REPORTING OF TROUBLE IN CABLE PRESSURE MONITORING SYSTEM; REMOTE TERMINALS AND E2A INTERFACE

1. GENERAL

1.01 This section covers the reporting procedures for trouble and abnormal conditions in or affecting Remote Terminals & E2A Interfaces associated with the Cable Pressure Monitoring System (CPMS). It also outlines the responsibilities of the Central Office (CO) and the CPMS Central Terminal personnel when handling such conditions.

1.02 Whenever this section is reissued, the reason(s) for reissue will be provided in this paragraph.

1.03 This section covers the reporting of information type reports, as well as Form 3325 reports used by the Service Control Center. The responsibility of notification to the Service Control Center will be assumed by the CPMS Central Terminal personnel.

1.04 The procedures outlined in this section are applicable to only the CPMS Remote and Satelite equipment which includes the E2A Interface.

1.05 This section is not intended as a replacement for the local management notification procedures that may exist. However, the present procedures for the notification of abnormal trouble conditions should be modified to incorporate this practice.

1.06 The CPMS Central Terminal is responsible for around-the-clock, 7 days a week surveillance and assistance to the cable and CO work forces. They will aid and assist both work groups with troubles of a general nature.

1.07 In conjunction with trouble isolation and clearing, it is imperative that each remote location have trained personnel as well as access to Maintenance Kits (spare packs & test sets). Care should be taken to insure that Maintenance Kits (spare packs & test sets). Care should be taken to insure that Maintenance Kits contain a full complement of known good spares at all times.

1.08 Associated BSP's are listed below for reference:

Remote Terminal Description and Operation	BSP 201-612-101
Remote Terminal Maintenance	BSP 201-612-301
Remote Terminal Cross-Connects	BSP 201-612-302
Remote Terminal Trouble Locating Procedures Satellite Operation	BSP 201-612-311
Satellite Terminal Cross-Connections	BSP 201-612-312
E2A Application to CPMS - Description	BSP 201-653-103
E2A Maintenance for CPMS	BSP 201-653-503

2. TYPES OF ALARMS - (CLASS 1 AND CLASS 2)

2.01 All Class 1 alarms produce a central office alarm when the trouble occurs. Maintenance procedures for all Class 1 alarms are covered in 201-612-301, Remote Terminal Maintenance.

2.02 Class 2 alarms can be separated into a major and minor alarm. Class 2 alarms do not cause a central office alarm but do appear as reported troubles on the Cathode Ray Tube (CRT) or at the line printer in the Central Terminal.

(a) Class 2 major alarms will appear on the CRT.

(b) Class 2 major alarm conditions will restrict the measurement capability of the Remote Terminal and prohibit the monitoring of outside plant alarm conditions.

NOTE: Class 2 major alarms should be given a high priority.

2.03 The Class 2 minor alarms will appear on the Maintenance Teletypewriter and will normally be cleared by local repair forces.

(a) Minor alarms can be caused by activity such as:

(1) Accidental removal of heat coils.
(2) Assignment record error.
(3) Craft activity in cables.

(b) Section 637-600-400, Section 3 covers examples of Class 1 and Class 2 alarms.

3. RESPONSIBILITIES FOR HANDLING AND ESCALATING TROUBLE CONDITIONS FOR CLASS 1 ALARMS (Figure 1)

3.01 The central office personnel shall be responsible for reporting Class 1 alarms to the CPMS Central Terminal. A general explanation of a Class 1 alarm is a central office alarm that will be audible or received by the TASC alarm group. The maintenance procedures for all Class 1 alarms are covered in Section 201-612-301, Remote Terminal Maintenance.

The Central Terminal personnel will assist the CO with trouble of a general nature; i.e., replacement and testing of circuit packs. It should be noted, however, that where lengthy outages occur that local test sets can be used to simulate computer operations relieving the computer for normal operations. This need will be coordinated by the CPMS Central Terminal personnel.

3.02 If normal trouble routines fail to clear the Class 1 alarm, the central office personnel should use their local management notification procedures.

3.03 After 3 hours, if normal trouble routines are complete and the Class 1 alarm is not cleared, the CPMS Central Terminal personnel will notify SCC on form 3325 (Report of Major Service Failure or Occurrence).

3.04 It will be the responsibility of the central office manager to determine the need for technical assistance and to make a request to the proper staff and/or Maintenance Engineering personnel.

4. RESPONSIBILITIES FOR HANDLING AND REPORTING CLASS 2 MAJOR ALAMRS (Figure 1)

4.01 The CPMS Central Terminal personnel will be responsible for reporting Class 2 major alarms.

4.02 A Class 2 major alarm will be treated as a high priority alarm because this type alarm can render the CPMS remote terminal inoperative.

