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superseded by Rev 2 TO

INSERVICE TESTING PLAN

Rev 1A, 12/14/86

SAN ONOFRE UNIT 3

program summary

INSERVICE INSPECTION

AND TESTING

PROGRAM PLAN

for the

SAN ONOFRE

NUCLEAR GENERATING STATION

UNIT NUMBER 3

SOUTHERN CALIFORNIA EDISON

COMPANY

SUMMARY

Inservice inspection (ISI) of Class 1, Class 2, and Class 3 nuclear components in Unit 3 of the San Onofre Nuclear Generating Station (SONGS-3) will be performed in accordance with the requirements of Section XI of the ASME Boiler and Pressure Vessel Code, Rules for Inservice Inspection of Nuclear Power Plant Components, hereinafter referred to as the Code.

This inspection and testing program describes the areas to be examined, examination categories, examination methods, extent and schedules to be followed during the 1st ten-year inspection interval together with operational testing requirements. It is anticipated that the first 120-month inspection interval will begin with the start of commercial operation* in September 1983 and be completed in September 1993.

This document is a summary of the SONGS-3 ISI program. It is being submitted to the Nuclear Regulatory Commission for approval in accordance with the requirements of 10 CFR 50.55a (g)(5)(iii). This submittal also provides information in response to specific concerns in Section III.5 of Standard Review Plan (SRP) 5.2.4, SRP 3.9.6, FSAR questions 121.3, 121.8 and 121.17, and as outlined in Appendix A to FSAR question section 121.

* The Commercial Operation Date will be as defined by Federal Power Commission regulations, 18 CFR 101, Chapter 1, paragraph 9.D.

STATEMENT OF POSITION ON USE OF CODE EDITION AND
ADDENDA FOR INSERVICE INSPECTION AT
SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3

10 CFR 50.55a (g)(4)(i) requires that inservice examinations and tests be conducted in accordance with the latest Edition and Addenda of the ASME Boiler and Pressure Vessel Code incorporated by reference 12 months prior to the date of the Operating License. For San Onofre Nuclear Generating Station, Unit No. 3, this would require the use of the 1980 Edition of Section XI, with all Addenda through winter, 1980.

The Edition and Addenda of Section XI of the code selected to govern the Inservice Inspection Program (ISI) for the San Onofre Nuclear Generating Station, Unit No. 2 is the 1977 Edition with all Addenda through the Summer, 1979 Addenda. As Units 2 and 3 are of mirror-image design, share common systems and features, and to reduce complications between the units with the inherent possibility of error, Southern California Edison has chosen to utilize the same Edition and Addenda of Section XI of the ASME Boiler and Pressure Vessel Code for ISI at Unit 3 as at Unit 2.

The use of the 1977 Edition of Section XI, with all Addenda through the Summer, 1979 Addenda, does not adversely affect the public health and safety, nor does it decrease the margins of safety for plant operations as the same types, numbers and percentages of welds require examination under both Editions of the Code and the same examination techniques are required. The only significant change between the two Editions of the Code is the renumbering and renaming of the examination categories defined in Subarticles IWB-2500, IWC-2500, and IWD-2600 and the associated Tables IWB-2500-1,

IWC-2500-1 and IWD-2500-1. This change, although extensive, is essentially editorial in nature as there are no changes in examination area required, examination required nor number or percent of welds to be examined between the 1977 Edition with all Addenda through summer 1979, and the 1980 Edition with all Addenda through winter, 1980.

It is, therefore, the position of Southern California Edison that the possibility of confusion arising from the use of two different Editions and Addenda of Section XI at adjoining plants, as would be required by strict application of 10 CFR 50.55a (g)(4)(i), would be more prejudicial to the public welfare than the use of an earlier Edition and Addenda of Section XI at San Onofre Nuclear Generating Station, Unit 3, and it is our intention to perform the Inservice Inspection Program for the first 10 year inspection period in accordance with the 1977 Edition of Section XI of the ASME Boiler and Pressure Vessel Code, with all Addenda through the Summer, 1979 Addenda.

1.0 OBJECTIVE (Continued)

Exclusions, exceptions, and appropriate relief requests are provided in Section 6.0 in those cases in which strict compliance with Code requirements is not practical.

