

September 19, 2005

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

SUBJECT: BRAIDWOOD STATION, UNITS 1 AND 2 - ISSUANCE OF AMENDMENTS -  
RE: REVISION OF THE APPENDIX B, ENVIRONMENTAL PROTECTION PLAN  
(NON-RADIOLOGICAL) (TAC NOS. MC5458 AND MC5459)

Dear Mr. Crane:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 138 to Facility Operating Licenses No. NPF-72 and Amendment No. 138 to Facility Operating Licenses No. NPF-77 for the Braidwood Station, Units 1 and 2, respectively, in response to your application dated December 17, 2004. The amendments revise Appendix B, Environmental Protection Plan (non-radiological), of the Braidwood Station Operating Licenses.

A copy of the Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,

**/RA/**

Jon B. Hopkins, Senior Project Manager, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. STN 50-456 and STN 50-457

Enclosures: 1. Amendment No. 138 to NPF-72  
2. Amendment No. 138 to NPF-77  
3. Safety Evaluation

cc w/encls: See next page

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DATE	8/16/05	8/16/05	8/16/05	8/16/05	8/24/05	9/7/05	9/14/05

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EXELON GENERATION COMPANY, LLC

DOCKET NO. STN 50-456

BRAIDWOOD STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 138

License No. NPF-72

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated December 17, 2004, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Environmental Protection Plan contained in Appendix B, as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-72 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. are hereby incorporated into this license. Exelon Generation Company, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

***/RA/***

Gene Y. Suh, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Environmental Protection Plan

Date of Issuance: September 19, 2005

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-457

BRAIDWOOD STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 138  
License No. NPF-77

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated December 17, 2004, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Environmental Protection Plan contained in Appendix B, as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-77 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. are hereby incorporated into this license. Exelon Generation Company, LLC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance and shall be implemented within 60 days of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

**/RA/**

Gene Y. Suh, Chief, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Environmental Protection Plan

Date of Issuance: September 19, 2005

ATTACHMENT TO LICENSE AMENDMENT NO. 138

FACILITY OPERATING LICENSE NOS. NPF-72 AND NPF-77

DOCKET NOS. 50-456 AND 50-457

Replace the following pages of Appendix B, Environmental Protection Plan, with the enclosed pages. The revised pages are identified by an amendment number and contain marginal lines indicating the areas of change.

Remove Pages

Cover Page  
Table of contents  
2-1  
3-2  
3-3  
4-1  
5-1  
5-2  
5-3  
5-4

Insert Pages

Cover Page  
Table of contents  
2-1  
3-2  
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4-1  
5-1  
5-2  
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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NO. NPF-72  
AND AMENDMENT NO. 138 TO FACILITY OPERATING LICENSE NO. NPF-77  
EXELON GENERATION COMPANY, LLC  
BRAIDWOOD STATION, UNITS 1 AND 2  
DOCKET NO. STN 50-456 AND STN 54-457

1.0 INTRODUCTION

By application dated December 17, 2004, Exelon Generation Company, LLC (EGC) and Exelon Generation Company, LLC (AmerGen), the licensees, requested changes to Appendix B, Environmental Protection Plan (EPP), for Braidwood Station, Units 1 and 2; Byron Station, Units 1 and 2; Clinton Power Station, Unit 1; LaSalle County Station, Units 1 and 2; Limerick Generating Station, Units 1 and 2; Oyster Creek Nuclear Generating Station; Peach Bottom Atomic Power Station, Units 2 and 3; and Quad Cities Nuclear Power Station, Units 1 and 2. This amendment addresses the licensees' proposed changes for Braidwood Station, Units 1 and 2. The proposed changes for Clinton Power Station, Unit 1, were addressed by amendment number 166 dated August 9, 2005, and, for the remaining operating units will be addressed in separate correspondence.

The proposed changes revise the EPP for Braidwood Station by clarifying a number of items without changing the purpose, by removing the requirement for an annual report, by updating terminology, by deleting obsolete program information, and by standardizing wording in the EPP.

2.0 REGULATORY EVALUATION

The EPP was established during initial plant operation to monitor environmental issues such as potential erosion along the transmission lines and the cooling tower drift impact on vegetation, noise, and cultural resources issues. The regulatory basis for the establishment of the EPP is Section 50.36b of Title 10 of the *Code of Federal Regulations* (10 CFR), "Environmental conditions." This section authorizes the NRC staff to place conditions on a license to protect the environment. The regulation states that the conditions will identify the "obligations of the licensees in the environmental area, including, as appropriate, requirements for reporting and keeping records of environmental data, and any conditions and monitoring requirement for the protection of the nonaquatic environment" and that the conditions will be derived from the licensee's environmental report and NRC's evaluation in the record of decision.

