

NOV 16 1976

SECRET NO.: 89-313

LICENSEE: Arkansas Power & Light Company (AP&L)

FACILITY: Arkansas Nuclear One - Unit No. 1 (ANO-1)

SUMMARY OF MEETING WITH ARKANSAS POWER & LIGHT COMPANY REGARDING SPENT FUEL POOL MODIFICATION AT ANO-1

On October 28, 1976, representatives of AP&L and the NRC staff (the "staff") met to discuss the pending spent fuel pool modification at ANO-1. A list of meeting attendees is attached (Enclosure 1).

1. Neutronics

The staff suggested that a Technical Specification limit of 45.2g U 235/axial cm be added to the proposed specifications. AP&L would prefer to specify a theoretical density limit (90 to 96%) in the Section 5 (Design Features) specifications. This alternative would be acceptable to the staff.

Other specific neutronic information requested of AP&L is listed in Enclosure 2.

2. Environmental Considerations

The licensee discussed the size and type of casks and the cranes used for fuel handling at ANO-1.

The licensee stated that the upcoming January 1977 reload will offload 56 fuel assemblies. A complete core discharge is not anticipated until 1984.

Other specific environmental information requested of the licensee is listed in Enclosure 2.

THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

7/11/80
4
P

OFFICE →						
SURNAME →				8004280723		
DATE →						

3. Mechanical

The Licensee's contractor, Exxon Nuclear, performed a non-linear structural analysis. The system was analyzed up to 35 Hz. Damping factors used were based on older techniques; the staff agreed with this practice.

Detailed drawings of the floor support structure was requested. Exxon Nuclear had some drawings on-hand which are presented in Enclosure 3.

Other specific mechanical information requested of APSL is listed in Enclosure 2.

Original signed by
William E. Converse
William E. Converse, Project Engineer
Operating Reactors Branch #2
Division of Operating Reactors

Enclosures

1. List of Attendees
2. Request for Additional Information
3. Drawings

OFFICE	DOR ORB #2 <i>WEC</i>	DOR ORB #2				
SURNAME	WEConverse:ah	DL Ziemann				
DATE	11/15/76	11/16/76				

