

April 29, 2005

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

SUBJECT: ZION NUCLEAR POWER STATION, UNITS 1 AND 2 - ISSUANCE OF
AMENDMENTS RE: MONTHLY OPERATING REPORTS AND
OCCUPATIONAL RADIATION EXPOSURE REPORTS

Dear Mr. Crane:

The U.S. Nuclear Regulatory Commission (Commission) has issued the enclosed Amendment No. 184 to Facility Operating License No. NPF-39 and Amendment No. 171 to Facility Operating License No. NPF-48 for the Zion Nuclear Power Station, Units 1 and 2, respectively. The amendments are in response to your application dated October 21, 2004.

The amendments will delete the Technical Specification (TS) requirements to submit monthly operating reports and annual occupational radiation exposure reports. The change is consistent with Revision 1 of NRC-approved Industry/Technical Specifications Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-369, "Removal of Monthly Operating Report and Occupational Radiation Exposure Report." This TS improvement was announced in the *Federal Register* (69 FR 35067) on June 23, 2004, as part of the Consolidated Line Item Improvement Process (CLIP).

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

Sincerely,
/RA/

John Hickman, Project Manager
Division of Waste Management
Environmental Protection
Office of Nuclear Management Safety
and Safeguards

Docket Nos. 50-295 and 50-304

Enclosures: 1. Amendment No. 184 to NPF-39
2. Amendment No. 171 to NPF-48
3. Safety Evaluation

cc w/encls: See next page

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-295

ZION NUCLEAR POWER STATION, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 184
License No. DPR-39

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated October 21, 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 Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-39 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B as revised through Amendment No. 184, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION
/RA/

Daniel M. Gillen, Director
Decommissioning Directorate
Division of Waste Management
Office of Nuclear Material Safety and Safeguards

Attachment: Changes to the Technical
Specifications

Date of Issuance: April 29, 2005

EXELON GENERATION COMPANY, LLC

DOCKET NO. 50-304

ZION NUCLEAR POWER STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 171
License No. DPR-48

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Exelon Generation Company, LLC (the licensee) dated October 21, 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 Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. DPR-48 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B as revised through Amendment No. 171, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 30 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION
/RA/

Daniel M. Gillen, Director
Decommissioning Directorate
Division of Waste Management
Office of Nuclear Material Safety and Safeguards

Attachment: Changes to the Technical
Specifications

Date of Issuance: April 29, 2005

ATTACHMENT TO LICENSE AMENDMENT NOS. 184 AND 171

FACILITY OPERATING LICENSE NOS. DPR-39 AND DPR-48

DOCKET NOS. 50-295 AND 50-304

Revise the Appendix A Technical Specifications by removing the page identified below and inserting the attached page. The revised page is identified by the captioned amendment number and contain marginal lines indicating the area of change.

Remove Page

5-3

Insert Page

5-3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 184 TO FACILITY OPERATING LICENSE NO. NPF-39
AND AMENDMENT NO. 171 TO FACILITY OPERATING LICENSE NO. NPF-48
EXELON GENERATION COMPANY, LLC
ZION NUCLEAR POWER STATION, UNITS 1 AND 2
DOCKET NOS. 50-295 AND 50-304

1.0 INTRODUCTION

By application dated October 21, 2004, Exelon Generation Company, LLC, (the licensee) requested changes to the Technical Specifications (TSs) for Zion Nuclear Power Station, Units 1 and 2, respectively. (Agencywide Documents Access and Management System (ADAMS) Accession No. ML042990134). The U.S. Nuclear Regulatory Commission (NRC) staff's original proposed no significant hazards consideration determination was published in the *Federal Register* on April 8, 2005 (70 FR 18061).

The amendments will delete the TS requirements to submit monthly operating reports and annual occupational radiation exposure reports. The change is consistent with Revision 1 of NRC-approved Technical Specifications Task Force (TSTF) Change Traveler, TSTF-369, "Elimination of Requirements for Monthly Operating Reports and Occupational Radiation Exposure Reports." This TS improvement was announced in the *Federal Register* (69 FR 35067) on June 23, 2004, as part of the Consolidated Line Item Improvement Process (CLIIP).

2.0 REGULATORY EVALUATION

Section 182a. of the Atomic Energy Act of 1954, as amended, (the Act) requires applicants for nuclear power plant operating licenses to state such TSs as the Commission may deem necessary. Such TSs shall be a part of the license issued. The Commission's regulatory requirements related to the content of TSs are set forth in Title 10 of the Code of Federal Regulations (10 CFR) 50.36, "Technical specifications." The regulation requires that TSs include items in five specific categories, including (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCO); (3) surveillance requirements; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TSs.

