Docket Nos. STN 50-454, 50-455 and STN 50-456, 30-457

Mr. Thomas J. Kovach Nuclear Licensing Manager Commonwealth Edison Company - Suite 300 OPUS West III 1400 OPUS Place Downers Grove, Illinois 60515 DISTRIBUTION:

Docket Files NRC & Local PDRs
PDIII-2 r/f JZwolinski

JWechselberger SSands
CMoore OGC-WF1
EJordan ACRS(10)
PDIII-2 Gray TBoyce
DCrutchfield FRosa

Dear Mr. Kovach:

SUBJECT: SAFETY EVALUATIONS OF THE BYRON STATION AND BRAIDWOOD STATION RESPONSES TO THE STATION BLACKOUT (SBO) RULE (TAC NOS. 68522, 68523 AND 68515, 68516)

By letters dated April 17, 1989, March 29, 1990, and March 30, 1990, Commonwealth Edison Company (CECo) submitted responses to the Station Blackout (SBO) rule for Byron Station, Unit Nos. 1 and 2 and Braidwood Station, Unit Nos. 1 and 2. The responses were reviewed by the NRC staff and by an NRC contractor, Science Applications International Corporation (SAIC). Attached as Enclosures 1 and 2 are the NRC staff Safety Evaluation Reports (SER) of the licensee's responses and the associated SAIC Technical Evaluation Reports (TER), SAIC-89/1640 for Byron Station and SAIC-90/1043 for Braidwood Station, dated June 14, 1990 (Attachments to Enclosures 1 and 2).

CECo has proposed using existing Emergency Diesel Generators (EDG) as an alternate AC (AAC) power source for Byron and Braidwood Stations and has submitted its response in the SBO generic response format. Based on that response, the NRC staff has concluded that the Byron and Braidwood Stations do not conform with the SBO rule, the guidance of Regulatory Guide 1.155, Nuclear Management and Resources Council (NUMARC) document NUMARC 87-00, and NUMARC 87-00, "Supplemental Questions/Answers and Major Assumptions," dated December 27, 1989 (issued to the industry by NUMARC on January 4, 1990). The areas of non-conformance are identified in the enclosed SERs.

In conjunction with the above mentioned documents related to the SBO rule, and the guidance provided to the industry by both the NRC and NUMARC, the enclosed letter (Enclosure 3) from Mr. William T. Russell, NRC, to Mr. William Rasin, NUMARC, dated June 6, 1990, provides further guidance regarding the issue of load shedding in the non-blackout (NBO) unit to meet the SBO requirements for AAC.

In addition, the following areas may require follow-up inspection by the NRC staff to verify that the implementation of any modifications, and the supporting documentation which CECo may propose as a result of this evaluation, are adequate to meet the SBO Rule:

- a. Hardware and procedural modifications.
- b. SBO procedures in accordance with R.G. 1.155, Position 3.4, and NUMARC 87-00, Section 4.

- c. Operator staffing and training to follow the identified actions in the SBO procedures.
- d. EDG reliability program meeting, as a minimum, the guidelines of RG 1.155.
- Equipment and components required to cope with an SBO are incorporated in a QA program that meets the guidance of RG 1.155. Appendix A.
- f. Actions taken pertaining to the specific recommendations noted in the SER.

The guidance provided on Technical Specifications (TS) for SBO states that the TS should be consistent with the Interim Commission Policy Statement on Technical Specifications. The NRC staff has taken the position that TS are required for SBO response equipment. However, the question of how Specifications for the SBO equipment will be applied is currently being considered generically by the NRC in the context of the Technical Specification Improvement Program (TSIP) and remains an open item at this time. In the interim, the NRC staff expects plant procedures to reflect the appropriate testing and surveillance requirements to ensure the operability of the necessary SBO equipment. If the staff later determines that TS regarding the SBO equipment is warranted, licensees will be notified of the implementation requirements.

