Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

www.exeloncorp.com

Exelon Nuclear

10 CFR 50.90

April 7, 2009

RS-09-036

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Dresden Nuclear Power Station, Units 2 and 3
Renewed Facility Operating License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-237 and 50-249

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254 and 50-265

Subject: Request for License Amendment to Technical Specification (TS) 3.4.5, "RCS Leakage Detection Instrumentation," TS 5.6.5, "Core Operating Limits Report (COLR)," and Renewed Facility Operating License

Pursuant to 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC, (EGC), requests an amendment to Renewed Facility Operating License (FOL) Nos. DPR-19, DPR-25, DPR-29, and DPR-30, and Appendix A, Technical Specifications (TS), of the Renewed FOLs, for Dresden Nuclear Power Station (DNPS) Units 2 and 3 and Quad Cities Nuclear Power Station (QCNPS) Units 1 and 2, respectively.

The proposed changes will delete a footnote from DNPS TS 3.4.5, "RCS Leakage Detection Instrumentation" that was incorporated as part of a limited duration emergency license amendment in August 2008, and is no longer applicable.

The proposed changes will correct administrative errors in the titles of analytical methods (i.e., NRC-approved licensing topical report references) in DNPS and QCNPS TS 5.6.5, "Core Operating Limits Report (COLR)," paragraph b. The proposed changes will also delete historical analytical methods from DNPS and QCNPS TS 5.6.5.b that are no longer applicable, and renumber the remaining analytical methods.

The proposed changes will delete a license condition from the DNPS Units 2 and 3 and QCNPS Units 1 and 2 Renewed FOLs that limits the maximum rod average burnup for each unit.

This request is subdivided as follows:

Attachment 1 provides a description and evaluation of the proposed changes.

Attachment 2 provides a mark-up of the DNPS Renewed FOL page and DNPS TS pages with the proposed changes indicated.

Attachment 3 provides a mark-up of the QCNPS Renewed FOL page and QCNPS TS pages with the proposed changes indicated.

EGC requests approval of the proposed license amendment by April 8, 2010.

The proposed changes have been reviewed by the DNPS and QCNPS Plant Operations Review Committees and approved by the Nuclear Safety Review Board in accordance with the requirements of the EGC Quality Assurance Program.

There are no regulatory commitments in this letter or attachments.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," EGC is notifying the State of Illinois of this application for changes to the TS by transmitting a copy of this letter and its attachments to the designated State Official.

Should you have any questions or require additional information, please contact Mr. John L. Schrage at (630) 657-2821.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 7th day of April 2009.

Respectfully,

Jeffrey L. Hansen
Manager, Licensing

Attachment 1: Evaluation of Proposed Changes
Attachment 2: Dresden Nuclear Power Station, Units 2 and 3, Mark-up of proposed Renewed Facility Operating License and Technical Specifications Pages
Attachment 3: Quad Cities Nuclear Power Station, Units 1 and 2, Mark-up of proposed Renewed Facility Operating License and Technical Specifications Pages

ATTACHMENT 1
EVALUATION OF PROPOSED CHANGES

INDEX

ATTACHMENT 1
EVALUATION OF PROPOSED CHANGES

1.0 DESCRIPTION

Pursuant to 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC, (EGC), requests an amendment to Renewed Facility Operating License (FOL) Nos. DPR-19, DPR-25, DPR-29, and DPR-30, and Appendix A, Technical Specifications (TS), of the Renewed FOLs, for Dresden Nuclear Power Station (DNPS) Units 2 and 3 and Quad Cities Nuclear Power Station (QCNPS) Units 1 and 2, respectively.

The proposed changes will delete a footnote from DNPS TS 3.4.5, "RCS Leakage Detection Instrumentation" that was incorporated as part of a limited duration emergency license amendment approved and implemented in August 2008, and is no longer applicable.

The proposed changes will correct administrative errors in the titles of analytical methods (i.e., NRC-approved topical report references) in DNPS and QCNPS TS 5.6.5, "Core Operating Limits Report (COLR)." paragraph b. The proposed changes will also delete historical analytical methods from DNPS and QCNPS TS 5.6.5.b that are no longer applicable, and renumber the remaining analytical methods.

Finally, the proposed changes will delete a license condition from the DNPS Units 2 and 3 and QCNPS Units 1 and 2 Renewed FOLs that limited the maximum rod average burnup for each unit, pending completion of a generic environmental assessment supporting the increased limit. In June 2004, the NRC issued generic environmental assessments for both DNPS and QCNPS. Based on the completion and conclusions of these generic environmental assessments, the license condition for each unit that limits average fuel rod burnup to 60 GWD/MTU has been satisfied. As such, these license conditions are no longer required or applicable.