Enclosure 1

LIST OF ATTENDEES

MEETING WITH ARKANSAS POWER & LIGHT COMPANY

OCTOBER 28, 1976

AP&L

M. L. Pendergrass
D. A. Rueter
O. W. Cypret
R. D. Lane

Exxon

G. Owsley
T. G. Eckhart
J. H. Riddle

NRC - Staff

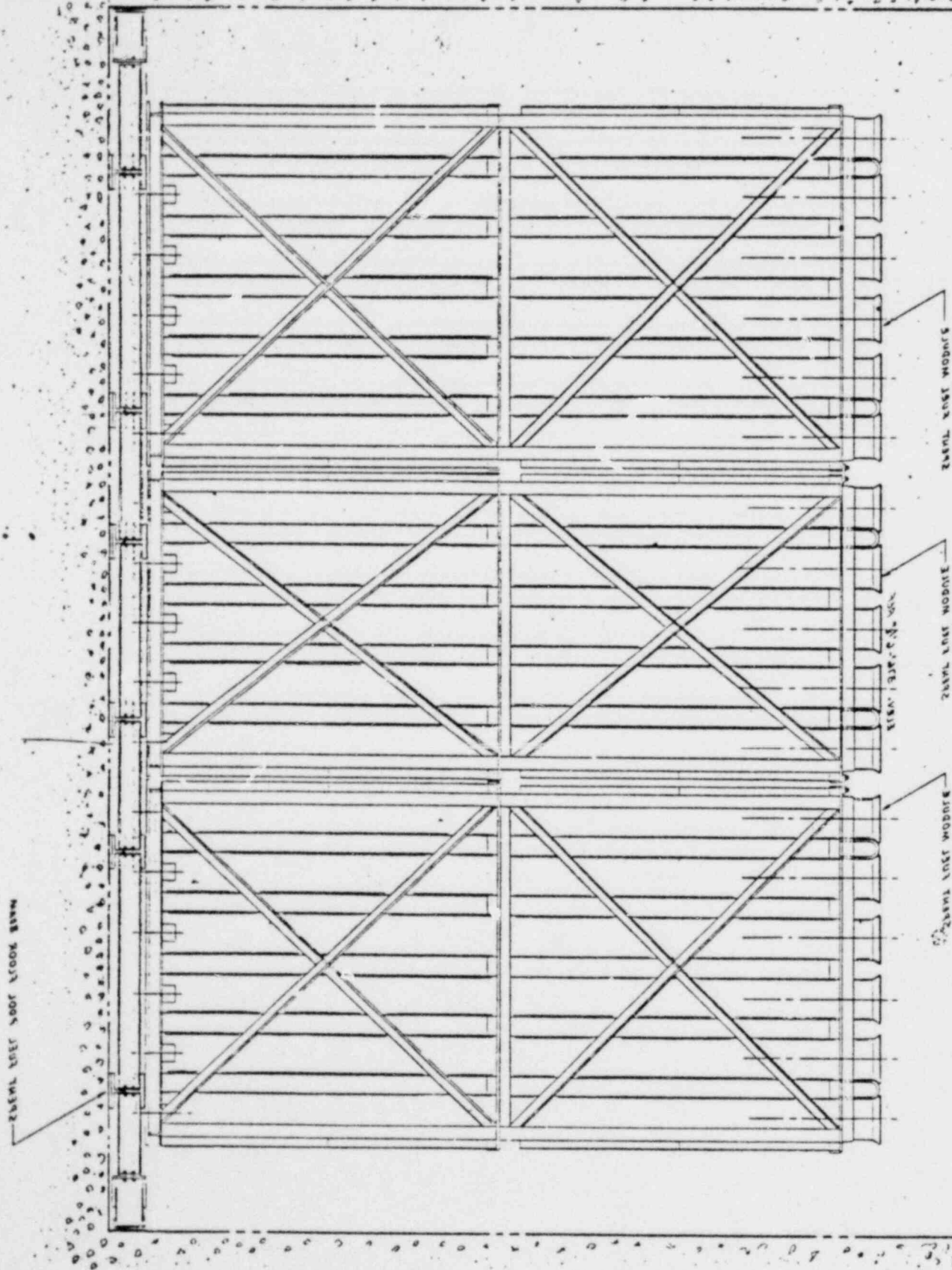
W. E. Converse
E. Lantz
M. L. Wohl
J. N. Donohew
J. J. Zudans
G. Bagchi
K. Jabbour
P. Kiefer
R. Snaider
S. Block

Enclosure 2

ADDITIONAL INFORMATION REQUIRED BY THE NRC STAFF

1. Provide U^{235} enrichment coefficients and stainless steel sensitivity coefficients for the proposed fuel rack modification.
2. What is the volume of the filter in the spent fuel pool cleanup system?
3. Provide a presentation of the load combinations and a stress summary for the proposed modification.
4. What are the significant frequencies and mode shape derived from your calculations?
5. Provide sketches showing fuel rack interties with the fuel pool.
6. Provide an analysis of the floor stresses comparing the proposed modification floor loading versus present loadings.
7. Provide the results of calculations of the generic dose rate above the fuel pool and man-rem estimates from all operations in the spent fuel pool area following the pool modification.
8. Perform an additional time history calculation of the proposed fuel pool structural modification. Provide documentation of the codes used and a formulation of the calculation including the constants used.
9. Discuss the effect of the increased heat load from the spent fuel pool cooling system on thermal discharges to Lake Dardanelle in relation to present thermal discharges from ANO-1.

