

Commonwealth Edison Company  
1400 Opus Place  
Downers Grove, IL 60515-5701



August 30, 2000

SVP-00-146

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

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 an Amendment to the Technical Specifications For  
Emergency Diesel Generator Cooling Water Pump Allowed Outage  
Time

**Reference:** Letter from R. M. Krich to USNRC, "Request for Technical  
Specifications Changes for Dresden Nuclear Power Station, Units 2 and  
3, LaSalle County Station, Units 1 and 2, and Quad Cities Nuclear  
Power Station, Units 1 and 2, to Convert to Improved Standard  
Technical Specifications," dated March 3, 2000.

In accordance with 10 CFR 50.90, "Application for amendment of license or  
construction permit," we request a change to the Technical Specifications (TS) of  
Facility License Nos. DPR-29 and DPR-30 for the Quad Cities Nuclear Power Station,  
Units 1 and 2 respectively. The proposed change involves TS Section 3.8.B, "Diesel  
Generator Cooling Water System."

The proposed change adds TS requirements when the Diesel Generator Cooling  
Water (DGCW) pump is inoperable and not capable of supporting associated  
Emergency Core Cooling System (ECCS) emergency room coolers. The proposed  
action requirements provide for manual alignment of backup ECCS room cooling from  
the common Emergency Diesel Generator (EDG), designated the 1/2 EDG, cooling  
water pump.

The request is subdivided as follows:

1. Attachment A gives a description and safety analysis of the proposed change,
2. Attachment B includes the marked-up TS pages with the requested change  
indicated,

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3. Attachment C provides information supporting a finding of no significant hazards consideration in accordance with 10 CFR 50.92(c),
4. Attachment D provides information supporting an Environmental Assessment.

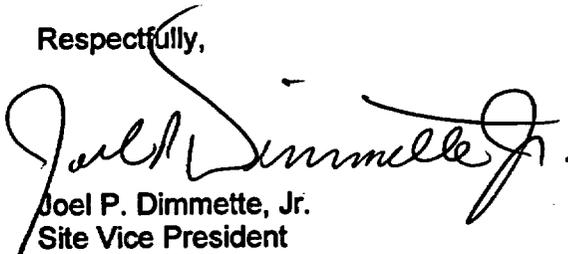
ComEd requests approval of this proposed TS change by March 2, 2001. This approval date is necessary to support our conversion to Improved Standard Technical Specifications (ISTS), NUREG-1433, Revision 1, "Standard Technical Specifications, General Electric Plants, BWR/4," the request for which was submitted to the NRC by letter dated March 3, 2000. Note that this change will be incorporated into our ISTS submittal in a future revision package.

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

ComEd is notifying the State of Illinois of this request 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 concerning this letter, please contact the Mr. C. C. Peterson at (309) 654-2241, extension 3609.

Respectfully,



Joel P. Dimmette, Jr.  
Site Vice President  
Quad Cities Nuclear Power Station

**Attachments: Affidavit**

- A. Description and Safety Analysis for Proposed Changes
- B. Marked-Up Technical Specifications Pages
- C. Information Supporting a Finding of No Significant Hazards Consideration
- D. Information Supporting an Environmental Assessment

cc: Regional Administrator – NRC Region III  
NRC Senior Resident Inspector – Quad Cities Nuclear Power Station

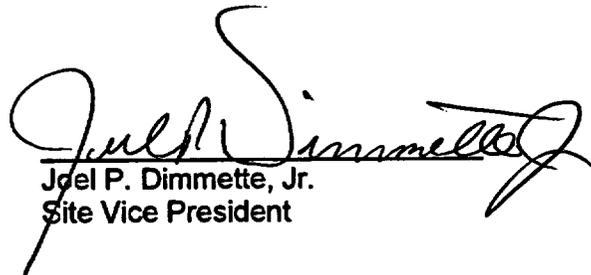
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**bcc:** Project Manager – NRR  
Office of Nuclear Facility Safety, - IDNS  
Senior Reactor Analyst – IDNS  
Manager of Energy Practice – Winston and Strawn  
Director, Licensing and Compliance – ComEd  
Vice President, Regulatory Services– ComEd  
ComEd Document Control Desk Licensing (Hard Copy)  
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W. Leech – MidAmerican Energy Company  
D. Tubbs – MidAmerican Energy Company  
Regulatory Assurance Manager – Dresden Nuclear Power Station  
Regulatory Assurance Manager – Quad Cities Nuclear Power Station  
NRC Coordinator – Quad Cities Nuclear Power Station  
NSRB Site Coordinator – Quad Cities Nuclear Power Station  
Joel Dimmette – Site Vice President Quad Cities Nuclear Power Station  
George Barnes – Station Manager Quad Cities Nuclear Power Station  
SVP Letter File

