Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

May 18, 1993

Dr. Thomas E. Murley
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attn: Document Control Desk

Subject: Quad Cities Nuclear Power Station Unit 1 and Unit 2
Application of Amendment to Facility Operating Licenses
DPR-29 and DPR-30, Appendix A,
Technical Specifications;
Proposed Revision to the Basis of the Scram and
Isolation Setpoint for the Main Steam Line Radiation Monitors
NRC Docket Nos. 50-254 and 50-265

References:

(a) I.M. Johnson to T.E. Murley letters dated September 16, 1988 and September 28, 1988

(b) T.M. Ross to H.E. Bliss letter dated January 18, 1989

(c) R. Stols to T.E. Murley letter dated May 1, 1989

(d) T.M. Ross to H.E. Bliss letter dated August 24, 1989

Dear Dr. Murley:

In the Reference (a) letters, Commonwealth Edison Company (CECo) submitted technical information pertaining to the installation and operation of a Hydrogen Water Chemistry (HWC) system at Quad Cities Station, Units 1 and 2. HWC, in combination with high purity reactor coolant, is expected to reduce the susceptibility of reactor piping and material to intergranular stress corrosion cracking (IGSCC). These letters included a proposed Technical Specification amendment to raise the scram and isolation setpoint of the Main Steam Line Radiation Monitors (MSLRM) from 7 times the normal full power background (NFPB) to 15 times the NFPB, in order to compensate for increased radiation levels in the main steam due to HWC.

The NRC approved this proposed amendment to the Technical Specifications, and issued a Safety Evaluation (SER) for the amendment in Reference (b). CECo provided comments to the SER in Reference (c), and the NRC issued a revised SER which incorporated the comments, in Reference (d).

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The value of 15 times NFPB was defined in the SER as 15 times an assumed NFPB of 100 mr/hr, resulting in a setpoint of 1500 mr/hr. The proposed change to 15 times NFPB from 7 times NFPB was technically justified on the basis that the new setpoint (1500 mr/hr) is less than the calculated dose rate (8 R/hr) for the limiting design basis accident (Control Rod Drop Accident).

In collaboration with the Electric Power Research Institute (EPRI) and General Electric (GE), CECo will conduct a comprehensive Stress Corrosion Monitoring (SCM) test on Quad Cities Unit 2 in July 1993. The purpose of the SCM test is to provide an in-core and in-pipe environmental evaluation for reactor component and recirculation system piping lifetime projections. The test will also optimize hydrogen injection rates for best plant performance.

During the SCM testing sequences, the hydrogen injection rates will be increased such that the MSLRM readings will approach the current scram and isolation setpoint value of 1500 mr/hr. In order to eliminate the potential for unwarranted challenges to safety systems, CECo has evaluated the basis of the MSLRM setpoint and the regulatory requirements for revising the setpoint.

The basis of the Technical Specification setpoint (15 times NFPB), as described in the NRC SER, is an assumed NFPB of 100 mr/hr. Recent measurements by CECo have indicated that the actual NFPB is 150 mr/hr. Utilization of this value for NFPB during the SCM test would result in a scram and isolation setpoint for the MSLRMs of 2250 mr/hr. However, CECo has determined that a change to the FSAR to incorporate the actual background level of 150 mr/hr during the SCM test would result in a reduction in the margin of safety as defined in the basis of a Technical Specification (10 CFR 50.59. (a)(2)(iii)). Therefore, in accordance with 10 CFR 50.59(c), CECo is required to submit a license amendment pursuant to 10 CFR 50.90.

