62-63 (REV 9-70)

PG and E

FOR INTRA—COMPANY USES

#1

A.T.S

CORRECTED TO DATE 1-30-76

DIVISION OR DEPARTMENT: VICE PRESIDENT - GAS OPERATIONS
FILE NO: 463
RE LETTER OF SUBJECT: Standard Practice No. 463-8
MAOP of Pipelines and Mains
Operating At or Above 20% of SMYS

SUPERSEDED BY 6-25-76 ltr 6-1-76 app.

April 15, 1975

DIVISION MANAGERS
GAS OPERATIONS MANAGERS
MANAGER, GAS CONSTRUCTION
MANAGER, PIPE LINE OPERATIONS
DIVISION GAS SUPERINTENDENTS
DISTRICT MANAGERS
DISTRICT GAS SUPERINTENDENTS
DIVISION ADMINISTRATIVE ANALYST OR EQUAL
DIRECTOR, PROCEDURES AND ORGANIZATION

The attached copy of Standard Practice No. 463-8, including the Supplement-Procedural Details and Appendices A, B, and C, dated May 1, 1975, replaces Standard Practice No. 463-8 and Supplement-Procedural Details dated June 1, 1973, and Appendices A, B, and C dated March 1, 1975.

Additional copies of this standard practice may be obtained from Gas Operations by calling Extension 1604.

E. F. SIBLEY

[redacted]

Attachment

62-7501 REV 4-68

PACIFIC GAS AND ELECTRIC COMPANY
STANDARD PRACTICE

STANDARD PRACTICE NO 463-8

EXECUTIVE OFFICE OR DIVISION GAS OPERATIONS

PAGE NO 1 EFFECTIVE 5/1/75

ISSUING DEPARTMENT GAS SYSTEM DESIGN

REPLACING PAGE NO 1 EFFECTIVE 6/1/73

SUBJECT:

MAXIMUM OPERATING PRESSURES OF PIPELINES AND MAINS OPERATING AT OR ABOVE 20% OF S.M.Y.S.

PURPOSE AND POLICY

*1. To establish a uniform procedure for identifying, reviewing and revising Design Pressure (DP), Maximum Allowable Operating Pressures (MAOP), and Maximum Operating Pressure (MOP) (PG&E) for all pipelines, mains and holders operating at or above 20% of specified minimum yield strength (SMYS) of the pipe material (See Appendixes A, B and C).

RECISIONS

2. All previous instructions, oral or written, that may be contrary to this Standard Practice.

RESPONSIBILITY

3. Division Gas Superintendents and the Manager of Pipe Line Operations shall be responsible for the performance required by this Standard Practice. Performance will include reviews of design procedures for the lines and the records generated by the referenced Standard Practices any time a change in MOP, MAOP or DP is contemplated.

4. The Manager of Gas System Design will establish and confirm changes to MOP (PG&E), MAOP and DP.

REFERENCES

*5. Current edition of California Public Utilities G.O. 112
S.P. 412-1, "External Corrosion Control of Buried Gas Facilities"
S.P. 460-1, "Location Class Changes: Pipelines and Mains"
S.P. 460.2-2, "Physical Inspection: Pipelines, Mains and Services"
S.P. 460-21-4, "Periodic Leakage Surveys of Gas Transmission and Distribution Facilities"
S.P. 463.7, "Pipeline History File, Establishing and Maintaining"

DEFINITIONS

*6. Design Pressure (DP) is the maximum pressure permitted by the design sections of the current edition of G.O. 112, applicable to the materials and locations involved. In some cases the DP has been established as the maximum pressure for the minimum wall thickness required under the current edition of G.O. 112 for Type 3 construction for line size listed (See double asterisk entries in Appendix A).

Future Design Pressure is the Design Pressure (DP) to be used for future additions to existing facilities, effective March 1, 1975.

* Paragraph Revised
** Paragraph Added

(SEE OVER)

62-7501 REV 4-68

PACIFIC GAS AND ELECTRIC COMPANY
STANDARD PRACTICE

STANDARD PRACTICE NO 463-8

EXECUTIVE OFFICE OR DIVISION GAS OPERATIONS — PAGE NO 2 EFFECTIVE 5/1/75

ISSUING DEPARTMENT GAS SYSTEM DESIGN — REPLACING PAGE NO 2 EFFECTIVE 6/1/73

SUBJECT:

MAXIMUM OPERATING PRESSURES OF PIPELINES AND MAINS OPERATING AT OR ABOVE 20% OF S.M.Y.S.

DEFINITIONS

Maximum Allowable Operating Pressure (MAOP) is the maximum pressure at which a pipeline or section of a pipeline may be operated in accordance with all the applicable provisions of the current edition of G.O. 112.

Maximum Operating Pressure (MOP) (PG&E) is the maximum pressure at which a gas system may be operated as specified by the Manager of the Gas System Design Department.

Specified Minimum Yield Strength (SMYS) is the minimum yield strength in psi prescribed by the specification under which pipe is purchased from the manufacturer or as specified in Section 192.107 of the current edition of G.O. 112.

APPLICATION

*7. Procedural details and supplemental data appear in addenda to this Standard Practice.

Supplement - Procedural Details
Appendix A - Lines in Transmission Capital Operating at or over 20% of SMYS
Appendix B - Distribution Mains Operating at or above 20% of SMYS.
Appendix C - Pipe Type Underground Holders Operating at or above 20% of SMYS

RECORD

8. Pressure Recording Charts and Operating Sheets (record of hourly data) which document the MAOP and/or MOP (PG&E) of pipelines and mains operating at or above 20% of SMYS shall be kept current by the Division and/or Pipe Line Operations Department assigned with the responsibility of maintenance and operation of facility.

SUPPLEMENT

9. The Supplement establishes the procedure for designating the MOP (PG&E), MAOP and DP for each facility.

APPROVED BY: E. F. Sibley
Vice President - Gas Operations

DISTRIBUTION:
Division Managers
Division Gas Superintendents
District Gas Superintendents
District Managers
Division Admin. Analyst or Equal
Director, Procedures Analysis
Pipe Line Operations

Additional copies of this Standard Practice may be obtained from Gas Operations, 77 Beale Street, San Francisco (PG&E Ext. 9-1604).

* Paragraph Revised
** Paragraph Added

(SEE OVER)

PROCEDURAL DETAILS

*10. Piping systems listed are not to be operated in excess of the MOP (PG&E). This limitation has been determined by the lowest of the following:

a) The test pressure or the rated working pressure of the pipe, valves, and fittings in the line.

b) The MAOP of the line as established in accordance with the provisions of the current edition of G.O. 112.

c) The MAOP of another pipeline system connected to the first system where there is no pressure control complete with over pressure protection between the two systems.

d) Operating conditions that limit pressure.

