



Commonwealth Edison

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March 28, 1980

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

Subject: Zion Station Units 1 and 2
Implementation of Thirty Day
Items of Confirmatory Order
NRC Docket Nos. 50-295 and 50-304

Reference (a): February 29, 1980 letter from H. R. Denton to
D. L. Peoples

Dear Mr. Denton:

Reference (a) contained a Confirmatory Order dated February 29, 1980 for Zion Station Units 1 and 2. That order required Commonwealth Edison Company to perform certain actions within thirty (30) days of the date of the Order. Attachment A to this letter provides Commonwealth Edison's response to those items.

Please address any questions that you might have concerning this matter to this office.

One (1) signed original and thirty-nine (39) copies of this transmittal are provided for your use.

Very truly yours,

William F. Naughton
Nuclear Licensing Administrator
Pressurized Water Reactors

Attachment

2661A

8004020189

ATTACHMENT A

Commonwealth Edison Company's responses to the NRC Staff's Thirty (30) Day items of Section B of Appendix A in Reference (a) follow.

- B.1. A vendor representative will be stationed on site for engineering consultation at Zion Unit 1 and Unit 2 on plant operations and maintenance to increase plant safety. The representative shall be from the NSSS vendor, architect/engineering or start up engineering firm.

A vendor representative from the NSSS vendor, Westinghouse Electric Corporation has been stationed on site.

- B.2. To ensure control room habitability under accident conditions, the licensee shall reexamine ventilation intakes, location of potential plant leakage (ingress and egress), and control room filter capabilities, and submit the results of this review to the NRC.

Commonwealth Edison has performed the recommended review. The results of this review follow.

The outside air openings for the Control Room HVAC System are as shown on the enclosed General Arrangement Drawings M-4 and M-5. The normal outside air intake is isolated on high radiation at the intake and the Turbine Building make-up air intake is opened and the make-up air filter unit fan is started.

The Control Room make-up filter unit is sized for a 2,000 cfm flow. Operating experience indicates that this is adequate to maintain a positive pressure in the Control Room. The filter unit consists of prefilters, HEPA filters and two charcoal adsorbers (tray type) in series. The efficiency of each charcoal adsorber is specified with a minimum efficiency of 99% for methyl-iodide with a relative humidity of 70%, as stated in Commonwealth Edison's answer to Question 9.8 in Amendment No. 17 of the Zion Station Final Safety Analysis Report (FSAR). The Control Room doses are also shown in the answer to Question 9.3 in Amendment No. 17 of the Zion FSAR. Graphically interpolating these doses for 30 days results in an accumulated thyroid dose for continuous occupancy of 0.60 rads. Including ingress and egress, the 30 day accumulated thyroid dose for one 8-hour shift per day is approximately 0.45 rads.

The potential plant exfiltration paths are identified on the enclosed General Arrangement Drawing M-3. All cable penetrations have been sealed using inorganic fiber insulating material covered by Flamemastic to provide air-tight fireproof seals.

- B.3. Emergency action levels shall be revised to require notification of the NRC for all events in the emergency classes described in NUREG-0610, September 1979.

Commonwealth Edison has issued Standing Orders at Zion Station to meet this requirement.

- B.4 The licensee shall comply with the NRC's "INTERIM POSITION FOR CONTAINMENT PURGE AND VENT VALVE OPERATION PENDING RESOLUTION OF ISOLATION VALVE OPERABILITY", as contained in the October 1979 letter to the licensee. The licensee committed to this position in its December 1979 letter to the NRC.

Commonwealth Edison has reviewed its commitments of December 14, 1979 and has verified that these commitments are being met.

- B.5. Plant personnel shall be trained or retrained in the following areas within thirty days, or prior to startup if required by the Lessons Learned implementation schedule. Plant personnel shall also be retrained in the following areas within thirty days of the time that there are significant changes to the procedures or requirements applicable to these areas:

- Containment and Degraded Core Sampling
- Degraded Core - Training
- Emergency Power for Pressurized Heaters and Decay Heat Removal
- Containment Isolation
- Containment Purge/Purge Valve Operation
- Subcooling Meter Operation
- Technical Support Center
- Onsite Operational Support Center
- Near-Site Emergency Operations Center
- Emergency Preparedness Plan
- In-Plant Area Airborne Radioiodine Monitors

All Commonwealth Edison Zion Station reactor operators and senior reactor operators performing shift duties have or will have received the subject training within the required time interval.