The Commission has provided guidance for the content of TSs in its "Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors" (58 FR 39132, published July 22, 1993), in which the Commission indicated that compliance with the Final Policy Statement satisfies Section 182a. of the Act. The Final Policy Statement identified four criteria to be used in determining whether a particular item should be addressed in the TSs as an LCO. The criteria were subsequently incorporated into Section 50.36 of Title 10 of the *Code of*

Federal Regulations (10 CFR) (60 FR 36593, published July 19, 1995). While the criteria specifically apply to LCO, the Commission indicated that the intent of these criteria may be used to identify the optimum set of administrative controls in TSs. Addressing administrative controls, 10 CFR 50.36 states that they are "the provisions relating to organization and management, procedures, record keeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner." The specific content of the administrative controls section of the TSs is, therefore, related to those programs and reports that the Commission deems essential for the safe operation of the facility, that are not adequately covered by regulations or other regulatory requirements. Accordingly, the NRC staff may determine that specific requirements, such as those associated with this change, may be removed from the administrative controls in the TSs if they are not explicitly required by 10 CFR 50.36(c)(5) and are not otherwise necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety.

The impetus for the monthly operating report (MOR) came from the 1973-1974 oil embargo. Regulatory Guide 1.16, Revision 4, "Reporting of Operating Information--Appendix A Technical Specifications," published for comment in August 1975, identifies operating statistics and shutdown experience information that was desired in the operating report at that time. In the mid-1990s, the NRC staff assessed the information that is submitted in the MOR and determined that, while some of the information was no longer used by the NRC staff, the MOR was the only source of some data used in the NRC Performance Indicator (PI) Program of that time period (see NRC Generic Letter (GL) 97-02, "Revised Contents of the Monthly Operating Report"). Beginning in the late 1990s, the NRC developed and implemented a major revision to its assessment, inspection, and enforcement processes through its Reactor Oversight Process (ROP). The ROP uses both plant-level PI and inspections performed by NRC personnel. In conjunction with the development of the ROP, the NRC developed the Industry Trends Program (ITP). The ITP provides the NRC a means to assess overall industry performance using industry level indicators and to report on industry trends to various stakeholders (e.g., Congress). Information from the ITP is used to assess the NRC's performance related to its goal of having "no statistically significant adverse industry trends in safety performance." The ITP uses some of the same PI as the PI Program from the mid-1990s and, therefore, the NRC has a continuing use for the data provided in MOR. The NRC also uses some data from the MOR to support the evaluation of operating experience, licensee event reports, and other assessments performed by the NRC staff and its contractors.

The reporting requirements for the MOR include challenges to the safety/relief valves. The reporting of challenges to the safety/relief valves was included in TSs based on the guidance in NUREG-0694, "[Three Mile Island] TMI-Related Requirements for New Operating Licensees." The industry proposed and the NRC accepted the elimination of the reporting requirements in TSs for challenges to safety/relief valves in Revision 4 to TSTF-258, "Changes to Section 5.0, Administrative Controls." The NRC staff's acceptance of TSTF-258 and subsequent approval of plant-specific adoptions of TSTF-258 is based on the fact that the information on challenges to relief and safety valves is not used in the evaluation of the MOR data, and that the information needed by the NRC is adequately addressed by the reporting requirements in 10 CFR 50.73, "Licensee event reports."

Licensees are required by TSs to submit annual occupational radiation exposure reports (ORER) to the NRC. These reports, developed in the mid-1970s, supplement the reporting requirements currently defined in 10 CFR 20.2206, "Reports of individual monitoring," by

providing a tabulation of data by work areas and job functions. The NRC included data from the ORER in its annual publication of NUREG-0713, "Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities," through the year 1997, but no longer includes the data in that or other reports.

3.0 TECHNICAL EVALUATION

3.1 Occupational Radiation Exposure Reports (Section 5.7.1 for Zion Nuclear Power Station, Units 1 and 2)

The information that the NRC staff needs regarding occupational doses is provided by licensees in the reports required under 10 CFR Part 20. The data from the Part 20 reports are sufficient to support the NRC trending programs, radiation related studies, and preparation of reports such as NUREG-0713. Accordingly, the NRC's limited use of the ORER submitted pursuant to the existing TS requirements no longer warrants the regulatory burden imposed on licensees. Therefore, the NRC staff finds it acceptable that Section 5.7.1 for Zion Nuclear Power Station, Units 1 and 2, is being deleted and the ORER will no longer be submitted by the licensee.

4.0 VERIFICATIONS AND COMMITMENTS

In order to efficiently process incoming license amendment applications, the NRC staff requested each licensee requesting the changes addressed by TSTF-369 using the consolidated line item improvement process (CLIIP) to address the following plant-specific regulatory commitment.

Each licensee should make a regulatory commitment to provide to the NRC using an industry database the operating data (for each calendar month) that is described in GL 97-02 "Revised Contents of the Monthly Operating Report," by the last day of the month following the end of each calendar quarter. The regulatory commitment will be based on use of an industry database (e.g., the industry's CDE program, currently being developed and maintained by the Institute of Nuclear Power Operations).

