August 20, 2003

Mr. John L. Skolds, President
Exelon Nuclear
Exelon Generation Company, LLC
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: BYRON STATION, UNIT 1 - NOTIFICATION OF NRC INSERVICE BASELINE INSPECTION AND REACTOR PRESSURE VESSEL HEAD AND VESSEL HEAD PENETRATION NOZZLES INSPECTION (NRC ORDER EA-03-009)

Dear Mr. Skolds:

On September 23, 2003, the NRC will begin the Inservice baseline inspection and a Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles inspection at the Byron Station, Unit 1. These on-site inspections will be performed September 23, 2003, through October 3, 2003, in accordance with the NRC baseline Inspection Procedures 71111.08 and Temporary Instruction 2515/150.

Experience has shown that the these inspections are resource intensive both for the NRC inspector and your staff. In order to minimize the inspection impact on the site and to ensure a productive inspection for both sides, we have enclosed a request for documents needed for these inspections. These documents have been divided into two groups. The first group identifies information necessary to ensure that the inspector is adequately prepared. The second group identifies the information the inspector 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.

The inspector for this inspection is John Jacobson. We understand that our regulatory contact for this inspection is W. Grundmann of your organization. If there are any questions about the inspection or the material requested, please contact the inspector John Jacobson at (630) 829-9736 or Mel Holmberg at (630) 829-9748.

In accordance with 10 CFR 2.790 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

document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

David Hills, Chief
Mechanical Engineering Branch
Division of Reactor Safety

Docket Nos. 50-454; 50-455
License Nos. NPF-37; NPF-66

Enclosure: INSERVICE INSPECTION DOCUMENT REQUEST

cc w/encl: Site Vice President - Byron
Byron Station Plant Manager
Regulatory Assurance Manager - Byron
Chief Operating Officer
Senior Vice President - Nuclear Services
Senior Vice President - Mid-West Regional
Operating Group
Vice President - Mid-West Operations Support
Vice President - Licensing and Regulatory Affairs
Director Licensing - Mid-West Regional Operating Group
Manager Licensing - Braidwood and Byron
Senior Counsel, Nuclear, Mid-West Regional
Operating Group
Document Control Desk - Licensing
M. Aguilar, Assistant Attorney General
Illinois Department of Nuclear Safety
State Liaison Officer
State Liaison Officer, State of Wisconsin
Chairman, Illinois Commerce Commission

document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

David Hills, Chief
Mechanical Engineering Branch
Division of Reactor Safety

Docket Nos. 50-454; 50-455
License Nos. NPF-37; NPF-66

Enclosure: INSERVICE INSPECTION DOCUMENT REQUEST

cc w/encl: Site Vice President - Byron
Byron Station Plant Manager
Regulatory Assurance Manager - Byron
Chief Operating Officer
Senior Vice President - Nuclear Services
Senior Vice President - Mid-West Regional Operating Group
Vice President - Mid-West Operations Support
Vice President - Licensing and Regulatory Affairs
Director Licensing - Mid-West Regional Operating Group
Manager Licensing - Braidwood and Byron
Senior Counsel, Nuclear, Mid-West Regional Operating Group
Document Control Desk - Licensing
M. Aguilar, Assistant Attorney General
Illinois Department of Nuclear Safety
State Liaison Officer
State Liaison Officer, State of Wisconsin
Chairman, Illinois Commerce Commission

DOCUMENT NAME: C:\ORPCheckout\FileNET\ML032320160.wpd
To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RIII	C	RIII	N	RIII	N		
NAME	MHolmberg:tr		AStone		DHills			
DATE	08/19/03		08/19/03		08/20/03			

OFFICIAL RECORD COPY

ADAMS Distribution:
AJM
DFT
GFD
RidsNrrDipmIipb
GEG
HBC
RAS
C. Ariano (hard copy)
DRPIII
DRSIII
PLB1
JRK1

INSERVICE INSPECTION DOCUMENT REQUEST

Inspection Dates: September 23, 2003, to October 3, 2003

Inspection Procedures: IP 7111108 "Inservice Inspection"
TI 2515/150 "Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles"

Lead Inspector: Inspector: John Jacobson (630) 829-9736

A. Information Requested for the In-Office Preparation Week

The following information (electronic copy if practicable - jmj3@nrc.gov) is requested by September 15, 2003, 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 request a list of additional documents needed on-site to your staff. We request that the specific items selected from the lists be available and ready for review on the first day of inspection. If you have any questions regarding this information, please call the inspector as soon as possible.

1) A detailed schedule of nondestructive examinations planned for Class 1 & 2 systems and containment, performed as part of your ASME Code ISI Program during the scheduled inspection weeks. Provide a detailed schedule of vessel head examinations which fulfill NRC commitments made in response to NRC Bulletin 2002-02 and NRC Order EA-03-009. Provide a detailed schedule of steam generator (SG) tube inspection and repair activities for the upcoming outage.

2) A copy of the procedures used to perform the examinations identified in A.1 (including calibration and flaw characterization/sizing procedures). For ultrasonic examination procedures qualified in accordance with Appendix VIII, of Section XI of the ASME Code, 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).

3) A copy of any ASME Section XI, Code Relief Requests applicable to the examinations identified in A(1).

4) A list identifying nondestructive examination reports (ultrasonic, radiography, magnetic particle, dye penetrant, visual (VT-1, VT-2, VT-3)) which have identified relevant indications on Code Class 1 & 2 systems in the past two refueling outages (both Units). Also, identify any NDE examinations with recorded indications in the vessel head penetration nozzles which have been accepted for continued service.

5) List of welds in Code Class 1, and 2 systems which have been completed since the beginning of the last refueling outage (both Units and identify system, weld number and reference applicable documentation).

