

Fig. 2.

of the radionuclides with low production rates. Since 54 Mn, with a half-life of 300 days, dominates the radionuclide production for both beam energies, the time dependence of the total photon dose rate is not significantly different for the two beam energies. The magnitude of the total photon dose rate at shutdown after infinite irradiation at the surface of cylinders with radii from 20 to 80 g/cm² is found to be ~65 to ~100 times higher for the 3-GeV beam than for the 200-MeV beam.

In addition to the principal results of the calculations given in Figs. 1 and 2, results concerning the production rate of nuclides other than those shown in Fig. 1, the neutron-leakage spectrum during irradiation, and the photon dose rate as a function of irradiation time, time after shutdown, and cylinder radius are given elsewhere.²

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Corrigendum

JOEL ADIR and JOHN R. LAMARSH, "The Thermal Utilization in Noncylindrical Reactor Cells Containing a Cylindrical Fuel Rod." Nucl. Sci. Eng., 35, 14 (1969).

We are indebted to Dr. T. Auerbach for calling our attention to the fact that additional eigenfunctions must be included in the two-dimensional generalization of Kofink's P_N method. To obtain the correct expressions for the angular flux, it is necessary to replace 2n by n in our Eqs. (43) through (45) and carry the summations on n up to l rather than to l/2. The additional functions do not enter into a P_1 calculation, but are present in a P_3 calculation. However, it would appear that their contribution to the value of f is small, in view of the agreement between our P_3 results and those of Dudley and Daitch reported in our Ref. 3.

²T. W. ARMSTRONG and J. BARISH, "Calculation of the Residual Photon Dose Rate Induced in Iron by 200-MeV Protons," ORNL-TM-2583 (1969).