

DEC 28 1981

Docket Nos.: STN 50-454
and STN 50-455

APPLICANT: Commonwealth Edison Company

FACILITY: Byron Station

SUBJECT: SUMMARY OF ASB MEETING

A meeting was held December 1, 1981 at the Byron Station near Byron, Illinois with representatives from Commonwealth Edison Company and Sargent & Lundy to discuss concerns raised by the Auxiliary Systems Branch during their review of the Byron/Braidwood FSAR. A list of attendees is given in Enclosure 1.

The following is an update of the ASB open items based on our discussions during the meeting:

1. 3.5.2 Tornado Missiles - Based on the applicant's draft response to Q 010.39 and our observations at the site, we consider that adequate tornado missile protection is provided for the main steam safety and relief valve stacks and the spent fuel from failure of the fuel building freight door. However, we are not satisfied with the applicant's response concerning protection of the essential service water cooling tower fans, fan motors and exposed piping or the diesel generator exhaust stacks. The applicant agreed to reevaluate the protection for this equipment in response to our position that positive protection be provided. The applicant also agreed to verify that the main steam safety valve house ventilation exhaust is tornado missile protected. This will remain an open item pending satisfactory resolution.
2. 3.6.1 Pipe Break Outside Containment - The applicant indicated that the analysis of protection of essential equipment outside containment from the effects of high and moderate energy pipe breaks is not complete. Therefore, complete responses to Q 010.40 and Q 010.41 can not be provided for sometime. This will remain an open item pending satisfactory resolution.
3. 9.1.4 Fuel Handling - The applicant agreed to revise the response to Q 010.43 to indicate that the consequences of dropping of the fuel building crane load block will be included in the response to NUREG-0612 "Control of Heavy Loads". The applicant also agreed to provide a table of light loads including their kinetic energies when dropped from over the open reactor vessel or spent fuel pool. This is now a confirmatory item.

| | | | | | | | |
|-----------|-------|------------|----------|-------|-------|-------|-------|
| OFFICE ▶ | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| SURNAME ▶ | ..... | 8201250029 | 811228 | ..... | ..... | ..... | ..... |
| DATE ▶ | ..... | PDR ADDCK | 05000454 | ..... | ..... | ..... | ..... |
|  | ..... | A | PDR | ..... | ..... | ..... | ..... |

DEC 28 1981

4. 9.2.2 Component Cooling Water - The applicant committed to provide a safety grade indication of loss of component cooling water flow to the reactor coolant pumps. This item is now a confirmatory item.
5. 9.3.1 Compressed Air - (not included in meeting notice) - The applicant committed to address compliance of the instrument air system with ANSI MC 11.1 Standard and identify a periodic sampling for instrument air quality. This is a confirmatory item.
6. 9.3.3 Equipment and Floor Drainage - The applicant is performing an evaluation of the internal flood protection design for all safety related equipment and will provide the results in the future. The applicant also committed to provide drawings indicating that check valves are provided in drain lines for redundant essential equipment rooms. The internal flooding review will include the effects of rupture of all nonseismic Category 1 piping in safety related equipment areas. This will remain an open item pending satisfactory resolution.
7. 9.4.1 Control Room HVAC - The applicant indicated that the P&ID symbols of fire dampers actual identify a multiple damper in the duct such that a single failure does not stop air flow to essential areas. Thus, this item is resolved.
8. 9.4.6 River Screen House HVAC - The applicant committed to include procedural steps which will require that the essential service water makeup pumps be started on loss of offsite power when the outside air temperature reaches 40 degrees F. This item is technically resolved and will be closed upon formal documentation.
9. 10.3.1 Main Steam - The applicant indicated that the main steam power operated relief valves (atmospheric dump valves) will be modified to include a hydraulic operator with a fully Class IE power supply capable of being operated from the control room in any loss of offsite power. This item is technically resolved and will be closed upon formal documentation.
10. 10.4.5 Circulating Water System - The applicant will reevaluate the potential flooding consequences resulting from a circulating water system failure. This analysis will include the water level reached in the building assuming the total volume of the cooling tower basin is displaced and will evaluate potential pathways for water flow to safety related equipment areas. This item will remain open pending a satisfactory response.
11. 10.4.7 Main Feedwater and Condensate - The applicant committed to perform a waterhammer test in accordance with the guidance of NUREG/CR-1606. This item is technically resolved and will be closed upon formal documentation.

| | | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|-------|
| OFFICE ▶ | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| SURNAME ▶ | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| DATE ▶ | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

DEC 28 1981

12. 10.4.9 Auxiliary Feedwater -

- a) The applicant will provide additional information to justify a 7 day LCO with one auxiliary feedwater pump inoperable. The applicant agreed to include the startup feedwater pump in tech. spec. surveillance requirements. This item remains open pending resolution of our position for a 72 hour LCO.
- b) This applicant will review the potential consequences of air binding the AFW pumps when transferring suction supply from the condensate storage tank to essential service water. This item remains open.
- c) The applicant has not committed to provide a third AFW pump capable of operation in a loss of offsite power. This item remains open.
- d) The applicant committed to tech. spec. an AFW pump oil supply equivalent to delivering the 200,000 gallons of condensate needed to shutdown. A backup oil supply can be provided from the standby diesel generator oil storage tanks. This item is resolved.
- e) The applicant committed to run a 48 hour endurance test on all AFW pumps including the startup pump. This item is technically resolved and will be closed upon formal documentation.
- f) The applicant committed to provide an independent verification of proper AFW system valve position following test and maintenance. The means of accomplishing this was still undecided. This is a confirmatory item.