*11. The MOP (PG&E) may equal, but shall never exceed the MAOP or the DP. In some cases where the MAOP is less than DP, it is anticipated that the MOAP may be increased at some future time, in accordance with Subpart K (Uprating) of the current edition of G.O. 112. For this reason, all new additions to an existing system shall have a design pressure at least equal to the design pressure listed in Appendixes A, B and C. Some sections of an existing system may not qualify for the established design pressure and would require reconstruction, testing, or replacement prior to increasing the MAOP. See paragraph 6.

12. New or replacement sections of line should be tested and qualified for the ultimate MAOP of the system, even though the MOP (PG&E) of the system is limited by the MAOP of other facilities connected to it.

*13. Any changes contemplated in the MOP (PG&E) or the MAOP of a line operating at or over 20% of SMYS shall be submitted by the Division Gas Superintendent or the Manager of Pipe Line Operations, in letter form, to the Manager of Gas System Design, for review and approval. A copy should be sent to the Manager of Gas System Planning.

*14. The MOP (PG&E), MAOP and DP of all newly installed pipelines and mains operating at or above 20% of SMYS, along with those in Appendixes A, B and C shall be confirmed annually by letter on or before February 1, by the Division Gas Superintendents and the Manager of Pipe Line Operations to the Manager of Gas System Design Department, for each facility within the scope of this Standard Practice.

*15. The Manager of Gas System Design Department will publish and distribute updated lists of pipeline pressures (Appendixes A, B and C) as required.

Attachment: Appendix A - "Lines in Transmission Capital Operating at or over 20% of SMYS"
Appendix B - "Distribution Mains Operating at or above 20% of SMYS"
Appendix C - "Pipe Type Underground Holders Operating at or above 20% of SMYS"

* Paragraph Revised
** Paragraph Added

LINES IN TRANSMISSION CAPITOL OPERATING AT OR OVER 20% SMYS

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
21	Crockett Station (MP 0.00) to MP 0.54	24" & 26"	400	405	650	675
21	MP 0.54 to Herrmann Station (MP 1.52)	24"	400	675	675	675
21	Herrmann Station to Reis Avenue (MP 2.71)	16"	250	258	575**	575**
21	Reis Avenue to Napa "Y" (MP 12.05)	12"	250	375	585	585
21	Napa "Y" to MP 35.05	12" & 26"	450	450	675	675
21	MP 35.05 to MP 51.41	12"	450	500	720	675
21	MP 51.41 to Santa Rosa Compressor Station (MP 53.12)	12"	450	500	720	675
21	MP 53.12 to MP 110.4	12"	600	890	890	890
21	MP 110.4 to MP 111.2	12"	600	720	890	890
21	MP 111.2 to MP 111.9	12"	600	890	890	890
21	MP 111.9 to MP 112.1	12"	600	720	890	890
21	MP 112.1 to MP 113.9	12"	600	890	890	890
21	MP 113.9 to Ukiah (MP 114.9)	12"	600	720	890	890
21	MP 114.9 to Willits (MP ~~136.8~~ 137.38)	8"	600	832	832	890
21	Napa "Y" (MP 0.00) to MP 18.64	16"	450	500	720	675
21	MP 18.64 to Denman Flat Tap (MP 24.6)	16"	450	500	720	675
21	McDowell Road Tap (MP 34.84) to Petaluma Meter Station (MP 35.86)	12"	450	500	593	675
21	Adobe (MP 0.00) to San Rafael HPU Holder Station	16" & 20"	450	500	600	675
21	Adobe (MP 0.00) to San Rafael HPU (MP 21.11)	12"	450	500	675	675
*50	5th & Walnut Streets, Marysville (MP 0.00) to Yuba City HPU (MP 2.87)	8"	400	400	720**	720**
*50	Yuba City HPU to Biggs Regulator Station (MP 21.62)	8"	250	250	720**	720**
*50	Biggs Regulator Station to Richvale "Y" (MP 26.94)	6" & 8"	250	250	720**	720**
*50	Richvale "Y" to Stirling Junction (MP 44.87)	6" & 8"	400	400	~~720~~ 686**	720**
50	MP 0.00 to Paradise (MP 7.81)	8"	400	720	720	720
56	Pleasant Creek Field Storage System	4"	1300	1300	~~1250~~ 1300	1440
56	Pleasant Creek Field Storage System	8"	1300	1440	1440	1440

**See Paragraph 6

(See Over)

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
57	McDonald Island Field Storage System	4" - 12"	2160	2160	2160	2160
57	McDonald Island Compressor Station (MP 0.00) to PLS (MP 7.47)	14" 16" 18"	1025	1025	1025	1025
57	PLS (MP 7.47) to Brentwood Terminal (MP 16.64)	18"	867	867	867	867
57B	Brentwood Terminal to McDonald Island	22"	2160	2160	2160	2160
100	MP 134.5 to Milpitas Terminal (MP 150.13)	20"	400	400	552	552
101	Milpitas Terminal (MP 0.00) to Rengstorff Avenue Station (MP 9.80)	36"	400	400	400	400
*101	Rengstorff Avenue Station Via Bayshore to San Francisco Border Meter Station (MP 33.68)	20"	180	180	275	400
*101	San Francisco Meter Station Via Bayshore Boulevard to Potrero Gas Plant (MP 44.56)	20"	109	150	275	275
*103	Hollister Meter Station (MP 0.00) to California Street Regulator Station (MP 23.55)	12"	350	350	670**	500
103	California Street Regulator Station to Harkins Road Meter and Mixer Station (MP 26.63)	12"	313	313	670**	500
105	Irvington Station (MP 6.88) to San Lorenzo Regulator Station (MP 23.03)	20"	250	250	500	500
*105	San Lorenzo Regulator Station to San Pablo Station (MP 52.01)	20"	150	198	275	275
*105	Oakland Holder Station (MP 0.00) to Berkeley City Limits (Parallel) (MP 2.03)	24"	150	198	275	275
105	Baine Avenue Crossover (MP 0.00) to Line 153 (MP 0.18)	20"	250	250	590	500
*105	West Winton Avenue Crossover (MP 0.00) to Line 153 (MP 0.185)	22" & 24"	250	250	500	500
105B	Crockett Station (MP 0.00) to San Pablo Station (MP 11.85)	24"	400	400	400	400
105S	Milpitas Terminal (MP 0.00) to Irvington Station (MP 6.88)	20"	465	480	500	720
107	Tracy Station (MP 0.00) to Livermore Junction (MP 13.11)	22"	500	500	500	720

