

August 27, 2003

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

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN -  
BYRON STATION, UNITS 1 AND 2 (REPORT 50-454/04-01; 50-455/04-01)

Dear Mr. Skolds:

On July 30, 2003, the NRC staff completed its mid-cycle plant performance assessment of the Byron Station, Units 1 and 2. The mid-cycle review for the Byron Station involved the participation of all technical divisions in evaluating performance indicators (PIs) for the most recent quarter and inspection results for the first half of the current assessment cycle, January 1 - December 31, 2003. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility so that you will have an opportunity to prepare for these inspections and to inform us of any planned inspections that may conflict with your plant activities.

Plant performance for the most recent quarter was within the Licensee Response Column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct only baseline inspections at your facility through September 30, 2004.

The enclosed inspection plan details the inspections scheduled through September 30, 2004. The inspection plan is provided to minimize the resource impact on your staff and to allow for scheduling conflicts and personnel availability to be resolved in advance of inspector arrival onsite. Two infrequently performed inspections will be conducted this year. These include (1) Problems identification and resolution inspection; and a (2) Biennial emergency preparedness exercise. Routine resident inspections are not listed due to their ongoing and continuous nature. In addition, the Byron Station has been chosen for a pilot inspection program which involves the consolidation of some of our existing inspection procedures. The inspections in the last 6 months of the inspection plan are tentative and may be revised at the end-of-cycle review meeting.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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).

If circumstances arise which cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at (630) 829-9729 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

*/RA/*

Ann Marie Stone, Chief  
Branch 3  
Division of Reactor Projects

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

Enclosure: Byron Station, Units 1 and 2 Inspection/Activity Plan

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  
T. Mulford, President, Leaf River  
S. Hawley, Village Clerk  
J. Leather, President, Stillman Valley  
B. Gocken, County Board Chairman  
M. Messer, Ogle County Sheriff  
R. McDermott, Emergency Management Director  
K. Cohn, County Board Chairman  
R. Meyers, Winnebago County Sheriff  
The Honorable Tom Stone, Sr.  
The Honorable Kathryn Hamas  
The Honorable Steven Mongan  
The Honorable Chet Olson  
INPO

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| OFFICE | RIII       |  | RIII     |  |  |  |  |  |  |
| NAME   | TTongue:co |  | AMStone  |  |  |  |  |  |  |
| DATE   | 08/25/03   |  | 08/25/03 |  |  |  |  |  |  |

**OFFICIAL RECORD COPY**

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The Honorable Tom Stone, Sr.  
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INPO