2.0 PROPOSED CHANGES

2.1. DNPS TS 3.4.5, "RCS Leakage Detection Instrumentation"

- LCO 3.4.5.a: Delete footnote (a) symbol modifying "system"
- Condition A.: Delete footnote (a) symbol modifying "system"
- Required Action A.1: Delete footnote (a) symbol modifying "system"
- Page 3.4.5-1: Delete footnote (a) text
- SR 3.4.5.2 and 3.4.5.3: Delete footnote (a) symbol modifying "system"
- Page 3.4.5-2: Delete footnote (a) text

2.2. DNPS TS 5.6.5, "Core Operating Limits Report (COLR)," paragraph b

- Item 13: Revise the referenced document number in the title of analytical method 13 (i.e., Item 13) from "224011" to "24011" and delete the term "(GESTAR)"
- Item 15: Delete the term "BWR Owners' Group"
- Item 21: Delete the proprietary and approved nomenclature (i.e., "-P-A") for CENPD-287) in Item 21
- Delete Items 1 through 10, 12, and 14
- Renumber DNPS TS 5.6.5.b Items 11, 13, and 15 through 22

2.3. QCNPS TS 5.6.5, "Core Operating Limits Report (COLR)," paragraph b

- Item 17: Delete the term "BWR Owners' Group"
- Item 23: Delete the proprietary and approved nomenclature (i.e., "-P-A") for CENPD-287 and the comma between "Reactors" and "Supplement"
- Delete Items 2 through 12, and 14 through 16
- Renumber QCNPS TS 5.6.5.b Items 13, and 17 through 24

2.4. DNPS Renewed FOLs DPR-19 and DPR-25

- Delete license condition 9, "Fuel Burnup," of Renewed Facility Operating License DPR-19
- Delete license condition Q, "Fuel Burnup," of Renewed Facility Operating License DPR-25

2.5. QCNPS Renewed FOLs DPR-29 and DPR-30

- Delete license condition U, "Fuel Burnup" of Renewed Facility Operating License DPR-29
- Delete license condition T, "Fuel Burnup," of Renewed Facility Operating License DPR-30

The marked-up TS and Renewed FOL pages are provided in Attachments 2 and 3 for DNPS and QCNPS, respectively.

3.0 BACKGROUND

3.1. Deletion of Footnote from DNPS TS 3.4.5, "RCS Leakage Detection Instrumentation"

DNPS TS 3.4.5, "RCS Leakage Detection Instrumentation," footnote (a) states that for DNPS Unit 3 only, the drywell equipment drain sump monitoring system may be used to satisfy the requirements applicable to the drywell floor drain sump monitoring system, until the drywell floor drain sump monitoring system is repaired, or startup from the twentieth DNPS Unit 3 refuel outage (D3R20), whichever is sooner. This footnote provides an alternate method to satisfy the requirement to quantify unidentified reactor coolant system (RCS) leakage in the DNPS Unit 3 drywell. This footnote was added to DNPS TS 3.4.5 as part of an August 2008 emergency license amendment (Reference 1) in response to a failed DNPS Unit 3 component. EGC repaired the failed DNPS Unit 3 component during D3R20, which was completed in November 2008.

3.2. Administrative Changes to DNPS and QCNPS TS 5.6.5 "Core Operating Limits Report (COLR)," paragraph b

DNPS and QCNPS TS 5.6.5, "Core Operating Limits Report (COLR)" specifies the NRC-approved analytical methodologies that EGC utilizes to establish cycle-specific core operating limits, consistent with the guidance in Generic Letter 88-16, "Removal of Cycle-Specific Parameter Limits from Technical Specifications," and NUREG-1433, "Standard Technical Specifications General Electric Plants, BWR/4."

During a review of DNPS and QCNPS TS 5.6.5.b, EGC identified administrative errors in the title of several analytical methods. In addition, EGC identified numerous historical analytical methods in DNPS and QCNPS TS 5.6.5.b associated with a fuel type that has been completely discharged from all four reactors.

3.3. Deletion of License Condition from DNPS and QCNPS FOLs

In References 2 and 3, Commonwealth Edison Company (i.e., the predecessor to EGC) submitted license amendment requests (LARs) to incorporate an NRC-approved licensing topical report (LTR) in DNPS and QCNPS TS 5.6.5.b as an analytical method for the COLR. The LTR, in part, justified an extended maximum rod average burnup to 62 gigawatt-days per metric ton of uranium (GWD/MTU).

In the NRC Safety Evaluations (SEs) that approved the addition of the analytical methodology (i.e., References 4 and 5), the NRC stated that the NRC-approved LTR supported the extended maximum rod average burnup limits of 62 GWD/MTU. However, the NRC also noted that, at that time, a generic environmental assessment had not been completed to support the 62 GWD/MTU limit. Therefore, at the NRC's request, Commonwealth Edison incorporated a proposed license condition in the DNPS and QCNPS FOLs that limited the burnup to 60 GWD/MTU until a generic environmental assessment was completed that supported the higher burnup levels.

4.0 TECHNICAL ANALYSIS

4.1. Deletion of Footnote from DNPS TS 3.4.5, "RCS Leakage Detection Instrumentation"

As described in the Reference 1 NRC SE, the addition and use of footnote (a) to DNPS TS 3.4.5 was a limited duration condition, terminating at the first subsequent outage of sufficient duration to repair a failed DNPS Unit 3 component, or startup from the next DNPS Unit 3 refueling outage, whichever was sooner.

EGC repaired the failed component during D3R20, prior to startup. Therefore the footnote is no longer applicable and the proposed deletion of the footnote is administrative.

