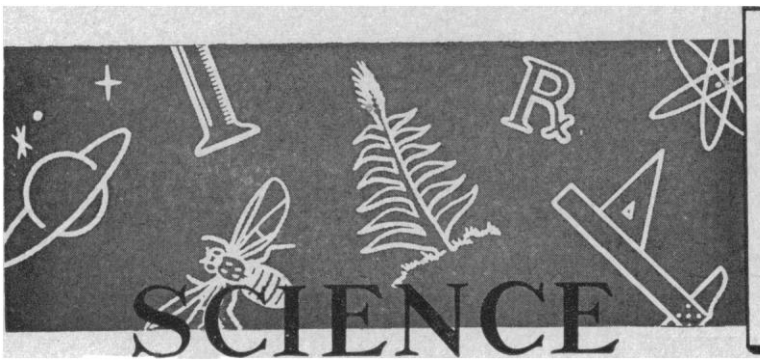

Nuclear Power—Its Future

ONE of the more encouraging aspects in what is, to many, a disappointingly slow approach to the utilization of nuclear energy for peaceful purposes, is the fact that the pattern is beginning to show a very real parallelism with other major technologic developments of the past. Recognition of ultimate possibilities, isolation of immediate critical problems, and an understanding of the physical phenomena basic to a solution of these critical problems are steps through which developments from the steam engine to television have all progressed. It is now beginning to be clear that the peacetime use of nuclear power will be no exception.

Papers such as those appearing in the present issue of SCIENCE show again the essential elements of this pattern. Research reactors, especially those in university installations, are destined to pay big dividends, for they contribute to each of the several stages of a major development. Such reactors of course provide facilities for the solution of research problems. But they also serve for the training of students, for gaining experience in reactor operation, and for developing self-confidence in the operating staffs. Moreover, the fact that they are usually accessible to public view and that the results obtained with them are published widely go a long way toward removing the atmosphere of mystery and awe that surrounds things atomic in the lay mind—one of the major handicaps to normal and rational technologic progress in this field.

Recent successes with reactors, including those abroad, now practically assure that at sometime in the not too distant future, nuclear power will be utilized in successful competition with power from fossil fuels. The question is no longer whether, but *when,* such utilization will begin. All this suggests the timeliness of a group of technical articles for the nonspecialist, describing the tools, the problems, and the progress of research in this fascinating but controversial field.

L. R. HAFSTAD

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More Important Than War

ONE day during the First World War the celebrated British physicist Rutherford wrote an apology for not attending a meeting that had been called to discuss a war research problem. He stated that he was too busy with experiments in which he seemed to have split the atom. "If this is true," he wrote, "it is far more important than your War."

In talking . . . about the future development of atomic energy I would like to borrow some of Rutherford's perspective. In the midst of a great war this eminent scientist glimpsed the real proportions of that force for human peace and welfare that lies in the energy from the atom—"Far more important than your War." In that thought I find a strong note of hope, and hope is the virtue in which our national stockpiles are today so low. I trust that our world will put this evaluation "Far more important than War" on the future use of atomic energy.

Such an evaluation will, I believe, come as a part of a growing awareness that atomic war because of its overdestructiveness will no longer be a useful means for solving international disputes.

Thomas E. Murray, Atomic Energy Commission, on the Electric Companies Public Information Program, Chicago, October 22, 1953.

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