



Nebraska Public Power District

GENERAL OFFICE
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January 4, 1979

Director, Nuclear Reactor Regulation
Attention: Mr. Thomas A. Ippolito, Chief
Operating Reactors Branch No. 3
Division of Operating Reactors
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Containment Purging During Normal Plant Operation

Dear Mr. Ippolito:

This letter is written in response to your letter of November 29, 1978 concerning containment purging. Your letter outlined three acceptable alternatives in response to the concerns noted. It should be realized that until the Atmospheric Containment Dilution System (ACAD) design for Cooper Nuclear Station is licensed and the containment inerting requirement removed, the District has no alternative but to justify the third approach of unlimited purging during power operation through the Standby Gas Treatment System (SBGT). The station must purge to inert the containment after startup and prior to shutdown to facilitate in-service hydrostatic tests and maintenance inspections during startups or shutdowns. Purging must be performed intermittently during operation for pressure and/or oxygen control in containment. For these reasons the District commits to limit purging to a minimum but cannot commit to confining purging to less than 90 hours per year at this time. The District submitted the design information on the installed ACAD system for NRC approval April 5, 1976. Recent discussions with the Staff regarding our November 14, 1978 submittal of revised ACAD system Technical Specifications, lead us to believe that ACAD system approval will be forthcoming in the near future.

A review of our Final Safety Analysis Report (FSAR) and construction contracts verify that the purge isolation valves are capable of closing against the dynamic forces of a loss-of-coolant accident. The valves are 24 inch diameter butterfly valves with closure times verified at least once per operating cycle.

Page two of your letter states that for PWR's, a degradation in ECCS performance may result from purging operations. This concern is considered not applicable to BWR's such as Cooper Nuclear Station.

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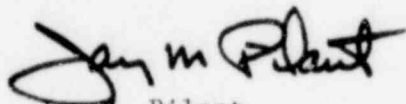
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The radiological consequences of any design basis accident requiring containment isolation occurring during purge operations was considered in section 2.4.6.f of the CNS FSAR. It was determined that the purge isolation valves would close before the coolant level drops below the top of the reactor core, thereby limiting the release of significant amounts of fission products under design basis accident conditions.

All safety initiation circuits were reviewed to determine the consequences of any manual override features. With the exception of two containment purge valves, there are no manual override features. The exceptions involve the ability to override the containment isolation signal to two inner containment isolation valves to permit post-accident venting via the ACAD and SBT systems. The flowpath and rationale for these overrides can be seen on figure III-2 which was included in the District's ACAD submittal of April 5, 1976. These overrides will only be used for post-accident venting after the ACAD system has been approved. Normal purging operations do not employ any manual override features. These override features are presently controlled with procedures and shift supervisor control of the keys needed to operate the keylocked override switches. Since the ACAD system is not licensed and the procedural controls on this override are considered adequate, annunciation of this override is not planned.

Should you have any questions, or require additional information, please contact me.

Sincerely,



Jay M. Pilant
Director of Licensing and
Quality Assurance

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