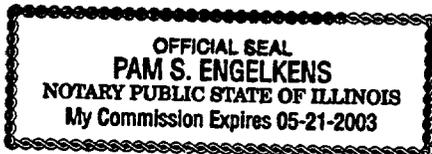
STATE OF ILLINOIS )  
COUNTY OF ROCK ISLAND )  
IN THE MATTER OF )  
COMMONWEALTH EDISON (COMED) COMPANY ) Docket Numbers  
QUAD CITIES NUCLEAR POWER STATION, UNITS 1 AND 2 ) 50-254 and 50-265  
SUBJECT: Proposed Technical Specifications Change  
Emergency Diesel Generator Cooling Water Pump Allowed Outage Time

## AFFIDAVIT

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

  
Joel P. Dimmette, Jr.  
Site Vice President

Subscribed and sworn to before me, a Notary Public in and  
for the State above named, this 30<sup>th</sup> day of  
August, 2000.



  
Notary Public

## ATTACHMENT A

### Proposed Change to Technical Specifications Quad Cities Nuclear Power Station - Units 1 and 2 (Page 1 of 7)

#### DESCRIPTION AND SAFETY ANALYSIS FOR PROPOSED CHANGES

##### A. SUMMARY OF PROPOSED CHANGES

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," we are requesting a change to Appendix A, Technical Specifications (TS), of Facility Operating License Nos. DPR-29 and DPR-30. The proposed change involves TS Section 3.8.B, "Diesel Generator Cooling Water System."

The proposed TS change adds Limiting Conditions For Operation (LCO) and Action requirements when the Unit (i.e., Unit 1 or Unit 2) Diesel Generator Cooling Water (DGCW) pump is inoperable and is not capable of supporting Emergency Core Cooling System (ECCS) emergency room coolers. The proposed action requirement provides for manual alignment of backup ECCS room cooling from the common Emergency Diesel Generator (EDG), designated the 1/2 EDG, cooling water pump.

The proposed change is described in detail in Section E of this Attachment. The marked-up TS pages are provided in Attachment B. Mark-ups are provided for both the existing TS and our proposed conversion to Improved Technical Specifications (ITS) submitted by letter dated March 3, 2000 (see References Section, Section I).

##### B. DESCRIPTION OF THE CURRENT REQUIREMENTS

###### System Description

Each of the EDGs at the Quad Cities Nuclear Power Station is equipped with a DGCW subsystem which provides engine cooling during diesel operation. Each cooling water subsystem contains a DGCW pump, which are located in separate Residual Heat Removal Service Water (RHRSW) pump vaults. The DGCW pumps take suction from the RHRSW inlet header and provide cooling water to the EDG heat exchanger. Ultimately, the cooling water flow is discharged into the RHRSW outlet header.

In addition to providing cooling water to their respective EDGs, the Unit 1 and Unit 2 DGCW pumps provide cooling water to the Unit 1 and Unit 2 ECCS emergency room coolers, respectively. This includes the emergency room coolers for the Core Spray (CS), Residual Heat Removal (RHR), and High Pressure Coolant Injection (HPCI) systems.

The Unit 1 and Unit 2 DGCW pumps can each deliver coolant at a flowrate of 1,304 gallons per minute. Approximately 900 gallons per minute is routed to each of the respective EDG heat exchangers, while approximately 404 gallons per minute is routed to the respective ECCS emergency room coolers. This cooling flow distribution is sufficient to provide adequate cooling to the associated unit EDG and supported ECCS equipment.

