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10 CFR 50.90

RS-02-152

August 22, 2002

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

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

Subject: Request for Technical Specifications Surveillance Requirement 3.3.4.1.2 Change Related to Anticipated Transient Without Scram - Recirculation Pump Trip Instrumentation

References:

1) Letter from R. M. Krich (Commonwealth Edison Company) to U. S. NRC, "Proposed Technical Specifications Change – Surveillance Test Intervals and Allowable Outage Times for Protective Instrumentation," dated December 27, 1999

2) Letter from U. S. NRC to O. D. Kingsley (Exelon Generation Company, LLC), "Quad Cities Nuclear Power Station, Units 1 and 2 - Issuance of Amendments," dated March 28, 2001

Pursuant to 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (EGC) requests a change to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. DPR-29 and DPR-30 for the Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2. The proposed change is to TS Section 3.3.4.1, "Anticipated Transient Without Scram Recirculation Pump Trip (ATWS-RPT) Instrumentation," Surveillance Requirement (SR) 3.3.4.1.2. This SR specifies calibration of the trip units associated with the instrumentation channels of the ATWS-RPT System. The proposed change modifies the required surveillance test interval for performance of SR 3.3.4.1.2 from monthly to quarterly.

The proposed change in trip unit calibration frequency is consistent with the recommendations specified in General Electric (GE) Company licensing topical reports that evaluated increasing allowed out-of-service times (AOTs) and surveillance test intervals (STIs) for boiling water reactor plants. The GE licensing topical reports were developed by the Boiling Water Reactor Owners' Group and subsequently approved by the NRC. The rationale used in this requested change is similar to that used in a license amendment request submitted for QCNPS (Reference 1) on AOTs and STIs for protective instrumentation, which was subsequently

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approved by the NRC (Reference 2). In addition, the proposed change is consistent with the instrument AOTs and STIs found in the Improved Standard Technical Specifications (i.e., NUREG-1433, Revision 2, "Standard Technical Specifications, General Electric Plants, BWR/4").

EGC requests approval of the proposed TS change by May 30, 2003, with a 90-day implementation period.

This request is subdivided as follows.

1. Attachment A contains a description and safety analysis of the proposed change.

2. Attachment B provides the marked-up TS page indicating the proposed change.

3. Attachment C provides the revised TS page incorporating the proposed change. The revised page of the affected TS Bases is also included for informational purposes.

4. Attachment D describes our evaluation performed using the criteria in 10 CFR 50.91(a), "Notice for public comment," paragraph (1), which provides information supporting a finding of no significant hazards consideration using the standards in 10 CFR 50.92, "Issuance of amendment," paragraph (c).

5. Attachment E provides information supporting an Environmental Assessment.

This proposed TS change has been reviewed by the QCNPS Plant Operations Review Committee and the Nuclear Safety Review Board in accordance with the requirements of the EGC Quality Assurance Program.

EGC is notifying the State of Illinois of this request for a change to the TS by transmitting a copy of this letter and its attachments to the designated State Official.

Should you have any questions concerning this letter, please contact Mr. Kenneth Nicely at (630) 657-2803.

Respectfully,

Keith R. Jury

Keith R. Jury
Director - Licensing
Mid-West Regional Operating Group

Attachments: Affidavit
Attachment A: Description and Safety Analysis for Proposed Change
Attachment B: Marked-Up Technical Specifications Page for Proposed Change
Attachment C: Typed Pages for Technical Specifications and Bases Changes
Attachment D: Information Supporting a Finding of No Significant Hazards Consideration
Attachment E: Information Supporting an Environmental Assessment

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Quad Cities Nuclear Power Station
Office of Nuclear Facility Safety – Illinois Department of Nuclear Safety

STATE OF ILLINOIS)

COUNTY OF DUPAGE)

IN THE MATTER OF)

EXELON GENERATION COMPANY, LLC) Docket Numbers

QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2) 50-254 and 50-265

SUBJECT: Request for Technical Specifications Surveillance Requirement 3.3.4.1.2 Change Related to Anticipated Transient Without Scram - Recirculation Pump Trip Instrumentation

AFFIDAVIT

I affirm that the content of this transmittal is true and correct to the best of my knowledge, information and belief.

