



FLORIDA POWER &amp; LIGHT COMPANY

Turkey Point Plant

December 22, 1972

Mr. John F. O'Leary, Director  
Division of Reactor Licensing  
U.S. Atomic Energy Commission  
Washington D. C. 20545

TURKEY POINT PLANT UNIT NO. 3  
DOCKET NOS. 50-250 AND 50-251  
ABNORMAL OCCURRENCE NO. 3-72-8  
BATTERY CHARGER FIRE

Dear Mr. O'Leary:

In accordance with Technical Specification 6.6.2 a(1) and in amplification of the company's telegram to the Director, Region II, Directorate of Regulatory Operations of December 16, 1972, this report is submitted.

At 7:57 AM on December 16, 1972, while Unit 3 was at cold shutdown and with no fuel in Unit 4, the No. 3 battery charger input transformer overheated and a small fire occurred in the transformer winding insulation.

The immediate corrective action consisted of electrically isolating the battery charger and extinguishing the fire. No damage was done to any other equipment. No equipment lost power as a result of isolating the charger because the No. 3 battery was in service and carried the plant D.C. loads. The 3S battery charger was immediately placed in service in lieu of the damaged charger.

The fire was caused by the overheating of one of the two parallel input transformers in the charger. The overheating caused the transformer to catch on fire.

The three battery chargers at Turkey Point are rated at 400 amps each. The fire started in No. 3 charger when the load was 200 amps. The chargers do not overheat under normal load of 100-130 amps, but whenever an equalizing charge is in progress with an associated charger load of 130-140 amps, operators have noted odors of overheated insulation. Factory representatives have informed plant personnel the odors were normal for this equipment.

On December 13, with the Unit 3 and Unit 4 D.C. buses cross connected, the No. 3 battery charger and battery were placed in service and the No. 4 battery and battery charger were removed from service. Thus the No. 3 battery charger was supplying all plant D.C. loads (approximately 200 amps).

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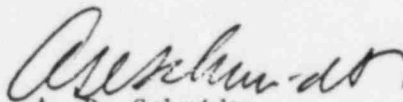
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At 7:57 AM on December 16, the charger sounded as if it abruptly increased load but the installed ammeter showed no change from the 200 amp level, and one of the transformers was noticed to be on fire.

Investigation by plant personnel has not disclosed the cause of the overheating, but it is felt that the problem is the type of insulation on the transformer windings. Hence, a new transformer with type F winding insulation has been ordered, and is expected on site shortly. An Exide field representative, who was on site on December 19, for preliminary investigation, referred the problem to the factory representative, who arrived on site on December 21, for further study. Any decision relative to permanent corrective action will have to be deferred until more information is available concerning the basic cause of the overheating. Until a permanent solution is instituted, the charger will be operated with forced cooling. Previous operating experience has shown the overheating problem to be minimized under normal load with forced cooling.

Reactor safety was not affected in any way by the fire, because no electrical loads were deenergized as a result of the fire and even if the fire had gone unnoticed, the battery charger main breaker would have opened on overcurrent when enough insulation burned to short sufficient windings. The No. 3 battery would supply the D.C. buses until the spare charger could be placed in service.

Sincerely,



A. D. Schmidt

Director of Power Resources

cc: Mr. John Davis, Director  
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