4.2. Administrative Changes to DNPS and QCNPS TS 5.6.5 "Core Operating Limits Report (COLR)," paragraph b

DNPS and QCNPS TS 5.6.5 requires that a COLR be established and the analytical methods that are used to determine the core operating limits be reviewed and approved by the NRC as part of the station's TS. The approved analytical methods for DNPS and QCNPS are listed in TS 5.6.5.b and support operation of the reactors for the fuel type(s) contained in the reactor core.

The proposed changes to DNPS and QCNPS TS 5.6.5.b that correct administrative errors in the titles of various analytical methods are strictly editorial, and do not change the content, methodology, or application of these analytical methods.

The proposed changes to DNPS and QCNPS TS 5.6.5.b that delete obsolete analytical methods and renumber the remaining analytical methods are administrative, in that the deleted analytical methods are NRC-approved methodologies for the analyses of fuel types have been completely discharged from the DNPS and the QCNPS reactors. Thus, these analytical methods are no longer applicable and are unnecessary.

4.3. Deletion of License Condition from DNPS and QCNPS FOLs

The proposed change to the DNPS and QCNPS Renewed FOLs to delete a license condition is based on the completion of an NRC-approved generic environmental assessment that supports an extended maximum rod average burnup limit of 62 GWD/MTU.

In June 2004, the NRC issued NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Supplement 16, "Quad Cities Nuclear Power Station, Units 1 and 2," and Supplement 17, "Dresden Nuclear Power Station, Units 2 and 3." In these supplements to the NUREG, the NRC stated that the impact values of transporting spent fuel with an average rod burnup up to 62 GWD/MTU is consistent with the impact values in 10 CFR 51.52(c), Summary Table S-4, "Environmental Impact of Transportation of Fuel and Waste to and from One Light-Water-Cooled Nuclear Power Reactor."

Based on the completion and conclusions of these generic environmental assessments for DNPS and QCNPS, the license condition for each unit that limits average fuel rod burnup to 60 GWD/MTU has been satisfied. As such, these license conditions are no longer required or applicable.

ATTACHMENT 1
EVALUATION OF PROPOSED CHANGES

5.0 REGULATORY ANALYSIS

5.1. No Significant Hazards Consideration

Pursuant to 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC, (EGC), hereby requests an amendment to Renewed Facility Operating License (FOL) Nos. DPR-19, DPR-25, DPR-29, and DPR-30, and Appendix A, Technical Specifications (TS), of the FOLs, for Dresden Nuclear Power Station (DNPS) Units 2 and 3 and Quad Cities Nuclear Power Station (QCNPS) Units 1 and 2, respectively.

According to 10 CFR 50.92(c), a proposed amendment to an operating license involves no significant hazards consideration 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; or
2. Create the possibility of a new or different kind of accident from any accident previously evaluated; or
3. Involve a significant reduction in a margin of safety.

In support of this determination, an evaluation of each of the three criteria set forth in 10 CFR 50.92 is provided below regarding the proposed license amendment.

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

Response: No

DNPS TS 3.4.5, "RCS Leakage Detection Instrumentation," establishes the applicability and requirements for equipment used to quantify unidentified reactor coolant system operational leakage (i.e., the drywell floor drain sump monitoring system). The proposed change deletes a footnote that established a limited duration alternative to these requirements for DNPS Unit 3.

The deletion of the footnote restores DNPS TS 3.4.5 requirements to the requirements prior to NRC approval of an emergency license amendment, which provided an alternative means to demonstrate TS compliance. In that the condition necessitating the footnote (i.e., a failed component) has been resolved (i.e., repair of the failed component), the footnote is no longer applicable. The proposed change will have no effect on any accident initiator or precursor previously evaluated and will not change the manner in which the plant is operated. Thus, the proposed change does not have any effect on the probability of an accident previously evaluated.

DNPS and QCNPS TS 5.6.5 "Core Operating Limits Report (COLR)," lists the NRC-approved analytical methods that are used at DNPS and

QCNPS to determine core operating limits. The proposed changes will correct administrative errors in the titles of several analytical methods in DNPS and QCNPS TS 5.6.5.b. The proposed changes will also delete historical analytical methods from DNPS and QCNPS TS 5.6.5.b that are no longer applicable, as well as renumber the remaining analytical methods.

The correction of administrative errors in the titles of analytical methods does not change the content or application of the methods. Similarly, the deletion of non-applicable analytical methods does not affect the ability to accurately model core behavior, including the determination of core operating limits, for the fuel that is currently loaded in the DNPS and QCNPS reactors. Therefore, the proposed changes will have no effect on any accident initiator or precursor previously evaluated and will not change the manner in which the core is operated. Thus, the proposed changes do not have any effect on the probability of an accident previously evaluated.

Finally, the proposed changes will delete a license condition in the DNPS Units 2 and 3 and QCNPS Units 1 and 2 Facility Operating Licenses (FOLs) that limits the maximum average fuel rod burnup to 60 gigawatt-days per metric ton of uranium (GWD/MTU) until a generic environmental assessment that supports an extended limit is approved.