Pursuant to 10 CFR 50.90, CECo proposes to amend Appendix A, Technical Specifications, of Facility Operating Licenses DPR-29 and DPR-30. This proposed amendment would revise the basis of the scram and isolation setpoint for the MSLRMs, as defined in NRC SERs dated January 18, 1989 and August 24, 1989. The proposed change would reduce the potential for unwarranted challenges to safety systems during a special test of the HWC system. CECo has evaluated this proposed change to the basis of the Technical Specification for the MSLRM scram and isolation setpoint, and has concluded that the proposed change (and implementation of the associated setpoint of 2250 mr/hr during the SCM test) would not result in any negative impact upon the radiological release consequences of the limiting design basis accident. The proposed amendment, including CECo's evaluation pursuant to 10 CFR 50.92(c) and an Environmental Assessment, is provided in the Attachment to this letter. CECo respectfully requests review and approval of this proposed license amendment by July 15, 1993.

This proposed license amendment to revise the basis of a Technical Specification (MSLRM scram and isolation setpoint) has been reviewed and approved by CECo On-Site and Off-Site Review in accordance with Commonwealth Edison procedures.

To the best of my knowledge and belief, the statements contained above are true and correct. In some respect, these statements are not based upon my personal knowledge, but obtained information from other CECo employees, contractor employees, and consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

CECo is notifying the State of Illinois of this proposed license amendment by transmitting a copy of this letter and Attachment to the designated state official.

If there are any questions concerning this matter, please contact this office.

Sincerely,

John L. Schrage
Nuclear Licensing Administrator

Attachment

cc: A.B. Davis, Regional Administrator-RIII
C.P. Patel, Project Manager-NRR
T.E. Taylor, Senior Resident Inspector-Quad Cities
Office of Nuclear Facility Safety-IDNS

State of Ill, County of Dupage
Signed before me on this 18th day
of May, 1993 by JLS
Notary Public

" OFFICIAL SEAL "
SANDRA C. LARA
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES 6/25/94

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ATTACHMENT

1.0 SUMMARY

Commonwealth Edison Company (CECo) proposes to amend the basis of the Quad Cities Station Unit 1 and Unit 2 Technical Specifications (DPR-29 and DPR-30) for the Main Steam Line Radiation Monitor scram and isolation setpoint as described in the NRC Safety Evaluation Report (SER) and Technical Specification Amendments, dated January 18, 1989 and revised on August 24, 1989. This would be a change to the basis of the Technical Specification, and is necessary in order to increase the MSLRM setpoint during a special test of the Hydrogen Water Chemistry system in mid-1993. The proposed change is based upon actual background radiation levels (versus an assumed design value) at the MSLRM during power operation (without Hydrogen water Chemistry). By increasing the MSLRM scram and isolation setpoint during the special test, CECo will minimize the potential for unwarranted challenges to safety systems. The safety assessment, no significant hazards consideration, and environmental assessment of the proposed change is described in the following sections:

- Historical Background of Hydrogen Water Chemistry and associated Technical Specifications
- Summary of Stress Corrosion Monitoring Special Test and Proposed Change to the Basis of the Technical Specifications
- Safety Assessment of the Proposed Change
- Evaluation of Significant Hazards Consideration for the Proposed Change
- Environmental Assessment of the Proposed Change

2.0 HYDROGEN WATER CHEMISTRY AND TECHNICAL SPECIFICATION BACKGROUND

Commonwealth Edison (CECo) installed the Hydrogen Water Chemistry (HWC) system at Quad Cities Station Units 1 and 2 in 1988, in accordance with the guidance provided in Electric Power Research Institute (EPRI) Licensing Topical Report EPRI NP-5288-SR-A, "Guidelines for Permanent BWR Hydrogen Water Chemistry Installations". The purpose of the HWC system is to inject hydrogen into the reactor coolant, via the condensate system, in order to suppress the dissolved oxygen concentrations (see Section 3.0 of this document). HWC, in combination with high purity reactor coolant, is expected to reduce the suspectibility of reactor piping and material to intergranular stress corrosion cracking (IGSCC) (see Section 3.0 of this document). The injection of hydrogen into the feedwater (via the condensate system), however, lowers the oxidizing potential in the reactor coolant, which in turn converts more nitrogen-16 (N-16) to volatile species. This results in an increase in main steam line radiation levels, thus necessitating a change in the scram and isolation setpoint, and corresponding Technical Specifications for the Main Steam Line Radiation Monitor (MSLRM) setpoints.

