

50-237

DRESDEN 2

CEC

SUMMARY AND ASSESSMENT OF TECHNICAL SPECIFICATIONS
UPGRADE PROGRAM

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Summary and Assessment of TSUP Clean-Up Changes Dresden and Quad Cities Nuclear Power Stations

No.	TSUP SECTION	SUBJECT	DESCRIPTION
1	3.3.A	Shutdown Margin	D/Q - Modify SDM requirements to 0.38/0.28 % $\Delta k/k$ as compared to CTS 0.25 % $\Delta k/k$. Clarify Bases for 4.3.A.3.
2	3/4.2	Instrumentation	D/Q - Eliminates the proposed requirements which allowed 0.7 cps with a signal-to-noise ratio of 2 for the SRM SR (vs. the 3 cps requirements).
3	3.7.I	Nitrogen	D/Q - Relocate controls for Nitrogen requirements to administrative controls to be consistent with QCS CTS
4	3.9.A	Diesel Generator/ AC Testing Requirements	D/Q - Revise TSUP to be consistent with the requirements outlined in GL 93-05 and to the current licensing basis. Resolves open items from NRC staff SER for TSUP 3/4.9.A AC testing. In addition, clarifies ambiguous language in Bases for 3/4.9.
5	3/4.0	ISI/IST	D/Q - Update TSUP to current versions of 10 CFR 50.55a for ISI and IST (ISI = 10 CFR50.55a(g); IST = 10 CFR50.55a(f)).
6	3.9.C	Batteries/VDC	D/Q - Revisions to maintain current Technical Specification requirements. Resolves open items from NRC staff SER for TSUP 3/4.9.C DC testing. Clarify 24/48 VDC LCO for Dresden.
7	3.6.B	Jet Pumps	D/Q - Revise Dresden LCO and Action requirements to be consistent to STS and current licensing basis/Tech Specs. Clarify Bases regarding establishment of flow patterns.
8	4.7.B	Primary Containment Leakage	D/Q - Revise SR to be consistent to the Improved Standard Technical Specifications that indicate that testing will be done in accordance with Appendix J <u>and approved exemptions</u>
9	3/4.5	HPCI/RCIC	D/Q - Changes HPCI/RCIC testing pressure requirements to conservatively align with the BWR STS.
10	----	Miscellaneous	D/Q - Miscellaneous administrative changes to correct headings, revised UFSAR references, typographical errors, Bases clarifications and other minor administrative issues.
11	3/4.8.A	CCSW/RHRSW	D/Q - Delete footnote (a) to eliminate unnecessary design details from the LCO and delete reference to automatic valves in the SR. In addition, for Dresden, modifies applicable MODE(s) to be consistent with current licensing basis
12	3/4.11	FDLRC	Dresden - Implement changes to clarify thermal limit FDLRC requirements and update changes to references to TSUP 6.0.

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13	6.2.B.5	GL 82-12	Dresden - Change 6.2.B.5 to be consistent with current TS and Quad Cities TSUP 6.2.B.5.
14	License	DPR-19/25 & DPR-29/30	D/Q - Discretionary extension for surveillances that cannot be performed prior to implementation of TSUP.
15	3.0.D	LCO	D/Q - Clarify ambiguous language in TSUP 3.0.D.
16	4.6.F.1	Relief Valves	D/Q - Revise relief valve CFT from every 92 days to 18 months to be consistent with current TS.
17	3/4.1, 3/4.2	IRM/APRM/ MSLRM	D/Q - Revise IRM/APRM CH CAL to be consistent with current TS. Also, restore notation to clarify channel alignment by current source for MSLRM.
18	3/4.5.A	LPCI Actions	D/Q - Clarification tying LPCI OPERABILITY to EDG OPERABILITY.
19	3/4.2.C	ATWS-RPT	D/Q - Clarifying ambiguous ATWS-RPT Action requirements.
20	Table 4.1.A-1	LPRM Calibrations	D/Q - Modifies calibration requirements for LPRMs from 1000 to 2000 EFPH.
21	4.3.C	GL 93-05 CRD Testing	D/Q - Incorporates requirements from GL 93-05 related to CR OPERABILITY.
22	3/4.2	Instrumentation	D/Q - Miscellaneous Changes to 3/4.2, "Instrumentation."
23	3/4.8.D	CREFS	D/Q - Revises Control Room Emergency Filtration System (CREFS) requirements to be consistent with ITS.
24	3/4.2	MSL High Temp	D/Q - Modify required number of channels to be consistent with current design basis
25	License	Spent Fuel Storage	Dresden Unit 2 - Correct administrative error that clarifies ambiguous storage requirements to be consistent with Unit 3
26	License	Expiration Date	Quad Cities - Correct typo in license expiration dates for Quad Cities Units 1 and 2
27	3.5.A	ADS Actions	D/Q - Modify TSUP 3.5.A, Actions to specify with one ADS valve inoperable, only 3 LPCI pumps are required to be OPERABLE.
28	4.5.A	ADS SR	D/Q - Clarify ambiguous ADS bases specifying pressure requirements when applicable to TSUP 4.0.D
29	3/4.2	Instrumentation	D/Q - Modify SR frequencies to be consistent with current TS
30	4.3.L, 4.5.A, 4.5.D, 4.8.I, 3.2.D, 3.9.E	RWM, ECCS, RCIC, IsoCondenser, OffGas Release, Distribution	D/Q - Relocate procedural details to admin controls

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31	1.0	CORE ALTERATIONS, LOGICAL SYSTEM FUNCTIONAL TEST, OPERABLE - OPERABILITY	D/Q - Adoption of NUREG-1433 requirements. Definitions that clarify ambiguities associated with CTS and STS Definitions.
32	4.1.A	RPS Response Time	D/Q - Relocation of RPS response time information to administrative controls per the guidance of GL 93-08.
33	4.3.H, 4.3.I	-CRD Coupling and Position Indication	D/Q - Adoption of NUREG-1433 requirements. Relocation of design details from SR to administrative controls.
34	3/4.5.A	ECCS ΔP Instrumentation	D/Q - Adoption of NUREG-1433 requirements. Relocation of design details from Actions and SR to administrative controls.
35	4.5.D	Isolation Condenser Design Details	Dresden - Relocation of SR specifics regarding the Isolation Condenser to admin controls.
36	3.2	ADS Timer Actions	Dresden - Revise ADS Timer requirements from 8.5 minutes to 10.0 minutes.
37	4.7.A.2, 4.7.N.2	PCI and SCI verifications	D/Q - Adoption of NUREG-1433 requirements. Clarifies ambiguous requirements from the STS and provides greater allowances for verification of valve alignments during power conditions.
38	4.7.K.3, 4.7.K.4	Suppression Chamber visual inspections	D/Q - Deletion of visual inspection requirements. Consistent with and/or redundant to NEDO and Appendix J requirements.
39	3.7.P, 4.7.P	SBGT Actions and SRs	D/Q - Delete allowed-outage-time action time requirements with both trains of SBGT inoperable to be consistent with CTS requirements. Addresses 1440 vs. 720 hour surveillance period NRC open item.
40	3.10.H	Spent Fuel Pool Water Level	D/Q - Correction to LCO water level limits to be identical to CTS requirements.
41	4.11.C	MCPR τ_{ave}	D/Q - Adoption of NUREG-1433 requirements. Relocation of cycle limits to the Core Operating Limits Report consistent with GL 88-16
42	4.8.J	SSMP Design Details	Quad Cities - Correction to SR specifics for the Safe Shutdown Makeup Pump.
43	3.2.E	SDV Water Level Rod Block	Dresden - Revision to trip setpoint for SDV Water Level -high control rod blocks.
44	3.2.E, 3.2.I, 3.2.J	Instrumentation Surveillance Period	D/Q - Annotate Tables to provide a two (2) hour allowance for required surveillance without placing the trip system in the tripped condition.

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45	6.12	High Rad Areas	Dresden - Revise high rad area requirements to be consistent with Quad Cities and clarify requirements to be consistent with the intent of Part 20.
46	3/4.6.D	Idle Loop Startup	Dresden - Relocate idle recirculation loop startup limits to administrative controls.
47	3/4.6.E, 3/4.6.F	Safety and Relief Valves	D/Q - Eliminate Action and Surveillance requirements that are redundant to TSUP 3/4.2.F.
48	3.2.A	HPCI Area Temperature	Dresden - Revise minimum channel requirements to reflect current design configuration.
49	License	DPR-19 & DPR-25	Dresden - Change implementation dates from 12/31/95 until 6/30/96 for all TSUP Sections approved to date.
50	NRC SER	Open Item Summary	D/Q - Summary and cross-reference of resolution of NRC open items.

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1. 3/4.3.A Shutdown Margin - This issue is applicable to both the Dresden and Quad Cities Stations TSUP. ComEd proposes to conservatively modify the proposed TSUP SDM LCO from 0.35/0.25 % $\Delta k/k$ to 0.38/0.28 % $\Delta k/k$. The previous CTS SDM limit for Dresden and Quad Cities was 0.25 % $\Delta k/k$. The basis for 0.38/28 % $\Delta k/k$ specified in later operating plants' Technical Specifications was modified to reflect the results of further design code comparisons and additional cold critical data (operating experience). Because this additional operating experience included plants of similar vintage to Dresden and Quad Cities and because similar fuel types and core design codes have been used in later operating BWR plants, ComEd has concluded that the revised criterion is technically acceptable to be used for the SDM limit at Dresden or Quad Cities. The proposed changes are consistent with current industry practice that are applicable to the Dresden and Quad Cities plant designs which are more restrictive and have been shown to provide an adequate level of protection from Shutdown Margin concerns. The proposed changes conservatively update the licensing basis for Dresden and Quad Cities Stations to reflect current industry experiences with regards to the Shutdown Margin demonstrations.

Surveillance requirement 4.3.A.3 specifies that the SDM shall be verified by calculation prior to each fuel movement during the fuel loading sequence. To clarify the requirements regarding the calculational methods and techniques specified in SR 4.3.A.3, ComEd proposes additional information be included in the Technical Specification Bases. For example, bounding analyses demonstrating SDM is acceptable for the entire fuel loading sequence. The proposed changes to the Bases provide enhanced guidance to site Operations personnel in defining the requirements of the surveillance requirement. Because the proposed Bases change clarifies the basis for the requirement and does not modify the requirement or plant operational practices, the proposed change is administrative in nature and does not adversely affect existing plant safety margins.

2. 3/4.2 Instrumentation - This issue is applicable to both Dresden and Quad Cities and eliminates the proposed TSUP footnote which allowed 0.7 cps with a signal-to-noise (s/n) ratio of 2 for SRM operability. This change conservatively eliminates a less restrictive requirement from the proposed TSUP Section 3/4.2 and is acceptable and consistent to the current licensing basis for Dresden and Quad Cities Stations. As such, the proposed change does not adversely affect existing plant safety margins.
3. 3.7.I Nitrogen - ComEd proposed revising the requirements for the Nitrogen system for Dresden and Quad Cities Stations. The original TSUP submittal was based on the format of the BWR STS for the CAD system. However, the Nitrogen system at Dresden or Quad Cities used to support the requirements for Oxygen concentration is not compatible to STS requirements. As such, the requirements specified in TSUP 3/4.7.J, "Primary Containment Oxygen Concentration," provide sufficient controls to ensure combustible concentrations are within prescribed

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limits.

It should be noted there are no corresponding current Technical Specification requirements at Quad Cities Station. The requirements for the currently implemented Technical Specifications at Dresden maintain a minimum level of liquid nitrogen in the storage tank, which corresponds to a seven day of supply. The current requirements provide assurances that appropriate supplies of nitrogen are available. However, such requirements are inappropriate for inclusion within the Technical Specifications and more appropriately controlled within plant-controlled administrative measures.

With an inoperable Nitrogen system, the oxygen requirements could not be maintained and as such, the Action requirements specified in TSUP 3.7.J encompass inoperable Nitrogen support. Because the Nitrogen system is used to support the Oxygen concentration limits, ComEd proposes to relocate applicable Nitrogen requirements to the UFSAR.

10 CFR 50.36(c) requires that Technical Specifications include items in five specific categories including safety limits; limiting safety system settings; limiting control settings; limiting conditions for operation; surveillance requirements; design features; and administrative controls. However, the rule does not specify the particular requirements to be included in a plant's Technical Specifications. The NRC has developed guidance criteria, as described in the "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors," published in Federal Register 58 FR 39132 (dated July 22, 1993), which can be used to determine which of the design conditions and associated surveillance provisions need to be located in the Technical Specifications.

The policy statement requires that Technical Specifications must include those conditions or limitations on reactor operation which are "necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety." The guidance criteria are summarized as follows:

- 1) Detection of abnormal degradation of the reactor coolant pressure boundary;
- 2) Conditions for bounding design basis accident and transient analyses;
- 3) Primary success paths to prevent or mitigate design basis accidents and transients; and
- 4) Functions determined to be important to risk or operating experience.

The policy statement recognized that items which are relocated from the Technical Specifications to licensee-controlled documents such as the updated FSAR would be controlled in accordance with the requirements of 10 CFR 50.59, "Changes tests,

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and experiments." 10 CFR 50.59 provides criteria to determine when planned facility or operating changes require prior NRC approval for any unreviewed safety questions. Also, NRC inspection and enforcement of licensees enable the NRC to monitor facility changes and licensee adherence to UFSAR commitments and to take any remedial action that may be appropriate.

As previously stated, the requirements specified in TSUP 3/4.7.J, "Primary Containment Oxygen Concentration," provide sufficient controls to ensure combustible concentrations are within prescribed limits. With an inoperable Nitrogen system, the oxygen requirements could not be maintained. Therefore, the Action requirements specified in TSUP 3.7.J encompass inoperable Nitrogen support. Because the Nitrogen system will continue to ensure combustible limits are maintained below 4% oxygen concentration, the proposed change does not significantly reduce existing plant safety margins.

4. 3/4.9 Diesel Generator/AC Testing Requirements - The requirements in Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation," have been adopted in the proposed TSUP package for EDGs. GL 93-05 provided improvements to the Technical Specifications Surveillance Requirements.

Enclosure 1 to GL 93-05 provides guidance for preparing license amendment requests to change the TS to reduce testing during power operation.

GL 93-05: Item 10.1 in Enclosure 1 to GL 93-05 recommends the following: (1) When an EDG itself is inoperable (not including a support system or independently testable component), the other EDG(s) should be tested only once (not every 8 hours) and within 8 hours unless the absence of any potential common mode failure can be demonstrated; (2) EDGs should be loaded in accordance with the vendor recommendations for all test purposes other than the refueling outage LOOP tests; (3) The hot-start test following the 24-hour EDG test should be a simple EDG start test. If the hot-start test is not performed within the required 5 minutes following the 24-hour EDG test, it should not be necessary to repeat the 24-hour EDG test. The only requirement should be that the hot-start test is performed within 5 minutes of operating the diesel generator at its continuous rating for 2 hours or until operating temperatures have stabilized; (4) Delete the requirement of alternate testing that requires testing of EDG and other unrelated systems not associated with an inoperable train or subsystem (other than an inoperable EDG). The proposed TSUP package incorporates the aforementioned recommended items from GL 93-05. As such, TSUP 3.9.A, Actions 1.b and 5.a are deleted. In addition, SR 4.9.A.7.b is deleted per GL 93-05.