The proposed deletion of the license condition is justified by completion of generic environmental assessments for DNPS and QCNPS (i.e. as required by the license condition). As such, these license conditions are no longer required or applicable. Therefore, the proposed change will have no effect on any accident initiator or precursor previously evaluated and will not change the manner in which the core is operated. Thus, the proposed changes do not have any effect on the probability of an accident previously evaluated.

The proposed changes to the DNPS TS 3.4.5, DNPS and QCNPS TS 5.6.5.b, and the deletion of the Renewed FOL license conditions do not affect the ability to successfully respond to previously evaluated accidents and does not affect the radiological assumptions used in the evaluations for both DNPS and QCNPS. Thus, the proposed changes will have no effect on the type or amount of radiation released, and will have no effect on predicted offsite doses in the event of an accident.

Therefore, the proposed changes do not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No

The proposed changes to DNPS TS Section 3.4.5, DNPS and QCNPS TS Section 5.6.5, and the proposed deletion of Renewed FOL license conditions do not affect the performance of any structure, system, or component credited with mitigating any accident previously evaluated.

The deletion of the footnote from DNPS TS 3.4.5 restores TS requirements to the requirements prior to NRC approval of an August 2008 emergency license amendment. The proposed deletion of the footnote does not affect the control parameters governing unit operation or the response of plant equipment to transient conditions. The proposed changes do not introduce any new modes of system operation or failure mechanisms.

The NRC-approved analytical methodologies in TS 5.6.5.b are used to accurately model core behavior, including the determination of core operating limits, for the fuel that is currently loaded in the DNPS and QCNPS reactors. These methodologies do not affect the control parameters governing unit operation or the response of plant equipment to transient conditions. The proposed changes do not introduce any new modes of system operation or failure mechanisms.

The existing Renewed FOL license condition limits fuel burnup until completion of a generic environmental assessment. In June 2004, the NRC issued NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Supplement 16, "Quad Cities Nuclear Power Station, Units 1 and 2," and Supplement 17, "Dresden Nuclear Power Station, Units 2 and 3." Based on the completion and conclusions of these generic environmental assessments for DNPS and QCNPS, the license condition limiting fuel burnup for each unit has been satisfied. As such, these license conditions are no longer required or applicable.

The proposed deletion of the license condition does not affect the control parameters governing unit operation or the response of plant equipment to transient conditions. The proposed changes do not introduce any new modes of system operation or failure mechanisms.

Therefore, the proposed changes do not create the possibility of a new or different kind of accident from any previously evaluated.

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

Response: No

The proposed changes to DNPS TS 3.4.5, DNPS and QCNPS TS 5.6.5.b, and the DNPS and QCNPS Renewed FOLs (i.e., deletion of the fuel burnup license condition) will not affect the ability to quantify unidentified RCS leakage, accurately model core behavior for the currently loaded fuel, and ensure compliance with NRC-approved LTRs.

As such, the proposed changes do not modify the safety limits or setpoints at which protective actions are initiated and do not change the requirements governing operation or availability of safety equipment assumed to operate to preserve the margin of safety. Therefore, the proposed changes provide an equivalent level of protection as that currently provided.

Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Based on the responses above, EGC has concluded that the proposed amendment presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2. Applicable Regulatory Requirements/Criteria

5.2.1. Deletion of Footnote from DNPS TS 3.4.5, "RCS Leakage Detection Instrumentation"

10 CFR 50, Appendix A, "General Design Criteria for Nuclear Power Plants," Criterion 30, "Quality of reactor coolant pressure boundary," requires means for detecting and, to the extent practical, identifying the location of the source of RCS leakage. Regulatory Guide 1.45, Revision 0, "Reactor Coolant Pressure Boundary Leakage Detection Systems," requires that plant technical specifications should include the limiting conditions for identified and unidentified RCS leakage and address the availability of various types of instruments in order to ensure that leakage to the primary reactor containment from unidentified sources is collected and the flow rate monitored.

DNPS TS 3.4.5 describes the requirements for equipment that is used to quantify unidentified RCS leakage in the drywell (i.e., primary containment), including the drywell floor drain sump monitoring system. Although alternate methods of detecting RCS leakage are available, the drywell floor drain sump monitoring system is the sole means of quantifying RCS leakage in primary containment. The drywell floor drain sump monitoring system satisfies Criterion 1 of 10 CFR 50.36(c)(2)(ii).

DNPS and QCNPS TS 5.6.5.b lists the NRC-approved analytical methods to determine core operating limits. The listed NRC-approved analytical methods provide the necessary administrative controls to ensure

operation of the facility in a safe manner and thus are required for inclusion in the DNPS and QCNPS TS in accordance with 10 CFR 50.36, "Technical specifications."

The fuel burnup license condition in the Renewed FOLs for DNPS and QCNPS establishes a limit on the maximum average rod burnup, relative to the value specified by the applicable TS 5.6.5.b analytical method for the specific fuel type. As stated above, the TS 5.6.5.b NRC-approved analytical methods provide the necessary administrative controls to ensure operation of the facility in a safe manner and thus are required for inclusion in the DNPS and QCNPS TS in accordance with 10 CFR 50.36, "Technical specifications."