CECo submitted a proposed license amendment for the HWC system, and associated Technical Specification changes (revised MSLRM setpoints) on September 16, 1988. On September 28, 1988, CECo provided additional information for the proposed amendment. The proposed Technical Specification amendment increased the MSLRM

scram and isolation setpoint from seven times the Normal Full Power Background (NFPB) to fifteen 15 times NFPB. The NRC, on January 18, 1989, issued their safety evaluation and concluded that the permanent HWC system at Quad Cities Units 1 and 2 complied with the EPRI Guidelines and that the proposed Technical Specification Change for the MSLRM scram and isolation setpoints was acceptable. The original SER was superceded on August 24, 1989, based upon additional design basis information which CECo submitted on May 1, 1989.

The proposed set point increase from 7 to 15 times the current NFPB was based upon EPRI Guidelines, which allowed for a factor of five (5) increase in the current NFPB due to increased N-16 carry over in the main steam, and a factor of three (3) to account for monitor response variation in accordance with the BWR Standard Technical Specifications. The existing MSLRM setpoint (in 1988) of 700 mr/hr was seven times the assumed NFPB of 100 mr/hr. The proposed MSLRM setpoint of 1.5 R/hr (5x3x100 mr/hr) was technically justified on the basis that a Control Rod Drop Accident (CRDA) was the only design basis event at Quad Cities station that took credit for the MSLRM. Since the calculated dose rate of 8 R/hr from the CRDA was approximately five times the proposed set point of 1.5 R/hr, CECo concluded that the MSLRMs would retain their capability to initiate the required safety actions on the high radiation signal caused by the CRDA. CECo further concluded that raising the MSLRM trip setpoints from 700 mr/hr to 1.5 R/hr would not significantly increase the radiological consequences of a CRDA.

3.0 STRESS CORROSION MONITORING SPECIAL TEST AND PROPOSED CHANGE TO THE BASIS OF THE TECHNICAL SPECIFICATIONS

3.1 Introduction; Purpose of Hydrogen Water Chemistry

Boiling Water Reactors use high purity water as the primary recirculation coolant in the direct cycle production of steam. This water contains a steady state value of 100 to 300 ppb of dissolved oxygen and the stoichiometrically related dissolved hydrogen because of the simultaneous action of hydrolysis and stripping in the core. It is well known that, in the presence of high stresses, this is sufficient oxygen in the coolant to cause intergranular stress corrosion cracking (IGSCC) of stainless steels. On-going programs strongly indicate that mitigation of IGSCC can be accomplished with the reduction of dissolved oxygen concentrations to an Electrochemical Corrosion Potential (ECP) value of less than -230 mV (SHE) and maintenance of water quality to a conductivity of less than 0.3 uS/cm.

3.2 Purpose of Special Test

In collaboration with the Electric Power Research Institute (EPRI) and General Electric (GE), CECo will conduct a comprehensive Stress Corrosion Monitoring (SCM) Test on Quad Cities Station Unit 2 in mid-1993. The purpose of the SCM test is to provide an in-core and in-pipe environmental evaluation and predictive capability for reactor internal component and recirculation system piping lifetime projections. The test will also optimize hydrogen injection rates for best plant

performance, and will benchmark the data acquired by the Crack Arrest Verification (CAV) system. The CAV system employed for the Quad Cities Unit 2 SCM Test has both crack growth and ECP sensors adjacent to each other for all monitored locations. The sensors will be located in both recirculation system loops, the reactor vessel drain line, and in two LPRM strings.

3.3 Plant Testing Program during the SCM Test

After plant startup following the twelfth refuel outage at Quad Cities Unit 2 (Q2R12), CECo will establish an initial period of normal water chemistry (NWC) operation. The purpose of this period of NWC operation is to establish measurable crack growth rates from the sensors. At the conclusion of the NWC baseline, CECo will perform a series of hydrogen injection test sequences. The details of the program are described in Table 1.