**See Paragraph 6

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
107	Livermore Junction to Irvington Station (MP 31.22)	22"	477	480	500	720
107S	Irvington Station to Milpitas Terminal (MP 38.06)	22"	477	~~500~~ 477	500	720
108	Stanpac 2 (MP 0.00) to Vernalis Field Mixing Station (MP 4.59)	16"	500	500	720	890
108	Vernalis Field Mixing Station to McMullin Ranch Mixer Station (MP 8.79)	16"	408	408	720**	720**
108	McMullin Ranch Mixer Station to MP 16.7	16"	408	408	720**	720**
108	MP 16.7 to Las Vinas Station (MP 43.5)	16"	412	426	720**	720**
108	Las Vinas Station to MP 56.25	16"	490	~~500~~ 490	500	720
108	MP 56.25 to Sacramento Gas Plant (MP 75.10)	16"	412	412	500	720
*108	E. Hazleton & B Streets Regulator Station (MP 27.10) to Stockton Gas Plant (MP 1.71)	12"	185	185	275	275
109	Milpitas Terminal (MP 0.00) to Sullivan Avenue Regulator Station (MP 43.47)	22" & 30"	375	375	400	400
*109	Sullivan Avenue Regulator to Potrero Gas Plant (MP 52.70)	26"	150	150	275	275
111	Helm Junction (MP 0.00) to Fresno Junction (MP 21.65)	12"	650	650	800	720
111	Fresno Junction to Division Gas Load Center (MP 28.05)	8"	400	400	720	720
111	Raisin City Field Collection System	4"	800	800	800	800
111	San Joaquin Field Collection System	3" & 4"	800	800	960	960
112	Vernalis Field Collection System	3" - 8"	594	594	800	800
114	West Rio Vista Field (MP 0.00) to Antioch Terminal (MP 9.01)	12" & 16"	510	510	800	800
114	Antioch Terminal to Brentwood Terminal (MP 16.59)	22"	595	595	595	720
114	Brentwood Terminal to Dalton Avenue PLS (MP 28.97)	22"	595	595	595	720
114	Dalton Avenue PLS to Livermore Junction (MP 34.05)	22"	495	495	595	720
*116	Davis Meter Station (MP 0.00) to Swingle Junction (MP 3.86)	8"	500	500	500	800
*116	Swingle Junction to Sacramento Gas Plant (MP 12.89)	8"	500	500	500	720

**See Paragraph 6

(See Over)

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
*118	Division Gas Load Center (MP 0.00) to Fresno Junction (MP 6.09)	8"	400	400	720	720
118	Division Gas Load Center (MP 0.00) to Fresno HPU Station (MP 0.66)	12"	690	690	720	720
*118	Fresno Junction to MP 12.57	12"	400	400	720	720
*118	MP 12.57 to Livingston (MP 73.26)	8"	400	400	720	720
118	Herndon (MP 0.00) to Athlone (MP 38.39)	12"	400	400	720	720
118	Livingston to Collier Road (MP 74.89)	6"	400	720	720	720
118	Collier Road to Bradbury Road Regulator Station (MP 83.74)	6"	400	400	400	400
118	Bradbury Road Regulator Station to MP 84.69	6"	500	890	890	890
119	Davis Meter Station (MP 0.00) to Swingle Junction (MP 3.85)	12"	780	792	800	800
119	Swingle Junction to MP 4.85	12"	500	720	800	720
119	MP 4.85 to MP 11.14	12"	500	520	800	720
119	MP 11.14 to MP 11.35	10"	500	520	800	720
119	MP 11.35 to N. Sacramento HPU (MP 16.46)	12"	500	520	800	720
119	N. Sacramento HPU (MP 0.00) to Antelope Meter Station (MP 10.17)	12"	500	500	500	600
119	N. Sacramento HPU (MP 0.00) to Antelope Meter Station (MP 8.41)	6" & 16"	500	500	500	600
119	N. Sacramento HPU (MP 0.00) to MP 2.80	24"	180	180	545	545
119	Elm and Traction Avenue Regulator (MP 4.6 to MP 5.5)	12"	500	500	500	600
119	Sonoma Avenue Regulator and Del Paso Boulevard (MP 0.00) to Roseville Regulator Station (MP 5.25)	6"	180	500	500	500
120	Sutter Creek Field Collection System	4" & 6"	492	492	720	720
120	Sutter Buttes Field Collection System	4" & 6"	485	485	720	720
121	Marysville Buttes Meter Station (MP 0.00) to Yuba City HPU (MP 11.54)	6"	485	485	720	720
123	Antelope Meter Station (MP 0.00) to Lincoln Junction (MP 13.57)	12"	500	500	670**	670**
124	Lincoln Junction (MP 0.00) to 5th & Walnut, Marysville (MP 23.46)	8"	400	400	720	600
124	Lincoln Junction (MP 0.00) to Yuba City HPU (MP 26.03)	16"	600	600	600	600

**See Paragraph 6

GAS AND ELECTRIC COMPANY

62 6224

COPY

GAS SYSTEM DESIGN
456

Decrease in Maximum
Allowable Operating
Pressure - L-131
Rio Vista Field

May 14, 1975

MR. M. H. FURBUSH:

The Maximum Allowable Operating Pressure and the Design Pressure of 10-inch and 12-inch Line 131, between mile points 0.00 and 9.19 in the Rio Vista Field, are being lowered from 800 psig, as shown in Appendix A dated 5/1/75 of Standard Practice 463-8, to 720 psig. This action is being taken because of design changes which will produce savings in the purchase of equipment of a lower pressure rating, not because of any inadequacies of the existing pipeline facilities. This MAOP reduction will not create any operating problems as the lines are part of a system operating well below 720 psig.

Please forward this information to the CPUC, as required in G.O. 112-C, Part I, Section 141.3.