In closing, a revised response to the SBO rule, which addresses the areas of non-conformance, should be submitted for staff review within 60 days from receipt of this letter. Subject to an acceptable resolution of the identified non-conformances, the issue of conformance to the SBO rule remains open at Byron Station, Unit Nos. 1 and 2 and Braidwood Station, Unit Nos. 1 and 2.

Sincerely.

Original Signed By:

Stephen P. Sands, Project Manager Project Directorate III-2 Division of Reactor Projects - III. IV, V and Special Projects Office of Nuclear Reactor Regulation

Enclosures:

 Byron Station Safety Evaluation Report w/Attachment

2. Braidwood Station Safety Evaluation Report w/Attachment

3. Letter dated 6/6/90

cc w/enclosures: See next page

DOCUMENT NAME: \ TAC 68515/16 SBO RUNE LAPPOINI-2 Office:

Moore Surname: Date:

PM/PDIII-2 SSands/tg 7 /31 /90

TBoyce 07/31/90

PM/PDIII-2/2 (A)PD/PDIII JWechselberger B/2/90



UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D. C. 20555

August 6, 1990

Docket Nos. STN 50-454, 50-455 and STN 50-456, 50-457

Mr. Thomas J. Kovach
Nuclear Licensing Manager
Commonwealth Edison Company - Suite 300
OPUS West III
1400 OPUS Place
Downers Grove, Illinois 60515

Dear Mr. Kovach:

SUBJECT: SAFETY EVALUATIONS OF THE BYRON STATION AND BRAIDWOOD STATION

RESPONSES TO THE STATION BLACKOUT (SBO) RULE (TAC NOS. 68522.

68523 AND 68515, 68516)

By letters dated April 17, 1989, March 29, 1990, and March 30, 1990, Commonwealth Edison Company (CECo) submitted responses to the Station Blackout (SBO) rule for Byron Station, Unit Nos. 1 and 2 and Braidwood Station, Unit Nos. 1 and 2. The responses were reviewed by the NRC staff and by an NRC contractor, Science Applications International Corporation (SAIC). Attached as Enclosures 1 and 2 are the NRC staff Safety Evaluation Reports (SER) of the licensee's responses and the associated SAIC Technical Evaluation Reports (TER), SAIC-89/1640 for Byron Station and SAIC-90/1043 for Braidwood Station, dated June 14, 1990 (Attachments to Enclosures 1 and 2).

CECo has proposed using existing Emergency Diesel Generators (EDG) as an alternate AC (AAC) power source for Byron and Braidwood Stations and has submitted its response in the SBO generic response format. Based on that response, the NRC staff has concluded that the Byron and Braidwood Stations do not conform with the SBO rule, the guidance of Regulatory Guide 1.155, Nuclear Management and Resources Council (NUMARC) document NUMARC 87-00, and NUMARC 87-00, "Supplemental Questions/Answers and Major Assumptions," dated December 27, 1989 (issued to the industry by NUMARC on January 4, 1990). The areas of non-conformance are identified in the enclosed SERs.

In conjunction with the above mentioned documents related to the SBO rule, and the guidance provided to the industry by both the NRC and NUMARC, the enclosed letter (Enclosure 3) from Mr. William T. Russell, NRC, to Mr. William Rasin, NUMARC, dated June 6, 1990, provides further guidance regarding the issue of load shedding in the non-blackout (NBO) unit to meet the SBO requirements for AAC.

In addition, the following areas may require follow-up inspection by the NRC staff to verify that the implementation of any modifications, and the supporting documentation which CECo may propose as a result of this evaluation, are adequate to meet the SBO Rule:

- a. Hardware and procedural modifications.
- b. SBO procedures in accordance with R.G. 1.155, Position 3.4, and NUMARC 87-00, Section 4.

