

CATEGORY 1

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9807140160 DOC.DATE: 98/07/02 NOTARIZED: NO DOCKET #
 FACIL:50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moha 05000410
 AUTH.NAME AUTHOR AFFILIATION
 DOTY,S.T. Niagara Mohawk Power Corp.
 DAHLBERG,K.A. Niagara Mohawk Power Corp.
 RECIPI.NAME RECIPIENT AFFILIATION

SUBJECT: LER 98-016-00:on 980602,determined that TS SR 4.3.7.3 had not been met since issuance of FOL on 861031.Caused by misinterpretation of requirements to calibrate entire channel.Surveillance procedure revised.W/980702 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 5
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

NOTES:

	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL	RECIPIENT ID CODE/NAME	COPIES LTTR ENCL
	PD1-1 PD	1 1	HOOD,D	1 1
INTERNAL:	ACRS	1 1	AEOD/SPD/RAB	2 2
	AEOD/SPD/RRAB	1 1	RTLE CENTER	1 1
	NRR/DE/ECGB	1 1	NRR/DE/EELB	1 1
	NRR/DE/EMEB	1 1	NRR/DRCH/HICB	1 1
	NRR/DRCH/HOHB	1 1	NRR/DRCH/HQMB	1 1
	NRR/DRPM/PECB	1 1	NRR/DSSA/SPLB	1 1
	NRR/DSSA/SRXB	1 1	RES/DET/EIB	1 1
	RGN1 FILE 01	1 1		
EXTERNAL:	L ST LOBBY WARD	1 1	LITCO BRYCE,J H	1 1
	NOAC POORE,W.	1 1	NOAC QUEENER,DS	1 1
	NRC PDR	1 1	NUDOCS FULL TXT	1 1

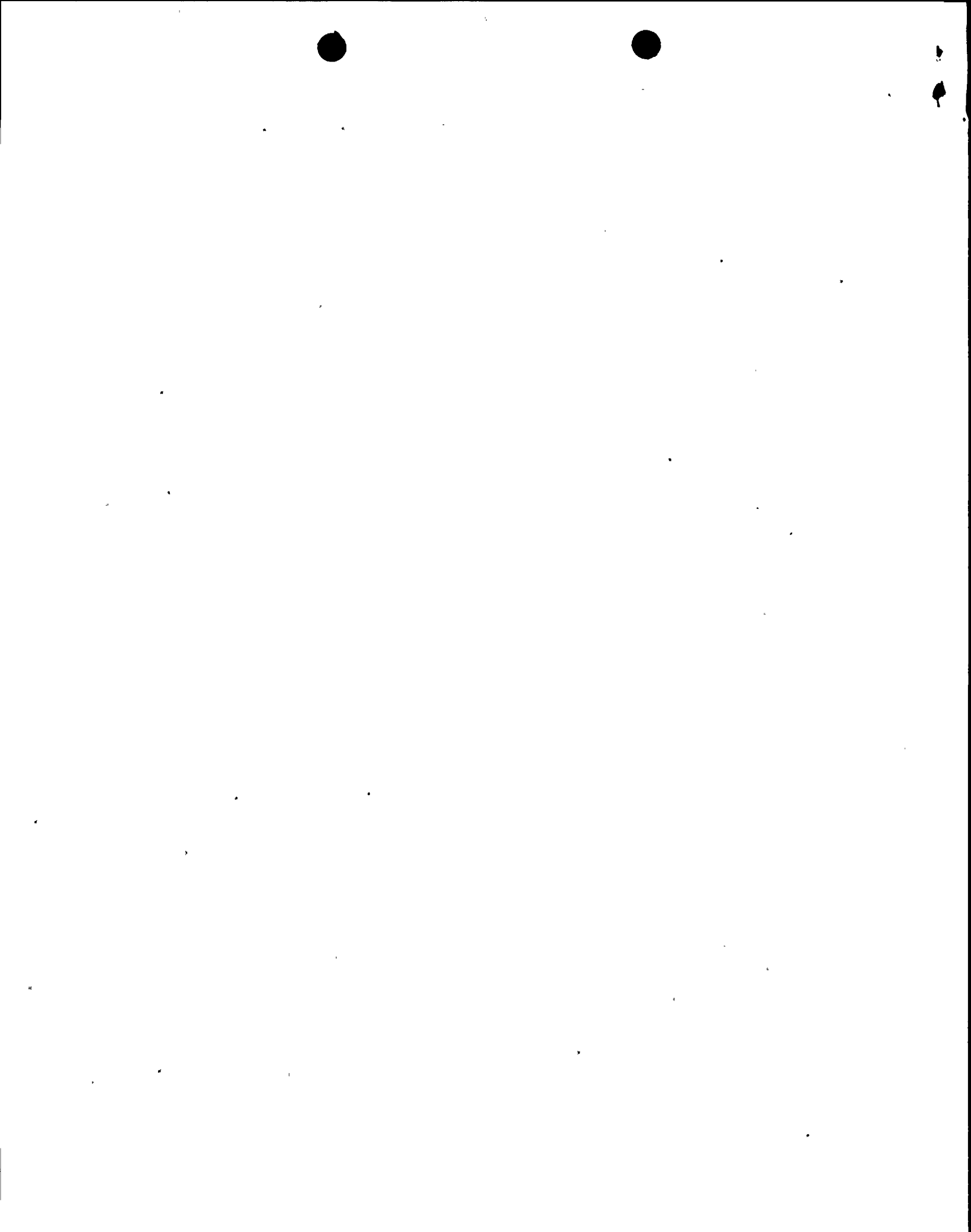
NOTE TO ALL "RIDS" RECIPIENTS:

PLEASE HELP US TO REDUCE WASTE. TO HAVE YOUR NAME OR ORGANIZATION REMOVED FROM DISTRIBUTION LISTS OR REDUCE THE NUMBER OF COPIES RECEIVED BY YOU OR YOUR ORGANIZATION, CONTACT THE DOCUMENT CONTROL DESK (DCD) ON EXTENSION 415-2083

FULL TEXT CONVERSION REQUIRED
 TOTAL NUMBER OF COPIES REQUIRED: LTTR 24 ENCL 24

C
A
T
E
G
O
R
Y
D
O
C
U
M
E
N
T

104





NIAGARA MOHAWK

GENERATION
BUSINESS GROUP

NINE MILE POINT NUCLEAR STATION/LAKE ROAD, P.O. BOX 63, LYCOMING, NEW YORK 13093

July 2, 1998
NMP2L 1798

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

RE: Docket No. 50-410
LER 98-16

Gentlemen:

In accordance with 10CFR50.73 (a)(2)(i), we are submitting LER 98-16, "Missed Technical Specification Surveillance Requirement of Meteorological Wind Speed."

Very truly yours,

Kim A. Dahlberg
Plant Manager - Unit 2

KAD/GJG/kap
Attachment

xc: Mr. H. J. Miller, Regional Administrator, Region I
Mr. B. S. Norris, Senior Resident Inspector
Records Management

9807140160 980702
PDR ADDCK 05000410
S PDR

IR 98-16



4
2

LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503

FACILITY NAME (1)

Nine Mile Point Unit 2

DOCKET NUMBER (2)

05000410

PAGE (3)

1 OF 4

TITLE (4)

Missed Technical Specification Surveillance Requirement of Meteorological Wind Speed

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)	
06	02	98	98	016	00	06	02	98	N/A	05000	
									N/A	05000	

OPERATING MODE (9)

5

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

POWER LEVEL (10)

000

- 20.2201(b)
- 20.2203(a)(1)
- 20.2203(a)(2)(i)
- 20.2203(a)(2)(ii)
- 20.2203(a)(2)(iii)
- 20.2203(a)(2)(iv)

- 20.2203(a)(2)(v)
- 20.2203(a)(3)(i)
- 20.2203(a)(3)(ii)
- 20.2203(a)(4)
- 50.36(c)(1)
- 50.36(c)(2)

- 50.73(a)(2)(i)
- 50.73(a)(2)(ii)
- 50.73(a)(2)(iii)
- 50.73(a)(2)(iv)
- 50.73(a)(2)(v)
- 50.73(a)(2)(vii)

- 50.73(a)(2)(viii)
- 50.73(a)(2)(x)
- 73.71
- OTHER
(Specify in Abstract below and In Text, NRC Form 366A)

LICENSEE CONTACT FOR THIS LER (12)

NAME

S. T. Doty, Maintenance Manager - NMP1

TELEPHONE NUMBER

(315) 349-4594

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

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX

SUPPLEMENTAL REPORT EXPECTED (14)

YES (If yes, complete EXPECTED SUBMISSION DATE)

NO

EXPECTED SUBMISSION DATE (15)

MONTH

DAY

YEAR

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

On June 2, 1998, Niagara Mohawk Power Corporation (NMPC) determined that Nine Mile Point Unit 2 (NMP2) Technical Specification (TS) Surveillance Requirement (SR) 4.3.7.3 had not been met since issuance of the facility operating license on October 31, 1986. Between July 1982 and February 1983, the wind speed monitoring system was modified by replacing the sensors with a new design. When this change was made, the surveillance procedure was revised to remove use of a synchronous motor to verify the channel accuracy.

The cause of this event is that there was a misinterpretation of the requirements to calibrate the entire channel. When the sensor was changed, it is postulated that personnel at the time did not consider the use of the synchronous motor to be a requirement since the new sensor was not adjustable.

The surveillance procedure has been revised to require changing the sensors with calibrated sensors when the surveillance is performed and use of a synchronous motor to calibrate the remainder of the channel.



