



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

July 23, 1979

Docket No. 50-213

Mr. W. G. Council, Vice President  
Nuclear Engineering and Operations  
Connecticut Yankee Atomic Power Company  
Post Office Box 270  
Hartford, Connecticut 06101

Dear Mr. Council:

In August 1976 we sent letters to the majority of licensees who operate Pressurized Water Reactors (PWRs) regarding the control of secondary water chemistry to inhibit corrosion of steam generator tubes. The letters requested the licensees to propose Technical Specification changes to incorporate limiting conditions for operation and surveillance requirements for secondary water chemistry parameters. Model Technical Specifications, which reflected the requirements contained in the Commission's Standard Technical Specifications (STS), were included for guidance.

Many licensees objected to the Model Technical Specifications principally on the basis that they could unnecessarily restrict plant operation. The majority of these licensees submitted alternative approaches that were directed more toward monitoring and record keeping rather than specific limits on chemistry parameters. At the time of our request, we recognized that a major disadvantage of the Technical Specifications was a potential decrease in operational flexibility, but our request was motivated by an overriding concern for steam generator tube integrity. Our objective was to provide added assurance that licensees would properly monitor and control secondary water chemistry to limit corrosion of steam generator tubes.

However, based on the experience and knowledge gained since 1976, we have now concluded that Technical Specification limits would not be the most effective way of accomplishing this objective. Due to the complexity of the corrosion phenomena involved, and the state-of-the-art as it exists today, we believe that a more effective approach would be to institute a license condition that requires the implementation of a secondary water chemistry monitoring and control program containing appropriate procedures and administrative controls. A Model License Condition that is acceptable to the staff for this purpose is enclosed.

The required program and procedures would be developed by the licensees, with any needed input from their reactor vendors or other consultants, and thus could more readily account for site and plant specific factors that affect chemistry conditions in the steam generators. In our view, such a license condition would provide assurance that licensees would

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devote proper attention to controlling secondary water chemistry, while also providing the needed flexibility to allow them to more effectively deal with any off-normal conditions that might arise. Moreover, we have concluded that such a license condition, in conjunction with existing Technical Specifications on steam generator tube leakage and inservice inspection, would provide the most practical and comprehensive means of assuring that steam generator tube integrity is maintained.

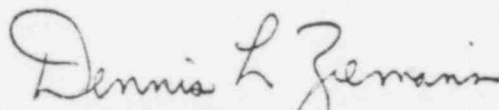
Consequently, we request that you submit a proposed amendment to your license to incorporate the requirements of the enclosed Model License Condition into the body of your license within 60 days.

If you previously submitted an application for a license amendment concerning steam generator monitoring requirements prior to March 22, 1978, you need not remit a fee for the license amendment requested by this letter. If you have not submitted a license amendment request prior to March 22, 1978, you should remit a Class III fee with your application.

If you have any questions, please contact us.

No further action will be taken on any proposed Technical Specification changes you may have submitted in response to our August 1976 request. Such change requests will be considered withdrawn unless you express objections within 60 days.

Sincerely,



Dennis L. Ziemana, Chief  
Operating Reactors Branch #2  
Division of Operating Reactors

Enclosure:  
Model License Condition

cc w/enclosure:  
See next page

Mr. W. G. Council

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cc  
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MODEL LICENSE CONDITION

SECONDARY WATER CHEMISTRY MONITORING

The licensee shall implement a secondary water chemistry monitoring program to inhibit steam generator tube degradation. This program shall include:

1. Identification of a sampling schedule for the critical parameters and control points for these parameters;
2. Identification of the procedures used to quantify parameters that are critical to control points;
3. Identification of process sampling points;
4. Procedure for the recording and management of data;
5. Procedures defining corrective actions for off control point chemistry conditions; and
6. A procedure identifying the authority responsible for the interpretation of the data, and the sequence and timing of administrative events required to initiate corrective action.