

Environmental Department - ESG Facility 4653 Table Mountain Drive Golden, Co 80403-1636

January 30, 2008

Mr. Bob Jorgenson Air Pollution Control Division Colorado Department of Public Health and Environment 4300 Cherry Creek Drive South Denver, CO 80246-1530

RE: Fourth Quarter 2007 EER, PSCo Comanche Station Unit #2

Dear Mr. Jorgenson:

Attached is the Fourth Quarter 2007 Excess Emissions Report (EER) for the Public Service Company of Colorado (PSCo) Comanche Station Unit #2.

Unit #2 was offline during the following periods:

- > From the beginning of the quarter until November 9th hour 1900
- November 10th hour 1400 to hour 1700 November 24th hour 1600 to November 25th hour 0400
- November 26th hour 0900 to hour 1300

The unit experienced two opacity exceedances during the quarter. On November 24th the unit experienced an opacity malfunction due to a boiler trip at 1624, when the opacity rose to 92.6% for the six minute average. The unit went offline and the fans stopped at 1625. Subsequent high opacity readings were recorded, however the unit was offline and the elevated readings were the result of ash entrained in the ductwork. Since the readings did not represent true exceedances, excess emissions recorded from 1630 to 1700 were not reported as exceedances in this report. A Malfunction Report Form is included with this report. The unit experienced another exceedance on November 29th from 1518-1523. It was determined that isolation valves had been left closed in error. The plant has modified their operations to ensure that this error is not repeated.

Daily calibrations were performed as required by regulation on each of the monitoring systems. The majority of the calibrations conducted on the SO2 and NOx monitoring systems were able to be completed in a fashion where the required data validation criteria was met. As such, even though calibrations were performed on the gas monitoring systems as required, monitor downtime episodes may not have been generated in the EERs as a result.

Please contact me at 720.497.2109 with any questions.

Sincerely,

Quinn Kilty

Manager, Air & Water Quality

Attachment

cc:

Mr. Albion Carlson

U. S. Environmental Protection Agency 999 18th Street, Suite 500

999 18th Street, Suite 500 Denver, CO 80202-2466

CERTIFICATION OF REPORT INTEGRITY

This is to certify that to the best of my knowledge, the information provided in this report is complete and accurate. Anomalous data and information is explained in the cover letter to this report.

Name: Quinn V. Kilty
Signature: G-Vi Kgg
Title: Manager, Air and Water Quality
Date: 1/29/08

STATE QUARTERLY OPACITY EXCEEDANCE & MONITOR DOWNTIME REPORT

Comanche Unit 2 FOR QUARTER 4 2007 DATE 01/09/08 P.S. of Colorado Comanche Generating Station Pueblo, CO

MONITOR TYPE: OPACITY

MANUFACTURE: United Sciences Inc. SERIAL NO.: 5500079

MODEL NO.: 550

INSTALLATION DATE: 12/2/99

--- OPAC EXCEEDANCE AND MONITOR DOWNTIME MATRIX (Hours) ---

EXCESS RANGE	20.0-30.0	30.0-40.0	40.0-50.0	50.0-60.0	>60.0	TOTAL
**EXCESS EMISSIONS REASON *STARTUP/SHUTDOWN STARTUP/SHUTDOWN *CLEANING/SOOTBLOWING CLEANING/SOOTBLOWING UNKNOWN CAUSES *CONTROL EQUIP (UPSET) CONTROL EQUIP (UNACCEPT) *PROCESS PROBLEMS (UPSET)	0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.10 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00 0.10 0.00	0.00 0.00 0.00 0.00 0.00 0.10 0.10
PROCESS PROB (UNACCEPT) FUEL PROBLEMS OTHERS TOTAL	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00		0.00 0.00 0.00 0.00 CEPTABLE EMISS & EXCESS EMISS		0.00 0.00 0.00 0.20 0.10 0.01%
MONITOR DOWNTIME REASON-						TOTAL
MONITOR EQUIP. FAILURE NON MONITOR FAILURES *CALIBRATION (QA) UNKNOWN CAUSES OTHERS			TOTAL UNF	ACCEPTABLE DOW % MONITOR DOW		0.00 0.00 12.40 0.00 0.00 0.00