### 3.0 TECHNICAL EVALUATION

#### Section 2.1 Aquatic Issues

##### Requested Action

This section of the EPP references the Illinois Environmental Protection Agency as the issuer of the National Pollutant Discharge Elimination System (NPDES) permit. The proposed change will standardize the issuer of the NPDES permit to be the Federal or State permitting authority. The use of a more generic reference to the permitting authority will prevent future changes in the structure of the state governments from creating new inconsistencies.

##### NRC Staff Analysis

The proposed change is administrative in nature and corrects existing inaccuracies. The use of a more generic reference to the permitting authority will prevent future changes in the structure of the state governments from creating new inconsistencies. The NRC staff concludes that this change is acceptable.

#### Section 3.1 Plant Design and Operation

##### Requested Action

The proposed change in Section 3.1, "Plant Design and Operation," is to delete the reference to the Annual Environmental Operating Report. With the deletion of the Annual Environmental Operating Report, a reference within this section is not required.

##### NRC Staff Analysis

The staff's analysis and conclusion regarding the need for the annual report is discussed in the evaluation for Subsection 5.4.1 which is being deleted. Without the annual report, the NRC staff will not receive summaries of the evaluations of changes by the licensees. However, these evaluations will be available for staff review at the plant. In addition, Section 3.1 will still require the licensees to obtain NRC staff approval for any changes that involve an unreviewed environmental question. Based on this, the staff concludes that the removal of the requirement for annual reporting of the licensees' evaluations for unreviewed environmental questions is acceptable.

#### Section 3.2 Reporting Related to NPDES Permits and State Certification

##### Requested Action

The proposed changes in Section 3.2 are to revise the reporting requirements related to approval or changes to the NPDES permit or State certification.

Currently this section requires that changes and additions to the NPDES permit or the State Certification shall be reported to the NRC, and that a proposed revision be sent to the NRC at the same time it is submitted to the permitting agency. Pursuant to the proposed change,

changes to the NPDES permit or State Certification will be provided by the licensee to the NRC within 30 days of approval. Proposed changes will no longer be provided to the NRC. Information related to environmental permits will continue to be available onsite for NRC review.

#### NRC Staff Analysis

The EPPs require the licensees to provide the NRC staff with copies of proposed revisions to, or renewals of, the NPDES permits. However, the NRC staff does not have a role in determining the NPDES limits for the plants. This responsibility lies with the appropriate NPDES permitting authority. Therefore, requiring the licensees to submit proposed NPDES permit changes is of little value to the NRC staff. The paragraph that will remain in the EPPs will still require the licensees to provide the staff with copies of the approved revised permits. This requirement will allow the NRC staff to remain cognizant of those environmental impacts of plant operation related to the permits. In addition, the EPPs will continue to require the licensees to evaluate plant changes for unreviewed environmental questions. This requirement ensures that significant changes to the environmental impacts of plant operation will receive an NRC staff review that is independent of the NPDES review by the permitting authority. While the NRC staff will continue to have no role in setting the limits in the NPDES permits, the staff will consider other impacts (e.g., to threatened and endangered aquatic species) that may not be included in the NPDES review. Based on this information, the staff concludes that the proposed changes are acceptable.

#### Section 3.3 Changes Required for Compliance with Other Environmental Regulations

##### Requested Action

A change is proposed to replace the phrase "required to achieve compliance with" with the phrase "that are either regulated or mandated by." This section exempts those changes that are regulated or mandated by other Federal, State, and local environmental regulations from the requirements of Section 3.1. An additional sentence has been added to state, "However, if any environmental impacts of a change are not evaluated under other Federal, State or local environmental regulations, then those impacts are subject to the requirements of Section 3.1." This is an administrative change to improve clarity and understanding and does not change the objective of the original statement.

##### NRC Staff Analysis

The current Section 3.3 applies the exemption from Section 3.1 only to those changes, tests, or experiments that are required to achieve compliance with the regulations of various agencies. The revision expands this exemption to include environmental impacts that are evaluated by these various agencies. This change has the effect of focusing Section 3.1 on those environmental impacts that will not otherwise receive a review by a cognizant Federal, State, or local agency. Impacts that are the subject of the expansion of the exemption will still be evaluated, but by the appropriate cognizant agency. Therefore, the NRC staff concludes that this change is acceptable.

## Section 4.1 Unusual or Important Environmental Events

### Requested Action

A change is proposed that if an event is reportable under 10 CFR 50.72, "Immediate notification requirements for operating nuclear power reactors," then a duplicate immediate report in accordance with the station's EPP is not required. Requirements are provided in the EPP to report Unusual or Important Environmental Events to the NRC within 24 hours. Unusual and Important Environmental Events are defined as any occurrence of an event that indicates or could result in significant environmental impact causally related to plant operation. Such events shall be recorded and reported to the NRC within 24 hours and followed by a written report.

