



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

August 22, 2007

Florida Power and Light Company  
ATTN: Mr. J. A. Stall, Senior Vice President  
Nuclear and Chief Nuclear Officer  
P. O. Box 14000  
Juno Beach, FL 33408-0420

SUBJECT: SAINT LUCIE NUCLEAR PLANT, UNIT 2 - NOTIFICATION OF INSPECTION  
AND REQUEST FOR INFORMATION

Dear Mr. Stall:

From October 9 to 19, 2007, the NRC will perform the baseline inservice inspection (ISI) and the Reactor Vessel Head replacement inspection at the Saint Lucie Nuclear Plant, Unit 2 (NRC Inspection Procedures 71111.08 and 71007 respectively). Experience has shown that this inspection is resource intensive both for the NRC inspectors and your staff. In order to minimize the impact to your on-site resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. These documents have been divided into two groups. The first group (section A of the enclosure) identifies information to be provided prior to the inspection to ensure that the inspectors are adequately prepared. The second group (section B of the enclosure) identifies the information the inspectors will need upon arrival at the site. It is important that all of these documents are up to date and complete in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection.

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Ken Frehafer of your organization. Our inspection dates are subject to change based on your updated schedule of outage activities. If there are any questions about this inspection or the material requested, please contact the lead inspector Joel Rivera-Ortiz at (404) 562-4825 (jer6@nrc.gov).

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's

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Sincerely,

/RA/

George T. Hopper, Chief  
Engineering Branch 3  
Division of Reactor Safety

Docket No.: 50-389

License No.: NPF-16

Enclosure: Inservice Inspection Document Request

cc w/encl:

William E. Webster  
Vice President, Nuclear Operations  
South Region  
Florida Power & Light Company  
Electronic Mail Distribution

Gordon L. Johnston  
Site Vice President  
St. Lucie Nuclear Plant  
Florida Power & Light Company  
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Christopher R. Costanzo  
Plant General Manager  
St. Lucie Nuclear Plant  
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Bill Parks  
Operations Manager  
St. Lucie Nuclear Plant  
Electronic Mail Distribution

Terry L. Patterson  
Licensing Manager  
St. Lucie Nuclear Plant  
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(cc w/encl cont'd - See page 3)

(cc w/encl cont'd)

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(cc w/encl cont'd - See page 3)

**(\*) - SEE PREVIOUS PAGE FOR CONCURRENCE**

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ADAMS:  Yes      ACCESSION NUMBER: \_\_\_\_\_

OFFICE	RII:DRS	RII:DRP	RII:DRS				
SIGNATURE	RA	RA	RA				
NAME	JRIVERIA	SVIAS	GHOPPER				
DATE	8/22/2007	8/27/2007	8/22/2007	8/ /2007	8/ /2007	8/ /2007	8/ /2007
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

## INSERVICE INSPECTION DOCUMENT REQUEST

Inspection Dates: October 9 to 19, 2007

Inspection Procedures: IP 71111.08, "Inservice Inspection (ISI) Activities"  
IP 71007, "Reactor Vessel Head Replacement Inspection"

Inspectors: Joel Rivera-Ortiz, Reactor Inspector (Lead Inspector)  
George Khouri, Reactor Inspector

### A. Information Requested for the In-Office Preparation Week

The following information should be sent to the Region II office in hard copy or electronic format (CD preferred), in care of Joel Rivera-Ortiz by September 24, 2007, to facilitate the selection of specific items that will be reviewed during the onsite inspection week. The inspector will select specific items from the information requested below and then request from your staff additional documents needed during the onsite inspection week (section B of this enclosure). We ask that the specific items selected from the lists be available and ready for review on the first day of inspection. \*Please provide requested documentation electronically if possible. If requested documents are large and only hard copy formats are available, please inform the inspector, and provide subject documentation during the first day of the onsite inspection. If you have any questions regarding this information request, please call the inspector as soon as possible.

#### A.1 ISI / Welding Programs and Schedule Information

- a) A detailed schedule (including preliminary dates) of:
  - i) Nondestructive examinations (NDEs) planned for Class 1 & 2 systems and containment, performed as part of your ASME Section XI, Risk Informed (if applicable), and augmented ISI Programs during the upcoming outage.  
  