-- Reasons Marked * are not used in the Excess and Downtime computations --

--- EXCEEDANCE AND MONITOR DOWNTIME LOG ---

DATE	TIME TYPE CHANNEL VALUE	DURATION REASON
11-09	07:00 SYS-DOWN 2 Opc Inst	00:06 *CALIBRATION (QA)
	ACTION: daily opacity monitor	calibration spans two six minute periods.
11-09	07:06 SYS-DOWN 2 Opc Inst	calibration spans two six minute periods.
	ACTION: daily opacity monitor	00.06 *CALIBRATION (OA)
11-10	07:00 SYS-DOWN 2 Opc Inst	calibration spans two six minute periods.
	07:06 SYS-DOWN 2 Opc Inst	00:06 *CALTBRATION (OA)
11-10	nomina. doily operate monitor	calibration spans two six minute periods.
11 11	or.an eve_point 2 Ope That	00:06 *CALIBRATION (OA)
TTTT	nemical daily opacity monitor	calibration spans two six minute periods.
1111	07.06 GYG-DOWN 2 One Inst	00:06 *CALIBRATION (QA)
	action. daily opacity mobitor	calibration spans two six minute periods.
11-12	AT AN EVE-DANN 2 Ame Thet	00:06 *CALIBRATION (QA)
	nomicon. daily opacity monitor	calibration spans two six minute periods.
11-12	ATLAS SYS-DOWN 2 ODC Inst	00:06 *CALIBRATION (QA)
	wentow, daily opacity monitor	calibration spans two six minute periods.
11-13	arion eve noise 2 One Inst	00:06 *CALIBRATION (OA)
	negrow. daily opacity monitor	calibration spans two six minute periods.
11-13	AT A C CYCDOWN 2 ONC That	00:06 *CALIBRATION (QA)
	ACTION: daily opacity monitor	calibration spans two six minute periods.
11-14	07-00 CVCDOWN 2 One That	00:06 *CALIBRATION (QA)
	ACTION: daily opacity monitor	calibration spans two six minute periods
11-14	07:06 SYS-DOWN 2 Opc Inst	00:06 *CALIBRATION (QA)
	ACTION: daily opacity monitor	calibration spans two six minute periods
11-15	07:00 SYS-DOWN 2 Opc Inst	00:06 *CALIBRATION (QA)
	ACTION: daily opacity monitor	calibration spans two six minute periods
11-15	07:06 SYS-DOWN 2 Opc Inst	UU:UO CALIBRATION (QA)

```
daily opacity monitor calibration spans two six minute periods.
     ACTION:
11-16 07:00 SYS-DOWN 2 Opc Inst 00:06 *CALIBRATION (QA)
     ACTION: daily opacity monitor calibration spans two six minute periods.
                                          00:06 *CALIBRATION (QA)
11-16 07:06 SYS-DOWN 2 Opc Inst
     ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
11-17 07:00 SYS-DOWN 2 Opc Inst
     ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
11-17 07:06 SYS-DOWN 2 Opc Inst
     ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
11-18 07:00 SYS-DOWN 2 Opc Inst
     ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
11-18 07:06 SYS-DOWN 2 Opc Inst
     ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
11-19 07:00 SYS-DOWN 2 Opc Inst
     ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
11-19 07:06 SYS-DOWN 2 Opc Inst
      ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
11-20 07:00 SYS-DOWN 2 Opc Inst
               daily opacity monitor calibration spans two six minute periods.
      ACTION:
                                           00:06 *CALIBRATION (QA)
11-20 07:06 SYS-DOWN 2 Opc Inst
      ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
11-21 07:00 SYS-DOWN 2 Opc Inst
      ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
 11-21 07:06 SYS-DOWN 2 Opc Inst
      ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06
                                                   *CALIBRATION (QA)
 11-22 07:00 SYS-DOWN 2 Opc Inst
      ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
 11-22 07:06 SYS-DOWN 2 Opc Inst
               daily opacity monitor calibration spans two six minute periods.
      ACTION:
                                           00:06 *CALIBRATION (QA)
 11-23 07:00 SYS-DOWN 2 Opc Inst
      ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
 11-23 07:06 SYS-DOWN 2 Opc Inst
      ACTION: daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
 11-24 07:00 SYS-DOWN 2 Opc Inst
      ACTION: daily opacity monitor calibration spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
 11-24 07:06 SYS-DOWN 2 Opc Inst
      ACTION: daily opacity monitor calibration spans two six minute periods.
 11-24 16:24 EXCESS 2 Opc Inst 92.6 00:06 *PROCESS PROBLEMS (UPSET)
               Opacity exceedance due to unit trip.
       ACTION:
                                            00:06 *CALIBRATION (QA)
 11-25 07:00 SYS-DOWN 2 Opc Inst
       ACTION: daily opacity monitor calibration spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
  11-25 07:06 SYS-DOWN 2 Opc Inst
       ACTION: daily opacity monitor calibration spans two six minute periods.
                                                    *CALIBRATION (QA)
  11-26 07:00 SYS-DOWN 2 Opc Inst
                                            00:06
       ACTION: daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  11-26 07:06 SYS-DOWN 2 Opc Inst
       ACTION: daily opacity monitor calibration spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
  11-27 07:00 SYS-DOWN 2 Opc Inst
       ACTION: daily opacity monitor calibration spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
  11-27 07:06 SYS-DOWN 2 Opc Inst
       ACTION: daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  11-28 07:00 SYS-DOWN 2 Opc Inst
       ACTION: daily opacity monitor calibration spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
  11-28 07:06 SYS-DOWN 2 Opc Inst
       ACTION: daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  11-29 07:00 SYS-DOWN 2 Opc Inst
       ACTION: daily opacity monitor calibration spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
  11-29 07:06 SYS-DOWN 2 Opc Inst
       ACTION: daily opacity monitor calibration spans two six minute periods.
  11-29 15:18 EXCESS 2 Opc Inst 41.8 00:06 CONTROL EQUIP (UNACCEPT)
        ACTION: Bypass damper valve inadvertently left open.
                                             00:06 *CALIBRATION (QA)
  11-30 07:00 SYS-DOWN 2 Opc Inst
        ACTION: daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  11-30 07:06 SYS-DOWN 2 Opc Inst
                daily opacity monitor calibration spans two six minute periods.
        ACTION:
                                             00:06 *CALIBRATION (QA)
  12-01 07:00 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity instrument calibrations spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
   12-01 07:06 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity instrument calibrations spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