TABLE 1
HYDROGEN WATER CHEMISTRY
SPECIAL TEST SEQUENCE

Test Sequence	Expected Duration (Hours)	Percent Power (%)	H2 Injection (scfm)
1	Baseline	85	40
	4		60
	3		80
	3		100
	2		120
	2		MIR*
2	Baseline	90	40
	4		60
	3		80
	3		100
	2		120
	2		MIR*
3	Baseline		40
	4		60
	3		80
	3		100
	2		120
	2	95	MIR*
4	Baseline		40
	4		60
	3		80
	3		100
	2		120
	2	100	

MIR* MIR equals the maximum hydrogen injection rate, not to exceed a recombiner temperature of 900°F.

TABLE 1
HYDROGEN WATER CHEMISTRY
SPECIAL TEST SEQUENCE
(Continued)

Test Sequence	Expected Duration (Hours)	Percent Power(%)	H2 Injection(scfm)
5	8	100	Based on results from test sequence 4
6	8	100	Based on results from test sequence 4
7	8	90	Based on results from test sequence 2
8	8	90	Based on results from test sequence 2
9 Optional	72	100	Based on results from test sequence 5
10 Optional	72	100	Based on results from test sequence 6
11	96-144	100	Based on results from test sequence 6 or 10

The test sequence is designed to obtain ECP, crack growth, and related water chemistry measurements as a function of hydrogen injection rates, and to determine the hydrogen injection rates necessary to protect the lower vessel, in-core components, and the recirculation system for a low power density BWR3.

3.4 Projected Impact Upon Main Steam Line Radiation Monitor

During normal plant operation without HWC, the MSLRM has a typical full power background of approximately 150 mr/hr. During normal HWC operation (50 scfm @ 100% power, which results in a feedwater hydrogen concentration of approximately 1.6 ppm) the MSLRM has a typical reading of 750 mr/hr. Normalizing the data (750 mr/hr / 150 mr/hr) realizes approximately a 5.0 times increase in MSLRM readings. This increase is typical of other plants operating with HWC at this injection level.

During the SCM testing sequences, feedwater hydrogen concentrations can reach as high as 4.0 ppm with a hydrogen injection rate of 120 scfm. It is projected that at the higher injection rates, the normalized MSLRM readings could reach 9 times the NFPB. When this multiplier is applied to actual background levels, the MSLRM

reading will equate to approximately 1350 mr/hr (150 mr/hr × 9.0). The MSLRM scram and isolation setpoint at Quad Cities Unit 2 is currently set at 1500 mrem/hr (15 times 100 mr/hr).

3.5 Need for Setpoint Change and Revision to Basis of the MSLRM Technical Specification

Based upon the postulated radiation levels during the special test (1350 mr/hr) and the current MSLRM scram and isolation setpoints (1500 mr/hr; 15 times NFPB), CECo has concluded that the setpoints should be increased to avoid potential unwarranted challenges to safety systems. The proposed setpoints will be based upon the Technical Specification setpoint (15 times NFPB) and the actual full power background levels (approximately 150 mr/hr).

CECo proposes to increase the MSLRM scram and isolation setpoints from 1500 mr/hr to 2250 mr/hr prior to the start of the SCM test, and return the setpoints to 1500 mr/hr at the conclusion of the test. The test sequence starts at 85% reactor power, and at that point, the MSLRM setpoints would be increased for the duration of the test. If the unit were to trip while the setpoint was at 2250 mr/hr, the test procedure would require the reduction of the MSLRM setpoints to the original 1500 mr/hr prior to reactor startup.

The regulatory basis for the increased MSLRM setpoints is a revision to the basis for the existing MSLRM Technical Specification, as described in the January 18, 1989 Technical Specification amendment and NRC SER and revised SER dated August 24, 1989.