Keith R. Jury

Keith R. Jury
Director – Licensing
Mid-West Regional Operating Group

Subscribed and sworn to before me, a Notary Public in and

for the State above named, this 22nd day of

August, 2002.

Anese L. Grigsby
Notary Public

OFFICIAL SEAL
ANESE L. GRIGSBY
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 3-13-2005

Attachment A

DESCRIPTION AND SAFETY ANALYSIS FOR PROPOSED CHANGE

A. SUMMARY OF PROPOSED CHANGE

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (EGC) requests a change to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. DPR-29 and DPR-30 for the Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2. The proposed change is to TS Section 3.3.4.1, "Anticipated Transient Without Scram Recirculation Pump Trip (ATWS-RPT) Instrumentation." Specifically, the proposed change increases the surveillance test interval (STI) specified for Surveillance Requirement (SR) 3.3.4.1.2 from monthly (i.e., 31 days) to quarterly (i.e., 92 days). SR 3.3.4.1.2 specifies calibration of the trip units associated with the instrumentation channels of the ATWS-RPT System. The proposed change in frequency of trip unit calibration is consistent with the recommendations specified in General Electric (GE) Company Licensing Topical Reports (LTRs) GENE-770-06-1-A and NEDC-30851P-A (References I.1 and I.2), which have been reviewed and approved by the NRC. In addition, the rationale used in this requested change is similar to that used in a license amendment request (LAR) submitted for QCNPS (Reference I.3) on extended STIs and Allowable Outage Times (AOTs) for protective instrumentation, which was subsequently approved by the NRC (Reference I.4). The proposed change is also consistent with the applicable STI specified in NUREG-1433, Revision 2, "Standard Technical Specifications, General Electric Plants, BWR/4."

A description of the proposed change is provided in detail in Section E, "Description of the Proposed Change," of this Attachment. Attachment B provides the marked-up TS page indicating the proposed change. Attachment C provides typed TS and Bases pages incorporating the proposed change.

B. DESCRIPTION OF THE CURRENT REQUIREMENTS

TS Section 3.3.4.1 provides the operability requirements applicable to the protection and monitoring functions of the ATWS-RPT instrumentation. As part of these operability requirements, SR 3.3.4.1.2 specifies performance of trip unit calibrations on the electronic analog trip units associated with the ATWS-RPT reactor vessel water level and reactor vessel steam dome pressure instrumentation channels. The specified frequency for SR 3.3.4.1.2 is at least once every 31 days.

C. BASES FOR THE CURRENT REQUIREMENTS

The protection and monitoring functions of the ATWS-RPT instrumentation have been designed to ensure safe operation of the reactor by lessening the effects of an ATWS event. The ATWS-RPT instrumentation initiates an RPT, when reactor vessel water level and/or reactor vessel steam dome pressure exceed their specified limits, to insert negative reactivity to the reactor. RPT actuation aids in preserving the integrity of the fuel cladding following events in which a Reactor Protection System (RPS) scram does not occur, but should have occurred.

The ATWS-RPT System includes sensors, relays, bypass capability circuit breakers, and switches that are necessary to cause initiation of an RPT. The ATWS-RPT instrument channels include electronic equipment (e.g., trip units) that compare measured input signals with pre-established setpoints. When the setpoint is exceeded, the channel output relay actuates, which then outputs an ATWS-RPT signal to the trip logic.

The ATWS-RPT consists of two independent trip systems, with two channels of reactor vessel steam dome pressure - high and two channels of reactor vessel water level - low low in each trip system. Each ATWS-RPT trip system is a two-out-of-two logic for each function. Thus, either two reactor vessel water level - low low or two reactor vessel steam dome pressure - high signals are needed to actuate a trip system. The outputs of the channels in a trip system are combined in a logic so that either trip system will trip both recirculation pumps (by tripping the respective motor generator drive motor field breakers).

