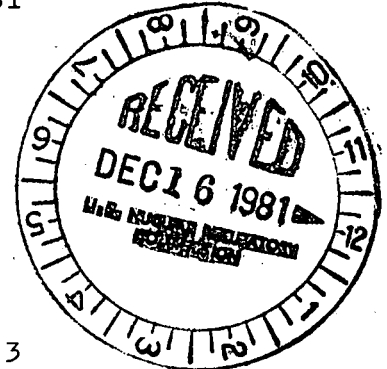




Commonwealth Edison
 One First National Plaza, Chicago, Illinois
 Address Reply to: Post Office Box 767
 Chicago, Illinois 60690

December 11, 1981



Mr. Darrell G. Eisenhut, Director
 Division of Licensing
 U.S. Nuclear Regulatory Commission
 Washington, DC 20555

Subject: Dresden Station Units 1, 2 and 3
 Quad Cities Station Units 1 and 2
 NUREG 0612 "Control of Heavy
 Loads at Nuclear Power Plants"
 NRC Docket Nos. 50-237/249 and
 50-254/265

- References (a): E. D. Swartz letter to D. G.
 Eisenhut dated June 22, 1981.
- (b): E. D. Swartz letter to D. G.
 Eisenhut dated September 22, 1981.

Dear Mr. Eisenhut:

References (a) and (b) provided the Commonwealth Edison response to NUREG 0612 for our Dresden, Quad Cities and LaSalle County Stations.

Since the submittal of our response, we have identified changes that should be made to the Dresden and Quad Cities Heavy Load Movement Reports. Therefore, we are enclosing the appropriate corrections to these reports in the form of change-out pages. Along with these change-out pages is an instruction sheet for your use in updating our reports.

To the best of my knowledge and belief, the statements contained herein and in the attachments are true and correct. In some respects, these statements are not based upon my personal knowledge, but upon information furnished by other Commonwealth Edison employees and consultants. Such information has been reviewed in accordance with Company practice and I believe it to be reliable.

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

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 PDR ADOCK 05000237
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 S/11*

December 11, 1981

One (1) signed original and fifty-nine (59) copies of this transmittal letter, including attachments, are provided for your use.

Very truly yours,



E. Douglas Swartz
Nuclear Licensing Administrator

cc: J. G. Keppler - RIII
Region III Inspector - Dresden
Region III Inspector - Quad Cities

SUBSCRIBED AND SWORN to
before me this, 11th day
of December, 1981.



Notary Public

EDS/lm

3031N

INSTRUCTIONS FOR UPDATING THE DRESDEN AND QUAD-CITIES HEAVY
LOAD MOVEMENT REPORTS

Changes to the Heavy Load Movement Reports are identified
by a vertical line in the right margin of the page.

REMOVE

INSERT

Dresden Station Report, Part 2

Pages 2.3-7, 2.3-8

Pages 2.3-7, 2.3-8

Quad-Cities Station Report, Part 1

Pages 1-1, 3-7, 3-8

1-1, 3-7, 3-8, 3-10a

Quad-Cities Station Report, Part 2

Pages 2.2-1, 2.2-5

Pages 2.2-1, 2.2-5

Response 2.3.2b (Cont'd)

and heavy load movement procedure are indicated in Table 3-1 submitted with item 2.1. Based on these considerations and the low probability of crane-load failure, this interaction is removed from further consideration.

Turbine Building Main Floor Area F-G/43-45

The turbine building main floor area is designated as a work area and is infrequently used for sandblasting the turbine rotor and parts. The crane-load combination and applicable procedure are shown in Table 3-1. The Standby Gas Treatment System is not required for safe shutdown of the plant. Based on these considerations and the low probability of a crane-load failure, this area is eliminated from further analysis.

Turbine Building Hatches

A potential fall of a turbine rotor at either hatch F-G/55-56 or F-G/33-34 could impact the ground floor above the Unit 3 cable tunnel on floor elevation 502'-6" with possible reduced capacity for safe shutdown of Unit 3. However, the likelihood of a turbine repair requiring rotor movement off the turbine main floor is very low. The probability of a crane-load failure is also very low. The outline of the cable tunnel in this area has been painted on the ground floor to aid in avoiding the tunnel during heavy load movements. The crane-load combination and heavy load handling procedure are identified in Table 3-1. Based on these considerations this interaction is removed from further analysis.

