



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SEP 26 1979

MEMORANDUM FOR: R. E. Johnson
TAP A-11 Manager
Engineering Branch
Division of Operating Reactors

FROM: C. Z. Serpan, Jr., Chief
Metallurgy & Materials Research Branch
Division of Reactor Safety Research

SUBJECT: DOSIMETRY INPUT TO TAP A-11

At the meeting on the above subject on September 21, 1979, several questions were posed concerning neutron dosimetry, the answers to which should provide input for TAP A-11. During the next several weeks, the appropriate contractors and myself will prepare brief but accurate answers to these questions, for your use in preparing the neutron dosimetry section of A-11.

1. What is the best way to plot embrittlement versus fluence (or damage)? How much better is this than "1MeV"?
2. How good are reactor physics calculations and methods for predicting both flux and spectrum, and embrittlement in reactor vessel environments?
3. What is the best procedure to predict embrittlement and flux/fluence or damage from surveillance capsule measurements?
4. What is the change in spectrum going from the surveillance location to locations inside the vessel wall? What is the significance of such changes?

C. Z. Serpan, Jr., Chief
Metallurgy & Materials Research Branch
Division of Reactor Safety Research

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POOR ORIGINAL

ROUTING AND TRANSMITTAL SLIP		ACTION	
1 TO (Name, office symbol or location) <i>S. Hanauer</i> ✓	INITIALS	CIRCULATE	
	DATE	COORDINATION	
2 <i>P. Kapo</i>	INITIALS	FILE	
	DATE	INFORMATION	
3 <i>W. Morris</i>	INITIALS	NOTE AND RETURN	
	DATE	PER CONVERSATION	
4	INITIALS	SEE ME	
	DATE	SIGNATURE	
REMARKS <p>A copy of the Memo from Serpan to me, which I mentioned at our meeting on 10/1, is attached. It is a formalization of the commitment made at the Sept. 21 meeting in Hanauer's office. Since Serpan's consultants are going flat out to get answers in time for our NUREG, report any lack of concurrence to me immediately, please.</p> <p>Do NOT use this form as a RECORD of approvals, concurrences, disapprovals, clearances, and similar actions</p>			
FROM (Name, office symbol or location) <i>R E Johnson</i>		DATE <i>10-2-79</i>	
		PHONE <i>X 27385</i>	

OPTIONAL FORM 4
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