The common EDG (i.e., the 1/2 EDG) also has an associated cooling water pump (i.e., the 1/2 DGCW pump). The common DGCW pump has the same capacity as the unit DGCW pumps. During normal system lineup, the 1/2 DGCW pump provides cooling water only to the 1/2 EDG heat exchangers. However, if necessary, the 1/2 DGCW pump can, through procedurally

## ATTACHMENT A

### Proposed Change to Technical Specifications Quad Cities Nuclear Power Station - Units 1 and 2 (Page 2 of 7)

controlled actions, be manually aligned to provide cooling water to either the Unit 1 or Unit 2 ECCS emergency room coolers in addition to providing the cooling requirements for the 1/2 EDG. The In-Service Testing (IST) program already includes periodic testing requirements to ensure operability of this alternate lineup.

#### Current TS Requirements

TS Section 3.8.B, "Diesel Generator Cooling Water System," provides the Limiting Conditions for Operation (LCOs) and TS Action requirements for each DGCW subsystem. A DGCW subsystem shall be operable for each required EDG. A subsystem is comprised of an operable pump and an operable flow path capable of taking suction from the ultimate heat sink and transferring it to the associated EDG. This LCO is applicable whenever the associated EDG is required to be operable. The TS Action specifies that with one or more DGCW subsystems inoperable, declare the associated EDG inoperable and take the actions required by TS Section 3.9.A, "A.C. Sources Operating," or TS Section 3.9.B, "A.C. Sources Shutdown," as applicable. The current TS do not specify actions for the associated loss of ECCS emergency room cooling in the event the Unit DGCW pump is made or found to be inoperable.

#### C. BASES FOR THE CURRENT REQUIREMENTS

The DGCW system, together with the ultimate heat sink, provide sufficient cooling capacity for continued operation of the EDGs during normal and accident conditions.

#### D. NEED FOR REVISION OF THE REQUIREMENTS

The current TS do not specify actions for the loss of ECCS emergency room cooling when a DGCW pump is made or found to be inoperable. The proposed change adds TS Action requirements when either the Unit 1 or Unit 2 DGCW pump is inoperable and not capable of supporting the associated ECCS emergency room coolers. The proposed action requirement provides for manual alignment of backup ECCS room cooling from the 1/2 EDG DGCW pump. Although this is a current operational practice at Quad Cities Nuclear Power Station, it is not explicitly directed by the current TS.

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### Proposed Change to Technical Specifications Quad Cities Nuclear Power Station - Units 1 and 2 (Page 3 of 7)

#### E. DESCRIPTION OF THE PROPOSED CHANGE

The following describes the proposed change to CTS. A similar change is proposed for ITS and is not described separately.

##### Current Requirement, TS Section 3.8.B:

##### **B. Diesel Generator Cooling Water System**

*A diesel generator cooling water (DGCW) subsystem shall be OPERABLE for each required diesel generator with each subsystem comprised of:*

- 1. One OPERABLE DGCW pump, and*
- 2. An OPERABLE flow path capable of taking suction from the ultimate heat sink and transferring cooling water to the associated diesel generator*

##### **APPLICABILITY:**

*When the diesel generator is required to be OPERABLE.*

##### **ACTION:**

*With one or more DGCW subsystems inoperable, declare the associated diesel generator inoperable and take the ACTION required by Specifications 3.9.A or 3.9.B, as applicable.*

## ATTACHMENT A

### Proposed Change to Technical Specifications Quad Cities Nuclear Power Station - Units 1 and 2 (Page 4 of 7)

#### Proposed Requirement, TS Section 3.8.B:

1. *One diesel generator cooling water (DGCW) subsystem shall be OPERABLE for each required OPERABLE diesel generator. An OPERABLE subsystem is comprised of an OPERABLE pump with an OPERABLE flow path capable of taking suction from the ultimate heat sink and transferring cooling water to the associated diesel generator.*
2. *One OPERABLE DGCW pump capable of transferring cooling water to the Emergency Core Cooling System (ECCS) emergency room coolers.*

#### **APPLICABILITY:**

*When the associated diesel generator or ECCS is required to be OPERABLE.*

#### **ACTION:**

1. *With a required DGCW subsystem inoperable and not capable of transferring cooling water to the associated diesel generator, declare the associated diesel generator inoperable and take the ACTION required by Specifications 3.9.A or 3.9.B, as applicable.*
2. *With a required DGCW subsystem inoperable and not capable of transferring cooling water to the Unit ECCS emergency room coolers, within 1 hour align a DGCW subsystem to the ECCS emergency room coolers. Otherwise, declare the supported ECCS equipment inoperable.*