Response 2.3.2b (Cont'd)

Reactor Building Hatches

The Units 2 and 3 Refuel floor hatchway Jib cranes and Unit 2 Hatchway Jib crane could have a potential crane-load failure resulting in load impact with the Reactor Building ground floor at 517'-6" and interaction with the torus at floor elevation 476'-6". The crane-load combination and station heavy load handling procedure are indicated in Table 3-1. However, heavy loads are occasionally moved at these hatches while the reactors are in operation. The probability of failure of the crane-load combination is also very low. Accordingly, these crane-load interactions are removed from further analysis.

Response to Request for Information
on the Control of Heavy Loads

2.1 General Requirements for Overhead Handling Systems

Request 1:

Report the results of your review of plant arrangements to identify all overhead handling systems from which a load drop may result in damage to any system required for plant shutdown or decay heat removal (taking no credit for any interlocks, technical specifications, operating procedures, or detailed structural analysis).

Response 1:

The cranes and trolleys that handle loads in plant areas where equipment for shutdown or decay heat removal is located are listed below in table 2.1-1.

Table 2.1-1

Cranes and Trolleys

Unit 1/2 Reactor Building:

U-1/2 Reactor Building Overhead Crane - - - - -	125 ton/9 ton
Second Floor JIB Crane - - - - -	2 ton
U-1 Drywell 1st Level Monorail - - - - -	20 ton
U-2 Drywell 1st Level Monorail - - - - -	20 ton
New Fuel Inspection Stand JIB Crane - - - - -	½ ton
CRD Repair Floor JIB Crane - - - - -	½ ton
U-1/2 Reactor Service Platform JIB Crane - - - - -	½ ton

Unit 1/2 Turbine Building:

U-1 Turbine Building Overhead Crane - - - - -	175 ton/25 ton
U-2 Turbine Building Overhead Crane - - - - -	125 ton/10 ton

TABLE 3-1
QUAD CITIES STATION - UNITS 1&2
CRANES AND HOISTS

3-1.1 UNIT 1&2 REACTOR BUILDING CRANE MAIN HOOK (125 TON) (DRAWING MS-165, SHEET 3)

<u>LOAD IDENTIFICATION</u>	<u>APPROX. WEIGHT</u>	<u>LIFTING DEVICE</u>	<u>PROCEDURAL CONTROL</u>
REACTOR CAVITY SHIELD PLUGS	110 TON EACH	3 - 2 3/4" CABLES	QMP 100-18 QMP 100-19
DRYWELL HEAD	65 TON	REACTOR HEAD STRONGBACK	QMP 500-1 QMP 500-2
DRYER SEPARATOR BLOCKS	40-46 TON EACH	TWO POINT LIFT BEAM	QMP 100-20 QMP 100-21
REACTOR VESSEL HEAD	96 TON	REACTOR HEAD STRONGBACK	QMP 300-1 QMP 300-2
STEAM DRYER	32 TON	HOOK BOX, 4 - 2" CABLES & DRYER SEPARATOR LIFT RIG	QMP 300-3 QMP 300-4
STEAM SEPARATOR	63.5 TON	SAME AS STEAM DRYER	QMP 300-5 QMP 300-6
REFUELING "CATTLE CHUTE"	11 TON	2 - 1" CABLES	QFP 500-4
1F 300 SPENT FUEL CASK	100 TON	REDUNDANT LIFTING YOKE	BEING DEVELOPED QFP 150-3
MISC. EQUIPMENT	VARIES	AS REQUIRED	SPECIAL PROCEDURES DEVELOPED AS NEEDED QFP 150-3

QUAD CITIES

REV. 1
NOV. 1981

TABLE 3-1

3-1.2 UNIT 1&2 REACTOR BUILDING CRANE AUX. HOOK (9 TON) (DRAWING MS-165, SHEET 3)