6) For reactor vessel weld examinations required by the ASME Code, that are scheduled during the inspection, provide a detailed description of the welds to be examined, and the extent of the planned examination.

7) Provide a list with description of ISI and steam generator related issues (e.g., piping/SG tube degradation or damage or errors in piping/SG tube examinations) entered into your corrective action system beginning with the date of the last refueling outage (both Units).

8) Copy of any 10 CFR Part 21 reports submitted beginning with the date of the last refueling outage.

9) Copy of SG history documentation given to vendors performing eddy current (ET) testing of the SGs during the upcoming outage.

10) Copy of procedure containing screening criteria used for selecting tubes for in-situ pressure testing and the procedure to be used for in-situ pressure testing.

11) Copy of previous outage SG tube operational assessment completed following ET of the SGs.

12) Copy of the document defining the planned ET scope for the SGs and the scope expansion criteria which will be used.

13) Copy of the document describing the ET probe types, and ET acquisition equipment to be used, including which areas of the SG (e.g., top of tube sheet, U-bends) each probe will be used in. Also, provide your response letter(s) to Generic Letters 95-03, 95-05, 97-05, and 97-06.

14) Copy of document describing actions to be taken if a new SG tube degradation mechanism is identified.

15) Identify the types of SG tube repair processes which will be implemented for defective SG tubes. Provide the flaw depth sizing criteria to be applied for ET indications identified in the SG tubes.

16) If tube leakage was identified during the previous operating cycle, provide documentation identifying which SG was leaking and planned corrective actions.

17) Provide a copy of the EPRI Technique Specification Sheets which support qualification of the ET probes to be used during the upcoming SG tube inspections.

18) Provide a copy of the guidance to be followed if a loose part or foreign material is identified in the SGs.

19) Detailed scope of the planned nondestructive examinations (NDE) of the vessel head which identifies the types of NDE methods to be used on each specific part of the vessel head to fulfill NRC commitments made in response to NRC Bulletin 2002-02 and NRC Order EA-03-009. Also include examination scope expansion criteria and planned expansion sample sizes if relevant indications are identified.

20) Copy of NDE procedures to be used for performing vessel head inspections that fulfill NRC commitments in response to NRC Bulletin 2002-02 and NRC Order EA-03-009.

21) Identify what standards or requirements will be used to evaluate indications identified during NDE examinations of the vessel head.

22) Copies of correspondence and commitments made to the NRC for performing vessel head examinations under bulletin 2002-02 and NRC Order EA-03-009.

B. Information to be provided on-site to the inspector at the entrance meeting:

1) For welds selected by the inspector from A.5 above, provide copies of the following documents:

a) Document of the weld number and location (e.g., system, train, branch);
b) Document with a detail of the weld construction;
c) Applicable Code Edition and Addenda for weldment;
d) Applicable Code Edition and Addenda for welding procedures;
e) Applicable weld procedures (WPS) used to fabricate the welds;
f) Copies of procedure qualification records (PQRs) supporting the WPS on selected welds;
g) Copies of mechanical test reports identified in the PQRs above;
h) Copies of the nonconformance reports for the selected welds;
i) Radiographs of the selected welds and access to equipment to allow viewing radiographs; and
j) Copies of the preservice examination records for the selected welds.

2) For the repair/replacement activities selected by the inspector provide a copy of the records of the repair or replacement required by the ASME Code Section XI Articles IWA -4000 or IWA 7000.

3) For the ISI related issues (A.7 above) entered into your corrective action system selected by the inspector provide a copy of the corrective actions and supporting documentation.

4) For the nondestructive examination reports (A.4 above) with relevant indications on Code Class 1 & 2 systems selected by the inspector provide a copy of the examination records and associated corrective action documents.

5) Provide a list of NDE personnel performing inspections of the vessel head and the qualification records for these personnel.

7) Copy of the most recent quality assurance department audit, which included the ISI program and activities. Copies of documents resolving findings in this audit.

8) Updated schedules for item A.1 (including schedule showing contingency repair plans for vessel nozzles if available).

9) Copy of the vendor qualification report(s) used to demonstrate the detection capability of the NDE equipment used for the vessel head penetration inspections. Also, identify any changes in system configurations and equipment used for head inspection discussed in item A.1 which differ from that used for in the vendor qualification report(s).

10) Provide the susceptibility ranking calculation for the vessel head operating time and temperature. Also, provide the plant specific records (or vendor information) used to determine the inputs for this calculation.

11) Provide a brief overview of planned repair process (including drawings) for use on the vessel head nozzles and identify the repair procedures to be used.

12) Provide drawings showing the vessel head and nozzle configuration and head insulation configuration.

13) Copy of document describing the flaw evaluation guidelines which will be followed for any cracking identified in the vessel nozzles or J-welds.

14) Copy of documentation including nondestructive examination reports for the last Unit 2 vessel head examination completed in response to NRC Bulletins 2001-01 or 2002-02.

15) Copy of the previous two completed Unit 2 system pressure tests, documenting the results of the VT-2 inspections completed near the upper vessel head and the lower vessel head.

16) Copy of any documentation of boric acid deposits/corrosion of the upper and lower vessel heads or head insulation. Also provide supporting corrective action documents and evaluations.

17) Completed copy documenting the results of the last two Mode 3 walkdowns/inspections near the vessel head (if performed) for Unit 2.

18) Copy of the plant procedures used to perform inspections to identify reactor coolant system leaks or boric acid deposits and the procedures for resolution of leaks or boric acid deposits.

19) Ready access to the Editions of the ASME Code (Sections V, IX and XI) applicable to the inservice inspection program and the repair/replacement program.