

September 6, 1984

Docket No. 50-289

Mr. Al Manick  
919 Hoffer Street  
Middletown, Pennsylvania 17057

Dear Mr. Manick:

At the limited appearance session for the Three Mile Island Unit 1 steam generator hearing which was held in Middletown on July 16 and 17, 1984, you raised three questions. Your paraphrased questions, and the NRC Staff's answers, are attached.

I trust this letter is responsive to your questions.

Sincerely,

**"ORIGINAL SIGNED BY:"**

Mary E. Wagner  
Counsel for NRC Staff

Attachment: As stated

cc: Service list

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1. What prevents the corrosion which was identified in the steam generators from spreading to other parts of the Unit?

The source of the reduced form of sulfur which has been identified as the causative agent in the steam generator corrosion has been eliminated. Therefore, reasonable assurance exists that corrosion will not spread to other parts of the Unit. Additionally, extensive examinations have been conducted in other systems which were initially exposed to the reduced sulfur. Corrosion was identified in two systems other than the steam generators and repairs were conducted. These issues are discussed in more detail in NUREG-1019 and Supplement No. 1 to NUREG-1019 which are available in the Local Public Document Room.

2. What is the tolerance between the old tubes and the new tubes and what would prevent the original tubes from stretching due to the kinetic expansion repair?

The kinetic expansion process was conducted by expanding a six-inch long defect-free portion of the original tubes within the original 22-inch tubesheet hole where it is located. This process results in establishing a tight seal. The repair process does not rely on the installation of new tubes. The kinetic expansion repair process and its qualification program are discussed in detail in NUREG-1019 and NUREG-1019 Supplement No. 1.

3. Will vibration of the steam generator tubes result in leaks?

An integral part of the repair program included removing from service tubes which were corroded to such an extent that vibration would be predicted to result in tube leaks. Vibrational considerations of the repair program are discussed in NUREG-1019 and NUREG-1019 Supplement No. 1.

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