

April 14, 2005

Mr. Christopher M. Crane  
President and Chief Nuclear Officer  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2 - INFORMATION REQUEST  
FOR A COMBINED NRC BIENNIAL MODIFICATION, CHANGES, TESTS, AND  
EXPERIMENTS, AND SAFETY SYSTEM DESIGN AND PERFORMANCE  
CAPABILITY INSPECTION

Dear Mr. Crane:

On June 27, 2005, the NRC will begin a required biennial inspection of modifications, changes, tests and experiments, and safety system design and performance capability (SSDPC) at your LaSalle County Station. This inspection will be performed in accordance with the guidance in NRC baseline inspection procedures 71111.02, 71111.17 (biennial portion), and 71111.21. The system/components to be reviewed during the SSDPC portion of the baseline inspection are the 125 volt direct current (Vdc) power systems and the reactor core isolation cooling system (RCIC). The modifications and 50.59 screenings and evaluations reviewed may be from these systems, but may also be from any other risk significant system.

Experience has shown that the combined baseline modifications, changes, tests and experiments, and design inspections are extremely resource intensive both for the NRC inspectors and the utility staff. In order to minimize the impact that the inspection has on the site and to ensure a productive inspection for both sides, we have enclosed a request for documents needed for the inspection. The documents have been divided into three groups.

The first group lists information necessary in order to ensure the inspection team is adequately prepared for the inspection. This information should be available to the Regional Office by no later than June 6, 2005. In so far as possible, this information should be provided electronically to the lead inspector.

The second group of documents requested are those items which the team will review or need access to during the inspection. This list includes a reference to specific documents resulting from the team's review of the initially supplied information. This supplemental request will be provided to your staff by no later than June 22, 2005. Ensuring that these documents are as complete as possible will minimize the number of documents requested during the inspection.

The last group of information requested is necessary to aid the inspection team in tracking issues identified as a result of the inspection. It is requested that this information be provided to the lead inspector as the information is generated during the inspection.

The lead inspector for this inspection is Ms. Patricia Lougheed. If there are any questions about the material requested, or the inspection, please call the lead inspector at (630) 829-9760 or e-mail her at [vpl@nrc.gov](mailto:vpl@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 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/*

Ann Marie Stone, Chief  
Systems Engineering Branch  
Division of Reactor Safety

Docket Nos. 50-373; 50-374  
License Nos. NPF-11; NPF-18

Enclosure: Initial Document Request

cc w/encl: Site Vice President - LaSalle County Station  
LaSalle County Station Plant Manager  
Regulatory Assurance Manager - LaSalle County Station  
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 - Clinton and LaSalle  
Senior Counsel, Nuclear, Mid-West Regional  
Operating Group  
Document Control Desk - Licensing  
Assistant Attorney General  
Illinois Department of Nuclear Safety  
State Liaison Officer  
Chairman, Illinois Commerce Commission

The last group of information requested is necessary to aid the inspection team in tracking issues identified as a result of the inspection. It is requested that this information be provided to the lead inspector as the information is generated during the inspection.

The lead inspector for this inspection is Ms. Patricia Lougheed. If there are any questions about the material requested, or the inspection, please call the lead inspector at (630) 829-9760 or e-mail her at [vpl@nrc.gov](mailto:vpl@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 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/*

Ann Marie Stone, Chief  
Systems Engineering Branch  
Division of Reactor Safety

Docket Nos. 50-373; 50-374  
License Nos. NPF-11; NPF-18

Enclosure: Initial Document Request

cc w/encl: Site Vice President - LaSalle County Station  
LaSalle County Station Plant Manager  
Regulatory Assurance Manager - LaSalle County Station  
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 - Clinton and LaSalle  
Senior Counsel, Nuclear, Mid-West Regional  
Operating Group  
Document Control Desk - Licensing  
Assistant Attorney General  
Illinois Department of Nuclear Safety  
State Liaison Officer  
Chairman, Illinois Commerce Commission

DOCUMENT NAME: G:DRS\ML051050167.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	RIII	RIII		
NAME	PLougheed:tr	BBurgess	AMStone		
DATE	04/13/05	04/14/05	04/13/05		

**OFFICIAL RECORD COPY**

ADAMS Distribution:

AJM

DMS6

RidsNrrDipmlipb

GEG

KGO

DEK

DRPIII

DRSIII

PLB1

JRK1

## **Initial Document Request**

### **I. Information Requested Expeditiously**

The following information is requested to be provided as soon as possible, but no later than June 6, 2005, to facilitate the selection of specific items that will be reviewed during the onsite inspection week. The team will select specific items from the information requested below and submit a list to your staff by June 22, 2005. In so far as possible, information should be provided electronically, with the exception of drawings. While drawings may be provided electronically, paper copies are also requested.

The selected systems for this inspection are the 125 Vdc power and the RCIC system.

