APR 17 1974

Docket No. 50-237

Commonwealth Edison Company
ATTN: Mr. J. S. Abel
Nuclear Licensing Administrator
Boiling Water Reactors
Post Office Box 767
Chicago, Illinois 60690

Gentlemen:

Enclosed is a request for additional information (round two) relative to seismic instrumentation information provided in your letter of February 11, 1974. The additional information will be reviewed in accordance with the schedule for our review of conversion of the provisional operating license for Dresden Unit 2 to a full-term operating license. To maintain our schedule for the full-term license review, we need your response to this request for additional information by July 8, 1974. If you cannot meet the specified date or if your reply to our request is incomplete, the overall schedule for completing our review will have to be extended. Since reassignment of the staff's efforts will require completion of the new assignment prior to returning to this review, the extension of our review schedule will most likely be greater than the delay in your response.

You are requested to provide this information in three signed and notarized originals and thirty-seven copies. If your response makes reference to other submittals, identify the specific paragraph to which reference is made. Please contact us if you have any questions regarding the information requested.

Sincerely,

Original signed by
Dennis L. Ziemann

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Directorate of Licensing

Enclosure and cc: See next page

528.1

Enclosure:
Request for Additional Information

cc w/enclosure:
John W. Rowe, Esquire
Isham, Lincoln & Beale
Counselors at Law
One First National Plaza
Chicago, Illinois 60670

Anthony Z. Roisman, Esquire
Berlin, Roisman and Kessler
1712 N Street, N. W.
Washington, D. C. 20036

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RO (3)
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SVarga, L:RP

528.2

OFFICE	L:ORB #2	L:ORB #2				
X7403						
SURNAME	RDSilver:sjh	DLZiemann				
DATE	4/15/74	4/16/74				

REQUEST FOR ADDITIONAL INFORMATION

DRESDEN UNIT 2

DOCKET NO. 50-237

Seismic Instrumentation

The response to Q.7 is not adequate.

1. The seismic instrumentation provided should be discussed and compared with the seismic instrumentation program described in AEC Regulatory Guide 1.12, "Instrumentation for Earthquakes". The basis for elements of the proposed program that differ from Regulatory Guide 1.12 should be submitted.

2. Seismic instrumentation such as peak recording accelerographs and multielement seismoscopes that will be installed in selected Category I structures and on selected Category I components should be described. The basis for selection of these structures and components and the location of instrumentation, as well as the extent to which this instrumentation will be employed to verify the seismic analyses following a seismic event, should be specified.

3. The provisions that will be utilized to inform the control room operator of the value of the peak acceleration level experienced in the basement of the reactor containment structure within a few minutes after the earthquake should be described. The basis for establishing predetermined values for activating the readout of the seismic instrument to the control room operator should be included.

528.3

OFFICE ➤						
SURNAME ➤						
DATE ➤						

APR 8 1974

Docket Nos. 50-237 and 50-249

Commonwealth Edison Company
ATTN: Mr. J. S. Abel
Nuclear Licensing Administrator -
Boiling Water Reactors
Post Office Box 767
Chicago, Illinois 60690

Gentlemen:

We are presently evaluating fuel performance in connection with continuing reviews of maintaining radioactivity releases as low as practicable during normal and abnormal conditions. To continue this review, we need certain information discussed below.

In our review, certain inconsistencies with respect to fuel descriptions have turned up in the data available in the docket files for Dresden Unit 2 (Docket No. 50-237; DPR-19) and Dresden Unit 3 (Docket No. 50-249; DPR-25).

The FSAR description states that rods in high burnup regions have dished pellets. DPR-19 Modifications No. 71-1 and No. 72-1 describe initial core fuel with 23 rods of undished pellets and 26 rods of dished pellets with different pellet diameters for each pellet configuration.

The startup report NEDC-10430A shows core zones of dished and undished assemblies. Assembly numbers for Dresden Unit 3 fuel used in the June 5, 1970 partial reload and the assembly number pattern in the Dresden 3 initial fuel loading also indicate two varieties of fuel assemblies. NEDC-10430A, in describing the fuel assemblies replacement reload for Cycle 3, states that all the gadolinia assemblies used contained dished fuel pellets.

Since from the information found in the docket there is no way of defining specifically the various fuel assembly designs used, please provide the following information:

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APR 8 1974

1. Descriptive drawings of each type of fuel assembly, showing the distribution of various types of fuel rods in the assembly.

2. Descriptive tables or completed forms (enclosed) listing the characteristics of each fuel rod type in each assembly type. The desired characteristics are identified on the enclosed forms. Quality Assurance data on the as-fabricated elements should be provided, not design data.

