



Commonwealth Edison  
1400 Opus Place  
Downers Grove, Illinois 60515

November 29, 1990

U.S. Nuclear Regulatory Commission  
ATTN: DOCUMENT CONTROL DESK  
Washington, D.C. 20555

Subject: Quad Cities Station Units 1 and 2  
Status of NRC Bulletin 88-10  
NRC Docket Nos. 50-254/265

- References:
- (a) NRC Bulletin 88-10,  
dated November 22, 1988.
  - (b) M. Richter (CECo) letter to U.S. NRC,  
dated April 4, 1989.
  - (c) M. Richter (CECo) letter to U.S. NRC,  
dated July 7, 1989.
  - (d) NRC Bulletin 88-10 Supplement 1,  
dated August 3, 1989.
  - (e) M. Richter (CECo) letter to U.S. NRC,  
dated September 13, 1989.
  - (f) M. Richter (CECo) letter to U.S. NRC,  
dated November 9, 1989.

Dear Sir:

NRC Bulletin 88-10, Reference (a), requested that actions be taken to provide reasonable assurance that molded-case circuit breakers (MCCB) purchased for use in safety-related applications without verifiable traceability to the circuit breaker manufacturer (CBM) perform their safety function. In Reference (e), Commonwealth Edison Company (CECo) reported that both units at Quad Cities Station had non-traceable MCCBs installed in safety-related applications, and that these breakers would be replaced (by traceable breakers) to complete Bulletin Action 5. For both units, an alternative schedule was presented for the replacement of the non-traceable MCCBs. CECo indicated that breaker replacement would be completed by the end of the second refueling outage beginning after March 1, 1989, presently scheduled for November 1990 for Quad Cities Unit 1 and December 1991 for Quad Cities Unit 2. This letter provides a status report on the breaker replacements to date, and delineates those actions being performed to complete the breaker replacements, for both units.

Quad Cities Unit 1

Attachment 1 lists the model number, location and application of the 16 non-traceable MCCB originally specified in Reference (b) for Quad Cities Unit 1 remaining to be replaced. In addition Attachment 1 includes 4 additional non-traceable MCCB which were installed in late 1989 due to the

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unavailability of traceable MCCBs. It is expected that each of these 20 non-traceable MCCBs will be replaced during the upcoming Unit 1 refueling outage. The four Unit 1 non-traceable breakers which have been previously replaced are listed in Attachment 2.

#### Quad Cities Unit 2

Attachment 3 lists the results of non-traceable MCCB replacement during the recent Unit 2 refueling outage at Quad Cities Station. Of the 34 Unit 2 non-traceable MCCBs described in the Quad Cities Unit 2 section of Reference (e), 30 have been replaced. It should be noted that the 4 breakers denoted with asterisks in Attachments 2 and 3 were reported in Reference (e) as single MCCBs. These instead should indicate two breakers at each location, one of which was older than the scope of the bulletin but otherwise identical to the one reported. In each case only one breaker required replacement; however, it was decided to replace both breakers to ensure their traceability and thus increase by four the total number of breakers requiring replacement. Attachment 4 lists the remaining eight non-traceable MCCBs reported in the Quad Cities Unit 2 section of Reference (e). It is expected that all six of the Unit 1 breakers listed in Attachment 4 will be replaced during the upcoming Unit 1 outage. The two remaining Unit 2 breakers listed in Attachment 4 will be replaced as soon as operational conditions and equipment availability permit.

The traceable replacement breakers for Units 1 and 2 are being procured safety-related, and meet the criteria of Bulletin Action 7.

CECo will notify the NRC following completion of the breaker replacements for Units 1 and 2. This will document the completion of Bulletin Action 5 for Quad Cities Station.

Please direct any questions that you may have concerning this response to this office.

Respectfully,



D.L. Taylor  
Generic Issues Administrator

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Attachments: 1,2 - Status of MCCB Replacement for Quad Cities Unit 1.  
3,4 - Status of MCCB Replacement for Quad Cities Unit 2.

cc: A.B. Davis - Regional Administrator, Region III  
Senior Resident Inspector - Quad Cities Station  
L. Olshan - NRR Project Manager

