

Mr. JONES. Next we have the Arkansas River-Ozark lock and dam and lock and dam No. 9, Arkansas.

ARKANSAS RIVER-OZARK LOCK AND DAM AND DAM NO. 9, ARKANSAS

We have Lt. Col. George B. Shaffer, Assistant Director of Civil Works for Plains Division.

Colonel Shaffer, you may proceed.

Colonel SHAFFER. Mr. Chairman, I have assisting me today on this project Mr. Fred Thrall from our office.

Mr. Chairman, this project is located in the Arkansas River Basin. The report is in response to Senate resolution of the Committee on Public Works adopted April 10, 1962, concerning the advisability of modifying the recommendations made for the Arkansas River and tributaries to the 79th Congress with the view to providing provisions for pumped storage developments for power production in conjunction with the multipurpose Arkansas River project.

The existing Federal development is a multipurpose project on the Arkansas River which provides for a channel 9 feet deep extending for about 450 miles on the Arkansas and Verdigris Rivers to the vicinity of Tulsa, Okla. Seventeen lock and dam projects are required to provide the channel, of which four of the higher head projects will include conventional hydroelectric power facilities or provisions for future power. Ozark lock and dam at mile 312.9 and lock and dam No. 9 at mile 233.5 are the two links in the multipurpose project which have feasible sites for pump storage development (White Oak and Petit Jean sites).

Mr. JONES. Let us get those on the map. Is that the dark area, the reservoir?

Colonel SHAFFER. Yes, sir.

The Chief of Engineers in his proposed report finds that a solution for satisfying part of the peaking needs in the surrounding power market area could be met by construction of two adjoining type pumped-storage hydroelectric plants at the White Oak and Petit Jean sites. These projects would consist of four pump-turbines and generating units designed to lift water (through the use of off-peak power) from the Ozark lock and dam and lock and dam No. 9, respectively to the top of adjacent mountains for storage, with later release for power generation during periods of peak needs. The Federal Power Commission has indicated that output of a 500-megawatt Petit Jean project could be utilized in 1975 and that output of a 500-megawatt White Oak project could be utilized in the regional load by 1980.

The estimated cost of the proposed improvements is \$125,200,000, all Federal. The annual charges are \$10,140,000, including about \$5,010,000 annually for pumping energy. The annual benefits from hydro-electric peaking power are estimated to be \$21,980,000 and the benefit-cost ratio is 2.1.

In submitting his proposed report the Chief of Engineers stated that the Petit Jean and White Oak projects are unique however, in that their authorization and construction by Corps of Engineers would represent the entry of the Federal Government into a new field involving questions of broad policy not yet promulgated. Furthermore, the unresolved policy questions are of such a nature that they do not fall