

CATEGORY

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9710200045 DOC.DATE: 97/10/10 NOTARIZED: NO DOCKET #
 FACIL:50-410 Nine Mile Point Nuclear Station, Unit 2, Niagara Moha 05000410
 AUTH.NAME AUTHOR AFFILIATION
 PISANO,L. Niagara Mohawk Power Corp.
 DAHLBERG,K.A. Niagara Mohawk Power Corp.
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 97-011-00:on 970912,determined that surveillance requirements were not met for APRMs channels E & F.Caused by inadequate written communication.Verified subject channels w/revised procedures & declared operable.W/971010 ltr.

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NIAGARA MOHAWK

GENERATION
BUSINESS GROUP

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

October 10, 1997
NMP2L 1730

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

RE: Docket No. 50-410
LER 97-11

Gentlemen:

In accordance with 10CFR50.73 (a)(2)(i)(B), we are submitting LER 97-11, "Technical Specification Violation of APRM Testing Requirements."

Very truly yours,

Kim A. Dahlberg
Plant Manager - NMP2

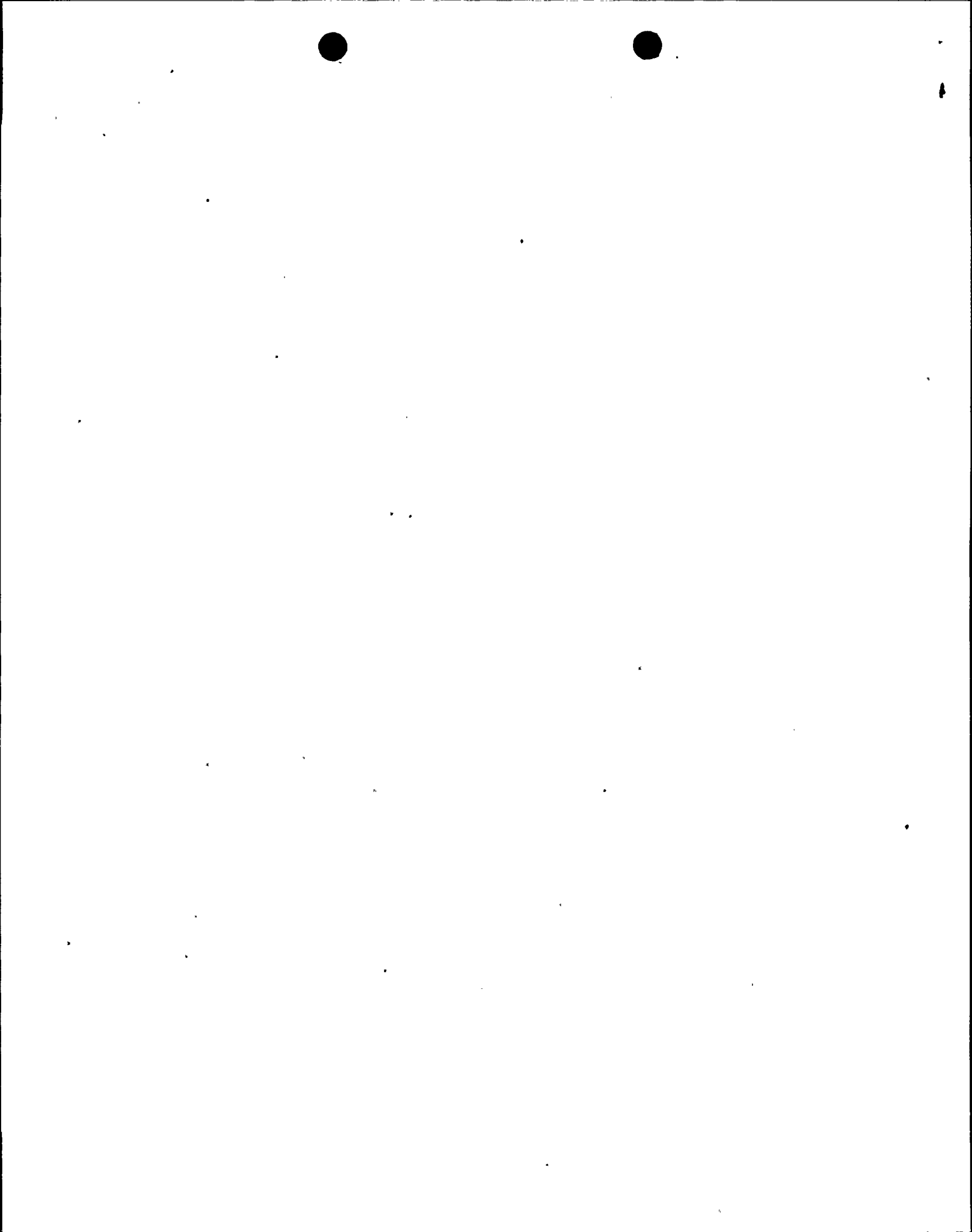
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xc: Mr. H. J. Miller, Regional Administrator, Region I
Mr. B. S. Norris, Senior Resident Inspector
Records Management

