Docket No. SA-534

Exhibit No. 2-AN

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

NTSB_033_009
CROSS TIE PROCEDURES (SEASONAL SETTINGS)

(24 Pages)

PACIFIC GAS AND ELECTRIC COMPANY
San Bruno Gas Transmission Line Incident
Data Response

PG&E Data Request No.:	NTSB_033-009		
PG&E File Name:	San Bruno GT Line Incident_DR_NTSB_033-009		
Request Date:	November 2, 2010	Requesting Party:	NTSB
Date Sent:	November 15, 2010	Requestor:	Operations (Shori)

QUESTION 9

Please provide copies of PG&E's procedures related to the determination of inter-tie valve settings in general and, in particular, those related to the inter-tie valves installed on Line 132.

ANSWER 9

PG&E does not maintain general procedures that address inter-tie valve settings. PG&E does maintain winter operating procedures that identify the seasonal settings of some inter-tie valves. These valves are identified in the table provided in response to NTSB_033-008 and in the attached excerpts from the winter operating plans.

QUESTION 9A

We request that for each of the responses to the questions above, PG&E please provide the name(s) of the individual(s) preparing the response.

ANSWER 9A

Drew Kelly

Daven Phalen

Teresa Duddy

Recommended Operating Procedures
Winter 2010 - 2011

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS (NORTH)

NORMAL WINTER OPERATIONS

Change Ralston DFM set points:

B21 – 27#
B18 – 31 #
B01 – 31 #

COLD WINTER DAY

- Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.
- Operate Walsh & L109/132 (C-21 Peninsula) at 225 psig.
- Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.
- Operate Ralston DFM (B03) at 145#
- Operate Pacifica DFM at 87#
- Open L109/L132 crossties:
  1) Healy Station (op. diagram 087221), valves 1, 2, 3, & 4
  2) Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284
  3) San Andreas Crossover
  4) Martin Station Cross-tie (Op. Diag 081628) V-19

STAGE 2

- Perform CWD operations.
- Curtailment of noncore customers may be needed.

Prepare to bypass Reg. Sta. D-04 in Cupertino

Recommended Operating Procedures
Winter 2009 - 2010

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS (NORTH)

NORMAL WINTER OPERATIONS

No operations necessary.

COLD WINTER DAY

- Operate Milpitas Station above 365# to maintain a minimum of 157 psig inlet at Sullivan and Martin Stations and 177 psig at Lomita Station.

- Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

- Operate Walsh & L109/132 (C-21 Peninsula) at 225 psig.

- Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

- Operate Middlefield DFM at 120 psig

STAGE 2

- Perform CWD operations.

- Open L109/L132 crossties in the following order:

  5) Healy Station (op. diagram 087221), valves 1, 2, 3, & 4
  6) Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284
  7) Crystal Springs Crossover (XO 31.92 & XO 31.95)
  8) Martin Station Cross-tie (Op. Diag 081628) V-19

- Curtailment of noncore customers in SF Zone 1 may be needed .
- Prepare to bypass Reg. Sta. R-170
- Prepare to bypass Reg. Sta. D-04 in Cupertino
- Prepare to bypass Reg. Sta. E-23 in Santa Clara

Prepare to bypass California Paperboard in Santa Clara

Recommended Operating Procedures
Winter 2008 - Winter 2009

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS (NORTH)

NORMAL WINTER OPERATIONS

No operations necessary.

COLD WINTER DAY

- Operate Milpitas Station above 365# to maintain a minimum of 157 psig inlet at Sullivan and Martin Stations and 177 psig at Lomita Station.

- Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

- Operate Walsh & L109/132 (C-21 Peninsula) at 225 psig.

- Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

- Operate Middlefield DFM at 120 psig

STAGE 2

- Perform CWD operations.

- Open L109/L132 crossties in the following order:

  9) Healy Station (op. diagram 087221), valves 1, 2, 3, & 4
  10) Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284
  11) Crystal Springs Crossover (XO 31.92 & XO 31.95)
  12) Martin Station Cross-tie (Op. Diag 081628) V-19

- Curtailment of noncore customers in SF Zone 1 may be needed .
- Prepare to bypass Reg. Sta. R-170
- Prepare to bypass Reg. Sta. D-04 in Cupertino
- Prepare to bypass Reg. Sta. E-23 in Santa Clara

Prepare to bypass California Paperboard in Santa Clara

Recommended Operating Procedures
Winter 2007 - Winter 2008

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS (NORTH)

Lines 101, 109 and 132 were partially isolated from each other between Milpitas Terminal and the SF Load Center during the winter of 1998/99. All bridles and crossties are closed, with the exception of the Sierra Vista (L132A) and Edgewood crossovers (L147) and a few designated open bridles within Peninsula Division.