Preventive Maintenance: The phrase "preplanned preventive maintenance" is being modified to "preplanned maintenance." The intent of this exclusion is to require additional testing only in those cases where a potential for a common mode failure exists. Limiting the reduced testing to time periods of preplanned

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preventive maintenance would cause unnecessary testing of the operable EDG when preplanned corrective maintenance is required. Corrective maintenance is not necessarily considered work that is required to be performed to maintain EDG operability (i.e., preplanned corrective maintenance could be delayed without declaring the EDG inoperable). Accordingly, the condition requiring corrective maintenance will not prevent the EDG from performing its intended safety function. The proposed wording could delay minor corrective maintenance in order to preclude having to demonstrate the operability of the remaining EDG. The ability to perform types of maintenance other than preventive without subsequent testing does not affect the design or performance characteristics of the EDGs. If during the performance of preplanned maintenance, it is discovered that an EDG is, in fact, inoperable and requires additional maintenance to restore it to operable status, plant personnel would either verify that the cause of the EDG being inoperable does not impact the operability of the EDG or perform testing to provide assurance of continued operability of that EDG.

It should be noted that deleting the term "preventive" was supported by NRC representatives at the Cooper-Bessemer Owners' Group meeting on January 25, 1995. The NRC staff approved a similar change as part of Amendment 54 for Niagara Mohawk Power Corporation's Nine Mile Point Unit 2 on December 15, 1993.

Accelerated EDG Testing/Reports: ComEd proposes to delete TSUP 3.9.A, Action 8 and Table 4.9.A-1. As submitted by ComEd to the NRC staff, TSUP 3.9.A, Action 8 requires reporting diesel generator testing failures to the NRC staff. Because this issue was left as an open item, these actions were approved as "Intentionally Left Blank." TSUP Table 4.9.A-1 provides a test schedule for the diesel generators. This change is consistent with the intention of Generic Letter 94-01, "Removal of Accelerated Testing and Special Reporting Requirements for Emergency Diesel Generators." GL 94-01 allowed licensees to implement the provisions of the maintenance rule for EDGs, including applicable regulatory guidance, to provide a program that assures EDG performance. The elements of the program must include the performance of a detailed root cause analysis of individual EDG failures, effective corrective actions taken in response to individual EDG failures and implementation of EDG preventative maintenance consistent with the maintenance rule. Dresden and Quad Cities, however, will be fully implementing the maintenance rule at a later date subsequent to implementing TSUP. GL 94-01 also specified that licensees may propose changes to remove special reporting requirements for EDGs from their plant TS and continue to comply with the provisions of 10 CFR 50.72 and 50.73. However, it should be noted that the current Technical Specifications at Dresden and Quad Cities does not include the requirements to report diesel generator testing failures nor does it include an accelerated test schedule for the diesel generators. As such, the proposed changes maintain existing requirements. Therefore, existing plant safety margins are unaffected by the proposed changes.

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Bases Clarifications: NRC staff Question No. 32 (Reference (18)) regarding TSUP 3/4.9 has been addressed herein. ComEd proposed to clarify the language regarding common mode failures. The proposed change satisfies an open item from TSUP 3/4.9 that is administrative in nature. Another proposed change to the Bases clarifies the requirements regarding the 4160 volt cross-tie. This change is also administrative in nature and serves to clarify that both site 4160 volt cross-ties are acceptable for usage. Change to the Bases regarding the addition of the term "vendor" regarding recommendations for the diesel generator has been proposed. This change ensures that either vendor or manufacturer recommendations are to be utilized during the performance of applicable surveillances for the diesel generators. The aforementioned proposed changes are purely administrative in nature and do not reduce existing plant safety margins.

Footnote Order: A change related to the ordering of footnotes in proposed TSUP 3/4.9 is addressed herein. Proposed TSUP 3/4.9.A, footnote (i) for Quad Cities has been changed to footnote (h) for continuity. All other footnote letters are unaffected. The proposed ordering of the footnotes in TSUP 3/4.9.A is based upon the order of appearance throughout the section. As such, the same footnote letter may be used on several different pages giving an incorrect appearance of a discontinuity. Therefore, no other changes to the ordering of the footnotes is necessary.

Automatic Transfer of Power Supply: Regarding the open item concerning the auto transfer function of the offsite/onsite power supply (Note: for simplicity, only Quad Cities bus Nos. are listed) - the auto transfer function for transferring busses [Quad Cities] 11(21) and [Quad Cities] 14(24) from transformer [Quad Cities] 11(21) (fed from the Unit) to transformer [Quad Cities] 12(22) (fed from the yard) following a generator trip is not a safety significant input to the core damage frequency calculations. Were this transfer to fail, the emergency bus, bus [Quad Cities] 14(24), would be without power until the site operator manually transferred the bus or until the emergency DG picked up the bus. Even were there to be a further failure such that the bus remained unpowered, the other emergency bus [Quad Cities] 13(23) would be sufficient to assure the safety of the unit. It should be noted that this is not the transfer from normal offsite power to the alternate offsite power. That transfer is a manual transfer only, to the transformer that normally feeds the other unit. In addition, if credit is taken for automatic scrams (as noted in NUREG-1433) during which busses [Quad Cities] 11 and 14 successfully transfer to the offsite power transformer, the historic periodicity of such events for Dresden and Quad Cities Station render this surveillance irrelevant. Therefore, ComEd proposes that TSUP SR 4.9.A.1.b remain as "At least once per 18 months by manually transferring the power supply from the normal circuit to the alternate circuit," and considers this item resolved.

Shared Diesel Surveillance Clarification: Regarding the open item concerning additional controls to ensure the shared diesel generator surveillance requirements

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are not overly restrictive and applied too frequently for the Unit 1/2 [Quad Cities] or Unit 2/3 [Dresden] engine. Limiting Condition for Operation (LCO) 3.9.A.2 requires that for each unit at Dresden or Quad Cities, two (2) separate and independent diesel generators must be OPERABLE to satisfy the LCO. This is defined for Unit 1 at Quad Cities, the Unit 1 and Unit 1/2 diesel generator; for Unit 2 at Quad Cities, the Unit 2 and Unit 1/2 diesel generator; for Dresden Unit 2, the Unit 2 and Unit 2/3 diesel generator; for Dresden Unit 3, the Unit 3 and Unit 2/3 diesel generator. If the Quad Cities Unit 1/2 diesel generator is inoperable, Action 2 would apply to both Unit 1 and Unit 2; thus, both Unit 1 and Unit 2 would enter their respective seven (7) day allowed-outage-time (AOT). If the Quad Cities Unit 1 diesel generator is inoperable, Action 2 would only apply for Unit 1 and thus, only Unit 1 would enter the seven day AOT. However, there exists the potential for misinterpretation of SR within TSUP 4.9.A for the shared diesel generators. As such, the periodicity of surveillance requirements for the shared diesel generators shall be equivalent to those required for the unit diesel generators. For example, it is not the intention of TSUP 4.9.A.8, 4.9.A.9 or 4.9.A.10 to perform this surveillance twice during the specified surveillance interval in order to first satisfy Unit 1 [Dresden Unit 2] requirements and then secondly, approximately 50% through the interval to satisfy any Unit 2 [Dresden Unit 3] requirements. By appropriately staggering the surveillance intervals between all three (3) diesel generators further ensures that for any loaded diesel generator surveillances, not more than one diesel generator is rendered inoperable at a given time in order to perform such testing. As such, ComEd has clarified the surveillance periodicity for the shared diesel generator within the Technical Specification Bases and considers this item resolved.

Diesel Lubrications: ComEd proposes to revise TSUP 3/4.9.A; footnote (a) to eliminate ambiguities regarding planned diesel generator surveillances. Confusion exists as to the applicability of performing prelubes if the surveillance is initiated as a result of entrance into an Action requirement. NUREG-1433 clarifies this ambiguity and language consistent with NUREG-1433 regarding engine prelude periods has been utilized in proposed TSUP 3/4.9.A, footnote (a). The addition of vendor requirements is also to preclude conflicting requirements, where they may potentially exist, between the diesel engine manufacturer and the diesel engine vendor. The proposed footnote (a) is consistent with current manufacturer/vendor requirements and does not reduce existing plant safety margins.

Diesel Load Band: ComEd proposes to revise TSUP 3/4.9.A, footnote (d) to eliminate ambiguities regarding the load band for the diesel generators. The originally proposed footnote (d) included terminology that implied the requirements were "meant as guidance." Although consistent with STS guidelines, ComEd believes that terminology consistent with NUREG-1433 is more appropriate for clarifying SR 4.9.A.2.d. As such, ComEd proposes to modify footnote (d) to state: "Momentary transients outside of the load range do not invalidate this test. Diesel generator loadings may include gradual loading as recommended by the

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manufacturer/vendor. This surveillance shall be conducted on only one diesel generator at a time." The addition of the term "vendor" to the above footnote eliminates any ambiguities associated with the proper origination of any such recommendations for diesel generator surveillances. The proposed footnote ensures that proper gradual loading techniques are performed to minimize wear on the diesel engine. In addition, the proposed footnote ensures that the surveillance is only performed on one diesel generator at a time; thus, eliminating the possibility of two (2) diesel generators [unit and shared diesel] being inoperable due to a loaded test. The aforementioned changes are consistent with current site practices and are consistent with current design requirements; therefore, the proposed changes do not adversely affect existing plant safety margins.

Emergency Load Specifications: ComEd proposes to revise TSUP 4.9.A.8.b to include the specific requirements regarding the largest single loads for the diesel generator. The previously submitted surveillance only specified the generic requirement to demonstrate the ability to reject the largest single emergency load. The proposed changes include the specific details associated with the largest single emergency loads. The proposed changes are consistent with the format of NUREG-1433 requirements and are consistent with the design requirements of the system; as such, there are no changes to plant operation by the incorporation of these design details within the diesel generator surveillance requirement.

Load Reject Specifications: ComEd proposes to revise TSUP 4.9.A.8.c to clarify that the surveillance basis is to demonstrate the ability of the diesel generator to reject a load between 2470 and 2600 kW for Dresden or 2375 and 2500 kW for Quad Cities, without tripping on overspeed. The change regarding the requirements associated with overspeed is administrative in nature and ensures that misinterpretation of a successful test demonstration does not occur. The inclusion of the specific load band requirements are consistent with the guidance of NUREG-0123 and delineates more explicit requirements and more explicitly defines, for site operations personnel, the acceptance criteria for the surveillance. TSUP 4.9.A.8.c is also annotated to specify that momentary transients outside the load band do not impact the validity of the test. This annotation is similar to those previously described above. Because the change does not adversely affect existing plant operational methodologies or testing acceptance criteria, existing plant safety margins are unaffected by the proposed change.

Diesel Inspections: ComEd proposes to revise TSUP 4.9.A.8.a regarding the inspection of diesel generators. The current Technical Specifications do not include the provisions specified in TSUP 4.9.A.8.a. The proposed change relocates the diesel generator inspection or surveillance requirements to administrative controls. This change is consistent with the requirements specified in NUREG-1433. The details of methods for performing surveillances are not included in NUREG-1433. These details are adequately controlled by procedures and their revisions are adequately controlled by the provisions of 10 CFR 50.59. Because these

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inspections or surveillances will continue to be performed, although controlled administratively, and the changes are consistent with the current licensing basis, there is no reduction in existing plant safety margins.

Diesel Start Times: ComEd proposes to revise the EDG start times listed in Quad Cities SR 4.9.A.7, 4.9.A.8.d(2), 4.9.A.8.e, 4.9.A.8.f(2), 4.9.A.8.h and 4.9.A.9. The originally proposed diesel generator start time requirements specified 13 seconds as the required limit. However, based upon current LOCA analysis assumptions for Quad Cities and the specific requirements listed within the aforementioned surveillances, 10 seconds is the appropriate start time for the Technical Specifications. The LOCA analysis assumptions includes a minimal period to allow for plant instrumentation to sense the LOCA before initiating the EDG start. The total elapsed period from initiation of the LOCA to the EDG operating is approximately 13 seconds. Therefore, it is more appropriate for the Technical Specification surveillance requirement to test the period from receipt of the start signal until the EDG is operating. For Dresden, the EDG start time of 13 seconds is used in LOCA analysis assumptions. As such, ComEd proposes to revise the aforementioned EDG start time for Quad Cities is 10 seconds. Because the proposed changes conservatively ensures the LOCA analysis assumptions are maintained, existing plant safety margins are not adversely affected by the proposed changes.

5. 3/4.0 Surveillance Requirements - To be consistent with the requirements outlined in the Improved Standard Technical Specifications (ITS; NUREG - 1433) and draft NUREG-1482, ComEd proposes to include the test frequency of two years to the IST Technical Specification surveillance table (3.0.D.2). Although this differs from the STS surveillance table, the change is administrative in nature, encompasses all IST surveillance intervals, is consistent with the guidance provided in NUREG-1482 and is consistent with the requirements specified in the ISTS (NUREG - 1433). ComEd also proposes to update the ISI/IST references to accurately reflect the appropriate sections of 10 CFR 50.55a. The BWR STS only references 10 CFR 50.55a(g). This change was recently approved prior to the implementation of TSUP by ComEd's submittal of January 27, 1995 and the NRC staff's approval dated February 21, 1995. Although this supplemental change differs from STS, it is administrative in nature and ensures consistency to the appropriate references in 10 CFR 50.55a encompassing ISI and IST requirements. The change is equivalent to the current licensing basis for Dresden and Quad Cities and therefore, there is no reduction in existing plant safety margins.

6. 3.9.C Batteries - Dresden and Quad Cities had proposed Action requirements that allowed an outage time of 72 hours which was a deviation from current requirements which specified various times between 2 hours, 72 hours and 14 days. The proposed clean-up package revises the requirements to be identical to current Technical Specification requirements (3.9.B.4 for Dresden and 3.9.C.3 for Quad Cities) for the D.C. Battery System for Dresden and Quad Cities. The

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change is equivalent to the current licensing basis for Dresden and Quad Cities; therefore, there is no reduction in existing plant safety margins.

4.9.C.2.c - Battery Cell Temperatures: Regarding the open item concerning the verification of battery cell temperature, ComEd proposes to modify TSUP 4.9.C.2.c to: "The average electrolyte temperature of all connected cells is above 60 °F." The associated Bases are modified to reflect the aforementioned changes. By verifying the average temperature of all connected cells, the proposed change ensures that lower than normal temperatures do not act to inhibit or reduce battery capacity. The proposed changes are consistent with the current design requirements of the D.C. system and as such, does not affect existing plant safety margins.

