

*52-001*  
**GE Nuclear Energy**

ABWR

Date 6-1-92

To

ROGER PEDERSEN~~504~~ 3162

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M/S (1034)This page plus 3 page(s)

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Subject

Upper Drywell SHIELDING.

Message

PLEASE FIND ATTACHED MODIFICATION  
ALONG WITH FIGURE 12.3-74. ALSO A  
FIGURE SHOWING RADIATION FIELD PRIOR  
TO ADDITIONAL SHIELDING IS ATTACHED  
FIGURE A.)9206260036 920601  
PDR ADDCK 05200001  
A PDR

FROM 408-9251687

06-01-92 05:43 PM

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JUN 01 '92 06:55AM G E NUCLEAR BLDG J P.274

Add paragraph following first paragraph on Page 12.3-12

..... operation and is not accessible during this period.

The upper drywell radiation shield design differs significantly from prior BWR designs in that the upper drywell shield extends to within four inches of the drywell ceiling thereby presenting a collimated angle to the upper drywell for fuel bundles as they are raised from the core to the upper pools. The design is shown in Figure 12.3-74. This design also protects from the remote possibility of a fuel bundle being dropped onto the refuelling bellows in that a lip has been added to the upper drywell ceiling to shield and collimate radiation streaming into the upper drywell from a fuel bundle on the bellows. This lip which extends 1.2 feet toward the vessel from the drywell ceiling wall and is 1.7 feet in height, consists of concrete with the bottom two inches of the lip made of steel with the steel plate extending two feet into the upper drywell. The radiation fields generated by a dropped fuel bundle even are shown in Figure 12.3-74 and though not low are sufficiently low to permit ingress of the area without significant operator exposure. The radiation field as shown in Figure 12.3-74 runs at a maximum 560 R/hr in the far upper corner nearest the bundle, dropping to less than 300 R/hr within 50 cm and below 100 R/hr at 1.5 meters from the corner.

The drywell wall is a 2m thick.....