NORMAL WINTER OPERATIONS

No operations necessary.

COLD WINTER DAY

- Operate Milpitas Station at pressure high enough to maintain a minimum of 157 psig inlet at Sullivan and Martin Stations and 177 psig at Lomita Station.

- Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

- Operate Walsh & L109/132 (C-21 Peninsula) at 225 psig.

- Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

- Operate Middlefield DFM at 120 psig

ABNORMAL PEAK DAY

- Perform CWD operations.

- L109 usually runs lower in pressure than L132. If necessary, in order to maintain higher inlet pressure at Sullivan Station, open L109/L132 crossties in the following order:

  13)Healy Station (op. diagram 087221), valves 1, 2, 3, & 4
  14)Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284
  15)Crystal Springs Crossover (XO 31.92 & XO 31.95)
  16)Martin Station Cross-tie (Op. Diag 081628) V-19

STAGE 2

- 20% curtailment of noncore customers in SF Zone 1 .

- Stand by at ODDSTAD regulator and prepare to bypass Reg. Sta. R-170 if the downstream set pressure falls below 55 psig
- Stand by Reg. Sta. D-04 in Cupertino and prepare to bypass if the downstream set pressure falls below 57 psig
- Stand by Reg. Sta. E-23 in Santa Clara and prepare to bypass if the downstream set pressure falls below 57 psig
- Stand by regulator station at California Paperboard in Santa Clara and prepare to bypass if the downstream set pressure falls below 57 psig

Recommended Operating Procedures
Winter 2006 - Winter 2007

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS (NORTH)

Lines 101, 109 and 132 were partially isolated from each other between Milpitas Terminal and the SF Load Center during the winter of 1998/99. All bridles and crossties are closed, with the exception of the Sierra Vista (L132A) and Edgewood crossovers (L147) and a few designated open bridles within Peninsula Division.

NORMAL WINTER OPERATIONS

No operations necessary.

COLD WINTER DAY

- Operate Milpitas Station at pressure high enough to maintain a minimum of 157 psig inlet at Sullivan and Martin Stations and 177 psig at Lomita Station.

- Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

- Operate Walsh & L109/132 (C-21 Peninsula) at 225 psig.

- Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

- Operate Middlefield DFM at 120 psig

ABNORMAL PEAK DAY

- Perform CWD operations.

- L109 usually runs lower in pressure than L132. If necessary, in order to maintain higher inlet pressure at Sullivan Station, open L109/L132 crossties in the following order:

  17) Healy Station (op. diagram 087221), valves 1, 2, 3, & 4
  18) Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284
  19) Crystal Springs Crossover (XO 31.92 & XO 31.95)
  20) Martin Station Cross-tie (Op. Diag 081628) V-19

STAGE 2

- 20% curtailment of noncore customers in SF Zone 1 .

- Stand by at ODDSTAD regulator and prepare to bypass Reg. Sta. R-170 if the downstream set pressure falls below 55 psig
- Stand by Reg. Sta. D-04 in Cupertino and prepare to bypass if the downstream set pressure falls below 57 psig
- Stand by Reg. Sta. E-23 in Santa Clara and prepare to bypass if the downstream set pressure falls below 57 psig
- Stand by regulator station at California Paperboard in Santa Clara and prepare to bypass if the downstream set pressure falls below 57 psig

Recommended Operating Procedures
Winter 2005 - Winter 2006

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS (NORTH)

Lines 101, 109 and 132 were partially isolated from each other between Milpitas Terminal and the SF Load Center during the winter of 1998/99. All bridles and crossties are closed, with the exception of the Sierra Vista (L132A) and Edgewood crossovers (L147) and a few designated open bridles within Peninsula Division.

NORMAL WINTER OPERATIONS

No operations necessary.

COLD WINTER DAY

- Operate Milpitas Station at pressure high enough to maintain a minimum of 157 psig inlet at Sullivan and Martin Stations and 177 psig at Lomita Station.

- Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

- Operate Walsh & L109/132 (C-21 Peninsula) at 235 psig.

- Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

- Operate Middlefield DFM at 120 psig

ABNORMAL PEAK DAY

- Perform CWD operations.

- L109 usually runs lower in pressure than L132. If necessary, in order to maintain higher inlet pressure at Sullivan Station, open L109/L132 crossties in the following order:

  21)Healy Station (op. diagram 087221), valves 1, 2, 3, & 4
  22)Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284
  23)Crystal Springs Crossover (XO 31.92 & XO 31.95)
  24)Martin Station Cross-tie (Op. Diag 081628) V-19

- Possible curtailment of noncore customers in SF Zone 1 during Stage 2 conditions.

Recommended Operating Procedures
Winter 2004 - Winter 2005

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS (NORTH)

Lines 101, 109 and 132 were partially isolated from each other between Milpitas Terminal and the SF Load Center during the winter of 1998/99. All bridles and crossties are closed, with the exception of the Sierra Vista (L132A) and Edgewood crossovers (L147) and a few designated open bridles within Peninsula Division.

NORMAL WINTER OPERATIONS

1) No operations necessary.

COLD WINTER DAY

1) Operate Milpitas Station at pressure high enough to maintain a minimum of 157 psig inlet at Sullivan and Martin Stations and 177 psig at Lomita Station.

2) Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

3) Operate Walsh & L109/132 (C-21 Peninsula) at 130 psig.

4) Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

ABNORMAL PEAK DAY

1) Operate Milpitas Station at pressure high enough to maintain a minimum of 157 psig inlet at Sullivan and Martin Stations and 177 psig at Lomita Station.

2) Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

3) Operate Walsh & L109/132 (C-21 Peninsula) at 130 psig.

4) Standby at Walsh & Alameda (C19) and prepare to bypass if outlet pressure drops below 29 psig.

5) Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

6) L109 usually runs lower in pressure than L132. If necessary, in order to maintain higher inlet pressure at Sullivan Station, open L109/L132 crossties in the following order:

    25) Healy Station (op. diagram 087221), valves 1, 2, 3, & 4
    26) Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284

Recommended Operating Procedures
Winter 2003 - Winter 2004

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS (NORTH)

Lines 101, 109 and 132 were partially isolated from each other between Milpitas Terminal and the SF Load Center during the winter of 1998/99. All bridles and crossties are closed, with the exception of the Sierra Vista (L132A) and Edgewood crossovers (L147) and a few designated open bridles within Peninsula Division.

NORMAL WINTER OPERATIONS

2) No operations necessary.

COLD WINTER DAY

5) Operate Milpitas Station at pressure high enough to maintain a minimum of 157 psig inlet at Sullivan and Martin Stations and 177 psig at Lomita Station.

6) Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

7) Operate Walsh & L109/132 (C-21 Peninsula) at 130 psig.

8) Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

ABNORMAL PEAK DAY

7) Operate Milpitas Station at pressure high enough to maintain a minimum of 157 psig inlet at Sullivan and Martin Stations and 177 psig at Lomita Station.

8) Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

9) Operate Walsh & L109/132 (C-21 Peninsula) at 130 psig.

10) Standby at Walsh & Alameda (C19) and prepare to bypass if outlet pressure drops below 29 psig.

11) Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

12) L109 usually runs lower in pressure than L132. If necessary, in order to maintain higher inlet pressure at Sullivan Station, open L109/L132 crossties in the following order:

    27) Healy Station (op. diagram 087221), valves 1, 2, 3, & 4
    28) Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284

Recommended Operating Procedures
Winter 2002 - Winter 2003

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS

Lines 101, 109 and 132 were partially isolated from each other between Milpitas Terminal and the SF Load Center during the winter of 1998/99. All bridles and crossties are closed, with the exception of the Sierra Vista (L132A) and Edgewood crossovers (L147) and a few designated open bridles within Peninsula Division.

NORMAL WINTER OPERATIONS

3) No operations necessary.

COLD WINTER DAY

1) Operate Milpitas Station at pressure high enough to maintain a minimum of 137 psig outlet at Sullivan, Martin, and Lomita Stations.

2) Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

3) Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

ABNORMAL PEAK DAY

13) Operate Milpitas Station at pressure high enough to maintain a minimum of 137 psig outlet at Sullivan, Martin, and Lomita Stations.

14) Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

15) Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

16) If necessary, in order to maintain a minimum of 137 psig outlet at Sullivan, Martin, and Lomita Stations, open L109/L132 crossties in the following order:

    29) Healy Station (op. diagram 087221), valves 1, 2, 3, & 4

30) Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284

Recommended Operating Procedures
Winter 2001 - Winter 2002

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS

Lines 101, 109 and 132 were partially isolated from each other between Milpitas Terminal and the SF Load Center during the winter of 1998/99. All bridles and cross-ties are closed, with the exception of the Sierra Vista (L132A) and Edgewood crossovers (L147) and a few designated open bridles within Peninsula Division.

NORMAL WINTER OPERATIONS

4) No operations necessary.

COLD WINTER DAY

4) Operate Milpitas Station at pressure high enough to maintain a minimum of 137 psig outlet at Sullivan, Martin, and Lomita Stations.

5) Operate the El Monte 158 psig DFM out of Sierra Vista s/o Rock Regulator Station (B28 – DeAnza) at 152 psig..

6) Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

7) Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

8) Issue a Stage 1 Curtailment Order for Foothill De Anza Community College @ 12345 S. El Monte Ave., Los Altos Hills (halfway between CWD and APD).

ABNORMAL PEAK DAY

17) Issue a Stage 2 Curtailment Order for Foothill De Anza Community College @ 12345 S. El Monte Ave., Los Altos Hills

18) Operate Milpitas Station at pressure high enough to maintain a minimum of 137 psig outlet at Sullivan, Martin, and Lomita Stations.

19) Operate the El Monte 158 psig DFM out of Sierra Vista s/o Rock Regulator Station (B28 – DeAnza) at its MAOP and/or bypass distribution reg at El Monte & Orange (A14 - DeAnza).

20) Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

21) Operate Whisman & Central Expressway (B-34 – DeAnza) at 175 psig and Lawrence Expressway & Lakehaven (C-20 – DeAnza) at 177 psig.

22) If necessary, bypass distribution reg at Stelling & Stevens Creek (D04 – DeAnza).

23) If necessary, in order to maintain a minimum of 137 psig outlet at Sullivan, Martin, and Lomita Stations, open L109/L132 crossties in the following order:

    31) Healy Station (op. diagram 087221), valves 1, 2, 3, & 4
    32) Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284

Recommended Operating Procedures
Winter 2000 - Winter 2001

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS

Lines 101, 109 and 132 were partially isolated from each other between Milpitas Terminal and the SF Load Center during the winter of 1998/99. All bridles and cross-ties are closed, with the exception of the Sierra Vista (L132A) and Edgewood crossovers (L147) and a few designated open bridles within Peninsula Division.

NORMAL WINTER OPERATIONS

1) No operations necessary.

COLD WINTER DAY

1) Operate Milpitas Station at pressure high enough to maintain a minimum of 137 psig outlet at Sullivan, Martin, and Lomita Stations.

2) Operate the El Monte 158 psig DFM out of Sierra Vista s/o Rock Regulator Station (B28 – DeAnza) as close to MAOP as possible.

3) Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

ABNORMAL PEAK DAY

4) Issue a Stage 2 Curtailment Order for Foothill De Anza Community College @ 12345 S. El Monte Ave., Los Altos Hills

5) Operate Milpitas Station at pressure high enough to maintain a minimum of 137 psig outlet at Sullivan, Martin, and Lomita Stations.

6) Operate the El Monte 158 psig DFM out of Sierra Vista s/o Rock Regulator Station (B28 – DeAnza) as close to MAOP as possible.

7) Operate N. 1st & Tasman (E05 – San Jose) at 190 psig.

8) If necessary, in order to maintain a minimum of 137 psig outlet at Sullivan, Martin, and Lomita Stations, open L109/L132 crossties in the following order:

    1) Healy Station (op. diagram 087221), valves 1, 2, 3, & 4
    2) Ralston Ave. Crossover (op. diagram 082534), valves 283 & 284

Recommended Operating Procedures
Winter 1999 - Winter 2000

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS

Lines 101, 109 and 132 were partially isolated from each other between Milpitas Terminal and the SF Load Center during the winter of 1998/99. All bridles and cross-ties are closed, with the exception of the Sierra Vista and Edgewood crossovers and a few designated open bridles within Peninsula Division. System response to loading will be monitored to determine if opening additional cross-ties is warranted.

