



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

SAFETY EVALUATION REPORT

BYRON STATION, UNIT 1

DOCKET NO. STN 50-454

RELIEF REQUEST-ASME CODE SECTION XI REQUIREMENTS

I. INTRODUCTION

In supplements to the SER we stated that we had not completed our detailed review of the licensee's inservice testing program for pumps and valves submitted with the licensee's November 4, 1982 letter. However, we reported that we had evaluated the Applicant's requests for relief and concluded that, pursuant to 10 CFR 50.55 a(g)(6)(i), the relief that the licensee had requested in that submittal from the pump and valve testing requirements of the 1980 Edition of ASME Code, Section XI, through Winter 1981 Addenda should be granted for a period of no longer than 2 years from the date of issuance of the Operating License or until the staff detailed review had been completed, whichever came first.

Since the issuance of Supplement 5, the licensee, by letter dated November 16, 1984, has submitted additional revisions of the inservice testing programs for pumps and valves, Rev. 3 of the pump program and Rev. 4 of the valve program. The licensee has stated that these programs have been prepared in accordance with the 1980 Edition of the ASME Boiler and Pressure Vessel Code, Section XI, through the Winter 1981 Addenda. This Edition and Addenda of the Code have been accepted in 10 CFR 50.55 a(g). The licensee in the revised programs has also requested relief from some code requirements pursuant to 10 CFR 50.55 a(g)(5)(iii) for certain pump and valve tests. Each relief request proposes alternative tests and/or test frequencies for identified pumps and valves.

II. STAFF EVALUATION AND CONCLUSIONS

The staff has not completed its detailed review of the licensee's revised programs. We have noted, however, that in Rev. 4 of the valve program the licensee, as required by the ASME Code, has specified maximum allowable stroke times for safety-related power operated valves that must open or close to perform a safety-related function. The stroke times specified for some valves appear to be longer than what the staff has concluded would provide for assurance of valve function, i.e., the valve may have experienced such a large amount of degradation as evidenced by the large stroke time that it could not perform its safety-related function. During our detailed review of the valve IST program we will require that the licensee provide technical justification for the maximum allowable stroke times for power operated valves. If at the completion of our detailed

review we conclude that insufficient justification exists for some specified maximum stroke times, we will require that the licensee revise the IST program to specify more conservative times. We have concluded that this does not constitute a safety-related concern for the relatively short period during which we perform our detailed review because during this period the safety-related valves for a plant in operation for only a short time would be expected to experience little or no degradation.

In addition, the staff has evaluated the licensee's requests for relief as specified in the Rev. 3 pump program and the Rev. 4 valve program and finds that it is impractical within the limitations of design, geometry, and accessibility for the Applicant to meet certain of the ASME Code requirements. Imposition of those requirements at this time would, in the staff's view, result in hardships or unusual difficulties without a compensating increase in the level of quality or safety. Therefore, pursuant to 10 CFR 50.55 a(g)(6)(i), the relief that the licensee has requested from the pump and valve testing requirements of the 1980 Edition of ASME Section XI through Winter 1981 Addenda should be granted for a period of no longer than 2 years from the date of issuance of the Operating License or until the detailed review has been completed, whichever comes first. If completion of the review results in additional testing requirements, the licensee will be required to comply with them.

We have concluded, based on the consideration discussed above, that the relief granted is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest giving due consideration to the burden upon the licensee that could result if the requirements were imposed on Byron Unit 1.

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Dated: December 10, 1984