NRC FORM 366
(7-77)

LICENSEE EVENT REPORT

Update Report — Previous Report Date 12/21/79

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ATTACHMENT I

Docket No. 50-247 Consolidated Edison Co. of N.Y., Inc.

LER-78-022/01 Indian Point Unit No. 2

(Update Report)

On August 15, 1978, discussions with Copes-Vulcan representatives indicated that a discrepancy existed between the specified and the as supplied value of Cv for the two newly-installed pressurizer power operated relief valves. This event is of the type defined in Technical Specification 6.9.1.7.1(i).

The specified value (Cv = 50) is the original design value assumed in the analysis for the recently-installed Overpressurization Protection System. The as supplied value (Cv = 38.5) results in reduced relieving capability for these valves, thus permitting operation in a manner less conservative than that previously assumed.

On August 17, 1978, an analysis was conducted which verified that sufficient relieving capacity existed to assure that continued operation was permissible. The scope of this analysis was twofold.

The first area of evaluation dealt with the original design of the normal overpressure protection system. Original design analysis calls for the code relieving capability to be provided solely by the three installed safety valves. The power operated relief valves are used solely to relieve surges, and thus no credit is taken for them in the safety analysis. The design analysis, with a nominal Cv = 50, uses the following parameters for saturated steam:

Pressure	-	2335 psi
Temperature	-	650°F
DELTA P	-	2000 psi
Flow Rate	-	179,000 lbs/hr

These conditions will be achieved with an actual Cv = 40.8.

For a Cv = 38.5, the flow rate becomes 168,900 lbs/hr, resulting in a slight reduction of 5.6% in relieving capability.

This minor reduction in relieving capacity does not affect any ASME Code or Technical Specification requirement.

The second area of evaluation dealt with the design of the Overpressurization Protection System (OPS). From the analysis for that system, two cases are presented below:

Case	Mass Input	Heat Input
For Cv=50, Worst Case Peak Pressure	540 psig	1333 psig
For Cv=38.5, Worst Case Peak Pressure	544.5 psig	1395 psig
Appendix G limit*	605 psig	1430 psig

Using NRC staff acceptance criteria for OPS design, the Worst Case peak pressure parameters for Cv=38.5 still fall within the acceptance criteria. It was concluded, therefore, that continued operation under these conditions was permissible.

To correct the discrepancy regarding the Cv of these valves (3-inch, Copes-Vulcan, 1500 psi, Dwg. No. E-181209, Rev. 3), the valve trim sets were removed and replaced with the proper trim sets. This maintenance work was accomplished during our 1979 Refueling Outage.

*Based on 0°F/Hr heatup rate.