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Central File

K. R. Goller, Assistant Director
for Operating Reactors
Division of Operating Reactors

OCONEE UNITS 1, 2 AND 3 - SPENT FUEL CASK HANDLING
TECHNICAL ASSISTANCE REQUEST NO. ORB1-1327

Plant Name: Oconee Units 1, 2 and 3 - Spent Fuel Cask Handling
Licensing Stage: Post OL
Document Reviewed: Duke Responses to Questions dated 3/19/76 and
11/3/75
Docket Nos.: 50-269, 50-270 and 50-287
Responsible OR Branch and Project Manager: ORB-1, G. Zech
Requested Completion Date: 7/1/76
Description of Response: First Round Questions
Review Status: Awaiting Information

In response to your request the Engineering Branch has reviewed
the information in the reference cited above in the areas of
structural and mechanical engineering. Adequate responses to the
questions herewith attached are required before we can complete
our review.

Original signed by
Darrell G. Eisenhut

D. G. Eisenhut, Assistant Director
for Operational Technology
Division of Operating Reactors

Enclosure: As stated

cc: V. Stello, DOR
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DISTRIBUTION:

Docket Nos. 50-269
50-270
50-287
NRR-Rdg
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DATE →	6/18/76	6/18/76	6/18/76	6/21/76	

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ENGINEERING BRANCH
DIVISION OF OPERATING REACTORS
OCONEE UNITS 1, 2 AND 3
DOCKET NOS. 50-269, 50-270, AND 50-287
REQUEST FOR ADDITIONAL INFORMATION

1. Describe the mathematical model used for the analysis of the storage racks.
2. Provide an analysis for the case where the cask tips and one end impacts on a few cells affecting the minimum edge-to-edge distance between fuel assemblies before the other end comes into contact with the fuel storage cells. Tabulate the highest stresses, the lowest stress margins, the greatest deformations and identify the locations where each occur.
3. Provide a summary of the stress analysis which was performed for the uniform drop of the cask, yoke and load block on the fuel storage cells. Tabulate the results as required in the item above.
4. Describe the critical drop accident for the cask, yoke and load block which may occur during spent fuel handling. Justify your response using the dynamics of the drop and state the number of cells which are affected. Tabulate the results - required in item 2.
5. Discuss the behavior of the assemblies which are located within and outside the boundary of the dropped cask during both the uniform and concentrated cask drop.