Mr. Thomas J. Kovach

-2
August 6, 1990
C. Operator staffing and training to follow the identified actions in the SBO procedures.
d. EDG reliability program meeting, as a minimum, the guidelines of RG 1.155.
e. Equipment and components required to cope with an SBO are incorporated in a QA program that meets the guidance of RG 1.155, Appendix A.
f. Actions taken pertaining to the specific recommendations noted in the SER.

The guidance provided on Technical Specifications (TS) for SBO states that the TS should be consistent with the Interim Commission Policy Statement on Technical Specifications. The NRC staff has taken the position that TS are required for SBO response equipment. However, the question of how Specifications for the SBO equipment will be applied is currently being considered generically by the NRC in the context of the Technical Specification Improvement Program (TSIP) and remains an open item at this time. In the interim, the NRC staff expects plant procedures to reflect the appropriate testing and surveillance requirements to ensure the operability of the necessary SBO equipment. If the staff later determines that TS regarding the SBO equipment is warranted, licensees will be notified of the implementation requirements.

In closing, a revised response to the SBO rule, which addresses the areas of non-conformance, should be submitted for staff review within 60 days from receipt of this letter. Subject to an acceptable resolution of the identified non-conformances, the issue of conformance to the SBO rule remains open at Byron Station, Unit Nos. 1 and 2 and Braidwood Station, Unit Nos. 1 and 2.

Sincerely,

Stephen P. Sands, Project Manager

Project Directorate III-2 Division of Reactor Projects - III.

IV, V and Special Projects

Office of Nuclear Reactor Regulation

Enclosures:

- Byron Station Safety Evaluation Report W/Attachment
- Braidwood Station Safety Evaluation Report w/Attachment
- 3. Letter dated 6/6/90

cc w/enclosures: See next page Mr. Thomas J. Kovach Commonwealth Edison Company

cc:

Mr. Gabe Toth
Westinghouse Electric Corporation
Energy Systems Business Unit
Post Office Box 355, Bay 236 West
Pittsburgh, Pennsylvania 15230

Joseph Gallo, Esq. Hopkins and Sutter 888 16th Street, N.W. Suite 700 Washington, D.C. 20006

Regional Administrator U. S. NRC, Region III 799 Roosevelt Road, Bldg. #4 Glen Ellyn, Illinois 60137

Ms. Bridget Little Rorem Appleseed Coordinator 117 North Linden Street Essex, Illinois 60935

Mr. Edward R. Crass
Nuclear Safeguards and Licensing
Division
Sargent & Lundy Engineers
55 East Monroe Street
Chicago, Illinois 60603

U. S. Nuclear Regulatory Commission Resident Inspectors Office RR#1, Box 79 Braceville, Illinois 60407

Mr. Thomas W. Ortciger, Director Illinois Emergency Services and Disaster Agency 110 East Adams Street Springfield, Illinois 62706

Robert Neumann Office of Public Counsel State of Illinois Center 100 W. Randolph Suite 11-300 Chicago, Illinois 60601 Byron/Braidwood Power Station Unit Nos. 1 and 2

U. S. Nuclear Regulatory Commission Byron/Resident Inspectors Office 4448 North German Church Road Byron, Illinois 61010

Ms. Lorraine Creek Rt. 1, Box 182 Manteno, Illinois 60950

Mrs. Phillip B. Johnson 1907 Stratford Lane Rockford, Illinois 61107

Douglass Cassel, Esq. 109 N. Derarborn Street Suite 1300 Chicago, Illinois 60602

David C. Thomas, Esq. 77 S. Wacker Drive Chicago, Illinois 60601

Michael Miller, Esq. Sidley and Austin One First National Plaza Chicago, Illinois 60690

George L. Edgar Newman & Holtzinger, P.C. 1615 L Street, N.W. Washington, D.C. 20036

Commonwealth Edison Company Byron Station Manager 4450 North German Church Road Byron, Illinois 61010

Illinois Department of Nuclear Safety Office of Nuclear Facility Safety 1035 Outer Park Drive Springfield, Illinois 62704