LICENSEE EVENT REPORT (LER)
TEXT CONTINUATIONESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION
REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE
RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY
COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT
(0150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Nine Mile Point Unit 2	05000410	98	- 16	- 00	02 OF 04

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

I. DESCRIPTION OF EVENT

On June 2, 1998, Niagara Mohawk Power Corporation (NMPC) determined that Nine Mile Point Unit 2 (NMP2) had not met Technical Surveillance (TS) Surveillance Requirement (SR) 4.3.7.3 since the issuance of the facility operating license on October 31, 1986. TS SR 4.3.7.3 requires a Channel Calibration of the unit speed sensor on six-month intervals. A Channel Calibration requires calibration from the sensor to the alarm and/or trip functions. The meteorological tower provides indication to the Nine Mile Point Unit 1 (NMP1), NMP2 and James A. Fitzpatrick (JAF) control rooms, and the meteorological computer. Between July 1982 and February 1983, the wind speed monitoring system was modified including the wind sensor. When the wind sensor was modified, the surveillance procedure was inappropriately revised by not including calibration of the entire channel.

The wind speed sensors were replaced in 1982 with a calibrated cup design. Prior to 1983, calibration of the sensor was performed using a synchronous motor to simulate a constant wind velocity to allow calibration of the recorders and computer point. The synchronous motor did effectively meet the Channel Calibration requirement. The sensor was adjustable, therefore, any inaccuracy could be corrected by adjustment. The use of the motor also provided for overlap testing of the signal cables.

After changing the sensors in 1982, the procedure was issued in January 1983. At that time, use of the synchronous motor was removed from the procedure. The revised surveillance procedure required inspection of the wind sensors for starting torque (threshold), level mounting, cup deterioration/deformation, bent arms, and any visual damage to the sensor assembly. Portions of the sensor that were unacceptable were replaced. However, at no time is the sensor calibrated for a given wind speed. The wind speed sensors are supplied with a calibration report at the time of purchase. Calibration of the meteorological recorders and computer points was accomplished in the procedure using a signal generated by a test card installed in the test panel. This test panel is located at the base of the meteorological tower, therefore; the signal cables from the sensors to the base of the tower were not tested as described above.

No documentation or explanation was found to justify changing the calibration methodology. It is believed that the use of the synchronous motor was removed because the new sensors were not adjustable, and that inspection of the physical condition and starting torque were sufficient to meet vendor recommended maintenance requirements. Conversation with a vendor representative indicated a synchronous motor was not available in the 1980's for the sensors. Therefore, starting torque and physical condition of the cup assembly was considered sufficient preventive maintenance for the wind speed sensors. Thus, daily systems checks and the semi-annual check of the starting torque were considered adequate for a preventive maintenance program.

In 1986 when the startup license was received, the NMP2 TS became effective. Accordingly, in May 1986 the meteorological procedures were revised to address NMP2. Based on accounts from personnel involved in



1

2

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (5)				PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Nine Mile Point Unit 2	05000410	98	- 16	- 00	03 OF 04	

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

I. DESCRIPTION OF EVENT (Cont'd)

the calibrations in 1986, the question was raised regarding calibration of the sensor. A decision was made that the sensor was a "go/no go" device where its commercial accuracy was sufficient, provided it was inspected for physical integrity and bearing condition (starting torque).

II. CAUSE OF EVENT

The cause of this event is a misinterpretation of the requirements to calibrate the entire channel. When the sensor was changed, it is postulated that personnel at the time did not consider Channel Calibration to include the sensor since the new sensor was not adjustable.

III. ANALYSIS OF EVENT

This event is reportable in accordance with 10CFR50.73(a)(2)(i)(B), "any event or condition prohibited by the plant's Technical Specifications."

During the week of June 30, 1998, the wind speed monitoring system has been surveilled using the revised procedure. The results were within acceptable tolerance. As noted in the description above, since 1983 the sensors had daily system checks and a semi-annual check of starting torque. The semi-annual surveillance included checks of cup deterioration/deformation, bent arms and any visual damage to the sensor assembly. If there was any concern relative to operability of the sensor, it was replaced. Therefore, NMPC believes that the wind speed monitoring system Channel Calibration would have been successful since 1983.

The primary purpose of the wind speed monitoring system is to aid in estimating post-accident dose dispersion. However, the NMPC Emergency Plan includes requirements for down wind survey teams to verify radiological release rates. If the meteorological data from the tower were incorrect, the survey teams would have observed the differences in release rates from the projected. In the event of significant differences in release rates, dose assessment would be reformed. The Emergency Plan also provides for alternate methods for the Meteorological Advisor to obtain meteorological data. Therefore, based upon the preceding, this event did not pose a threat to public or plant personnel.



LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (5)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Nine Mile Point Unit 2	05000410	98	- 16	- 00	04 . OF 04

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

IV. CORRECTIVE ACTIONS

- Procedures have been revised to include exchanging the wind speed sensors with calibrated sensors and the use of a synchronous motor to provide the proper channel functional overlap. During the week of June 30, 1998, the wind speed monitoring system was successfully surveilled.
- Other meteorological procedures required by TS have been reviewed. No similar deficiencies were identified.
- This event will be communicated to groups responsible for TS surveillances at both NMP1 and NMP2 by August 31, 1998.

V. ADDITIONAL INFORMATION

- Failed components: none.
- Previous similar events: none
- Identification of components referred to in this LER:

COMPONENT	IEEE 803 FUNCTION	IEEE 805 SYSTEM ID
Wind Speed Calibrations	NA	IS

