

NRC INSPECTION MANUAL^{IQMB}

TEMPORARY INSTRUCTION 2515/143

SHEARON HARRIS SPENT FUEL POOL ('C' and 'D') EXPANSION

FUNCTIONAL AREA: ENGINEERING (ENG)

APPLICABILITY: This Temporary Instruction (TI) is to be performed at the Shearon Harris Nuclear Power Plant

2515/143-01 OBJECTIVES

01.01 To evaluate the licensee's system of quality procedures and associated records that provide, in lieu of installation records, reasonable assurance that affected portions of the spent fuel pool (SFP) expansion project were constructed in accordance with applicable Code requirements.

01.02 To review the condition of equipment, procured and/or installed prior to termination of the Unit 2 construction license in 1983, for conformance with current quality assurance requirements.

2515/143-02 BACKGROUND

The Harris plant was originally planned as a four unit nuclear site. In order to accommodate four units, the fuel handling building was designed and constructed with four separate pools capable of storing spent fuel. Spent fuel pools 'C' and 'D' were designed to support Units 2 and 3. Construction on the cooling and cleanup system for SFP 'C' and 'D' was discontinued in 1983 when Unit 2 was canceled.

At the time that Unit 2 was canceled, the majority of the mechanical piping and equipment associated with the operation of SFPs 'C' and 'D' was already installed, including all of the embedded and most of the accessible portions of ASME Section III piping associated with the SFP cooling system.

Following cancellation of Unit 2, records documenting field activities, which were required by the construction codes and plant procedures, were transferred to temporary storage facilities. They were not microfilmed since they were

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associated with systems which were not fully completed and accepted under the site's N Certification Program. These records were subsequently discarded during a document control records cleanup effort.

Notably, these discarded records include the piping isometric packages for field installation of the completed portion of Unit 2 Fuel Pool Cooling and Cleanup System (FPCCS) and Component Cooling Water System (CCWS) piping within Code boundaries. As a result, records required by the Code are not available for 52 large bore welds in the completed ASME Section III portions of the Unit 2 FPCCS and CCWS.

Section 50.55a, "Codes and Standards," of 10 CFR Part 50 requires that nuclear power facilities be subject to the licensing condition that structures, systems, and components are designed, fabricated, erected, constructed, tested, and inspected to quality standards commensurate with the importance of the safety function to be performed. 10CFR50.55a further requires that systems and components of nuclear power reactors must meet the specific requirements of the ASME Boiler and Pressure Vessel Code. The lost records are required by the Code.

10CFR50.55a provides for licensees to propose alternatives to these requirements provided that it can be demonstrated that the proposed alternatives would provide an acceptable level of quality and safety. Verification that an effective quality assurance program existed at the time these records were made supports the proposed alternative. Quality records that are available for the affected welds provides further support for the proposed alternative.

2515/143-03 INSPECTION REQUIREMENTS

03.01 Verify that at the time of construction a system of quality procedures was in place to ensure that activities were performed in a manner to ensure that all design requirements were met.

03.02 Verify through inspection of records that the activities controlled by these quality procedures were, indeed, performed.

03.03 Inspect the functional and material condition of the affected components for compliance with the licensee's quality assurance requirements such that the structure, system, or component will perform satisfactorily in service.

2515/143-04 GUIDANCE

General Guidance

No general guidance provided.

Specific Guidance

04.01 Review the system of plant procedures covering activities performed on the affected components. These activities include design, procurement, construction, testing, and inspection.

04.02 For preselected welds, examine the records required by the procedures reviewed in 04.01.

04.03 Inspect equipment within the scope of the SFP cooling and cleanup systems to be placed in service. The licensee's approved quality assurance program, together with the applicable regulatory guides and standards should be used as the acceptance criteria.

2515/143-05 REPORTING REQUIREMENTS

The inspection findings will be documented in a routine inspection report.

2515/143-06 COMPLETION SCHEDULE

Complete the inspection and reporting requirements of this TI by December 31, 1999, in order to support the licensee's schedule for loading of spent fuel in pool 'C' starting in early 2000.

2515/143-07 EXPIRATION

This temporary instruction will remain in effect until June 30, 2000.

2515/143-08 CONTACT

Contact Ken Heck 301-415-2682 for questions regarding this TI.

2515/143-09 STATISTICAL DATA REPORTING

Record actual inspection time to 2515/143 for the regulatory information tracking system (RITS) with an IPE code of SI.

2515/143-10 ORIGINATING ORGANIZATION INFORMATION

10.01 Organizational Responsibility. The Quality Assurance, Vendor Inspection, Maintenance, and Allegations Branch (IQMB) originated this temporary instruction.

10.02 Resource Estimate. The estimated number of onsite inspection hours necessary to complete this temporary Instruction is 28 hours per inspector (4

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inspectors), for a total direct inspection effort of 112 hours.

10.03 Followup Inspection. None.

2515/143-11 TRAINING

No special training is required for the conduct of this temporary instruction.

2515/143-12 REFERENCES

Shearon Harris Request for License Amendment, Spent Fuel Storage, submitted by letter dated December 23, 1998. (Accession No. 9812290056)

Section 50.55a, "Codes and Standards" of 10 CFR Part 50.

ASME Boiler & Pressure Vessel Code, Section III, 1974 Edition, Winter 1976 Addenda.

CP&L Corporate Quality Assurance Program, July 10, 1998 (or current as of the date of inspection).

Shearon Harris Quality Assurance Program, FSAR Chapter 17.3 (current as of the date of inspection).

END

Jim

- Dan Nangosh ① Understudy & Billy Crowley
- ② well records / qualification (Dan Nangosh / Billy Crowley)
- Jim Davis ~~procedures~~ for pipe cleaning, prior to videotaping
Billy Crowley
- Chemistry records / clips (Nangosh - Jim Davis - B. Crowley)
- Trace back Hydrostatic testing - Ken Heck Joe Penabaz
weld control, weld process & inspection (Ken - Billy Crowley)
- Jim Davis to review videotapes as well.
- concern about mic 5 1/2 hours
- Corrosion concern - how many times wetted & water
fracture.