



May 5, 1999

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

Dresden Nuclear Power Station, Unit 3
Facility Operating License No. DPR-25
NRC Docket No. 50-249

Subject: Exigent Application for Amendment to Appendix A, Technical Specifications, Change in the Number of Safety Valves Required for Reactor Vessel Overpressure Protection

Reference: Letter from P. D. Swafford to USNRC dated May 4, 1999 "Request for Notice of Enforcement Discretion Concerning Main Steam Safety Valve Technical Specification Actions"

In accordance with 10 CFR 50.91(a)6, Commonwealth Edison (ComEd) Company proposes an exigent change to Appendix A, Technical Specifications (TS), Facility Operating License DPR-25. The application for amendment proposes a change to TS Section 3/4.6.E, Primary System Boundary – Safety Valves. The requested change reduces the number of safety valves required to provide overpressure protection to the reactor vessel. This change is consistent with the Unit 3 plant transient analyses.

Dresden Nuclear Station, Unit 3, has 13 safety and relief valves. One of the 13 valves, manufactured by Target Rock, serves a safety and relief function. Thus, both the safety valve (TS 3/4.6.E) and relief valve (TS 3/4.6.F) TS govern the operability of this valve. The remaining numbers of safety and relief valves are eight and four, respectively.

At approximately 1951 hours on May 3, 1999, an annunciator indicated a possible pilot valve bellows failure for the Target Rock safety relief valve was received in the Unit 3 control room. The failure of the pilot valve bellows prevents the Target Rock from functioning as a safety valve. Although the pressure safety function is inhibited, the pressure relief capability was not impacted. The action statement associated with an inoperable safety valve required that the unit be in hot shutdown within 12 hours and cold shutdown within the next 24 hours. Preparation for a plant shutdown was commenced. Concurrently, the Notice of Enforcement Discretion (NOED) process was also initiated. At approximately 0215 hours on May 4, 1999, the NRC granted verbal approval of the NOED. The NOED request, referenced above, was docketed on May 4, 1999.

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ComEd requests exigent review of the proposed amendment pursuant to the provisions of 10CFR50.91(a)(6). 10 CFR50.91(a)(6)(i)(B)(vi) states that a licensee must state whether the exigency could have been avoided and whether or not the licensee has exerted its best efforts to submit a timely application for an amendment. The need for an license amendment was determined upon the recent potential failure of safety mode of the Target Rock safety/relief valve (at 1951 hours on May 3, 1999), the need for an NOED and a subsequent license amendment request. We had no prior knowledge of this failure and, discovered during a review of licensing and design bases that credit for the safety mode of the Target Rock was not used in the evaluation of any design basis accidents or transients. Submittal of this amendment is consistent with the guidance provided in NRC Administrative Letter 95-05, Revision 1 for NOEDs that are granted which also require a license amendment. We believe that circumstances surrounding our request for exigent review were unavoidable and not created by a failure to make a timely application for a license amendment request.

Although the Target Rock valve is required to be operable by the plant TS, no credit is taken for this valve in the analyses that are used to meet the requirements of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code. A review of the plant's design bases revealed that overpressure requirements were met with less than nine safety valves.

The purpose of this amendment is to support a reduction in the number of safety valves required for reactor overpressure protection for Dresden Nuclear Power Station Unit 3. The ASME B&PV Code requires that each vessel designed to meet ASME Section III be protected from the consequences of pressures and temperatures in excess of design conditions. Main Steam Safety Valves are sized to protect the reactor vessel against postulated overpressure events. Current TS require nine (9) safety valves to be OPERABLE during MODES 1, 2, and 3. However, plant transient analyses and applicable design bases documentation indicate that the number of valves required for ASME B&PV Code compliance is eight (8). The current TS is overly conservative and presents an undue burden with no increase in the margin of safety.

This amendment request is being submitted under exigent conditions to amend the TS requirement to remove the requirement for the Target Rock valve to perform in the pressure safety mode, to prevent undue shutdown or derate of the unit. Therefore, ComEd requests approval of this amendment by June 16, 1999

This proposed amendment request is subdivided as follows:

1. Attachment A gives a description and safety analysis of the proposed changes in this amendment.
2. Attachment B includes the marked-up Technical Specification pages with the requested changes indicated.

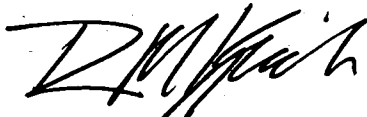
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3. Attachment C describes ComEd's evaluation performed in accordance with 10 CFR 50.92(c), which confirms that no significant hazards consideration is involved.
4. Attachment D provides information supporting an Environmental Assessment.

This proposed amendment has been reviewed and approved by ComEd Onsite and Offsite Review in accordance with ComEd procedures.

ComEd is notifying the State of Illinois of this application for amendment by transmitting a copy of this letter and its attachments to the designated State Official. If there are any questions or comments concerning this letter, please refer them to Mr. Dale Ambler, Regulatory Assurance Manager, at (815) 942-2920, extension 3800.