   12-02 07:00 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
   12-02 07:06 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity monitor calibrations spans two six minute periods.
   12-03 07:00 SYS-DOWN 2 Opc Inst 00:06 *CALIBRATION (QA)
                  Daily opacity monitor calibrations spans two six minute periods.
        ACTION:
                                             00:06 *CALIBRATION (QA)
   12-03 07:06 SYS-DOWN 2 Opc Inst
```

```
Daily opacity monitor calibrations spans two six minute periods.
     ACTION:
12-04 07:00 SYS-DOWN 2 Opc Inst 00:06 *CALIBRATION (QA)
     ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
12-04 07:06 SYS-DOWN 2 Opc Inst
     ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
12-05 07:00 SYS-DOWN 2 Opc Inst
     ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
12-05 07:06 SYS-DOWN 2 Opc Inst
     ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
12-06 07:00 SYS-DOWN 2 Opc Inst
     ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
12-06 07:06 SYS-DOWN 2 Opc Inst
     ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
12-07 07:00 SYS-DOWN 2 Opc Inst
      ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
12-07 07:06 SYS-DOWN 2 Opc Inst
      ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
12-08 07:00 SYS-DOWN 2 Opc Inst
               Daily opacity monitor calibrations spans two six minute periods.
      ACTION:
                                            00:06 *CALIBRATION (QA)
 12-08 07:06 SYS-DOWN 2 Opc Inst
      ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
 12-09 07:00 SYS-DOWN 2 Opc Inst
      ACTION: Daily opacity monitor calibrations spans two six minute periods. 07:06 SYS-DOWN 2 Opc Inst 00:06 *CALIBRATION (QA)
 12-09 07:06 SYS-DOWN 2 Opc Inst
      ACTION: Daily opacity monitor calibrations spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
 12-10 07:00 SYS-DOWN 2 Opc Inst
      ACTION: Daily opacity monitor calibration spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
 12-10 07:06 SYS-DOWN 2 Opc Inst
               Daily opacity monitor calibration spans two six minute periods.
       ACTION:
                                            00:06 *CALIBRATION (QA)
 12-11 07:00 SYS-DOWN 2 Opc Inst
       ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
 12-11 07:06 SYS-DOWN 2 Opc Inst
       ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
 12-12 07:00 SYS-DOWN 2 Opc Inst
       ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
 12-12 07:06 SYS-DOWN 2 Opc Inst
       ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
 12-13 07:00 SYS-DOWN 2 Opc Inst
       ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  12-13 07:06 SYS-DOWN 2 Opc Inst
       ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  12-14 07:00 SYS-DOWN 2 Opc Inst
       ACTION: Daily opacity monitor calibration spans two six minute periods.
  12-14 07:06 SYS-DOWN 2 Opc Inst
                                             00:06 *CALIBRATION (QA)
       ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  12-15 07:00 SYS-DOWN 2 Opc Inst
       ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  12-15 07:06 SYS-DOWN 2 Opc Inst
       ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  12-16 07:00 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity monitor calibration spans two six minute periods.
  12-16 07:06 SYS-DOWN 2 Opc Inst
                                             00:06 *CALIBRATION (QA)
        ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  12-17 07:00 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity monitor calibration spans two six minute periods. 07:06 SYS-DOWN 2 Opc Inst 00:06 *CALIBRATION (QA)
  12-17 07:06 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  12-18 07:00 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity monitor calibration spans two six minute periods.
                                              00:06 *CALIBRATION (QA)
  12-18 07:06 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity monitor calibration spans two six minute periods.
  12-19 07:00 SYS-DOWN 2 Opc Inst
                                              00:06
                                                      *CALIBRATION (QA)
        ACTION: Daily opacity monitor calibration spans two six minute periods.
                                                      *CALIBRATION (QA)
                                              00:06
   12-19 07:06 SYS-DOWN 2 Opc Inst
                 Daily opacity monitor calibration spans two six minute periods.
        ACTION:
   12-20 07:00 SYS-DOWN 2 Opc Inst
                                              00:06 *CALIBRATION (QA)
        ACTION: Daily opacity monitor calibration spans two six minute periods.
                                              00:06 *CALIBRATION (QA)
   12-20 07:06 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity monitor calibration spans two six minute periods.
                                               00:06 *CALIBRATION (QA)
   12-21 07:00 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity monitor calibration spans two six minute periods.
                                              00:06 *CALIBRATION (QA)
   12-21 07:06 SYS-DOWN 2 Opc Inst
        ACTION: Daily opacity monitor calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
   12-22 07:00 SYS-DOWN 2 Opc Inst
                  Daily opacity monitor calibration spans two six minute periods.
        ACTION:
                                              00:06 *CALIBRATION (QA)
   12-22 07:06 SYS-DOWN 2 Opc Inst
```

```
Daily opacity monitor calibration spans two six minute periods.
     ACTION:
                                           00:06 *CALIBRATION (QA)
12-23 07:00 SYS-DOWN 2 Opc Inst
               Daily opacity monitor calibration spans two six minute periods.
     ACTION:
12-23 07:06 SYS-DOWN 2 Opc Inst
                                           00:06 *CALIBRATION (QA)
     ACTION: Daily opacity monitor calibration spans two six minute periods.
                                           00:06 *CALIBRATION (QA)
12-24 07:00 SYS-DOWN 2 Opc Inst
     ACTION: Daily opacity monitor calibration spans two six minute periods.
                                           00:06