## ATTACHMENT A

### Proposed Change to Technical Specifications Quad Cities Nuclear Power Station - Units 1 and 2 (Page 5 of 7)

#### Current Bases

*The diesel generator cooling water system, with the ultimate heat sink, provides sufficient cooling capacity for continued operation of the diesel generators during normal and accident conditions. The cooling capacity of the system is consistent with the assumptions used in the safety analysis to keep the accident conditions within acceptable limits. OPERABILITY of this system is also dependent upon special measures for protection from flooding in the condenser pit area.*

#### Proposed Bases

*The diesel generator cooling water system, with the ultimate heat sink, provides sufficient cooling capacity for continued operation of the diesel generators during normal and accident conditions. The cooling capacity of the system is consistent with the assumptions used in the safety analysis to keep the accident conditions within acceptable limits. OPERABILITY of this system is also dependent upon special measures for protection from flooding in the condenser pit area.*

*The diesel generator cooling water subsystem also provides cooling water to the Emergency Core Cooling System (ECCS) emergency room coolers. During normal lineup, the diesel generator cooling water subsystems are aligned such that the Unit 1 and Unit 2 subsystems provide cooling to the Unit 1 and Unit 2 ECCS emergency room coolers (respectively). Should one of the Unit diesel generator cooling water subsystems become inoperable, the common diesel generator (i.e., 1/2 diesel generator) cooling water subsystem can be aligned to either Unit's ECCS emergency room coolers.*

## ATTACHMENT A

### Proposed Change to Technical Specifications Quad Cities Nuclear Power Station - Units 1 and 2 (Page 6 of 7)

#### F. SAFETY ANALYSIS OF THE PROPOSED CHANGES

Each Reactor Building contains five ECCS pump rooms. These rooms contain the primary ECCS equipment including the ECCS pumps and supporting equipment. For each unit, two rooms contain RHR equipment, a third room contains CS equipment, while the fourth room contains CS and Reactor Core Isolation Cooling (RCIC) equipment (note: RCIC is not part of the ECCS). The fifth room contains HPCI, which is also equipped with an emergency room cooler. Each room is equipped with an ECCS emergency room cooler that is designed to provide cooling during an accident condition. As noted above, the ECCS emergency room coolers normally receive cooling water flow from the unit DGCW pump.

The proposed change requires that the DGCW pump for the 1/2 EDG be aligned to the unit ECCS emergency room coolers when the normal cooling water supply from the unit DGCW pump is made or found to be inoperable. In the event the Unit 1 or Unit 2 ECCS emergency room coolers are inoperable due to an inoperable DGCW pump or flowpath, the 1/2 DGCW pump can be manually aligned to the ECCS emergency room coolers to provide sufficient cooling water flow. This action involves the operation of manual valves and is governed by Station procedures. ComEd has validated that the re-alignment of the ECCS emergency room coolers can be accomplished in a timely manner. The Operations Department conducted a walkdown of the evolution which demonstrated the re-alignment could be conducted within 30 minutes including the required crew briefing. The 1/2 EDG DGCW pump is a reliable source of cooling water and the pump and the flow path valves are included in the In-Service Testing (IST) program. The IST program periodically demonstrates the capability of the 1/2 EDG DGCW pump to provide simultaneous cooling to both the 1/2 EDG and the ECCS room cooling for either Unit 1 or Unit 2.

The proposed one hour Allowed Outage Time (AOT) provides the operator sufficient time to evaluate and take the necessary actions to restore cooling water to the ECCS emergency room coolers. The one hour AOT is judged acceptable because loss of room cooling would not have an immediate adverse affect on the ability of ECCS equipment to function successfully. The one hour duration minimizes risk while allowing for restoration of support equipment in a timely and controlled fashion. Furthermore, the probability of an event occurring requiring ECCS actuation during this timeframe is judged to be sufficiently small. Using initiating event frequencies from the 1999 model used for Probabilistic Risk Analysis (PRA), the probability of any initiating event within one hour is about  $5E-4$ . This value does not represent the probability of core damage, merely the probability of having an off-normal event such as a transient or Loss of Coolant Accident.

This proposed AOT is consistent with other TS requirements that pertain to a potential loss of safety function. For example TS Section 3.1.A, "Reactor Protection System," allows a one hour timeframe to take action when both Reactor Protection System (RPS) trip systems are found to have less than the required minimum channels per trip system. This concept is also applied in TS Section 3.0.C, which allows a one hour duration for initiating shutdown actions when a TS LCO is not met. The one hour timeframe minimizes risk and allows sufficient time to complete corrective measures in a controlled and timely fashion.