The licensee has made a regulatory commitment to provide to the NRC using an industry database the operating data (for each calendar month) that is described in GL 97-02 "Revised Contents of the Monthly Operating Report," by the last day of the month following the end of each calendar quarter. The regulatory commitment will be based on use of an industry database (e.g., the industry's CDE program, currently being developed and maintained by the Institute of Nuclear Power Operations). This regulatory commitment will be implemented to prevent any gaps in the monthly operating statistics and shutdown experience provided to the NRC (i.e., data for all months will be provided using one or both systems (MOR and CDE)).

Each licensee [(operating different reactor types at a single site) or (possessing both operating and shutdown reactors at a single site)] will include in its application a regulatory commitment to provide information to the NRC annually (e.g., with its annual submittal in accordance with 10 CFR 20.2206) to support the apportionment of station doses [(to each type of reactor) or (to differentiate between operating and shutdown units)]. The data will provide the summary distribution of annual whole body doses as presented in Appendix B of NUREG-0713 for each reactor type and for operating and shutdown units.

The licensee has made a regulatory commitment to provide information to the NRC annually to support the apportionment of the station doses to each type of reactor and to differentiate between operating and shutdown units.

The NRC staff finds that reasonable controls for the implementation and for subsequent evaluation of proposed changes pertaining to the above regulatory commitments can be provided by the licensee's administrative processes, including its commitment management program. The NRC staff has agreed that Nuclear Energy Institute 99-04, Revision 0, "Guidelines for Managing NRC Commitment Changes," provides reasonable guidance for the control of regulatory commitments made to the NRC staff (see Regulatory Issue Summary 2000-17, "Managing Regulatory Commitments Made by Power Reactor Licensees to the NRC Staff," dated September 21, 2000). The NRC staff notes that this amendment establishes a voluntary reporting system for the operating data that is similar to the system established for the ROP PI Program. Should the licensee choose to incorporate a regulatory commitment into the final safety analysis report or other document with established regulatory controls, the associated regulations would define the appropriate change-control and reporting requirements.

5.0 STATEMENT OF EXIGENT CIRCUMSTANCES

The licensee requested approval by April 29, 2005, of these license amendments in an application dated October 21, 2004, as supplemented January 4, 2005. The application constituted a timely submittal for the amendments. However, due to an administrative oversight, the proposed amendments were not noticed in the *Federal Register* in time to meet the licensee's need. To meet the licensee's requested date, a 14-day public comment period was provided in accordance with the provisions of 10 CFR Part 50.91(a)(6): where the Commission finds that exigent circumstances exist, in that a licensee and the Commission must act quickly and that time does not permit the Commission to publish a *Federal Register* notice (FRN) allowing 30 days for prior public comment, and it also determines that the amendment involves no significant hazards considerations, it may issue an FRN providing notice of an opportunity for hearing and allowing at least two weeks from the date of the notice for prior public comment. The NRC staff issued an exigent proposed no significant hazards consideration determination, published in the *Federal Register* on April 8, 2005 (70 FR 18058).

This TS improvement is consistent with the NRC TSTF process. The NRC staff interacted extensively with licensees, industry organizations, and other stakeholders during the development of this TSTF as demonstrated in the FRNs published on June 23, 2004 (69 FR 35067). The licensee stated that its application does not contain any variations or deviations from the TS changes described in TSTF-369, Revision 1, or in the model safety evaluation dated June 16, 2004. Therefore, the NRC staff has determined that the interaction conducted during the development of this TSTF constituted an extensive opportunity for public comments and, consequently, the 14-day prior comment period is adequate for the issuance of this TS amendment in accordance with the exigent provisions of 10 CFR Part 50.91(a)(6).

6.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission's regulations of 10 CFR 50.92 state that the Commission may make a final determination that a license amendment involves no significant hazards considerations, if operation of the facility, in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any previously evaluated, or (3) involve a significant reduction in the margin of safety.

These amendments have been evaluated against the standards in 10 CFR 50.92(c).

Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The proposed change eliminates the Technical Specifications (TSs) reporting requirements to provide a monthly operating report of shutdown experience and operating statistics if the equivalent data is submitted using an industry electronic database. It also eliminates the TS reporting requirement for an annual occupational radiation exposure report, which provides information beyond that specified in NRC regulations. The proposed change involves no changes to plant systems or accident analyses. As such, the change is administrative in nature and does not affect initiators of analyzed events or assumed mitigation of accidents or transients. Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response : No

The proposed change does not involve a physical alteration of the plant, add any new equipment, or require any existing equipment to be operated in a manner different from the present design. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

Does the proposed change involve a significant reduction in a margin of safety?

Response: No

This is an administrative change to reporting requirements of plant operating information and occupational radiation exposure data, and has no effect on plant equipment, operating practices or safety analyses assumptions. For these reasons, the proposed change does not involve a significant reduction in the margin of safety.

Based on this review, the NRC staff has determined that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff concludes that these amendments involve no significant hazards consideration.

7.0 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.

8.0 ENVIRONMENTAL CONSIDERATION

The amendments relate to changes in record keeping, reporting, or administrative procedures or requirements. 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.

9.0 CONCLUSION

The Commission 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 amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: W. Reckley

Date: April 29, 2005

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