

(Drew)
From: Suresh Chaudhary
To: DCL, MCM — *Modes*
Date: Fri, Jan 26, 2001 11:02 AM
Subject: IP/ConEd Response to Violation

Dave,

The ConEd response in a tabulated form is attached. The references include the main section (i.e. basis of denial A, statements 1,2,3,4.) paragraphs, and the page number.

I Believe that the main arguments of the licensee are laid down in the 'basis' section of the response. The 'Statement' section is which keyed to the NRC violation statement, generally elaborates and provides supporting details to shore up the main arguments.

Please take look and let me know if additional work is needed.

Suresh C.

CC: MSF2

A/127
(4)

INDIAN POINT 2
50-247/2000-10
Response to Violation

SN	Ref. Para	Licencee Statement	NRC Evaluation
1	Sec A para1 pg19	SG tube in service examinations were conducted in accordance with industry guideline and requirements applicable at the time of examination	
2	para1 pg 19	1997 inspections used conservative approaches in both selection of inspection sample, and in the analysis guidelines and reporting requirements	
3	para1 pg 19	Data were analyzed by experienced and qualified personnel who received site specific training in accordance with Revision 4 of the EPRI PWR Steam Generator NDE Guidelines	
4	para1 pg19	Probes, techniques and procedures were the most advanced qualified technology available at the time	
5	para2 pg19	Although not required, the licensee hired an independent eddy current expert to provide oversight of the principal contractor	
6	para3 pg19	Failure to detect instances of PWSCC in 1997 was associated with the inherent subjectively-based limitation of eddy current testing at that time, and was acknowledged by the NRC through Info. Notice 97-26, (5/19/97)	
7	para1 pg 20	Ease of detection of the indication was questionable, and it is supported by verious NRC consultant opinions in TAC No. MA9163, dtd 10/23/2000, p 9)	
8	para 2&3 pg20	Current inspection capability and standards should not be applied retroactively to 1997. This is supported by several affidavits of SG inspection and eddy current experts	
9	State ment 1 para1 pg2	During 1997inspection a single U-bend PWSCC indication was detected; the indication did not leak at the EOC-13, and the tube R2C67was plugged consistent with industry practice	

10	para2 & 3 pg21	The EPRI PWR Steam Generator Guidelines, Revision 4, Volume 1, recommended SG tube inspection frequency and sample size, Table 3-2, Section 3.4.3 set forth critical area sampling for Westinghouse SG. The Table 3-2 requirement for U-Bend IGA/ODSCC/PWSCC is 100% of Row 1 & 2. The 100% inspection of Row 2 & 3 U-Bends with a qualified, rotating +Point coil met this requirement	
11	para4 pg21	The indication found in 1997 was based on the first +Point inspection of the IP 2 low row U-Bends; it was reasonable to conclude that the detection of U-Bend PWSCC in R2C67 was due to enhanced detection capabilities of the +Point probe than to accelerated tube deterioration during Cycle 13	
12	para2 pg22	The appearance of a single Row-2 U-Bend PWSCC indication was not an unusual event, and the characteristics of the indication were consistent with the data included in the SSPD training and testing materials. The plugging of tube R2C67 was an appropriate response	
13	para4 & 5 pg23	The +Point probe was qualified and added to the EPRI performance demonstration data base in May 1996. The NRC IN 97-26 described this test as qualified for detecting indications in small radius U-Bends " <u>in accordance with enhanced qualification criteria developed by EPRI</u> "	
14	para1 pg24	PWSCC in the R2C67 tube was not an unexpected finding thus no modification to the inspection program was needed, and the program covered 100% examination using the most sophisticated qualified probe available	
15	State ment 2 para2 pg25	1997 low-row U-Bend probe restriction should be evaluated in light of historical experience. In 1997, 19 tubes had restriction that prevented a 0.610-inch +point probe from passing through the tube. This was specifically discussed in the RAI response to Question 11	

16	para4 pg25	The significant factor in 1997 examination was that the +point probe was of different physical geometry. All previous U-Bend examinations had been performed with very flexible ball joint bobbin coil probes of different mech. Design	
17	para 3&6 pg26	Because of the different probe geometry, The licensee concluded that the most of the probe restrictions encountered in 1997 were due to conditions existing before 1989	
18	State ment 3 para4 pg27 para 2&3 pg29	In 1997, no formal criteria existed in the industry for quantitative evaluation of noise, and it should be noted that EDM notches typically yield larger signal amplitude for a given depth than PWSCC	