6.0 ENVIRONMENTAL EVALUATION

EGC has evaluated this proposed license amendment consistent with the criteria for identification of licensing and regulatory actions requiring environmental assessment in accordance with 10 CFR 51.21, "Criteria for and identification of licensing and regulatory actions requiring environmental assessments." EGC has determined that this proposed change meets the criteria for categorical exclusion set forth in paragraph (c)(9) of 10 CFR 51.22, "Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review," and has determined that no irreversible consequences exist in accordance with paragraph (b) of 10 CFR 50.92, "Issuance of amendment." This determination is based on the fact that this change is being processed as an amendment to the license issued pursuant to 10 CFR 50, "Domestic Licensing of Production and Utilization Facilities," which changes a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, "Standards for Protection Against Radiation," or which changes an inspection or surveillance requirement and the amendment meets the following specific criteria:

(i) **The amendment involves no significant hazards consideration.**

As demonstrated in Section 5.1 above, "No Significant Hazards Consideration," the proposed change does not involve any significant hazards consideration.

(ii) **There is no significant change in the types or significant increase in the amounts of any effluent that may be released offsite.**

The proposed changes will delete an obsolete footnote from DNPS TS 3.4.5, correct administrative errors in the titles of analytical methods in DNPS and QCNPS TS 5.6.5.b, delete analytical methods from DNPS and QCNPS TS 5.6.5.b that are no longer applicable.

These proposed changes will not result in an increase in power level, nor will the proposed changes increase the production or alter the flow path or method of disposal of radioactive waste or byproducts; thus, there will be no change in the amounts of radiological effluents released offsite.

The proposed changes also delete a Renewed FOL license condition for DNPS Units 2 and 3 and QCNPS Units 1 and 2 that limits the maximum average rod burnup, based on the completion of a generic environmental assessment. In June

2004, the NRC issued NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," Supplement 16, "Quad Cities Nuclear Power Station, Units 1 and 2," and Supplement 17, "Dresden Nuclear Power Station, Units 2 and 3." Based on the completion and conclusions of these generic environmental assessments for DNPS and QCNPS, the license condition limiting fuel burnup for each unit is no longer required. As such, the proposed changes will not result in an increase in power level, nor will the proposed changes increase the production or alter the flow path or method of disposal of radioactive waste or byproducts; thus, there will be no change in the amounts of radiological effluents released offsite.

Based on the above evaluation, the proposed changes will not result in a significant change in the types or significant increase in the amounts of any effluent released offsite.

7.0 REFERENCES

1. Letter from C. Gratton (USNRC) to C. G. Pardee (Exelon Generation Company, LLC), "Dresden Nuclear Power Station, Unit 3 - Issuance of Emergency Amendment Regarding Drywell Floor Drain Sump Monitoring System (TAC No. MD9467)," dated August 22, 2008

2. Letter from J. M. Heffley (Commonwealth Edison Company) to USNRC, "Request for Amendment to Appendix A, Minimum Critical Power Ratio," dated August 3, 1999

3. Letter from R. M. Krich (Commonwealth Edison Company) to USNRC, "Request for Technical Specifications Change, Transition to General Electric Fuel," dated September 29, 2000

4. Letter from L. W. Rossbach (USNRC) to O. D. Kingsley (Commonwealth Edison Company), "Dresden – Issuance of Amendments Changing the Unit 2 Minimum Critical Power Ratio and Adding the RODEX2A Methodology for Units 2 and 3 (TAC Nos. MA6233 and MA6234)," dated September 21, 2000

5. Letter from S. N. Bailey (USNRC) to O. D. Kingsley (Exelon Generation Company, LLC), "Issuance of Amendments (TAC Nos. MB0168, MB0169, MB1327, MB1328)," dated December 20, 2001

ATTACHMENT 2

Dresden Nuclear Power Station, Units 2 and 3
Mark-up of proposed Renewed Facility Operating License
and Technical Specification Pages

Renewed Facility Operating License DPR-19 Page 5
Renewed Facility Operating License DPR-25 Page 6
TS Page 3.4.5-1
TS Page 3.4.5-2
TS Page 5.6-3
TS Page 5.6-4
TS Page 5.6-5

(7) Additional Conditions

The Additional Conditions contained in Appendix B, as revised through Amendment No. 191, are hereby incorporated into this renewed operating license. The licensee shall operate the facility in accordance with the Additional Conditions.

(8) Deleted

(9) Fuel Burnup

Deleted

The maximum rod average burnup for any rod shall be limited to 60 GWD/MTU until the completion of an NRC environmental assessment supporting an increased limit.

(10) Exelon Generation Company, LLC shall provide the Director of the Office of Nuclear Reactor Regulation a copy of any application, at the time it is filed, to transfer (excluding grants of security interests or liens) from Exelon Generation Company, LLC to its direct or indirect parent, or to any other affiliated company, facilities for the production, transmission, or distribution of electric energy having a depreciated book value exceeding ten percent (10%) of Exelon Generation Company, LLC's consolidated net utility plant, as recorded on Exelon Generation Company, LLC's books of account.