4.9.C.5 - 60 Month Battery Test: Regarding the open item concerning the 60 month battery capacity test and latest load profile requirements, ComEd proposes to modify TSUP 4.9.C.5 for Dresden to: "At least once per 60 months, verify that the battery capacity is 80% of the manufacturer's rating when subjected to either a performance discharge test or a modified performance discharge test. The modified performance test satisfies the requirements of both the service test and performance test and therefore, may be performed in lieu of a service test." For Dresden, a battery modified performance test is a test of the battery capacity and the battery's ability to meet high rate loads of the battery's duty cycle. This test satisfies the requirements of both a service test and a performance test and may be performed in lieu of a service test. The performance discharge test and the modified performance test are intended to detect any change in capacity and to determine overall battery degradation due to age and usage. The batteries have a rated capacity of 125% of the load expected at the end of their service life allowing for a minimum battery capacity of at least 80% of the manufacturer's rating. A battery capacity of 80% indicates that the battery rate of deterioration is increasing, even if there is ample capacity to meet the load requirements. The proposed changes are consistent with the current design requirements of the D.C. system and as such, does not affect existing plant safety margins.

For Quad Cities, ComEd proposed to modify TSUP 4.9.C.5 to: "At least once per 60 months verify that the battery capacity is at least the greater of either 80% of the manufacturer's rating or the minimum acceptable battery capacity from the load profile when subjected to either a performance discharge test or a modified performance discharge test. The modified performance test satisfies the requirements of both the service test and performance test and therefore, may be performed in lieu of a service test." For Quad Cities, a battery modified performance test is a test of the battery capacity and the battery's ability to meet the high rate loads of the battery's duty cycle. This test satisfies the requirements of both a service test and a performance test and may be performed in lieu of a service test. The performance discharge test and the modified performance test are intended to detect any change in capacity and to determine overall battery degradation due to age and usage. The 125 volt batteries have a rated capacity of

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125% of the load expected at the end of their service life allowing for a minimum battery capacity of at least 80% of the manufacturer's rating. A battery capacity of 80% indicates that the battery rate of deterioration is increasing, even if there is ample capacity to meet the load requirements. The 250 volt batteries do not have a rated capacity of 125% of the load expected at the end of their service therefore, the minimum allowable battery capacity is based on the capacity margin calculated from the design load profile for the battery. The proposed changes are consistent with the current design requirements of the D.C. system and as such, does not affect existing plant safety margins.

4.9.C.6 - Accelerated Battery Tests: Regarding the open item concerning TSUP 4.9.C.6, ComEd proposes to modify 4.9.C.6 to: "For any battery that shows signs of degradation or has reached 85% of the service life for the expected application and delivers a capacity of less than 100% of the manufacturer's rated capacity, a performance discharge test or a modified performance test of battery capacity shall be performed at least once every 12 months or the battery shall be replaced or restored to 100% or greater of the manufacturer's rated capacity during the next refuel outage. Degradation is indicated when the battery capacity drops more than 10% from its capacity on the previous performance test, or is below 90% of the manufacturer's rating. If the battery has reached 85% of service life, delivers a capacity of 100% or greater of the manufacturer's rated capacity and has shown no signs of degradation, a performance test or a modified performance test of battery capacity shall be performed at least once every two years." The proposed changes are consistent with the current design requirements of the D.C. system and as such, does not affect existing plant safety margins.

24/48 VDC LCO: ComEd proposes to revise TSUP 3.9.C.3 regarding the unit 24/48 volt batteries for Dresden Station. The originally proposed LCO specifies that one unit 24/48 volt battery and charger are required to be OPERABLE. However, to maintain consistency with current plant design requirements, ComEd proposes to revise LCO 3.9.C.3 to require two unit 24/48 volt batteries (2 per unit). Because the proposed changes conservatively maintain consistency with existing plant design requirements, the proposed changes do not adversely affect existing plant safety margins.

7. 3.6.B Jet Pumps - Dresden had originally proposed in TSUP 3.6.B to allow a specific number of jet pump flow indicators to be inoperable to be consistent with the requirements previously approved for Quad Cities for jet pump flow in an NRC staff SER dated May 23, 1990. However, the clean-up changes have been made for Dresden Station to be consistent with the current Dresden Technical Specification (3/4.6.G). These changes make TSUP 3.6.B for Dresden equivalent to the current Technical Specifications; therefore, because the current licensing basis remains unchanged, existing plant safety margins are unaffected by the proposed clean-up changes.

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In addition, a change to the Bases is proposed for both Dresden and Quad Cities Station to clarify the establishment of jet pump flow patterns at the beginning of cycle conditions and initially following entry into single loop operations. These changes are administrative in nature and consistent with current plant operating philosophy. As such, existing plant safety margins are unaffected by the proposed changes.

8. 4.7.B Primary Containment Leakage - In accordance with 10 CFR 50, Appendix J and the Improved Standard Technical Specifications (NUREG-1433), ComEd proposes to include requirements for all approved exemptions to Appendix J. The current STS does not include wording for approved (by the NRC staff) exemptions to Appendix J. A recent NRC-OGC ruling requires that exemption wording must be contained within the Technical Specifications for a plant to utilize an exemption and fully comply with the Technical Specifications. Therefore, for future possible schedular exemptions to 10 CFR 50, Appendix J, and to fully comply with the Technical Specifications, the proposed changes would be required in addition to the requirements specified under 10 CFR 50.12. Because exemptions to 10 CFR 50, Appendix J are required to be reviewed and approved by the NRC staff per 10 CFR 50.12, the proposed changes are administrative in nature, and as such, do not reduce existing plant safety margins.

The proposed changes include deletion of the reference to TSUP 4.0.B related to 24 months Appendix J test intervals. The originally proposed terminology was redundant to the requirements specified in 10 CFR 50, Appendix J. As such, the proposed deletion of this requirement is administrative in nature and does not adversely affect existing plant safety margins.

9. 3/4.5 - HPCI/RCIC Test Requirements - The proposed changes revise the wording of the HPCI and RCIC quarterly flow rate tests, and the post-refuel outage flow rate tests to require the performance of the flow rate tests against a system head corresponding to reactor pressure. The proposed change will require that the HPCI and RCIC (for Quad Cities only) systems deliver a flow rate of 5000 gpm and 400 gpm respectively, when tested against a system head corresponding to reactor vessel pressure, when steam is supplied to the turbine at 920 psig to 1005 psig (quarterly flow rate test and post-refuel outage high pressure test) and 150 psig to 350 psig for Dresden [150 to 180 for Quad Cities] (post-refuel outage low pressure test).

The proposed changes also revise the pressure at which the HPCI and RCIC (for Quad Cities only) post-refuel outage low pressure flow rate test is performed to be consistent with the pressure at which HPCI and RCIC are required to be operable. The proposed change will require that the HPCI and RCIC systems deliver a flow rate of 5000 gpm and 400 gpm respectively, when tested against a system head corresponding to the reactor vessel pressure and steam is supplied to the turbine at 150 psig to 350 psig for Dresden [150 to 180 psig for Quad Cities]. ComEd

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proposes to maintain the existing upper band until further plant operational performance data is gathered for Dresden Station. The proposed changes also revise the HPCI and RCIC (for Quad Cities only) quarterly and post-fuel outage flow rate test requirements to eliminate unnecessary strain on the systems, and will lower the pressure at which testing commences to a reactor pressure consistent with the pressure at which the systems are required to be operable.

These proposed changes are more conservative than the current requirements, and are consistent with the intent of BWR STS Section 4.5.1; as such, existing plant safety margins are unaffected by the proposed changes.

10. Miscellaneous Administrative Changes - ComEd has proposed to change portions of the previously submitted pages to correct administrative typographical errors, heading changes, changes to the Bases, elimination of obsolete cross-references and other miscellaneous minor changes. Examples of some proposed administrative changes include but are not limited to the following:

- correction of cross-references to Section 6 such as described on pages 2-1 and 2-2.
- omission of the letter 'U' in UFSAR as described on page 1-4
- re-naming the Function Unit in Dresden Table 4.2.A-1 on page 3/4.2-9
- correction to Quad Cities Table 4.2.D-1 Title on page 3/4.2-27
- re-numbering of footnotes in Dresden Table 3.2.E-1 as described on page 3/4.2-29
- correction of cross-reference to 3.7.K on page B 3/4.5-2
- correction of ANSI cross-reference on Dresden page 3/4.7-24
- incorrect cross-reference to non-existent Section 6 as described on page 3/4.8-17.
- correction of terminology for EDG logic as described on page 3/4.9-8
- correction of Reg Guide reference as described on page B 3/4.9-3
- re-numbering of deleted Sections in Section 6 as described on Dresden page 6-9.

The proposed revisions encompassed herein are purely administrative in nature and as such, do not reduce existing plant safety margins.

11. 3/4.8.A CCSW & RHRSW - Proposed Dresden TSUP LCO 3.8.A.2.b includes information regarding the flow path of the CCSW system. The LCO includes proposed footnote (a) that clarifies that the LPCI heat exchanger is not required to support operation of the CREFS. Although this information does clarify the design of the CCSW system, this information is a design detail inappropriate for inclusion within the Technical Specifications. The definition of OPERABILITY should suffice for determining such requirements. The exclusion of this design information from the Technical Specifications is consistent with the CTS requirements and the requirements specified in the Improved Technical Specifications (NUREG-1433) for this system.

Proposed TSUP SR 4.8.A. includes a requirement that each valve, manual, power operator or automatic, in the flow path that is not locked, sealed or otherwise

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secured in position, is in its correct position. Dresden and Quad Cities do not have automatic valves in the CCSW or RHRSW systems that meet the intent of these requirements. Therefore, ComEd proposes that the wording in SR 4.8.A regarding "or automatic" be deleted.

In addition, the proposed TSUP requirements for the Dresden CCSW system (TSUP 3.8.A) specified for MODE(s) 4 (COLD SHUTDOWN) and 5 (REFUELING) are redundant to those specified for TSUP MODE *. The CCSW system design requirements during MODE 4 or 5 are only applicable when handling irradiated fuel in the secondary containment, during CORE ALTERATION(s) and during operations with a potential for draining the reactor vessel. TSUP MODE 4 and 5 are encompassed within TSUP MODE * and as such, are redundant. In addition, changes are proposed to the Dresden Bases to clarify that CCSW requires two pumps to satisfy design basis requirements. Therefore, because the current design basis of the system is unaffected by the proposed change as the change is administrative in nature, existing plant safety margins are unaffected.

12. Thermal Limit Clarification (FDLRC) - The Title for Dresden TSUP 3/4.11.B is changed to fully reflect parameters affected by this section (consistent with ISTS - NUREG-1433). The LCO is changed to better describe the limitations on operation. As currently written, the LCO implies that FDLRC must always be less than 1.0. Upon completing the adjustments to the GAFs or Scram line setdown, operation may continue beyond the 6 hour Action requirement with FDLRC greater than 1.0. The proposed changes are administrative in nature and consistent in format to the ITS. The proposed Action Statement changes enhance the clarity and make the wording consistent with STS and the TSUP 3/4.11.B for Quad Cities.

In TSUP 3/4.11.D, the LCO changes better describe the actual requirement. The SLHGR is the limit to which LHGR is compared. This relationship is analogous to the GE limit of MFLPD; LHGR is compared to the MFLPD limit. Thus, the LCO is revised to indicate that the LHGR is compared to the SLHGR. The corresponding changes to the Action statement and the SR reflect the aforementioned change.

Proposed TSUP 3/4.11.E for Dresden Station is removed since the relationship of LHGR to the Transient LHGR limit is incorporated into TSUP 3/4.11.B. This treatment is analogous to the GE MFLPD/FRP requirement in STS. The proposed changes to the TSUP Bases for Section 3/4.11.B are made to support the aforementioned changes.

Because the proposed changes are administrative in nature that provide clearer requirements, existing plant safety margins are unaffected by the proposed changes.

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13. Generic Letter 82-12 - In Reference (36), ComEd submitted TSUP Section 6.0 to the NRC staff for Dresden Station. In Reference (40), ComEd submitted TSUP Section 6.0 to the NRC staff for Quad Cities Station. A discrepancy between TSUP 6.2.B.5 for Dresden and Quad Cities exists regarding Generic Letter (GL) 82-12 requirements. To maintain consistency for TSUP 6.2.B.5 between Dresden and Quad Cities Stations, ComEd proposes to revise Dresden 6.2.B.5 to eliminate the superfluous statements regarding deviations from overtime policies. The requirements specified within the NRC Policy Statement on working hours delineated within GL 82-12 suffices. As such, the proposed changes are administrative in nature and are consistent with the current Technical Specifications; therefore, the proposed changes do not reduce existing plant safety margins.

14. New Surveillances - TSUP adds several surveillances to the plant Technical Specification that cannot be tested in an operational mode that is achievable in the time period between approval of TSUP and full implementation for both Units at both Dresden and Quad Cities. ComEd proposes to extend any such surveillances for Dresden and Quad Cities for which performance would cause an undue hardship (e.g., shutdown of the reactor) to complete prior to an operational mode for which performance of the SR is achievable. Because the proposed requirements are new requirements which are not incorporated within the current licensing basis for Dresden or Quad Cities Stations, existing plant safety margins are unaffected by the proposed extensions.

In addition, the current Technical Specifications (CTS) define a refueling outage in CTS Section 1.0. There is no current specific time delineation for a refueling outage. In TSUP, the corresponding surveillance interval is defined in TSUP 1.0 as 'E', which corresponds to 18 months. As such, following implementation, based upon currently accepted practices, there exists the potential for certain surveillances to extend past the TSUP 18 months (including 25% allowance for scheduling concerns - 22.5 months). Therefore, ComEd proposes to add such surveillances to the aforementioned surveillance extensions. Because the proposed requirements are new requirements which are not incorporated within the current licensing basis for Dresden or Quad Cities Stations for which performance would cause an undue hardship (e.g., shutdown of the reactor) to complete prior to an operational mode for which performance of the SR is achievable, existing plant safety margins are unaffected by the proposed extensions.

15. 3.0.D - The proposed changes enhance the clarity of TSUP 3.0.D by adopting the proposed Improved Technical Specification (NUREG-1433) 3.0.4 language. The proposed changes are administrative in nature and do not reduce existing requirements for LIMITING CONDITIONS FOR OPERATION.

16. 4.6.F.1 Relief Valve CHANNEL FUNCTIONAL TEST (CFT) - The proposed TSUP surveillance frequency for the relief valve CFT was originally proposed in TSUP to

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be once per 92 days. However, ComEd proposes to retain the current Technical Specification (CTS) frequency (CTS 4.6.E) of once per refueling outage (equivalent to approximately once per 18 months); thus, the revised proposed frequency is specified as once per 18 months. Because the proposed changes maintain existing requirements, existing plant safety margins are unaffected.

17. 4.1.A IRM/APRM/MSLRM CHANNEL CALIBRATION - The proposed TSUP surveillance frequency for the Intermediate Range Monitor (IRM) CHANNEL CALIBRATION was originally proposed in TSUP to be once per 18 months (TSUP nomenclature 'E'). However, ComEd proposes to retain the CTS frequency (CTS 3/4.1) of performance of the IRM Neutron Flux-High CHANNEL CALIBRATION(s) upon each entry into the applicable OPERATIONAL MODE(s) (i.e., during a shutdown) by the addition of a footnote to Table 4.1.A-1. However, ComEd proposes to revise the associated notation to expand the provisions of exemption from 4.0.D for 24 hours after entering MODE(s) 2 and 3. This provision is based on precedence for those approved for LaSalle County Station and provides sufficient controls for ensuring the affected instrumentation is appropriately calibrated in a controlled fashion. The proposed change is consistent with the design of the systems at Dresden and Quad Cities, and as such, does not adversely affect existing plant safety margins. A footnote also specifies that the CHANNEL CALIBRATION shall be performed if not performed within the previous seven days. This clarification ensures that excessive CHANNEL CALIBRATION(s) are not performed. Because the proposed changes maintain the intent of existing requirements, existing plant safety margins are unaffected.