The operability of the ATWS-RPT instrumentation is dependent on the operability of the individual instrumentation channel functions. Each function must have a required number of operable channels in each trip system, with their setpoints within their specified Allowable Values. The actual setpoint is calibrated consistent with applicable setpoint methodology assumptions.

The TS require instrumentation important to safety, including the ATWS-RPT System, to be tested at a specified interval to ensure a high degree of safety system reliability. SR 3.3.4.1.2 provides assurance that the ATWS-RPT instrumentation channels will perform as required to initiate an RPT should a low-low reactor vessel water level or high reactor vessel steam dome pressure condition occur during reactor power operations (i.e., Mode 1).

D. NEED FOR REVISION OF THE REQUIREMENTS

In 1983 the Boiling Water Reactor Owners' Group (BWROG) formed a Technical Specification Improvement (TSI) Committee. This committee established a program to identify improvements to AOTs and STIs specified in Boiling Water Reactor (BWR) Standard TS. The primary objective was to minimize unnecessary testing and restrictive out-of-service times that could potentially degrade overall plant safety and availability. Examples of some of the problems experienced at QCNPS with SR 3.3.4.1.2 performance are excessive actuation of equipment contributing to component wear-out and unavailability of system equipment during surveillance testing. In addition, the allocation of plant resources required to perform excessive surveillance testing prevents plant personnel from performing other activities that may have a more significant contribution to plant safety.

During April 1984, the TSI Committee met with the NRC and outlined the BWR TS Improvement Program. The NRC expressed agreement with the overall approach. Subsequently, the BWROG developed a series of LTRs (including References I.1 and I.2) which provided the bases for extending the AOTs and STIs for key actuation instrumentation, including that associated with ATWS-RPT. These GE LTRs were subsequently reviewed and approved by the NRC.

DESCRIPTION AND SAFETY ANALYSIS FOR PROPOSED CHANGE

In 1999, QCNPS initiated a TS improvement project to extend the functional test frequency for certain plant instruments (primarily the actuation instruments such as the RPS and Emergency Core Cooling System (ECCS)). This project supported extending the functional test interval from monthly to quarterly and was patterned after the BWROG developed GE LTRs on AOT/STI TS enhancements. QCNPS applied for AOT/STI TS enhancements in a license amendment request (Reference I.3), which was subsequently approved by the NRC (Reference I.4). At the time, the setpoint calculations for most of the instrument channel trip units utilized at QCNPS (i.e., Rosemount analog trip units) were based on a quarterly calibration interval, thus allowing the extension of calibration related STIs for such instrumentation to quarterly. However, the analog trip units utilized for ATWS-RPT functions at QCNPS are manufactured by the GE Company and their calibration interval was intentionally retained at monthly. Since that time, the supporting calculations, using NRC-approved methodology, for the ATWS-RPT reactor vessel level and pressure instruments have been revised and now support a quarterly calibration STI for ATWS-RPT instrumentation related trip units.

E. DESCRIPTION OF THE PROPOSED CHANGE

The following TS change is proposed:

- Revise the required frequency for SR 3.3.4.1.2 from "31 days" to "92 days."

The proposed TS change is reflected on a marked-up copy of the affected TS page in Attachment B. Revised TS and Bases pages affected by the proposed change are also provided as information in Attachment C. Following NRC approval of this request, EGC will revise the TS Bases, in accordance with the TS Bases Control Program of TS Section 5.5.10, "Technical Specifications (TS) Bases Control Program," to incorporate the change identified in Attachment C.

F. SAFETY ANALYSIS OF THE PROPOSED CHANGE

As described in Section 15.8, "Anticipated Transients Without Scram," of the QCNPS Updated Final Safety Analysis Report (UFSAR), ATWS events are not design basis accidents. ATWS events are low probability events in which an anticipated transient occurs and is not followed by an automatic reactor shutdown (scram) when required. The failure of the reactor to scram quickly during these transients can lead to unacceptable reactor coolant system pressures and to fuel damage. The closure of all main steam isolation valves would be the most severe event from virtually all aspects when accompanied by lack of a scram.

