selected. I could have certainly made a better selection in the field of medicine. Probably any other specialized scientist could have made a better selection in his own field.

But in spite of these picayune criticisms, these volumes are delightful reading for the scientist (any branch) who just wants some vacation reading. It is a reference work for the historian of science. It is almost a textbook for the radioisotope chemist and biologist and clinician. If I had to burn my library tomorrow, these are among the last books I would burn.

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(*About the Reviewer: See previous book review.*)

Directory of Nuclear Reactors, Vol. IV. International Atomic Energy Agency, Vienna, July 1962, 324 pp. Price: U.S. $5.00; elsewhere: Sch 105-(30s. stg; NF 20; DM 17, 50).

This volume of IAEA's Reactor Directories supersedes Volume I issued in June 1959 which covered 35 nuclear electric plants then in operation or being constructed. Volume IV presents up-to-date data and drawings for these earlier reactors supplemented by information on 20 new reactors, construction of which started in the interim. This would seem to make the coverage of active power reactor projects complete; however, some nuclear electric plants presently being designed or constructed have apparently been overlooked. Notable among the omissions are: Sizewell, EDF-3, EL-4, HTGR, Bodega Bay, SENN, SELNI, SENA, and VVER-7 (East Berlin).

The selection of power reactors included in Volume IV, as in Volume I, has apparently been limited to those with actual electrical generating capacities greater than 2 Mw. For this reason relatively large maritime power reactors such as the Lenin or Savannah reactors, and experimental power reactors, such as the Dragon, MSRE, Halden, Borax-5, EBR-1, PRO, etc., are not included although all of these have the capability of producing appreciable quantities of electricity. For the sake of completeness, it is suggested that the editors of the Power Reactor Directory abandon the criterion of "useful electricity" and present data on these other power reactor projects.

The material presented for each nuclear power project includes general information on the reactor and on its core, physics data, sketches of the reactor and fuel elements, flowsheets, heat transfer, and cost information. Thus Volume IV comprises a condensed source of technical information which is ideal for making general surveys of reactors or finding specific bits of information on particular reactors; however, no attempt has been made to satisfy the needs of engineers interested in design details of individual projects. For such information, one must refer to the pertinent design reports which are listed in a bibliography at the end of each section. An easily accessible, up-to-date source of vital reactor statistics is, however, often needed by those working in the nuclear power field; therefore, Volume IV should be a very useful addition to technical libraries or as a desk reference volume.

In contrast to its excellence from a technical standpoint, the Directory is very poorly bound with a paper cover that cannot withstand hard use. This method of binding was chosen deliberately so that the pages may be easily extracted and placed in a loose-leaf binder, presumably to permit regrouping of pages or adding of new material as desired. It is doubtful that this flexibility is needed or even practical. First of all, because of the transitory nature of the nuclear power field, periodic revisions of data for the majority of reactors may be necessary as was the case for the Volume I reactors; and second, such a loose-leaf volume would be unsuited to library use because of the possibility of lost pages. A hard bound edition of Volume IV would, therefore, appear to be desirable with subsequent supplements and/or revised editions appearing as needed.

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(*About the Reviewer: A graduate of Worcester Polytechnic Institute with B.S. in Chemistry in 1936 and M.S. in Chemical Engineering in 1938, Lane was W.P.I.'s first exchange fellow, attending the University of Goettingen, Germany, 1938–39, specializing in physical chemistry. He started work at the E. I. du Pont Company in the field of physical property measurements, dialysis technology, and diffusional operations. His work in atomic energy started in 1942 at the Metallurgical Laboratory, University of Chicago. Since that time, he has held posts of Assistant Director, Technical Division, Clinton Laboratories; Chief of the Evaluation Branch, AEC, Washington; and Director, Reactor Engineering Division, Oak Ridge National Laboratory. At the present time he is Director of Reactor Evaluations and the Thorium Utilization Program and is on the Tennessee State Advisory Committee on Atomic Energy.*