The CHANNEL CALIBRATION for the Main Steam Line Radiation Monitor (MSLRM) originally did not include the CTS requirement of performing an instrument channel alignment every three months using a current source (CTS 3/4.1). ComEd proposed to retain this requirement and modify proposed TSUP Table 4.1.A-1 accordingly. Because the proposed changes maintain existing requirements, existing plant safety margins are unaffected.

The proposed TSUP surveillance frequency for the IRM Upscale Rod Block and IRM Downscale Rod Block CHANNEL CALIBRATION was originally proposed in TSUP to be once per 18 months (TSUP nomenclature 'E'). However, ComEd proposes to retain the CTS frequency (CTS 3/4.2) of performance of the CHANNEL CALIBRATION(s) upon each entry into the applicable OPERATIONAL MODE(s) (i.e., during a shutdown) by the addition of a footnote to Table 4.2.E-1. ComEd proposes to revise the associated notation to provide sufficient controls for ensuring the affected instrumentation is appropriately calibrated in a controlled fashion. The proposed change is consistent with the design of the systems at Dresden and Quad Cities, and as such, does not adversely affect existing plant safety margins. A footnote also specifies that the CHANNEL CALIBRATION shall be performed if not performed within the previous seven days. This clarification ensures that excessive CHANNEL CALIBRATION(s) are not performed. Because the proposed changes

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maintain the intent of existing requirements, existing plant safety margins are unaffected.

The proposed TSUP surveillance frequency for the APRM Startup Neutron Flux - High Rod Block CHANNEL CALIBRATION was originally proposed in TSUP to be once per 6 months (TSUP nomenclature 'SA'). However, ComEd proposes to retain the Dresden CTS frequency (CTS 3/4.2) of performance of the CHANNEL CALIBRATION(s) upon each entry into the applicable OPERATIONAL MODE(s) (i.e., during a shutdown) by the addition of a footnote to Table 4.2.E-1. This footnote also specifies that the CHANNEL CALIBRATION shall be performed within 12 hours after entering the applicable OPERATIONAL MODE if not performed within the previous seven days. This clarification ensures that excessive CHANNEL CALIBRATION(s) are not performed. This is an additional requirement for Quad Cities Station, and therefore more conservative. Because the proposed changes maintain the intent of existing Dresden CTS requirements, existing plant safety margins are unaffected.

18. 3/4.5.A LPCI Actions - A footnote is proposed to be added to TSUP 3.5.A, Actions 2.a and 2.b that ensures the minimum required number of LPCI pumps are maintained. The proposed footnote to TSUP 3/4.5.A, Actions 2.a and 2.b clarifies the requirements specified in TSUP 3.9.A, Actions 4.a and 6.b for the LPCI subsystem. The requirements for EDG OPERABILITY related to the OPERABILITY of multi-train systems are encompassed within TSUP 3/4.9, Actions 4 and 6. The diesel generator requirement ensures that at least one of the two train systems is OPERABLE including its emergency power supply, when a diesel generator is inoperable. As currently stated, the LPCI subsystem does not explicitly satisfy the requirements of a two train subsystem; however, EDG OPERABILITY is still necessary for LPCI. The proposed footnote to TSUP 3.5.A, Actions 2.a and 2.b ensures that no more than two (2) LPCI pumps are coincidentally inoperable. In conjunction with the requirements of TSUP 3.9.A, Actions 4.a or 6.b, this ensures that a minimum of two (2) LPCI pumps and one (1) core spray pump are always available; thus, ensuring design basis mitigative requirements are always available. Therefore, the proposed clarification ensures existing plant safety margins are unaffected.

19. ATWS-RPT Actions - ComEd originally proposed in TSUP 3.2.C, Action 2 that with the number of OPERABLE CHANNEL(s) less than the minimum required for an individual TRIP system, a fourteen (14) day allowed-outage-time (AOT). If the requirements could not be restored, the plant was required to be in STARTUP (MODE 2) within the next 8 hours.

The proposed clean-up changes for TSUP 3.2.C, Action 2.a maintain the same requirements for restoring the minimum number of OPERABLE CHANNEL(s) (14 days). However, the proposed clean-up changes require a more expeditious period for bringing the plant to STARTUP (6 hours) if the requirements cannot be restored.

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The change from 8 hours to 6 hours has also been proposed for TSUP 3.2.C, Actions 4 and 5. This change conservatively places the plant in a condition for which the LCO does not apply in a more expeditious time frame; as such, the proposed changes do not adversely affect existing plant safety margins.

To be consistent with the requirements specified in the Improved Standard Technical Specifications (ITS), the proposed clean-up changes for TSUP 3.2.C, Action 2.b allow a fourteen (14) AOT for placing the inoperable CHANNEL in the tripped condition. ComEd originally proposed in TSUP 3.2.C, Action 3.b that with one (1) inoperable water level CHANNEL and one (1) inoperable vessel pressure CHANNEL, place the inoperable CHANNEL(s) in the tripped condition within one (1) hour unless this would cause the Trip Function to occur. Although the proposed change is less restrictive than the requirements originally proposed in TSUP 3.2.C, Action 3.a, the requirements are consistent to the AOT for an inoperable CHANNEL. As such, it is contradictory and unnecessarily burdensome to restrict the period of time for allowing an inoperable CHANNEL prior to placing the CHANNEL in the tripped condition as compared to allowing the CHANNEL to be inoperable. The originally proposed one (1) hour time period does not provide a reasonable period of time to perform maintenance or surveillance testing activities for the ATWS-RPT system. In addition, it should be noted, there are no existing Technical Specification requirements that require tripping an inoperable CHANNEL. Therefore, because the proposed requirements are consistent with the ITS (NUREG-1433), and enhances the clarity and adds additional restrictions not part of the current licensing basis, the proposed changes do not significantly reduce existing plant safety margins.

The proposed TSUP 3.2.C, Action 3 is consistent with ITS requirements and existing Technical Specification requirements for Dresden or Quad Cities Station. Therefore, the proposed changes do not significantly reduce existing plant safety margins.

20. LPRM Calibrations - Current requirements at Quad Cities specify that LPRM calibrations shall be performed every 1000 effective full power hours (EFPH). There are no comparable requirements within the Dresden Technical Specifications. The calibration frequency of every 1000 EFPH is an arbitrary value that is consistent with STS guidelines and current industry practices. ComEd's calculations have shown that calibration frequencies of 2000 EFPH do not have an adverse affect on the existing plant safety analyses.

The basis for calibrating LPRMs is to ensure that the inputs for the Average Power Range Monitors (APRMs) are acceptable. LPRMs provide an input for the APRM. The APRMs provide an input for the Reactor Protection System (RPS). As such, the uncertainties assumed within the plant's safety analysis and subsequent field settings for APRMs need to be considered in determining an appropriate periodicity for calibrating the LPRM detectors.

For any individual reactor operating cycle, a reactor core may consist of several

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different types of LPRM detectors. Each LPRM detector may exhibit different characteristics and features that may affect its accuracy and corresponding calibration frequency.

As with determining the periodicity of appropriately calibrating any instrument, the calibration frequency for an LPRM detector is dependent upon its corresponding affect on the APRM's input into the RPS. As previously mentioned, the LPRM calibration frequency is dependent upon several factors that may change every reactor operating cycle. ComEd's calculations have shown that calibration frequencies of 2000 EFPH do not have an adverse affect on the existing plant safety analyses. As such, ComEd proposes changing the LPRM calibration requirements accordingly.

21. GL 93-05 - The requirements in Generic Letter 93-05, "Line-Item Technical Specifications Improvements to Reduce Surveillance Requirements for Testing During Power Operation," have been adopted in the proposed TSUP clean-up package for control rod OPERABILITY, where appropriate. GL 93-05 provided improvements to the Technical Specification Surveillance Requirements. Enclosure 1 to GL 93-05 provides guidance for preparing license amendment requests to change the TS to reduce testing during power operation.

Item 4.2.2 in Enclosure 1 to GL 93-05 recommends the following: The TS should be changed to require that if a control rod is immovable because of friction or mechanical interference, the other control rods should be tested within 24 hours and every 7 days thereafter. The TS include testing control rods every 7 days. Therefore, the recommendation to change the frequency for tests that apply when a control rod is immovable to include "once every 7 days thereafter" is already encompassed by the TS requirements that apply before the occurrence of an immovable rod (proposed TSUP 4.3.C.1.a). Because the proposed changes reduce unnecessary testing that correspondingly may lead to subsequent equipment degradation, the proposed change does not adversely affect existing plant safety margins.

22. 3/4.2 "Instrumentation" - The CHANNEL CALIBRATION for the Main Steam Line Radiation Monitor (MSLRM) originally did not include the CTS requirement of performing a calibration using simulated electrical signals every three months. Therefore, ComEd proposes to clarify this requirement by the addition of notation to Table 4.2.A-1. Because the proposed changes maintain existing requirements, existing plant safety margins are unaffected.

The CHANNEL FUNCTIONAL TEST is proposed to be revised from "M" to "E" to be consistent with current requirements. The SDV system is required to be OPERABLE in MODE(s) 1 and 2 in TSUP 3/4.3.K. However, due to system design limitations, the SDV switch-in-bypass requirements only affect operation during Mode 5. Therefore, MODE(s) 1 and 2 are not directly applicable to the SDV switch-

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in-bypass requirements. As such, the proposed requirements are consistent with the current design configuration of the plant. Because the proposed changes maintain existing requirements, existing plant safety margins are unaffected.

Within TSUP Table 4.2.E-1, the SRM and IRM Detector Not Full In CHANNEL CALIBRATION frequency is proposed to be changed from "N/A" to "E" (E = every 18 months). This change maintains the current Technical Specification frequency. Because the proposed changes maintain existing requirements, existing plant safety margins are unaffected.

The proposed changes to Table 3.2.F-1 and 4.2.F-1 modify the originally proposed TSUP requirements to include current LCO, ACTIONS and Surveillance Requirements for Post Accident Monitoring Instrumentation for Torus Pressure. In addition, the number of required CHANNELS has been modified from 2 to 1 to be consistent with existing plant design and existing Technical Specification requirements. The proposed surveillance frequency for the CHANNEL CHECK and CHANNEL CALIBRATION for Torus Pressure has been changed from current requirements (daily and quarterly, respectively) to "M" and "E", respectively. The proposed changes have been shown by the instrument calibration data to provide a sufficient level of protection for ensuring the appropriate parameters are within acceptable levels. As such, the proposed changes do not significantly reduce existing plant safety margins.

Changes are proposed to Table 3.2.F-1 and Table 4.2.F-1 combine the instrumentation requirements for the Drywell Hydrogen/Oxygen Concentration - Analyzer and Monitor. The proposed change is administrative in nature and retains existing plant requirements. Because the proposed change is administrative and does not pose a relaxation from current licensing requirements, the proposed change does not adversely affect existing plant safety margins.

SRM Downscale requirements are being deleted from Table 3.2.E-1 and 4.2.E-1. The proposed change is consistent with current licensing requirements and eliminates requirements unnecessary for inclusion within the Technical Specifications. The deletion of the SRM Downscale requires re-numbering of subsequent footnote notation in Table Notation. In addition, the proposed change is consistent with NUREG-1433 requirements.

Clarification is proposed to Table 4.2.F-1 regarding the CHANNEL CHECK of Safety/Relief Valve Position Indicators - Acoustic & Temperature monitors. Table notation is provided to maintain consistency with current licensing requirements and to clarify the appropriate requirements necessary to satisfy the surveillance requirement. Footnote (c) is added to Dresden Table 4.2.F-1 to maintain consistency with CTS requirements for the Acoustic Monitors. The CTS monthly verification of Acoustic Monitor instrument threshold levels is consistent with the proposed changes in notation for the CHANNEL CHECK. As such, the proposed change is

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administrative in nature and retains existing plant requirements. Because the proposed change is administrative and does not pose of relaxation from current licensing requirements, the proposed change does not adversely affect existing plant safety margins.

ComEd proposes to maintain the originally proposed surveillance frequency for Table 4.2.A-1, Item 3.d, regarding the Main Steamline (MSL) High - Flow requirements as 'E' (every 18 months). CTS requirements specify the surveillance frequency to be once every three months. The proposed change have been shown by the instrument calibration data that the proposed revised surveillance frequency does not adversely affect system operational performance. As such, the proposed change does not significantly affect existing plant safety margins.

The requirements originally proposed in Dresden Table 4.2.F-1, Item 5, CHANNEL CALIBRATION, specify a frequency of 'E'. This is equivalent to Dresden CTS periodicity requirements, and as such, maintains current requirements. Therefore, ComEd considers this issue resolved.

23. 3/4.8.D CREVS -The proposed changes to the Dresden and Quad Cities TS add LCOs, Actions and SRs for the Control Room Emergency Ventilation (CREV) System. This addition will ensure that the CREV System will maintain the Control Room environment suitable for plant personnel habitability and for equipment functional reliability under all plant conditions. The proposed changes are based upon the recommendations in GL 93-05, "Line-Item Technical Specification Improvements to Reduce Surveillance Requirements for Testing During Power Operation," and NUREG 1366, "Improvements to Technical Specifications Surveillance Requirements," and consistent with the guidance of NUREG-1433, "Standard Technical Specifications, General Electric BWR-4." In GL 93-05, "Line-Item Technical Specification Improvements to Reduce Surveillance Requirements for Testing During Power Operation," and NUREG 1366, "Improvements to Technical Specifications Surveillance Requirements," the NRC provided additional guidance and recommendations pertaining to the Control Room temperature surveillance. In those documents, the NRC stated that the temperature limit intended to ensure equipment operability and human habitability was not effective for either purpose. The NRC recommended the replacement of the temperature verification requirement with a more useful surveillance. Based upon the recommendations in GL 93-05 and NUREG-1366, ComEd proposes to add new LCOs and SRs for the Control Room refrigeration control unit (RCU) System, consistent with the guidance of NUREG-1433. The proposed changes provide additional restrictions not incorporated within the current Technical Specification that are applicable to the Dresden and Quad Cities plant system designs. Because the proposed changes provide additional restrictions, existing plant safety margins are unaffected.

The proposed changes to the Quad Cities CREF TS revise the Allowable Outage Time (AOT) to a more conservative value, consistent with BWR-STS (NUREG 0123,

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Revision 4). In addition, the proposed changes are new requirements not incorporated within the current Technical Specifications at Dresden. Because the proposed changes conservatively reduce existing plant vulnerabilities to an inoperable CREV system, the proposed changes do not significantly reduce existing plant safety margins.

