

May 23, 2003

Mr. John L. Skolds, President  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3 - REQUEST FOR  
ADDITIONAL INFORMATION REGARDING HEAVY LOADS HANDLING  
AMENDMENT REQUEST (TAC NOS. MB7840 AND MB7841)

Dear Mr. Skolds:

By letter dated February 26, 2003, Exelon Generation Company submitted an amendment request concerning heavy loads handling at Dresden Nuclear Power Station, Units 2 and 3. The staff has identified additional information that is needed in order to complete their review of this relief request in the area of mechanical and civil engineering. These questions were discussed with members of your staff on May 15, 2003. Your staff agreed to respond to this request for additional information (RAI) within three weeks of the date of this letter.

Please contact me at (301) 415-2863 if your staff has any questions about this RAI.

Sincerely,

*/RA/*

Lawrence W. Rossbach, Project Manager, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-237 and 50-249

Enclosure: Request for Additional Information

cc w/encl: See next page

May 23, 2003

Mr. John L. Skolds, President  
Exelon Nuclear  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

SUBJECT: DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3 - REQUEST FOR  
ADDITIONAL INFORMATION REGARDING HEAVY LOADS HANDLING  
AMENDMENT REQUEST (TAC NOS. MB7840 AND MB7841)

Dear Mr. Skolds:

By letter dated February 26, 2003, Exelon Generation Company submitted an amendment request concerning heavy loads handling at Dresden Nuclear Power Station, Units 2 and 3. The staff has identified additional information that is needed in order to complete their review of this relief request in the area of mechanical and civil engineering. These questions were discussed with members of your staff on May 15, 2003. Your staff agreed to respond to this request for additional information (RAI) within three weeks of the date of this letter.

Please contact me at (301) 415-2863 if your staff has any questions about this RAI.

Sincerely,  
*/RA/*

Lawrence W. Rossbach, Project Manager, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-237 and 50-249

Enclosure: Request for Additional Information

cc w/encl: See next page

Distribution:

PUBLIC  
PDIII/2 r/f  
A. Mendiola  
P. Coates  
L. Rossbach  
OGC  
ACRS  
J. Rajan  
M. Ring, RIII

**ADAMS Accession Number: ML031410178**

OFFICE	PM:PD3-2	LA:PD3-2	SC:PD3-2
NAME	LRossbach	THarris for PCoates	AMendiola
DATE	5/23/03	5/23/03	5/23/03

**OFFICIAL RECORD COPY**

Dresden Nuclear Power Units 2 and 3

cc:

Site Vice President - Dresden Nuclear Power Station  
Exelon Generation Company, LLC  
6500 N. Dresden Road  
Morris, IL 60450-9765

Dresden Nuclear Power Station Plant Manager  
Exelon Generation Company, LLC  
6500 N. Dresden Road  
Morris, IL 60450-9765

Regulatory Assurance Manager - Dresden  
Exelon Generation Company, LLC  
6500 N. Dresden Road  
Morris, IL 60450-9765

U.S. Nuclear Regulatory Commission  
Dresden Resident Inspectors Office  
6500 N. Dresden Road  
Morris, IL 60450-9766

Chairman  
Grundy County Board  
Administration Building  
1320 Union Street  
Morris, IL 60450

Regional Administrator  
U.S. NRC, Region III  
801 Warrenville Road  
Lisle, IL 60532-4351

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

Document Control Desk-Licensing  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Senior Vice President, Nuclear Services  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Vice President  
Mid-West Regional Operating Group  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Senior Vice President  
Mid-West Regional Operating Group  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Vice President - Licensing and Regulatory  
Affairs  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Director - Licensing  
Mid-West Regional Operating Group  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Senior Counsel, Nuclear  
Mid-West Regional Operating Group  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

Manager Licensing - Dresden and  
Quad Cities  
Exelon Generation Company, LLC  
4300 Winfield Road  
Warrenville, IL 60555

## Dresden Nuclear Power Station, Units 2 and 3

### Request for Additional Information on Heavy Load Handling Amendment Request

1. The load drop of a shield plug during lifting of the plug from the cavity in Unit 3 and laying it down on top of Unit 2 shield plugs is analyzed as Scenario 1 of the load drop analysis (Attachment 3 of the amendment request). The calculations for determining the bearing capacity of the top shield plug on page 29 of 95, utilize a strength reduction factor of 0.7 for the bearing strength of concrete and a 2/3 factor to account for the spaces between the bearing bars. Provide the basis and applicable reference material for the use of this strength reduction factor and 2/3 factor.
2. Provide justification for not taking the concrete reinforcement into consideration in the determination of the weight of the slab, beams and column in the calculations related to the "Full drop of a shield plug on single column" which is Scenario 2 of the load drop analysis.
3. The full drop of a shield plug on a system of two adjacent slabs with a beam in between the slabs, is analyzed as Scenario 3 of the load drop analysis. In this calculation the combined beam and slab moment resistance factor, as discussed on page 68 of 95, is obtained on the basis of an equation provided on this page. Provide an explanation of how this equation reduces the beam moment resistance that accounts for the area of the two adjacent slabs as indicated.
4. The full drop of a shield plug on wall at column 44 is analyzed as Scenario 5 of the load drop analysis. Provide a definition of the factor " $K_{wall} = 0.8$ " used on page 89 of 95 of this calculation and explain how it is obtained.
5. Provide a drawing or illustration of the maximum height that a top shield plug can drop and explain why this height is the maximum possible drop height.
6. Are the 1997 Code Requirements for Nuclear Safety Related Concrete Structures (ACI 349-97) and the 1999 Building Code Requirements for Structural Concrete (ACI 318-99) referenced in calculation DRE02-0064 attached to your submittal the current versions of these codes? If there are later versions, why weren't they used and how would they affect the calculation?