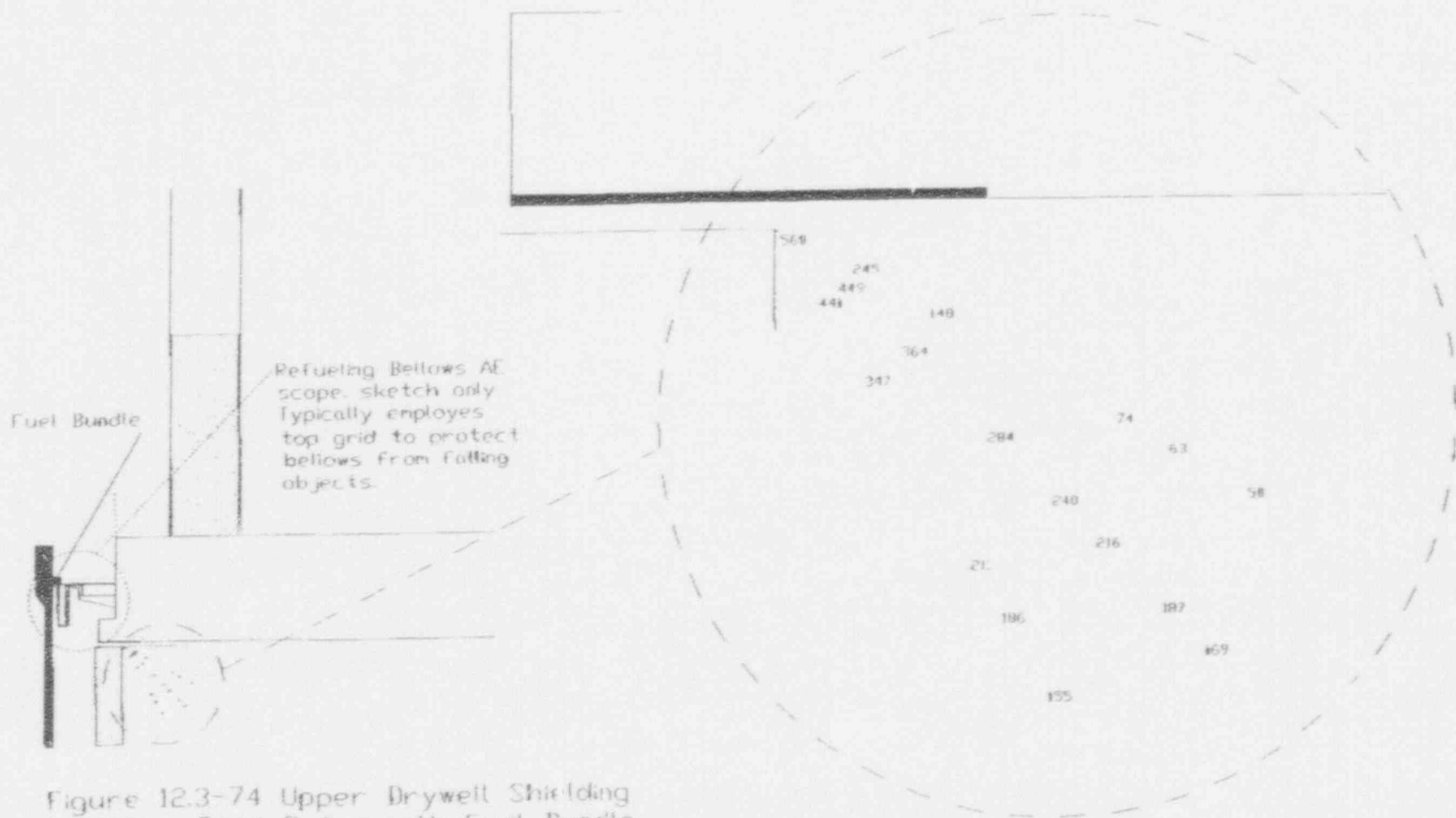
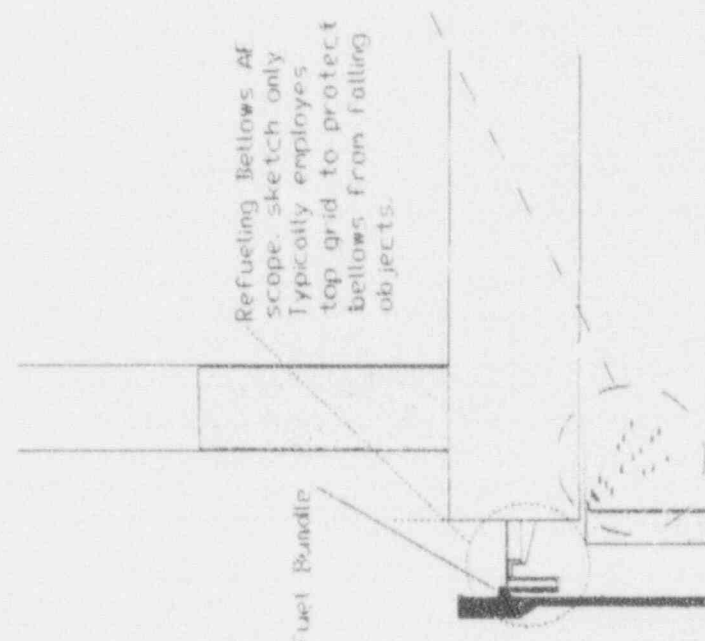
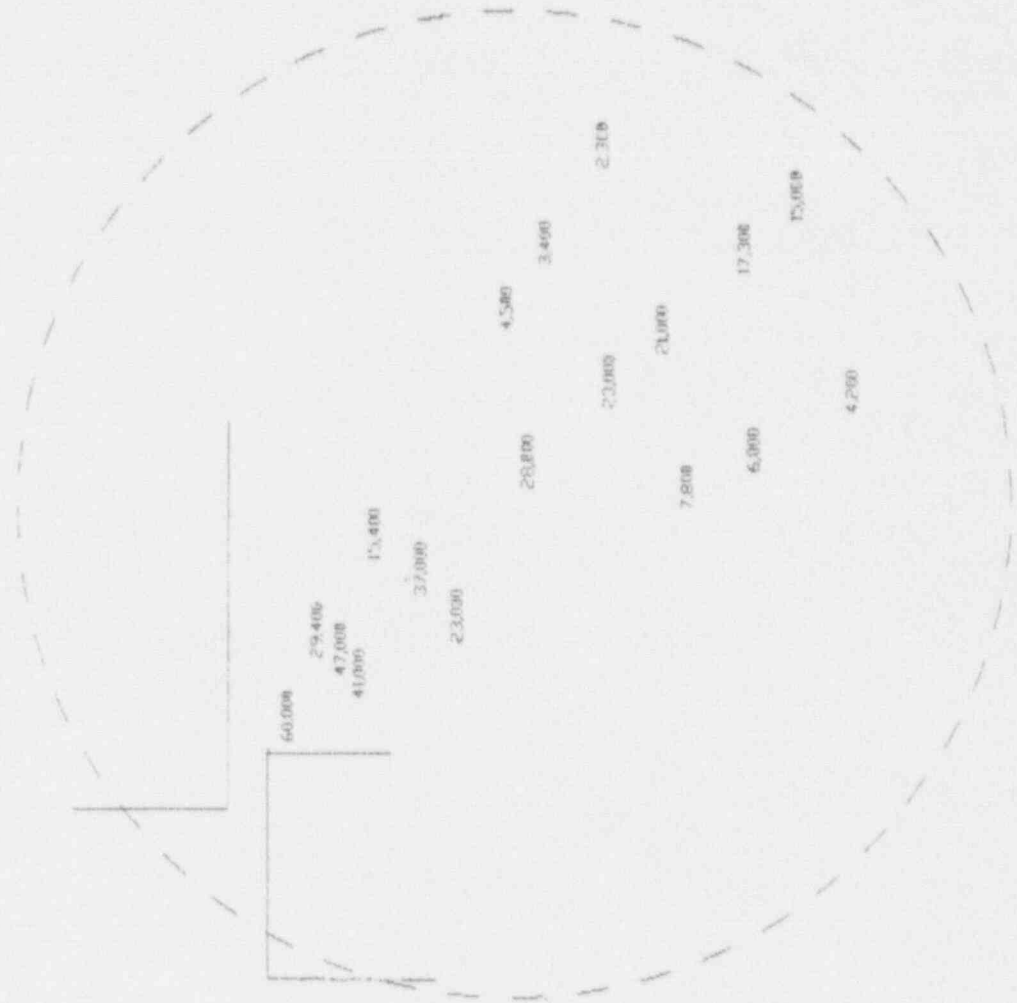


Figure 12.3-74 Upper Drywell Shielding Radiation Dose Rates with Fuel Bundle on Refueling Bellows. (Rads/hr)

FIGURE A



Radiation Dose Rates with Fuel Bundle  
on Refueling Bellows. (Rads/hr)