                                                  *CALIBRATION (QA)
12-24 07:06 SYS-DOWN 2 Opc Inst
     ACTION: Daily opacity monitor calibration spans two six minute periods.
12-24 10:36 SYS-DOWN 2 Opc Inst
                                           00:06
                                                   *CALIBRATION (OA)
     ACTION: Quarterly opacity monitor filter audit.
                                                   *CALTBRATION (OA)
12-24 10:42 SYS-DOWN 2 Opc Inst
                                           00:06
               Quarterly opacity monitor filter audit.
     ACTION:
                                                   *CALIBRATION (QA)
                                           00:06
12-24 10:48 SYS-DOWN 2 Opc Inst
     ACTION: Quarterly opacity monitor filter audit.
                                                   *CALIBRATION (OA)
12-24 10:54 SYS-DOWN 2 Opc Inst
                                           00:06
      ACTION: Quarterly opacity monitor filter audit.
                                                   *CALIBRATION (QA)
12-24 11:00 SYS-DOWN 2 Opc Inst
                                            00:06
      ACTION: Quarterly opacity monitor filter audit.
                                                   *CALIBRATION (QA)
                                            00:06
12-24 11:06 SYS-DOWN 2 Opc Inst
      ACTION: Quarterly opacity monitor filter audit.
12-24 11:12 SYS-DOWN 2 Opc Inst
                                            00:06
                                                   *CALIBRATION (QA)
              Quarterly opacity monitor filter audit.
      ACTION:
                                            00:06 *CALIBRATION (QA)
12-24 11:18 SYS-DOWN 2 Opc Inst
      ACTION: Quarterly opacity monitor filter audit.
                                                   *CALIBRATION (OA)
12-24 11:24 SYS-DOWN 2 Opc Inst
                                            00:06
      ACTION: Quarterly opacity monitor filter audit.
                                            00:06
                                                   *CALIBRATION (OA)
 12-24 11:30 SYS-DOWN 2 Opc Inst
      ACTION: Quarterly opacity monitor filter audit.
                                            00:06 *CALIBRATION (QA)
 12-24 11:36 SYS-DOWN 2 Opc Inst
      ACTION: Quarterly opacity monitor filter audit.
                                                    *CALIBRATION (QA)
                                            00:06
 12-24 11:42 SYS-DOWN 2 Opc Inst
              Quarterly opacity monitor filter audit.
      ACTION:
                                                    *CALIBRATION (QA)
 12-24 11:48 SYS-DOWN 2 Opc Inst
                                            00:06
      ACTION: Quarterly opacity monitor filter audit.
 12-24 11:54 SYS-DOWN 2 Opc Inst
                                            00:06
                                                   *CALIBRATION (QA)
      ACTION: Quarterly opacity monitor filter audit.
                                            00:06
                                                   *CALIBRATION (QA)
 12-24 12:00 SYS-DOWN 2 Opc Inst
      ACTION: Quarterly opacity monitor filter audit.
                                                   *CALIBRATION (OA)
 12-24 12:06 SYS-DOWN 2 Opc Inst
                                            00:06
      ACTION: Quarterly opacity monitor filter audit.
                                            00:06 *CALIBRATION (QA)
 12-24 12:12 SYS-DOWN 2 Opc Inst
      ACTION: Calibration after filter audit.
                                             00:06 *CALIBRATION (OA)
 12-24 12:18 SYS-DOWN 2 Opc Inst
       ACTION: Calibration after filter audit.
 12-25 07:00 SYS-DOWN 2 Opc Inst
                                             00:06 *CALIBRATION (QA)
       ACTION: Opacity monitor daily calibration spans two six minute periods.
                                                   *CALIBRATION (QA)
 12-25 07:06 SYS-DOWN 2 Opc Inst
                                            00:06
                Opacity monitor daily calibration spans two six minute periods.
       ACTION:
 12-26 07:00 SYS-DOWN 2 Opc Inst
                                            00:06 *CALIBRATION (QA)
       ACTION: Opacity monitor daily calibration spans two six minute periods.
                                            00:06 *CALIBRATION (QA)
  12-26 07:06 SYS-DOWN 2 Opc Inst
       ACTION: Opacity monitor daily calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  12-27 07:00 SYS-DOWN 2 Opc Inst
       ACTION: Opacity monitor daily calibration spans two six minute periods.
  12-27 07:06 SYS-DOWN 2 Opc Inst
                                             00:06 *CALIBRATION (QA)
       ACTION: Opacity monitor daily calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  12-28 07:00 SYS-DOWN 2 Opc Inst
                Opacity monitor daily calibration spans two six minute periods.
       ACTION:
  12-28 07:06 SYS-DOWN 2 Opc Inst
                                                    *CALIBRATION (QA)
                                            00:06
       ACTION: Opacity monitor daily calibration spans two six minute periods.
                                             00:06 *CALIBRATION (QA)
  12-29 07:00 SYS-DOWN 2 Opc Inst
       ACTION: Opacity monitor daily calibration spans two six minute periods.
  12-29 07:06 SYS-DOWN 2 Opc Inst
                                             00:06 *CALIBRATION (QA)
       ACTION: Opacity monitor daily calibration spans two six minute periods.
                                                    *CALIBRATION (QA)
                                             00:06
  12-30 07:00 SYS-DOWN 2 Opc Inst
       ACTION: Opacity monitor daily calibration spans two six minute periods.
  12-30 07:06 SYS-DOWN 2 Opc Inst
                                             00:06 *CALIBRATION (QA)
                Opacity monitor daily calibration spans two six minute periods.
        ACTION:
                                             00:06 *CALIBRATION (QA)
  12-31 07:00 SYS-DOWN 2 Opc Inst
       ACTION: Opacity monitor daily calibration spans two six minute periods.
  12-31 07:06 SYS-DOWN 2 Opc Inst
                                             00:06 *CALIBRATION (QA)
        ACTION: Opacity monitor daily calibration spans two six minute periods.
```

