End of R&D Project: 'Unpopular, but Sensible'

PP&L and Westinghouse paid their own way, broke no commitments in cancelling R&D project on homogeneous reactor

The announcement that Pennsylvania Power & Light Co and Westinghouse Electric Corp had decided to drop their homogeneous reactor research and development project was greeted at once by such a roll of political drums that the facts were all but drowned out.

Last week, during a lull in the drum roll, a few clear notes could be heard: The mid-December decision to abandon the project was taken after 3½ years of research at a cost to Westinghouse and PP&L of about $9 million.

There had been no commitment to build a full scale reactor.

The project had been entirely supported by the private funds of the companies.

Not Technically Feasible

The project had been for research and development, and after 3½ years of R&D the companies had reluctantly concluded that the single-region slurry homogeneous reactor is not now technically feasible.

In 1955 the companies initiated the R&D program with the aim of determining whether or not the construction of a large-scale power plant could be justified. The homogeneous plant would use particles of uranium in a liquid slurry instead of using metallic fuel elements. Pending the outcome of this research, the decision was to be made on construction of a nuclear plant of probably 150 Mw.

In announcing the project's end, Charles E. Oakes, PP&L board chairman, and Mark W. Cresap, president of Westinghouse, said:

"We continue to believe that this reactor holds bright promise for the future, involving as it does potentiality of conversion of thorium to fissionable material. However . . . the present facts indicate the necessity of further research and development work, including prototype development and experience, before a large-scale plant would seem to be warranted."

Early last year PP&L and Westinghouse had asked AEC for funds for further research. After general Congressional approval, contract negotiations were commenced with AEC. The negotiations, however, had not yet been concluded at the date of the companies' decision to suspend the project.

"We didn't see how we could negotiate the AEC contract without laying the facts on the table," said Jack K. Busby, PP&L president. "Cutting off the project was not a popular thing to do, but it was the only sensible conclusion we could reach. The technical staffs of PP&L and Westinghouse found that a full-scale plant would not be feasible at this time, and we felt that we could not properly negotiate a contract for which the government might pick up the check any more than we could properly continue to spend our own money."

The companies informed AEC that they would make no claim on the federal government for reimbursement of any of their expenditures.

Oakes and Cresap pointed out that an experimental homogeneous program at AEC's own Oak Ridge National Laboratory has encountered delays and difficulties, and noted that this highlights changes that have taken place in "previous conceptions and projections of feasibility and operability."

"This announcement is no condemnation of the homogeneous concept," said Oakes, "but it is, we believe, a realistic appraisal of the present situation . . . Certainly PP&L's newly-announced participation in the gas-cooled reactor power plant to be built by Philadelphia Electric will not continue to be the extent of our nuclear power effort. For, in our company's philosophy, the sound and orderly development of nuclear power is plain, common sense."

WWP Sees Bright Future in the 'Electric'

An experimental electric car developed by Washington Water Power Co provides another convincing bit of evidence that the "electric" is more than a museum piece. A converted Crosley sedan, the experimental model was built by Robert Sewell, a WWP engineer. Conventional storage batteries and one motor drive it at speeds up to 30 mph.

"Tests now show," said George Brunzell, executive vp, "that with two motors, a rear wheel direct drive, and special designed batteries, speeds of almost 60 mph and a much longer operating time or driving range are possible." Above, (l to r) are Brunzell, Pres Kinsey Robinson, and Sewell.