Plant Technical Specifications implement various aspects of the SONGS-3 ISI program. A summary of applicable technical specifications is provided in Section 7.0 for information.

A summary of items requiring NRC approval is provided in Section 8.0.

NRC approval of the SONGS-3 ISI program is required prior to initiation of the first 120-month inspection interval, beginning in September 1983.

2.0 SCOPE

The SONGS-3 ISI program includes all examinations and tests required by Section XI of the ASME Code for pressure retaining components in Class 1, 2, and 3 systems. Other periodic examinations, not detailed in the Plant Technical Specifications, but required to assure the integrity of plant fluid systems, are included in the scope of the ISI program.

Pressure boundary examinations which are covered in detail in the Plant Technical Specifications, will not be considered a part of the ISI program.

2.1 Items Included

2.1.1 Inspections - Section XI, Division 1, of the ASME Code describes inspections, including non-destructive examinations, to be followed in the Plant ISI program. Code examinations which are covered in the Technical Specifications, are not included in the pressure boundary examinations of the ISI program. See item 2.2.9.

2.1.2 Pump testing - Inservice testing of pumps is included in accordance with subsection IWP of the 1977 Edition of the Code, Summer 1979 Addenda. Testing of safety-related Class 1, 2, and 3 pumps which are powered by an emergency power source are covered by the program.

2.1.3 Valve testing - Inservice testing of valves is included in the ISI program. Subsection IWV will be followed for valves using the 1977 Edition of the Code through Summer 1979 Addenda.

VALVE RELIEF REQUEST NO. 12

SYSTEM: Safety Injection

COMPONENT: 16-077-C-645 (Check Valve)
16-084-C-645 (Check Valve)
16-199-C-645 (Check Valve)
16-201-C-645 (Check Valve)

CATEGORY: C

CLASS: 2

FUNCTION: These valves open to allow a flow of water from the refueling water tank into the suction piping of the low pressure safety injection pumps.

TEST EQUIPMENT: Exercise these valves every three months.

BASIS FOR RELIEF: These check valves cannot be full stroke exercised during power operation because the low pressure safety injection pumps cannot overcome reactor coolant system pressure. During cold shutdown the LPSI pumps are used for the shutdown cooling system which bypasses these check valves by taking suction directly from the RCS.

ALTERNATE TESTING: These valves will be partial stroke exercised during periodic tests of the low pressure safety injection pumps during normal operation. Mini-flow tests will be conducted every three months. These valves will be full stroke exercised every refueling outage as the LPSI pumps fill the refueling water canal.

VALVE RELIEF REQUEST NO. 21

SYSTEM: Various

COMPONENT: Check Valve

CATEGORY: C and AC

CLASS: 1, 2, and 3

FUNCTION: N. A.

TEST
REQUIREMENT:

When full stroke exercising a check valve without flow through the valve, a mechanical exerciser shall be used to move the disk. The force or torque delivered to the disk shall be measured and compared with a predetermined value, per Paragraph IWV-3522(b).

BASIS
FOR RELIEF:

The requirements of this paragraph are impractical in application throughout the plant as separate fixtures would be required for each type and size of check valve in this category. The reliability of the check valves will not be enhanced by this method of exercising.

ALTERNATE
TESTING:

Relief is requested from the requirements of paragraph IWV-3522(b). In lieu of these requirements, each valve will be disassembled and the disk will be manually pulled through its full arc. This exercising will ensure that there is no mechanical binding and the disk moves freely.

PUMP RELIEF REQUEST NO. 4

SYSTEM: Safety Related Systems

COMPONENT: All pumps in the program

CLASS: Class 2 and 3

FUNCTION: To provide flow to safety systems

TEST REQUIREMENT: An inservice test shall be run on each pump nominally each month during normal plant operation.

BASIS FOR RELIEF: Relief is requested from the requirements of Sub-Article IWP-2300(a) regarding monthly testing of each pump. The experience of the industry has shown that the statistical failure rate of these pumps is such that monthly surveillance testing is not justified. The statistics do, however, justify testing on a quarterly basis. Later editions on the Code allow surveillance testing on a quarterly basis.

ALTERNATE TESTING: Inservice testing shall be accomplished on each pump at least once every 3 months. The exception to this will be the Auxiliary Feedwater pumps which will be tested monthly per Technical Specification requirements.