

Attachment to LER 82-029/03L
Beaver Valley Power Station
Duquesne Light Company
Docket No. 50-334

Exceeding the four minute allowable drip rate between consecutive drops for the Wallace and Tiernan Model 50-125 Chlorine Detector has been a continuing problem at Beaver Valley and has resulted in several previous Licensee Event Reports. Regardless of past corrective action initiated to eliminate such reportable occurrences e.g., modifications to the unit or more stringent preventative maintenance, the four minute drip rate was exceeded which required declaring the units inoperable. Wallace and Tiernan, manufacturer of the chlorine detectors at Beaver Valley, was again brought in to investigate the continuing problems with the units and to make recommendations that would eliminate future problems.

The chlorine detectors at Beaver Valley are calibrated on an eighteen month frequency. Since the last calibration performed in May, 1982, the detectors have been equipped with a new, larger glass orifice and a new foam-type wick(filter). In addition, the liquid media has been changed from deionized to distilled water. Installation of this foam-type filter prevents foreign material from clogging the glass orifice and also slows the drip rate necessary to allow sufficient time for the designed chemical reaction to take place, thus enabling the detector to sense the presence of chlorine.

Wallace and Tiernan verbally indicated to Station personnel that there was no reason to have a four minute period between drips and the rate could be increased to fifteen minutes with the detector still performing its intended function. In fact, the unit would continue to check accurately for chlorine presence as long as the electrode probe remained moist in the event the fifteen minute criteria was exceeded. Wallace and Tiernan followed this verbal notification with written confirmation that the drip rate could be increased to fifteen minutes between drips. Based on the new information from Wallace and Tiernan, surveillance time between any two consecutive drips from the detector wicks will be increased to fifteen minutes.

Since obtaining verbal notification of the increase in time between individual drops, several other instances have occurred whereby the four minute drip rate was exceeded. The Station does not intend to make these reportable items as they did not constitute a technical problem nor compromise the safety of the plant or the public. The Station elected to await written confirmation from Wallace and Tiernan addressing the increase in time between drips before taking any action. It was in the time period between the verbal and written confirmation that these additional problems occurred.

The Station is in the process of modifying appropriate procedures that affect the surveillance requirements of the Model 50-125 Chlorine Detector in accordance with existing Technical Specifications. The increase to fifteen minutes between drips should all but eliminate future reportable incidents.