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)
Nine Mile Point Unit #1	0 5 0 0 0 2 2 0	1 OF 0 3

TITLE (4)
Loss of Power to Power Board #103 and Power Board #17B

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 5 0 0 0
0 8	0 7	8 4	8 4	0 1 5	0 0	0 9	0 7	8 4		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)			
N	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0 9 7	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	50.36(c)(2)	X 50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	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
Robert Randall, Supervisor, Technical Support	AREA CODE 3 1 5 3 4 9 - 2 4 4 5

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)

ABSTRACT

During normal operations on August 7, 1984, calibration work was being performed on the Power Board #103 Undervoltage relays. Diesel Generator #103 and its output breaker were taken out of service for this work, and power was being supplied to Power Board #103 from offsite power through breaker R-1013. Calibration work was then performed on the relays, one at a time, per procedure N1-IMP-52, "Procedure For Calibration and Functional Test of meters and Protective Relay Systems." Due to personnel error, the protective relaying was actuated, causing breaker R-1013 to open, and protective relay 86-17 to trip on Power Board #17, de-energizing Power Boards #103 and #17B. This caused approximately half of the station's safety related loads to become inoperable. Operators re-established offsite power to the powerboards approximately 10 minutes after the event occurred. The calibrations were then satisfactorily completed. To prevent recurrences of this type in the future, procedural changes will be implemented, and engraved nameplates indicating the proper test switch operating sequence will be attached at each test switch assembly on Power Boards #102 and #103.

IE22
1/1

NRC Form 366
(9-83)

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Nine Mile Point Unit #1	0 5 0 0 0 2 2 0	8 4	— 0 1 5	— 0 0	0 2 OF 0 3

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

TEXT

During normal operations on August 7, 1984, Meter and Test personnel were scheduled to perform calibration work on the Power Board #103 ITE Undervoltage Relays (27-1A, 27-2A, and 27-3A). To allow this work to be performed, Diesel Generator #103 and Diesel Generator Output Breaker R-1032 were taken out of service in compliance with Technical Specifications. Power was supplied from offsite power to Power Board #103 via breaker R-1013, which is the normal alignment. Test personnel then began their calibrating work per Instrument and Maintenance procedure N1-IMP-52, "Procedure for Calibration and Functional Test of Meters and Protective Relay Systems." Relay 27-1A was removed from service, calibrated, and returned to service. Then, relay 27-2A was removed from service. Due to personnel error, the test power supply was hooked up to 27-1A rather than 27-2A, causing the potential transformer's secondary fuse feeding relay 27-1A to blow. The technicians completed the calibration of relay 27-2A and returned it to service. When relay 27-2A was returned to service, a restoring sequence error was made by the technician, causing this relay to indicate low voltage. The combination of 27-1A with a blown fuse and 27-2A reading instantaneous low voltage made up the 2 out of 3 logic. As a result, at approximately 1050 hrs., breaker R-1013 opened, and protective relay 86-17 tripped on Power Board #17, resulting in a loss of power to Power Boards #103 and #17B. As a direct result of this, the following equipment became inoperable:

Core Spray Pumps #112 and #122; Core Spray Topping Pumps #112 and #122; Containment Spray Pumps #121 and #122; Containment Spray Raw Water Pumps #121 and #122; Reactor Building Closed Loop Cooling Water Pump #12; Shutdown Cooling Pump #12; Liquid Poison Pump #12; Emergency Service Water Pump #12; Control Rod Drive Pump #12; Battery Charger #171; Nitrogen Supply #12 Heater; Containment Monitoring Sample Pump #12; Emergency Vent Exhaust Fan #12; Emergency Exhaust Duct #12 Heater; Diesel Generator #103 Cooling Raw Water Pump; Diesel Generator #103 Air Compressors #1 and #2; Condensate transfer Pump #12; Diesel Generator #103 Roof Exhaust Fans #3 and #4; Diesel Room #103 Motor Operated Door; Core Spray Suction Isolation Valves #112 and #122; Core Spray Discharge Isolation Valves #112 and #122; Containment Spray Suction Isolation Valves #121 and #122; Containment Spray Raw Water Pump Discharge Valves #121 and #122; Reactor Shutdown Cooling Pump Suction Blocking Valve #12; Reactor Vent Valves #11 and #12; Emergency Condenser Steam Isolation Valve #121; Main Steam Isolation Valve #121; Feedwater Isolation Valve #12; Containment Spray Raw Water/Containment Spray Intertie Valve #121; Core Spray High Point Vent Valve; and Containment Spray Raw Water/Core Spray Intertie Valve #122.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Nine Mile Point Unit #1	0 5 0 0 0 2 2 0	8 4	— 0 1 5	— 0 0	0 3 OF 0 3

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

ASSESSMENT OF POTENTIAL SAFETY CONSEQUENCES

As a direct result of this event occurring, components in the core spray and containment spray systems were not operable for approximately 10 minutes. The core spray and containment spray systems are designed to be used during loss of coolant accident conditions. During the time period that these systems were inoperable, the plant did not experience a loss of coolant accident, and no transients or other events occurred that could have caused the plant to degrade into an accident condition. Additionally, during the course of this event, Power Board #16 and #102 (redundant power boards to Power Boards #17 and #103, respectively) and all redundant loads were operable. Therefore, the overall potential consequences arising out of this event were minimal.

CORRECTIVE ACTION

Operators reduced the load on the generating unit to 300Mwe due to the loss of Power Board #17B loads, which included the #12 Reactor Building Closed Loop Cooling (RBCLC) Pump. Operators also contacted the test personnel to find out what they had done, and to verify that breaker R-1013 could be reclosed. The blown potential transformer fuse was replaced on undervoltage relay 27-1A, and the contacts were reset on undervoltage relay 27-2A. Operators then reclosed breaker R-1013, which re-energized Power Boards #103 and #17B. The calibrations were then satisfactorily completed. To prevent recurrences of this type in the future, procedural changes will be implemented, and an engraved nameplate will be attached at each test switch assembly associated with relays 27-1A, 27-2A, and 27-3A at Power Boards #102 and #103. The nameplate will indicate the proper test switch operating sequence (ie-when testing, open trip switches first and restore last).

NMP-9306

NIAGARA MOHAWK POWER CORPORATION

NIAGARA MOHAWK

300 ERIE BOULEVARD, WEST
SYRACUSE, N. Y. 13202

September 7, 1984

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

Re: Docket No. 50-220
LER 84-15

Gentlemen:

In accordance with 10 CFR 50.73, we hereby submit the following Licensee Event Report:

LER 84-15 — Which is being submitted in accordance with 10 CFR 50.73, (a) (2) (vii) (D), "Any event where a single cause or condition caused at least one independent train or channel to become inoperable in multiple systems or two independent trains or channels to become inoperable in a single system designed to mitigate the consequences of an accident."

The report was completed in the format designated in NUREG-1022, dated September 1983.

Very truly yours,

C. V. Mangan
Vice President
Nuclear Engineering & Licensing

RGR/lo
Attachments (3 copies)
cc: Dr. Thomas E. Murley
Regional Administrator

IE22
1/1