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT AIR POLLUTION CONTROL DIVISION MALFUNCTION EVENT REPORTING FORM

Date Reported 11/24/2007

Time Reported 18:00

Name of Person Filing Report Robert Lopez

Phone Number

719-549-3720

Company/Source Name Xcel Energy

Plant Name Comanche Station

Unit No. 2

Unit AIRS ID No.

101,0003,001

Applicable Permit No. 96OPPB133

Malfunction Started: Date 11/24/2007

Time 1624

Malfunction Ended: Date 11/24/2007

Time 1629

Total time of malfunction

6 minutes

Pollutants which exceeded emission standards:

Pollutant (SO2, NOx, opacity, etc.)	Emission Rate During Malfunction (Lbs./hr, % Opacity)	Total Emissions During Malfunction (Tons)
Opacity	Highest avg % opacity = 92.6%	

Detailed explanation of malfunction event, cause of the malfunction, and corrective actions taken to prevent a reoccurrence:

On Saturday, November 24, 2007, Comanche Unit #2 experienced an opacity excedance from 1624 to 1629. The circumstances are outlined below:

- 1. Unit #2 had an electrical problem that resulted in an MFT at 1619.
- 2. At 1624 the ID fans stopped operating and the FD fans began to decrease speed until they completely stopped at 1625.
- 3. 1625 no airflow going through the stack other then natural draft.
- 4. The electrical power to the baghouse was also lost at 1625.
- 5. First opacity exceedance at 1623 with the six-minute average for unit 2 opacity at 1624 being 92.6%.
- 6. Opacity returned to below 20% at 1700.
- 7. Historical data in the DCS reviewed on Monday, November 26, 2007 pertaining to the baghouse indicates that the baghouse was not bypassed and that the differential pressure on the baghouse did not change until the power was lost.

An investigation revealed that a feeder breaker to the Unit #2 ID fan was grounded resulting in the unit MFT and loss of power to the ID fans, FD fans, and the baghouse. Based on the historical data collected and the lack of airflow, it has been determined that sedimentary ash in the ductwork and baghouse became entrained in the duct leading to the stack. Because there were no ID or FD fans running at the time there was little or no stack flow, which resulted in the ash remaining stagnant within the stack for an extended period.

