



**Commonwealth Edison**

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August 5, 1986

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, DC. 20555

Subject: Braidwood Station Units 1 and 2  
Essential Service Water System  
NRC Docket No. 50-456 and 50-457

Reference: December 6, 1985 K.A. Ainger letter to H.R. Denton

Dear Mr. Denton:

As a result of the review of the Byron LCO Relaxation Program, concerns arose regarding the calculated contribution of the Unit 1 essential service water (ESW) system to the estimated core melt frequency during the period prior to Byron Unit 2 operation. Commonwealth Edison committed per the above referenced letter to enhance the reliability of the Unit 1 ESW system by making a Unit 2 ESW pump available during operation of Byron Unit 1. The purpose of this letter is to provide a description of the similar administrative controls that will be put into effect at Braidwood to govern the availability of a Unit 2 ESW pump until Braidwood Unit 2 is in operation.

Unit 2 essential service water will be completed to the extent necessary to provide essential service water cooling to Unit 1 through the existing cross-connect piping. Testing will be performed on the appropriate components of the Unit 2 essential service water system to demonstrate its availability as defined below. As a minimum the Unit 2 essential service water pump, the essential service water pump breaker, the essential service water strainer, and the valves listed in item 2 will be tested. The results of the testing will be post test reviewed and accepted prior to declaring Unit 2 essential service water system available to support Unit 1 operation.

Prior to entering Mode 4, a Unit 2 ESW pump will be AVAILABLE to support Braidwood Unit 1 operation. The Unit 2 ESW pump will be considered AVAILABLE if it is capable of being manually started and crosstied to the Unit 1 ESW system. The availability of a Unit 2 ESW pump will be ensured by incorporating the following surveillances into the Station Surveillance Program.

1. At least once per day, Bus 241 will be verified to be energized if the 2A ESW pump is the AVAILABLE pump or BUS 242 will be verified to be energized if the 2B ESW pump is the AVAILABLE pump.

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2. At least once per day, the following valves will be verified open or capable of being operated from the main control board.

If 2A ESW pump - valves 2SX033, 2SX034, 2SX005,  
is AVAILABLE 2SX001A, 2SX016A, 2SX027A

If 2B ESW pump - valves 2SX005, 2SX001B, 2SX016B,  
is AVAILABLE 2SX027B

3. At least once per 31 days, the AVAILABLE pump will be operated for 15 minutes.

If neither Unit 2 ESW pump is AVAILABLE, either the 2A or 2B ESW pump will be restored to AVAILABLE status in 7 days or Braidwood Unit 1 will be in Mode 3 in 6 hours and Mode 5 in the following 30 hours.

If only one Unit 1 ESW pump is OPERABLE and neither Unit 2 ESW pump is AVAILABLE, immediate action will be initiated to restore either a Unit 2 ESW pump to AVAILABLE status or a Unit 1 ESW pump to OPERABLE status.

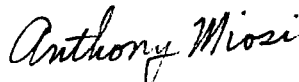
Prior to entering Mode 4, operating procedures will be revised to instruct control room operators to crosstie the Unit 2 ESW system to the Unit 1 ESW system in the event both Unit 1 ESW pumps become inoperable. In addition, initial training on these procedures will be provided to control room operators.

The actions described above address the concerns regarding the calculated contribution of the Unit 1 ESW system to the estimated core melt frequency during the period before operation of Braidwood Unit 2.

Please address any questions you may have regarding this matter to this office.

One signed original and fifteen copies are provided for your review.

Very truly yours,



A. D. Miosi  
Nuclear Licensing Administrator

/klj

cc: J. Stevens  
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