FORM 5326

INDIANA & MICHIGAN ELECTRIC COMPANY
DONALD C. COOK NUCLEAR PLANT

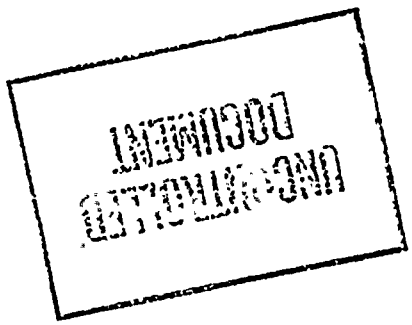
MAINTENANCE DEPARTMENT
CONTROLLED DOCUMENT
COPY NO. _____

PROCEDURE COVER SHEET

Procedure No. **1MHP2140.082.005
Revision No. 0

TITLE MAINTENANCE PROCEDURE FOR REPOWERING CONTAINMENT VALVES

SCOPE OF REVISION



SIGNATURES	REVISION NUMBER			
* * * * * *	ORIGINAL			
PREPARED BY				
DEPARTMENT HEAD APPROVAL				
INTERFACING DEPARTMENT HEAD CONCURRENCE	N/A			
QUALITY ASSURANCE SUPERVISOR APPROVAL				
PLANT NUCLEAR SAFETY COMMITTEE	#1911			
PLANT MANAGER APPROVAL				
APPROVAL DATE	5/22/86			
EFFECTIVE DATE	5/29/86			

LIST OF EFFECTIVE PAGES

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INDIANA & MICHIGAN ELECTRIC COMPANY
DONALD C. COOK NUCLEAR PLANT

1.0 TITLE Maintenanence Procedure for Repowering Containment Valves

2.0 OBJECTIVE

2.1 This procedure provides instructions for the installation of temporary power feeds to the following in-containment motor operated valves:

IMO-110	ICM-129
IMO-120	ICM-111
IMO-130	NMO-151
IMO-140	NMO-152
IMO-128	NMO-153

It is intended for use when the power cables for these valves have been fire damaged, resulting in a loss of operability of these valves.

3.0 REFERENCES

3.1 Equipment Control-Clearance Permit System - PMI-2110.

3.2 Plant Safety Manual, General Safety G.9.

3.3 Maintenance Procedure 12MHP5021.082.006.

3.4 10CFR50, Appendix R, Section III, L.5.

3.5 Control of Special Tools and Measuring and Test Equipment, MHI-5060.

4.0 PRECAUTIONS

4.1 Calibrated tools or measuring and test equipment shall not be used in a manner that would invalidate its calibration.

4.2 Fire doors and security doors will be required to remain open during implementation of this procedure. Appropriate fire watches and security guards must be posted while these doors remain open.

5.0 LIMITATIONS

5.1 The Maintenance Supervisor assigned the work is responsible for ensuring that the controlled copy of this procedure is the latest revision and includes all applicable approved change sheets.

5.2 The Maintenance Supervisor assigned the work is responsible for ensuring that the controlled copy of this procedure is maintained at the work site, if not in a radiological controlled area, and that required data is entered in the controlled copy. If the work to be performed is in a radiological controlled area, the controlled copy shall be maintained in the Supervisor's office and a controlled working copy shall be available at the job site.

NOTE: When a controlled working copy is being used at the work site, data should be entered as best as practical.

5.3 All steps which will not be performed, based on the scope of the work, shall be indicated by "N/A" in the appropriate signoff blank and initialed by the Maintenance Supervisor assigned the work, along with an explanation of why the step was not performed.

5.4 Section 7.0 of this procedure need not be performed in sequence. Steps within each Subsection shall be performed in sequence.

5.5 Attachments No. 1 thru 9 must be completed for Lifted Wires and Electrical Jumpers. Multiple copies of these Attachments may be used.

5.6 It is assumed that the equipment required by this procedure is available. Additionally, use of equipment required from the opposite (unaffected) unit should not impair the safe continued operation or shutdown of that unit.

6.0 INITIAL CONDITIONS

6.1 Maint. Supv. Identify, with assistance from Operations, the breaker to be used for a temporary power feed. Enter the breaker I.D.

Breaker I.D._____

_____ _____
Performed By Date

NOTE: Minimum breaker size 50A. Should be fed from either bus 21A, B, C or D.

6.2 Maint. Supv. Obtain Clearance Permits, as time allows, and record the Clearance Permit Nos. (See reference step nos.)

Equipment	Clearance Permit No.
Temp. Feed Breaker (7.1.1)	_____
Breaker 11A3 (7.2.1)	_____
Breaker 11B2 (7.3.1)	_____
Breaker 11C6 (7.4.1)	_____
Breaker 11D6 (7.5.1)	_____

6.3 Maint. Mech. Necessary tools and equipment which require periodic calibration must be checked to ensure that they have been calibrated within the specified time interval.

6.4 Maint. Supv. Verify that all materials which are known to be required are available prior to starting the work.

_____ _____
Verified By Date

6.5 Maint. Mech. Obtain Shift Supervisor approval to start the work via Shift Supervisor signature on applicable job order or a Clearance Permit, as applicable.