C. J. TATEOSIAN

[redacted]

cc EFSibley
JAFairchild
ICOdom
FJParsons
[redacted]
DCImoto
[redacted]

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
124	Beale Air Force Base Tap (MP 0.00) (T 13.31) to MP 3.76	6"	400	400	720	600
125	Thompkins Hill Field Collection System	3" 4" 6"	448	448	720	720
126	Thompkins Hill Meter Station (MP 0.00) to Union Street Regulator (MP 10.57)	4"	350	442	720	720
126	Thompkins Hill Meter Station (MP 0.00) to Union Street Regulator (MP 10.89)	6"	350	442	720	720
126	Elk River Road Regulator (MP 0.00) to MP 3.62 (T 12.38, Line 126)	10"	167	167	720	720
*126	MP 0.00 to Eureka Propane (MP 0.36)	10"	167	167	720	720
126	Union Street Regulator to Line 137 (MP 12.61)	6"	167	167	720	720
130A	HP Rio Vista Sacramento River Crossing (MP 0.00 to MP 0.50)	10"	800	800	800	800
130B	LP Rio Vista Sacramento River Crossing (MP 0.00 to MP 0.50)	10"	420	510	800	800
131	E. Rio Vista Field (MP 0.00 to MP 0.71)	12"	685	685	800	~~800~~ 720
131	E. Rio Vista Field (MP 0.00) to Antioch Terminal (MP 9.19)	10" & 12"	~~800~~ 685	~~800~~ 720	800	~~800~~ 720
131	Antioch Terminal to MP 10.47	24"	438	438	600	720
131	MP 10.47 to Brentwood Terminal (MP 16.87)	24"	438	495	600	720
131	Brentwood Terminal to Irvington Station (MP 50.57)	24"	500	525	600	650
131	Irvington Station to Milpitas Terminal (MP 57.45)	30"	595	595	650	650
132	Milpitas Terminal (MP 0.00) to Martin Station (MP 46.59)	24" 30" 36"	400	400	400	400
132	Martin Station to Potrero Plant (MP 51.50)	24"	145	145	275	275
132	Sierra Vista Avenue (MP 10.32) to Rengstorff Avenue Station (MP 0.00 to MP 1.47)	16" & 24"	400	400	400	400
132	Martin Station to Geneva Avenue (MP 39.86)	20"	109	150	275	275
133	Gill Ranch Field Collection System	4" 6" 8"	400	500	720	720
134	Herndon Junction (MP 0.00) to MP 21.57	6" & 8"	400	500	720	720
134	MP 21.57 to Arbios Meter Station (MP 27.04)	6"	500	500	720	720

(See Over)

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
134	Arbios Meter Station to MP 30.50	6" & 8"	500	500	720	720
134	Arbios Meter Station to Firebaugh Regulator Station (MP 34.13)	3" & 4"	500	500	720	720
136	Ord Bend Meter Station (MP 0.00) to MP 3.21	6"	479	565	720	720
136	MP 3.21 to Stirling Junction (MP 12.87)	6"	550	550	720	720
*137	Whipple and Albee Streets, Eureka (MP 0.00) to MP 11.83	4" & 6"	167	167	720	720
137	Ryan Slough Regulator Station (MP 3.58) to Arcata (MP 7.37)	8"	350	350	720	720
138	Helm Tap Station (MP 0.00) to Helm Junction (MP 14.94)	10"	500	500	650	650
138	Helm Tap Station (MP 0.00) to Helm Junction (MP 14.71)	20"	700	700	800	890
138	Helm Junction to Elkhorn Station (MP 20.50)	18"	700	865	865	890
138	Elkhorn Station to Burrel Meter Station (MP 22.04)	18"	650	650	865	720
138	Burrel Meter Station to Adams & Elm Meter and Regulator Station (MP 38.59)	16"	650	650	720**	720**
138	Adams & Elm Meter Station to Cherry & Jensen Regulator (MP 45.00)	12" & 16"	650	650	720	720
138	MP 45.00 to San Joaquin Division Gas Load Center (MP 49.42)	10" & 12"	650	650	720	720
138	T 43.58 to Chestnut & Clay Regulator Station (MP 50.02)	16"	650	650	720	720
138	MP 45.10 to Peach Avenue (T 46.64)	10"	650	720	720	720
141E	Thornton Meter Station to E. Thornton Field Collection System	4" & 6"	538	538	800	800
141W	Thornton Meter Station to W. Thornton Field Collection System	3" - 10"	768	768	800	800
*141	N.E. River Island & Walnut Grove Field Collection System	6" & 8"	768	768	800	800
142N	Bakersfield Tap to Bakersfield Meter Station (MP 14.05)	12" 16" 20"	475	475	720	720
142S	Gosford Road Meter Station (MP 0.00) to Brundage Lane Regulator (MP 9.00)	6" & 10"	600	600	720	720
*142	MP 9.00 to Bakersfield Meter Station (MP 11.47)	8" & 12"	300	300	720	720
*143	Millar Field Collection System	3" & 4"	796	800	800	800

**See Paragraph 6

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
144	Millar Meter Station (MP 0.00) to Millar Field (MP 3.50)	10" & 12"	796	796	800	800
145	Maine Prairie Field Coll. System	3" 4" 6"	796	796	800	800
146	Maine Prairie Meter Station (MP 0.00) to Maine Prairie Field (MP 6.00)	8"	796	796	800	800
147	~~Whipple~~ Edgewood Road Crossover (MP 0.00) to San Carlos Regulator Station (MP 3.39)	20" & 24"	400	400	400	400
148	McMullin Ranch Mixer Station (MP 0.00) to Ceres Regulator Station (MP 18.24)	8"	408	408	720	720
149	Winters Field Collection System	4" & 6"	750	750	800	800
150	Winters Meter Station to Davis Meter Station (MP 18.09)	6"	750	750	800	800
151	Afton Odorizer Station (MP 0.42) to Afton Regulator Station (MP 14.05)	6"	250	250	720	720
152	Afton Field (MP 0.00) to Afton Odorizer Station (MP 0.42)	6"	250	250	720	720
153	Irvington Station (MP 0.00) to Marina Boulevard Station (MP 18.00)	30"	420	420	500**	500**
*153	Marina Boulevard Station to 2nd and Market Streets (MP 27.89)	24"	246	246	275	275
153	Tap to 50th Avenue Holder Station	16" & 20"	246	246	275	275
153	Tap to Oakland Holder Station	20"	246	246	275	275
153	Alvarado Crossover to Line 105	16"	250	250	500**	500**
*153	Fairway Avenue Crossover to Line 105	20" & 30"	150	198	542	500
155	Durham Field Collection System	4"	680	680	800	800
156	Durham Field (MP 0.00) to Durham Field Meter Station (MP 5.72)	6"	680	680	800	800
158	Dunnigan Hills Field (MP 4.90) to Dunnigan Hills Meter & Regulator (MP 13.65)	6"	500	564	800	800
*158	Woodland Field Collection System	3" & 4"	500	564	800	800
159	Pleasant Creek Compressor Station (MP 0.00) to V 0.65	4"	975	975	1000	975
159	V 0.65 to Pleasant Creek Regulator Station (MP 3.91)	4"	975	975	1000	975
159	Pleasant Creek Regulator Station to Winters Meter Station (MP 6.08)	4"	750	750	800	800
159	Winters Field Collection System	4"	750	750	800	800