Similarly, 10 CFR 50.72 (b)(2)(xi) states that the licensee shall notify the NRC as soon as practical and in all cases, within four hours of the occurrence of "[a]ny event or situation, related to the health and safety of the public or onsite personnel, or protection of the environment, for which a news release is planned or notification to other government agencies has been or will be made." The change proposed will relieve the administrative burden of making duplicate reports to the NRC for the same event. Follow-up written reports are still required to be submitted in accordance with the EPP.

### NRC Staff Analysis

The change is a clarification to avoid potential duplicate reporting requirements and is acceptable to the NRC staff. Note that at the time the EPPs were developed, there was no environmental reporting requirement in 10 CFR 50.72. Thus, there was no issue with the potential for duplicate reporting.

## Section 5.2 Records Retention

### Requested Action

A revision is proposed to change the requirement of log and data retention and retention timeframe from the "life of the plant" to "until the date of termination of the operating license."

This section requires retention of records relative to the environmental aspects of plant operation and modifications determined to potentially affect the continued protection of the environment. A change is proposed to remove the requirement of data and log retention and delete the requirement for pre-operational environmental monitoring records, procedures, data and logs. The requirement to maintain all records is maintained. There are no dedicated environmental logs maintained on site. Logs relative to the environment are required to be documented by specific State permits (i.e., NPDES Permit) and EGC and AmerGen environmental administrative procedures. Such entries are maintained as part of station operating logs. The reference to environmental logs has been deleted for clarity but the purpose of the original statements is maintained.

The proposed change in the retention timeframe to the termination of the operating license makes the requirement consistent with similar requirements in other regulations (i.e., 10 CFR 50.59). This change has been proposed to provide clarity but does not change the objective of the requirement.

### NRC Staff Analysis

The proposed change regarding the types of records retained simplifies the EPPs by requiring the retention of records associated with the EPPs. The existing reference to data and logs refers to information that would have been collected under the now-completed monitoring programs. The change to the stated retention period makes the requirement consistent with other similar requirements in the NRC regulations (e.g., 10 CFR 50.59, "Changes, tests, and experiments"). The NRC staff concludes that this change is acceptable.

#### Section 5.4.1 Routine Reports

##### Requested Action

A change is proposed to delete the entire section relating to Routine Reports.

This section requires an annual environmental operating report to be submitted to the NRC by May 1 of each year. The report includes a list of all changes in the station design or operation, tests, and experiments made in accordance with Section 3.1 involving potentially significant unreviewed environmental questions, a list of nonroutine reports submitted in accordance with Subsection 5.4.2, and a list of EPP noncompliances and the corrective actions taken to remedy them.

Design changes are implemented under EGC implementing procedures associated with 10 CFR 50.59, "Changes, tests and experiments" and Section 3.1 of the EPP. If an environmental evaluation indicates that an activity involves an unreviewed environmental question, or involves a change to the EPP, prior NRC approval must be obtained prior to implementation. Environmental non-compliances are reported as required by 10 CFR 50.72, "Immediate notification requirements for operating nuclear power reactors," and corrective actions will be included in the Exelon Corrective Action Program (CAP). With the requirements addressed in 10 CFR 50.72, the EGC 10 CFR 50.59 Review Program and Environmental Evaluation Program, it is proposed that Section 5.4.1 be deleted in its entirety.

### NRC Staff Analysis

Monitoring programs are either done, or are monitored by the cognizant State agency. Based on the existing requirements in NRC regulations, the NRC staff concludes that the annual report is not necessary and this requirement can be deleted.

#### Section 5.4.2 Nonroutine Reports

##### Requested Action

A change is proposed to Section 5.4.2 to revise a "non-routine event" to be an "unusual or important environmental event."

Currently this section requires written reports to be sent to the NRC within 30 days of occurrence of a nonroutine event. An administrative change is being made to clarify the objective of the section to refer to an "unusual or important environmental event" as described in Section 4.1 of Appendix B. This change is also for consistency with all other EGC and AmerGen stations.

## NRC Staff Analysis

The NRC staff has reviewed the EPPs and concludes that the intent of Subsection 5.4.2 was to require a written report for the events described in Subsection 4.1. Therefore, the staff concludes that the proposed clarification is acceptable.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Illinois State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes requirements with respect to recordkeeping, reporting, or administrative procedures or requirements with respect to the EPPs. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding (70 FR 19115 ).

### 6.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: A. Kugler and C. Guerrero

Date: September 19, 2005