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H. Nieh (HKN), OEDO

Project Director, NRR

Project Mgr., NRR

RidsNrrDipmlipb

JLC1

GEG

HBC

RML2

SRI Byron

DRPIII

DRSIII

PLB1

JRK1

**Byron**  
**Inspection / Activity Plan**  
**09/01/2003 - 09/30/2004**

| Unit Number | Inspection Activity | Title                                                                                 | No. of Staff on Site | Planned Dates |            | Inspection Type      |
|-------------|---------------------|---------------------------------------------------------------------------------------|----------------------|---------------|------------|----------------------|
|             |                     |                                                                                       |                      | Start         | End        |                      |
|             | <b>ISI</b>          | <b>- ISI FOR UNIT 1</b>                                                               | <b>1</b>             |               |            |                      |
| 1           | IP 7111108P         | Inservice Inspection Activities - PWR                                                 |                      | 09/22/2003    | 10/03/2003 | Baseline Inspections |
|             | <b>ISI</b>          | <b>- TI-150 FOR UNIT 1</b>                                                            | <b>1</b>             |               |            |                      |
| 1           | IP 2515/150         | Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC Bulletin 2002-0 |                      | 09/22/2003    | 10/03/2003 | Safety Issues        |
|             | <b>IP 71121</b>     | <b>- RP OUTAGE ALARA &amp; ACCESS CNTL INSPECTION</b>                                 | <b>1</b>             |               |            |                      |
| 1,2         | IP 7112101          | Access Control to Radiologically Significant Areas                                    |                      | 09/29/2003    | 10/03/2003 | Baseline Inspections |
| 1,2         | IP 7112102          | ALARA Planning and Controls                                                           |                      | 09/29/2003    | 10/03/2003 | Baseline Inspections |
|             | <b>FY 2004</b>      | <b>- BYRON INIT PREP 10/2003</b>                                                      | <b>1</b>             |               |            |                      |
| 1           | W90072              | OL - INITIAL EXAM - BYRON - NOV/DEC 2003                                              |                      | 11/03/2003    | 11/07/2003 | Not Applicable       |
|             | <b>PI&amp;R</b>     | <b>- PROBLEM IDENTIFICATION AND RESOLUTION</b>                                        | <b>3</b>             |               |            |                      |
| 1,2         | IP 71152B           | Identification and Resolution of Problems                                             |                      | 11/03/2003    | 12/03/2003 | Baseline Inspections |
|             | <b>INSP</b>         | <b>- BIENNIAL EP EXERCISE</b>                                                         | <b>2</b>             |               |            |                      |
| 1,2         | IP 7111401          | Exercise Evaluation                                                                   |                      | 12/01/2003    | 12/05/2003 | Baseline Inspections |
| 1,2         | IP 71151            | Performance Indicator Verification                                                    |                      | 12/01/2003    | 12/05/2003 | Baseline Inspections |
|             | <b>FY 2004</b>      | <b>- BYRON INIT EXAM 12/2003</b>                                                      | <b>3</b>             |               |            |                      |
| 1           | W90072              | OL - INITIAL EXAM - BYRON - NOV/DEC 2003                                              |                      | 12/01/2003    | 12/12/2003 | Not Applicable       |
|             | <b>HT SNK B</b>     | <b>- HEAT SINK BIENNIAL (DRS)</b>                                                     | <b>1</b>             |               |            |                      |
| 1,2         | IP 71111.HS         | Heat Sink Performance                                                                 |                      | 12/08/2003    | 12/12/2003 | Baseline Inspections |
|             | <b>MOD50.59</b>     | <b>- MODIFICATIONS &amp; 50.59</b>                                                    | <b>3</b>             |               |            |                      |
| 1,2         | IP 7111102          | Evaluation of Changes, Tests, or Experiments                                          |                      | 01/26/2004    | 01/30/2004 | Baseline Inspections |
| 1,2         | IP 7111117B         | Permanent Plant Modifications                                                         |                      | 01/26/2004    | 01/30/2004 | Baseline Inspections |
|             | <b>7111108</b>      | <b>- INSERVICE INSPECTION &amp; TI-150 UNIT 2</b>                                     | <b>1</b>             |               |            |                      |
| 2           | IP 2515/150         | Reactor Pressure Vessel Head and Vessel Head Penetration Nozzles (NRC Bulletin 2002-0 |                      | 03/29/2004    | 04/09/2004 | Safety Issues        |
| 2           | IP 7111108P         | Inservice Inspection Activities - PWR                                                 |                      | 03/29/2004    | 04/09/2004 | Baseline Inspections |
|             | <b>7112101</b>      | <b>- RP OUTAGE ALARA &amp; ACCESS CNTRL INSP</b>                                      | <b>1</b>             |               |            |                      |
| 1,2         | IP 7112101          | Access Control to Radiologically Significant Areas                                    |                      | 03/29/2004    | 04/02/2004 | Baseline Inspections |
| 1,2         | IP 7112102          | ALARA Planning and Controls                                                           |                      | 03/29/2004    | 04/02/2004 | Baseline Inspections |
|             | <b>MR</b>           | <b>- MAINTENANCE RULE</b>                                                             | <b>1</b>             |               |            |                      |
| 1,2         | IP 7111112B         | Maintenance Effectiveness                                                             |                      | 05/03/2004    | 05/07/2004 | Baseline Inspections |
|             | <b>7112201</b>      | <b>- RADIOACTIVE LIQUID &amp; GAS EFFLUENTS</b>                                       | <b>2</b>             |               |            |                      |
| 1,2         | IP 7112101          | Access Control to Radiologically Significant Areas                                    |                      | 06/14/2004    | 06/18/2004 | Baseline Inspections |
| 1,2         | IP 7112201          | Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems              |                      | 06/14/2004    | 06/18/2004 | Baseline Inspections |
| 1,2         | IP 71151            | Performance Indicator Verification                                                    |                      | 06/14/2004    | 06/18/2004 | Baseline Inspections |
|             | <b>FPI</b>          | <b>- TRIENNIAL FIRE PROTECTION</b>                                                    | <b>3</b>             |               |            |                      |
| 1,2         | IP 7111105T         | Fire Protection                                                                       |                      | 08/30/2004    | 09/17/2004 | Baseline Inspections |

This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.

**Byron**  
**Inspection / Activity Plan**  
**09/01/2003 - 09/30/2004**

| Unit Number | Inspection Activity | Title                                              | No. of Staff on Site | Planned Dates |            | Inspection Type      |
|-------------|---------------------|----------------------------------------------------|----------------------|---------------|------------|----------------------|
|             |                     |                                                    |                      | Start         | End        |                      |
|             | <b>71111.11</b>     | <b>- LIC OPERATOR REQUAL PROGRAM EVALUATION</b>    | <b>2</b>             |               |            |                      |
| 1,2         | IP 7111111B         | Licensed Operator Requalification                  |                      | 08/16/2004    | 08/20/2004 | Baseline Inspections |
|             | <b>7112202</b>      | <b>- RAM PROCESSING &amp; TRANSPORTATION</b>       | <b>2</b>             |               |            |                      |
| 1,2         | IP 7112101          | Access Control to Radiologically Significant Areas |                      | 09/13/2004    | 09/17/2004 | Baseline Inspections |
| 1,2         | IP 7112202          | Radioactive Material Processing and Transportation |                      | 09/13/2004    | 09/17/2004 | Baseline Inspections |
| 1,2         | IP 71151            | Performance Indicator Verification                 |                      | 09/13/2004    | 09/17/2004 | Baseline Inspections |

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