24. MSL High Temperature - The Dresden CTS Minimum Channels per Trip System requirement for "High Temperature Main Steam Line Tunnel specifies "2 of 4 in each of 4 sets." The Quad Cities CTS requirement specifies 16 total channels (8 per trip system). The Dresden TSUP Table 3.2.A-1 requirement (TSUP item 3.d, "MSL Tunnel Temperature - High") specifies 4 channels per trip system. The Quad Cities TSUP requirement (TSUP item 3.d, "MSL Tunnel Temperature - High") specifies 8 channels per trip system. Upon further review, ComEd has determined that the proposed minimum operable channel requirement (per Trip System) does not adequately address the instrumentation logic for the trip function. The TSUP minimum operable channel requirement (per Trip System) should be "2 of 4 in each of 2 sets."

The MSL Tunnel temperature instrumentation uses 16 temperature channels, in four strings of four channels. Two trip strings make up each trip system and both trip systems must trip to cause an MSL isolation. Each trip string has four inputs, any one of which will trip the trip string. The trip strings are arranged in a one-out-of-two taken twice logic. This is effectively a one-out-of-eight taken twice logic arrangement to initiate isolation of the MSIVs.

Based upon this design of instrumentation logic (four inputs per instrument string, any one of which will trip the trip string), the minimum number of operable channels for each string of channels should be two, in order to ensure that the design function will be met under postulated accident conditions, with a single failure. The minimum number of operable channels per Trip System should be at least 4 (2 channels per string and two strings per trip system). Therefore, the TSUP minimum channel requirements (per Trip System) for Dresden and Quad Cities (4 and 8 respectively) do not represent a significant reduction in the level of safety.

25. Spent Fuel Storage License Condition - Current OL DPR-19 allows for the possession of byproduct special nuclear materials produced by the operation of Dresden Unit 2. Byproduct and special nuclear material are present in spent nuclear fuel and are a proliferation concern. The current full-term operating license (FOL) licenses Dresden Unit 2 to possess spent nuclear fuel produced from the operation of the "facility" which is defined as Dresden Unit 2. This is in accordance with Section 2.B.5 of the current license which states, "CECo, pursuant to the Act and 10 CFR Parts 30, 40 and 70, to possess, but not separate, such byproduct special nuclear material as may be produced by the operation of the facility." The "facility" is defined as Dresden Unit 2 and the associated equipment in Section 2.A of the license.

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The current requirement resulted from an administrative error when the Facility Operating License was revised from a Provisional Operating License (POL) to a Full Term License. The previous requirement in the POL (Amendment No. 34) allowed Dresden 2 to possess byproduct and special nuclear materials produced by the operation of Dresden Units 1, 2 and 3. Under this condition, some Dresden Unit 1 spent fuel was placed into the Unit 2 spent fuel pool in the mid 1980's. The error was introduced when generic language was subsequently used ("facility") rather than explicitly stating the station name and identifying all three units, as in the corresponding provisions of the Dresden 3 FOL and previous Unit 2 POL.

The revised requirement reflects the acceptability of storing spent nuclear fuel from Dresden Units 1, 2 and 3 in the Unit 2 spent fuel pool. The revised requirement is identical to that contained in the Unit 3 FOL Section 2.E which states "Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of Dresden Nuclear Power Station Units Nos. 1, 2 and 3.

The bases for the revised requirement were previously evaluated in Amendment 30 which first licensed Unit 2 to possess Units 1 and 3 fuel. Updated FSAR Section 9.1.2.3.2 discusses the technical bases for criticality, structural and thermal hydraulic effects of storing Unit 1 fuel in the high density racks. These bases and design criteria were not altered with the change from a provisional to a full term operating license. New Unit 2 and 3 fuel assemblies have been and are currently analyzed for storage in the new fuel vault and either spent fuel pool prior to receipt. Therefore, the current basis is unchanged with the proposed license change.

The proposed license change restores a previously licensed provision which allowed Dresden Unit 2 to possess Dresden Units 1 and 3 fuel. This condition was inadvertently changed when the Unit 2 license was converted from a provisional license to a full term operating license. The term "facility" was used instead of explicitly stating the Station name and all three units. Thus, an intended and unnecessary difference between the Unit 2 and Unit 3 operating licenses was introduced. The design basis for Unit 2, as described in the UFSAR Section 9.1.2.3.2, is not compromised by the storage of spent fuel from Dresden Units 1 and 3 into the Unit 2 spent fuel pool.

26. Quad Cities License Expiration Date - Amendment Nos. 128/123 for DPR-29/30 for Quad Cities Units 1 and 2 recaptured the construction period for the plants. This amendment inadvertently utilized the period of time 40 years from the date of issuance of the full power operating license. The date of issuance of the full power operating license was December 14, 1972. The correct bases for the 40 years should have been the period from the initial operating license. The date of issuance of the initial operating license was October 1, 1971 for Quad Cities Unit 1 and March 31, 1972 for Quad Cities Unit 2. The correct expiration date of the license should be October 1, 2011 for Quad Cities Unit 1 and March 31, 2012 for Quad

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Cities Unit 2. The proposed changes are administrative in nature and do not affect the operation of the plant.

27. ADS Actions Regarding OPERABLE LPCI Pumps - The originally proposed TSUP 3.5.A, Actions required that all four LPCI pumps be OPERABLE with a single ADS valve inoperable. CTS requirements at Quad Cities do not place any restrictions on LPCI pumps with an inoperable ADS valve. CTS requirements at Dresden also do not place any restrictions on LPCI pumps with an inoperable ADS valve. Because the design basis of the LPCI subsystem is maintained by three (3) OPERABLE LPCI pumps, ComEd proposes to revise the TSUP 3.5.A, Actions for ADS to specify that three LPCI pumps shall be OPERABLE with a single inoperable ADS valve. Both CS subsystems and the HPCI subsystem will continue to be required to remain OPERABLE during periods with an inoperable ADS valve. As such, existing plant safety margins are unaffected by the proposed changes as the functionality, design basis and OPERABILITY of the ADS system and LPCI subsystem are not compromised in any way.
28. ADS Bases Clarifications - The Dresden and Quad Cities TSUP Bases for Section 3/4.5 are being revised to incorporate NUREG-1433 guidance with respect to ADS surveillance requirements.

TSUP SR 4.5.A.4.b states that;

"The ECCS shall be demonstrated OPERABLE: At least once per 18 months for the ADS: (by) Manually opening each ADS valve when the reactor steam dome pressure is ≥ 150 psig^(c) and observing that either: 1) The turbine control valve or turbine bypass valve position responds accordingly, or 2) There is a corresponding change in the measured steam flow."

Footnote "(c)" to this requirement states that the provisions of 4.0.D are not applicable provided the surveillance is performed within 12 hours after reactor steam dome pressure is adequate to perform the test. The proposed requirement and footnote are consistent with BWR-STs (NUREG-0123, Draft Rev. 4) Surveillance Requirement (SR) 4.5.1.d.2.b), and footnote "***," as modified for the plant-specific pressure requirement (which is equivalent to the pressure at which ADS is required to be operable).

The TSUP SR and accompanying footnote are also consistent with the NUREG - 1433, SR 3.5.1.12. However, the minimum pressure requirement is qualitatively described in the NUREG-1433 Bases, as opposed to being quantitatively specified in the SR. For SR 3.5.1.12 (once per 18 month opening of each ADS valve), the NUREG-1433 Bases indicate that the adequate pressure at which this SR is required to be performed is the pressure recommended by the valve manufacturer. The Bases also state that reactor startup is allowed prior to performing the SR because valve operability and the setpoints for overpressure protection are verified,

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per ASME requirements, prior to valve installation.

The TSUP 3/4.5 Bases have been revised to include this NUREG-1433 guidance for performance of the SR. This revision is consistent with NUREG-1433, and represents a more conservative operating practice. The revised Bases ensure that adequate steam pressure is available to perform the test in order to avoid damaging the valves. Therefore the revised Bases do not represent a reduction in the level or margin of safety.

29. Instrumentation Surveillance Frequencies - A portion of the surveillance requirement frequencies proposed in the original TSUP 3/4.2, "Instrumentation," were based upon industry precedence and the requirements of the BWR STS (NUREG-0123). However, in order to maintain consistency with current licensing basis requirements, ComEd has chosen to revise surveillance requirement frequencies to be consistent with the current Technical Specifications.

Examples of some proposed surveillance frequency changes include but are not limited to the following:

- changes to Dresden Table 4.2.A-1, Item 6.a from Q to E
- changes to Dresden Table 4.2.B-1, Item 1.d from E to Q
- changes to Quad Cities Table 4.2.E-1, Item 5.b from M to E
- changes to Quad Cities Table 4.2.E-1, Item 4.a from NA to E

Because existing surveillance requirements will be maintained, existing plant safety margins are not adversely affected by the proposed changes.

30. Surveillance Requirement Details - The SRs specified in TSUP 4.3.L.2.b and 4.3.L.3.b regarding the demonstration of the rod block function ability of the RWM has been relocated to station administrative procedures. Details of the methods for performing these surveillances are inappropriate for inclusion within the Technical Specifications. The RWM system design features and system operational details regarding control rod block function are appropriately controlled by administrative means, the revisions to which the provisions of 10 CFR 50.59 suffice. The proposed changes are consistent with the requirements specified in the BWR ISTS (NUREG-1433). The proposed change administratively relocates system design details - the RWM system will continue to require OPERABLE control rod block functions - there is no physical change to the plant or its operation proposed herein. As such, the proposed changes do not significantly reduce existing plant safety margins.

TSUP 4.5.A.1.a(1) specifies that for the applicable ECCS systems, "Verifying by venting at the high point vents that the system piping from the pump discharge valve to the system isolation valve is filled with water." ComEd proposed to relocate the requirements specified as "...by venting at the high point vents..." to site administrative controls, the revisions to which the provisions of 10 CFR 50.59

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suffice. Details of the methods for performing surveillances are inappropriate for inclusion within the Technical Specifications. The proposed changes are consistent with the requirements specified in the BWR ISTS (NUREG-1433). The proposed change administratively relocates system design details - the appropriate ECCS systems will continue to require that the required piping will be filled with water - there is no physical change to the plant or its operation proposed herein. As such, the proposed changes do not significantly reduce existing plant safety margins.

Dresden TSUP 4.5.D.4 specifies that the Isolation Condenser shall be demonstrated OPERABLE: "At least once per 5 years by verifying the system heat removal capability to be $\geq 252.5 \times 10^6$ BTU/hour." ComEd proposed to relocate the requirements specified as "...to be $\geq 252.5 \times 10^6$ BTU/hour..." to site administrative controls (i.e., UFSAR and the TS Bases), the revisions to which the provisions of 10 CFR 50.59 suffice. In addition, ComEd proposes to revise the notation within 3/4.2.D, Table 3.2.D-1 regarding ≤ 15 seconds to 17 seconds and relocate this information to the Technical Specification Bases. The proposed change to 17 seconds for the IC system is consistent with revised plant analyses. Details of the methods for performing surveillances are inappropriate for inclusion within the Technical Specifications. The proposed changes are consistent with the intention of the requirements specified in the BWR ISTS (NUREG-1433). The proposed change administratively relocates system design details - the Isolation Condenser will continue to require adequate heat removal capability - there is no physical change to the plant or its operation proposed herein. As such, the proposed changes do not significantly reduce existing plant safety margins.

TSUP 4.8.I.2.b specifies that the Main Condenser Offgas Activity release rate shall be verified: "Within 4 hours following the determination of an increase, as indicated by the air ejector noble gas monitor, of $> 50\%$, after factoring out increases due to changes in THERMAL POWER level, in the nominal steady state fission gas release from the primary coolant." ComEd proposed to relocate the requirements specified as "..., as indicated by the air ejector noble gas monitor ..." and "... , after factoring out increases due to changes in THERMAL POWER level, in the nominal steady state fission gas release from the primary coolant" to site administrative controls (i.e., UFSAR and the TS Bases), the revisions to which the provisions of 10 CFR 50.59 suffice. Details of the methods for performing surveillances are inappropriate for inclusion within the Technical Specifications. The proposed changes are consistent with the intention of the requirements specified in the BWR ISTS (NUREG-1433). The proposed change administratively relocates system design details - the Main Condenser Offgas Activity release rates will continue to require increased surveillance upon gross increases in activity level - there is no physical change to the plant or its operation proposed herein. As such, the proposed changes do not significantly reduce existing plant safety margins.

TSUP 3.9.E, Limiting Conditions for Operation includes specific design detail

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requirements that specify the tie breaker configuration of the Distribution System. The details relating to system design, function and OPERABILITY are not necessary for inclusion within the Technical Specifications. The definition of OPERABILITY suffices. The details related to tie breaker configuration are more appropriately controlled in licensee controlled documents. This change is in accordance with the guidance provided in NUREG-1433. The design features and system configuration are also described in the plant's UFSAR. Changes to plant controlled documents are controlled by the provisions of 10 CFR 50.59. Therefore, because the proposed change does not affect the physical configuration of the plant or its operational practices, the proposed change does not adversely affect existing plant safety margins.

31. 1.0 Definitions of CORE ALTERATIONS, LOGIC SYSTEM FUNCTIONAL TEST and OPERABLE - OPERABILITY - The proposed changes to the definitions of CORE ALTERATION(s), LOGIC SYSTEM FUNCTIONAL TEST and OPERABLE - OPERABILITY are consistent to NUREG-1433.

CORE ALTERATION(s) - When CORE ALTERATION(s) are required to be suspended, it is known that a specific movement may have to be completed. Completing the movement that was in progress at the time of the requirement to suspend is required to establish a "safe" configuration (e.g., no fuel bundle suspended from the fuel mast). The requirement to establish a "safe" position is deemed proper and sufficient. Eliminating the STS requirement to also be a "conservative" position avoids potential confusion and perhaps overly restrictive interpretation. Since there is no reference on which to base the conservative evaluation, it is assumed that "conservative" is intended to reflect the same context as "safe." That is, if it is "safe" it is also "conservative." Given this understanding, the wording change is editorial. This is acceptable since "safe" adequately controls the allowance to complete the move.

The change maintains CORE ALTERATION(s) as movement of only that which can affect core reactivity. The basis for this is evident in that the Specifications applicable during CORE ALTERATION(s) are those that protect from or mitigate a reactivity excursion event. In keeping with this, NUREG-1433 provides that "normal" movement of SRMs, IRMs, LPRMs, TIPs or special movable detectors (i.e., incore instruments) is not considered a CORE ALTERATION. In the previous definition, no delineation of what is and is not considered "normal" movement is given. This has led to some confusion and perhaps overly restrictive interpretation. NUREG-1433 focuses the definition on activities that can effect the core reactivity. Since incore instruments have negligible (if any) affect on core reactivity, any movement of incore instruments has essentially no impact on core reactivity. Therefore, the revised definition places no restrictions on incore instrument movement; "normal" or otherwise, including under vessel replacement.

This change allows control rod movement in a defueled cell to not be considered a

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CORE ALTERATION. In this configuration, the negative reactivity inserted by removing the adjacent four fuel assemblies is significantly more than any minimal positive reactivity incurred during the movement (including complete removal) of the control rod. Appropriate Technical Specifications controls are applied during the fuel movements (i.e., they are CORE ALTERATION(s)) preceding the control rod movement to protect from or mitigate a reactivity excursion event. After the fuel has been removed, sufficient margin and administrative controls are in place to allow removing the applicable CORE ALTERATIONS Technical Specification controls during the control rod movement. The change focuses the definition on activities that can affect the core reactivity. Maintaining CORE ALTERATIONS as movement of only that which can affect core reactivity is consistent with its application in the Specifications. CORE ALTERATIONS Applicabilities involve Specifications that protect from or mitigate a reactivity excursion event.