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9710200045 971010
PDR ADOCK 05000410
S PDR





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
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TITLE (4)
Technical Specification Violation of APRM Testing Requirements

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)
09	12	97	97	011	00	10	10	97	N/A	05000
									N/A	05000

OPERATING MODE (9) 1 THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)

POWER LEVEL (10) 95	<input type="checkbox"/> 20.402(b) <input type="checkbox"/> 20.405(a)(1)(i) <input type="checkbox"/> 20.405(a)(1)(ii) <input type="checkbox"/> 20.405(a)(1)(iii) <input type="checkbox"/> 20.405(a)(1)(iv) <input type="checkbox"/> 20.405(a)(1)(v)	<input type="checkbox"/> 20.405(c) <input type="checkbox"/> 50.36(c)(1) <input type="checkbox"/> 50.36(c)(2) <input checked="" type="checkbox"/> 50.73(a)(2)(i) <input type="checkbox"/> 50.73(a)(2)(ii) <input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(iv) <input type="checkbox"/> 50.73(a)(2)(v) <input type="checkbox"/> 50.73(a)(2)(vii) <input type="checkbox"/> 50.73(a)(2)(viii)(A) <input type="checkbox"/> 50.73(a)(2)(viii)(B) <input type="checkbox"/> 50.73(a)(2)(x)	<input type="checkbox"/> 73.71(b) <input type="checkbox"/> 73.71(c) <input type="checkbox"/> OTHER <small>(Specify in Abstract below and in Text, NRC Form 366A)</small>
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LICENSEE CONTACT FOR THIS LER (12)

NAME Lou Pisano- Manager Maintenance Unit 2	TELEPHONE NUMBER (315) 349-2073
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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)

YES (If yes, complete EXPECTED SUBMISSION DATE) NO

EXPECTED SUBMISSION DATE (15)

MONTH	DAY	YEAR

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

On September 12, 1997, Niagara Mohawk Power Corporation (NMPC) determined that the surveillance testing performed to meet the Nine Mile Point Unit 2 (NMP2) Technical Specification (TS) Surveillance Requirements (SR) 4.3.1.1-2a, 4.3.1.1-2b, 4.3.1.1-2c, 4.3.1.2 and 4.3.1.3 were not met for Average Power Range Monitors (APRMs) channels E and F.

The cause of the event is attributed to inadequate written communications (omission of relevant information) when the procedures were developed. A contributing factor is poor work practices in that during the development and revision of the procedures, personnel did not perform an adequate technical review.

Immediately upon discovery, operators declared APRM channels E and F inoperable. The applicable procedures were revised and the tests were performed to verify that channels E and F met the SRs. Channels E and F were then declared operable.



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 (6)				PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER		
Nine Mile Point Unit 2	05000410	97	- 11	- 00	02 OF 04	

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

I. DESCRIPTION OF EVENT

On September 12, 1997, Niagara Mohawk Power Corporation (NMPC) determined that surveillance testing performed to meet the Nine Mile Point Unit 2 (NMP2) Technical Specification (TS) Surveillance Requirements (SR) 4.3.1.1-2a (Neutron Flux - Upscale, Setdown), 4.3.1.1-2b (Flow Biased Simulator Thermal Power - Upscale) and 4.3.1.1-2c (Fixed Neutron Flux - Upscale) for Channel Functional Testing (CFT) and channel calibration had not been met for Average Power Range Monitors (APRMs) E and F. In addition, the NMP2 TS SRs 4.3.1.2, Logic System Functional Test (LSFT) and 4.3.1.3, Response Time Testing (RTT) requirement had not been met for the same APRMs. This deficiency was found by personnel performing a design review for the Power Range Neutron Monitoring System which will replace the APRM system.