(11) Exelon Generation Company, LLC shall have decommissioning trust funds for Dresden, Unit 2, in the following minimum amount, when Dresden, Unit 2, is transferred to Exelon Generation Company, LLC:

Dresden, Unit 2	$288,233,336

(12) The decommissioning trust agreement for Dresden, Unit 2, at the time the transfer of the unit to Exelon Generation Company, LLC is effected and thereafter, is subject to the following:

(a) The decommissioning trust agreement must be in a form acceptable to the NRC.

(b) With respect to the decommissioning trust fund, investments in the securities or other obligations of Exelon Corporation or affiliates thereof, or their successors or assigns are prohibited. Except for investments tied to market indexes or other non-nuclear sector mutual funds, investments in any entity owning one or more nuclear power plants are prohibited.

M. Deleted [Amdt. 85, 12-12-85]

N. By Amendment No. 144, the license is amended to allow, on a one time temporary basis, operation of Dresden, Unit 3, with the corner room structural steel members in the Low Pressure Coolant Injection Corner Rooms outside the Updated Final Safety Analysis Report (UFSAR) design parameters. Operation under these conditions is allowed up to and including the next scheduled refueling outage (D3R14).

The repairs to Dresden, Unit 3, corner room structural steel shall restore the steel design margins to the current UFSAR (updated through Revision 1A) design criteria. The design of the modifications to the Dresden, Unit 3, corner room structural steel members will be based on use of elastic section modulus and the structural steel stresses will be limited to 1.6 of the American Institute of Steel Construction (AISC allowables). The modifications to Dresden, Unit 3, corner room structural steel will be implemented during the upcoming D3R14 refueling outage.

During this interim period of operation, should vibratory ground motion exceeding the UFSAR Operating Basis Earthquake (OBE) design parameters, Dresden, Unit 3, will be shut down for inspection and will not start up without prior NRC approval.

O. Additional Conditions

The Additional Conditions contained in Appendix B, as revised through Amendment No. 185, are hereby incorporated into this license. The licensee shall operate the facility in accordance with the Additional Conditions.

P. Deleted

Deleted

Q. Fuel Burnup

The maximum rod average burnup for any rod shall be limited to 60 GWD/MTU until the completion of an NRC environmental assessment supporting an increased limit.

R. Exelon Generation Company, LLC shall provide the Director of the Office of Nuclear Reactor Regulation a copy of any application, at the time it is filed, to transfer (excluding grants of security interests or liens) from Exelon Generation Company, LLC to its direct or indirect parent, or to any other affiliated company, facilities for the production, transmission, or distribution of electric energy having a depreciated book value exceeding ten percent (10%) of Exelon Generation Company, LLC's consolidated net utility plant, as recorded on Exelon Generation Company, LLC's books of account.

3.4 REACTOR COOLANT SYSTEM (RCS)

3.4.5 RCS Leakage Detection Instrumentation

LCO 3.4.5 The following RCS leakage detection instrumentation shall be OPERABLE:

a. Drywell floor drain sump monitoring system[a], and

b. Primary containment atmospheric particulate sampling system.

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

CONDITION	REQUIRED ACTION		COMPLETION TIME
A. Drywell floor drain sump monitoring system[a] inoperable.	A.1	Restore drywell floor drain sump monitoring system[a] to OPERABLE status.	24 hours
B. Primary containment atmospheric particulate sampling system inoperable.	B.1	Restore primary containment atmospheric particulate sampling system to OPERABLE status.	24 hours
C. Required Action and associated Completion Time not met.	C.1 AND	Be in MODE 3.	12 hours
	C.2	Be in MODE 4.	36 hours

(a) For Unit 3 only, the drywell equipment drain sump monitoring system may be used to satisfy requirements applicable to the drywell floor drain sump monitoring system until the system is repaired during a Unit 3 outage of sufficient duration, but no later than startup from D3R20.

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.4.5.1	Perform primary containment atmospheric particulate sampling.	12 hours
SR 3.4.5.2	Perform a CHANNEL FUNCTIONAL TEST of drywell floor drain sump monitoring system(a) instrumentation.	31 days
SR 3.4.5.3	Perform a CHANNEL CALIBRATION of drywell floor drain sump monitoring system(a) instrumentation.	12 months

(a) For Unit 3 only, the drywell equipment drain sump monitoring system may be used to satisfy requirements applicable to the drywell floor drain sump monitoring system until the system is repaired during a Unit 3 outage of sufficient duration, but no later than startup from D3R20.

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

3. The LHGR for Specification 3.2.3.

4. Control Rod Block Instrumentation Setpoint for the Rod Block Monitor–Upscale Function Allowable Value for Specification 3.3.2.1.

5. The OPRM setpoints for the trip function for SR 3.3.1.3.3

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. ANF-1125(P)(A), "Critical Power Correlation - ANFB."

2. ANF-524(P)(A), "ANF Critical Power Methodology for Boiling Water Reactors."

3. XN-NF-79-71(P)(A), "Exxon Nuclear Plant Transient Methodology for Boiling Water Reactors."

4. XN-NF-80-19(P)(A), "Exxon Nuclear Methodology for Boiling Water Reactors."

5. XN-NF-85-67(P)(A), "Generic Mechanical Design for Exxon Nuclear Jet Pump Boiling Water Reactors Reload Fuel."

6. ANF-913(P)(A), "CONTRANSA2: A Computer Program for Boiling Water Reactor Transient Analysis."

7. XN-NF-82-06(P)(A), Qualification of Exxon Nuclear Fuel for Extended Burnup Supplement 1 Extended Burnup Qualification of ENC 9x9 BWR Fuel.