<u>LOAD IDENTIFICATION</u>	<u>APPROX. WEIGHT</u>	<u>LIFTING DEVICE</u>	<u>PROCEDURAL CONTROL</u>
FUEL POOL GATES	1100-1400 lbs.	1 - 1/2" CABLE	QFP 500-2 QFP 500-3
REFUEL POOL SLOT PLUGS	6.5 TONS	1 - 1" CABLE	QMP 100-22 QMP 100-23
VESSEL SERVICE PLATFORM	5 TONS	1" CABLE WITH CHAIN FALLS	QMP 300-14 QMP 300-15
REACTOR VESSEL HEAD INSULATION	6 TONS	REACTOR HEAD STRONGBACK	QMP 300-12 QMP 300-13
LEAD SHIELDED IN VESSEL WORK SKIFF	7 TONS	4 - 1" CABLES	BEING DEVELOPED
NEW FUEL & METAL SHIPPING CONTAINER	1.5 TONS	SLINGS	QFP 200-1
NEW FUEL BUNDLE	680 lbs.	GERMAN HOOK*	QFP 200-1 QFP 200-3 QFP 200-4
TEST WEIGHTS FOR REFUEL BRIDGE	1800 lbs.	DIRECT	BEING DEVELOPED
CORE SPRAY/FEED WATER SPARGER INSPECTION RIG	400 lbs.	DIRECT	QFP 150-10
LPRM STRONGBACK	400 lbs.	DIRECT	QFP 600-2
MISC. EQUIPMENT	VARIES	AS REQUIRED	QMP 100-24 QFP 150-3

3-1.3 UNIT 1&2 DRYWELL FIRST LEVEL MONORAIL (20 TON) (DRAWING MS-165, SHEET 6)

<u>LOAD IDENTIFICATION</u>	<u>APPROX. WEIGHT</u>	<u>LIFTING DEVICE</u>	<u>PROCEDURAL CONTROL</u>
MISC. POWER PLANT EQUIPMENT	VARIES	AS REQUIRED	BEING DEVELOPED

*GERMAN HOOK IS A HOOK THAT IS REMOTELY ACTIVATED BY A LANYARD

TABLE 3-1

3-1.7 UNITS 1&2 REACTOR SERVICE PLATFORM JIB CRANE

<u>LOAD IDENTIFICATION</u>	<u>APPROX. WEIGHT</u>	<u>LIFTING DEVICE</u>	<u>PROCEDURAL CONTROL</u>
JET PUMPS: MISC. REACTOR VESSEL INTERNALS DURING REPAIR WORK	VARIES	DIRECT ATTACHMENT VIA HOOKS OR SLINGS	QMP 400-1 QMP 400-2 OR SPECIFIC PROCEDURE FOR THE REPAIR

3-10a

QUAD CITIES

REV. 1
NOV. 1981

2.2 SPECIFIC REQUIREMENTS FOR OVERHEAD HANDLING SYSTEMS OPERATING IN THE REACTOR BUILDING

NUREG-0612, Section 5.1.4, provides guidelines concerning the design and operation of load-handling systems in the vicinity of spent fuel in the reactor vessel or in storage. Information provided in response to this section should demonstrate that adequate measures have been taken to ensure that, in this area, either the likelihood of a load drop which might damage spent fuel is extremely small, or that the estimated consequences of such a drop will not exceed the limits set by the evaluation criteria of NUREG-0612, Section 5.1, Criteria I through III.

Request 2.2.1

Identify by name, type, capacity, and equipment designator, any cranes physically capable (i.e., ignoring interlocks, moveable mechanical stops, or operating procedures) of carrying loads over spent fuel in the storage pool or in the reactor vessel.

Response 2.2.1

The Reactor Building cranes physically capable of carrying loads over spent fuel in the storage pool or in the reactor vessel are listed below in Table 2.2.1-1.

Table 2.2.1-1

Unit 1/2 Reactor Building Overhead Crane	125 Ton/9 Ton
New Fuel Inspection Stand Jib Crane	1/2 Ton
Unit 1 Refuel Platform Hoist	1/2 Ton
Unit 2 Refuel Platform Hoist	1/2 Ton
Unit 1/2 Reactor Service Platform Jib Crane	1/2 Ton

Response 2.2.4

a. The Quad Cities cranes and interlock systems are addressed in Quad Cities Special Report 16 and Technical Specification sections 3.10/4.10.

b. The Standby Gas Treatment System is discussed in FSAR Section 5.3. Ventilation of the Reactor Building is also discussed in FSAR Section 10.11. The Reactor Building ventilation and filtration system is designed to limit potential releases of radioactive iodine and other radioactive materials.

c. and d. The control of heavy loads near spent fuel is discussed in M. S. Turbak's letter to V. Stello dated July 13, 1978 in response to a request for additional information concerning Control of Heavy Loads Over Spent Fuel.

The following cranes are excluded from further analysis since they do not carry a heavy load, as defined in NUREG-0612

New Fuel Inspection Stand Jib Crane,
Unit 1 Refuel Platform Hoist, and
Unit 2 Refuel Platform Hoist,
Unit-1/2 Reactor Service Platform Jib Crane.