6.6 Maint. Mech. Notify the Unit Supervisors that work is to be started.

_____ _____
Unit 1 Supervisor Date

_____ _____
Unit 2 Supervisor Date

7.0 DETAILS

INDEX:

NOTE: C & I Procedure **1THP6030.IMP.305 has been prepared to provide temporary control for these valves. Implementation of this section shall be co-ordinated with the implementation of the C & I procedure.

7.1 Temporary Power Feed

This section may be performed in parallel with the section for the first MCC to be powered.

Steps in this section need not be performed sequentially, provided safety measures are observed.

7.1.1	Maint. Mech.	Request Operations to open and tag the temporary feed breaker identified in Step 6.1 with a Striped Tag clearance.
7.1.2	Maint. Mech.	Verify the temporary feed breaker has been opened and tagged, and the output side of the breaker is de-energized.
7.1.3	Maint. Mech.	Disconnect the power cables from the output side of the temporary feed breaker. Signoff on Attachment No. 9. Attach Temporary Modification I.D. Tags.
7.1.4	Maint. Supv.	Verify the power cables have been properly lifted from the temporary feed breaker. Signoff on Attachment No. 9.
7.1.5	Maint. Mech.	NOTE: This may require running the cable thru fire doors, security doors, and/or penetrations. Firewatches and guards shall be posted as needed. Penetrations shall be repaired per applicable sections of **12MHP5021.001.031. Route a 3 phase power cable from the temporary feed breaker to the E.S.S. MCC area in the Unit 1 4-KV switchgear room. The cable must be able to reach each of the 4 MCC's listed under 7.0.
7.1.6	Maint. Mech.	Make-up lugs on the cable ends per applicable sections of 12MHP5021.082.006.
7.1.7	Maint. Mech.	Make the connection at the temporary feed breaker and attach a phase rotation meter to the MCC end of the cable.
7.1.8	Maint. Mech.	Request Operations to close the temporary feed breaker to power up the meter and determine the phasing of the cable. A 1-2-3 phase connection should produce a clockwise rotation on the meter. Mark the cable for future reference.

7.1.9	Maint. Mech.	Request Operations to open the temporary feed breaker. Remove the phase rotation meter.

7.2 MCC EZC-A (IMO-140 & NMO-151)

7.2.1	Maint. Mech.	Verify breaker 11A3 has been racked out and tagged, and MCC EZC-A is de-energized.
7.2.2	Maint. Mech.	Remove cover(s) from the incoming feeder compartment(s).
7.2.3	Maint. Mech.	NOTE: MCC EZC-A has two incoming feeders, both supplied from breaker 11A3. Disconnect the feeder cables from the buses in the MCC. Enter data and sign-off on Attachment No. 1. Attach Temporary Modification I.D. Tags.
7.2.4	Maint. Supv.	Verify the feeders have been properly lifted. Sign-off on Attachment No. 1.
7.2.5	Maint. Mech.	Connect the temporary power cable to the buses using applicable sections of 12MHP5021.082.006. Take care to achieve proper phasing. Attach Temporary Modification I.D. Tags. Enter data and sign-off on Attachment No. 2.
7.2.6	Maint. Supv.	Verify the temporary power feed is properly installed. Sign-off on Attachment No. 2.
7.2.7	Maint. Mech.	Transfer control of the striped tag clearance on the temporary feed breaker to C&I via a Striped Tag permission slip.

The following step is to be implemented when C & I has completed control wiring modifications for the first valve to be operated:

7.2.8	Maint. Supv.	Jointly notify the S.S. that modifications to MCC EZC-A are complete.

Maint. Supv. _____ Date _____

C & I Supv. _____ Date _____

S.S. _____ Date _____

The following steps are to be implemented after all valves controlled from this MCC are closed or opened.

7.2.9	Maint. Mech.	Regain control of the striped tag clearance on the temporary feed breaker and request Operations to open the breaker.
7.2.10	Maint. Mech.	Verify the temporary feed breaker has been opened and tagged, and MCC EZC-A is de-energized.
7.2.11	Maint. Mech.	Disconnect the temporary feeder from the buses in the MCC. Remove temporary I.D. tags. Sign-off on Attachment No. 2.
7.2.12	Maint. Supv.	Verify the temporary feeder has been properly removed from MCC EZC-A. Sign-off on Attachment No. 2.

7.3 MCC EZC-B (IMO-120, IMO-128, & NMO-152)

7.3.1	Maint. Mech.	Verify breaker 11B2 has been racked out and tagged, and MCC EZC-B is de-energized.
7.3.2	Maint. Mech.	Remove cover(s) from the incoming feeder compartments.
7.3.3	Maint. Mech.	Disconnect the feeder cables from the buses in the MCC. Enter data and sign-off on Attachment No. 3. Attach Temporary Modification I.D. Tags.
7.3.4	Maint. Supv.	Verify the feeders have been properly lifted. Sign-off on Attachment No. 3.
7.3.5	Maint Mech.	Connect the temporary power cable to the buses using applicable sections of 12MHP5021.082.006. Take care to achieve proper phasing. Attach Temporary Modification I.D. Tags. Enter data and sign-off on Attachment No. 4.
7.3.6	Maint. Supv.	Verify the temporary power feed is properly installed. Sign-off on Attachment No. 4.
7.3.7	Maint. Mech.	Transfer control of the Striped Tag Clearance on the temporary feed breaker to C&I via a Striped Tag Permission Slip.