#### **A. Information Requested for all Inspections**

1. Name and phone numbers of the technical contact(s), regulatory contact(s), and the design and system engineer(s).
2. Organizational charts showing upper level managers and the engineering departments only.
3. A list of all corrective action documents, both open or closed, that were initiated in the last two years and that relate to problems with the quality of engineering work. For each item, besides the number and title, clearly designate the status (open/closed), the importance ranking, the date initiated, the date closed (if applicable), the status of corrective actions, and a technical contact. The list should be sorted by document number.

#### **B. Information Requested for the Safety System Design and Performance Capability Inspection (SSDI, IP 71111.21)**

The items requested below apply **only** to the selected systems (125 Vdc power and RCIC systems):

1. One copy of the system description, training manual (lesson plans), design basis document, and latest system health report, as available.
2. One copy of the normal and abnormal operating procedures.
3. Two half-size (approximately 18" by 24") copies of the piping and instrument drawings or flow diagrams.
4. Two half-size copies (approximately 18" by 24") of the single-line and key electrical diagrams.
5. Probabilistic risk information, such as risk achievement worth (RAW) or Fussel-Vessley (F-V) values for the top 20 components in each system.

6. A list of components which are powered from the 125 Vdc system, and either the RAW or F-V worth for those components.
7. A list of calculations or analyses which specifically address each of the following areas. If a calculation cannot be identified for a particular area, please provide an explanation of why a calculation is not necessary.
  - a) Breaker and fuse coordination calculations;
  - b) Instrument uncertainty calculations;
  - c) Room temperature environmental qualification calculations for major equipment;
  - d) Relay setting calculations;
  - e) Setpoint calculations for all technical specification or emergency operation procedure equipment;
  - f) Time delay calculations (for any component incorporating time delay features);
  - g) Undervoltage and degraded voltage calculations;
  - h) Voltage drop calculations for all major electrical components;
  - i) Check valve leakage criteria calculations;
  - j) Design basis (flow rates, levels, pressures, temperatures) confirmation calculations (including NSSS calculations);
  - k) NPSH and total dynamic head calculations;
  - l) Operability determination support calculations;
  - m) Pressure transient/water hammer evaluations;
  - n) Pump minimum recirculation flow calculations;
  - o) Relief valve sizing calculations; and
  - p) Any other analyses that either support or take credit for operation of the system(s).

For each analysis, besides the number and title, include the **purpose of the calculation**, the date, a technical contact, and the current status of the analysis, such as active, superceded, or historical.

8. A list of all major modifications made to the selected systems since pre-operational testing. Major changes are those that significantly affected the way the system operated, for example, replacement of major components, or change to a component or system function. Please include the number and title, the modification purpose (description), the date, the status (such as whether the modification is being developed, engineering complete, installed, or field complete) and a technical contact. Note if any of the modifications required prior NRC approval.
9. A list of all major setpoint changes made to the systems since pre-operational testing, unless included as part of Item 8. Major changes are those that significantly affected the way the system operated. Please include the number and title, the component affected, the purpose, the date, and a technical contact. Spell out abbreviations, or acronyms and give word titles for any numbers.

10. A list of temporary modifications, including date installed and proposed or actual removal date.
11. A list of any electrical equipment or components that are currently included in or have been removed from the EQ Program.
12. A list of the corrective maintenance (only) history of major components for the last two years. Any codes used should be defined.
13. A list of operability evaluations as far back as retrievable. Include both those currently relied upon and those that were previously relied upon for operability.
14. A list of current engineering-related operator workarounds.
15. A list of operating experience (both internal and external) applicable to the systems.
16. A list of corrective action documents that are in one of the following categories. For each document, besides the number and title, clearly designate the status (open/closed), the importance ranking, the date initiated, the date closed (if applicable), the status of corrective actions, and a technical contact. The documents should be sorted by number.
  - a) Any corrective action document initiated more than two years prior to the inspection that is still open;
  - b) Any corrective action document (open or closed) initiated in the last two years that required an apparent or root cause analysis; and
  - c) Any corrective action document (open or closed) initiated in the last two years that required an operability determination.

**C. Information Requested for the Permanent Plant Modification Inspection (IP 71111.17)**

If the list of major plant modifications in Item I.B.8 contains at least seven modifications that were engineering-completed within the last two years, then only the first two items from the following list need to be provided. If less than seven modifications were performed on the selected systems within the last two years, please provide all of the following information. This information should cover the last two years (June 1, 2003 through June 6, 2005).

1. One copy of each procedure which controls design change processes at the plant. This includes corporate as well as site specific procedures and includes any of the following (or equivalent) processes: modifications, design changes, set point changes, equivalency evaluations, suitability analysis, alternate part replacements, commercial grade dedications, and post modification testing.