The GE LTR developed by the BWROG that pertains to ATWS-RPT actuation instrumentation is GENE-770-06-1-A (Reference I.1). GENE-770-06-1-A provides the justification for TS improvements for selected instrumentation functions at BWR plants. Included in this LTR are proposed changes to STIs and AOTs for the applicable instrumentation including the calibration extension from monthly to quarterly for ATWS-RPT instrument related trip units. The report concluded that extending functional test frequencies and AOTs for certain instruments was appropriate. A NRC Safety Evaluation for GENE-770-06-1 was provided in a letter from C. Rossi (USNRC) to R. Binz (BWROG), dated July 21, 1992. As stated within this NRC Safety Evaluation, the NRC required that plant specific applications confirm the applicability of the generic analyses to the specific plant, and confirm that setpoint drift, which could be expected under the extended test intervals, is within the existing allowances in the respective instrument setpoint calculations. The following discussion provides the information requested by the NRC in plant-specific submittals.

NRC Condition No. 1

Confirm the applicability of the generic analyses to the plant.

Response to NRC Condition No. 1

EGC has reviewed LTR GENE-770-06-1-A and completed the necessary plant-specific evaluations to confirm that the generic results and conclusions of the LTR apply to QCNPS, Units 1 and 2. QCNPS instrumentation for ATWS-RPT actuation consists of four low-low reactor vessel water level instruments and four high reactor vessel steam dome pressure instruments. The signals are combined in a two-out-of-two taken once logic scheme. The LTR analysis for ATWS-RPT System instrumentation (Section 3.3) evaluated the following logic schemes: one-out-of-two taken twice and two-out-of-two taken once. Thus, the LTR-analyzed logic schemes encompass the ATWS-RPT design of QCNPS. The LTR evaluation concluded that the proposed changes to ATWS-RPT instrumentation STIs have a negligible effect on the reactivity shutdown failure frequency. For these reasons, the applicability of the generic analyses to QCNPS for the proposed change has been confirmed.

NRC Condition No. 2

Confirm that setpoint drift, which could be expected under the extended test intervals, is within the existing allowances in the respective instrument setpoint calculations.

Response to NRC Condition No. 2

The setpoint methodology at QCNPS uses the instrument calibration frequency to account for potential instrument drift. The reactor vessel water level instrument loops of the ATWS-RPT System contain GE Model 184C5988G131 analog trip units with Rosemount Model 1151DP4 transmitters. The reactor vessel steam dome pressure instrument loops of the ATWS-RPT System contain the same GE model analog trip units with Rosemount Model 1151GP9 transmitters. The analog trip unit devices are calibrated every 31 days in accordance with the current TS. However, EGC has explicitly evaluated the setpoint drift associated with these GE analog trip units. The results of the drift analysis have been utilized to demonstrate that extending the current calibration frequency from 31 days to 92 days is acceptable and within existing setpoint allowances. This rationale is consistent with the evaluation of analog trip units provided in GE LTR NEDC-30851P-A (Reference I.2). (NOTE: Appendix L of NEDC-30851P-A identifies Commonwealth Edison Company (including QCNPS) as a participating utility in contributing to the development of this LTR.) LTR NEDC-30851P-A has been NRC-approved (NRC Safety Evaluation for NEDC-30851P-A was transmitted in a letter from A. Thadani (USNRC) to T. Pickens (BWROG), dated July 15, 1987). NEDC-30851P-A evaluated the impact of extending functional testing requirements from monthly to quarterly for RPS instrumentation. Although NEDC-30851P-A pertains to RPS instrumentation, Section 5.7.3 of the LTR includes a general discussion on the acceptability of extending testing requirements for analog trip unit devices that would also apply to ATWS-RPT instrumentation analog trip units. This LTR section states "Current vendor drift information on analog trip units indicate that the calibration interval could be extended to 6 months." Therefore, increasing the GE analog trip unit calibration intervals from 31 days to 92 days is consistent with the general requirements of this LTR and is explicitly demonstrated as acceptable per our current setpoint methodology. The frequency of 92 days is consistent with the frequency for existing trip units on RPS and ECCS level channels at QCNPS. In addition, the 92-day frequency is also consistent with the applicable STI specified in NUREG-1433, Revision 2, "Standard Technical Specifications, General Electric Plants, BWR/4." Therefore, we have confirmed that the setpoint drift, which could be expected under the proposed extended STI, is within the existing allowances of the associated ATWS-RPT instrumentation setpoint calculations.