Please	check	all	that	appl	y:
--------	-------	-----	------	------	----

\boxtimes	The excess emissions were caused by a sudden, unavoidable breakdown of equipment, or a sudden, unavoidable failure of a process to operate in the normal or usual manner, beyond the reasonable control of the owner or operator;
\boxtimes	The excess emissions did not stem from any activity or event that could have reasonably been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;
\boxtimes	Repairs were made as expeditiously as possible.
\boxtimes	The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable.
\boxtimes	All Reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality.
\boxtimes	All emissions monitoring systems were kept in operation (if at all possible);
\boxtimes	The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.
Sign	nature:
Titl	e: Station Supervisor

11/24/2007

Date:

STATE QUARTERLY SO2 EXCEEDANCE & MONITOR DOWNTIME REPORT

P.S. of Colorado

Comanche Unit 2 FOR QUARTER 4 2007 DATE 01/09/08 Comanche Generating Station Pueblo, CO

MANUFACTURE: Environment SA MONITOR TYPE: SO2

SERIAL NO.: 1084 MODEL NO.: MIR9000

INSTALLATION DATE: 10/11/01

--- SO2 EXCEEDANCE AND MONITOR DOWNTIME MATRIX (Hours) ---

EXCESS RANGE	1.20-1.40	1.40-1.60	1.60-1.80	1.80-2.00	>2.00	TOTAL
MM						
EXCESS EMISSIONS REASON		0.00	0.00	0.00	0.00	0.00
*STARTUP/SHUTDOWN	0.00		0.00	0.00	0.00	0.00
STARTUP/SHUTDOWN	0.00	0.00		0.00	0.00	0.00
*CLEANING/SOOTBLOWING	0.00	0.00	0.00	0.00	0.00	0.00
CLEANING/SOOTBLOWING	0.00	0.00	0.00		0.00	0.00
UNKNOWN CAUSES	0.00	0.00	0.00	0.00		
*CONTROL EQUIP (UPSET)	0.00	0.00	0.00	0.00	0.00	0.00
CONTROL EQUIP (UNACCEPT)	0.00	0.00	0.00	0.00	0.00	0.00
*PROCESS PROBLEMS (UPSET)	0.00	0.00	0.00	0.00	0.00	0.00
PROCESS PROB (UNACCEPT)	0.00	0.00	0.00	0.00	0.00	0.00
FUEL PROBLEMS	0.00	0.00	0.00	0.00	0.00	0.00
OTHERS	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00
				CEPTABLE EMIS		0.00
				% EXCESS EMIS	SSIONS	0.00%
UNIT OPERATING TIME: 123	21.32 HR					
MONITOR DOWNTIME REASON	-					TOTAL
						0.00
MONITOR EQUIP. FAILURE						0.00
NON MONITOR FAILURES						11.00
*CALIBRATION (QA)						0.00
UNKNOWN CAUSES						
OTHERS						7.00
			TOTAL UNA		WNTIME	7.00
				% MONITOR DO	WNTIME	0.57%

-- Reasons Marked * are not used in the Excess and Downtime computations --

--- EXCEEDANCE AND MONITOR DOWNTIME LOG ---

DATE TIME TYPE CHANNEL VALUE DURATION	+ REASON	
11-09 16:00 SYS-DOWN 2_SO2MMx 01:00	*CALIBRATION	(QA)
ACTION: Calibration during start-up.		
ACTION: Calibration during start-up. 11-09 18:00 SYS-DOWN 2_SO2MMx 01:00 ACTION: Calibration during start-up.	*CALIBRATION	(QA)
ACTION: Calibration during start-up.		
11-09 19:00 SYS-DOWN 2 SO2MMx 01:00	*CALIBRATION	(AQ)
ACTION: Calibration during start-up.		
11-12 08:00 SYS-DOWN 2 SO2MMx 01:00	*CALIBRATION	(QA)
ACTION: Calibration during start-up. 11-12 08:00 SYS-DOWN 2 SO2MMx 01:00 ACTION: Linearity following start-up.		
11~12 09:00 515-DOWN 2 502MMX 01:00	Ottor provi	(QA)
ACTION: Linearity following start-up.		
ACTION: Linearity following start-up. 11-19 11:00 SYS-DOWN 2_SOZMMx 01:00 ACTION: Linearity at full load following	*CALIBRATION	(QA)
ACTION: Linearity at full load following	start-up.	
11-19 12:00 SYS-DOWN 2 SOZMMX 01:00	-CHTTDKWITON	(QA)
ACTION: Linearity at full load following	start-up.	
11-19 13:00 SYS-DOWN 2_SO2MMx 01:00	*CALIBRATION	(QA)
ACTION: Linearity at full load following	start-up.	
11-19 14:00 SYS-DOWN 2_SO2MMx 01:00	*CALIBRATION	(QA)
ACTION: Linearity at full load following	start-up.	
12-10 08:00 SYS-DOWN 2_SO2MMx 01:00	*CALIBRATION	AQ)
ACTION: Calibration.		
12-10 23:00 SYS-DOWN 2_SO2MMx 01:00	*CALIBRATION	AQ)
ACTION: Calibration.		
ACTION: Calibration. 12-10 23:00 SYS-DOWN 2_SO2MMx 01:00	OTHERS (DOWN	TIME)
ACTION: MIR maintenance.		
12-11 10:00 SYS-DOWN 2_SO2MMx 01:00	OTHERS (DOWN	TIME)
ACTION: MIR maintenance.		
ACTION: MIR maintenance. 12-11 10:00 SYS-DOWN 2_SO2MMX 01:00 ACTION: MIR maintenance. 12-11 11:00 SYS-DOWN 2_SO2MMX 01:00) OTHERS (DOWN	TIME)
ACTION: MIR maintenance.		