The following step is to be implemented when C & I has completed control wiring modifications for the first valve to be operated:

7.3.8	Maint. Supv.	Jointly notify the S.S. that modifications to MCC EZC-B are complete.

Maint. Supv. _____ Date _____

C & I Supv. _____ Date _____

S.S. _____ Date _____

The following steps are to be implemented after all valves controlled from this MCC are closed or opened.

7.3.9	Maint. Mech.	Regain control of the Striped Tag Clearance on the temporary feed breaker and request Operations to open the breaker.
7.3.10	Maint. Mech.	Verify the temporary feed breaker has been opened and tagged, and MCC EZC-B is de-energized.
7.3.11	Maint. Mech.	Disconnect the temporary feeder from the buses in the MCC. Remove temporary I.D. tags. Sign-off on Attachment No. 4.
7.3.12	Maint. Supv.	Verify the temporary feeder has been properly removed from MCC EZC-B. Sign-off on Attachment No. 4.

7.4 MCC EZC-C (IMO-110, ICM-129, & ICM-111)

7.4.1	Maint. Mech.	Verify breaker 11C6 has been racked out and tagged, and MCC EZC-C is de-energized.
7.4.2	Maint. Mech.	Remove cover(s) from the incoming feeder compartment(s).
7.4.3	Maint. Mech.	Disconnect the feeder cables from the buses in the MCC. Enter data and sign-off on Attachment No. 5. Attach Temporary Modification I.D. Tags.
7.4.4	Maint. Supv.	Verify the feeders have been properly lifted. Sign-off on Attachment No. 5.

7.4.5	Maint. Mech.	Connect the temporary power cable to the buses using applicable sections of 12MHP5021.082.006. Take care to achieve proper phasing. Attach Temporary Modification I.D. Tags. Enter data and sign-off on Attachment No. 6.
7.4.6	Maint. Supv.	Verify the temporary power feed is properly installed. Sign-off on Attachment No. 6.
7.4.7	Maint. Mech.	Transfer control of the Striped Tag Clearance on the temporary feed breaker to C&I via a Striped Tag Permission Slip.

The following step is to be implemented when C & I has completed control wiring modifications for the first valve to be operated:

7.4.8	Maint. Supv.	Jointly notify the S.S. that modifications to MCC EZC-C are complete.

_____ _____
Maint. Supv. Date

_____ _____
C & I Supv. Date

_____ _____
S.S. Date

The following steps are to be implemented after all valves controlled from this MCC are closed or opened.

7.4.9	Maint. Mech.	Regain control of the Striped Tag Clearance on the temporary feed breaker and request Operations to open the breaker.
7.4.10	Maint. Mech.	Verify the temporary feed breaker has been opened and tagged, and MCC EZC-C is de-energized.
7.4.11	Maint. Mech.	Disconnect the temporary feeder from the buses in the MCC. Remove temporary I.D. tags. Sign-off on Attachment No. 6.
7.4.12	Maint. Supv.	Verify the temporary feeder has been properly removed from the MCC EZC-C. Sign-off on Attachment No. 6.

7.5 MCC EZC-D (IMO-130 & NMO-153)

Step No.	To Be Performed By	Action
7.5.1	Maint. Mech.	Verify breaker 11D6 has been racked out and tagged, and MCC EZC-D is de-energized.
7.5.2	Maint. Mech.	Remove cover(s) from the incoming feeder compartment(s).
7.5.3	Maint. Mech.	Disconnect the feeder cables from the buses in the MCC. Enter data and sign-off on Attachment No. 7. Attach Temporary Modification I.D. Tags.
7.5.4	Maint. Supv.	Verify the feeders have been properly lifted. Sign-off on Attachment No. 7.
7.5.5	Maint. Mech.	Connect the temporary power cable to the buses using applicable sections of 12MHP5021.082.006. Take care to achieve proper phasing. Attach Temporary Modification I.D. Tags. Enter data and sign-off on Attachment No. 8.
7.5.6	Maint. Supv.	Verify the temporary power feed is properly installed. Sign-off on Attachment No. 8.
7.5.7	Maint. Mech.	Transfer control of the Striped Tag Clearance on the temporary feed breakers to C&I via a Striped Tag Permission Slip.

The following step is to be implemented when C & I has completed control wiring modifications for the first valve to be operated:

7.5.8	Maint. Supv.	Jointly notify the S.S. that modifications to MCC EZC-D are complete.

_____ _____
Maint. Supv. Date

_____ _____
C & I Supv. Date

_____ _____
S.S. Date

The following steps are to be implemented after all valves controlled from this MCC are closed or opened.