## **ATTACHMENT A**

### **Proposed Change to Technical Specifications Quad Cities Nuclear Power Station - Units 1 and 2 (Page 7 of 7)**

#### **G. IMPACT ON PREVIOUS SUBMITTALS**

The proposed change has an impact on ComEd's ITS submittal (see Reference Section, Section I). A revision package will be submitted that incorporates this proposed change.

#### **H. SCHEDULE REQUIREMENTS**

ComEd requests approval of this proposed TS change by March 2, 2001. This approval date will facilitate our conversion to the (ISTS), NUREG-1433, Revision 1, "Standard Technical Specifications, General Electric Plants, BWR/4."

#### **I. REFERENCES**

Letter from R. M. Krich to USNRC, "Request for Technical Specifications Changes for Dresden Nuclear Power Station, Units 2 and 3, LaSalle County Station, Units 1 and 2, and Quad Cities Nuclear Power Station, Units 1 and 2, to Convert to Improved Standard Technical Specifications," dated March 3, 2000.

**ATTACHMENT B**

**Proposed Change to Technical Specifications  
Quad Cities Nuclear Power Station - Units 1 and 2**

**Marked-up Technical Specifications Changes  
(Current Technical Specifications)**

**3.8 - LIMITING CONDITIONS FOR OPERATION**

**B. Diesel Generator Cooling Water System**

A diesel generator cooling water (DGCW) subsystem shall be OPERABLE for each required diesel generator with each subsystem comprised of:

1. One OPERABLE DGCW pump, and
2. An OPERABLE flow path capable of taking suction from the ultimate heat sink and transferring cooling water to the associated diesel generator.

**APPLICABILITY:**

When the diesel generator is required to be OPERABLE.

**ACTION:**

With one or more DGCW subsystems inoperable, declare the associated diesel generator inoperable and take the ACTION required by Specifications 3.9.A or 3.9.B, as applicable.

**4.8 - SURVEILLANCE REQUIREMENTS**

**B. Diesel Generator Cooling Water System**

Each of the required DGCW subsystems shall be demonstrated OPERABLE:

1. At least once per 31 days by verifying that each valve in the flow path that is not locked, sealed or otherwise secured in position, is in its correct position.
2. At least once per 18 months by verifying that each pump starts automatically upon receipt of a start signal for the associated diesel generator.

**INSERT 1**

## INSERT 1

1. One diesel generator cooling water (DGCW) subsystem shall be OPERABLE for each required OPERABLE diesel generator. An OPERABLE subsystem is comprised of an OPERABLE pump with an OPERABLE flow path capable of taking suction from the ultimate heat sink and transferring cooling water to the associated diesel generator.
2. One OPERABLE DGCW pump capable of transferring cooling water to the Emergency Core Cooling System (ECCS) emergency room coolers.

### APPLICABILITY:

*When the associated diesel generator or ECCS is required to be OPERABLE.*

### ACTION:

1. With a required DGCW subsystem inoperable and not capable of transferring cooling water to the associated diesel generator, declare the associated diesel generator inoperable and take the ACTION required by Specifications 3.9.A or 3.9.B, as applicable.
2. With a required DGCW subsystem inoperable and not capable of transferring cooling water to the Unit ECCS emergency room coolers, within 1 hour align a DGCW subsystem to the ECCS emergency room coolers. Otherwise, declare the supported ECCS equipment inoperable.

**BASES****3/4.8.A Residual Heat Removal Service Water System**

The residual heat removal service water system, with the ultimate heat sink, provides sufficient cooling capacity for continued operation of the residual heat removal system and of other safety-related equipment, e.g., RHRSW vault coolers and the control room emergency ventilation system refrigeration units, during normal and accident conditions. The redundant cooling capacity of the system, assuming a single failure, is consistent with the assumptions used in the safety analysis to keep the accident conditions within acceptable limits. Since only one of the four pumps is required to provide the necessary cooling capacity, a thirty day repair period is allowed for one pump out of service. OPERABILITY of this system is also dependent upon special measures for protection from flooding in the condenser pit area.

