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October 25, 2001

Docket Nos. 50-348  
50-364

NEL-01-0235

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

**Joseph M. Farley Nuclear Plant - Unit 1 and 2 Pressurizer Safety Valves  
Inservice Inspection Relief Request Numbers Q1B13-RR-V-1 and Q2B13-RR-V-1**

Ladies and Gentlemen:

In accordance with the provisions of 10 CFR 50.55a, Southern Nuclear Operating Company (SNC) is requesting NRC approval of the enclosed Relief Requests Q1B13-RR-V-1 and Q2B13-RR-V-1 for Farley Nuclear Plant Units 1 and 2. If granted, these reliefs will alter the sequence of testing the pressurizer safety valves. Approval is requested by September 1, 2002 to support ongoing ISI activities.

There are no commitments contained in this letter. If you have questions, please advise.

Respectfully submitted,

A handwritten signature in cursive script that reads "Dave Morey".

Dave Morey

EWC/kaw: PSVrelief request.doc

Attachments:

- Attachment 1 Request for Relief Q1B13-RR-V-1
- Attachment 2 Request for Relief Q2B13-RR-V-1

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U. S. Nuclear Regulatory Commission

cc: Southern Nuclear Operating Company  
Mr. L. M. Stinson, General Manager

U. S. Nuclear Regulatory Commission, Washington, D. C.  
Mr. F. Rinaldi, 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

**ATTACHMENT 1**

**RELIEF REQUEST  
Q1B13-RR-V-1**

**RELIEF REQUEST  
Q1B13-RR-V-1**

**Valve:** Q1B13V031A, B, C

**Other Valve No:** NA

**Drawing/Coord:** D-175037 Sht. 2/D-5, D-4, D-3

**System:** Reactor Coolant

**Category:** C

**Class:** 1

**Function:** Pressurizer Safety Valve

**OM Code Test Requirements:** Paragraph I 7.3 of the Mandatory Appendix I of the 1990 Edition of the ASME OM Code, states:

**I 7.3 Periodic Testing.** No maintenance, adjustment, disassembly, or other activity that could affect as-found set pressure or seat tightness data is permitted before testing.

Paragraph I 7.3.1 of the Mandatory Appendix I of the 1990 Edition of the ASME OM Code, states:

**I 7.3.1 Class 1 Safety Valves.** Tests before maintenance or set pressure adjustment, or both, shall be performed in the following sequence:

- (a) visual examination;
- (b) seat tightness determination;
- (c) set pressure determination;
- (d) determination of compliance with the Owner's seat tightness criteria;
- (e) determination of electrical characteristics and operation of bellows alarm switch;
- (f) verification of the integrity of balancing device on balanced valves; and
- (g) determination of operation and electrical characteristics of position indicators.

**RELIEF REQUEST  
Q1B13-RR-V-1**

**Basis for  
Relief:**

The ASME 1990 Code specifies that the periodic testing of certain pressure relief valves is required. No maintenance, adjustment, disassembly, or other activity that could affect the as-found set pressure or seat tightness data is permitted before testing.

The 1990 OM Code requires that all specified tests be performed before valve maintenance or set pressure adjustments. The Code specifies the sequence in which these tests are to be performed. FNP is unable to perform Steps (d), (f) and (g) in the Code specified sequence for the Pressurizer Safety Relief valves. Each step is discussed below:

Step (d) "Determination of compliance with the Owner's seat tightness criteria"

The valves are final leak tested after the valves are set pressure tested and after any as-left set pressure adjustments are made. Thus, this leak test provides an accurate indication of the valves' leak tightness when returned to service since no other adjustment is performed after this point.

Step (f) "Verification of the integrity of balancing device on balanced valves"

The test of the integrity of the balancing device requires the valve to be cooled down to ambient temperature; thus, it is desirable to have all elevated temperature testing including set pressure, leak tightness, as well as all as-left set pressure adjustments completed prior to this step.

Step (g) "Determination of operation and electrical characteristics of position indicators"

Due to the design and mechanical arrangement of the limit switches on these valves, the position indicators (limit switches) must be removed prior to the code prescribed testing and therefore they cannot be tested in the Code prescribed sequence. Removal of the limit switches may be considered an activity that could affect as-found set pressure. After removal from the valve, the limit switches remain at the plant site while the valve is shipped to a vendor for off-site testing and refurbishment. A previously tested and refurbished valve is then installed in the location of the removed valve and the position indication devices are attached to the newly installed valve and verified to be operating correctly. Alternatively, when the valves must be tested in place, the limit switches must be removed in order to install the valve lift assist device used in the subsequent testing.

**RELIEF REQUEST**  
**Q1B13-RR-V-1**

**Alternate  
Testing:**

FNP will use the testing sequence of the ASME OM Code paragraph I 7.3.1, 1995 Edition with 1996 Addenda as reproduced below:

I 7.3.1 Class 1 Safety Valves. Tests before maintenance or set-pressure adjustment, or both, shall be performed for (a), (b), and (c) in sequence. The remaining shall be performed after maintenance or set-pressure adjustment:

- (a) visual examination;
- (b) seat tightness determination, if practicable;
- (c) set-pressure determination;
- (d) determination of operation and electrical characteristics of bellows alarm switch; *(not applicable to FNP)*
- (e) verification of the integrity of the balancing device on balanced valves;
- (f) determination of operation and electrical characteristics of position indicators; and
- (g) determination of compliance with Owner's seat tightness criteria.