LOGIC SYSTEM FUNCTIONAL TEST - As a requirement for OPERABILITY of a Technical Specification channel, not all channels will have a "required" sensor or alarm function. Conversely, some channels may have a "required" display function. This is perceived as the purpose of the STS wording, and therefore, the revised wording more accurately reflects the requirement.

The definition of LOGIC SYSTEM FUNCTIONAL TEST (LSFT) has been modified to exclude the actuated device. The actuated device is to be tested as part of a system functional test (eg., pump runs, etc). Deleting the actuated device from the definition of LSFT eliminates the confusion as to whether a previously performed LSFT is rendered invalid if the final actuated device is discovered to be inoperable as a consequence of another Surveillance (e.g., valve cycling). Therefore, the proposed change is consistent with NUREG-1433 and eliminates confusion regarding LSFT test acceptance criteria which are more appropriately specified within an individual systems' Technical Specifications.

Clarification is provided to proposed Surveillance Requirement 4.5.A.3.a regarding ECCS testing. The originally proposed terminology includes vague phrases without specific definition within the Technical Specification. The proposed requirements provide simple, concise language that clearly delineates the purpose of the surveillance and the appropriate acceptance criteria that demonstrates the function of the system. Clarification is maintained to preclude actual injections into the reactor vessel. The proposed changes are also consistent with NUREG-1433. Because these changes provide clarification of current requirements and do not relax existing surveillances, the proposed changes do not adversely affect existing plant safety margins.

OPERABLE - OPERABILITY - The non-specific "electrical power" requirement is intended to be a requirement for only one source of power to be able to declare OPERABILITY; however, this definition had a history of being both "normal and emergency" in older (pre-1980) licensed TS. To minimize the potential for

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confusion, the intent of the current STS requirement is more explicitly stated in NUREG-1433 as "normal or emergency electrical power." Similarly, "specified function" could be misinterpreted. The TS intent is to address "safety function(s)" and not necessarily to also encompass any non-safety functions a system may also perform. These additions provide clarification of the STS requirement without any modification of intent.

The proposed change also addresses the issue regarding declaring systems inoperable which utilize the diesel generator as its emergency power source when its normal power source is OPERABLE. The proposed change ensures that minimum electrical power sources are available to a system for maintaining OPERABILITY status and avoid an unnecessary administrative burden introduced by "cascading" Technical Specification requirements. The change to the definition of OPERABLE - OPERABILITY eliminates subsequent changes to other TSUP sections and provides sufficient controls for ensuring that minimum system OPERABILITY requirements are maintained.

32. 4.1.A RPS Response Times - To be consistent with the intention of Generic Letter 93-08, "Guidance for a Proposed License Amendment to Relocate Tables of Instrument Response Time Limits from Technical Specifications to the Updated Final Safety Analysis Report," any reference to specific instrumentation response shall be controlled within the UFSAR. As such, the proposed surveillance requirement (TSUP 4.1.A) does not delineate any specific time requirements. Because the RPS response times will continue to be maintained outside of the Technical Specifications and controlled per the provisions of 10 CFR 50.59, there is no reduction in plant safety margins.
33. 4.3.H and 4.3.I CRD Coupling and Position Indication - STS Surveillance 4.1.3.6.c (TSUP 4.3.H.3) addresses the requirement to perform coupling checks after performing activities which could have affected coupling integrity. This surveillance must be completed prior to allowing the control rod to be considered OPERABLE. Therefore, the STS Surveillance 4.1.3.6.a (TSUP 4.3.H.1) is redundant. "CORE ALTERATIONS that could have affected the control rod drive coupling integrity" is a subset of the requirement "maintenance...which could have affected the control rod drive coupling integrity." Performance of the integrity verification prior to control rod OPERABILITY bounds "prior to reactor criticality." Therefore, elimination of this requirement eliminates redundant specifications and is therefore administrative in nature, and represents no change in existing requirements.

The intent of the STS LCO 3.1.3.7 (TSUP 3.3.I) requirement is understood to be related to each control rod. The Applicability footnote "*" (TSUP footnote (a)), each ACTION within "a." (TSUP Action 1), ACTION "b" (TSUP Action 2), and each Surveillance Requirement all refer to individual control rods. Therefore, the interpretation of this LCO is simply that each control rod shall have "at least one

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control rod position indication."

The essence of the requirement that each control rod have at least one control rod position indication is presented in SR 3.1.3.1 of ITS LCO 3.1.3, "Control Rod OPERABILITY." The effect of relocating the requirement for control rod position to be indicated, is to make it a requirement for control rods to be considered OPERABLE. Similarly, STS ACTION a.1 addresses this intent. NUREG-1433 SR 3.1.3.1 has combined the STS LCO intent with the ACTION a.1. intent to require the position of the control rod be determined. If the position can be determined, the control rod may be considered OPERABLE, and continued operation allowed. The proposed changes to TSUP 4.3.I and 4.3.H are consistent with NUREG-1433. This outcome is identical, whether complying with STS ACTION a.1., or meeting NUREG-1433 SR 3.1.3.1, and its use has been previously approved for Perry Nuclear Power Plant. Therefore, this change is considered administrative. In addition, corresponding changes are proposed to the Technical Specification Bases to avoid unnecessary confusion to site operations personnel.

34. 4.5.A ECCS CS Δ P Instrumentation - As an alarm-only function performing no automatic function, and not assumed in any event for dependence on operator action, this function has not been retained in NUREG-1433 and as such, is deleted in TSUP 3/4.5.A, where applicable. Alarm-only functions do not necessarily relate directly to the associated OPERABILITY requirements for the system. In general NUREG-1433 does not specify indication-only, alarm-only, or test equipment to be OPERABLE to support OPERABILITY of a system or component. Control of the availability of, and necessary compensatory activities if not available, for indications, monitoring instruments, alarms, and test equipment are addressed by plant operational procedures and policies.
35. 4.5.D Isolation Condenser Details - Proposed TSUP 4.5.D includes specific details for demonstrating the OPERABILITY of the Isolation Condenser by verifying the shell side water level and shell side water temperature to be within limits. CTS 4.5.E.1.a specifies "The shell side water level and temperature shall be checked daily." Upon further analysis, the originally proposed values for water volume require modification. In addition, future modifications to the system may require additional changes to the water volume value. NUREG-1433 relocates specific procedural details to administrative controls. As such, to be consistent with the format of NUREG-1433 and to restore CTS 4.5.E.1, ComEd proposes to retain the format of CTS 4.5.E.1 and modify TSUP 4.5.D.1 accordingly. The specific water volumes and temperature values will continue to be administratively controlled (site procedures, UFSAR, and/or Technical Specification Bases). Because the proposed changes maintain the requirements for existing Isolation Condenser daily surveillances, existing plant safety margins are unaffected by the proposed changes.
36. ADS Timer - The Dresden Technical Specification Upgrade Program (TSUP) has

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proposed to revise the ADS drywell pressure bypass timer setpoint (Table 3.2.B-1, Items 4.d and 5.d) that provides protection against breaks outside the containment. ComEd proposed to revise the upper bound value of 10 minutes for the bypass timer setting. The originally proposed TSUP setpoint for the time delay relay is 8.5 minutes.

The NRC issued a Safety Evaluation Report in the memo from D. M. Crutchfield to D. L. Farrar dated June 3, 1983, "NUREG-0737; ITEM II.K.3.18, ADS Logic Modifications." As specified within NUREG-0737, Item II.K.3.18, these changes described several possible solutions for eliminating the need for manual actuation to ensure core coverage during a postulated break outside the containment. The NRC also requested Commonwealth Edison to choose one of the two acceptable options for plant modification, and to propose appropriate Technical Specifications. In response, ComEd proposed to add a timer that bypasses the high drywell pressure logic during a sustained low reactor pressure vessel level and allowed ADS actuation on low water level alone. An upper bound of 10 minutes was proposed for the bypass timer setting. A manual ADS inhibit switch was also provided to allow operator action to inhibit ADS.

The technical basis for satisfying Item II.K.3.18 was provided by General Electric Document NEDO-24708A, "Additional Information Required for NRC Staff Generic Report on Boiling Water Reactors", dated December 1980. NEDO-24708A indicates that the analysis assumes the operators manually initiate ADS 10.0 minutes after the commencement of a main steam line break outside containment. It also states the manual and automatic initiation of ADS after 10.0 minutes provide the same transient results. Therefore, any ADS drywell pressure bypass timer setpoint of 10.0 minutes or less is acceptable and is bounded by the assumptions listed within NEDO-24708A. In addition, since the low low level ECCS initiation and main steamline isolation setpoint for Dresden is approximately seven feet above the top of the active fuel, whereas one foot is assumed in the NEDO-24708A analysis, ADS will actuate on low water level approximately 5 minutes sooner, with less core heatup. Therefore, the NEDO-24708A results are bounding for Dresden.

The NRC closed out the ADS drywell pressure bypass timer issue in the memo from J. A. Zwolinski to D. L. Farrar dated December 20, 1984, "Close Out of TMI Action Plan Item II.K.3.18, ADS Logic Modification for Isolation Condenser Boiling Water Reactors." The NRC indicated that for plants with isolation condensers, like Dresden, certain events would be adversely impacted by an ADS drywell pressure bypass timer. These events involve the loss of high pressure makeup capability and are normally readily mitigated by the operation of the isolation condenser. Vessel depressurization greatly reduces the effectiveness of the isolation condenser and can defeat its function. The NRC stated that since the ADS drywell pressure bypass timer provides protection for only a small number of events, and that other events would be adversely impacted by the actuation of the ADS, the proposed modifications provide no clear overall safety enhancement. The staff concluded

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that for Dresden, being an isolation condenser plant, no modifications to the ADS logic was required and that implementation of emergency procedures is sufficient for satisfying Action Plan Item II.K.3.18.

Since Dresden was near completion of the ADS logic modification when the NRC close-out letter was received, ComEd evaluated completion of the modification. The issue regarding ADS logic modifications for plants with isolation condensers was first raised by Nine Mile Point-1. Dresden and Nine Mile Point-1 have different arrangements of safety systems. Particularly, Dresden has a HPCI system and a smaller isolation condenser capability. ComEd concluded the issues regarding the Nine Mile Point-1 were not directly applicable to Dresden. In addition, for events during which the isolation condenser is available, the long bypass duration should be sufficient to allow the operators to inhibit ADS. For events which involve the loss/failure of HPCI and the isolation condensers, ADS actuation by the logic modification assured subsequent core cooling by the low pressure systems. As such, ComEd concluded that the ADS drywell pressure bypass timer provides an enhancement at Dresden and was retained.

As discussed above, ComEd's review has shown that a time delay of ≤ 10 minutes is acceptable. The delay time of 10 minutes was originally evaluated and found to be acceptable during evaluations performed to satisfy NUREG-0737, Item II.K.3.18. As such, the proposed changes do not significantly affect existing plant safety margins as the revised TSUP limit (10 minutes) maintains existing plant design requirements.

37. 4.7 PCI and SCI Surveillances - The valves associated with the affected surveillances are located in relatively inaccessible or well controlled areas of the plant, therefore additional measures to "lock, seal or otherwise secure" items are removed as a Technical Specification requirement. The requirement to ensure the appropriate penetrations are closed (without explicitly provided the closure mechanism, as specified in 4.7.A.2 and 4.7.N.2.b) should suffice. Existing plant procedures and criteria for locking, sealing and securing valves will dictate the appropriate controls for closed valves located in the containment, steam tunnel and drywell. Many of these valves will retain a design or administrative requirement to lock, seal, or secure them in the closed position. Therefore, the proposed changes do not relax existing requirements.

A footnote lists several ACTIONS and Surveillances to allow administrative controls to be used to verify isolation barriers in high radiation areas remain isolated. These isolation barriers are initially verified to be in the proper position and access to them is restricted during operation due to the high levels of radiation in the area. Therefore, the probability of misalignment of the isolation barrier is acceptably small.

38. 4.7.K Suppression Chamber Visual Inspections - This requirement is deleted in

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accordance with the recommendations of NEDO-30832, "Elimination of Limit on BWR Suppression Pool Temperature for SRV Discharge with Quenchers," December, 1984. The basis for eliminating the subject limit is that there are no undue loads on the suppression pool or its components from SRV discharges through quenchers at elevated pressures and temperatures. Therefore, the requirements specified in TSUP 4.7.K.3 is unnecessary as there is no need to perform this special visual examination.

Visual examinations are an Appendix J requirement prior to Type A leak rate testing. This regulation adequately prescribes the frequency for these visual examinations without the need for a Technical Specification requirement for more frequent examinations. Therefore, the requirements specified in TSUP 4.7.K.4 are relocated from Technical Specifications, with appropriate examinations performed prior to ILRTs.

39. 3/4.7.P Standby Gas Treatment (SBGT) Actions and Surveillances - CTS 3.7.B.1.b for both Dresden and Quad Cities Station specify that if both SBGT system subsystems are inoperable, within 36 hours the reactor shall be placed in a condition for which the SBGT system is not required. ComEd proposes to conservatively retain existing CTS 3.7.B.1.b requirements which specify that with both SBGTS system subsystems inoperable (following a one hour allowed-outage-time (AOT)), place the plant in a condition for which SBGTS is not required within 36 hours. The revised TSUP 3.7.P, Action 4 provides a one-hour allowed-outage-time (AOT) in order to provide a limited period of time to restore a subsystem of the SBGTS system to OPERABLE prior to commencing reactor shutdown (12 hours to HOT SHUTDOWN followed by 24 hours to COLD SHUTDOWN). This one hour AOT does not significantly reduce existing plant safety margins. To be consistent with the aforementioned issue, proposed TSUP 3.7.P, Actions 2 and 3 are deleted as these actions are redundant to Action 4.

To clarify diesel generator OPERABILITY requirements associated with the standby gas treatment system, ComEd proposes to revise 3.7.P, LCO by deleting the specific reference to OPERABLE emergency diesel generators. The definition of OPERABILITY suffices. Design details such as these are inappropriate for inclusion within the Technical Specification. This information has been added to the Technical Specification Bases to clarify and define emergency power sources for the standby gas treatment system. The proposed change is administrative in nature and as such, does not reduce existing plant safety margins.