3. Fuel assembly identification numbers assigned to each assembly type. These should be the same numbers used in the core loading distribution or a correlation must be defined.

The information should be submitted within 90 days with one signed and fourteen additional copies of non-proprietary data and three copies of proprietary data.

Sincerely,

/S/

Dennis L. Ziemann, Chief
Operating Reactors Branch #2
Directorate of Licensing

Enclosure:
Forms (7)

cc w/enclosure:
John W. Rowe, Esquire
Isham, Lincoln & Beale
Counselors at Law
One First National Plaza
Chicago, Illinois 60670

Anthony Z. Roisman, Esquire
Berlin, Roisman and Kessler
1712 N Street, N. W.
Washington, D. C. 20036

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DLZiemann, L:ORB #2
RDSilver, L:ORB #2
RMDiggs, L:ORB #2
SVarga, L:RP
A.Olson

527.2

OFFICE	L:ORB #2	L:ORB #2				
X7403 SURNAME	RDSilver:sjh	DLZiemann				Rg Appl.
DATE	4/8/74	4/8/74				

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COMM.	STATEMENT NUMBER	CONT.	FORTRAN STATEMENT	IDENTIFICATION SEQUENCE
1	2 3 4	5	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72	73 74 75 76 77 78 79 80
	DOC	KEY	ASSBLY TYPE / NFG / TOTAL NO. USED / GOAL B.U. MMDYYe / FABRICATION DATES START / FINISH / CHARGEING SEQUENCE CY NUM / CY NUM / CY NUM / CY NUM	
		FOIO		

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PROGRAMMER	DATE		PUNCH								CARD ELECTRO NUMBER*

COMM.	STATEMENT NUMBER	CONT.	FORTRAN STATEMENT											IDENTIFICATION SEQUENCE
DOC		KEY	ASSBLY TYPE	ROD TYPE	Nopen ASSY	CLADDING MATL.	O.D (in.)	O.D. RANGE (in.)	I.D. (in.)	I.D. RANGE (in.)	WALL THICKNESS (in.)	WALL RANGE (in.)	No.	GAS PLENUMS LENGTH OF UPPER (in.)	LENGTH OF LOWER (in.)	Total Eff Volume (in.³)	PRESSURE (PSIG)
		F020															

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PROGRAMMER	DATE		PUNCH								CARD ELECTRO NUMBER*

COMM.	STATEMENT NUMBER	CONT.	FORTRAN STATEMENT														IDENTIFICATION SEQUENCE
DOC	KEY		ASSBLY TYPE	ROD TYPE	ENRICH $^{235}U/U$ (%)	$Pu/U+Pu$ (%)	BURNABLE POISON MATL.	WT%	AXIAL Bot. (in.)	AXIAL Top (in.)	FUEL PELLET GEOMETRY	O.D. (in)	O.D. RANGE (in)	I.D. (in.)	I.D. RANGE (in.)		
	F021																

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PROGRAMMER	DATE		PUNCH	CARD ELECTRO NUMBER*

COMM.	STATEMENT NUMBER	CONT.	FORTRAN STATEMENT	IDENTIFICATION SEQUENCE

DOC	KEY	ASSBLY TYPE	ROD TYPE	FUEL PELLET LENGTH (in)	Lg RANGE (in)	DISH GEOM VOL. (in³)	GEOM DENS (% T.D)	RANGE (% T.D)	IMM. DENS (% T.D)	RANGE (% T.D)	CLAD INNER SURFACE TREATMENT	ROUGHNESS (μin.) RMS	CLAD OUTER SURF TREATMENT
	F022												

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PROGRAMMER	DATE		PUNCH								CARD ELECTRO NUMBER*

FORM	STATEMENT NUMBER	CONT.	FORTRAN STATEMENT	IDENTIFICATION SEQUENCE
DOC		KEY	ASSBLY TYPE / ROD TYPE / PLENUM GAS COMPOSITION HE (%) / AIR (%) / OTHER MATL. (%) / MEAN CHEMICAL ANALYSIS OF FUEL PELLETS (ppm) C / ΣH₂ / CL / FL / N₂ / FE / AL / TH	
		F023		

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COMM. 1	STATEMENT NUMBER 2–5	CONT. 6	FORTRAN STATEMENT 7–72	IDENTIFICATION SEQUENCE 73–80
DOC		KEY	ASSBLY TYPE / ROD TYPE / PELLET COMPOSITION $\overline{H_2O}$ (ppm) / O/M / FUEL COLUMN LENGTH (in.) / RANGE (in.) / WEIGHT $\overline{Kg}$ / RANGE (gms) / REFERENC DOCUMENTS	
		F024		

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