8. ANF-89-14(P)(A), Advanced Nuclear Fuels Corporation Generic Mechanical Design for Advance Nuclear Fuels Corporation 9x9-IX and 9x9-9X BWR Reload Fuel.

(continued)

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

9. ANF-89-98(P)(A), Generic Mechanical Design Criteria for BWR Fuel Designs.

10. ANF-91-048(P)(A), Advanced Nuclear Fuels Corporation Methodology for Boiling Water Reactors EXEM BWR Evaluation Model.

11. Commonwealth Edison Company Topical Report NFSR-0091, "Benchmark of CASMO/MICROBURN BWR Nuclear Design Methods."

12. EMF-85-74(P), RODEX2A (BWR) Fuel Rod Thermal Mechanical Evaluation Model.

13. NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel (GESTAR)."

14. NEDC-32981P, "GEXL96 Correlation for ATRIUM 9B Fuel," September 2000.

15. NEDO-32465-A, "BWR Owners' Group Reactor Stability Detect and Suppress Solutions Licensing Basis Methodology for Reload Applications," August 1996.

16. CENPD-300-P-A, "Reference Safety Report for Boiling Water Reactor Reload Fuel."

17. WCAP-16081-P-A, "10x10 SVEA Fuel Critical Power Experiments and CPR Correlation: SVEA-96 Optima2."

18. WCAP-15682-P-A, "Westinghouse BWR ECCS Evaluation Model: Supplement 2 to Code Description, Qualification and Application."

19. WCAP-16078-P-A, "Westinghouse BWR ECCS Evaluation Model: Supplement 3 to Code Description, Qualification and Application to SVEA-96 Optima2 Fuel."

20. WCAP-15836-P-A, "Fuel Rod Design Methods for Boiling Water Reactors - Supplement 1."

(continued)

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

(9) → (21). WCAP-15942-P-A, "Fuel Assembly Mechanical Design Methodology for Boiling Water Reactors, Supplement 1 to CENPD-287-P-A."

(10) → (22). CENPD-390-P-A, "The Advanced PHOENIX and POLCA Codes for Nuclear Design of Boiling Water Reactors."

The COLR will contain the complete identification for each of the TS referenced topical reports used to prepare the COLR (i.e., report number, title, revision, date, and any supplements).

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.6 Post Accident Monitoring (PAM) Instrumentation Report

When a report is required by Condition B or F of LCO 3.3.3.1, "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

ATTACHMENT 3

Quad Cities Nuclear Power Station, Units 1 and 2
Mark-up of proposed Renewed Facility Operating License
and Technical Specifications Pages

Renewed Facility Operating License DPR-29, Page 7
Renewed Facility Operating License DPR-30, Page 7
TS Page 5.6-3
TS Page 5.6-4
TS Page 5.6-5

first surveillance interval that began on the date the surveillance was last performed prior to the implementation of Amendment No. 199.

For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of Amendment No. 199.

Deleted

U. Fuel Burnup

The maximum rod average burnup for any rod shall be limited to 60 GWD/MTU until the completion of an NRC environmental assessment supporting an increased limit.

V. The license is amended to authorize changing the UFSAR to allow credit for containment overpressure as detailed below, to assure adequate Net Positive Suction Head is available for low pressure Emergency Core Cooling System pumps following a design-basis accident.

From (sec)	To (sec)	Credit (psig)
Accident start	290	8.0
290	5,000	4.8
5,000	44,500	6.7
44,500	52,500	6.0
52,500	60,500	5.5
60,500	75,000	4.7
75,000	95,000	3.8
95,000	115,000	3.0
115,000	155,000	2.3
155,000	Accident end	1.8

W. Updated Final Safety Analysis Report

The Exelon Generation Company, LLC Updated Final Safety Analysis Report supplement, submitted pursuant to 10 CFR 54.21(d), describes certain future activities to be completed prior to the period of extended operation. The Exelon Generation Company, LLC shall complete these activities no later than December 14, 2012, and shall notify the NRC in writing when implementation of these activities is complete and can be verified by NRC inspection.

The Updated Final Safety Analysis Report supplement, as revised, shall be included in the next scheduled update to the Updated Final Safety Analysis Report required by 10 CFR 50.71(e)(4) following issuance of this renewed license. Until that update is complete, Exelon Generation Company, LLC may make changes to the programs and activities described in the supplement without prior Commission approval, provided that Exelon Generation Company,

For SRs that existed prior to this amendment whose intervals of performance are being reduced, the first reduced surveillance interval begins upon completion of the first surveillance performed after implementation of Amendment No. 195.

For SRs that existed prior to this amendment that have modified acceptance criteria, the first performance is due at the end of the first surveillance interval that began on the date the surveillance was last performed prior to the implementation of Amendment No. 195.

For SRs that existed prior to this amendment whose intervals of performance are being extended, the first extended surveillance interval begins upon completion of the last surveillance performed prior to implementation of Amendment No. 195.