7.5.9	Maint. Mech.	Regain control of the Striped Tag Clearance on the temporary feed breaker and request Operations to open the breaker.
7.5.10	Maint. Mech.	Verify the temporary feed breaker has been opened and tagged, and MCC EZC-D is de-energized.
7.5.11	Maint. Mech.	Disconnect the temporary feeder from the buses in the MCC. Remove temporary I.D. tags. Sign-off on Attachment No. 8.
7.5.12	Maint. Supv.	Verify the temporary feeder has been properly removed from MCC EZC-D. Sign-off on Attachment No. 8.

8.0 RESTORATION

8.1 MCC EZC-A

8.1.1	Maint. Mech.	Visually inspect the power feed to MCC EZC-A. If any damage is found, proceed directly to Step 8.1.3. Note any observations. Notes:_____
8.1.2	Maint. Mech.	Perform a megger on the power cable per MHP5022.082.002. If the megger is unacceptable, contact Maint. Supv. for resolution. If the megger is acceptable, proceed directly to Step 8.1.6. _____ Megger Serial No. _____ Calib. Date/Due Date
8.1.3	Maint. Mech.	Remove the damaged cable and pull new cable per 12MHP5021.082.004.
8.1.4	Maint. Mech.	Install lugs on the new cable per 12MHP5021.082.006.

8.1.5	Maint. Mech.	Perform a megger on the new cable per MHP5022.082.002.

Megger Serial No. _____ Calib. Date/Due Date _____

8.1.6	Maint. Mech.	Verify breaker 11A3 is racked out and tagged, and MCC EZC-A is de-energized.
8.1.7	Maint. Mech.	Terminate power feeds at breaker 11A3 per 12MHP 5-21.082.006, if new cable was pulled.
8.1.8	Maint. Mech.	Terminate power feeds at the MCC, ensuring proper phasing is maintained, per 12MHP5021.082.006. Remove temporary I.D. Tags. Sign-off on Attachment No. 1.
8.1.9	Maint. Supv.	Verify power feed is properly terminated at the MCC. Sign-off on Attachment No. 1.
8.1.10	Maint. Supv.	Verify all lifted leads have been properly re-terminated and all electrical jumpers have been removed, and all Temporary Modification I.D. Tags have been removed. Sign-off on Attachments No. 1 and No. 2.
8.1.11	Maint. Supv.	Notify the Shift Supervisor that normal power feeds to MCC EZC-A are restored.

Performed By _____ Date _____

S.S. _____ Date _____

8.2 MCC EZC-B

8.2.1	Maint. Mech.	Visually inspect the power feed to MCC EZC-B. If any damage is found, proceed directly to Step 8.2.3. Note any observations.

Notes: _____

8.2.2	Maint. Mech.	Perform a megger on the power cable per MHP5022.082.002. If the megger is unacceptable, contact Maint. Supv. for resolution. If the megger is acceptable, proceed directly to Step 8.2.6.

Megger Serial No. _____ Calib. Date/Due Date _____

8.2.3	Maint. Mech.	Remove the damaged cable and pull new cable per 12MHP5021.082.004.
8.2.4	Maint. Mech.	Install lugs on the new cable per 12MHP5021.082.006.
8.2.5	Maint. Mech.	Perform a megger on the new cable per MHP5022.082.002.

Megger Serial No. _____ Calib. Date/Due Date _____

8.2.6	Maint. Mech.	Verify breaker 11B2 is racked out and tagged, and MCC EZC-B is de-energized.
8.2.7	Maint. Mech.	Terminate power feeds at breaker 11B2 per 12MHP5021.082.006, if new cable was pulled.
8.2.8	Maint. Mech.	Terminate power feeds at the MCC, ensuring proper phasing is maintained, per 12MHP5021.082.006. Remove temporary I.D. Tags. Sign-off on Attachment No. 3.
8.2.9	Maint. Supv.	Verify power feed is properly terminated at the MCC. Sign-off on Attachment No. 3.
8.2.10	Maint. Supv.	Verify all lifted leads have been properly re-terminated and all electrical jumpers have been removed, and all Temporary Modification I.D. Tags have been removed. Sign-off on Attachments No. 3 and No. 4.
8.2.11	Maint. Supv.	Notify the Shift Supervisor that normal power feed to MCC EZC-B is restored.