4.03 A Class 2 major alarm appears on the central terminal CRT as a Code 1 thru 9 after a wire center name. An example would be 63IPLS 7.

4.04 A Class 2 major alarm can be analyzed by using BSP 637-600-400. Some of the trouble codes relate to E2A and data set problems while others relate to Remote Terminal Calibration and defective circuit packs in the Remote or E2A equipment.

4.05 The CPMS Central Terminal will coordinate clearing the Class 2 major alarms.

4.06 If, after 3 hours, the Class 2 major has rendered the remote terminal inoperative and the normal trouble routines have been completed, the CPMS Central Terminal craftsperson will use their local management notification procedures and a Form 3325 will be filed with the SCC.

4.07 Technical Assistance will be provided by CPMS Central Terminal for calibration and circuit pack replacement providing all Class 1 alarms are clear.

5. RESPONSIBILITIES FOR HANDLING AND REPORTING CLASS 2 MINOR ALARMS (Figure 1)

5.01 The Class 2 minor alarms are the normal alarms that are relayed to field forces via the Maintenance Teletype as pressure alarms.

5.02 A Class 2 minor alarm will not result in a remote terminal failure.

5.03 The clearing of Class 2 minor alarms is the responsibility of field forces with assistance from the CPMS Central Terminal personnel.

5.04 During the normal business day, the Class 2 minor alarms that have been given a Priority 1 rating will be rechecked by CPMS Central after

the computer escalation report. If conditions are abnormal, the responsible Plant Service Center or outside supervisor will be called to verify they have knowledge of the alarm.

5.05 During the hours that the local Maintenance Center or Plant Service Center is not manned, the following Priority 1 alarms will be reported to the responsible Duty Supervisor covering the area in which the alarm was received:

(a) **Contactor Alarms** — Contactor alarms will be referred to the Duty Supervisor immediately.

(b) **Dryer Alarms** — Central office dryer and remote dryer alarms will be referred to the work groups responsible or the Duty Supervisor, whichever is the case, immediately.

(c) **Airflow Alarms** — Airflow alarms will be referred if they are not cleared out on the next 20 minute measurement. However, if the current flow has increased to 100 SCFD over the previous reading, the alarm will be referred immediately. Airflow alarms that are currently 000 do not have to be referred. CPMS personnel will work with the outside forces to correct these problems.

(d) **Transducer Alarms** — If the pressure has dropped 1.5 psi from the previous reading, immediately refer the alarm.

5.06 BSP 660-195-910NB, titled Plant Service Center Administration of Cable Pressurization Systems, covers installation, analysis, forms, and responsibility of the Service Center pertaining to maintenance.

5.07 In the case of a major plant failure or unusual occurrences, the local field supervisor will file a Form 3325 with SCC.

Attachment

FIELD RESPONSIBILITIES
REPORTING PROCEDURES OF TROUBLE OR ABNORMAL CONDITIONS

			CPMS Central To File Form 3325 With SCC	Notify Management
Class 1 Alarm REMOTE IS DOWN	Business Day	C.O. forces to call CPMS Central within 1 HR.	3 HOURS (3325 Report) Update Every 2 Hours	According to Local Practices.
	Nights and Weekends	C.O. to call CPMS Central within 2 HRS.	4 HOURS (3325 Report) Update Every 2 Hours	According to Local Practices.
Class 2 Major REMOTE CAN'T BE OPERATED	Business Day	CPMS Central will call the appropriate work forces.	3 HOURS (3325 Reprot) Update Every 2 Hours	According to Local Practices.
	Nights and Weekends	CPMS Central will call the appropriate work forces.	4 HOURS (3325 Report) Update Every 2 Hours	According to Local Practices.
Class 2 Minor PRESSURE ALARMS	Business Day	CPMS will send via Maintenance Teletype.	See Below*	According to Local Practices.
	Nights and Weekends	CPMS personnel will call supervisor on duty about Priority 1 alarms and all alarms will be sent on Maintenance Teletype.	See Below*	According to Local Practices.

ALL TIMES SHOULD BE INTERPRETED AS LIMITS OF TIME FROM THE INCIDENT OR WHEN THE TROUBLE CONDITION BECAME APPARENT.

*IN THE CASE OF A MAJOR PLANT FAILURE, THE LOCAL FIELD SUPERVISOR WILL FILE A FORM 3325 WITH SCC.

FIGURE 1