**3/4.8.B Diesel Generator Cooling Water System**

The diesel generator cooling water system, with the ultimate heat sink, provides sufficient cooling capacity for continued operation of the diesel generators during normal and accident conditions. The cooling capacity of the system is consistent with the assumptions used in the safety analysis to keep the accident conditions within acceptable limits. OPERABILITY of this system is also dependent upon special measures for protection from flooding in the condenser pit area.

**3/4.8.C Ultimate Heat Sink**

← INSERT 2

The Mississippi River provides an ultimate heat sink with sufficient cooling capacity to either provide normal cooldown of the units, or to mitigate the effects of accident conditions within acceptable limits for one unit while conducting a normal cooldown on the other unit.

**3/4.8.D Control Room Emergency Ventilation System**

The control room emergency filtration system maintains habitable conditions for operations personnel during and following all design basis accident conditions. This system, in conjunction with control room design, is based on limiting the radiation exposure to personnel occupying the room to five rem or less whole body, or its equivalent.

Testing of the Control Room Emergency Ventilation System during the pressurization mode of operation verifies the integrity of the Control Room and the assumed inleakage rates of potentially contaminated air. During the pressurization mode of operation the Control Room Emergency Ventilation system is designed to slightly pressurize the Control Room to a positive pressure greater than or equal to 0.125" w.g. with respect to potentially contaminated areas. Potentially contaminated areas adjacent to the Control Room include the outside air, Turbine Building, Battery Room, Shift Engineers Office, the west stairwell and the adjacent hallway. Although the Cable Spreading Room is adjacent, it is not a potentially contaminated area because it is part of the Control Room Emergency Zone. The Cable Spreading Room is therefore not considered an adjacent area for the purposes of periodic testing.

## **INSERT 2**

**The diesel generator cooling water subsystem also provides cooling water to the Emergency Core Cooling System (ECCS) emergency room coolers. During normal lineup, the diesel generator cooling water subsystems are aligned such that the Unit 1 and Unit 2 subsystems provide cooling to the Unit 1 and Unit 2 ECCS emergency room coolers (respectively). Should one of the Unit diesel generator cooling water subsystems become inoperable, the common diesel generator (i.e., 1/2 diesel generator) cooling water subsystem can be aligned to either Unit's ECCS emergency room coolers.**

**ATTACHMENT B**

**Proposed Change to Technical Specifications  
Quad Cities Nuclear Power Station - Units 1 and 2**

**Marked-up Technical Specifications Changes  
(Improved Standard Technical Specifications)**

3.7 PLANT SYSTEMS

3.7.2 Diesel Generator Cooling Water (DGCW) System

LCO 3.7.2 The following DGCW subsystems shall be OPERABLE:

- a. Two unit DGCW subsystems; and
- b. The opposite unit DGCW subsystem capable of supporting its associated diesel generator (DG).

APPLICABILITY: MODES 1, 2, and 3.

ACTIONS

-----NOTE-----  
Separate Condition entry is allowed for each DGCW subsystem.  
-----

CONDITION	REQUIRED ACTION	COMPLETION TIME
A. One or more DGCW subsystems inoperable. <i>and not capable of supporting its associated DG</i>	A.1 Declare <sup>the associated supported</sup> <del>component(s)</del> DG inoperable.	Immediately

INSERT 3

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.7.2.1 Verify each required DGCW subsystem manual valve in the flow path, that is not locked, sealed, or otherwise secured in position, is in the correct position.	31 days

(continued)

**INSERT 3**

**B. Required DGCW subsystem inoperable and not capable of supporting the ECCS emergency room coolers.**

**B.1 Align a DGCW subsystem to the ECCS emergency room coolers. 1 hour**

**OR**

**B.2 Declare the supported ECCS components inoperable. 1 hour**

BASES (continued)

LCO

The OPERABILITY of the unit DGCW System is required to provide a coolant source to ensure effective operation of the DGs and ECCS in the event of an accident or transient. The OPERABILITY of the DGCW System is based on having an OPERABLE pump and an OPERABLE flow path capable of taking suction from the ultimate heat sink and transferring cooling water to the associated DG heat exchangers and ECCS room emergency coolers. The OPERABILITY of the opposite unit's DGCW subsystem is required to provide adequate cooling to ensure effective operation of the required opposite unit's DG heat exchanger in the event of an accident in order to support operation of the shared systems such as the Standby Gas Treatment System and Control Room Emergency Ventilation System.

each

subsystem

one DGCW subsystem capable of supporting the

An adequate suction source is not addressed in this LCO since the minimum net positive suction head of the DGCW pump and the maximum suction source temperature are covered by the requirements specified in LCO 3.7.3, "Ultimate Heat Sink (UHS)."