2. A list of corrective action documents pertaining to the design change process. For each item, besides the number and title, clearly show the status (open/closed), the importance ranking, the date initiated, the date closed (if applicable), whether an operability evaluation was required, whether a root or apparent cause evaluation was required and the status of any corrective actions. The documents should be sorted by number.
3. If required, a list of permanent plant modifications/design changes in any risk-significant system. Please include the number and title, the modification purpose (description), the date, the status (such as whether the modification is being developed, engineering complete, installed or field complete) and a technical contact. Spell out abbreviations, or acronyms and give word titles for any numbers. Note if any of the modifications required prior NRC approval.
4. A list of set point changes. Provide information similar to Item 3 above.
5. A list of equivalency evaluations, suitability analysis, or alternate part replacements (or other "like-for-like" or "fit, form, and function" replacement processes). Provide information similar to Item 3 above.
6. A list of commercial grade dedications. Provide information similar to Item 3 above.

**D. Changes, Tests, or Experiments (10 CFR 50.59) (IP 71111.02)**

The information requested below should cover all plant systems and should cover the last two years (June 1, 2003 through June 6, 2005).

1. One copy of each procedure which controls 10 CFR 50.59 applicability checks, screenings, evaluations, FSAR updates and submittals at the plant. This includes corporate as well as site specific procedures.
2. A list of corrective action documents pertaining to the 10 CFR 50.59 process. For each item, besides the number and title, clearly show the status (open/closed), the importance ranking, the date initiated, the date closed (if applicable), whether an operability evaluation was required, whether a root or apparent cause evaluation was required and the status of any corrective actions. The documents should be sorted by number.
3. A list of all 10 CFR 50.59 evaluations. Please note if any required prior NRC approval.
4. A list of all 10 CFR 50.59 screenings that were screened out as not requiring a full evaluation.



5. A list of any documents where "applicability checks" were done in accordance with NEI 96-07 and where it was determined that a 10 CFR 50.59 screening was not necessary.
6. A list of any special tests, experiments, or non-routine operating configurations (if any). Please provide the number of the associated 10 CFR 50.59 evaluation or screening.
7. A copy of the latest report of changes, tests, and experiments submitted to the NRC in accordance with 10 CFR 50.59(d)(2).

## **II. Information Requested to be Available on First Day of Inspection**

We request that the following information be provided to the team once it arrives onsite. Items indicated as reference materials (Item II.xx) do not need to be solely available to the team (i.e., they can be located in a reference library) as long as the team has ready access to them. Reference materials do not need to be provided immediately upon the inspection team arriving on site; however, they should be located prior to the inspection such that if the team requests any of these documents they can be made available within a short time (i.e., less than two hours).

- A. Copies of all calculations indicated by subject area in Item I.7. Copies should include the assumptions and conclusions, but may exclude data files. Referenced material, such as drawings, engineering requests, or vendor letters, should also be provided.
- B. Copies of those design changes, modifications and setpoint changes from the lists provided in Sections I.B.8, I.B.9, and I.C.3 through I.C.6, and as requested during the preparation week. For each modification, as a minimum, provide the purpose, the 10 CFR 50.59 evaluation or screening, and the completed post-modification test.
- C. Copies of those corrective action documents from the lists provided in Sections I.A.3, I.B.16, I.C.2, and I.D.2, as requested during the preparation week. Please provide any associated root or apparent cause analyses and operability determinations and also provide the disposition of any corrective actions.
- D. Copies of any other documents specifically requested by the team as a result of their review of material during the preparation week.
- E. Copies of the Technical Specification surveillances for ALL equipment within the 125 Vdc power and RCIC systems completed during the last two years. (Copy of latest surveillance and test results [data sheets] from previous surveillances performed during the time frame is acceptable.)

- F. A list of any additional corrective action documents that would fall in one of the previously requested categories and was generated between June 6 and June 27, 2005.
- G. A copy of any self-assessment generated in preparation for the inspection, along with associated corrective action documents.
- H. Copies of additional drawings as necessary. Previous inspections have requested half size (18" x 24") copies of:
- major equipment drawings (valves, pumps, tanks, strainers), including pump head curves;
  - isometric drawings for major flow paths;
  - elementary diagrams;
  - wiring diagrams;
  - instrument loop drawings; and
  - instrumentation and control logic drawings.
- I. Reference materials:
- Equipment qualification binders;
  - General set of plant drawings (Flow Diagrams) (1/2 size);
  - IPE/PRA report;
  - Pre-operational tests, including documents showing resolution of deficiencies;
  - Procurement documents for major components in each system (verify retrievable);
  - Relevant operating experience information (such as vendor letters or utility experience);
  - Standards used in system design (such as IEEE, ASME, TEMA);
  - System procedures;
  - Technical Specifications;
  - Technical Requirements Manual/Technical Data Book;
  - Updated Safety Analysis Report; and
  - Vendor manuals.

### **III. Information Requested to Be Provided Throughout the Inspection**

- A. Copies of any corrective action documents generated as a result of the team's questions or queries during this inspection.
- B. Copies of the list of questions submitted by the team members and the status/resolution of the information requested (provide two copies daily during the inspection to the lead inspector).