## ATTACHMENT 1

## INSTALLED NON-TRACEABLE BREAKERS ON UNIT ONE

INSTALLED SI #	NEW SI #	MODEL #	LOCATION	APPLICATION
501H52	789E53	TEC36015	MCC 19-4, D1	MO-1-1001-36B, RHR 1B Torus Dump Valve.
502G40	789D53	TEC36007	MCC 18-1A, C4	MO-1-220-4, MSL to Condenser
503D21	789E53	TEC36015	MCC 18-1B, C1	MO-1-1001-34A, RHR 1A Torus Spray
503D21	789E53	TEC36015	MCC 19-4, C1	MO-1-1001-34B, RHR 1B Torus Spray
503D22	789C53	TEC36003	MCC 18-1A, A3	MO-1-220-90A, 1A MSL Drain Valve
503D22	789C53	TEC36003	MCC 18-1A, B1	MO-1-220-90B, 1B MSL Drain Valve
503D22	789C53	TEC36003	MCC 18-1A, J1	MO-1-220-90D, 1D MSL Drain Valve
503D22	789C53	TEC36003	MCC 18/19-5, C2	MO-1-202-9A, 1A Recirc X-tie Bypass Valve.
503D31	790F21	THQL1115	18-1A-1, B3	Bkr. #1, RCIC Gland Seal Vac. Pmp.
503D31	790F21	THQL1115	18-1A-1, B3	Bkr. #15, ARM Sys. Alarm
790G21	790G21	THQL1120	18-1A-1, B3	Bkr. #18, H <sub>2</sub> -O <sub>2</sub> DW Heat Tracing
790G21	790G21	THQL1120	18-1A-1, B3	Bkr. #23, H <sub>2</sub> -O <sub>2</sub> Torus Heat Tracing.
790G21	790G21	THQL1120	19-1-1, C1	Bkr. #18, H <sub>2</sub> -O <sub>2</sub> DW Heat Trace
790G21	790G21	THQL1120	19-1-1, C1	BKR. #20, H <sub>2</sub> -O <sub>2</sub> Torus Heat Tracing.
N/A	794E04	THED136015WL	18-1A, H3	H <sub>2</sub> -O <sub>2</sub> Sample Pump
N/A	794E04	THED136015WL	19-1, E4	H <sub>2</sub> -O <sub>2</sub> Sample Pump
507C81	791G88	FA3035	MCC 1B, COMP 01	RCIC Cooling Water Lube Oil Cooler and MO-1-1301-62
507C81	791G88	FA3035M	MCC 1B, COMP M1	MO-1-220-2, MSL Drain Outboard Isolation Valve
502G40	789D53	TEC36007	MCC 19-1, E3	MO-1-1201-80, RWCU to "A" FW Line
507C82	791H88	FA3190M	MCC 1A, J1	MO-1-2301-36, HPCI Upstm Suction from Torus

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## ATTACHMENT 2

## NON-TRACEABLE BREAKERS REPLACED ON UNIT ONE

<u>INSTALLED</u>	<u>NEW</u>			
<u>SI #</u>	<u>SI #</u>	<u>MODEL #</u>	<u>LOCATION</u>	<u>APPLICATION</u>
500G54	789B51	TED134060	18-2, C1	125V Battery Charger 1A.
503D21	789E53	TEC36015	MCC 19-1-1, A3	UNASSIGNED
503D22	789C53	TEC36003	MCC 18-1A, B1	SPARE
503D22	789C53	TEC36003	MCC 18/19-5, B3	SPARE

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ATTACHMENT 3

INSTALLED NON-TRACEABLE BREAKERS REPLACED  
DURING UNIT TWO CYCLE 10 REFUEL OUTAGE

<u>INSTALLED SI#</u>	<u>NEW SI#</u>	<u>MODEL #</u>	<u>LOCATION</u>	<u>APPLICATION</u>
767A57	791E89	P1515	PNL 2252--81A	Comsip Delphi Panel, H <sub>2</sub> &O <sub>2</sub> Monitor Instruments & Controls 2A
767A57	791E89	P1515	PNL 2252-81B	Comsip Delphi Panel, H <sub>2</sub> &O <sub>2</sub> Monitor Instruments & Controls 2B
* NA	791F89	QOU120	PNL 2252-102 (2 Breakers)	Heat Trace-Drywell & Suppression Chamber Sample Lines 2A (Unit 2 Div I)
* NA	791F89	QOU120	PNL 2252-103 (2 Breakers)	Heat Trace-Drywell & Suppression Chamber Sample Lines 2B (Unit 2 Div II)
500F22	789F52	TFJ236125	MCC 28/29-5,C1	MO 2-1001-28A, 2A RHR Outboard Injection Isolation Valve
500F22	789F52	TFJ236125	MCC 28/29-5,F1	MO 2-1001-28B, 2B RHR Outboard Injection Isolation Valve
500F22	789F52	TFJ236125	MCC 29-3,E4	Main Turbine Turning Gear Oil Pump
500G54	789B51	TED134060	MCC 29-2,D2	125 v Battery Charger #2
502G39	789C53	TEC36003	MCC 28-1A,E1	MO 2-302-10, CRD Cooling Water Pressure Control Valve
502G39	789C53	TEC36003	MCC 28-1A,F4	MO 2-220-90C, 2C MSL Drain Valve
502G39	789C53	TEC36003	MCC 28-1A,G3	MO 2-220-90D, 2D MSL Drain Valve
502G40	789D53	TEC36007	MCC 28-1B,B4	MO 2-1001-5A, 2A RHRSW Heat Exchanger FCV
502G40	789D53	TEC36007	MCC 29-1,H3	MO 2-1001-186B, 2B RHRSW Heat Exchanger Reverse Inlet Valve