Performed By _____ Date _____

S.S. _____ Date _____

8.3 MCC EZC-C

8.3.1	Maint. Mech.	Visually inspect the power feed to MCC EZC-C. If any damage is found, proceed directly to Step 8.3.3. Note any observations. Notes:_____
8.3.2	Maint. Mech.	Perform a megger on the power cable per MHP5022.082.002. If the megger is unacceptable, contact Maint. Supv. for resolution. If the megger is acceptable, proceed directly to Step 8.3.6. _____ _____ Megger Serial No. Calib. Date/Due Date
8.3.3	Maint. Mech.	Remove the damaged cable and pull new cable per 12MHP5021.082.004.
8.3.4	Maint. Mech.	Install lugs on the new cable per 12MHP5021.082.006.
8.3.5	Maint. Mech.	Perform a megger on the new cable per MHP5022.082.002. _____ _____ Megger Serial No. Calib. Date/Due Date
8.3.6	Maint. Mech.	Verify breaker 11C6 is racked out and tagged, and MCC EZC-A is de-energized.
8.3.7	Maint. Mech.	Terminate power feeds at breaker 11C6 per 12MHP5021.082.006, if new cable was pulled.
8.3.8	Maint Mech.	Terminate power feeds at the MCC, ensuring proper phasing is maintained, per 12MHP5021.082.006. Remove temporary I.D. Tags. Sign-off on Attachment No. 5.
8.3.9	Maint. Supv.	Verify power feed is properly terminated at the MCC. Sign-off on Attachment No. 5.

8.3.10	Maint. Supv.	Verify all lifted leads have been properly re-terminated and all electrical jumpers have been removed, and all Temporary Modification I.D. Tags have been removed. Sign-off on Attachments No. 5 and No. 6.
8.3.11	Maint. Supv.	Notify the Shift Supervisor that normal power feed to MCC EZC-C is restored.

_____ _____
Performed By Date

_____ _____
S.S. Date

8.4 MCC EZC-D

8.4.1	Maint. Mech.	Visually inspect the power feed to MCC EZC-D. If any damage is found, proceed directly to Step 8.4.3. Note any observations.

Notes: _____
_____
_____

8.4.2	Maint. Mech.	Perform a megger on the power cable per MHP5022.082.002. If the megger is unacceptable, contact Maint. Supv. for resolution. If the megger is acceptable, proceed directly to Step 8.4.6.

_____ _____
Megger Serial No. Calib. Date/Due Date

8.4.3	Maint. Mech.	Remove the damaged cable and pull new cable per 12MHP5021.082.004.
8.4.4	Maint. Mech.	Install lugs on the new cable per 12MHP5021.082.006.
8.4.5	Maint. Mech.	Perform a megger on the new cable per MHP5022.082.002.

_____ _____
Megger Serial No. Calib. Date/Due Date

8.4.6	Maint. Mech.	Verify breaker 11D6 is racked out and tagged, and MCC EZC-D is de-energized.

8.4.7	Maint. Mech.	Terminate power feeds at breaker 11D6 per 12MHP5021.082.006, if new cable was pulled.
8.4.8	Maint. Mech.	Terminate power feeds at the MCC, ensuring proper phasing is maintained, per 12MHP5021.082.006. Remove temporary I.D. Tags. Sign-off on Attachment No. 7.
8.4.9	Maint. Supv.	Verify power feed is properly terminated at the MCC. Sign-off on Attachment No. 7.
8.4.10	Maint. Supv.	Verify all lifted leads have been properly re-terminated and all electrical jumpers have been removed, and all Temporary Modification I.D. Tags have been removed. Sign-off on Attachments No. 7 and No. 8.
8.4.11	Maint. Supv.	Notify the Shift Supervisor that normal power feed to MCC EZC-D is restored.

_____ _____

Performed By Date

_____ _____

S.S. Date

8.5 Temporary Feed Breaker

8.5.1	Maint. Mech.	Verify the breaker is opened and tagged, and the output side of the breaker is de-energized.
8.5.2	Maint. Mech.	Determinate the temporary power feed at the breaker.
8.5.3	Maint. Mech.	Reterminate the power cables to the output side of the breaker per applicable sections of 12MHP5021.082.006. Remove temporary I.D. tags. Signoff on Attachment No. 9.
8.5.4	Maint. Supv.	Verify the power cables are properly terminated at the breaker. Signoff on Attachment No. 9.
8.5.5	Maint. Supv.	Verify all lifted leads have been properly re-terminated and all Temporary Modification I.D. Tags have been removed. Signoff on Attachment No. 9.

8.5.6	Maint. Mech.	NOTE: Any fire barrier which was opened shall be repaired after the cable is removed. Remove the temporary power feed.

9.0 ACCEPTANCE CRITERIA

9.1 Installation of the temporary power feeds shall be considered acceptable provided work is completed per this procedure and the containment valves functioned properly.

9.2 Final acceptance shall be achieved upon restoration of the normal power feeds to the MCCs and to the breaker used for the temporary feed breaker.

9.3 In the event that jumpers are not removed and/or lifted leads are not restored, a PNSRC evaluation shall be performed and the signoff completed on the appropriate attachment(s).

