



AEC and rural electrification groups discuss future farm use of atomic power

ATOMIC POWER FOR AMERICAN FARMS may still be a few years away, but the first steps in this direction have been taken by government agencies and interested farm groups. The Atomic Energy Commission recently held a meeting with top officials of the Rural Electrification Administration. The atomic energy committee of the National Rural Electric Cooperative Association also took part.

The meeting was called to discuss the future of nuclear generated electricity for farm use. The REA and the farm power group also wanted to make sure that they were up to date on the latest progress made toward the goal of economic electric power by the nation's scientists.

REA will have a major stake in any power produced by AEC in its developmental programs. Cooperative users of power get preference if this power is sold. The so-called "preference clause" was one of the most bitterly debated sections of the new atomic energy law passed during the last session of Congress.

Know-how for nuclear power generation will be made available to farm cooperatives and other groups as soon as possible, AEC promises. Close liaison already exists between REA and AEC. Five REA staff members have been given AEC clearance for classified information. Their job is to keep in close touch with AEC's power development programs.

From this direct information, the REA can pass out less detailed information to the local cooperatives and electric districts. The current meeting was designed to tie up some of the loose ends and to bring the interested parties together so future strategy could be mapped out.

The NRECA, which represents many of the individual rural electrical "co-ops," already has filed an application with AEC for a power study agreement similar to those entered into by other indus-

try groups. If the application is approved, AEC will make information available on reactor development to cleared personnel.

While the farm power meeting brought out optimism for atomic electric power, this feeling was tempered by the knowledge that no power reactor yet developed promises power costs that are competitive with conventional power plants. Economic studies made by the commission and its contractors indicate that electricity from the atom will be competitive within a decade or two, according to AEC Chairman Lewis L. Strauss.

This means that the farmer cannot expect low cost nuclear power until further development work is done. The situation will change as new discoveries gained from atomic research are put into practice.

Right now the best bet for producing cheaper nuclear power is the pressurized water reactor being built in the Pittsburgh area with the cooperation of the Duquesne Light Company. Ground already has been broken and it's expected that the reactor will be supplying 60,000 kilowatts by 1957.

But coming along behind is the small "package" reactor the Army is studying at Fort Belvoir, Va. The idea of a small power producing unit which could be set up in isolated areas appeals to some rural electrification spokesmen. They believe such a reactor also could solve another pressing problem—lack of fuel. Power for some fuel starved areas must be brought over transmission lines for long distances. In some areas the fuel itself is shipped into the local generating plant.

New Reactors to be Built

AEC has plans for newer and better reactors as part of its five year program of reactor development. These prototype reactors will be financed partly by the Government and partly by private

interests. In addition to the pressurized water reactor, four other atom power plants will be built.

Even if none of these reactors provide economical power they should provide valuable know-how about reactor construction and operation. This information could be passed on to builders of boilers, pumps, fuel assemblies, and other auxiliary parts of the reactor system.

The information also would be passed on to local cooperatives who were interested in building generating plants in conjunction with the reactor. Such information would be the foundation for future operating knowledge and would aid in overcoming difficulties in the supply system.

The future is not completely bright for the REA and the cooperatives. Neither or both of them are in a financial position which would allow them to take on part of the costs of developing nuclear power reactors. Naturally, however, both groups want to keep in as close touch as possible with the latest developments in nuclear technology.

The farm groups are primarily interested in the small to medium sized central station power plants. Portability, one of the aims of the Army package reactor program, is not necessary because the atomic installation will be relatively permanent.

In future reactor projects, REA hopes that AEC will look to areas with rural electrification when planning the location of experimental plants. REA would like to get some first hand information on the running of reactors which might be the right size for their power supplying operations. Strauss promises that REA will benefit from atomic power when the costs are brought down to an economical level.

The present meeting is only the beginning of a series which will be held by AEC, REA, and the cooperatives. The groups will continue to seek to advance the development of atomic energy for peacetime uses, especially for use on the farm.

Their biggest accomplishment was to set up the channels of information back and forth between the government agencies and the cooperatives. This will enable rural electrification interests to keep abreast of all the progress in reactor technology and enable them to evaluate the prospects of economic nuclear power.

Commenting on the future of atomic energy, Secretary of Agriculture Benson said:

"Just as our forefathers conquered the wilderness that was once America, so are we today pushing back the frontiers of science. Today we stand on the threshold of the age of atomic power. The way will be opened for radical changes in such widely separated fields as agriculture, transportation, heating and medicine."