Respectfully,



R. M. Krich
Vice President Regulatory Services

- Attachments:
- A. Description and Safety Analysis for Proposed Changes
 - B. Marked-up Pages for Proposed Changes
 - C. Significant Hazards Consideration
 - D. Environmental Assessment

cc: Regional Administrator - Region III
NRC Senior Resident Inspector - Dresden Nuclear Power Station
Office of Nuclear Facility Safety - IDNS

STATE OF ILLINOIS

Docket No. 50-249

IN THE MATTER OF:

COMMONWEALTH EDISON (COMED) COMPANY

DRESDEN NUCLEAR POWER STATION – UNIT 3

AFFIDAVIT

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

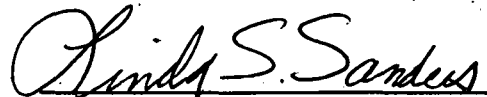


R. M. Krich
Vice President
Regulatory Services

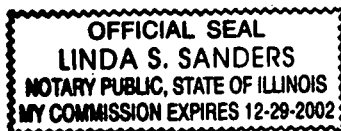
Subscribed and sworn to before me, a Notary Public in and

for the State above named, this 5th day of

May, 19 99.



Notary Public



**ATTACHMENT A
DESCRIPTION AND SAFETY ANALYSIS
FOR PROPOSED CHANGES**

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A. SUMMARY OF PROPOSED CHANGES

In accordance with 10 CFR 50.91(a)6, Commonwealth Edison (ComEd) Company proposes a change to Appendix A, Technical Specifications (TS), Facility Operating License DPR-25. The application for amendment proposes a change to Technical Specification (TS) Section 3/4.6.E, Primary System Boundary – Safety Valves. The requested change reduces the number of safety valves required to provide overpressure protection to the reactor vessel. This change is consistent with the Unit 3 plant transient analysis. The TS for safety valves ensure that the reactor pressure vessel is protected from overpressure conditions in accordance with American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (B&PV) Code requirements. The size and number of self-actuating valves were determined to prevent internal vessel pressure from exceeding ASME Code limits. The TS for safety valves is overly conservative in that it requires more than the number of safety valves necessary to maintain the reactor pressure below the ASME Code limit of 110 percent of the reactor pressure design pressure.

The proposed changes are described in Section E of this Attachment. The marked up TS pages are shown in Attachment B.

B. DESCRIPTION OF THE CURRENT REQUIREMENTS

TS Section 3/4.6.E provides operability requirements for the Primary System Boundary pressure safety valves. The number, as well as the lift setpoint, is provided. In the event plant conditions fail to meet the limiting conditions for operation, action requirements are provided. Additionally, surveillance requirements are provided to demonstrate the operability of the safety valves.

The lone action provided requires the plant to achieve and maintain cold shutdown conditions if the safety valve function of one or more of the required safety valves is inoperable while the plant is in OPERATIONAL MODE 1, 2, or 3.

The surveillance requirements provide adequate assurance that ASME Code requirements are maintained.

C. BASES FOR THE CURRENT REQUIREMENTS

The basis for the TS requirement is to insure the appropriate number of safety valves are available to protect the reactor vessel from overpressure during upset conditions as required by the ASME B&PV Code. The current safety limit for the pressure boundary is 110 percent of the vessel design pressure. The safety valves are designed to provide overpressure protection in the event of an isolation of all main steam lines with a failure of the MSIV closure scram and a failure of all relief valve functions.

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D. NEED FOR REVISION OF THE REQUIREMENT

The current TS requirement places undue burden upon plant operation without an increase in the margin of safety. The current action statement requires the plant to achieve and maintain cold shutdown in the event that the safety valve function of one or more safety valves is inoperable. The current TS states that nine (9) valves are required to be operable to ensure that ASME Code requirements are met. However, transient analysis assumed that the Target Rock valve does not operate to compensate for the most severe pressurization transient, isolation of all main steam lines. Based on the determination of the analysis, only eight (8) safety valves are necessary to provide adequate protection against system over-pressurization. The proposed amendment will reflect Dresden's plant specific analysis and design bases.

E. DESCRIPTION OF THE PROPOSED CHANGES

The requested change will reduce the number of required safety valves from nine (9) to eight (8) by excluding the Target Rock valve. The valve lift pressure setpoints will be placed in the surveillance requirement section for the safety valves. Although wording changes are proposed in the amendment, they are more consistent with the intent of standard TS.

F. SAFETY ANALYSIS OF THE PROPOSED CHANGES

A review of the design basis for Unit 3 indicates that the Target Rock valve is not credited in either the safety or relief mode in any of the ASME transient analyses. The relief function is credited in other accident and transient events; the relief function remains available. Therefore, there is no risk associated with having the Target Rock valve safety mode function out of service. The number of safety valves required is determined by the ASME B&PV code overpressure analysis which assumes Main Steam Isolation Valve (MSIV) closure, with no credit for direct scram from MSIV closure. No credit is given for either the safety or relief function of the Target Rock valve. In addition, other conservative assumptions used in the transient analyses, such as 103 percent of the set point value, the fastest MSIV closure time allowed by TSs, and reduced safety valve flow rates, provide additional assurance that the loss of the safety mode function of the Target Rock valve does not impact the results of the ASME B&PV Code overpressure analysis.

G. IMPACT ON PREVIOUS SUBMITTALS

ComEd has reviewed the proposed Operating License Amendment request regarding impact on any previous submittals, and has determined that there is no impact on any outstanding previous submittals.

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H. SCHEDULE REQUIREMENTS

ComEd requests approval of this amendment prior to June 16, 1999.

I. REFERENCES

UFSAR 5.2