

repressurization system is acceptable) designed to conform with the general requirements of Criteria 41, 42, and 43 of appendix A to this part. If a purge system is used as part of the repressurization system, the purge system shall be designed to conform with the general requirements of Criteria 41, 42, and 43 of appendix A to this part. The containment shall not be repressurized beyond 50 percent of the containment design pressure.

When the Commission issued what is now paragraph c(3)(ii) of 10 CFR 50.44 in 1981, a safety related hydrogen recombiner system was installed. Paragraph c(3)(ii) requires:

By the end of the first scheduled outage beginning after July 5, 1982 and of sufficient duration to permit required modifications, each light-water nuclear power reactor that relies upon a purge/repressurization system as the primary means for controlling combustible gases following a LOCA shall be provided with either an internal recombiner or the capability to install an external recombiner following the start of an accident. The internal or external recombiners must meet the combustible gas control requirements in paragraph (d) of this section. [* * *]

As a result, the recombiner system became the primary method of combustible gas control while the PACV system became a backup method.

The purpose of this exemption request for 10 CFR 50.44(f) is to remove requirements for the PACV system from the IP3 licensing basis. The licensee is not requesting an exemption from GDC 41, "Containment Atmosphere Cleanup," or 10 CFR 50.44(c). The licensee is requesting this exemption in accordance with 10 CFR 50.12. Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50 when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. These circumstances include the special circumstances stated in 10 CFR 50.12(a)(2)(ii), "Application of the regulation in the particular circumstances would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule." The PACV system also has a role in severe accident management. The Commission stated in Attachment 1 to SECY-02-0080, "Proposed Rulemaking—Risk-Informed 10 CFR 50.44, Combustible Gas Control In Containment," their position concerning the ability to vent the containment as a severe accident

strategy. Specifically, Attachment 1 to SECY-02-0080 states:

The Commission continues to view severe accident management guidelines as an important part of the severe accident closure process. Severe accident management guidelines are part of a voluntary industry initiative to address accidents beyond the design basis and emergency operating instructions. In November 1994, the U.S. nuclear industry committed to implement severe accident management at their plants by December 31, 1998, using the guidance contained in NEI 91-04, Revision 1, "Severe Accident Issue Closure Guidelines." Generic severe accident management guidelines developed by each nuclear steam system supplier owners group includes either purging and venting or venting the containment to address combustible gas control. On the basis of the industry-wide commitment, the Commission is not proposing to require such capabilities, but continues to view purging and/or controlled venting of all containment types to be an important combustible gas control strategy that should be considered in a plant's severe accident management guidelines.

3.0 Discussion

Pursuant to 10 CFR 50.12, the Commission may, upon application by any interested person or upon its own initiative, grant exemptions from the requirements of 10 CFR part 50 when (1) the exemptions are authorized by law, will not present an undue risk to public health or safety, and are consistent with the common defense and security; and (2) when special circumstances are present. These circumstances include the special circumstances that the PACV system is not needed to meet the underlying purpose of 10 CFR 50.44. As mentioned above, the underlying purpose of 10 CFR 50.44 is to show that following a LOCA, an uncontrolled hydrogen-oxygen recombination would not take place, or that the plant could withstand the consequences of uncontrolled hydrogen-oxygen recombination without loss of safety function.

The staff examined the licensee's rationale to support the exemption request of eliminating the licensing basis requirements for the PACV system and concluded that retaining the licensing basis requirements for the PACV system is not necessary to achieve the underlying purpose of 10 CFR part 50.44. As mentioned above, the PACV system is the backup combustible gas control system. The primary system is the electric hydrogen recombiner system which meets the requirements of 10 CFR 50.44 c(3)(ii). Each of the recombiner subsystems is capable of maintaining the hydrogen concentration below the required limit following a design-basis LOCA. The

PACV system is not necessary to meet the intent of the rule.

In their January 16, 2003, letter, the licensee stated that even with the retirement of the PACV system, they will be able to meet all their severe accident management commitments. Their current Severe Accident Management Guidelines (SAMGs) identify, in addition to the PACV system, three alternate methods of containment depressurization and combustible gas control. These methods are backflow to the steam ejector line, containment pressure relief line, and the containment purge system. The licensee stated that the decommissioning of the PACV system will include a revision to the SAMGs that will include the three alternative methods listed above. The staff concludes that the licensee continues to address the Commission's concerns regarding the use of purging and/or controlled venting of containment as an important combustible gas control strategy that should be considered in the licensee's severe accident management guidelines.

Based on the above, the staff determined that the requested exemption from the requirements of 10 CFR 50.44(f) meets the requirements of 10 CFR 50.12. The staff finds the requested exemption acceptable. Therefore, the staff concludes that pursuant to 10 CFR 50.12(a)(2) the licensee's requested exemption from the requirements of 10 CFR 50.44(f) for IP3 as specified in a letter dated October 3, 2002, and as supplemented by letters dated January 16 and March 11, 2003, is acceptable.

4.0 Conclusion

Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12(a), the exemption is authorized by law, will not present an undue risk to the public health and safety, and is consistent with the common defense and security. Also, special circumstances are present. Therefore, the Commission hereby grants ENO an exemption from the requirement to maintain a purge/repressurization system of 10 CFR 50.44(f) for IP3.

Pursuant to 10 CFR 51.32, the Commission has determined that the granting of this exemption will not have a significant effect on the quality of the human environment (68 FR 15487).

This exemption is effective upon issuance.

Dated at Rockville, Maryland, this 2nd day of April, 2003.