4.0 SAFETY ASSESSMENT OF PROPOSED CHANGE TO THE BASIS OF THE MSLRM TECHNICAL SPECIFICATIONS

4.1 Basis for Revised Setpoint

The proposed setpoint for the MSLRM scram and isolation signal during the special SCM test will be based upon the current Technical Specification requirement (15 times Normal Full Power Background, or NFPB) and the actual full power background levels (approximately 150 mr/hr). This will yield a setpoint of approximately 2250 mr/hr. The regulatory basis for the increased MSLRM setpoint is a temporary revision to the basis of the existing Technical Specification for the MSLRM scram and isolation setpoint, as described in the January 18, 1989 Technical Specification amendment and NRC SER and revised SER dated August 24, 1989.

4.2 Design Basis of MSLRMs

The MSLRMs provide reactor scram and reactor vessel and primary containment isolation signals when elevated radiation levels are detected in the main steam lines. However, the only design basis accident that takes credit for the MSLRM is the Control Rod Drop Accident (CRDA). During this accident, the primary function of the MSLRMs is to limit the transport of activity which is released from

failed fuel, to the turbine and condensers, by initiating automatic closure of the main steam isolation valves, and thus isolating the reactor vessel. High radiation levels in the main steam will also produce a reactor scram signal, however, during the CRDA, the scram signal would be initiated by signals from the neutron monitoring system.

Generic analyses of the consequences of a CRDA have shown that fuel failures are not expected to result from a CRDA occurring at greater than 10% reactor power. This is primarily due to the effects of increased void formation and Doppler reactivity feedback, which causes the rapid decrease of CRDA severity as the reactor power level increases (reference J.E. Richardson to G.H. Neils letter and SER dated July 13, 1987).

In the event of a CRDA, the MSLRMs detect high radiation levels in the main steam lines and provide signals for reactor scram and Main Steam Isolation Valve (MSIV) closure. The expected dose rate at the MSLRM during a CRDA has been calculated to be 8 R/hr. Since the expected CRDA dose rate at the MSLRM is over 3.5 times the proposed MSLRM setpoint of 2250 mr/hr (15 times the actual NFPB of 150 mr/hr), the high radiation signal caused by the CRDA will still isolate the MSIVs. The expected dose rates would also result in a scram signal, however, the reactor scram would have already been initiated by the neutron monitoring system.

Raising the MSLRM trip setpoint from the current 1500 mr/hr (15 times an NFPB of 100 mr/hr) to 2250 mr/hr (15 times the actual NFPB of 150 mr/hr) will not result in a significant increase in the radiological consequences following a CRDA. This is based upon an industry analysis which evaluated the consequences of a CRDA without automatic MSIV closure. This was submitted to the NRC as a Licensing Topical Report, and approved by an NRC Safety Evaluation dated May 15, 1991. The analysis is described below.

4.3 Industry Analysis of the MSLRM Isolation Function

The industry has performed an analysis to confirm that the radiological release consequence of the CRDA is within the NRC acceptance criteria, even without the automatic MSIV closure (reference NEDO-31400, dated May, 1987). This analysis has been approved by the NRC staff (reference A.C. Thadani to G.J. Beck letter and safety evaluation dated May 15, 1991). The analysis examined two cases for the CRDA; the bounding FSAR case, which assumes automatic MSIV closure; and the CRDA without automatic MSIV closure. In the first case (i.e. design basis CRDA with automatic MSIV closure), the analysis resulted in calculated offsite doses of 4.3 rem to the thyroid, and 0.31 rem whole-body. The offsite dose criterion used by Standard Review Plan (SRP) 15.4.9 for the CRDA is that offsite doses should be less than 25% of the 10 CFR 100 guidelines; i.e., the thyroid dose should be less than 75 rem and the whole-body dose should be less than 6 rem. Therefore the calculated offsite doses from the bounding FSAR case represent 5.7% and 5.2% of the 10 CFR 100 guidelines for thyroid and whole-body dose.

