



# Pennsylvania Power & Light Company

Two North Ninth Street • Allentown, PA 18101 • 215 / 770-5151

February 24, 1983

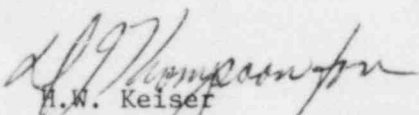
Mr. R.C. Haynes  
Director, Region I  
U.S. Nuclear Regulatory Commission  
631 Park Avenue  
King of Prussia, PA 19406

SUSQUEHANNA STEAM ELECTRIC STATION  
LICENSEE EVENT REPORT 83-016/03L-0  
ER 100450 FILE 841-23  
PLA- 1544

Docket No. 50-387  
License No. NPF-14

Dear Mr. Haynes:

Attached please find a copy of Licensee Event Report No. 83-016/03L-0. This event was determined to be reportable per Technical Specification 6.9.1.9.b, in that reactor coolant system conductivity exceeded the Technical Specification 3.4.4.a.3 limit of 10 umho/cm at 25°C. The limit was exceeded for less than one hour.



H.W. Keiser  
Superintendent of Plant-Susquehanna

LAK/cg

cc: Director of Nuclear Reactor Regulation  
Attention: Mr. A. Schwencer, Chief  
Licensing Branch No. 2  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

G. Rhoads  
Resident Inspector  
U.S. Nuclear Regulatory Commission  
P.O. Box 52  
Shickshinny, PA 18655

Attachment

8303080002 830224  
PDR ADOCK 05000387  
S PDR

IE22

Attachment

Licensee Event Report 83-016/03L-0

Susquehanna Unit 1 was at 85% power in a steady state condition, when Reactor conductivity started to increase rapidly. Within minutes, Technical Specification limits of 10.0 umho/cm had been exceeded (table 3.4.4-1) and conductivity was steadily rising. All normal plant operations were stopped (e.g. all releases and transfer of water) and power was reduced to 83%. Within an hour, conductivity dropped back within operating limits. When normal plant operations were continued, reactor conductivity began to rapidly increase again. Power was reduced to 70% and plant operations were again halted. This time, however, conductivity exceeded Technical Specification limit of 10.0 umho/cm, peaking at 12.9 umho/cm. PH had also dropped to 4.7. Within one hour, conductivity dropped below 10.0 umho/cm and continuously dropped thereafter to operating limits later that day. PH also returned to within its operating limit.

An organic cleaning solution previously approved for use, apparently entered the Radioactive Waste drains and was not removed during processing through the Radwaste System. The water was then transferred to the Condensate System. When the water was subjected to high temperatures, high conductivity and low pH was observed.

The actions taken to prevent this occurrence are:

1. Temporary improved administrative controls were established,
2. Increased sampling requirements were implemented,
3. The procurement of a total organic carbon analyzer (TOCA) was completed, and
4. Tanks with TOC greater than 1 ppm will not be sent to the CST.

Final administrative procedures are being developed. These procedures are scheduled for implementation prior to 6/1/83.