check valve, Q1P16V0659 (or Q2P16V0659), will be disassembled/inspected on the alternating outages. This disassembly schedule requires that only one train of the diesel generators be out of service during any outage.

Without a sampling disassembly/inspection plan, FNP will be increasing risk to the core without a commensurate gain in the reliability of the valves. This is counter to the philosophy of 10CFR50.65 of balancing reliability and availability which states that "Adjustments shall be made where necessary to ensure that the objective of preventing failures of structures, systems, and components through maintenance is appropriately balanced against the objective of minimizing unavailability of structures, systems, and components due to monitoring or preventative maintenance."

SNC has considered the use of non-intrusive techniques for these valves. These valves are part of both the INPO SOER 86-03 Check Valve Failures or Degradation program and the IST program. In order to minimize the cost and burden of testing, the testing technique employed for these valves must meet the requirements of both programs. To meet the intent of the SOER 86-03 program, a non-intrusive technique must provide a reliable indication of the valve's internal condition in addition to a full open or full closed verification that is required for IST purposes. Results from non-intrusive check valve testing done at FNP have not been conclusive in ascertaining the internal condition or degree of degradation. These inconclusive results make the use of the non-intrusive techniques unattractive compared to the disassembly and inspection option that meets the requirements of both the SOER and IST programs. SNC has been actively following and participating in non-intrusive check valve technology since 1990 and will continue to do so with a goal of reducing the number of valves disassembled.

Q1P16V0661 will be disassembled/inspected every other Unit 1 refueling outage Alternate Testing: and Q2P16V0661 every other Unit 2 refueling outage. The valve internals will be verified to be structurally sound (no loose or corroded parts) and the disk will be manually exercised to verify full stroke capability. The valve will be part stroked with flow after reassembly. The necessary valve obturator movement, verifying part stroke exercising, will be confirmed by changes in system pressure, flow rate, level, temperature, seat leakage testing or other positive means or through the use of ultrasonic (or similar) flow measuring devices. If a problem is determined while disassembling and inspecting a valve, an evaluation will be performed to determine if there is a generic issue involved. As part of this evaluation, the results of the disassembly and inspection results from the same unit's V0660 valve will be reviewed. (The V0660 and V0661 valves from the same unit should always be scheduled for disassembly/inspection during the same refueling outage). If a generic problem is determined to exist, SNC will implement the guidance set forth in NUREG-1482, Appendix G, Comments on Section 4, "Supplemental Guidance on Inservice Testing of Valves," Comment and Response 4.1-3 and disassemble/inspect the V0661 valve from the other unit at that unit's next refueling outage.

ENCLOSURE 2

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Unit 2

IST PROGRAM RELIEF REQUEST

Q2P16-RR-V-5

RELIEF REQUEST Q2P16-RR-V-5

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(See Q1P16-RR-V-5)