Deleted

T. Fuel Burnup

The maximum rod average burnup for any rod shall be limited to 60 GWD/MTU until the completion of an NRC environmental assessment supporting an increased limit.

U. The license is amended to authorize changing the UFSAR to allow credit for containment overpressure as detailed below, to assure adequate Net Positive Suction Head is available for low pressure Emergency Core Cooling System pumps following a design-basis accident.

From (sec)	To (sec)	Credit (psig)
Accident start	290	8.0
290	5,000	4.8
5,000	44,500	6.7
44,500	52,500	6.0
52,500	60,500	5.5
60,500	75,000	4.7
75,000	95,000	3.8
95,000	115,000	3.0
115,000	155,000	2.3
155,000	Accident end	1.8

V. Updated Final Safety Analysis Report

The Exelon Generation Company, LLC Updated Final Safety Analysis Report supplement, submitted pursuant to 10 CFR 54.21(d), describes certain future activities to be completed prior to the period of extended operation. The Exelon Generation Company, LLC shall complete these activities no later than December 14, 2012, and shall notify the NRC in

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

3. The LHGR for Specification 3.2.3.

4. Control Rod Block Instrumentation Setpoint for the Rod Block Monitor–Upscale Function Allowable Value for Specification 3.3.2.1.

5. The OPRM setpoints for the trip function for SR 3.3.1.3.3.

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

1. NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel."

2. Commonwealth Edison Topical Report NFSR-0085, "Benchmark of BWR Nuclear Design Methods."

3. Advanced Nuclear Fuels Methodology for Boiling Water Reactors, XN-NF-80-19(P)(A).

4. Generic Mechanical Design for Exxon Nuclear Jet Pump BWR Reload Fuel, XN-NF-85-67(P)(A).

5. Qualification of Exxon Nuclear Fuel for Extended Burnup, XN-NF-82-06(P)(A).

6. Advanced Nuclear Fuels Corporation Generic Mechanical Design for Advanced Nuclear Fuels 9x9-IX and 9x9-9X BWR Reload Fuel, ANF-89-014(P)(A).

7. Generic Mechanical Design Criteria for BWR Fuel Designs, ANF-89-98(P)(A).

8. Exxon Nuclear Plant Transient Methodology for Boiling Water Reactors, XN-NF-79-71(P)(A).

9. ANFB Critical Power Correlation, ANF-1125(P)(A).

(continued)

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

10. Advanced Nuclear Fuels Corporation Critical Power Methodology for Boiling Water Reactors/Advanced Nuclear Fuels Corporation Critical Power Methodology for Boiling Water Reactors: Methodology for Analysis of Assembly Channel Bowing Effects/NRC Correspondence, ANF-524(P)(A).

11. COTRANSA 2: A Computer Program for Boiling Water Reactor Transient Analyses, ANF-913(P)(A).

12. Advanced Nuclear Fuels Corporation Methodology for Boiling Water Reactors EXEM BWR Evaluation Model, ANF-91-048(P)(A).

13. Commonwealth Edison Topical Report NFSR-0091, "Benchmark of CASMO/MICROBURN BWR Nuclear Design Methods."

14. ANFB Critical Power Correlation Application for Coresident Fuel, EMF-1125(P)(A).

15. EMF-85-74(P), RODEX2A(BWR) Fuel Rod Thermal Mechanical Evaluation Model, Supplement 1(P)(A) and Supplement 2 (P)(A), Siemens Power Corporation, February 1998.

16. NEDC-32981P, "GEXL96 Correction for ATRIUM 9B Fuel."

17. NEDO-32465-A, "BWR Owners' Group Reactor Stability Detect and Suppress Solutions Licensing Basis Methodology for Reload Applications," August 1996.

18. CENPD-300-P-A, "Reference Safety Report for Boiling Water Reactor Reload Fuel."

19. WCAP-16081-P-A, "10x10 SVEA Fuel Critical Power Experiments and CPR Correlation: SVEA-96 Optima2."

20. WCAP-15682-P-A, "Westinghouse BWR ECCS Evaluation Model: Supplement 2 to Code Description, Qualification and Application."

21. WCAP-16078-P-A, "Westinghouse BWR ECCS Evaluation Model: Supplement 3 to Code Description, Qualification and Application to SVEA-96 Optima2 Fuel."

(continued)

5.6 Reporting Requirements

5.6.5 CORE OPERATING LIMITS REPORT (COLR) (continued)

8 → 22. WCAP-15836-P-A, "Fuel Rod Design Methods for Boiling Water Reactors - Supplement 1."

9 → 23. WCAP-15942-P-A, "Fuel Assembly Mechanical Design Methodology for Boiling Water Reactors," Supplement 1 to CENPD-287-P-A."

10 → 24. CENPD-390-P-A, "The Advanced PHOENIX and POLCA Codes for Nuclear Design of Boiling Water Reactors."

The COLR will contain the complete identification for each of the TS referenced topical reports used to prepare the COLR (i.e., report number, title, revision, date, and any supplements).

c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.6.6 Post Accident Monitoring (PAM) Instrumentation Report

When a report is required by Condition B or F of LCO 3.3.3.1, "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.