Recommended Operating Procedures
Winter 1998 - Winter 1999

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS

LINE ISOLATION Intended operations will have lines 101, 109 and 132 partially isolated from each other along the entire Peninsula by closing most of the crosstie and bridle valves between the lines. The only open crossties should be Sierra Vista and Edgewood crossovers; all bridles should be closed. The system reponse to loading will be monitored to determine if opening additional crossties is warranted.

Recommended Operating Procedures
Winter 1997 - Winter 1998

SAN FRANCISCO, PENINSULA, DE ANZA & SAN JOSE DIVISIONS

LINE ISOLATION Intended operations will have lines 101, 109 and 132 partially isolated from each other along the entire Peninsula by closing most of the crosstie and bridle valves between the lines. The only open crossties should be Sierra Vista and Edgewood crossovers; all bridles should be closed. The system reponse to loading will be monitored to determine if opening additional crossties is warranted.

Recommended Operating Procedures
Winter 1996 - Winter 1997

SAN FRANCISCO AND PENINSULA DIVISIONS

LOMITA STATION, MARTIN STATION, and SULLIVAN STATION - In all but the most extreme weather conditions, two of these three stations provide adequate gas capacity to supply San Francisco and power plant loads. Each of these stations have dual regulator runs that allow flexibility to the station's operation.

MAIN REGULATOR RUN AT ONE STATION FAILS CLOSED

Milpitas technicians should repair the regulator run within two working days. There is no need to make repairs on an emergency basis. Meanwhile, the San Jose Load Center can raise the secondary run's setpoint to bring it into full operation. The load center should notify David Boyd at the time of the failure.

MAIN REGULATOR FAILS OPEN AND PRESSURE RISES TO THE MONITOR'S SETPOINT

The load center will attempt to close the regulator remotely (Note: there is no remote control capability on the monitors). The setpoint on the secondary run should then be raised to bring it into full operation at normal operating pressures. If the procedure is successful, David Boyd (or Bill Harris if David Boyd is unavailable) should be notified to make repairs within two working days. If the procedure to close off the main run and reduce operating pressure from the monitor's setpoint is unsuccessful, contact David Boyd (or Bill Harris if David Boyd is unavailable) to have a mechanic sent to the site to make repairs.

BOTH RUNS AT ONE STATION FAIL CLOSED DURING WINTER OPERATING CONDITIONS

Send a Milpitas mechanic to the site on overtime to repair at least one regulator run. Under other weather conditions, this can be done on a regular work day.

Recommended Winter Operation Procedures
1995-1996 Winter Season

SAN FRANCISCO AND PENINSULA DIVISIONS

LOMITA STATION, MARTIN STATION, and SULLIVAN STATION - In all but the most extreme weather conditions, two of these three stations provide adequate gas capacity to supply San Francisco and power plant loads. Each of these stations have dual regulator runs that allow flexibility to the station's operation.

MAIN REGULATOR RUN AT ONE STATION FAILS CLOSED

Milpitas technicians should repair the regulator run within two working days. There is no need to make repairs on an emergency basis. Meanwhile, the San Jose Load Center can raise the secondary run's setpoint to bring it into full operation. The load center should notify David Boyd at the time of the failure.

MAIN REGULATOR FAILS OPEN AND PRESSURE RISES TO THE MONITOR'S SETPOINT

The load center will attempt to close the regulator remotely (Note: there is no remote control capability on the monitors). The setpoint on the secondary run should then be raised to bring it into full operation at normal operating pressures. If the procedure is successful, David Boyd (or Bill Harris if David Boyd is unavailable) should be notified to make repairs within two working days. If the procedure to close off the main run and reduce operating pressure from the monitor's setpoint is unsuccessful, contact David Boyd (or Bill Harris if David Boyd is unavailable) to have a mechanic sent to the site to make repairs.

BOTH RUNS AT ONE STATION FAIL CLOSED DURING WINTER OPERATING CONDITIONS

Send a Milpitas mechanic to the site on overtime to repair at least one regulator run. Under other weather conditions, this can be done on a regular work day.