



LER 2-81-55 ATTACHMENT

Facility: BSEP Unit No. 2

Event Date: 6-14-81

No. 1 diesel generator tripped as a result of a diesel lockout signal from lockout relay device, 85DB, model number HEA61B, that occurred when the lockout device relay coil became energized. Diesel lockout logic voltage dropping resistor, AE8, shorted to ground and the resulting electrical arc energized the 86DB relay coil. The device then initiated its protective function of tripping the diesel and opening the diesel generator output breaker. At no time did an actual trip condition exist which would have energized the device as designed. Lockout relay device, 86DB, receives initiation input from any of three diesel protective relays:

1. Diesel generator power directional relay, 32D (reverse power)
2. Diesel generator overcurrent relay, 51V
3. Loss of excitation relay, 40

An examination of the shunt resistor revealed a hole in its porcelain insulation approximately 1/16 inch in diameter. The resistor was replaced and tested for normal operation. The shunt resistors on the remaining three diesel generators were inspected with no problems found. A failure mode for this resistor insulation breakdown could not be identified. This is considered to be an isolated event.