- B.6. The licensee shall perform diesel generator testing in accordance with Regulatory Guide 1.108 with a corresponding change in the allowable outage time stipulated in the Limiting Conditions of Operation as follows:

<u>Numbers of DG Failures In Prior 100 Tests</u>	<u>Test Interval (Days) (R.G. 1.108)</u>	<u>Allowable Outage Time</u>
0 or 1	30	As Is
2	14	As Is
3	7	As Is
4	3	32 hr.
5	3	8 hr.
6 or more	3	None*

*Plant must achieve hot shutdown within 12 hours and in cold shutdown within the following 30 hours.

Regulatory Guide 1.108, Section C.2, Testing, states requirements for regular periodic testing and 18 month (refueling cycle) testing. Additional requirements for periodic testing include timing voltage and frequency on starts, full load runs for a minimum of one hour, and shorter testing intervals based on demonstrated performance. The data base for determining initial testing interval will be obtained by tabulating the number of failures in the last 100 starts prior to March 30, 1980 on each Zion unit.

Commonwealth Edison has revised its periodic test procedures to incorporate the above requirements, including an update of the required testing interval. The refueling testing requirements are currently being incorporated into the appropriate testing and surveillance procedures and will be implemented during the next required performance of these tests.

- B.7. Requirements regarding reactor operator qualifications shall be revised to incorporate the following for applications submitted after June 1, 1980 except for training classes in session at time of issuance of this Order:
- a. The following experience shall be required for senior operator applicants:

Applicants for senior operator licensee shall have 4 years of responsible power plant experience. Responsible power plant experience shall be that obtained as a control room operator (fossil or nuclear), field operator (nuclear) or as a power plant staff engineer involved in the day-to-day activities of the facility, commencing with the final year of

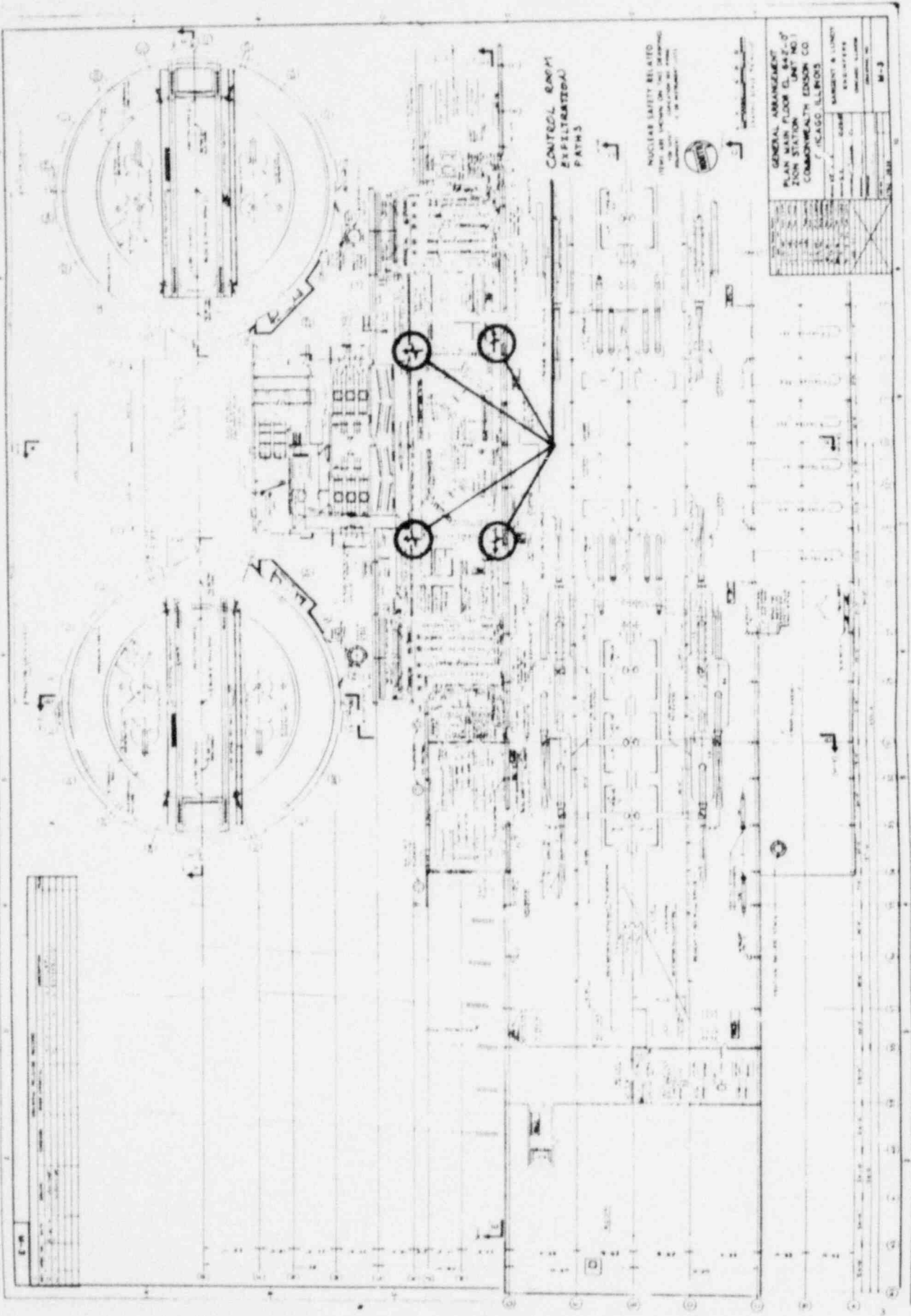
construction. A maximum of two years' power plant experience may be fulfilled by academic or related technical training, on a one-for-one time basis. Two years shall be nuclear power plant experience. At least six months of the nuclear power plant experience shall be at the plant for which the applicant seeks a license.