For the above reasons, the proposed change is acceptable and does not involve a reduction in plant safety.

G. IMPACT ON PREVIOUS SUBMITTALS

EGC has reviewed the proposed change for impact on previous submittals awaiting NRC approval, and has determined that there is no impact on any of them.

H. SCHEDULE REQUIREMENTS

We request approval of the proposed change by May 30, 2003, with a 90-day implementation period.

I. REFERENCES

I.1 General Electric Licensing Topical Report GENE-770-06-1-A, "Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," December 1992

I.2 General Electric Licensing Topical Report NEDC-30851P-A, "Technical Specification Improvement Analyses for BWR Reactor Protection System," March 1988

I.3 Letter from R. M. Krich (Commonwealth Edison Company) to U. S. NRC, "Proposed Technical Specifications Change – Surveillance Test Intervals and Allowable Outage Times for Protective Instrumentation," dated December 27, 1999

I.4 Letter from U. S. NRC to O. D. Kingsley (Exelon Generation Company, LLC), "Quad Cities Nuclear Power Station, Units 1 and 2 - Issuance of Amendments," dated March 28, 2001

Attachment B

MARKED-UP

TECHNICAL SPECIFICATIONS PAGE

FOR

PROPOSED CHANGE

<u>REVISED TS PAGE</u>

3.3.4.1-3

SURVEILLANCE REQUIREMENTS

-----------------------------------NOTE-----------------------------------

When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the associated Function maintains ATWS-RPT trip capability.

SURVEILLANCE		FREQUENCY
SR 3.3.4.1.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.4.1.2	Calibrate the trip units.	92 ~~31~~ days
SR 3.3.4.1.3	Perform CHANNEL FUNCTIONAL TEST.	92 days
SR 3.3.4.1.4	Perform CHANNEL CALIBRATION. The Allowable Values shall be: a. Reactor Vessel Water Level — Low Low: $\geq$ -56.3 inches with time delay set to $\geq$ 7.2 seconds and $\leq$ 10.8 seconds; and b. Reactor Vessel Steam Dome Pressure — High: $\leq$ 1219 psig.	24 months
SR 3.3.4.1.5	Perform LOGIC SYSTEM FUNCTIONAL TEST including breaker actuation.	24 months

Attachment C

TYPED PAGES

FOR

TECHNICAL SPECIFICATIONS AND BASES CHANGES

REVISED TS PAGE

3.3.4.1-3

REVISED BASES PAGE
(PROVIDED FOR INFORMATION ONLY)

B 3.3.4.1-9

SURVEILLANCE REQUIREMENTS

-----------------------------------NOTE-----------------------------------

When a channel is placed in an inoperable status solely for performance of required Surveillances, entry into associated Conditions and Required Actions may be delayed for up to 6 hours provided the associated Function maintains ATWS-RPT trip capability.

SURVEILLANCE		FREQUENCY
SR 3.3.4.1.1	Perform CHANNEL CHECK.	12 hours
SR 3.3.4.1.2	Calibrate the trip units.	92 days
SR 3.3.4.1.3	Perform CHANNEL FUNCTIONAL TEST.	92 days
SR 3.3.4.1.4	Perform CHANNEL CALIBRATION. The Allowable Values shall be: a. Reactor Vessel Water Level—Low Low: ≥ -56.3 inches with time delay set to ≥ 7.2 seconds and ≤ 10.8 seconds; and b. Reactor Vessel Steam Dome Pressure-High: ≤ 1219 psig.	24 months
SR 3.3.4.1.5	Perform LOGIC SYSTEM FUNCTIONAL TEST including breaker actuation.	24 months

