NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Catawba Nuclear Station, Unit 1	0 5 0 0 0 4 1 3	1 OF 0 4

TITLE (4)
Diesel Generator and Turbine Driven Auxiliary Feedwater Pump Concurrently Inoperable

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
0 3	0 7	8 5	8 5	— 0 1 8	— 0 0	0 4	0 5	8 5		0 5 0 0 0
										0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
1		20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10)		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
0 3 0		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
Roger W. Ouellette, Assistant Engineer - Licensing	7 0 4 — 3 7 3 1 - 7 5 3 0

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On March 7, 1985, at 0910 hours, the Train A Diesel Generator control power batteries were placed on equalize charge following maintenance on the batteries, rendering Train A Diesel Generator inoperable.

Also at 0910 hours on March 7, 1985, the Turbine Driven Auxiliary Feedwater Pump was declared inoperable so that a required Periodic Pump Performance Test could be performed. From 0910 hours to 1945 hours on March 7, 1985, Train A Diesel Generator and the Turbine Driven Auxiliary Feedwater Pump were concurrently inoperable.

Personnel failed to recognize the consequences of placing the batteries on equalize charge. Therefore, this incident is classified as a Personnel Error. At 1945 hours on March 7, 1985, after realizing that the Diesel Generator was inoperable, the batteries were placed back in service, terminating the incident. Also, Available Power Source Operability Check was performed as required by Technical Specification 3.8.1.1.a. Unit 1 was at 30% Reactor Power at the time of the incident. This incident is reportable pursuant to 10 CFR 50.73 (a)(2)(i)(B).

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

The 125VDC Essential Diesel Auxiliary Power System (EPQ) consists of redundant battery banks, battery chargers, and distribution centers. The battery chargers receive power from a 600 VAC Essential Motor Control Center, and supply power to Diesel Generator (D/G) DC loads while maintaining the batteries at float conditions. When power is lost or a charger is inoperable, the Associated Battery Bank is sized to provide power to required D/G DC loads for two hours. The EPQ System also serves as a backup power supply to certain distribution centers in the Vital Instrumentation and Controls (I&C) System. However, power is provided to the D/G Control Panel and through Auctioneering Diode Assemblies (which compares voltage between the EPQ System and Vital I&C System, selecting the higher) before being provided to the Vital I&C System.

Due to periodic cleaning, discharge tests, and evaporation of water in the battery cells, the batteries have to be recharged. To accomplish this, the feeder breaker from the battery charger to the D/G control panel is opened, and the battery charger feeds only the batteries until normal battery voltage is obtained.

However, opening the feeder breaker to the D/G control panels renders the associated D/G inoperable, because there is then no source of power to the D/G start relays and other essential DC loads. Also, with this breaker open, the EPQ System cannot serve as a backup power source to the Vital I&C System. Therefore, when the batteries are on equalize charge, the Action Statements of Technical Specification 3.8.1.1 are entered. The Specification pertinent to this incident is 3.8.1.1.c.2, which states that the Steam Driven Auxiliary Feedwater Pump is to be OPERABLE when in Modes 1, 2, or 3 with a steam pressure greater than 900 psig.

During weekly inspections of the Diesel Generator (D/G) batteries, certain Train A battery bank cells were found low on water. Work Request 3454 IAE was initiated to add water to the cells and place the batteries on equalize charge. During the night of March 6, 1985, technicians requested permission from the Shift Supervisor to begin work. The Shift Supervisor asked the technicians if the batteries would have to be removed from the bus to perform the work. The technicians stated that, at the present time, the batteries would not have to be removed from the bus. The Shift Supervisor did not stamp the work request "Tech Spec Item", and signed the work request giving permission to begin work. The technicians proceeded to fill the D/G battery cells with water as required. This continued throughout the night and was completed the morning of March 7, 1985. After shift change, technicians carried the work request paperwork to the Unit Supervisor and requested that the batteries be placed on equalize charge. The Unit Supervisor asked if the batteries were operable. The technicians stated that they were, but still needed to be placed on equalize charge. The Unit Supervisor then dispatched a Nuclear Equipment Operator (NEO) to place the Train A D/G batteries on equalize charge per Procedure OP/1/A/6350/06 (125VDC Diesel Auxiliary Power), Enclosure 4.5, page 1 of 2. At 0910 hours on March 7, 1985, the batteries were placed on equalize charge.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Also at 0910 hours, the Turbine Driven Auxiliary Feedwater Pump (CA Pump #1) was declared inoperable for reasons unrelated to the D/G. Personnel were not aware of the consequences of placing the D/G batteries in equalize until shift turnover at 1900 hours. The oncoming Unit Supervisor recognized the inoperable state of Train A D/G, and obtained the last voltage readings on the batteries. Also, Periodic Test PT/1/A/4350/02, Available Power Source Operability Check, was initiated to comply with Action Statement A of Technical Specification 3.8.1.1. At 1945 hours, the final voltage readings were found to be acceptable and a NEO placed the batteries back in service. The D/G was declared operable at 1945 hours; therefore, from 0910 hours until 1945 hours on March 7, 1985 (10:35 total hours), Technical Specification 3.8.1.1.c.2 was not complied with.

When the technicians brought the work request to the Shift Supervisor on March 6, 1985, the Shift Supervisor misunderstood the technicians to say that the batteries would not have to be removed from the bus at all. This led the Shift Supervisor to believe that the D/G would not be rendered inoperable. However, the batteries are placed on equalize charge under an operating procedure. He should have realized that placing the batteries on equalize charge would render the associated D/G inoperable. Therefore, this work request should have been stamped "Tech Spec Item".

When the technicians came to the Unit Supervisor to have the batteries placed on equalize, the Unit Supervisor did not realize the consequences of this action. He should have also realized that the associated D/G would be rendered inoperable. He then sent out a NEO to place the batteries on equalize charge. While performing enclosure 4.5 of Procedure OP/1/A/6350/06, the NEO did not heed a "caution" statement, which stated that the D/G would be rendered inoperable by placing the batteries on equalize. After completion of the enclosure, the Unit Supervisor also reviewed and signed the enclosure without heeding the "caution" statement. Therefore, a cause of Personnel Error, is assigned to this incident.

CORRECTIVE ACTION

1) Train A D/G was declared inoperable.

2) The D/G batteries were placed back in service with the charger supplying the D/G control panel. Train A D/G was then declared operable.

3) Available Power Source Operability Check, PT/1/A/4350/02, was performed.

4) This incident has been reviewed with the personnel involved.

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TEXT *(If more space is required, use additional NRC Form 366A's)* (17)

SAFETY ANALYSIS

Completion of Periodic Test PT/1/A/4350/02 proved operability of B Train D/G and the availbility of offsite power. Also, both Motor Driven Auxiliary Feedwater Pumps were operable and available for use if needed. Even with Train A D/G inoperable and assuming loss of offsite power, B Train D/G and Motor Driven Auxiliary Feedwater Pump were still available to provide adequate cooling to the Steam Generators. The health and safety of the public were not affected by this incident.

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HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

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April 5, 1985

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Subject: Catawba Nuclear Station, Unit 1
Docket No. 50-413

Gentlemen:

Pursuant to 10 CFR 50.73 Section (a) (1) and (d), attached is Licensee Event Report 413/85-18 concerning a diesel generator and the Turbine Driven Auxiliary Feedwater pump being inoperable at the same time. This event was considered to be of no significance with respect to the health and safety of the public.

Very truly yours,

H.B. Tucker /TBL

Hal B. Tucker

RWO:slb

Attachment

cc: Dr. J. Nelson Grace, Regional Administrator
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Catawba Nuclear Station

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