

PARAG. 6

ROCHESTER GAS AND ELECTRIC CORPORATION

GINNA STATION

CONTROLLED COPY NUMBER

9

GINNA STATION

UNIT #1

COMPLETED

DATE :-

TIME :-

PROCEDURE NO. PT-2.3.1

REV. NO. 5

POST ACCIDENT CHARCOAL FILTER DAMPERS

TECHNICAL REVIEW

PORC 4/28/80

TR Schuler
QC REVIEW

5-2-80
DATE

APPROVED FOR USE

Braun
PLANT SUPERINTENDENT

5-7-80
DATE

QA X NON-QA CATEGORY 1.0

REVIEWED BY:

THIS PROCEDURE CONTAINS 8 PAGES

8009160 527

PT-2.3.1POST ACCIDENT CHARCOAL FILTER DAMPERS

01
2.0 PURPOSE:

- 1.1 To provide the necessary steps to check operability of dampers associated with the Containment Recirculation fan charcoal filter flow paths.
- 1.2 To provide the necessary steps to check monthly each recirculation fan unit.

2.0 TEST REQUIREMENTS:

- 2.1 To exercise each air operated damper through a complete stroking cycle, monthly.
- 2.2 To time each damper during its opening and closing stroke, quarterly.
- 2.2.1 For stroke direction of primary concern (denoted by symbol +) the reference time as indicated on instruction sheet may not be exceeded.
- 2.2.2 Stroking time in the opposite direction within the indicated tolerance is desired but not essential for verification of proper damper operability.
- 2.3 To verify that each air operated damper assumes its fail safe position upon loss of system control air pressure, quarterly.
- 04 To inspect each recirculation fan unit for signs of water within the filtration area, monthly.

3.0 REFERENCES:

- 3.1 Applicable System Flow Diagram
- 3.2 Quality Assurance Manual, Appendix "C"
- 3.3 ASME Code, Section 11, Subsection 1WV

4.0 INITIAL CONDITIONS:

- 4.1 Damper surveillance may be performed during any plant operating mode.
- 4.2 Any control room personnel involved in the test (other than simple request to actuate a control board switch) will not have simultaneous plant responsibilities relative to normal duties and routine operation.
- 4.3 Unasterisked steps on instruction sheets will be completed and initialed each time procedure is performed (N/A steps which are not required).
- 4.4 Single asterisked steps on instruction sheets will be completed and initialed on at least quarterly intervals.

4.5 Any abnormality or erratic damper action observed during performance of procedure shall be noted. A maintenance work order trouble card shall be submitted for the concerned damper.

4.6 Test personnel will be qualified in accordance with A-1102 Procedure.

4.7 An SWP has been issued by HP Department to permit containment entry and recirculation fan unit inspection.

5.0 PRECAUTIONS:

5.1 For complete verification of all dampers of a charcoal unit and its containment recirculation fan, the fan breaker must be placed in test position. Ensure the following equipment operable. (Applies only when Rx is being maintained critical).

5.1.1 Remaining charcoal unit

5.1.2 Remaining three containment recirculation fans

5.1.3 Both A & B Containment Spray pumps

5.2 Observe all requirements of SWP for containment entry.

5.0 INSTRUCTIONS:

5.1 1A Recirculation Fan Dampers.

6.1.1 Ensure 1A Fan in service and visually verify the following:

6.1.1.1 Loop entry damper 1F-LED (5873) is open.

6.1.1.2 Charcoal unit inlet damper 1I-CID (5871) is closed.

6.1.1.3 Charcoal unit outlet damper 1K-COD (5872) is closed.

6.1.1.4 Green indicating light for charcoal dampers is illuminated.

6.1.2 Press in armature button of CF1A/L relay (latch in type relay), verify the following and time dampers as required.

6.1.2.1 1F LED damper assumes its fully closed position.

6.1.2.2 1I CID damper assumes its fully open position.

6.1.2.3 1K COD damper assumes its fully open position.

6.1.2.4 Green indicating light (at C.B.) for charcoal dampers is extinguished.



*6.1.3 Damper travel time

NOTE: All three dampers swing with actuation of CF1A/L relay, hence, depending on number of personnel involved at damper location, it may be necessary to repeat relay actuation several times until all damper timings have been obtained. Dampers may be reset to normal by momentarily pressing in the armature button of the reset relay.

*6.1.3.1 1F LED travel time in close direction. _____ SECONDS

Acceptable time: (+) CLOSE 23 SEC.

*6.1.3.2 1I CID travel time in open direction. _____ SECONDS

Acceptable time: (+) OPEN 22 SEC.

*6.1.3.3 1K COD travel time in open direction. _____ SECONDS

Acceptable time: (+) OPEN 23 SEC.