Provide a status summary of the NDE inspection activities vs. the required inspection period percentages for this Interval by category per ASME Section XI, IWX-2400 (Do not provide separately if other documentation requested contains this information).
  - ii) Examinations planned for Alloy 82/182/600 components that are not included in the Section XI scope. (If applicable).
  - iii) Examinations planned as part of your Boric Acid Corrosion Control Program (Mode 3 walkdowns, bolted connection walkdowns, etc.).

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- iv) Welding activities that are scheduled to be completed during the upcoming outage (ASME Class 1, 2, or 3 structures, systems, or components (SSCs)).
- b) A copy of ASME Section XI Code Relief Requests and associated NRC Safety Evaluations applicable to the examinations identified above.
- c) A list of NDE reports (ultrasonic, radiography, magnetic particle, dye penetrant, visual VT-1, VT-2, and VT-3) which have identified recordable indications (geometric or flaw) on Code Class 1 & 2 systems since the beginning of the last refueling outage. This should include the previous Section XI pressure test(s) conducted during start up and any evaluations associated with the results of the pressure tests. Also, include in the list the NDE reports with recorded indications in the RPVH penetration nozzles which have been accepted for continued service. The list of NDE reports should include a brief description of the SSC where the recordable indication was identified.
- d) A list with a brief description (e.g. system, material, pipe size, weld number, and NDE performed) of the welds in Code Class 1 and 2 systems which have been fabricated due to component repair/replacement activities since the beginning of the last refueling outage. Please include a similar list of the welds which are planned to be fabricated this refueling outage.
- e) If reactor vessel weld examinations required by the ASME Code are scheduled to occur during the upcoming outage, provide a detailed description of the welds to be examined, and the extent of the planned examination. Please also provide reference numbers for applicable procedures that will be used to conduct these examinations.
- f) Copy of any 10 CFR Part 21 reports applicable to your SSCs within the scope of Section XI of the ASME Code that have been identified since the beginning of the last refueling outage.
- g) A list of any temporary non-code repairs in service (e.g. pinhole leaks).
- h) Please provide copies of the most recent self assessments for the ISI, Welding, and Alloy 600 Programs.

#### A.2 Replacement Reactor Pressure Vessel Head (RRPVH)

- a) Provide the detailed scope of the planned (or already performed) pre-service and baseline NDEs of the RRPVH which identifies the types of NDE methods to be used on each specific part of the vessel head to fulfill the requirements of the applicable ASME Code and NRC Order EA-03-009.

- b) Provide a copy of the "Table of Content" from the RRPVH and CRDM fabrication Quality Assurance (QA) packages.
- c) Provide a copy of the Certified Design Specification for the RRPVH and CRDMs. If this document is classified as "Proprietary," please contact the lead inspector to discuss handling instructions.
- d) Copy of the refueling outage schedule designated for RRPVH replacement..

A.3 Boric Acid Corrosion Control Program (BACCP)

- a) Copy of the procedures that govern the scope, equipment and implementation of the inspections required to identify boric acid leakage and the procedures for boric acid leakage/corrosion evaluation.
- b) Please provide a list of leaks (including code class of the components) that have been identified since the last refueling outage and associated corrective action documentation. If during the last cycle, the Unit was shutdown, please provide documentation of containment walk-down inspections performed as part of the BACCP.
- c) Please provide a copy of the most recent self-assessment performed for the BACCP.

A.4 Additional information related to all ISI activities

- a) A list with a brief description of ISI, BACCP, SG ISI, and welding related issues (e.g., condition reports) entered into your corrective action program since the beginning of the last refueling outage (for Units 1 and 2). For example, a list based upon data base searches using key words related to piping or SG tube degradation such as: ISI, ASME Code, Section XI, NDE, cracks, wear, thinning, leakage, rust, corrosion, boric acid, or errors in piping/SG tube examinations.
- b) Please provide names and phone numbers for the following program leads:
  - ISI contacts (Examination, planning)
  - Containment Exams
  - RPVH Replacement and Exams
  - Snubbers and Supports
  - Repair and Replacement Program Manager
  - Licensing Contact
  - Site Welding Engineer
  - Boric Acid Corrosion Control Program



