



September 14, 2010

L-2010-207
10 CFR 50.4
10 CFR 50.55a

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

Re: St. Lucie Units 1 and 2
Docket Nos. 50-335 and 50-389
Fourth Ten-Year Interval
Relief Request PR-9

This submittal contains a relief request for the fourth ten- year interval requiring NRC approval in accordance with 10 CFR 50.55a(a)(3)(i), for relief from the requirements of the ASME OM Code.

The details of the 10CFR 50.55a relief request are provided in the attachment.

Please contact Ken Frehafer at (772) 467-7748 if there are any questions on this submittal

Sincerely,

A handwritten signature in black ink that reads 'ES Katzman'.

Eric S. Katzman
Licensing Manager
St. Lucie Plant

Attachment

ESK/KWF

A047
NRR

RELIEF REQUEST NO. PR-09

Relief from Comprehensive Pump Testing for Intake Cooling Water Pumps

NOTE

Proposed Alternative in Accordance with 10 CFR 50.55a(a)(3)(i):
Alternative Provides Acceptable Level of Quality and Safety

ASME Code Component(s) Affected

Pump	Description	Class	Category	Unit
ICW 1A	Intake Cooling Water Pump 1A	3	Group A	1
ICW 1B	Intake Cooling Water Pump 1B	3	Group A	1
ICW 1C	Intake Cooling Water Pump 1C	3	Group A	1
ICW 2A	Intake Cooling Water Pump 2A	3	Group A	2
ICW 2B	Intake Cooling Water Pump 2B	3	Group A	2
ICW 2C	Intake Cooling Water Pump 2C	3	Group A	2

Applicable Code Edition and Addenda

ASME OM Code 2001 Edition through 2003 Addenda

Applicable Code Requirement

Table ISTB-3400-1 – Inservice Test Frequency:
ISTB-5223 – Comprehensive Test Procedure

Reason for Request

Pursuant to 10 CFR 50.55a, “Codes and Standards,” paragraph (a)(3), relief is requested from the requirements of ASME OM Code ISTB-5223 and Table ISTB-3400-1. The basis for the relief request is that the proposed alternative would provide an acceptable level of quality and safety.

Table ISTB-3400-1 specifies a biennial frequency for Comprehensive Pump Testing (CPT) of Group A and Group B pumps. ISTB-5223 describes the specific requirements for performance of CPT of vertical line shaft pumps. Performance of the biennial CPT on the pumps identified above is unnecessary since the existing Group A quarterly pump tests are performed at sufficient flow rates to adequately monitor for pump degradation (+/- 20% of design flow).

The ASME OM ISTB Code Committee has approved Code Case OMN-18, “Alternative Testing Requirements for Pumps Tested Quarterly within +/- 20% of Design Flow,” which allows owners to perform a Group A test in lieu of the CPT if the Group A test is conducted at +/- 20% of the design flow rate and uses pressure instruments that meet the CPT accuracy requirements (+/- 1/2% of full-scale Pressure and ΔP for analog gauges). The basis behind this change is that a quarterly Group A pump test, performed at the CPT flow rate is more

effective in assessing the pumps' operational readiness, through trending, than a Group A test in conjunction with a biennial CPT. Additionally, combining multiple test methods has caused problems with trending, as the data from tests with the more accurate instruments was not always directly comparable with the quarterly data.

Proposed Alternative and Basis for Use

PSL proposes to perform the modified Group A quarterly tests in lieu of performing the Code-required CPT. The modified Group A test will be run at +/-20% of the pump's design flow rate using +/- 1/2% accurate gauges to determine the pump differential pressure. Additionally, PSL will utilize a maximum acceptable ΔP limit of 106% or lower for quarterly testing which is also consistent with the planned Code change applicable to CPT.

Using the provisions of this relief request as an alternative to the specific requirements of ISTB-5223 will provide adequate indication of pump performance, permit detection of component degradation, and continue to provide an acceptable level of quality and safety. Therefore, pursuant to 10 CFR 50.55a(a)(3)(i), PSL requests relief from the specific ISTB requirements identified in this request.

Duration of Proposed Alternative

The proposed alternative test method will be used for the remainder of the Fourth Ten-Year Inservice Testing Inspection Interval for PSL Units 1 and 2.

Precedents

The ASME Code Committees have approved Code Case OMN-18, which allows for the substitution of quarterly Group A pump testing in lieu of biennial Comprehensive Pump Testing. This precedent also requires slight changes to the quarterly pump testing such as the use of 1/2% accuracy pressure gauges and a test flow rate within +/-20% of design flow. In addition, PSL will be imposing a tighter maximum acceptance criteria of 106% to quarterly testing for pumps applying this alternative.