The proposed SBGT and CREF service usage frequency adopts the Quad Cities CTS SBGT system service usage requirement (1440 hours). This extended interval (relative to BWR-STs) reduces unnecessary testing of the SBGT and CREF systems, and is justified based upon historical test data from Dresden and Quad Cities Stations. Therefore, ComEd proposes to leave the system service usage requirements as originally submitted (1440 hours). The following historical data

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demonstrates consecutive successful completions of the periodic performance tests, as described below:

- Dresden SBTG 12 consecutive successful tests (6 on each train, all spanning the period from May 1986 to June 1991, with new charcoal installed in May 1992) with methyl iodide penetration $\leq 0.9\%$ (the proposed TSUP SR criteria is $\leq 10\%$ methyl iodide penetration).
- Dresden CREF 5 consecutive successful tests (spanning the period from March 1989 to June 1995) with methyl iodide penetration $\leq 0.1\%$ (the proposed TSUP SR criteria is $\leq 0.5\%$ methyl iodide penetration).
- QCNPS CREF 7 consecutive successful tests (spanning the period from December 1985 to May 1995 with methyl iodide penetration $\leq 1\%$ (the proposed TSUP SR criteria is $\leq 0.5\%$ methyl iodide penetration).

40. 3.10.H Spent Fuel Pool Water Level - Current Technical Specification 3.10.C specifies that "Whenever irradiated fuel is stored in the fuel storage pool, the pool water level shall be maintained at a level of 33 feet." The proposed TSUP 3.10.H requirements were based upon STS requirements which specified "At least 23 feet of water shall be maintained over the top of irradiated fuel assemblies seated in the spent fuel storage pool racks." Upon further review, ComEd discovered that the STS requirements were not applicable to the Dresden or Quad Cities spent fuel pool design. As such, ComEd proposes to retain the CTS 3.10.C requirements. Because the proposed changes maintain the requirements for existing spent fuel pool water levels, existing plant safety margins are unaffected by the proposed changes.
41. 4.11.C MCPR τ_{ave} - The core thermal limits listed in TSUP 4.11.C regarding τ_{ave} are currently specified in the Core Operating Limits Report (COLR). These changes are consistent with the requirements of NUREG-1433 and Generic Letter 88-16 which relocated fuel thermal limit parameters to the COLR. The COLR, changes to which are controlled per the provisions of 10 CFR 50.59, provides adequate control of such parameters. Because the proposed change administratively relocates the details regarding the verification of the MCPR limit and is consistent with NUREG-1433, there is no reduction in existing plant requirements and existing plant safety margins are unaffected by the proposed change.
42. 4.8.J Safe Shutdown Makeup Pump (SSMP)- Proposed TSUP 4.8.J.2 provides quarterly surveillance testing of the SSMP at Quad Cities. The proposed changes similarly revise the wording of the SSMP testing to be consistent with the HPCI

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and RCIC quarterly flow rate tests that require the performance of the flow rate tests against a system head corresponding to reactor pressure. The proposed change will require that the SSMP (for Quad Cities only) systems deliver a flow rate of 400 gpm when tested against a system head corresponding to reactor vessel pressure of greater than 1120 psig. The previously submitted value of 1150 psig was caused by the incorrect conversion of psia to psig. ComEd apologizes for any inconvenience this issue may have caused the NRC staff. The proposed changes are consistent with the current safety analysis and do not reduce existing plant safety margins at Quad Cities Station.

43. 3.2.E.1 - SDV Water Level High Control Rod Block - ComEd proposes to revise the Trip Setpoint for the Dresden TSUP Table 3.2.E-1, Item 5.a, "Control Rod Block Instrumentation - Scram Discharge Volume Water Level - High." The revised setpoint for each Unit at Dresden more accurately reflects the instrument capabilities and inaccuracies. The design function for the SDV Water Level - High control rod block will not be affected by the proposed change. Therefore, the revised setpoint does not represent a reduction in the margin of safety.
44. Instrumentation Surveillance Period - ComEd proposed to revise TSUP Tables 3.2.E-1, 3.2.I-1, and 3.2.J-1 to add a table note to each table. The proposed table note is based upon BWR-STS and NUREG-1433 guidance, and modifies the minimum channel requirement column by stating that a channel may be inoperable for up to 2 hours for required surveillance without placing the trip system in the tripped condition. The proposed action enhances the proposed requirements by specifying that the relaxation described above can only be implemented if the Functional Unit maintains design function capability. This proposed note is consistent with NUREG-1433 and does not represent a significant reduction in existing plant safety margins.
45. High Radiation Areas - ComEd proposes to revise Dresden TSUP Sections 6.12.B.1, 6.12.B.3, and 6.12.B.4, consistent with the proposed Quad Cities TSUP Sections, the requirements defined in 10 CFR 20.1101(b), and recent NRC Staff guidance (C.I. Grimes to Owners Group Chairpersons letter dated July 28, 1995; "Changes to Technical Specifications Resulting from 10 CFR 20 and 50.36a Changes").

The proposed revision of Dresden TSUP requirement 6.12.B.1 deletes the term "continuous" as it applies to direct surveillance, when this surveillance is used to prevent unauthorized entry into High Radiation Areas with radiation levels greater than 1000 mrem/hr.

The proposed revision of Dresden TSUP requirement 6.12.B.3 deletes the term "continuous" as it applies to surveillance and radiation monitoring (by a Radiation Protection Technician) of entries into High Radiation Areas (with radiation levels greater than 1000 mrem/hr), without an alarming electronic dosimeter.

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The proposed revision of Dresden TSUP requirement 6.12.B.4 deletes the term "continuous" as it applies to surveillance and radiation monitoring (by a Radiation Protection Technician) of emergency entries into High Radiation Areas (with radiation levels greater than 1000 mrem/hr), without a routine Radiation Work Permit (RWP).

The use of the term "continuous" in Dresden TSUP Sections 6.12.B.1, 6.12.B.3, and 6.12.B.4 is inconsistent with implementation of the "As Low as Reasonably Achievable" (ALARA) philosophy required by 10 CFR 20.1101(b). This regulation states, in part, that licensees shall use, to the extent practicable, procedures based upon sound radiation protection principles to achieve occupational doses ALARA.

The literal implementation of the term "continuous," as referenced in Dresden TSUP Section 6.12.B.1, would require the presence of an individual at the physical entry to an unlocked High Radiation Area ("direct surveillance"), as opposed to a contiguous, line-of-sight location with lower radiation levels. With respect to Dresden TSUP Sections 6.12.B.3 and 6.12.B.4, the literal implementation of "continuous" would require that a Radiation Protection Technician accompany each individual entering a High Radiation Area, as opposed to oversight and control of the entry in a contiguous location with lower radiation levels. All of these situations would result in unnecessary occupational exposure, with no accompanying increase in the level of control over the entry to High Radiation Areas.

The proposed revision to Dresden TSUP Sections 6.12.B.1, 6.12.B.3, and 6.12.B.4 would provide necessary flexibility for control of access to High Radiation Areas (with radiation levels greater than 1000 mrem/hr), thereby implementing the intent of 10 CFR 20.1101(b), without decreasing the necessary level of positive control of the areas and entry into the areas.

The proposed revision of Dresden TSUP Sections 6.12.B.1, 6.12.B.3, and 6.12.B.4 is also consistent with the guidance provided in recent NRC Staff guidance (C.I. Grimes to Owners Group Chairpersons letter dated July 28, 1995; "Changes to Technical Specifications Resulting from 10 CFR 20 and 50.36a Changes"). Section 5.7.2.D of the suggested revision to the Improved Standardized Technical Specifications (NUREG-1433) defines the requirements for each individual entering a High Radiation Area with radiation levels greater than 1000 mrem/hr. Subsection (iv) of the requirement states, in part, that if the required direct surveillance of entries into a High Radiation Area are impractical or inconsistent with the ALARA principle, then each individual should be equipped with a radiation monitoring device that continuously displays radiation dose rates in the area. This is consistent with the proposed Dresden (and Quad Cities) TSUP Section 6.12.B requirements.

46. Idle Loop Startup Limits - The proposed Technical Specification changes for

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Dresden Station revise the requirements for the startup of an idle recirculation loop. These changes ensure that the system is operated and actions are performed such that the design of the reactor recirculation and reactor coolant system is maintained. The revisions to the Technical Specification are consistent to the BWR Improved Standard Technical Specifications (ISTS; NUREG-1433). The revised Limiting Conditions for Operation (LCO) requirements specified in TSUP 3/4.6.D ensure that the reactor recirculation system is operated within design requirements during periods when one or both recirculation pumps are out-of-service.

The revised LCO is consistent to the intent of the guidance outlined in GE SIL No. 251 (Reference 1) and GE SIL No. 251, Supplement 1 (Reference 2). The proposed amendment allows the use of the reactor bottom head thermocouple (or other appropriate means) in lieu of the bottom head drain line thermocouple as an indication of the coolant temperature in the bottom head region. The bottom head drain line thermocouple cannot be utilized at Dresden Station because: a) the drain temperature cannot be accurately determined due to the location of the thermocouple on the bottom drain; and b) the drain line becomes plugged and stops the flow of water from the vessel. As a result, Dresden has been unable to determine the difference between the indicated vessel skin temperature and the actual coolant temperature, and has evaluated possible alternate means of complying with the intent of References 1 and 2.

In addition, the proposed actions ensure the reactor coolant system is acceptable for continued operation if temperature and/or flow requirements are exceeded during periods of operation with idle recirculation pumps. The changes are consistent to the requirements outlined in the BWR Improved Standard Technical Specifications (ISTS; NUREG-1433)

The revised Limiting Conditions for Operation (LCO) changes the current LCO by modifying specific reference to the temperature differential between the reactor vessel steam space and the bottom head drain line coolant temperature. The proposed changes specify that an idle recirculation pump shall not be started unless the temperature differential between the reactor vessel and the bottom head coolant temperature are within specified limits. The proposed changes provide flexibility for allowances to the system design to comply within the temperature and/or flow requirement. The changes are consistent to the requirements outlined in the BWR Improved Standard Technical Specifications (ISTS; NUREG-1433).

The bottom vessel head thermocouple provides a conservative estimate of the moderator temperature at the bottom of the vessel. The 145°F limit currently stated in Dresden TSUP 3.6.D will be administratively controlled to account for instrument inaccuracies in the thermocouple loop and inaccuracies in the steam pressure instrument loop. Station procedures will reflect the appropriate inaccuracies to ensure system design requirements are maintained.

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In accordance with the recommendations of GE SIL No. 251, when the temperature differential between the core exit coolant (determined from dome saturation pressure) and the bottom head drain coolant cannot be measured, the following operating conditions will be avoided:

- a) Operation of the reactor at less than 30% rated power without recirculation flow in both recirculation loops.
- b) Heatup of the reactor with only one recirculation loop in operation.
- c) Operation at any power level with only one recirculation loop in operation at less than 40% flow.
- d) When a reactor scram is experienced-accompanied by loss of the recirculation pumps, then the recirculation pump(s) should not be started nor should the reactor be made critical until the reactor has been depressurized to atmospheric pressure.

These requirements will be administratively controlled in the Dresden Administrative Technical Requirements and station procedures will reflect these recommendations.

In addition, GE clarified the limits specified in GE SIL No. 251. These clarifications are summarized below:

- 1) If a recirculation pump trip occurs, the active pump should be maintained at an operating speed of at least 40% per SIL 251. This requirement is to prevent thermal stratification in the lower plenum.
- 2) If it becomes necessary to reduce active pump speed in order to warm the idle loop in preparation for restart of the idle pump, the active pump speed should not remain below 40% for more than 30 minutes. This is based on experience at another BWR/3 plant which has shown that it takes at least 30 minutes at low core flow before lower plenum stratification will be established. This allowance is acceptable, and is supported by the supplement to the SIL which states that thermal stratification is generally not a problem when a recirc pump trips without a scram.
- 3) Should repetitive restart attempts of the idle loop be needed that require more than 30 minutes, the active pump should be returned to at least 40% speed for at least 15 minutes to ensure that the whole vessel is well mixed before reducing speed again.

The above recommendations will conservatively assure site operating margins are maintained for the system documentation. These requirements will be

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administratively controlled in the Dresden Administrative Technical Requirements and station procedures will reflect these recommendations.

Finally, the changes are consistent to the requirements outlined in the BWR Improved Standard Technical Specifications (ISTS; NUREG-1433).

The BWR Improved Standard Technical Specifications (ISTS; NUREG-1433) require additional actions in the event that the specified temperature and/or flow limits are exceeded during periods of operation with an idle recirculation loop. ComEd has adopted these provisions within the proposed TSUP. The proposed change specifies the following actions prior to the restart of an idle recirculation pump if the temperature and/or flows limits are exceeded: 1) suspend startup of any recirculation loop; 2) restore the system to within limits within 30 minutes; and 3) determine if the reactor coolant system is acceptable for continued operation within 72 hours. If any of the above three requirements cannot be met, the reactor is required to be in Hot Shutdown within 12 hours and Cold Shutdown within the following 24 hours.

The aforementioned changes provide enhanced requirements to site operating personnel by delineating specific actions in the event a temperature and/or flow limit is exceeded during periods of operation with an idle recirculation loop. The current Technical Specifications do not specify action statements.

The aforementioned changes institute time requirements for which the specific action statements must be performed. The current Technical Specifications do not delineate time requirements for the completion of action statements.

The aforementioned changes require that within 72 hours the site evaluate the continued viability of the reactor coolant system in the event temperature and/or flow limits are exceeded. The current Technical Specifications do not delineate this requirement. The proposed changes ensures that site personnel perform an evaluation in a timely manner of the reactor coolant system to analyze the affects of the temperature and/or flow transient.

Finally, the proposed changes specifically delineate that the plant be in Hot Shutdown in 12 hours and Cold Shutdown within the following 24 hours if the aforementioned actions cannot be met. The current Technical Specifications do not delineate this requirement. Although equivalent to the current Technical Specifications (defaults to current Technical Specification 3.0.D), the proposed delineation of the consequences of failing to meet all action requirements provides enhanced guidance to site operating personnel, thus ensuring that the appropriate conservative course of action will be followed in the event that temperature and/or flow limit actions are exceeded.

The revised Technical Specifications remove specific parameters for temperature

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and flow from the Technical Specifications for the startup of an idle recirculation loop. These parameters are relocated to administratively controlled procedures. For Dresden, the parameters are proposed to be located in the Dresden Administrative Technical Requirements (DATR). The removal of these specific parameter limits is consistent to the intent of the BWR Improved Standard Technical Specifications (ISTS; NUREG-1433). Although the ISTS recommend removal of the specific limits to the PTLR (Pressure and Temperature Limits Report), Dresden has not adopted the full removal of the site-specific pressure and thermal limits for the reactor vessel from the Technical Specifications. However, the partial implementation of ISTS for the recirculation system temperature and flow limits does not alter the ability of the reactor coolant system to perform its design function.

Changes have been made to the Technical Specification Bases to reflect the aforementioned revisions. The revisions to the Bases are consistent to the changes proposed for Technical Specification Section 3/4.6.D.

