5. W. B. LEWIS, "The Super-Converter or Valubreeder, A Near Breeder Uranium-Thorium Nuclear Fuel Cycle," AECL-3081, Atomic Energy of Canada Limited (1968).

6. S. LUNGU and M. ISBASESCU, "A Data Base for a PHW Reactor Operating on a Once-Through Low Enriched Uranium-Thorium Cycle," IAEA-R-2573-F, International Atomic Energy Agency (1984); see also IAEA-Tecdoc-344, International Atomic Energy Agency (1985).

COMMENTS ON "RADIATION PROTECTION PRACTICES AND EXPERIENCE IN FRENCH OPERATING REACTORS"

In reading the paper by Gauvenet,[1] a number of anomalies were noted. This results in conflicting information in the paper.

Table IV, titled "Total Collective Doses at the End of 1982," states the total doses were 12 986 person-rem; the total energy produced was 282 545/GWh. Thus the ratio was 0.046 person-rem/GWh or 0.46 mSv/GWh.

Figure 3 of the paper shows the collective dose per gigawatt hour at 0.035 person-mSv/GWh for 1982.

This calls into question the scale in Fig. 3. Is it possible it is out by a factor of 10? Should the scale be 0 to 1 mSv/GWh? Also, the 1982 data do not agree, even with this factor of 10 correction.

It should also be noted that Fig. 4 has an incorrect conversion factor. It should be 1 Sv = 100 rem.

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July 14, 1986

REFERENCE

1. A. GAUVENET, "Radiation Protection Practices and Experience in French Operating Reactors," *Nucl. Technol.*, **72**, 246 (1986).

REPLY TO "COMMENTS ON 'RADIATION PROTECTION PRACTICES AND EXPERIENCE IN FRENCH OPERATING REACTORS'"

There is no contradiction between Table IV and Fig. 3 concerning the workers' collective doses in French nuclear stations.

The collective doses are given year by year in Fig. 3 while the data mentioned in Table IV are relative to the *total life of the stations* since their connection to the network ("*total* collective doses *at the end of 1982*" has this meaning).

This is the reason why the average dose on the central stations' *total* life is 0.045 person-rem/GWh while in the year 1982 it was 0.035 person-rem/GWh.

Van Berlo[1] is right in signaling a mistake on the vertical scale of Fig. 3. The scale must be in *person-rems* (and not in person-milliSieverts). In Fig. 4, of course, 1 Sv = 100 rem (100 was wrongly copied as 1 m in designing this figure).

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September 11, 1986

REFERENCE

1. J. P. van BERLO, "Comments on 'Radiation Protection Practices and Experiences in French Operating Reactors,'" *Nucl. Technol.*, **76**, 194 (1987).