BASES

SURVEILLANCE REQUIREMENTS (continued)

SR 3.3.4.1.2

Calibration of trip units provides a check of the actual trip setpoints. The channel must be declared inoperable if the trip setting is discovered to be less conservative than the Allowable Value specified in SR 3.3.4.1.4. If the trip setting is discovered to be less conservative than the setting accounted for in the appropriate setpoint methodology, but is not beyond the Allowable Value, the channel performance is still within the requirements of the ATWS analysis. Under these conditions, the setpoint must be readjusted to be equal to or more conservative than accounted for in the appropriate setpoint methodology.

The Frequency of 92 days is based on the reliability analysis of Reference 3.

SR 3.3.4.1.3

A CHANNEL FUNCTIONAL TEST is performed on each required channel to ensure that the channel will perform the intended function. A successful test of the required contact(s) of a channel relay may be performed by the verification of the change of state of a single contact of the relay. This clarifies what is an acceptable CHANNEL FUNCTIONAL TEST of a relay. This is acceptable because all of the other required contacts of the relay are verified by other Technical Specifications and non-Technical Specifications tests at least once per refueling interval with applicable extensions. Any setpoint adjustment shall be consistent with the assumptions of the current plant specific setpoint methodology.

The Frequency of 92 days is based on the reliability analysis of Reference 3.

SR 3.3.4.1.4

A CHANNEL CALIBRATION is a complete check of the instrument loop and the sensor, including the time delay relays associated with the Reactor Vessel Water Level—Low Low Function. This test verifies the channel responds to the

(continued)

Attachment D

INFORMATION SUPPORTING A FINDING OF NO SIGNIFICANT HAZARDS CONSIDERATION

According to 10 CFR 50.92, "Issuance of amendment," paragraph (c) a proposed amendment to an operating license involves a 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.

Overview

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (EGC) requests a change to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. DPR-29 and DPR-30 for the Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2. The proposed change modifies the TS section involving operability requirements for Anticipated Transient Without Scram Recirculation Pump Trip (ATWS-RPT) instrumentation. Specifically, the proposed change modifies the required frequency for performance of a Surveillance Requirement involving calibration of the trip units associated with the instrumentation channels of the ATWS-RPT System. The proposed change in trip unit calibration frequency is consistent with the recommendations specified in General Electric (GE) Company licensing topical reports which justified extending allowed out-of-service times (AOTs) and surveillance test intervals (STIs) for key actuation instrumentation. These GE licensing topical reports have been previously reviewed and approved by the NRC.

The proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed TS change increases a STI for ATWS-RPT System actuation instrumentation based on generic analyses completed by the Boiling Water Reactor Owners' Group (BWROG). The NRC has reviewed and approved these generic analyses and has concurred with the BWROG that the proposed changes do not significantly affect the probability of failure or availability of the affected instrumentation systems. EGC has determined these studies are applicable to QCNPS, Units 1 and 2.

TS requirements that govern operability or routine testing of plant instruments are not assumed to be initiators of any analyzed event because these instruments are intended to prevent, detect, or mitigate accidents. Therefore, this change will not involve an increase in the probability of occurrence of an accident previously evaluated. Additionally, this change will not increase the consequences of an accident previously evaluated because the proposed change does not involve any physical changes to ATWS-RPT System components or the manner in which the ATWS-RPT System is operated. This change will not alter the operation of equipment assumed to be available for the mitigation of accidents or transients specified in the ATWS analysis contained in the QCNPS Updated Final Safety Analysis Report (UFSAR). As justified and approved in licensing topical reports endorsing extended AOTs and STIs, the proposed change establishes or maintains adequate assurance that components are operable when necessary for the prevention or mitigation of accidents or transients, and that plant variables are maintained within limits necessary to satisfy the assumptions for initial conditions in the safety analyses. Furthermore, there will be no change in the types or significant increase in the amounts of any effluents released offsite.

For these reasons, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated?