ATTACHMENT 3  
(continued)

INSTALLED SI#	NEW SI#	MODEL #	LOCATION	APPLICATION
503D22	789C53	TEC36003	MCC 28-1A-1,D1	Spare
503D22	789C53	TEC36003	MCC 28-1A-1,D3	Unassigned
503D22	789C53	TEC36003	MCC 28/29-5,C2	MO 2-202-9A, 2A Recirc Crosstie Bypass Valve
503D22	789C53	TEC36003	MCC 28/29-5,F2	MO 2-202-9B, 2B Recirc Crosstie Bypass Valve
503D22	789C53	TEC36003	MCC 29-1-1,B2	Unassigned
503E55	789G53	TEC36050	MCC 28-1B,C2	MO 2-1001-50, RHR Shutdown Cooling Inboard Isolation Valve
503E55	789G53	TEC36050	MCC 28/29-5,B4	MO 2-1001-29A, 2A RHR Inboard Injection Isolation Valve
503E55	789G53	TEC36050	MCC 28/29-5,E2	MO 2-202-5B, 2B Recirc Pump 2B Discharge Valve.
503E55	789G53	TEC36050	MCC 28/29-5,E4	MO 2-1001-29B, 2B RHR Inboard Injection Isolation Valve
503E55	789G53	TEC36050	MCC 29-4,A4	1/2-7506A SBT Fan
770D04	789C51	TED136070	MCC 29-4,E2	1/2-7503A SBT Heater
790G21	789G21	THQL1120	MCC 28-1A-1,B3	H <sub>2</sub> &O <sub>2</sub> Monitor Sys Suppression Chamber Line Heat Trace
790G21	790G21	THQL1120	MCC 28-1A-1,B3	H <sub>2</sub> &O <sub>2</sub> Monitoring DW Line Heat Trace
790G21	790G21	THQL1120	MCC 29-1-1,C1	Breaker 21, H <sub>2</sub> &O <sub>2</sub> Monitoring DW Line Heat Trace
790G21	790G21	THQL1120	MCC 29-1-1,C1	Breaker 24, H <sub>2</sub> &O <sub>2</sub> Monitor Sys. Suppression Chbr. Line Heat Trace

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## ATTACHMENT 4

INSTALLED NON-TRACEABLE BREAKERS NOT REPLACED  
DURING UNIT TWO CYCLE 10 REFUEL OUTAGE

<u>INSTALLED</u> <u>SI#</u>	<u>NEW</u> <u>SI#</u>	<u>MODEL</u> <u>#</u>	<u>UNIT</u>	<u>LOCATION</u>	<u>APPLICATION</u>
767A57	791E89	P1515	1	PNL 2251-81A	Comsip Delphi Panel, H <sub>2</sub> &O <sub>2</sub> Monitor Instruments & Controls 1A
767A57	791E89	P1515	1	PNL 2251-81B	Comsip Delphi Panel, H <sub>2</sub> &O <sub>2</sub> Monitor Instruments & Controls 1B
* NA	791F89	QOU120	1	PNL 2251-102 (2 Breakers)	Heat Trace-Drywell & Suppression Chamber Sample Lines 1A (Unit 1 Div I)
* NA	791F89	QOU120	1	PNL 2251-103 (2 Breakers)	Heat Trace-Drywell & Suppression Chamber Sample Lines 1B (Unit 1 Div II)
NA	791G96	THED136015	2	MCC 28-1A, Cub. G4	Post LOCA Containment H <sub>2</sub> &O <sub>2</sub> Monitor Sample Pump 2A
NA	791G96	THED136015	2	MCC 29-1A, Cub. C2A	Post LOCA Containment H <sub>2</sub> &O <sub>2</sub> Monitor Sample Pump 2B

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