10.0 DATA COLLECTION

10.1	Maint. Supv.	Review entire procedure for completeness.

_____ _____
Maint. Supv. Date

10.2	Maint. Supt.	Review of entire procedure.

_____ _____
Maint. Supt. Date

LIFTED WIRE FORM

MAINTENANCE DEPARTMENT
CONTROLLED DOCUMENT
COPY NO. _____

UNIT: 1
LOCATION: 4KV SWITCHGEAR ROOM
EQUIPMENT AFFECTED: MCC EZC-A

7.2.3 & 8.1.8 ITEM #	TERM. BLOCK & TERMINAL #	CABLE #/COMPONENT DESCRIPTION	LIFTED BY	LIFTED DATE	LANDED BY	LANDED DATE

7.2.4 THE ABOVE WIRES HAVE BEEN CORRECTLY LIFTED.
ITEM # _____ VERIFIED BY _____ DATE _____

8.1.9 PARTIAL RESTORATION: THE FOLLOWING WIRES HAVE BEEN RESTORED TO DESIGN CONFIGURATION.

ITEM # _____ VERIFIED BY _____ DATE _____

8.1.10 FINAL RESTORATION: ALL WIRES WHICH WERE LIFTED HAVE BEEN RESTORED TO DESIGN CONFIGURATION AND ALL TAGS HAVE BEEN REMOVED.

VERIFIED BY _____ DATE _____

9.3 PNSRC REVIEW: NOT ALL THE LIFTED WIRES HAVE BEEN RESTORED AND A 10 CFR 50.59 SAFETY EVALUATION HAS BEEN PERFORMED AND APPROVED BY THE PNSRC PER PMI-1040.

PNSRC REVIEW BY _____ PNSRC MTG _____ DATE _____

IF RESTORED, ATTACH THIS FORM TO THE PROCEDURE OR JOB ORDER.
IF NOT, PLACE THIS FORM IN CONTROL ROOM BOOK.

ELECTRICAL JUMPER FORM

MAINTENANCE DEPARTMENT
CONTROLLED DOCUMENT
COPY NO. _____

UNIT: 1
LOCATION: 4KV SWITCHGEAR ROOM
EQUIPMENT AFFECTED: MCC EZC-A

7.2.5 & 7.2.11 ITEM #	JUMPER FROM TERMINAL # AND/OR CONTACT LOCATION	JUMPER TO TERMINAL # AND/OR CONTACT LOCATION	INSTALLED BY	INSTALLED DATE	REMOVED BY	REMOVED DATE

7.2.6 THE ABOVE JUMPERS HAVE BEEN CORRECTLY INSTALLED.
ITEM # _____ VERIFIED BY _____ DATE _____

7.2.12 PARTIAL RESTORATION: THE FOLLOWING JUMPERS HAVE BEEN REMOVED.

ITEM # _____ VERIFIED BY _____ DATE _____

8.1.10 FINAL RESTORATION: ALL JUMPERS WHICH WERE INSTALLED AND ALL TAGS HAVE BEEN REMOVED AND THE CIRCUIT RESTORED TO DESIGN CONFIGURATION.

VERIFIED BY _____ DATE _____

9.3 PNSRC REVIEW: NOT ALL THE JUMPERS HAVE BEEN REMOVED AND A 10 CFR 50.59 SAFETY EVALUATION HAS BEEN PERFORMED AND APPROVED BY THE PNSRC PER PMI-1040.

PNSRC REVIEW BY _____ PNSRC MTG _____ DATE _____

IF RESTORED, ATTACH THIS FORM TO THE PROCEDURE OR JOB ORDER.
IF NOT, PLACE THIS FORM IN CONTROL ROOM BOOK.

LIFTED WIRE FORM

MAINTENANCE DEPARTMENT
CONTROLLED DOCUMENT
COPY NO. _____

UNIT: 1
LOCATION: 4KV SWITCHGEAR ROOM
EQUIPMENT AFFECTED: MCC EZC-B

7.3.3 & 8.2.8 ITEM #	TERM. BLOCK & TERMINAL #	CABLE #/COMPONENT DESCRIPTION	LIFTED BY	LIFTED DATE	LANDED BY	LANDED DATE

7.3.4 THE ABOVE WIRES HAVE BEEN CORRECTLY LIFTED.
ITEM # _____ VERIFIED BY _____ DATE _____

8.2.9 PARTIAL RESTORATION: THE FOLLOWING WIRES HAVE BEEN RESTORED TO DESIGN CONFIGURATION.

ITEM # _____ VERIFIED BY _____ DATE _____

8.2.10 FINAL RESTORATION: ALL WIRES WHICH WERE LIFTED HAVE BEEN RESTORED TO DESIGN CONFIGURATION AND ALL TAGS HAVE BEEN REMOVED.

VERIFIED BY _____ DATE _____

9.3 PNSRC REVIEW: NOT ALL THE LIFTED WIRES HAVE BEEN RESTORED AND A 10 CFR 50.59 SAFETY EVALUATION HAS BEEN PERFORMED AND APPROVED BY THE PNSRC PER PMI-1040.

PNSRC REVIEW BY _____ PNSRC MTG _____ DATE _____

IF RESTORED, ATTACH THIS FORM TO THE PROCEDURE OR JOB ORDER.
IF NOT, PLACE THIS FORM IN CONTROL ROOM BOOK.