In the second case (i.e. CRDA without automatic MSIV closure), if the event occurs at low power and the Steam Jet Air Ejector (SJAE) does not operate, the offsite dose is equivalent to the first case. This is based upon the assumption that the total activity is instantaneously transferred to the condenser. If sufficient power is available for SJAE operation, some of the available activity is transferred into the Offgas system. This provides a different release path for a portion of the radioactivity. The Offgas system charcoal beds would then retain the iodine component of the radioactivity. The particulate daughters of the noble gases (xenon and krypton) would also be held in the charcoal beds for significant decay times before release. For Offgas systems with krypton decay times greater than approximately twenty hours, the total dose from noble gas is less than 0.55 rem. This is comparable to the whole-body dose for the first case (CRDA with MSIV closure). The expected holdup time for krypton in the Quad Cities Offgas system is approximately 20 hours.

Commonwealth Edison has also evaluated the remaining applicable plant parameters identified in NEDO-31400, and has verified that these parameters are bounded by the assumptions in NEDO-31400.

The industry analysis (NEDO-31400) also examined the impact of a postulated flow blockage event on the potential for increased plant contamination and resultant high occupational exposures due to plant contamination. The analysis estimated that the MSLRM could detect this event if the release was a sudden puff with a duration of approximately 10 seconds or less. However, the response time of the MSLRM, combined with the MSIV closure time (about 10 seconds total), is such that the release would already be downstream of the MSIVs prior to isolation. Therefore, such a puff release would not be stopped in time to prevent contamination of the plant, even with the automatic MSLRM isolation function. If the puff release (assuming a constant amount of radioactivity) were extended over a longer period of time (i.e., over several minutes), the MSLRM would probably not detect the release due to masking effects from nitrogen-16 activity. In this case, the activity could be detected approximately two minutes after release by the offgas radiation monitors (due to nitrogen-16 decay), and isolated through manual operator actions.

4.4 Conclusions

Commonwealth Edison has concluded that the proposed change of the basis for the MSLRM scram and isolation setpoint Technical Specification, and resultant setpoint change (2250 mr/hr during the duration of the SCM test described above) would not result in any negative impact upon the radiological release consequences of the design basis accident (CRDA). This conclusion is based upon: 1. The generic industry analyses which indicate that above 10% power, the CRDA would not result in significant fuel failures; and 2. The industry analysis and subsequent NRC Safety Evaluation which states that offsite doses during a design basis accident (CRDA) without automatic MSIV closure would remain less that the NRC acceptance criteria (SRP 15.4.9).

5.0 EVALUATION OF SIGNIFICANT HAZARDS CONSIDERATION FOR PROPOSED CHANGE TO THE BASIS OF THE MSLRM TECHNICAL SPECIFICATION SCRAM AND ISOLATION SETPOINT.

The proposed change (described above) involves a change of the basis for the Main Steam Line Radiation Monitor (MSLRM) scram and isolation setpoint Technical Specification as defined in the applicable NRC Safety Evaluations. This Technical Specification (Table 3.1-2 for the scram signal and Table 3.2-1 for the isolation signal) requires a MSLRM setpoint of 15 times the normal full power background (NFPB) without Hydrogen Water Chemistry (HWC). The basis for NFPB, as described in the Safety Evaluation for the Technical Specification amendment (dated January 18, 1989) and revised on August 24, 1989, is 100 mr/hr. This results in a setpoint of 1500 mr/hr. The proposed setpoint will be based upon the current Technical Specification requirement (15 times NFPB) and the actual full power background level of 150 mr/hr. This results in a setpoint of 2250 mr/hr. The setpoint would be implemented for the duration of the test, which is being conducted at greater than or equal to 85% of rated power.

Commonwealth Edison has evaluated this proposed change to the basis for the MSLRM Scram and Isolation Setpoint Technical Specification for Quad Cities Unit 1 and Unit 2 (DPR-29 and DPR-30), and has determined that it involves no significant hazards consideration. In accordance with the criteria of 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:

5.1 Involve a significant increase in the probability or consequences of an accident previously analyzed.

The proposed change revises the basis of the Technical Specification for the MSLRM and isolation setpoint. The proposed change does not affect any accident precursor or initiator. Therefore, the probability of an accident is not affected by the proposed change.