**See Paragraph 6

(See Over)

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
*162	Tracy Station (MP 0.00) to Banta Regulator Station (MP 7.73)	6" & 8"	365	365	720	720
162	Tracy Station to Byron Road (MP 5.59)	10"	365	720	720	720
164	Coalinga Field Collection System	10" & 8"	498	498	865	890
167	E. Beehive Bend Odorizer Station (MP 0.00) to Yuba City HPU (MP 34.50)	12" & 16"	800	800	800	800
167	Wild Goose Field Meter (MP 0.00) to Wild Goose Mixer & Odorizer Station (Parallel)	10"	800	800	800	800
167	Wild Goose Mixer to Gridley Junction (MP 6.54)	8"	800	800	800	800
167	Wild Goose Collection System	3" & 4"	800	800	800	800
167	Princeton Field Collection System (MP 4.12 to MP 7.60)	3"	800	800	800	800
167	Compton Landing Field Collection System	4" & 6"	800	800	800	800
167	Bounde Creek Field Collection System	4"	800	800	800	800
168	River Island Field Collection System HP	4" 6" 8"	800	800	800	800
168	River Island Field Collection System LP	3" - 8"	698	698	800	800
169	Beehive Bend, Willows, Llano Seco, & Perkins Lake Field Collection System	3" - 20"	800	800	800	800
172	W. Beehive Bend Meter Station (MP 0.00) to Swingle Junction (MP 69.81)	18" & 20"	800	800	800	800
172	Swingle Junction to Sacramento Gas Plant (MP 79.15)	16"	500	520	720	720
172	Crosstie Between Line 172 (MP 0.00) & Line 167 (MP 0.60)	10"	800	800	800	800
172	Crosstie Between Line 172 (MP 75.45) & Line 119 (MP 9.68)	12"	500	520	720	720
*173	Line 123 (MP 0.00) (V 6.51) to Auburn Regulator Station (MP 17.56)	4" 6" 8"	500	500	720	720
*174	Arbuckle Field Collection System	2" - 10"	800	800	800	800
176	Roberts Island Field Collection System	2" - 8"	555	555	800	800
176	Roberts Island Field (MP 0.00) to Tracy Station (MP 18.85)	6" & 8"	555	555	800	800
177	Sacramento Avenue Junction (MP 0.00) to Grapeway Regulator Station (MP 0.87)	10"	819	819	960	960

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
177	Grapeway Regulator to Stirling Junction Meter Station (MP 7.68)	6" & 10"	469	469	600	600
177	Fell Regulator & Odorizer (MP 0.00) to Sacramento Avenue Junction (MP 4.75)	16"	819	819	960	960
177	Sacramento Avenue Junction to Corning N. Dome Station (MP 29.09)	10"	819	819	960	960
177	Tap 27.60 (MP 0.00) to Tap 29.87 (MP 2.19) Parallel Section Near Corning N. Dome	6" & 8"	819	819	960	960
177	Corning N. Dome Station to Gerber Compressor Station (MP 37.84)	12"	819	819	960	960
177	Gerber Compressor Station to Cummings Creek PLS (MP 163.04)	12"	819	819	960	960
177	Cummings Creek PLS to Thompkins Hill Meter & Regulator Sta (MP 178.18)	12"	430	430	720	720
177	Thompkins Hill Meter & Regulator Station to Ryan Slough Regulator Station (MP 192.26)	12"	350	442	600	600
177	Crosstie Between Lines 177 (T 37.8) and Line 400 (V 149.18)	12"	819	819	960	960
177	Tap (V 43.87) to Red Bluff and Diamond National (MP 1.24)	6"	819	819	960	960
177	Rancho Capay Field Coll. System	4"	819	819	960	960
180	Kettleman Hills Field Coll. System	8" - 20"	421	421	500	500
181	Soap Lake Meter Station (MP 0.00) to V 1.56	10"	300	300	400	400
181	V 6.19 to Watsonville Meter Station (MP 20.15)	10" & 12"	300	303	400	400
181	Anzar Road Meter and Regulator (MP 0.00) to Watsonville Meter Station (MP 11.19)	10" 16" 12"	300	303	400	400
*182	Serpa "Y" (MP 0.00) to Shell Chemical Meter Station (MP 18.23)	4" - 12"	435	435	800	800
*182	Shell Chemical Meter Sta. to Suisun Junction Meter Station (MP 18.87)	12"	435	435	600	800
182	Kirby Hills Field Collection System	3" - 8"	435	435	800	800
182	Suisun Field Collection System	2" - 6"	435	435	800	800
183	Firebaugh Regulator Sta. (MP 0.00) to Moffat Field Meter Sta. (MP 6.35)	3"	175 ~~320~~	320	800	800
185	Hollister Field Collection System	4"	396	396	600	500
186	Dos Palos Meter Station (MP 0.00) to Red Top Regulator (MP 26.1)	3" 4" 6"	625	625	720	720
186	Red Top Reg Sta to Chowchilla Field	2" 3" 4"	625	960	960	960

(See Over)

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
187	San Ardo Field Meter Station (MP 0.00) to Jolon Road Regulator Station (MP 22.58)	6"	313	313	870	870
187	Jolon Road Regulator Station to Harkins Road Meter & Mixer Station (MP 65.70)	8"	313	313	720	720
189	Elk River Road Regulator Station (MP 0.00) to Humboldt Bay P.P. (MP 1.72)	10"	350	442	720	720
190	Kettleman Compressor Station (MP 0.00) to Coalinga Nose Storage Field (MP 16.08)	12" & 16"	2160	2160	2160	2160
190	Coalinga Nose Storage Field to Union Oil Company (MP 16.22)	16"	2160	2160	2160	2160
191	Antioch Terminal (MP 0.00) to Los Medanos Junction (MP 5.81)	30" & 34"	315	600	600	600
191	MP 3.87 to MP 9.93 Via Pittsburg Power Plant	20" & 24"	315	390	600	600
191	MP 9.93 to Reliez Station Road Regulator Station	16" 20" 24"	315	338	600	600
*191	Reliez Station Road Regulator Station to MP 29.36	8" 10" 12"	268	283	400	400
*191	Junction Line 191 (MP 29.36) to MP 32.76	10"	268	270	400	400
*191	MP 32.76 to Martinez Meter and Regulator Station (MP 35.83)	10"	268	268	400	400
*191A	Junction Line 191 to Ardilla and Camino Pablo & Orinda Regulator Station	3" 6" 8"	268	283	400	400
*191B	Junction Line 191 to Reliez Valley Road Regulator Station	8"	268	283	400	400
193	Rice Creek Field Collection System	2" - 8"	819	960	960	960
193	Malton Field Collection System	4" 6" 8"	819	960	960	960
193	Kirkwood & Rice Creek Field North Collection System	6"	819	819	960	960
194	McMullin Ranch Mixer (MP 0.00) to MP 2.83	8" & 10"	437	437	800	800
194	McMullin Field Dehydrator Station (MP 0.00) to California Ammonia Company (MP 4.39)	6"	437	437	960	960
194	McMullin Ranch Field Collection System	2" & 10"	437	437	800	800
195	Rio Vista Field Collection System (HP)	2" - 16"	800	800	800	800