**B. Information to be provided on-site to the inspector at the entrance meeting (October 9, 2007):**

**B.1 ISI / Welding Programs and Schedule Information**

- a) Updated schedules for ISI/NDE activities, including RPVH replacement, planned welding activities, and schedule showing contingency repair plans, if available.
- b) For ASME Class 1 and 2 welds selected by the inspector from the lists provided from section A of this enclosure, please provide copies of the following documentation for each subject weld:
  - i) Weld data sheet (traveler)
  - ii) Weld configuration and system location
  - iii) Applicable Code Edition and Addenda for weldment
  - iv) Applicable Code Edition and Addenda for welding procedures
  - v) Applicable weld procedures (WPS) used to fabricate the welds
  - vi) Copies of procedure qualification records (PQRs) supporting the WPS from B.1.b.v
  - vii) Copies of mechanical test reports identified in the PQRs above
  - viii) Copies of the nonconformance reports for the selected welds (If Applicable)
  - ix) Radiographs of the selected welds and access to equipment to allow viewing radiographs (If RT was performed)
  - x) Copies of the preservice examination records for the selected welds.
  - xi) Copies of welder performance qualifications records applicable to WPS, including documentation that welder maintained proficiency in the applicable welding processes specified in the WPS (At least six months prior to date subject work)
  - xii) Copies of NDE personnel qualifications (VT, PT, UT, and RT) *As applicable*
- c) For the ISI related corrective action issues selected by the inspector from section A of this enclosure, provide a copy of the corrective actions and supporting documentation.
- d) For the NDE reports with recordable indications on Code Class 1 & 2 systems selected by the inspector from section A above, provide a copy of the examination records, examiner qualification records, and associated corrective action documents.
- e) A copy of (or ready access to) the most current revision of the ISI Program Manual and Plan for the current Interval.
- f) For the NDEs selected by the inspector from section A of this enclosure, provide copy of the NDE procedures used to perform the examinations (including

calibration and flaw characterization/sizing procedures). For ultrasonic examination procedures qualified in accordance with ASME Code, Section XI, Appendix VIII, provide documentation supporting the procedure qualification (e.g., the EPRI performance demonstration qualification summary sheets). Also, include documentation of the specific equipment to be used (e.g., ultrasonic unit, cables, and transducers including serial numbers) and NDE personnel qualification records.

#### B.2 Replacement Reactor Pressure Vessel Head (RRPVH)

- a) Provide ready access to the RRPVH fabrication QA package.
- b) If applicable, provide ready access to RT films for the CRDM welds, including densitometer, and viewer.
- c) Provide access to the Engineering Design Change Document (including the 50.59 screening/evaluation).
- d) Provide a hard copy or ready access to the Baseline NDE report, including copy of procedures and personnel qualification records.
- e) For the NDE techniques used for the Baseline inspection, provide copy of the vendor qualification report(s) that demonstrates the detection capability of the NDE equipment used for the RRPVH examinations. Also, identify any changes in equipment configurations used for the RRPVH examinations which differ from that used in the vendor qualification report(s).

#### B.3 Boric Acid Corrosion Control Program (BACCP)

- a) Please provide boric acid walk down inspection results, an updated list of boric acid leaks identified so far this outage, associated corrective action documentation, and overall status of planned boric acid inspections.
- b) Please provide any engineering evaluations completed for boric acid leaks identified since the end of the last refueling outage. Please include a status of corrective actions to repair and/or clean these boric acid leaks. Please specify which known leaks, if any, have remained in service or will remain in service as active leaks.

#### B.4 Codes and Standards

- a) Ready access to: (i.e. copies provided to the inspector to use for the duration of the inspection at the on-site inspection location, or room number and location where available)

- I) Applicable editions of the ASME Code (Sections V, IX and XI) for the inservice inspection program and the repair/replacement program.
- ii) Applicable editions of the ASME Code (Sections II, III, V, IX, and XI) for the fabrication of the RRPVH.

Inspector Contact Information:

Joel Rivera-Ortiz, P.E.  
Reactor Inspector  
404-562-4825  
[jer6@nrc.gov](mailto:jer6@nrc.gov)

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