



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 63 TO FACILITY OPERATING LICENSE NO. DPR-18  
ROCHESTER GAS AND ELECTRIC CORPORATION  
R. E. GINNA NUCLEAR POWER PLANT  
DOCKET NO. 50-244

1.0 INTRODUCTION

By letter dated February 9, 1996, the Rochester Gas and Electric Corporation (the licensee) submitted a request for changes to the R. E. Ginna Nuclear Power Plant Technical Specifications (TSs). The requested changes would change the TS setpoints for the steam generator water level-high feedwater isolation function.

The following TS would be changed:

1. Technical Specification Table 3.3.2-1, Function 5b.

- i. The allowable value would be changed from  $\leq 68\%$  to  $\leq 94\%$ .
- ii. The trip setpoint value would be changed from  $\leq 67\%$  to  $\leq 85\%$ .

2.0 BACKGROUND

The licensee stated that the Steam Generator (SG) Water Level-High feedwater isolation setpoint is designed to prevent excessive moisture carryover to the main steam system, which would cause excessive wear on the main turbine. SGs separate water in two stages, a primary stage and a secondary stage. Primary separators are located in the steam drum of the generator below the secondary separators, and generally work on the centrifugal principle. The high water level setpoint is chosen such that water in the downcomer is not above the top of these primary separators which would flood them and degrade their performance.

The Ginna Station is planning to replace its SGs during the 1996 Refueling Outage. The original SGs are Westinghouse Model 44 SGs. The primary separator flood point for these generators is at approximately 75 percent narrow range water level. Consequently, a setpoint sufficiently below this value to allow for instrument and process measurement uncertainty is chosen for the current setpoint value of 67 percent narrow range.

Replacement SGs are being manufactured by Babcock and Wilcox International. The flood point for the primary separators on these generators is above



100 percent narrow range level. Consequently, new setpoints sufficiently below 100 percent to account for process measurement uncertainty are chosen for an allowable value (94 percent), and instrument uncertainty for a setpoint value (85 percent). This expanded range allows the operator more time to restore level to nominal conditions using controlled means prior to initiation of feedwater isolation.

Prior to implementing this TS change the SGs must be replaced. No other hardware changes are required.

### 3.0 EVALUATION

The design of the replacement SGs is such that the primary steam separators are located at a higher elevation in the steam drum than in the existing SGs. The bottom of the actual separator is approximately 14 inches above the upper narrow range level tap. Therefore, it is acceptable to operate with water levels above 100 percent narrow range level without degrading separator performance. Since water level above 100 percent cannot be monitored, 100 percent is chosen as the limit.

The Upgraded Final Safety Analysis Report (UFSAR) accident analyses that model this setpoint (Section 15.1.6, Combined Steam-Generator Atmospheric Relief Valve and Feedwater Control Valve Failures) currently use a value of 100 percent narrow range level. Therefore, the accident analysis is not affected by this proposed change as the same 100 percent narrow range level value remains.

The SG Water-Level-High feedwater isolation function is designed to prevent excessive moisture carryover to the main steam system. The proposed setpoint change does not degrade the capability of the moisture separators and therefore this function is unchanged. The UFSAR accident analyses that model this function (UFSAR Section 15.1.6) use a value of 100 percent narrow range level. The revised trip setpoint (85 percent) and allowable value (94 percent) were raised from the previous values to minimize challenges and to avoid trips. They remain bounded by the accident analysis value of 100 percent. Therefore, we find these proposed changes to be acceptable.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the New York State official was notified of the proposed issuance of the amendment. The State official had no comments.

### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released.



offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (61 FR 7558). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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