PACIFIC GAS AND ELECTRIC COMPANY

62-5224

COPY

GAS SYSTEM DESIGN
456

Rio Vista Gas Field
Collection System
Operating Pressure

June 19, 1975

[redacted]:

Standard Practice 463-8 lists an MAOP/MOP of 510 psig for the L-200 West Rio Vista Collection System (LP). A compressor cylinder is being installed in the Marks Compressor Lease which is rated for a maximum pressure of 400 psig. It will be used to compress gas from the 30 psig system to the 150 psig system. Because of this, the MOP of the portion of the West Rio Vista Collection System, which is used for the wells with a 30 psig contract pressure, has been reduced from 510 psig to 400 psig. This system will be referred to as the "West Rio Vista Field Collection System (30 psig)." There will be no change in the 510 psig MAOP.

C. J. TATEOSIAN

[redacted]

cc ICOdom
FJParsons
[redacted]
EFSibley
JAFairchild
ATS

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
*195	Rio Vista Field Collection System (LP)	2" - 16"	510	510	800	800
196	Las Vinas Station (MP 0.00) to Isleton Meter Station (MP 13.45)	8" & 12"	800	800	800	800
197A	Las Vinas Station to MP 21.41	10"	385	388	720	720
197A	MP 21.41 to MP 31.23	10" & 12"	320	500	720	720
197A	MP 31.23 to MP 39.57	12"	320	320	720	720
197A	MP 39.57 to Calaveras Cement	8"	320	320	720	720
197B	Las Vinas Station to MP 5.50	6"	385	388	720	720
197B	V 19.57 to V 31.24	8"	320	320	720	720
197C	Ione Tap to MP 23.02	10"	385	720	720	720
199	Bunker Field Collection System	3" - 8"	796	796	800	800
200	W. Rio Vista Field Collection System (HP)	2" - 16"	800	800	800	800
*200	W. Rio Vista Field Collection System (LP)	2" - 16"	~~510~~ 400	510	800	800
200	Liberty Islands Field Collection System	4"	800	800	800	800
200	Lindsay Slough Field Collection System	3" - 10"	800	868	960	960
201	Todhunters Lake Field Collection System	2" - 12"	800	960	960	960
202	Grass Valley Tap to Regulator Station near Robin Avenue, Grass Valley (MP 23.72)	6" & 8"	400	720	720	600
203	Greens Lake Field Collection System	4"	500	800	800	800
204	~~Bonder Gas Well Collection System~~ CHENEY RANCH FIELD	3" & 4"	500	890	890	890
206	Pleasant Creek Tap to Pleasant Creek Compressor Station	12"	975	1440	1440	1440
* 207	Conway Ranch Field Collection System	4" 6" 8"	800	1000	1000	1000
209	Line 400 to Line 128 at Willows	4"	450	~~450~~ 720	720	720
210	Rio Vista "Y" (MP 0.00) to Creed Station (MP 1.40)	16"	650	650	800	800
210	Creed Station to Napa "Y" (MP 25.98)	16" & 18"	650	650	740	740
210	Creed Station to Cordelia Regulator Station (MP 19.47)	32"	650	675	675	675
210	Cordelia Regulator to Napa "Y" (MP 25.62)	10" & 12"	650	650	800	800
210	Rio Vista "Y" to Creed Station (MP 1.36)	10"	650	650	800	800
210	Cordelia Regulator to Herrmann Station	24"	650	675	675	675
210	V 27.67 (MP 0.00) to Humble Oil Meter Station	18"	650	720	720	675
212	Tremont Field Collection System	4, 6"	796	796	800	800

(See Over)

* 206	Union Is. to Lathrop Field	12"	1000	1000	1000	1000

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
215	MP 0.00 to MP 20.05	12"	500	890	890	890
220	Rio Vista "Y" (MP 0.00) to Davis Meter & Regulator Station (MP 22.01)	8" 10" 12"	796	796	800	800
220	Davis Meter & Regulator to Dunnigan Meter & Regulator Station (MP 34.11)	6" & 8"	500	500	500	800
300A	Colorado River (MP 0.00) to Topock Compressor Station (MP 0.64)	30" & 34"	660	700	700	700
300A	Topock Compressor Station to PLS 1A (MP 40.87)	34"	867	867	890	890
300A	PLS 1A to PLS 2A (MP 103.72)	34"	815	815	815	815
300A	PLS 2A to PLS 2AX (MP 130.37)	34"	688	688	688	688
300A	PLS 2AX to Hinkley Compressor Station (MP 159.33)	26" & 34"	573	573	573	573
300A	Hinkley Compressor Station to PLS 3A (MP 203.02)	34"	861	861	890	890
300A	PLS 3A to PLS 4A (MP 256.21)	34"	803	817	817	817
300A	PLS 4A to PLS 5A (MP 299.01)	34"	736	757	757	757
300A	PLS 5A to Kettleman Compressor Station (MP 353.85)	34"	669	688	688	688
300A	Kettleman Compressor Station to PLS 6A (MP 436.74)	34"	840	840	890	890
300A	PLS 6A to Pacheco Pass PLS (MP 461.07)	34"	715	715	715	715
300A	Pacheco Pass PLS to PLS 7A Silver Creek (MP 490.65)	34"	631	631	715	715
300A	PLS 7A to Milpitas Terminal Station (MP 502.34)	34"	558	558	676	676
300B	Colorado River (MP 0.00) to Topock Compressor Station (MP 0.45)	34"	660	660	735	735
300B	Topock Compressor Station to PLS 1B (MP 40.49)	34"	867	867	894	894
300B	PLS 1B to PLS 2B (MP 103.51)	34"	815	821	821	821
300B	PLS 2B to PLS 2BX (MP 130.40)	34" & 36"	688	688	688	688
300B	PLS 2BX to Hinkley Compressor Station (MP 161.02)	34"	573	573	573	573
300B	Hinkley Compressor Station to PLS 3B (MP 203.07)	34"	861	861	897	897
300B	PLS 3B to PLS 4B (MP 256.64)	34"	803	816	816	816
300B	PLS 4B to PLS 5B (MP 299.00)	34"	736	757	757	757
300B	PLS 5B to Kettleman Compressor Station (MP 354.02)	34"	669	688	688	688