NMP2 has six APRM channels: A, B, C, D, E, and F. Channels A and C input to Trip System "A" Logic Channels A1 and A2, respectively. Channel E inputs to both Trip System "A" Logic Channels A1 and A2. Channels B and D input to Trip System "B" Logic Channels B1 and B2, respectively. Channel F inputs to both Trip System "B" Logic Channels B1 and B2. This design allows one APRM to be bypassed while maintaining two trip channels within the Trip System.

Prior to September 12, 1997, the procedures for CFT, LSFT, RTT, and channel calibrations did not contain steps to individually test channels E and F within the individual Trip System. Therefore, an inoperable condition could have existed in one of the channels with another channel bypassed, which would have made the Trip System inoperable.

II. CAUSE OF EVENT

The cause of this event is attributable to inadequate written communication in that during the development of the procedures, the requirements to test both logic channels of APRM E and F were not incorporated. A contributing factor is poor work practices; during the revision of relevant procedures, personnel did not perform an adequate technical review. The uniqueness of the APRM E and F circuits was not recognized by either the developer of the original procedures or by the personnel subsequently revising the procedures.

III. ANALYSIS OF EVENT

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



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-350), 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 (6)				PAGE (3)
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Nine Mile Point Unit 2	05000410	97	11	00		03 OF 04

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

III. ANALYSIS OF EVENT (cont'd)

CFT, LSFT, RTT and channel calibration SR's were met for APRM channels A, B, C and D. These SRs were also verified for one half of the channel E and F logic (i.e., the CFT, LSFT and RTT verified that one logic channel circuit was functional), although it cannot be determined which logic channel was tested. In any event, three of the four channels in each trip unit always met the SR, which included the primary channels A, B, C, and D. For one trip system to be inoperable based upon untested trip unit input, one of the primary trip channels would have had to have been bypassed and the input from the E or F channel to that trip unit inoperable. The testing was completed on September 18, 1997 and both halves of channels E and F passed the SR. In fact, the results of the testing confirmed that no adjustments or additional calibration were required to pass the requirements. Therefore, this condition did not pose a threat to the public or NMP2 plant personnel.

IV. CORRECTIVE ACTIONS

1. Immediately upon discovery, APRM channels E and F were declared inoperable.
2. Procedures (N2-ISP-NMS-W@001, N2-ISP-NMS-Q157, N2-ISP-NMS-Q167 and N2-ISP-NMS-R203) were revised to individually test both logic channels of APRM channels E and F, and the tests were performed to verify operability.
3. NMPC reviewed other RPS channel logic to determine other systems with dual channel inputs. The Turbine Stop Valve Closure and Main Steam Isolation Valve Closure logic were identified. Procedures for those systems were reviewed and it was determined that those procedures adequately tested those dual channels.
4. NMPC is in the process of designing a modification to remove the existing APRMs and install a Power Range Neutron Monitoring System. This deficiency was identified by the team working on that modification. The new system will receive an in-depth review to assure that CFT, LSFT, RTT, and channel calibration procedures meet the TS SRs.
5. NMPC is performing a review of procedures per NRC Generic Letter (GL) 96-01, Testing of Safety Related Logic Circuits. That review includes comparing electrical schematic drawings and logic diagrams to plant surveillance procedures to assure TS requirements are met.



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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) Nine Mile Point Unit 2	DOCKET NUMBER (2) 05000410	LER NUMBER (6)				PAGE (3) 04 OF 04
		YEAR 97	SEQUENTIAL NUMBER 11	REVISION NUMBER 00		

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

V. **ADDITIONAL INFORMATION**

- A. Failed components: none.
- B. Previous similar events: LER 96-01, "Technical Specification Violation Caused by Inadequate APRM Setdown Channel Functional Test." That LER describes that the reactor mode switch was placed in startup with an inadequate channel functional test performed on the reactor mode switch contacts for the APRM setdown function. Corrective actions included reviewing the remaining neutron monitoring channel functional test procedures for steps which removed relays in a manner that could have caused components to be inadequately tested. That action would not have identified the deficiency identified in this LER.
- C. Identification of components referred to in this LER:

COMPONENT	IEEE 803 FUNCTION	IEEE 805 SYSTEM ID
Average Power Range Monitors (APRM)	MON	IG



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