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REPOSITORY INEL

COLLECTION SNAPTRAN

#22305 FRC#430 780073
BOX No. File: 4p1 - Jul 1965 Branch Reading Files
Snapshot I Test Series

FOLDER Proposal #5 Rev I

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SNAPTRAN-I TEST SERIES PROPOSAL NO. 5 REVISION I

HSHP:WFG

The Health and Safety Division reviewed the subject proposal. It is our opinion that the test series may be conducted with no undue hazards to personnel. We have the following two comments:

1. An independent calculation of the doses at TSF which might be expected to result from the instantaneous release of 100% of the fission products formed during a 20 MW-sec power excursion in the IET Test Cell yielded the following results:

<u>Stability Class</u>	<u>Inhalation Thyroid Dose</u>	<u>Cloud Gamma Dose</u>
Strong Inversion	1.9 rad	200 mr
Weak Inversion	90 mrad	50 mr
Weak Lapse	3 mrad	10 mr
Strong Lapse	0.3 mrad	1 mr

These calculations considered decay and initial diffusion within the Test Cell but still represent conservative dose estimates.

In view of very low doses which might result from an accident during lapse conditions, it would appear that the meteorological controls recommended by PFCO are unnecessarily restrictive. As an alternative we would recommend these tests not be performed under inversion conditions with the wind blowing into the sector encompassed by 150° through 180° to 270°. This restriction could be expected to result in fewer programmatic delays and would obviate the need for an evacuation of the TAN area in the event of an accident.

2. The Test Cell doors must be kept closed during all reactor operations.

cc: E. K. Loop

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