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Docket No. 50-263

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

MONTICELLO SPENT FUEL SHIPPING CASK HANDLING
NORTHERN STATES POWER COMPANY

Plant Name: Monticello
Licensing Stage: Post OL
Docket No.: 50-263
Branch and Project Manager Requesting Assistance: ORB-2, R. Snaider
Operating Reactors Branches Involved: Engineering, Plant Systems
Requested Completion Date: February 27, 1976
Description of Request: By memo TAR No. ORB-2-210
Review Status: Request for additional information

The Engineering Branch, Division of Operating Reactors has reviewed the report entitled "An Analysis And Safety Evaluation of Spent Fuel Shipping Cask Handling At The Monticello Nuclear Generating Plant" dated January 13, 1976 regarding the adequacy of the structural design criteria.

We find that before we can complete our review, additional information as indicated in the enclosure, is necessary.

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

Enclosure: As Stated

cc w/encl:
V. Stello
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DATE	2/27/76	2/27/76	2/27/76	3/1/76		

Form AEC-318 (Rev. 9-53) AECM 0240

☆ U. S. GOVERNMENT PRINTING OFFICE: 1974-526-166

NORTHERN STATES POWER COMPANY
MONTICELLO SPENT FUEL SHIPPING CASK HANDLING
REQUEST FOR ADDITIONAL INFORMATION
ENGINEERING BRANCH

1. In page 3-3 verify that the strength properties of concrete and reinforcing steel used for the analysis conservatively represent the insitu properties of the structures concerned.

2. In page 3-8 it is indicated that the force acting on the structure is checked for punching shear and end shear on the slab and beam. Indicate what limits are used to arrive at the acceptance criteria.

3. In page 3-9 indicate the limiting value of ductility ratio, μ to arrive at the available strain energy of the beam.

4. In tables 3-1 and 3-2 provide bases to support the numbers shown for M_u and V_u.

5. In page 5-5 ground acceleration value of .06g is indicated to be the DBE. However, the safe shutdown earthquake for the plant is 0.12g horizontal. Establish stability against overturning moment using this higher earthquake. The last sentence in section 5.2 implies that no seismic restraint is required to protect the spent fuel. Clarify whether spent fuel storage racks are seismically restrained as they are stored in the pool.

6. In Figure 3-1 cask drop locations are indicated. Between drop number one (No. 1) and drop number three (No. 3) there appears to be a noncomposite beam W30X108 along the column line 6.9. Evaluate the consequences of a postulated cask drop at the center of this beam.