

LICENSEE: NORTHERN STATES POWER CO.
 SITE: MONTICELLO 1 EN NUMBER: 26988
 DOCKET: 05000263 EVENT DATE: 03-24-94
 RX TYPE: BWR EVENT TIME: 14:30
 VENDORS: GE-3 NOTIFY DATE: 03-24-94
 EMERGENCY CLASS: N/A REGION: 3 STATE: MN TIME: 15:39
 OPS OFFICER: WILLIAM HUFFMAN
 10 CFR SECTION: NONR OTHER UNSPEC REQMNT
 UNIT SCRAM RX INIT INITIAL MODE CURR CURRENT MODE
 CODE CRIT PWR PWR
 1 N Y 100 POWER OPERATION 100 POWER OPERATION

REPORT OF POTENTIAL PROBLEMS ASSOCIATED WITH KLOCKNER MOELLER (K/M) MOLDED CASE CIRCUIT BREAKERS.

THE FOLLOWING IS THE TEXT OF A FACSIMILE PROVIDED BY THE LICENSEE DESCRIBING THE PROBLEM:

"WHILE PERFORMING ROUTINE TESTING OF A CLASS 1E K/M MOLDED CASE CIRCUIT BREAKER (MODEL # ZM6-33-200.0Bi-CNA PURCHASED IN 1982), IT WAS OBSERVED THAT ADJUSTMENT OF THE MAGNETIC TRIP DIAL SETTING DID NOT CHANGE THE ACTUAL MAGNETIC (INSTANTANEOUS) TRIP SETPOINT AS EXPECTED. AT THE LOW END OF THE ADJUSTMENT RANGE (100A), THE BREAKER TRIPPED AS REQUIRED AT APPROXIMATELY 100A. INCREASING THE DIAL SETTING HOWEVER, SEEMED TO HAVE LESS THAN EXPECTED EFFECT. AT THE HIGH END OF THE ADJUSTMENT RANGE (200A), THE BREAKER TRIPPED AT APPROXIMATELY 115-130A. RESULTS WERE CONSISTENT FROM POLE TO POLE. SPARE BREAKERS OF THE SAME MODEL NUMBER AND VINTAGE WERE TESTED. EACH PRODUCED SIMILAR RESULTS.

TO DETERMINE THE EXTENT OF THE PROBLEM, A K/M BREAKER OF ANOTHER MODEL NUMBER BUT OF THE SAME VINTAGE WAS TESTED. SO WAS A K/M BREAKER OF ANOTHER MODEL NUMBER PURCHASED OM 1993. THESE OTHER MODELS EXHIBITED SIMILAR CHARACTERISTICS, HOWEVER, NOT TO THE EXTENT THAT THEY FAILED A -25% ACCEPTANCE CRITERIA SPECIFIED. FURTHER TESTING WILL MORE COMPLETELY IDENTIFY THE EXTENT OF THE PROBLEM.

TESTING WAS PERFORMED BY EXPERIENCED PLANT ELECTRICIANS IN ACCORDANCE WITH THE REQUIREMENTS OF UL 489. RESULTS WERE CONFIRMED BY AN INDEPENDENT TESTING LABORATORY."

THE APPLICATION IN QUESTION AT MONTICELLO INVOLVES 480 VOLT 33 AMP (200 AMP INSTANTANEOUS) BREAKERS. FOUR BREAKERS ARE USED AT THIS SETTING. TWO ARE USED (ONE IN EACH DIVISION) FOR CONTROL ROOM EMERGENCY FILTRATION TRAIN. TWO ARE USED (ONE IN EACH DIVISION) FOR THE COMBUSTIBLE GAS CONTROL SYSTEM. THE LICENSEE STATED THAT THE SAFETY RELATED LOADS SUPPLIED BY THESE BREAKERS

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WERE REVIEWED. THE REVIEW INCLUDED MOTOR STARTING AND COORDINATION ISSUES. ALL LOADS ARE CONSIDERED OPERABLE. MOST OF THE K/M BREAKERS AT MONTICELLO ARE USED IN 100AMP INSTANTANEOUS APPLICATIONS.

KLOCKNER MOELLER IS AWARE OF THIS PROBLEM. THEY NO LONGER SUPPLY THESE BREAKERS DIRECTLY TO LICENSEES AS 1E CERTIFIED.

THE NRC RESIDENT INSPECTOR WILL BE NOTIFIED.