47. Safety/Relief Valves Redundant Actions and Surveillances - ComEd proposes to eliminate redundant actions and surveillance requirements from TSUP 3/4.6.E and TSUP 3/4.6.F. TSUP 3.6.E, Action 2 and TSUP 3.6.F, Action 4, are redundant to proposed TSUP 3.2.F, Table 3.2.F-1, Action 63.b, which requires restoration of the minimum number of safety & relief valve position indication CHANNEL(s) within 30 days. Because TSUP 3.6.E and TSUP 3.6.F specify the Applicable MODE(s) as 1, 2 and 3, Actions 2 and 4, respectively, require shutdown to HOT SHUTDOWN in 12 hours and continuation to COLD SHUTDOWN within the next 24 hours if position indication cannot be restored. TSUP 3.2.F, Action 63.b requires shutdown to HOT SHUTDOWN in 12 hours. The continuation to COLD SHUTDOWN is unnecessary as the required instrumentation is only applicable in MODE(s) 1 and 2, as specified in TSUP Table 3.2.F-1. This redundancy is an unnecessary burden and may cause confusion to site operations personnel. The corresponding proposed changes to the Limiting Condition for Operation (deleting "Each installed valve shall be closed with OPERABLE position indication.") eliminates similar redundancies and confusion regarding design details inappropriate for inclusion within the Technical Specifications - position indication OPERABILITY is encompassed within TSUP 3/4.2.F and valve position (open/closed) is encompassed within the definition of OPERABILITY for the safety and relief valves. In addition, it should be noted that the proposed changes are consistent to the requirements of NUREG-1433 as position indication for the safety and relief valves is not required. Therefore, the deletion of TSUP 3.6.E, Action 2 and TSUP 3.6.F, Action 4 is an administrative change and does not affect existing plant safety margins.

TSUP 4.6.E.1 and 4.6.F.2 are redundant to TSUP 4.2.F, Table 4.2.F-1, Item 10. The CHANNEL CHECK requirements will continue to be performed every 31 days and the CHANNEL CALIBRATION will continue to be performed every 18

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months. As such, the deletion of TSUP 4.6.E.1 and 4.6.F.2 are administrative changes and does not affect existing plant safety margins. In addition, it should be noted that the proposed changes are consistent to the requirements of NUREG-1433.

48. HPCI High Area Temperature Channel Requirements - ComEd proposes to revise the minimum channel requirement in Dresden TSUP Table 3.2.A-1.6.c to reflect the current design configuration. The proposed revision modifies the minimum channel requirement from 8 to 4, and adds a footnote which modifies the requirement. The note clarifies the requirement of 4 minimum channels per trip system by stating that the requirement is satisfied by all four channels in either of two groups per trip system. This proposed change more accurately reflects the design configuration for the isolation instrumentation and is consistent with CTS requirements. Therefore the proposed change does not represent a reduction in the level of safety.
49. Implementation Schedule - The NRC staff approved all TSUP Sections prior to the date of this letter, for Dresden Station, to be implemented by December 31, 1995. The current implementation schedule at Dresden Station, however, is dependent upon the startup from the current Dresden Unit 2 refueling outage, and a subsequent period of plant operation. The current startup schedule from the Unit 2 refueling outage is projected to be January, 1996. To allow some margin for unforeseen changes in the implementation schedule, therefore, ComEd requests a change to the implementation schedule for all approved TSUP Sections prior to the date of this letter, for Dresden Station, from December 31, 1995 until June 30, 1996. This proposed change is administrative in nature and does not adversely affect existing plant safety margins.
50. NRC Open Items - Resolution - The following provides a summary of ComEd's proposed resolution of open items identified by the NRC staff within all received Safety Evaluation Reports (SER).

Section 1.0 (Reference (19), Attachment 2)

- Item 4 - Definition of RPS Response Times). ComEd proposed resolution to this issue in Reference (37), Attachment A, Item 3.

Section 2.0 (Reference (27), Section 3.8)

- Item 1 - CTS 2.1.B, "APRM Rod Block Trip Setting" relocated to TSUP 3.2.E. Approval of TSUP 3.2.E by NRC staff (Reference pending) resolves this issue.
- Item 2 - CTS 2.2.B, "Primary System Safety Valve Nominal Settings" relocated to TSUP 3.6.F. Approval of TSUP 3.6.F by NRC staff (Reference (41)) resolves this issue.
- Item 3 - CTS 2.1.D, "Reactor Water Level - Low Low ECCS Initiation Trip Point" relocated to TSUP 3.2.B. Approval of TSUP 3.2.B by NRC staff (Reference pending) resolves this issue.

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- Item 4 - CTS 2.1.H, "Main Steamline Pressure Initiation of Main Steamline Isolation Valve Closure" relocated to TSUP 3.2.A. Approval of TSUP 3.2.A by NRC staff (Reference pending) resolves this issue.

Section 3.0 (Reference (19)) - No NRC open items.

Section 3/4.1 (Reference (39), Section 3.5)

- Item 1 - Table 4.1.A-1 IRM Flux High channel calibration frequency. This issue addressed in Attachment A (Item 17) to this letter.
- Item 2 - Table 4.1.A-1 MSLRM High channel calibration frequency. This issue addressed in Attachment A (Item 17) to this letter.

Section 3/4.2 (Reference pending)

- Item 1 - Table 3.2.A-1 MSL Tunnel Temperature - High (Item 3.e) - minimum channel requirement. This issue is addressed in Attachment A (Item 24) to this letter.
- Item 2 - Table 4.2.A-1 (Dresden): Main Steam High Flow (Item 3.d) and Refueling Floor Radiation (Item 2.d) - channel calibration frequency. This issue is addressed in Attachment A (Items 22 and 29) to this letter.
- Item 3 - Table 4.2.A-1: MSL Tunnel Radiation (Item 3.b) - calibration frequency. This issue is addressed in Attachment A (Item 29) to this letter.
- Item 4 - Table 4.2.D-1 (Dresden): Reactor Vessel Pressure - calibration frequency. This issue is addressed in Attachment A (Item 29) to this letter.
- Item 5 - Table 3.2.E-1 SRM Downscale (Item 3.d) - trip setpoint, minimum channels, applicability, actions, and notes (d) and (i). This issue is addressed in Attachment A (Item 22) to this letter.
- Item 6 - Table 3.2.E-1 SRM Detector Not Full In (Item 3.a) - trip setpoint, minimum channels, applicability, actions and note (b). This issue is addressed in Attachment A (Item 22) to this letter.
- Item 7 - Table 3.2.E-1 SDV Switch in Bypass (Item 5.b) - applicability. This issue is addressed in Attachment A (Item 22) to this letter.
- Item 8 - Table 4.2.E-1 (Dresden): APRM Downscale (Item 2.c) - calibration frequency. This issue is addressed in Attachment A (Item 29) to this letter.
- Item 9 - Table 4.2.E-1 SRM Detector Not Full In (Item 3.a) and SRM Detector Downscale (Item 3.d) - channel check frequency, functional test frequency, calibration frequency and notes (f) and (h). This issue is addressed in Attachment A (Items 22 and 29) to this letter.
- Item 10 - Table 4.2.E-1 - SDV Switch in Bypass (Item 5.b) - functional test. This issue is addressed in Attachment A (Item 22) to this letter.
- Item 11 - Table 4.2.E-1 - IRM Detector Not Full In (Item 4.a) - channel calibration. This issue is addressed in Attachment A (Item 29) to this letter.
- Item 12 - Table 4.2.E-1 (Dresden): SRM Upscale (Item 3.b) - channel calibration. This issue is addressed in Attachment A (Item 17) to this letter.
- Item 13 - Table 4.2.E-1 APRM Startup Neutron Flux (Item 2.d) - channel calibration. This issue is addressed in Attachment A (Item 17) to this letter.

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- Item 14 - Table 4.2.E-1 IRM Upscale (Item 4.b) - channel calibration. This issue is addressed in Attachment A (Item 17) to this letter.
- Item 15 - Table 4.2.E-1 IRM Downscale (Item 4.d) - channel calibration. This issue is addressed in Attachment A (Item 29) to this letter.
- Item 16 - Table 3.2.F-1 and Table 4.2.F-1 - include Torus Pressure instrumentation. This issue is addressed in Attachment A (Item 22) to this letter.
- Item 17 - Table 4.2.F-1 (Dresden) - channel calibrations for the following instruments: Reactor Vessel Pressure (Item 1), Reactor Vessel Water Level (Item 2), Torus Water Level (Item 3), Torus Water Temperature (Item 4), Drywell Pressure - Wide Range (Item 5), Drywell Pressure - Narrow Range (Item 6), Safety and Relief Valve Position Indicators (Item 10), Source Range Neutron Monitors (Item 11). This issue is addressed in Attachment A (Items 22 and 29) to this letter.

Section 3/4.3 (Reference (33)) - No NRC open items.

Section 3/4.4 (Reference (26)) - No NRC open items.

Section 3/4.5 - (Reference pending)

- Item 1 - Proposed TSUP 3.5.A, Action 2 for the LPCI subsystem does not fully satisfy the requirements of a two-train system. In addition, the electrical power configuration requires additional clarification regarding operability and its effect on supported system. Additional clarification is required to address any potential discrepancies. This issue is addressed in Attachment A (Items 18 and 31) to this letter.
- Item 2 - Proposed TS 3.5.A, Action 7 for Quad Cities incorrectly refers to Specification 6.6.B.4. The correct reference is 6.9.B. This issue is addressed in Attachment A (Item 10) to this letter.
- Item 3 - Various sections of current 3/4.5.B are relocated to 3/4.7.L, 3/4.7.M and 3/4.8.A. Approval of TSUP 3/4.7.L, 3/4.7.M and 3/4.8.A by the NRC staff (References pending) resolves this issue.
- Item 4 - Current Quad Cities 4.5.A.1.f, 4.5.B.1.c, 4.5.D.2 and 4.5.C.5 and current Dresden TS 4.5.A.1.f, 4.5.D.1.c and Table 4.5.1, Item 6 are relocated to proposed TS 4.2.B.2. Approval of TSUP 3/4.2.B by the NRC staff (Reference pending) resolves this issue.

Section 3/4.6 (Reference (41), Section 3.18)

- Item 1 - Number of jet pumps in TSUP 3.6.B, Action 2. This issue is addressed in Attachment A (Item 7) to this letter.
- Item 2 - Periodicity of TS 4.6.F.1.a (relief valve testing). This issue is addressed in Attachment A (Item 16) to this letter.
- Item 3 - Bases page B 3/4.6-7 ASTM reference. TSUP page B 3/4.6-7 incorrectly referenced ASTI. The correct reference is ASTM. As such, this issue is addressed as an administrative, editorial change, as noted in Attachment A (Item

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10) to this letter.

- Item 4 - CTS 3/4.6.I relocated to TSUP 3/4.8.F. Approval of TSUP 3/4.8.F by NRC staff (Reference pending) resolves this issue.
- Item 5 - CTS 4.6.A and 4.6.B regarding permanent recording of temperatures and pressures will be relocated to TSUP 6.0. Approval of TSUP 6.0 by the NRC staff (Reference pending) resolves this issue.

Section 3/4.7 (Reference pending)

- Item 1 - Frequency of channel calibrations for 4.7.H.2.b for Dresden. Approval of TSUP 3/4.2 by the NRC staff (Reference pending) resolves this issue.
- Item 2 - AOT for TSUP 3.7.I, Actions. This issue is addressed in Attachment A (Item 3) to this letter.
- Item 3 - TSUP 3.7.P, Actions 2 and 3. This issue is addressed in Attachment A (Item 39) to this letter.
- Item 4 - TSUP 4.7.P.3 charcoal adsorber analysis frequency. This issue is addressed in Attachment A (Item 39) to this letter.

Section 3/4.8 (Reference pending)

- Item 1 - Relocated 3.5.B.4 to proposed TS 3.7.L. Approval of TSUP 3/4.7.L by the NRC staff (Reference pending) resolves this issue.
- Item 2 - TS 3.8.D Action 1 - the AOT should be revised from 14 days to 7 days. This issue is addressed in Attachment A (Item 23) to this letter.
- Item 3 - Add TS requirements for the Control Room Filtration and Air Conditioning System. This issue is addressed in Attachment A (Item 23) to this letter.
- Item 4 - TS 4.8.D.4 - the service usage testing requirements must be justified or revised. This issue is addressed in Attachment A (Item 39) to this letter.

Section 3/4.9 (Reference (38), Section 3.9)

- Item 1 - TSUP 3.9.A, Action 8. This issue is addressed in Attachment A (Item 4) to this letter.
- Item 2 - TSUP 4.9.A.1.b. This issue is addressed in Attachment A (Item 4) to this letter.
- Item 3 - TSUP 4.9.A.8.b. This issue is addressed in Attachment A (Item 4) to this letter.
- Item 4 - TSUP 3.9.C, Actions 1 and 2. This issue is addressed in Attachment A (Item 6) to this letter.
- Item 5 - TSUP 4.9.C.2.c. This issue is addressed in Attachment A (Item 6) to this letter.
- Item 6 - TSUP 4.9.C.5. This issue is addressed in Attachment A (Item 6) to this letter.
- Item 7 - TSUP 4.9.C.6. This issue is addressed in Attachment A (Item 6) to this letter.

Section 3/4.10 (Reference (30), Section 3.13)

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- Item 1 - TSUP 4.10.B, footnote (c). ComEd proposed resolution to this issue in Reference (37), Attachment A, Item 2.
- Item 2 - TSUP 3/4.10.F. ComEd proposed resolution to this issue in Reference (37), Attachment A, Item 1.

Section 3/4.11 (Reference (27)) - No NRC open items.

Section 3/4.12 (Reference (27)) - No NRC open items.

Section 5.0 (Reference (28), Section 3.9)

- Item 1 - Figure 5.1.B-1. ComEd proposed resolution to this issue in Reference (37), Attachment A, Item 4.
- Item 2 - Figure 5.1.A-1. ComEd proposed resolution to this issue in Reference (37), Attachment A, Item 4.

Section 6.0 - (Reference pending)

TSUP Clean-Up (Reference (37))

- Item 1 - As noted in Attachment A, Item 6 of ComEd's submittal regarding the close-out of certain TSUP open items (ComEd's submittal to the NRC staff, Reference (37), dated September 15, 1995), ComEd discussed the basis for acceptance of the Standby Liquid Control System (SBLC) pump surveillance frequency. Within this discussion, ComEd inadvertently specified "Reference (e)" as the originating document. "Reference (e)" included ComEd's submittal for TSUP Section 3/4.10, dated February 16, 1993. The appropriate cross-reference is ComEd's submittal for TSUP Section 3/4.4, dated October 15, 1992. ComEd apologizes for any inconvenience this discrepancy may have caused the NRC staff.
- Item 2 - Based upon discussions with members of the NRC staff, ComEd was requested to provide further justification regarding the relocation of TSUP 3/4.10.F to administrative controls. As discussed in ComEd's response to the NRC staff's request for additional information (RAI) for TSUP 3/4.10, dated May 2, 1995 (Reference (22)), ComEd stated that TSUP 3/4.10.F for both Dresden and Quad Cities (based on current Technical Specifications [CTS] 3/4.10.F) will be relocated to administrative controls. These requirements are relocated to plant controlled documents which is consistent with the Improved Standard Technical Specifications (ITS - NUREG-1433) and does not adversely affect existing plant "heavy loads analyses" for Dresden or Quad Cities Stations. These requirements shall continue to be enforced but will be administratively controlled per the provisions of 10 CFR 50.59 at both Dresden and Quad Cities Station and will prohibit improper loads from being transported at the sites. As such, the proposed TSUP package does not reduce existing safety margins, does not adversely affect the current licensing basis, does not adversely affect Dresden or Quad Cities "heavy loads analyses" and maintains the current safety analysis for the plant.