12-11	12:00 SYS-DOWN 2_SO2MMx	01:00	OTHERS	(DOWNTIME)
12_11	ACTION: MIR maintenance. 13:00 SYS-DOWN 2_SO2MMx	01:00	OTHERS	(DOWNTIME)
	ACTION: MIR maintenance.	01.00	OTHERS	(DOWNTIME)
	14:00 SYS-DOWN 2_SO2MMx ACTION: MIR maintenance.			
12-11	15:00 SYS-DOWN 2_SO2MMx	01:00	OTHERS	(DOWNTIME)

STATE QUARTERLY NOX EXCEEDANCE & MONITOR DOWNTIME REPORT

Comanche Unit 2 FOR QUARTER 4 2007 DATE 01/09/08 P.S. of Colorado

Comanche Generating Station

Pueblo, CO

MONITOR TYPE: NOX

MANUFACTURE: Environment SA

MODEL NO.: MIR9000 INSTALLATION DATE: 10/11/01 SERIAL NO.: 1084

--- NOX EXCEEDANCE AND MONITOR DOWNTIME MATRIX (Hours) ---

EXCESS RANGE	0.70-0.80	0.80-0.90	0.90-1.00	1.00-1.10	>1.10	TOTAL
MMbtu						
EXCESS EMISSIONS REASON						
*STARTUP/SHUTDOWN	0.00	0.00	0.00	0.00	0.00	0.00
STARTUP/SHUTDOWN	0.00	0.00	0.00	0.00	0.00	0.00
*CLEANING/SOOTBLOWING	0.00	0.00	0.00	0.00	0.00	0.00
CLEANING/SOOTBLOWING	0.00	0.00	0.00	0.00	0.00	0.00
UNKNOWN CAUSES	0.00	0.00	0.00	0.00	0.00	0.00
*CONTROL EOUIP (UPSET)	0.00	0.00	0.00	0.00	0.00	0.00
CONTROL EQUIP (UNACCEPT)	0.00	0.00	0.00	0.00	0.00	0.00
*PROCESS PROBLEMS (UPSET)	0.00	0.00	0.00	0.00	0.00	0.00
PROCESS PROB (UNACCEPT)	0.00	0.00	0.00	0.00	0.00	0.00
FUEL PROBLEMS	0.00	0.00	0.00	0.00	0.00	0.00
OTHERS	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00
			TOTAL UNAC	CEPTABLE EMIS	SIONS	0.00
				% EXCESS EMIS	SIONS	0.00%