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
300B	Kettleman Compressor Station to PLS 6B (MP 436.85)	34"	840	840	890	890
300B	PLS 6B to Pacheco Pass PLS (MP 461.08)	34"	715	715	715	715
300B	Pacheco Pass PLS to PLS 7B Silver Creek (MP 490.92)	34"	631	631	715	715
300B	PLS 7B to Milpitas Terminal Station (MP 502.64)	34"	600	669	669	669
301G	Hollister Meter Station (MP 0.00) to Moss Landing Power Plant (MP 24.68)	24" & 30"	500	500	500	500
301A	Hollister Meter Station (MP 0.00) to Moss Landing Power Plant (MP 24.84)	20"	396	396	500	500
301B	Dolan Road Meter Station (MP 0.00) to Hilltown Regulator Station (MP 14.02)	12"	408	408	600	500
*301C	Hilltown Regulator Station to Harkins Road Meter and Mixer Station (MP 17.20)	8" & 12"	313	313	500	500
*301F	Espinosa Road (MP 0.00) to Marina Regulator Station (MP 7.94)	16"	408	412	400	412
*301E	Crosstie - Monterey #2 (MP 0.00) to Main 301 (MP 1.02)	12"	408	408	500	500
301D	Anzar Tap Station to Anzar Road Meter & Regulator Station (MP 1.72)	10"	500	500	500	500
301H	Anzar Tap Station to Anzar Road Meter & Regulator Station	16"	500	500	500	500
302	Sutter Buttes, W. Butte, Butte Slough, Grimes, Sycamore, Kirk & Buckeye Field Collection System	2" - 20"	1000	1000	1000	1000
302	Buckeye Creek PLS (MP 0.00) to Hershey Junction (MP 5.76)	20"	975	975	1000	975
303	Antioch Terminal to Brentwood Terminal (MP ~~7.86~~ (7.95)	36"	720	720	720	720
303	Brentwood Terminal to Irvington Station (MP 42.83)	36"	590	590	600	600
304	Tracy Station (MP 0.00) to Lathrop Dehydrator & Odorizer Station (MP 11.29)	12"	825	825	825	825
304	Lathrop Field Collection System	3" - 12"	825	825	825	825
306	Kettleman Compressor Station (MP 0.00) to Dry Creek PLS (MP 43.3)	20"	840	840	840	840

(See Over)

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
306	Dry Creek PLS to Morro Bay Power Plant (MP 70.02)	20"	650	650	840	840
307	Spreckels Sugar Meter Station (MP 0.00) to Spreckels Sugar Regulator (MP 16.36) (TAP 12.05)	8"	500	500	915	890
307	Derrick Road Tap ~~(MP 0.00)~~ to (V-16.92) Arbios Regulator Station ~~(MP 4.95)~~	8"	500	890	915	890
311	Main 300 (MP 0.00) (V 180.64A) to Westend Primary Regulator Station (MP 54.44)	10" & 12"	700	700	960	890
311	Parallel Section (MP 31.97) to MP 38.49	12"	700	810	960	890
312	Line 300A (MP 0.00) (T 273.27) to Paloma Field Meter Station (MP 8.00)	8"	736	740	820	820
313	Lucerne Valley Tap Meter Station to Permanente Company Meter (MP 34.4)	8" & 10"	573	573	720	720
314	Hinkley Compressor Station (MP 0.00) to MP 24.19	12"	861	861	890	890
314	MP 24.19 to MP 29.00	10"	260	260	720	720
314	MP 29.00 to Black Mountain Meter & Regulator Station (MP 43.18)	8" & 10"	260	260	720	720
314	Tap to Riverside Cement	8"	260	260	720	720
314	Tap to Airbase Road Meter Station	8"	260	260	720	720
*316	Dutch Slough & River Break Field Collection System	2" - 12"	800	800	800	800
317	Chickahominy Field Collection System	3"	975	975	975	975
* 318	Black Butte Field Collection System	3"	911	911	960	960
372	Ridgecrest Tap to Ridgecrest Primary Regulator	6"	700	700	960	960
400	California-Oregon Border (MP 0.00) to Tionesta Compressor Station (MP 24.60)	36"	911	911	911	911
400	Tionesta Compressor Station to Indian Springs PLS (MP 48.64)	36"	911	911	911	911
400	Indian Springs PLS to Burney Compressor Station (MP 82.33)	36"	911	911	911	911
400	Burney Compressor Station to MP 104.20	36"	911	911	911	911
400	MP 104.20 to Shingletown PLS (MP 115.26)	36"	911	915	942	942
400	Shingletown PLS to Gerber Compressor Station (MP 149.18)	36"	911	911	911	911
* 331	Santa Nella Tap (MP 0.00) to Tri Valley (MP 5.59)	4" 6"	500	890	890	890

Trans. Line No.	Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
400	Gerber Compressor Station to Delevan Compressor Station (MP 197.83)	26" & 36"	911	911	911	911
400	Delevan Compressor Station to Buckeye Creek PLS (MP 233.87)	36"	1040	1040	1040	1040
400	Buckeye Creek PLS to Antioch Terminal (MP 298.87)	26" & 36"	975	975	975	975
402	Redding-Calaveras Tap (MP 0.00) to PLS (MP 9.96)	12"	300	300	865	865
402	MP 9.96 to Calaveras Cement Tap (MP 38.10)	8" 10" 12"	300	300	720	720
403	Rio Vista "Y" (MP 0.00) to Creed Station (MP 1.38)	16"	650	650	855	800

*Indicates that line or sections of line are under 20% SMYS, but are listed for the purpose of continuity.