APPLICABILITY

In MODES 1, 2, and 3, the DGCW subsystems are required to be OPERABLE to support the OPERABILITY of equipment serviced by the DGCW subsystems and required to be OPERABLE in these MODES.

In MODES 4 and 5, the OPERABILITY requirements of the DGCW subsystems are determined by the systems they support; therefore, the requirements are not the same for all facets of operation in MODES 4 and 5. Thus, the LCOs of the systems supported by the DGCW subsystems will govern DGCW System OPERABILITY requirements in MODES 4 and 5.

ACTIONS

The ACTIONS Table is modified by a Note indicating that separate Condition entry is allowed for each DGCW subsystem. This is acceptable, since the Required Actions for the Condition provide appropriate compensatory actions for each inoperable DGCW subsystem. Complying with the Required Actions for one inoperable DGCW subsystem may allow for continued operation, and subsequent inoperable DGCW subsystem(s) are governed by separate Condition entry and application of associated Required Actions.

(continued)

BASES

ACTIONS  
(continued)

A.1

If one or more DGCW subsystems are inoperable, ~~the associated DG(s) and ECCS components, supported by the affected ECCS room emergency coolers,~~ <sup>and not capable of supporting its associated</sup> the DG, the DG(s) cannot perform their intended function and must be immediately declared inoperable. In accordance with LCO 3.0.6, this also requires entering into the Applicable Conditions and Required Actions for LCO 3.8.1, "AC Sources-Operating," and LCO 3.5.1, "Emergency Core Cooling System (ECCS) Operating," as applicable.

INSERT 4

SURVEILLANCE  
REQUIREMENTS

SR 3.7.2.1

Verifying the correct alignment for manual valves in the DGCW subsystem flow paths provides assurance that the proper flow paths will exist for DGCW subsystem operation. This SR does not apply to valves that are locked, sealed, or otherwise secured in position since these valves were verified to be in the correct position prior to locking, sealing, or securing. This SR does not require any testing or valve manipulation; rather, it involves verification that those valves capable of being mispositioned are in the correct position. This SR does not apply to valves that cannot be inadvertently misaligned, such as check valves.

The 31 day Frequency is based on engineering judgment, is consistent with the procedural controls governing valve operation, and ensures correct valve positions.

SR 3.7.2.2

This SR ensures that each required DGCW subsystem pump will automatically start to provide required cooling to the associated DG heat exchangers and ECCS room emergency coolers when the DG starts.

Operating experience has shown that these components usually pass the SR when performed at the 24 month Frequency, which is based at the refueling cycle. Therefore, this Frequency is concluded to be acceptable from a reliability standpoint.

(continued)

#### INSERT 4

##### B.1 and B.2

With the required DGCW subsystem inoperable and not capable of supporting the ECCS emergency room coolers, the ECCS cannot perform its intended function and therefore continued operation is only allowed if the DGCW subsystem can be aligned to provide cooling to the ECCS emergency room coolers within 1 hour. This may be accomplished by aligning the DG 1/2 DGCW subsystem to support the ECCS emergency room coolers. If this cannot be accomplished the supported ECCS components must be declared inoperable within the same 1 hour period. In accordance with LCO 3.0.6, this also requires entering into the Applicable Conditions and Required Actions for LCO 3.5.1, "Emergency Core Cooling System (ECCS) Operating." The 1 hour Completion Time is based on the time required to reasonably complete the alignment of the DG 1/2 DGCW subsystem and the low probability of an event occurring requiring the DGCW subsystems to support the ECCS emergency room coolers during the time period.

## ATTACHMENT C

### Proposed Change to Technical Specifications Quad Cities Nuclear Power Station - Units 1 and 2 (Page 1 of 2)

#### INFORMATION SUPPORTING A FINDING OF NO SIGNIFICANT HAZARDS CONSIDERATION

Commonwealth Edison (ComEd) Company has evaluated the proposed Technical Specifications (TS) change for Quad Cities Nuclear Power Station (QCNPS), Units 1 and 2, and has determined that it involves no significant hazards consideration. According to 10 CFR 50.92(c), "Issuance of amendment," a proposed change to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed change would not:

Involve a significant increase in the probability of occurrence or consequences of an accident previously evaluated;

Create the possibility of a new or different kind of accident from any previously analyzed; or

Involve a significant reduction in a margin of safety.

