

FLORIDA POWER & LIGHT COMPANY
ST. LUCIE UNIT NO. 1
REPORTABLE OCCURRENCE NO. 335-B-78-06

TITLE: Ocean Intake Area - Recording Thermographs

A. Description, Analysis and Evaluation

On October 27, 1978, the laboratory technician responsible for the thermographs went out to the thermograph station located in the St. Lucie plant intake area to exchange the recording instrument. He could not find the thermographs or the marker buoy. Since the plant was in operation at the time of the discovery, the occurrence is contrary to Environmental Technical Specification 3.1.A.6.

B. Cause of Occurrence

During the week of October 30, 1978 an individual notified Continental Shelf Associates, FPL's supplier of the buoys which support the thermographs, that the intake area buoy had been found on the beach. They recovered the buoy from this individual and examined it. No damage was apparent to the buoy and the buoy eye, to which a heavy shackle and chain should have been attached for anchoring purposes, was in perfect condition, but had no shackle. Since breakage of the anchor line would have resulted in part of the line being still connected to the buoy, it is speculated that vandals are responsible for cutting the anchor line at the shackle.

FPL authorized Continental Shelf to replace the buoy in the intake area as soon as possible. Because of inclement weather resulting in extremely rough seas, Continental Shelf was unable to replace the buoy until November 6, 1978. At that time, as thorough a search as visibility would permit was conducted of the ocean bottom surrounding the buoy anchor. This search resulted in no clues as to the whereabouts of the thermographs or the metal cage which holds them beneath the buoy.

Later, one thermograph was found on the beach and returned to personnel at the St. Lucie Plant. This makes the theory that vandals were responsible more believable since the thermographs are normally strapped into the metal cage and it would be difficult for the two to become separated without assistance.

C. Corrective Action

As was mentioned above, the buoy in the intake area was replaced on November 6, 1978. Plans have been made to install the thermographs as soon as it becomes possible to operate a boat and dispatch a diver on the ocean. To date, the continually high seas have prevented this.

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Loss of the ocean intake area thermographs occurred on one previous occasion (R. O. #335-B-77-04). The discharge area thermographs have also been lost several times. FPL has attempted to prevent these losses as described in previous Reportable Occurrence Reports. However, the thermograph stations are located on the open ocean in the path of a considerable amount of traffic. Also, they are not insulated or protected from natural and/or man-made interferences. Therefore, we are unable to estimate the future reliability of the thermograph stations. Spare buoys and thermograph recorders are kept on hand at all times in order to rapidly accommodate the need for repairs and/or replacement.