6.1.4 Return 1A Fan Dampers to their normal position by pressing in armature button of reset relay, verify the following and time dampers as required.

6.1.4.1 1F LED assumes full open position. _____

6.1.4.2 1I CID assumes its fully closed position. _____

6.1.4.3 1K COD assumes its fully closed position. _____

6.1.4.4 Green indicating light for charcoal dampers is illuminated. _____

*6.1.5 Damper travel time

NOTE: All three dampers swing with actation of CF1A/L relay, hence, depending on number of personnel involved at damper location, it may be necessary to repeat relay actuation several times until all damper timings have been obtained. Dampers may be reset to normal by momentarily pressing in the armature button of the reset relay.

*6.1.5.1 1F LED travel time in open direction. _____ SECONDS

Acceptable Time: OPEN 52 SEC.

*6.1.5.2 1I CID travel time in close direction. _____ SECONDS

Acceptable Time: CLOSE 31 SEC.

*6.1.5.3 1K COD travel time in close direction. _____ SECONDS

Acceptable Time: CLOSE 25 SEC.

6.2 1C Recirculation Fan Dampers

6.2.1 Ensure 1C Fan in service and visually verify the following:

- 6.2.1.1 Loop entry damper 1H-LED (5875) is open. _____
- 6.2.1.2 Charcoal unit inlet damper 1J CID (5876) is closed. _____
- 6.2.1.3 Charcoal unit outlet damper 1L COD (5874) is closed. _____
- 6.2.1.4 Green indicating light for charcoal dampers is illuminated. _____
- 6.2.2 Press in armature button of CF1C/L relay (latch in type relay), verify the following and time dampers as required.
- 6.2.2.1 1H LED damper assumes its fully closed position. _____
- 6.2.2.2 1J CID damper assumes its fully open position. _____
- 6.2.2.3 1L COD damper assumes its fully open position. _____
- 6.2.2.4 Green indicating light (at C.B.) for charcoal dampers is extinguished. _____

*6.2.3 Damper travel time

NOTE: All three dampers swing with actuation of CF1C/L relay, hence, depending on number of personnel involved at damper location, it may be necessary to repeat relay actuation several times until all damper timings have been obtained. Dampers may be reset to normal by momentarily pressing in the armature button of the reset relay.

- 6.2.3.1 1H LED travel time in close direction. _____ SECONDS
Acceptable time: (+) CLOSE 23 SEC.
- *6.2.3.2 1J CID travel time in open direction. _____ SECONDS
Acceptable time: (+) OPEN 25 SEC.
- *6.2.3.3 1L COD travel time in open direction. _____ SECONDS
Acceptable time: (+) OPEN 31 SEC.
- 6.2.4 Return 1C Fan dampers to their normal position by pressing in armature button of reset relay, verify the following and time dampers as required.
- 6.2.4.1 1H LED assumes its fully open position. _____
- 6.2.4.2 1J CID assumes its fully closed position. _____
- 6.2.4.3 1L COD assumes its fully closed position. _____
- 6.2.4.4 Green indicating light for charcoal dampers is illuminated. _____

*6.2.5 Damper travel time

NOTE: All three dampers swing with actuation of CF1C/L relay, hence, depending on number of personnel involved at damper location, it may be necessary to repeat relay actuation several times until all damper timings have been obtained. Dampers may be reset to normal by momentarily pressing in the armature button of the reset relay.

*6.2.5.1 LH LED travel time in open direction. _____ SECONDS

Acceptable Time: OPEN 32 SEC.

*6.2.5.2 LJ CID travel time in close direction. _____ SECONDS

Acceptable time: CLOSE 34 SEC.

*6.2.5.3 LL COD travel time in close direction. _____ SECONDS

Acceptable time: CLOSE 27 SEC.

*6.2.6 To verify failure mode of dampers upon loss of supply air pressure perform the following:

*6.2.6.1 Remove LC fan from service. _____

*6.2.6.2 Place LC fan 480 volt breaker in test position. _____

*6.2.6.3 Close LC fan breaker and verify the following: _____

*6.2.6.3.1 LH LED is open. _____

*6.2.6.3.2 LJ CID is closed. _____

*6.2.6.3.3 LL COD is closed. _____

*6.2.6.3.4 Green indicating light for charcoal dampers is illuminated. _____

*6.2.6.4 Perform the following for LH LED damper.

