


BECKWITH  
ELECTRIC



CO. INC.

P. J. Coz  
SERVICE AND PRODUCTS FOR ELECTRIC UTILITIES

11811 62ND STREET NORTH  
LARGO FLORIDA 33543

(813) 535-3408

OFFICE OF THE SECRETARY  
March 29, 1979

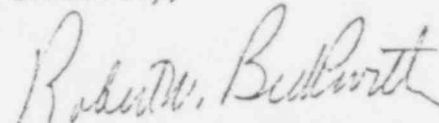
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Mr. Joseph M. Hendrie, Chairman  
Nuclear Regulatory Commission  
1717 H. Street N. W.  
Washington, D. C. 20555

Dear Mr. Hendrie,

I believe you will be interested in the enclosed material which we have made available to the presidents of the 100 largest electric utilities in the U. S. as well as the utility trade magazines. The motor bus transfer problem could contribute to an incident such as occurred at the Three Mile Island Station, Unit #2 nuclear plant. You may find the material of value to you in this investigation.

Sincerely,



Robert W. Beckwith  
President

RWB:jv

enc.

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TO: ALL UTILITY TRADE MAGAZINES

FOR: BECKWITH ELECTRIC CO., INC.  
11811 62nd Street North  
Largo, FL 33543

March 29, 1979

FOR FURTHER INFORMATION CONTACT:

FOR IMMEDIATE RELEASE

Mike A. Wyatt  
Phone 813/535-3408

## POWER TRANSFER RELAYS

One single event which could complicate the normal shut down of a nuclear power plant is an improper transfer of the plant motor bus as explained in a paper "Power Transfer - How and Why" available from the Beckwith Electric Company, 11811 62nd Street North, Largo, FL 33543, Phone: (813) 535-3408. The possibility exists of simultaneous failure to various plant motors just at the crucial instant of a plant shut down by an out of phase combination of the trapped flux voltage on the motor bus with the new source. This particular failure mode can be avoided by use of high speed bus transfer circuit breakers supervised by a combination of the M-0236 Power Transfer Relay and M-0245 High Speed Sync-Check Relay manufactured by Beckwith Electric. Extensive bus transfer simulations are underway at Beckwith Electric, as well as major electric utilities and engineering companies, to confirm the problem and the use of the M-0236 and M-0245 relays as a reliable solution. Results of these studies and simulations over the past two years indicate the potential failure mode does exist and that the available relays will reliably solve the problem. While no cases of damage by motor bus transfer have been confirmed for nuclear plants, there have been several instances of damage transfer at fossil fueled plants. This issue was discussed in depth at a seminar held at Beckwith Electric in January of this year. All major utilities were invited and several attended.

Enc: "Power Transfer - How and Why"  
M-0236 Application Guide  
M-0236 Specifications  
M-0245 Specifications

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WASHINGTON, D. C. 20555

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