UNIT OPERATING TIME: 1221.32 HR

--MONITOR DOWNTIME REASON--

TOTAL

MONITOR EQUIP. FAILURE
NON MONITOR FAILURES
*CALIBRATION (QA)
UNKNOWN CAUSES
OTHERS

10.00 0.00 11.00 0.00 9.00

TOTAL UNACCEPTABLE DOWNTIME 19.00 \$ MONITOR DOWNTIME 1.56%

-- Reasons Marked * are not used in the Excess and Downtime computations --

--- EXCEEDANCE AND MONITOR DOWNTIME LOG ---

DATE TIME TYPE CHANNEL VALUE DURATION REASON
11-09 15:00 SYS-DOWN 2 NOXMMX 01:00 *CALIBRATION (QA)
11-09 16:00 SYS-DOWN 2_NOXMMX 01:00 *CALIBRATION (QA)
ACTION: Calibration during start-up.
11-09 18:00 SYS-DOWN 2 NOXMMX 01:00 *CALIBRATION (QA) ACTION: Calibration during start-up.
ACTION: Calibration during start-up.
11-09 19:00 SYS-DOWN 2_NOXMMX 01:00 CALIBRATION (QA)
ACTION: Calibration during start-up.
11-12 08:00 SYS-DOWN 2 NOXMMX 01:00 *CALIBRATION (QA)
ACTION: Linearity following start-up.
11-12 09:00 SYS-DOWN 2_NOXMMx 01:00 *CALIBRATION (QA) ACTION: Linearity following start-up.
ACTION: Linearity following start-up.
11-19 11:00 SYS-DOWN 2_NOXMMX 01:00 *CALIBRATION (QA)
ACTION: Linearity at full load following start-up.
11-19 12:00 SYS-DOWN 2_NOXMMX 01:00 *CALIBRATION (QA) ACTION: Linearity at full load following start-up.
ACTION: Linearity at full load following start-up.
11-19 13:00 SYS-DOWN 2 NOXMMX 01:00 *CALIBRATION (QA)
ACTION: Linearity at full load following start-up.
11-19 14:00 SYS-DOWN 2_NOXMMX 01:00 *CALIBRATION (QA)
ACTION: Linearity at full load following start-up.
11-19 15:00 SYS-DOWN 2_NOXMMX 01:00 *CALIBRATION (QA)
ACTION: Linearity at full load following start-up.
11-20 07:00 SYS-DOWN 2 NOXMMX 01:00 MONITOR EQUIP. FAILURE
ACTION: Failed daily MIR calibrations for NOx.
12-10 07:00 SYS-DOWN 2 NOXMMX 01:00 MONITOR EQUIP. FAILURE
ACTION: Daily NOx calibration failure.
12-10 08:00 SYS-DOWN 2 NOXMMX 01:00 MONITOR EQUIP. FAILURE
ACTION: Daily NOx calibration failure.

		02 00	MONTHON TOUTS TO THE THE
12-10	22:00 SYS-DOWN 2 NOXMMX	01:00	MONITOR EQUIP. FAILURE
į	ACTION: Daily NOx calibration f	allure.	MONTHOD MONTH PATTING
12-10	23:00 SYS-DOWN 2 NOXMMX		MONITOR EQUIP. FAILURE
	ACTION: Daily NOx calibration f	callure.	OTHERS DOWNTIME
12-11	07:00 SYS-DOWN 2_NOxMMx	01:00	OTHERS DOWNTIME
	ACTION: MIR maintenance		AMERICA DOMINITATE
12-11	08:00 SYS-DOWN 2_NOXMMX ACTION: MIR maintenance	01:00	OTHERS DOWNTIME
	ACTION: MIR maintenance	01.00	OTHERS DOWNTIME
12-11	U9:UU SIS-DOWN Z_NOXMMX	01:00	OTHERS DOMNITME
	ACTION: MIR maintenance.	07 - 00	OTHERS DOWNTIME
12-11	10:00 SYS-DOWN 2_NOXMMX	01:00	OTRERS DOWNTIME
	10:00 SYS-DOWN 2 NOXMMX ACTION: MIR maintenance 11:00 SYS-DOWN 2 NOXMMX	01.00	OTHERS DOWNTIME
12-11	11:00 SYS-DOWN 2_NOXMMX	01:00	OTHERS DOWNTIME
	ACTION: MIR maintenance		OTHERS DOWNTIME
	12:00 SYS-DOWN 2_NOXMMX	01:00	OTHERS DOWNTIME
	ACTION: MIR maintenance	01:00	OTHERS DOWNTIME
12-11	13:00 SYS-DOWN 2_NOXMMX ACTION: MIR maintenance	01:00	OIRES DOWNING
	ACTION: MIR maintenance	01:00	OTHERS DOWNTIME
12-11	14:00 SYS-DOWN 2 NOXMMX ACTION: MIR maintenance	01.00	Olimpia Domest Lead
20 51		01:00	
15-11	15:00 SYS-DOWN 2_NOXMMX ACTION: MIR maintenance	01.00	011111110 P.0111-11111
10 70	07:00 SYS-DOWN 2_NOXMMX	01.00	MONITOR EQUIP. FAILURE
12-16	ACTION: Daily NOx calibration	failure	1101121011 1100111111111111111111111111
10.70	07:00 SYS-DOWN 2_NOXMMX	01:00	MONITOR EQUIP. FAILURE
12-18	ACTION: Daily NOx calibration	failure.	PRANCE AND MEN
10.00	07:00 SYS-DOWN 2_NOXMMX	01:00	MONITOR EQUIP. FAILURE
12-28	ACTION: Daily NOx calibration		
10.00	08:00 SYS-DOWN 2_NOXMMX	01:00	MONITOR EQUIP. FAILURE
12-26	ACTION: Daily NOx calibration	failure.	
10.00	07:00 SYS-DOWN 2_NOXMMX	01:00	MONITOR EQUIP. FAILURE
12-29	ACTION: Daily NOx calibration	failure.	