In accordance with 10 CFR 50.90, "Application for amendment of license or construction permit," ComEd proposes to amend Appendix A, TS, of Facility Operating License Nos. DPR-29 and DPR-30. The proposed change involves TS Section 3.8.B, "Diesel Generator Cooling Water System."

The proposed change provides a new TS action requirement when either the Unit 1 or Unit 2 Diesel Generator Cooling Water (DGCW) pump is inoperable and not capable of supporting the associated Emergency Core Cooling System (ECCS) emergency room coolers.

The determination that the criteria set forth in 10 CFR 50.92 are met for this change is provided below:

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

The proposed Technical Specifications (TS) change does not modify plant equipment or change the way plant equipment is operated during a design basis accident condition. The proposed change provides additional action requirements to ensure equipment used to mitigate an accident remains operable. Specifically, the proposed change requires that the Diesel Generator Cooling Water (DGCW) pump for the common Emergency Diesel Generator (EDG) be aligned to the unit Emergency Core Cooling System (ECCS) emergency room coolers when the normal cooling water supply for that unit is made or found to be inoperable. Accident consequences are not impacted because the proposed one hour allowance for this action is consistent with existing TS requirements for a loss of function condition. This required action will ensure equipment important to safety remains available to mitigate the consequences of an accident. The proposed change does not adversely impact any systems, structures and components important to safety and has no impact on offsite dose consequences. In addition, the DGCW pump is not an initiator of any accident previously evaluated. For these reasons, the proposed change does not involve an increase in the probability or consequences of an accident previously evaluated.

## **ATTACHMENT C**

### **Proposed Change to Technical Specifications Quad Cities Nuclear Power Station - Units 1 and 2 (Page 2 of 2)**

#### **INFORMATION SUPPORTING A FINDING OF NO SIGNIFICANT HAZARDS CONSIDERATION**

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

The proposed change adds additional requirements to the TS that ensure equipment important to safety remains operable. The proposed change enhances safety and has no adverse effect on the way in which systems structures and components respond during accident conditions. The proposed change does not introduce a new mode of plant operation and does not involve physical modifications to the plant. In addition, the proposed change has no impact on primary plant mitigation barriers, including the fuel clad, reactor coolant, and containment barriers. For these reasons, the proposed change does not create the possibility of a new or different kind of accident from any previously evaluated.

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

The proposed change provides additional TS requirements to ensure equipment important to safety remains operable during design basis accident conditions. The proposed change enhances safety by providing for an alternate source of cooling to the ECCS emergency room coolers when the normal cooling water source is made or found to be inoperable. Application of the In-Service Testing program to this alternate source of cooling water requires periodic testing to ensure the alternate cooling water source remains reliable.

For these reasons, the change does not involve a significant reduction in a margin of safety.

Therefore, based upon the above evaluation, ComEd has concluded that these changes involve no significant hazards considerations.

## **ATTACHMENT D**

### **Proposed Change to Technical Specifications Quad Cities Nuclear Power Station - Units 1 and 2 (Page 1 of 1)**

#### **INFORMATION SUPPORTING AN ENVIRONMENTAL ASSESSMENT**

Commonwealth Edison (ComEd) Company has evaluated the proposed change to the Technical Specifications (TS) 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." ComEd has determined that this change meets the criteria for a categorical exclusion set forth in 10 CFR 51.22(c)(9) and as such, has determined that no irreversible consequences exist in accordance with 10 CFR 50.92(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," that 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 proposed change meets the following specific criteria:

- (i) the proposed change involves no significant hazards consideration.

As demonstrated in Attachment C, this proposed amendment 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.

As documented in Attachment C, there will be no significant change in the types or significant increase in the amounts of any effluents released offsite.

- (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. There will be no change in the level of controls or methodology used for processing of radioactive effluents or handling of solid radioactive waste, nor will the proposal result in any change in the normal radiation levels within the plant. Therefore, there will be no significant increase in individual or cumulative occupational radiation exposure resulting from this proposed change.