Detroit Edison

Fermi 2

Temporary Change Notice

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Part 1: Request for Change (Initiator)

A) Number	B) Revision	C) Title
24.202.02	43	HPCI FLOW RATE TEST AT 165 PSIG REACTOR STEAM PRESSURE

D) Reason for Change

E) Change Requested

Page	Step	Change
12	5.1.24 1.	Changed setpoint to 70% from 80% for S-display
12	5.1.24. 2.	Changed setpoint to 150 psi from 200 psi for y-display
13	5.1.28	Changed 80% to 70% for V-display
13	5.1.28	Changed 200psig to 150psig for p display
18	5.1.35 4.d	Changed flow from ≥ 5150gpm to 5100gpm

F) Recommended Change Duration

- ☐ One time Use: WO/Work Order Detail Report No.
- ☒ Multiple Use: Expires when DCR approved
- ☐ Multiple Use: WO/Temp Mod No.

G) Requested By	Signature	Date
ID Number EX1001	System Engineer - HPCI	Today

Part 2: Interim Approval

A) TCN Signature Authority (must be qualified technical reviewer and listed in MGA04)	Signature	Date
ID Number EY2002	Manager - Performance Engineering	Today

B) SRO Approval	Signature	Line-up Impact	Date
ID Number		Yes ☐ No ☐	

C) Notified I&P	D) TCN Number Assigned By	Date	E) DCR Number Assigned By I&P	Date
☐ NA Initials	Initials		☐ NA	

Part 3: Final Review and Approval

Check one: ☐ Applicability Determination Required ☐ Applicability Determination exempt. Document exemption criteria from MGA02:

A) OSRO Recommendation	Signature	I.D. Number	Date
☐ NA ☐ Disapproval ☐ Approval			

B) Plant Manager	Signature	I.D. Number	Date
☐ Disapproval ☐ Approval			

Part 4: Notice of Cancellation ☐ NA

This TCN is no longer required; remove and destroy it

TCN Signature Authority	Signature	Notified I&P	Date
ID Number		☐ NA Initials	

Original-Record File Copy Request working copies as needed

DTC: TPMMGA DSN: MGA04001 Rev. 9 P1/1 IP: I File: 1703.22 Issued: ~~2-17-2009~~

DTC: ☐ TCTCN ☐ VSTCN (14 day approval) DSN: _____ File: 1727 IP: I Recipient: _____

5.1.23 Record the following:

1. C32-R609, Reactor Pressure Recorder, Point 2 (COP H11-P603)

RX Pressure	Tech Spec
_____psig	165 – 215 psig

2. E41-R608, HPCI Turbine Steam Pressure Indicator

Inlet Pressure
_____psig

3. Verify reactor pressure meets acceptable limits. ❑

ACCEPTANCE CRITERIA _____
INITIALS

5.1.24 Perform the following to select E41-F011, HPCI/RCIC Test Iso/PCV, Valve Position and Pressure Permissive.

1. At H11-P602, adjust E41-K820, Test Iso/PCV E41-F011 Ctrlr, to set valve position opening setpoint to approximately ~~80~~ 70% open (S-display). ❑ TCN

2. At H11-P602, adjust E41-K820, Test Iso/PCV E41-F011 Ctrlr, to set discharge pressure setpoint to ~~200~~ 150 psi (Y-display). ❑ TCN

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INITIALS

CAUTION

If the Turbine Generator is not on line, the Turbine Bypass Valves must be open at least 27%, in auto pressure control, to absorb HPCI start transient and to prevent a reactor scram due to a RPV water level transient.

5.1.25 If turbine generator is not on line, verify Turbine Bypass Valves are at least 27% open in auto pressure control.

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INITIALS

5.1.26 Open E4150-F059, HPCI Oil Clg Water Iso Valve.

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INITIALS

NOTE: The following step initiates a quick start of the HPCI Turbine. Time between actions must be minimized to prevent turbine overspeed trips.

5.1.27 Start the HPCI Turbine by **simultaneously** performing the following steps:

1. Open E4150-F001, HPCI Turb Stm Sply Iso Vlv. ❑

2. Place E4101-C005, HPCI Turbine Aux Oil Pump, CMC Switch in RUN. ❑

3. Verify HPCI turbine starts and speed increases. ❑

ACCEPTANCE CRITERIA _____

INITIALS

5.1.28 Verify E41-F011, HPCI/RCIC Test Iso/PCV, strokes open to approximately ~~80%~~ 70 (E41-K820, V-display), after pump discharge pressure exceeds ~~200~~ 150 psig (E41-K820, P-display). TCN

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INITIALS

NOTE: If proper conditions do not develop, the following auto-actions will not be observed.

5.1.29 Verify the following:

1. E4150-F012, HPCI Pump Min Flow Vlv, auto opens, when:

   a. E41-R609, HPCI Pump Pressure Indicator, greater than or equal to 125 psig ❑

   b. E41-R613, HPCI Pump Flow Indicator, less than or equal to 650 gpm ❑

2. E4150-F012, HPCI Pump Min Flow Vlv, auto closes when E41-R613, HPCI Pump Flow Indicator, is greater than or equal to 1200 gpm. ❑

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INITIALS

d. Calculate corrected HPCI flow.

HPCI Flow

_____gpm x _____ = _____gpm
5.1.35.4.a 5.1.35.4.c Tech Spec and instrument tolerance ≥ ~~5150~~ gpm
≥ 5100 gpm

TCN

ACCEPTANCE CRITERIA _____
INITIALS

5. Pump Discharge Pressure (green pointer) (E41-R609)

Discharge Press	Tech Spec and Instrument Tolerance
_____psig	> = Rx Press plus 120 psi

6. Verify parameters meet acceptable limits. ❑

ACCEPTANCE CRITERIA_____
INITIALS

5.1.36 Record pressure parameters on Table 3.

Table 3

Local Pressure Parameters	Reading
Turbine Governor End Shaft Seal (E41-RA21) (Front End of HPCI Turbine, South Side)	inches
Governor Valve Stem Packing (E41-RA18) (Top of HPCI Turbine)	inches/psia
Governor Valve Stem Packing (E41-RA19) (Top of HPCI Turbine)	inches/psia
Turbine Coupling End Shaft Seal (E41-RA22) (Back End of HPCI Turbine, South Side)	inches
Barometric Condenser Pressure (E41-RA16) (At Barometric Condenser)	inches

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INITIALS