The MSLRMs provide reactor scram and reactor vessel and primary containment isolation signals when high activity levels are detected in the main steam lines. However, the only design basis accident which takes credit for the MSLRM is the Control Rod Drop Accident (CRDA). Generic analyses of the CRDA have shown that fuel failures are not expected to result from a CRDA occurring at greater than 10% power levels. In addition, the industry has performed an analysis which demonstrates that the radiological release consequence of the CRDA is within the NRC acceptance criteria even without automatic MSIV closure. The proposed change of the basis for the MSLRM scram and isolation setpoint Technical Specification will reduce the potential for unwarranted challenges to safety systems during a special test of the Quad Cities Unit 2 HWC system in mid-1993.

Based upon the power level during the special test (greater than or equal to 85% of rated power) and the analyses described above, the proposed change of the basis for the MSLRM scram and isolation setpoint Technical Specification does not significantly increase the consequences of the radiological release consequence following the design basis accident (CRDA), above the NRC acceptance criteria (SRP 15.4.9). Therefore, the proposed change does not significantly increase the consequences of an accident previously analyzed.

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

The proposed change does not decrease the ability of the MSLRMs to perform their intended function, nor does the proposed change create any opportunities for a new or different accident outside of those previously evaluated. No new or different modes of plant operation are introduced by the proposed changes. Therefore, there is no possibility of creating any new failure mechanisms which could initiate a new or different kind of accident from those previously analyzed.

5.3 Involve a significant reduction in the margin of safety.

The proposed change of the basis for the MSLRM scram and isolation setpoint in the Technical Specifications will reduce the potential for unwarranted challenges to safety systems during a special test of the Quad Cities Unit 2 HWC system in mid-1993. The current MSLRM setpoint of fifteen times NFPB, (without hydrogen addition,) results in a calculated dose rate of 1.5 R/hr following a CRDA. For a CRDA, the dose rate at the MSLRM has been evaluated to be 8 R/hr. The proposed change to the basis of the Technical Specification would revise the NFPB from an assumed 100 mR/hr (as described in NRC SERs dated January 18, 1989 and August 24, 1989), to the current actual measured level of 150 mR/hr. Using the current actual NFPB of 150 mR/hr, a revised setpoint of 2.25 R/hr would still be well below the CRDA analyses value of 8 R/hr. Some increased time to closure for the MSIVs would result, however, generic industry analyses (approved by the NRC in an SER dated May 15, 1991) has shown that offsite doses during a CRDA without automatic MSIV closure would remain less than 25% of the 10 CFR 100 guidelines. Therefore, the proposed change does not significantly reduce the margin of safety.

6.0 ENVIRONMENTAL ASSESSMENT OF THE PROPOSED CHANGE TO THE BASIS OF THE MSLRM TECHNICAL SPECIFICATION SCRAM AND ISOLATION SETPOINT.

Commonwealth Edison has evaluated the proposed change against the criteria of 10 CFR 50.92 (c) and has determined that the proposed change does not present a significant hazards consideration. The proposed change of the basis for the Main Steam Line Radiation Monitor (MSLRM) scram and isolation setpoint Technical Specification as

6.0 **ENVIRONMENTAL ASSESSMENT OF THE PROPOSED CHANGE TO THE BASIS OF THE MSLRM TECHNICAL SPECIFICATION SCRAM AND ISOLATION SETPOINT. (CONTINUED)**

defined in applicable NRC Safety Evaluations does not result in a change in the types or amounts of effluents released offsite. The proposed changed has no effect upon individual or cumulaive occupational radiation exposure. Therefore, incorporating the proposed change of the basis for the MSLRM scram and isolation setpoint Technical Specification will not result in any increase in environmental consequences beyond those already accepted by the NRC in the Final Environmental Statement. Accordingly, Commonwealth Edison has determined that the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22 (c) (g).