- b. The hot training programs shall be modified so that the training concentrates on the responsibilities and functions of the operator, rather than the senior operator. All individuals who satisfactorily complete this hot training program will be allowed to apply for an operator license. At least three months experience as a licensed operator is necessary before applying for a senior operator license.
- c. The three month continuous on-the-job training for hot operator applicants shall be as an extra person on shift in the control room. The hot senior operator applicants will have three months continuous on-the-job training as an extra person on shift in training.
- d. In addition to the presently approved training programs, all replacement applicants shall participate in simulator training programs
- e. Training center and facility instructors who teach systems, integrated response, and transient and simulator courses shall demonstrate their competence to the NRC by successful completion of an SRO written examination. Instructors shall be enrolled in appropriate requalification programs to assure that they are cognizant of current operating history, problems and changes to procedures and administrative limitations.

Commonwealth Edison has revised the requirements regarding reactor operator qualifications to meet this requirement.

- B.8. Requirements regarding reactor operator qualifications shall be revised such that all operator licensees shall participate in periodic retraining and recertification on a full scope simulator representative of Zion Units 1 and 2. The frequency of training will be on an annual basis.

Commonwealth Edison has revised its requirements regarding reactor operator qualifications to meet this requirement.



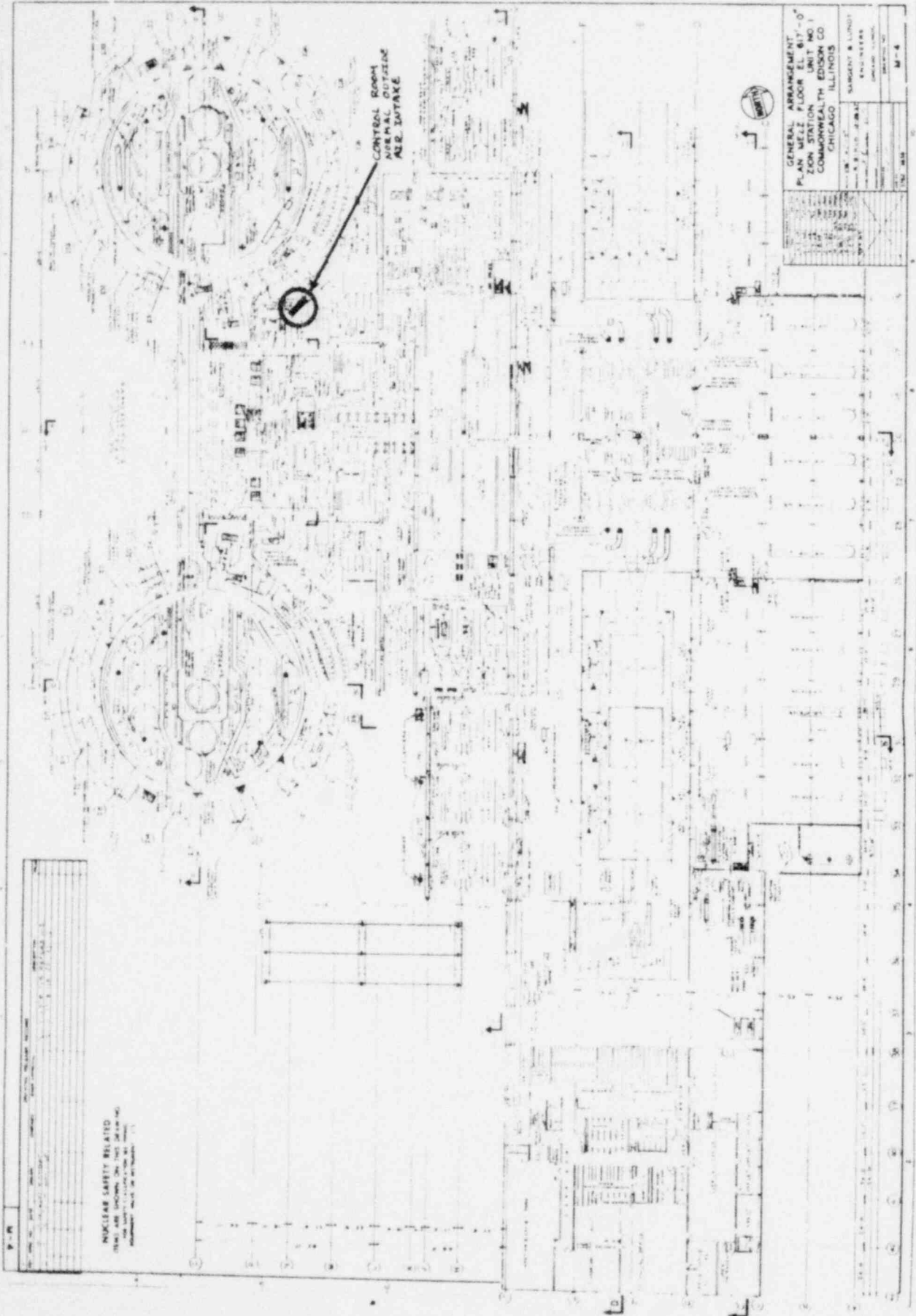
CENTRAL ROOM
EXPURGATED
PATH 3

NUCLEAR SAFETY RELATED
ITEMS ARE SHOWN ON THE DRAWING
DATE: 10/15/60
BY: [Signature]

GENERAL ARRANGEMENT	
PLAN MAIN FLOOR CL. 842'-0"	
ION STATION UNIT NO. 1	
COMMONWEALTH EDISON CO	
CHICAGO ILL. 60605	
DATE: 10/15/60	BY: [Signature]
CHECKED: [Signature]	SCALE: AS SHOWN
PROJECT NO. 100-1000	FIG. NO. 100-1000-1
M-3	

NO.	DATE	DESCRIPTION
1	10/15/60	ISSUED FOR CONSTRUCTION
2		
3		
4		
5		
6		
7		
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9		
10		

POOR ORIGINAL



GENERAL ARRANGEMENT
 PLAN MEZZ FLOOR EL. 817'-0"
 ZION STATION UNIT NO. 1
 COMMONWEALTH EDISON CO
 CHICAGO ILLINOIS

DATE: 11-1-54
 DRAWN BY: J. B. J. J. J.
 CHECKED BY: J. B. J. J. J.
 APPROVED BY: J. B. J. J. J.

SCALE: 1/8" = 1'-0"

PROJECT NO. 100-100000

REV. NO. 1

DATE: 11-1-54

BY: J. B. J. J. J.

CHKD: J. B. J. J. J.

APPD: J. B. J. J. J.

NUCLEAR SAFETY RELATED
 ITEMS ARE SHOWN ON THIS DRAWING
 FOR INFORMATION ONLY AND ARE NOT
 NECESSARILY PART OF THE DESIGN

