

80-247

AUG 12 1970

P. Howe, Chief, Site, Environmental and Radiation Safety Group, DRL  
THRU: D. R. Muller, Chief, PWR Projects Branch #1, DRL

POTENTIAL OFFSITE DOSES FROM IMPACT OF A TURBINE MISSILE ON  
STORED SPENT FUEL FOR INDIAN POINT 2

The applicant has indicated that a turbine failure at operating speed should now be considered a design basis accident for Indian Point 2. He has concluded that such a missile could impact on up to 18 fuel assemblies stored in the fuel pool. Such an event could presumably take place only after the plant had been refueled and restarted with the turbine-generator rolling. The appropriate decay period to be used in a dose calculation is, therefore, significantly greater than the 90 hours currently used for the refueling accident involving one assembly.

In accordance with our informal discussion, please determine the offsite dose consequences for the above turbine missile impact on 18 fuel assemblies for assumed fuel decay periods in the interval of two to four weeks for the Indian Point 2 plant. This determination should reflect your evaluation of the applicant's proprietary topical report WCAP 7518-L "Radiological Consequences of a Fuel Handling Accident" which was recently submitted.

For multiple plant sites such as Indian Point the turbine missile could originate from one of the other plants. For this case, the 90 hour decay period would still be appropriate. Accordingly, please calculate the offsite doses for the 90 hour decay period also.

Original signed by  
K. Kniel

K. Kniel, Project Leader  
PWR Projects Branch #1  
Division of Reactor Licensing

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| DATE ▶    | 8/12/70  | 8/       | ADOCK 05000247    |  |  |  |  |  |

*Memo*