LINES IN TRANSMISSION CAPITAL OPERATING AT OR OVER 20% OF SMYS

Trans. Line No.	Location	Nominal Pipe Diameter (inches)	Stanpac MOP psig	MAOP	Design Press.	Future Requirements Design Press.	Future Requirements Size (inches)
SP-1	Calpac Tap to Kettleman Compressor Station	16-22	421	421	500	500	
SP-2	Panoche Junction to Tracy	22-26	500	500	500	890	26
	Tracy Station to Brentwood Terminal	26	456	456	456	890	26
SP-3	Brentwood Terminal to Los Medanos Junction	26	315	360	456	600	26
	Los Medanos Junction to Los Medanos Field Tap	22-24-26	315	315	317**	600	26
	Los Medanos Field Tap to Crockett Junction	22-24-26	315	315	375**	600	26
	Crockett Junction to San Pablo Station	20-22-24	250	250	250	600	24
	San Pablo Station to Standard Oil	16	150	150	250	250	16
SP-4	East Rio Vista Gas Field to Antioch Terminal	8-10-12-16	510	800	800	800	8-10-12-16
SP-5	Antioch Terminal to Line 191 (MP 3.87)	24	315	390	500	600	24
	Antioch Town Meter Station to Los Medanos Junction	16-22-24	315	375	375**	600	30
Crockett Branch	Crockett Junction to Crockett Station	20-22	250	250	250	600	24

DISTRIBUTION MAINS
OPERATING AT OR OVER 20% SMYS

Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
COAST VALLEYS DIVISION					
Monterey #1 - Harkins Road Meter & Mixer Station to Fig-Frank Streets Regulator Station	8" & 12"	313	313	500	400
Monterey #2 - Fort Ord to Fig-Frank Streets Regulator Station	10" 12" 16"	313	313	400	400
Monterey (V-18.65 to Carmel V-2.13) Aquajito Road Regulator Station	8" & 10"	313	313	500	400
Harkins Road Meter and Mixer Station to MP 2.45	8" & 10"	313	313	500	500
MP 2.45 to MP 3.50	8"	313	313	500	500
MP 3.50 to California Street Regulator Station	8"	313	313	500	500
Salinas Main - Foster Road to San Miguel Avenue	8"	313	313	500	500
DFM-6 Espinosa Road Main from 301-B, V-3.18	6"	408	500	720	500
* DFM-7 Union Carbide Main from 187, MP 17.42	3"	313	313	720	870
DFM-8 Paradise Road to Meridian Road Main	4" & 6"	500	500	720	500
COLGATE DIVISION					
Yuba City HPU Holder to Market Street Regulator Pit	6" & 8"	135	135	400	400
Tap to Schohr Ranch	6"	250	250	720	720
DRUM DIVISION					
Diamond Oaks Feeder	6"	500	500	500	600
EAST BAY DIVISION					
Avon Power Station Feeder	8" & 12"	315	338	600	600
Phillips Petroleum Company Feeder	12"	315	338	600	600
General Chemical Tap	4"	315	338	600	600
Pacific States Steel Feeder	12"	420	420	~~600~~ 500	500
Warm Springs Feeder	2" & 4"	465	465	500	600
Port Costa Feeder	6"	315	338	600	600
50th Avenue Holder Feeder Off Line 105	16" & 20"	150	198	275	275
Pittsburg Town Feeder	12"	315	338	600	600
Concord Feeder to Alpha Beta Regulator	8"	315	600	600	600
Oleum Steam Plant Tap	8" 10" 12"	250	250	275	275
San Ramon Feeder	16"	500	500	500	600
Standard Oil Feeder	22"	400	400	400	400

(See Over)

* Under 20%

Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
NORTH BAY DIVISION					
Cotati Feeder	8"	450	500	675	675
12" Line 21 (V-16.15) to Pine Street Meter Station	8"	450	500	675	675
12" Line 21 (V-16.15) to Kilburn Regulator Station	10"	450	500	675	675
Kilburn Regulator Station to Yountville	8" & 10"	450	500	675	675
6" Sonoma Tap Line	6"	450	500	675	675
SACRAMENTO DIVISION					
Sacramento Gas Plant to North Sacramento HPU Holder	8" & 12"	260	260	400	400
Tremont Tap to Dixon Meter Station	6"	750 ~~550~~	750	800	800
Tap to Union Carbide (MP 0.00 - MP 4.05)	8" & 10"	412	412	720	720
SAN FRANCISCO DIVISION					
Peninsula Main	16" & 20"	109	109	275	275
Hunters Point Power Plant Feeder	20"	145	145	275	275
SAN JOAQUIN DIVISION					
Tranquility Feeder	3"	800	800	900	900
Yosemite Avenue Feeder	6"	400	720	720	720
Line 300A to California-Portland Cement Company	3"	803	817	865	865
Snelling Highway Feeder	6"	400	400	400	720
Dixon Dryer Feeder	4"	500	500	720	720
Peach and Central Feeder	6"	650	720	720	720
Clovis Feeder Main	6" & 12"	650	650	720	720
Vinewood Avenue Feeder	4"	400	720	720	720
Winton Avenue Feeder	6"	400	720	720	720
Cressey Way Feeder	4" & 6"	400	400	720	720
Valley Nitrogen Feeder	6"	650	650	800	720
ASHLAND AVE FEEDER	4+6	400	593	720	720
SAN JOSE DIVISION					
Half Moon Bay Feeder Line	8" 10" 12"	400	577	577**	577**
Santa Cruz to Davenport	10" & 12"	300	303	557**	400
Milpitas Terminal to PLS #7, Kings Road, 20" Feeder	16" 20" 30"	200	200	275	526
Watsonville to River Street Regulator Station	8" & 10"	300	303	577**	400
Watsonville to Rob Roy Junction	10"	300	303	557**	400

**See Paragraph 6

Location	Nominal Pipe Diameter (Inches)	PG&E MOP psig	MAOP	Design Press.	Future Design Press.
SHASTA DIVISION					
Simpson Lee Paper Mill Feeder	6"	300	300	720	720
U.S. Plywood Plant Feeder	4"	300	720	720	720
Enterprise Town Feeder	4" & 6"	300	300	720	720
Calaveras Cement Company Feeder	8"	300	300	720	720
Red Bluff District Tap	2"	911	911	911	911
STOCKTON DIVISION					
Roth Road Feeder - Manteca	4"	408	720	720	720
Valley Tomato Trunk Line	8"	412	500	720	720
Eight Mile Road Trunk Line	4" & 8"	412	426	720	720
Ripon-Modesto Feeder (Parallel)	8" & 12"	408	408	720	720
Dale Road to North Avenue Feeder	12"	408	408	720	720
Riverbank Feeder	8" & 10"	408	720	720	720
Carpenter Road Feeder	12"	412	500	720	720
Modesto Feeder Via Pauline Boulevard	4" & 6"	408	408	720	720
Turner Road Feeder (Parallel)	4" & 8"	300	300	720	720
McArthur Road Feeder	4"	295	295	400	720
Louise Avenue Feeder	8"	408	408	720	720
C.Y.A. Feeder - Stockton	6"	412	426	720	720
Morgan Road Feeder - Modesto	12"	260	720	720	720
Swain Road Feeder	6" & 8"	125	400	400	400
*Turlock to Ceres Regulator Station	10"	250	260	720	720

(See Over)