

1. PURPOSE

1.1 This standard is to establish frequencies and procedures for lubricating and maintaining plug, ball, and gate valves on gas transmission and distribution systems.

2. VALVE MAINTENANCE SCHEDULE

2.1 A program and schedule for valve lubrication and inspection shall be established by each Division and Pipe Line Operations. The work required and the frequency with which this work must be performed are as follows:

* 2.1.1 Transmission line valves which might be required during an emergency must be inspected, lubricated (where required), and ~~partially~~ operated once each calendar year as specified in Section 2.2. (sec 2.1.4 below)

* 2.1.2 Each distribution system valve, the use of which may be necessary for the safe operation of the system, must be inspected, serviced, lubricated (where required), and ~~partially~~ operated once each calendar year as specified in Section 2.2. (sec 2.1.4 below)

* 2.1.3 Manually operated valves at compressor stations and major measuring and regulating stations (i.e., feeds from transmission lines except farm taps; terminal stations, and city gate or border regulating stations, but not district regulator pits), shall be inspected, lubricated (where required), and partially operated at least twice each calendar year as specified in Section 2.2. Additional servicing and lubrication should be scheduled when valves are used frequently. (see attached)

* 2.1.4 When partially operating a valve to comply with 2.1.1, 2.1.2, or 2.1.3 above, the valve plug must be rotated. Rotation of 45° is preferred where load conditions permit. (see attached)

2.1.5 Power actuated valves on standby or used for overpressure protection, should be partially operated and inspected once a month, and lubricated (where required) at least twice each calendar year as specified in Section 2.2.



* Paragraph revised

APPROVED BY	7	8/25/85	REV'D PAR. 2.1.2, 2.1.3; ADDED PAR. 2.1.4; CHG'D ALL POS. TO REV. 7						
WJH	WER	5	3/2/84	Rev'd. Par. 2.1, 2.1.1, 2.1.2, 2.1.3, 2.1.5 Add. 2.2 Sect.				CJT	/PAL
PAI	TOB	5	9/1/83	Rev'd. Par. 2.1.2				CJT	/MOB/PAL
JAF	RCB	4	9/27/82	Revised & Updated					MOB/PAL
LWH	CJT		REV. DATE	DESCRIPTION	GM	DWN.	CHKD.	SUPV.	APVD.

GM	
SUPV.	
DSGN.	
DWN.	
CHKD.	
O.K.	
DATE	SCALE
5-28-75	

VALVE - DATA SHEET
LUBRICATION AND MAINTENANCE REQUIREMENTS
GAS STANDARD
PACIFIC GAS AND ELECTRIC COMPANY
SAN FRANCISCO, CALIFORNIA

B/M	
DWG. LIST	
SUPSDS 084470	
SUPSD BY	
SHEET NO. 1 of 1 SHEETS	
DRAWING NUMBER	REV.
086389	78

2.1.6 Power actuated ball and plug valves used as regulators should be lubricated and inspected at least once a week.

2.1.7 All valves shall be inspected and lubricated (where required) prior to use.

** 2.1.8 Any problem experienced with the operation of any of the above valves, either during scheduled maintenance or at any other time, shall be reported on a Material Failure Report (S.P. 460.21-7).

2.2 Scheduling of Maintenance

2.2.1 An annual "anniversary month" shall be established for the inspection and maintenance of each valve covered by Section 2.1. The "anniversary month" is the calendar month in which the inspection and maintenance required in Section 2.1 is scheduled. Except as permitted by Paragraph 2.2.4, the "anniversary month" shall be based on the month in which the last inspection and maintenance was performed in 1983 and shall be the same month each subsequent year.

2.2.2 Where Section 2.1 requires maintenance twice each calendar a second anniversary month shall be established, as the sixth month after the annual anniversary month established in Paragraph 2.2.1.

2.2.3 The inspection and maintenance required by Section 2.1 shall be scheduled for the anniversary month(s). If circumstances do not permit performance of the work during the month in which it is scheduled, it may be performed in the month prior to or following the scheduled month, provided the annual or semi-annual requirements of Section 2.1 are met.

2.2.4 A new anniversary month(s) for scheduled maintenance may be established by performing the required inspection and maintenance during a month which is earlier than the anniversary month. A new anniversary month may not be established by performing the scheduled maintenance during a month following the established anniversary month. Performing the work during the month prior to or the month following the anniversary month, as permitted by Paragraph 2.2.3, will not change the anniversary month.

** Paragraph added

PG & E CO.		DRAWING NUMBER	REV
SHEET 2	OF 10 SHEETS	086389	7

2.1.3 Manually operated valves at compressor stations and major measuring and regulating stations (see 2.1.3.1) shall normally be inspected, lubricated (where required), and operated (see 2.1.4 below) at least twice each calendar year as specified in Section 2.2. See 2.1.3.2 for exceptions.

- 2.1.3.1 a) Major measuring and regulating stations includes:
 - All feeds from transmission lines, except farm taps.
 - Terminal stations
 - City gate or border regulating stations

b) Not included are district regulator pits.

2.1.3.2 The twice each calendar year ^(schedule) may be modified by the responsible supervisor under the following conditions:

- a) Where valves are operated frequently, additional servicing and lubrication should be scheduled.
- b) For valves meeting all of the criteria outlined below the scheduled inspections may be extended to once a year:

- i) The valve is known to be and is maintained in good condition.
- ii) The valve is used infrequently
- iii) The valve is not critical to the emergency operation or reliability of the facility.
- iv) It has been determined locally that no special operating conditions exist which require more frequent maintenance

Should any of the above conditions change, The maintenance frequency shall be increased to twice each calendar year.

2.1.4 When operating a valve as required in 2.1.1, 2.1.2, or 2.1.3 above, The valve should be turned through its complete range where operating conditions permit. Where operating conditions do not permit full operation of the valve, it should be turned through at least half of its range (45° plug rotation).