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OF 1954

MASTER

Westinghouse Electric Corporation

Astronuclear Laboratory

Box 10864, Pittsburgh 36, Pa
Telephone: 466-6800

October 11, 1962

*Mr. R. Schroeder, Chief
Space Nuclear Propulsion Office
NASA Lewis Research Center
21000 Brookpark Road
Cleveland 35, Ohio

Dear Mr. Schroeder:

Transmitted herewith are four (4) copies of WANL-TME-162, "Gamma Ray Source Strength for Equivalent Point Source", dated October 11, 1962.

This document is transmitted for your information.

Respectfully,

H. F. Faught
Program Manager
NERVA Nuclear Subsystem

jm

Enclosures - 4

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by K.F.C. TIC, date SEP 10 1973

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	<u>KAW</u>	<u>U</u>	<u>5-4-82</u>
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Info - 2
63-88312

RECEIVED

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From: WANL-TME-162
Date: Ground Support Engineering
October 11, 1962
Subject: Gamma Ray Source Strength
for Equivalent Point Source

Astronuclear Laboratory

Mr. A. M. Poindexter

This is information concerning the gamma ray source strength for an equivalent point source for NRX fuel elements at a 20 minute full power operation and one week after shutdown. This information was requested of WANL during a meeting at Vitro Engineering Company on October 3 and 4. It will be utilized by Vitro Engineering Company to determine the thickness of the shielding doors of the transfer car system in the post-operative cells of the E-MAD facility.

A. J. Svasek

A. J. Svasek
Ground Support Engineering

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ATOMIC ENERGY
OF 1954

GAMMA RAY SOURCE STRENGTH FOR EQUIVALENT POINT SOURCE
60 NRX FUEL ELEMENTS (20 MW FULL POWER OPERATION)
(1 WEEK AFTER SHUTDOWN)

<u>E_{Mev}</u>	<u>Mev/Sec</u>	<u>E</u>	<u>Photons/Sec.</u>
.1 - .4	3.45/13	.3	1.15/14
.4 - .9	1.03/14	.7	1.47/14
.9 - 1.35	2.14/13	1	2.14/13
1.35 - 1.8	6.88/13	1.5	4.58/13
1.8 - 2.2	2.76/12	2	1.38/12
2.2- 2.6	8.62/12	2.5	3.45/12
2.6 - 3.0	8.42/10	2.8	3.05/10
3 - 3.5	7.59/10	3.25	2.33/10
3.5- 4	6.89/10	3.75	1.84/10
<u>Total</u>	<u>2.39 x 10¹⁴</u>		<u>3.34 x 10¹⁴</u>

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