*6.2.6.4.1 Shut off air supply to control solenoid for LH LED damper and void piston air by breaking tubing fitting downstream of air supply valve. _____

*6.2.6.4.2 As piston air bleeds to atmosphere verify that LH LED damper assumes its fully closed position. _____

*6.2.6.4.3 Retighten tubing fitting, turn on supply air and verify that as piston pressure increases to normal, that LH LED damper assumes its fully open position. _____

*6.2.6.5 Perform the following for LJ CID damper:

*6.2.6.5.1 Shut off air supply valve to control solenoid for LJ CID damper and void piston air by breaking tubing fitting downstream of air supply valve. _____

*6.2.6.5.2 As piston air bleeds to atmosphere verify that 1J CID damper assumes its fully open position.

6.2.6.5.3 Retighten tubing fitting, turn on supply air and verify that as piston pressure increases to normal 1J CID damper assumes its fully closed position.

*6.2.6.6 Perform the following for 1L COD damper:

*6.2.6.6.1 Shut off air supply valve to control solenoid for 1L COD damper and void piston air by breaking tubing fitting downstream of air supply valve.

*6.2.6.6.2 As piston air bleeds to atmosphere verify that 1L COD damper assumes its fully open position.

*6.2.6.6.3 Retighten tubing fitting, turn on supply air and verify that as piston pressure increases to normal 1L COD damper assumes its fully closed position.

*6.2.7 Return 1C Fan breaker to the fully racked in position.

*6.2.8 Check 480 volt breaker operability by starting 1C Fan and permit fan to run for a few minutes. After this fan may be left in service or removed from service at discretion of operations.

*6.2.9 To verify failure mode of dampers upon loss of supply air pressure perform the following:

6.2.9.1 Remove 1A fan from service.

*6.2.9.2 Place 1A fan 480 volt breaker in test position.

*6.2.9.3 Close 1A fan breaker and verify the following:

*6.2.9.3.1 1F LED is open.

*6.2.9.3.2 1I CID is closed.

*6.2.9.3.3 1K COD is closed.

*6.2.9.3.4 Green indicating light for charcoal dampers is illuminated.

*6.2.9.4 Perform the following for 1F LED damper

*6.2.9.4.1 Shut off air supply to control solenoid for 1F LED damper and void piston air by breaking tubing fitting downstream of air supply valve.

*6.2.9.4.2 As piston air bleeds to atmosphere verify that 1F LED damper assumes its fully closed position.

6.2.9.4.3 Retighten tubing fitting, turn on supply air and verify that as piston pressure increases to normal that 1F LED damper assumes its fully open position.



*6.2.9.5 Perform the following for 1I CID damper:

2.9.5.1 Shut off air supply valve to control solenoid for 1I CID damper and void piston air by breaking tubing fitting downstream of air supply valve. _____

*6.2.9.5.2 As piston air bleeds to atmosphere, verify that 1I CID damper assumes its fully open position. _____

*6.2.9.5.3 Retighten tubing fitting, turn on supply air and verify that as piston pressure increases to normal 1I CID damper assumes its fully closed position. _____

*6.2.9.6 Perform the following for 1K COD damper:

*6.2.9.6.1 Shut off air supply valve to control solenoid for 1K COD damper and void piston air by breaking tubing fitting downstream of air supply valve. _____

*6.2.9.6.2 As piston air bleeds to atmosphere verify that 1K COD damper assumes its fully open position. _____

*6.2.9.6.3 Retighten tubing fitting, turn on supply air and verify that as piston pressure increases to normal 1K COD damper assumes its fully closed position. _____

*6.2.10 Return 1A Fan Breaker to the fully racked in position. _____

2.11 Check 480 volt breaker operability by starting 1A Fan and permit fan to run for a few minutes. After this fan may be left in service or removed from service at discretion of Operations. _____

6.3 Monthly Inspection of Containment Recirc Units - Perform inspection of each Recirculation unit as per Instructions on Attachment I.

6.3.1 "A" Recirc. Unit inspection complete. _____

6.3.2 "B" Recirc. Unit inspection complete. _____

6.3.3 "C" Recirc. Unit inspection complete. _____

6.3.4 "D" Recirc. Unit inspection complete. _____

6.4 Notify Operations upon completion of procedure. Inform Operations they may operate recirc. fans as desired. _____

COMPLETED BY: _____ DATE _____

SHIFT SUPERVISOR: _____

RESULTS AND TEST REVIEW: _____ DATE _____

ATTACHMENT I

1. Ensure recirc. fan unit is not in operation. _____
2. Ensure each drain is not restricted and each is free of foreign material. _____
3. Inspect fan chiller piping area for possible service water leaks. _____
4. Inspect roughing filter-HEPA section for evidence of water about floor area and any water damage to HEPA filter units. _____
5. Submit a Trouble Card if any discrepancies are noted. _____

COMPLETED BY: _____

DATE COMPLETED: _____