In addition, FNP will perform an additional test of the position indicator devices prior to Step (a) of this sequence. This additional test will be similar to that specified in Step (f) and will serve as an as-found verification of the devices.

**Justification for  
Granting Relief:**

The proposed alternate testing is technically a sound engineering approach and would provide adequate assurance of the integrity of the valve. Testing of the position indicating devices in the sequence proposed provides an as-found indication of their proper operation and electrical characteristics. Any condition associated with these devices that would have affected the valve set pressure or leaktightness data will be detected during this testing. In addition, when the position indication devices are installed on the refurbished replacement valve, their calibration and proper operation are as-left verified.

In addition, the proposed testing is consistent with the 1996 Addenda of the OM Code which has been approved for use by the Nuclear Regulatory Commission. Therefore, it is requested that the proposed alternative be authorized pursuant to 10 CFR 50.55a(a)(3)i.

**ATTACHMENT 2**

**RELIEF REQUEST  
Q2B13-RR-V-1**

**RELIEF REQUEST  
Q2B13-RR-V-1**

**Valve:** Q2B13V031A, B, C

**Other Valve No:** NA  
**Drawing/Coord:** D-205037 Sht. 2/D-5, D-4, D-3  
**System:** Reactor Coolant  
**Category:** C  
**Class:** 1  
**Function:** Pressurizer Safety Valve

**OM Code Test Requirements:** Paragraph I 7.3 of the Mandatory Appendix I of the 1990 Edition of the ASME OM Code, states:

**I 7.3 Periodic Testing.** No maintenance, adjustment, disassembly, or other activity that could affect as-found set pressure or seat tightness data is permitted before testing.

Paragraph I 7.3.1 of the Mandatory Appendix I of the 1990 Edition of the ASME OM Code, states:

**I 7.3.1 Class 1 Safety Valves.** Tests before maintenance or set pressure adjustment, or both, shall be performed in the following sequence:

- (a) visual examination;
- (b) seat tightness determination;
- (c) set pressure determination;
- (d) determination of compliance with the Owner's seat tightness criteria;
- (e) determination of electrical characteristics and operation of bellows alarm switch;
- (f) verification of the integrity of balancing device on balanced valves; and
- (g) determination of operation and electrical characteristics of position indicators.



## RELIEF REQUEST

### Q2B13-RR-V-1

#### Basis for Relief:

The ASME 1990 Code specifies that the periodic testing of certain pressure relief valves is required. No maintenance, adjustment, disassembly, or other activity that could affect the as-found set pressure or seat tightness data is permitted before testing.

The 1990 OM Code requires that all specified tests be performed before valve maintenance or set pressure adjustments. The Code specifies the sequence in which these tests are to be performed. FNP is unable to perform Steps (d), (f) and (g) in the Code specified sequence for the Pressurizer Safety Relief valves. Each step is discussed below:

#### Step (d) "Determination of compliance with the Owner's seat tightness criteria"

The valves are final leak tested after the valves are set pressure tested and after any as-left set pressure adjustments are made. Thus, this leak test provides an accurate indication of the valves' leak tightness when returned to service since no other adjustment is performed after this point.

#### Step (f) "Verification of the integrity of balancing device on balanced valves"

The test of the integrity of the balancing device requires the valve to be cooled down to ambient temperature; thus, it is desirable to have all elevated temperature testing including set pressure, leak tightness, as well as all as-left set pressure adjustments completed prior to this step.

#### Step (g) "Determination of operation and electrical characteristics of position indicators"

Due to the design and mechanical arrangement of the limit switches on these valves, the position indicators (limit switches) must be removed prior to the code prescribed testing and therefore they cannot be tested in the Code prescribed sequence. Removal of the limit switches may be considered an activity that could affect as-found set pressure. After removal from the valve, the limit switches remain at the plant site while the valve is shipped to a vendor for off-site testing and refurbishment. A previously tested and refurbished valve is then installed in the location of the removed valve and the position indication devices are attached to the newly installed valve and verified to be operating correctly. Alternatively, when the valves must be tested in place, the limit switches must be removed in order to install the valve lift assist device used in the subsequent testing.

**RELIEF REQUEST**  
**Q2B13-RR-V-1**

**Alternate  
Testing:**

FNP will use the testing sequence of the ASME OM Code paragraph I 7.3.1, 1995 Edition with 1996 Addenda as reproduced below:

I 7.3.1 Class 1 Safety Valves. Tests before maintenance or set-pressure adjustment, or both, shall be performed for (a), (b), and (c) in sequence. The remaining shall be performed after maintenance or set-pressure adjustment:

- (a) visual examination;
- (b) seat tightness determination, if practicable;
- (c) set-pressure determination;
- (d) determination of operation and electrical characteristics of bellows alarm switch; *(not applicable to FNP)*
- (e) verification of the integrity of the balancing device on balanced valves;
- (f) determination of operation and electrical characteristics of position indicators; and
- (g) determination of compliance with Owner's seat tightness criteria.

In addition, FNP will perform an additional test of the position indicator devices prior to Step (a) of this sequence. This additional test will be similar to that specified in Step (f) and will serve as an as-found verification of the devices.

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In addition, the proposed testing is consistent with the 1996 Addenda of the OM Code which has been approved for use by the Nuclear Regulatory Commission. Therefore, it is requested that the proposed alternative be authorized pursuant to 10 CFR 50.55a(a)(3)i.