ELECTRICAL JUMPER FORM

MAINTENANCE DEPARTMENT
CONTROLLED DOCUMENT
COPY NO. _____

UNIT: 1
LOCATION: 4KV SWITCHGEAR ROOM
EQUIPMENT AFFECTED: MCC EZC-B

7.3.5 & 7.3.11 ITEM #	JUMPER FROM TERMINAL # AND/OR CONTACT LOCATION	JUMPER TO TERMINAL # AND/OR CONTACT LOCATION	INSTALLED BY	INSTALLED DATE	REMOVED BY	REMOVED DATE

7.3.6 THE ABOVE JUMPERS HAVE BEEN CORRECTLY INSTALLED.
ITEM # _____ VERIFIED BY _____ DATE _____

7.3.12 PARTIAL RESTORATION: THE FOLLOWING JUMPERS HAVE BEEN REMOVED.

ITEM # _____ VERIFIED BY _____ DATE _____

8.2.10 FINAL RESTORATION: ALL JUMPERS WHICH WERE INSTALLED AND ALL TAGS HAVE BEEN REMOVED AND THE CIRCUIT RESTORED TO DESIGN CONFIGURATION.

VERIFIED BY _____ DATE _____

9.3 PNSRC REVIEW: NOT ALL THE JUMPERS HAVE BEEN REMOVED AND A 10 CFR 50.59 SAFETY EVALUATION HAS BEEN PERFORMED AND APPROVED BY THE PNSRC PER PMI-1040.

PNSRC REVIEW BY _____ PNSRC MTG _____ DATE _____

IF RESTORED, ATTACH THIS FORM TO THE PROCEDURE OR JOB ORDER.
IF NOT, PLACE THIS FORM IN CONTROL ROOM BOOK.

LIFTED WIRE FORM

MAINTENANCE DEPARTMENT
CONTROLLED DOCUMENT
COPY NO. _____

UNIT: 1
LOCATION: 4KV SWITCHGEAR ROOM
EQUIPMENT AFFECTED: MCC EZC-C

7.4.3 & 8.3.8 ITEM #	TERM. BLOCK & TERMINAL #	CABLE #/COMPONENT DESCRIPTION	LIFTED BY	LIFTED DATE	LANDED BY	LANDED DATE

7.4.4 THE ABOVE WIRES HAVE BEEN CORRECTLY LIFTED.
ITEM # _____ VERIFIED BY _____ DATE _____

8.3.9 PARTIAL RESTORATION: THE FOLLOWING WIRES HAVE BEEN RESTORED TO DESIGN CONFIGURATION.

ITEM # _____ VERIFIED BY _____ DATE _____

8.3.10 FINAL RESTORATION: ALL WIRES WHICH WERE LIFTED HAVE BEEN RESTORED TO DESIGN CONFIGURATION AND ALL TAGS HAVE BEEN REMOVED.

VERIFIED BY _____ DATE _____

9.3 PNSRC REVIEW: NOT ALL THE LIFTED WIRES HAVE BEEN RESTORED AND A 10 CFR 50.59 SAFETY EVALUATION HAS BEEN PERFORMED AND APPROVED BY THE PNSRC PER PMI-1040.

PNSRC REVIEW BY _____ PNSRC MTG _____ DATE _____

IF RESTORED, ATTACH THIS FORM TO THE PROCEDURE OR JOB ORDER.
IF NOT, PLACE THIS FORM IN CONTROL ROOM BOOK.

ELECTRICAL JUMPER FORM

MAINTENANCE DEPARTMENT
CONTROLLED DOCUMENT
COPY NO. _____

UNIT: 1
LOCATION: 4KV SWITCHGEAR ROOM
EQUIPMENT AFFECTED: MCC EZC-C

7.4.5 & 7.4.11 ITEM #	JUMPER FROM TERMINAL # AND/OR CONTACT LOCATION	JUMPER TO TERMINAL # AND/OR CONTACT LOCATION	INSTALLED BY	INSTALLED DATE	REMOVED BY	REMOVED DATE

7.4.6 THE ABOVE JUMPERS HAVE BEEN CORRECTLY INSTALLED.
ITEM # _____ VERIFIED BY _____ DATE _____

7.4.12 PARTIAL RESTORATION: THE FOLLOWING JUMPERS HAVE BEEN REMOVED.

ITEM # _____ VERIFIED BY _____ DATE _____

8.3.10 FINAL RESTORATION: ALL JUMPERS WHICH WERE INSTALLED AND ALL TAGS HAVE BEEN REMOVED AND THE CIRCUIT RESTORED TO DESIGN CONFIGURATION.

VERIFIED BY _____ DATE _____

9.3 PNSRC REVIEW: NOT ALL THE JUMPERS HAVE BEEN REMOVED AND A 10 CFR 50.59 SAFETY EVALUATION HAS BEEN PERFORMED AND APPROVED BY THE PNSRC PER PMI-1040.

PNSRC REVIEW BY _____ PNSRC MTG _____ DATE _____

IF RESTORED, ATTACH THIS FORM TO THE PROCEDURE OR JOB ORDER.
IF NOT, PLACE THIS FORM IN CONTROL ROOM BOOK.