In addition to the above, we discussed the ASB preliminary review of the Byron safe shutdown due to fire analysis. The applicant indicated that for certain fires, when a loss of offsite power is assumed and shutdown is accomplished via natural circulation, the primary coolant (hot leg and cold leg) resistance temperature detectors (RTDs) can not adequately indicate T_H and T_C as flow in the loops is too slow, and the well detector is too great a metal mass. The Westinghouse owners group is aware of this problem and is looking into it. The staff will pursue this item as well.

Original signed by:
Kenneth L. Kiper

Kenneth L. Kiper, Project Manager
Licensing Branch No. 1
Division of Licensing

| | | | | | | | |
|-----------|-------------|---------------|------------|----------|------------|--|--|
| OFFICE ▶ | cc w/encl.: | See next page | DL:LB#1 | DL:LB#1 | DL:LB#1 | | |
| SURNAME ▶ | | | KLKiper/lg | SChesnut | BJYoung/lf | | |
| DATE ▶ | | | 12/22/81 | 12/22/81 | 12/24/81 | | |

Mr. Louis O. DelGeorge
Director of Nuclear Licensing
Commonwealth Edison Company
Post Office Box 767
Chicago, Illinois 60690

ccs:

Mr. William Kortier
Atomic Power Distribution
Westinghouse Electric Corporation
P. O. Box 355
Pittsburgh, Pennsylvania 15230

Paul M. Murphy, Esq.
Isham, Lincoln & Beale
One First National Plaza
42nd Floor
Chicago, Illinois 60603

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

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

Dr. Bruce von Zellen
Department of Biological Sciences
Northern Illinois University
DeKalb, Illinois 61107

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

Nuclear Regulatory Commission
Region III
Office of Inspection and Enforcement
799 Roosevelt Road
Glen Ellyn, Illinois 60137

Myron Cherry, Esq.
Cherry, Flynn and Kanter
1 IBM Plaza, Suite 4501
Chicago, Illinois 60611

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

Ms. Diane Chavez
602 Oak Street, Apt. #4
Rockford, Illinois 61108

ENCLOSURE 1

ASB Meeting
December 1, 1981

NRC Staff

J. Wermiel
A. Singh
R. Jaross (Argonne National Lab)
C. Scheibelhut (Argonne National Lab)

Commonwealth Edison Company

K. Ainger
R. Ward

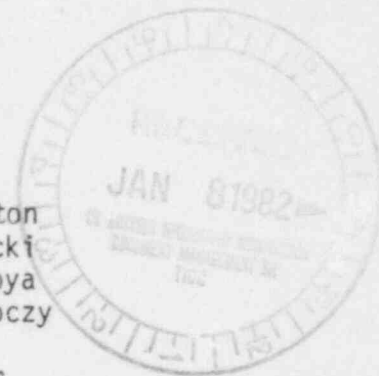
Sargent & Lundy

K. Green
S. Boeing
T. Hottle

Power Consultants, Inc.

J. LaVallee

MEETING SUMMARY DISTRIBUTION



Docket File
NRC PDR
Local PDR
TIC/NSIC/Tera

DEC 28 1981

LB#1 Reading
H. Denton/E. Case

D. Eisenhut/M. Jambor

B. J. Youngblood
A. Schwencer
F. Miraglia
J. Miller
G. Lainas
R. Vollmer
J. P. Knight
R. Bosnak
F. Schauer
R. E. Jackson
Project Manager K. Kiper/S. Chesnut
Attorney, OELD
M. Rushbrook
OIE (3)
ACRS (16)

E. Adensam

NRC Participants:

J. Wermiel
A. Singh
R. Jaross (ANL)
C. Scheibelhut (ANL)

G. Lear
W. Johnston
S. Pawlicki
V. Benaroya
Z. Rosztoczy
W. Haass
D. Muller
R. Ballard
W. Regan
R. Mattson
P. Check
F. Congel
O. Parr
F. Rosa
W. Butler
W. Kreger
R. Houston

L. Rubenstein
T. Speis
M. Srinivasan
J. Stolz
S. Hanauer
W. Gammill
T. Murley
F. Schroeder
D. Skovholt
M. Ernst
R. Baer
C. Berlinger
K. Kniel
G. Knighton
A. Thadani
D. Tondi
J. Kramer
D. Vassallo
P. Collins
D. Ziemann

bcc: Applicant & Service List