



Surry Power Station, Unit 1  
Docket No: 50-280  
Report No: 79-044/03L-0  
Event Date: 12-30-79

1. Description of Event

Both units were at cold shutdown. Repair work had been completed on #3 emergency diesel generator air starting system. The engine was started in preparation for an operability check. With the engine idling at 400 RPM, a loud screeching type noise was detected in the vicinity of the turbo-charger. The engine was immediately stopped. The exact source of the noise has not been determined but a possible failure of some part in the turbo-charger is suspected. The time of the failure of the turbo-charger part can not be exactly determined and the possibility exists that the failure occurred prior to Unit #1 being brought to a cold shutdown condition. It is therefore reported in accordance with Technical Specification 6.6.2.b.(2).

2. Probable Consequences of Occurrence

The redundant EDG was operational, therefore the health and safety of the public were not affected.

3. Cause

The turbo-charger has been replaced on the engine. It will be returned to Electro-Motive Division of General Motors for inspection to determine if a failure exists and the cause. In addition, a crack was found in the exhaust line flexible coupling liner. Escaping gas could have caused the loud screeching sound. IE Circular 79-12 has been reviewed but is not applicable in this event since the Emergency Diesel Generator was not subject to hot-fast starts.

4. Immediate Corrective Action

The immediate corrective action is to replace the turbo-charger. The manufacturer's manual specifically states that it is not practical to attempt any repairs in the field and the turbo-chargers should be returned to EMD for reconditioning. The liner crack was welded to reseal the flexible coupling.

5. Subsequent Corrective Action

Any subsequent corrective action will be determined by the results of the inspection by EMD.

6. Actions Taken to Prevent Recurrence

This again will be determined by the results of the inspection by EMD.

7. Generic Implications

None are known at this time.