LIFTED WIRE FORM

MAINTENANCE DEPARTMENT
CONTROLLED DOCUMENT
COPY NO. _____

UNIT: 1
LOCATION: 4KV SWITCHGEAR ROOM
EQUIPMENT AFFECTED: MCC EZC-D

7.5.3 & 8.4.8 ITEM #	TERM. BLOCK & TERMINAL #	CABLE #/COMPONENT DESCRIPTION	LIFTED BY	LIFTED DATE	LANDED BY	LANDED DATE

7.5.4 THE ABOVE WIRES HAVE BEEN CORRECTLY LIFTED.
ITEM # _____ VERIFIED BY _____ DATE _____

8.4.9 PARTIAL RESTORATION: THE FOLLOWING WIRES HAVE BEEN RESTORED TO DESIGN CONFIGURATION.

ITEM # _____ VERIFIED BY _____ DATE _____

8.4.10 FINAL RESTORATION: ALL WIRES WHICH WERE LIFTED HAVE BEEN RESTORED TO DESIGN CONFIGURATION AND ALL TAGS HAVE BEEN REMOVED.

VERIFIED BY _____ DATE _____

9.3 PNSRC REVIEW: NOT ALL THE LIFTED WIRES HAVE BEEN RESTORED AND A 10 CFR 50.59 SAFETY EVALUATION HAS BEEN PERFORMED AND APPROVED BY THE PNSRC PER PMI-1040.

PNSRC REVIEW BY _____ PNSRC MTG _____ DATE _____

IF RESTORED, ATTACH THIS FORM TO THE PROCEDURE OR JOB ORDER.
IF NOT, PLACE THIS FORM IN CONTROL ROOM BOOK.

ELECTRICAL JUMPER FORM

MAINTENANCE DEPARTMENT
CONTROLLED DOCUMENT
COPY NO. _____

UNIT: 1
LOCATION: 4KV SWITCHGEAR ROOM
EQUIPMENT AFFECTED: MCC EZC-D

7.5.5 & 7.5.11 ITEM #	JUMPER FROM TERMINAL # AND/OR CONTACT LOCATION	JUMPER TO TERMINAL # AND/OR CONTACT LOCATION	INSTALLED BY	INSTALLED DATE	REMOVED BY	REMOVED DATE

7.5.6 THE ABOVE JUMPERS HAVE BEEN CORRECTLY INSTALLED.
ITEM # _____ VERIFIED BY _____ DATE _____

7.5.12 PARTIAL RESTORATION: THE FOLLOWING JUMPERS HAVE BEEN REMOVED.

ITEM # _____ VERIFIED BY _____ DATE _____

8.4.10 FINAL RESTORATION: ALL JUMPERS WHICH WERE INSTALLED AND ALL TAGS HAVE BEEN REMOVED AND THE CIRCUIT RESTORED TO DESIGN CONFIGURATION.

VERIFIED BY _____ DATE _____

9.3 PNSRC REVIEW: NOT ALL THE JUMPERS HAVE BEEN REMOVED AND A 10 CFR 50.59 SAFETY EVALUATION HAS BEEN PERFORMED AND APPROVED BY THE PNSRC PER PMI-1040.

PNSRC REVIEW BY _____ PNSRC MTG _____ DATE _____

IF RESTORED, ATTACH THIS FORM TO THE PROCEDURE OR JOB ORDER.
IF NOT, PLACE THIS FORM IN CONTROL ROOM BOOK.

LIFTED WIRE FORM

MAINTENANCE DEPARTMENT
CONTROLLED DOCUMENT
COPY NO. _____

UNIT: 1
LOCATION:
EQUIPMENT AFFECTED:

7.1.3 & 8.5.3 ITEM #	TERM. BLOCK & TERMINAL #	CABLE #/COMPONENT DESCRIPTION	LIFTED BY	LIFTED DATE	LANDED BY	LANDED DATE

7.1.4 THE ABOVE WIRES HAVE BEEN CORRECTLY LIFTED.
ITEM # _____ VERIFIED BY _____ DATE _____

8.5.4 PARTIAL RESTORATION: THE FOLLOWING WIRES HAVE BEEN RESTORED TO DESIGN CONFIGURATION.

ITEM # _____ VERIFIED BY _____ DATE _____

8.5.5 FINAL RESTORATION: ALL WIRES WHICH WERE LIFTED HAVE BEEN RESTORED TO DESIGN CONFIGURATION AND ALL TAGS HAVE BEEN REMOVED.

VERIFIED BY _____ DATE _____

9.3 PNSRC REVIEW: NOT ALL THE LIFTED WIRES HAVE BEEN RESTORED AND A 10 CFR 50.59 SAFETY EVALUATION HAS BEEN PERFORMED AND APPROVED BY THE PNSRC PER PMI-1040.

PNSRC REVIEW BY _____ PNSRC MTG _____ DATE _____

IF RESTORED, ATTACH THIS FORM TO THE PROCEDURE OR JOB ORDER.
IF NOT, PLACE THIS FORM IN CONTROL ROOM BOOK.