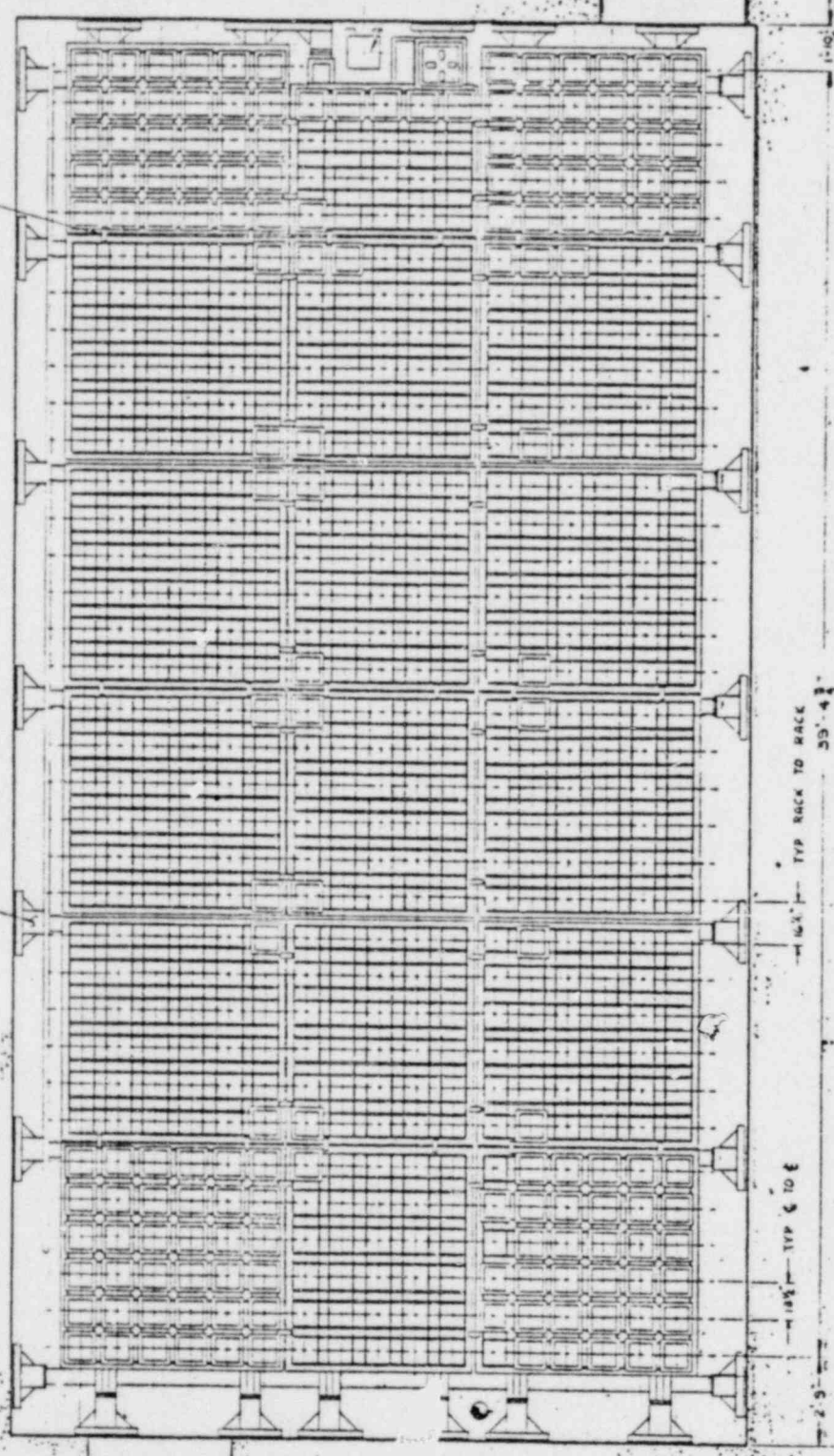
Enclosure 3





SPENT FUEL MODULE RACK TRYS

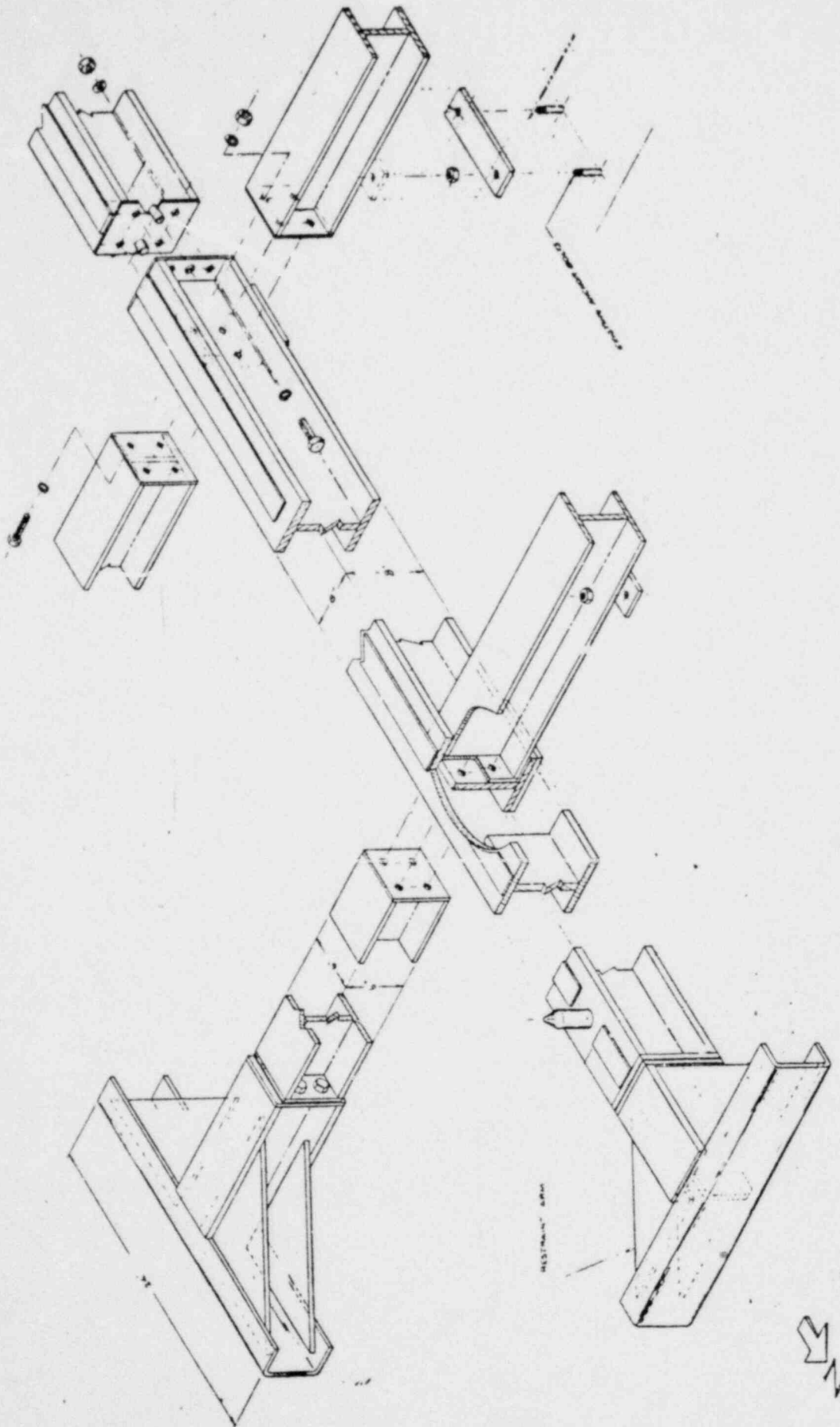
SPENT FUEL POOL FLOOR BEAMS



14'-0" TYP RACK TO RACK 33'-4 1/2"

14'-0" TYP G TO G

PLAN
AUXILIARY BUILDING SPENT FUEL POOL



MEETING SUMMARY DISTRIBUTION

Docket

NRC PDR
Local PDR
ORB #2 Reading
NRR Reading
B. C. Rusche
E. G. Case
V. Stello
K. R. Goller
D. Eisenhut
T. J. Carter
A. Schwencer
G. Lear
R. Reid
W. Butler
B. Grimes
R. Baer
L. Shao
Project Manager - WEConverse
Attorney, OELD - Kiefer
OI&E (3)
R. Diggs
NRC Participants (Major)
R. Fraley, ACRS (16)
T. B. Abernathy, DTIE
J. B. Buchanan
Licensee