The proposed change does not involve any physical changes to the ATWS-RPT System or associated components, or the manner in which the ATWS-RPT System functions. Therefore, this change will not create the possibility of a new or different kind of accident from any accident previously evaluated. There is no change being made to the parameters within which the plant is operated. There are no setpoints at which protective or mitigative actions are initiated that are affected by the proposed change. This proposed change will not alter the manner in which equipment operation is initiated nor will the function demands on credited equipment be changed. The change in methods governing normal plant operation is consistent with the current ATWS analysis assumptions specified in the UFSAR. Therefore, this change will 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?

Margins of safety are established in the design of components, the configuration of components to meet certain performance parameters, and in the establishment of setpoints to initiate alarms or actions. The proposed change increases a STI for ATWS-RPT System actuation instrumentation based on generic analyses completed by the BWROG. The analyses determined that there is no significant change in the availability and/or reliability of ATWS-RPT instrumentation as a result of the proposed change in STI. The extended STI does not result in significant changes in the probability of ATWS-RPT instrument failure. Furthermore, the proposed change will not reduce the probability of test-induced ATWS-RPT transients and equipment failures. Therefore, it is concluded that the proposed change will not result in a reduction in the margin of safety.

Conclusion

Based upon the above evaluation, EGC has concluded that the criteria of 10 CFR 50.92(c) are satisfied and that the proposed TS change involves no significant hazards consideration.

Attachment E

INFORMATION SUPPORTING AN ENVIRONMENTAL ASSESSMENT

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," Exelon Generation Company, LLC (EGC) requests a change to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. DPR-29 and DPR-30 for the Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2. The proposed change is to TS Section 3.3.4.1, "Anticipated Transient Without Scram Recirculation Pump Trip (ATWS-RPT) Instrumentation," Surveillance Requirement (SR) 3.3.4.1.2. Specifically, the proposed change modifies the required surveillance test interval for performance of SR 3.3.4.1.2 from monthly to quarterly. SR 3.3.4.1.2 specifies calibration of the trip units associated with the instrumentation channels of the ATWS-RPT System. The proposed change in trip unit calibration frequency is consistent with the recommendations specified in General Electric Company Licensing Topical Reports GENE-770-06-1-A, "Bases for Changes to Surveillance Test Intervals and Allowed Out-of-Service Times for Selected Instrumentation Technical Specifications," and NEDC-30851P-A, "Technical Specification Improvement Analyses for BWR Reactor Protection System," which were developed by the Boiling Water Reactor Owners' Group and approved by the NRC.

EGC has evaluated this proposed change against 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 a categorical exclusion set forth in 10 CFR 51.22, "Criterion for categorical exclusion; identification of licensing and regulatory actions eligible for categorical exclusion or otherwise not requiring environmental review," paragraph (c)(9), and as such, has determined that no irreversible consequences exist in accordance with 10 CFR 50.92, "Issuance of amendment," paragraph (b). This determination is based on the fact that this change is being proposed as an amendment to a 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 that changes an inspection or a surveillance requirement, and the amendment meets the following specific criteria:

(i) The amendment involves no significant hazards consideration.

As demonstrated in Attachment D, the proposed change does not involve a 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 change only revises the required frequency for a Surveillance Requirement that calls for calibration of the trip units associated with the ATWS – RPT instrumentation channels. This proposed change does not affect the amounts of effluents released offsite. The proposed change does not allow for an increase in the unit power level, does not increase the production, nor alter the flow path or method of disposal of radioactive waste or byproducts. Therefore, the proposed change does not affect actual unit effluents.

INFORMATION SUPPORTING AN ENVIRONMENTAL ASSESSMENT

(iii) There is no significant increase in individual or cumulative occupational radiation exposure.

The proposed change will not result in changes in the operation of the facility. The proposed change only changes the required frequency in which trip unit calibrations are performed for the ATWS – RPT instrumentation channels. There will be no change in the level of controls or methodology used for processing of radioactive effluents or handling of solid radioactive waste. The proposed change will not result in any change in the normal radiation levels within the plant. Therefore, there will be no increase in individual or cumulative occupational radiation exposure resulting from this change.