stituents and by Arkansas Members of the House of Representatives. I know that you will give careful consideration to their views, and I sincerely believe that these projects represent a good investment for the entire nation.

With best wishes, I am Sincerely yours,

J. W. FULBRIGHT.

STATEMENT OF BARRETT M. CAROTHERS FOR UNION ELECTRIC Co., THURSDAY, JUNE 20, 1968

My name is Barrett M. Carothers. I am Executive Vice President of Union Electric Company, an investor-owned public utility incorporated under the laws of Missouri having its executive offices at 315 North Twelfth Boulevard, St. Louis, Missouri

Union Electric is engaged, among other things, in the generation, transmission, distribution and sale of electric power and energy to approximately 800,000 customers in an 18,000 square mile area having a population of over 2,000,000 people in portions of Missouri, Illinois and Iowa, and is subject to the jurisdiction of the Missouri Public Service Commission, the Illinois and Iowa Commerce Commissions and the Federal Power Commission. The Company owns and operates seven steam electric generating plants having a total capacity fo 2,980,000 kilowatts, two hydroelectric plants with a capacity of 330,000 kilowatts, and a pumped storage project known as our Taum Sauk Plant. Taum Sauk is one of the world's first and largest pumped storage hydroelectric plants and is located near Lesterville, Missouri, some 90 air miles southwest of St. Louis. Completed in late 1963, its two units provide 350,000 kilowatts of peaking capacity and system reserve. The Company is extensively interconnected with other electric utility systems in the midwest and is a member of the Illinois-Missouri Power Pool and two of the nation's largest power planning networks, MAIN and MAPP.

Union Electric joins with Arkansas Power and Light Company in opposing the authorization of two proposed Federal pumped storage projects in northwestern Arkansas, namely, the Petit Jean and White Oak projects. Briefly stated, we are opposed to these proposed projects principally because they are unsound and cannot be justified from an economic and engineering standpoint and there is a serious and substantial question as to their legality.

Pumped storage projects are simply peaking plants—nothing more. It is fundamental that such plants are feasible only if an electric supply system has unused generating capacity available during off-peak periods that can be used to pump water from a lower to an upper reservoir of the pumped storage project from which it can be released to generate power as needed during peak load hours. Most hydroelectric plants are also essentially peaking plants. Thus it is apparent that the idle capacity required to justify a pumped storage project would have to be provided by steam electric generating plants.

Since in the field of power generation the Corps of Engineers has always been limited by law to the development of hydroelectric facilities and then only when such power generation is a natural and economic adjunct of a project justified for some other legitimate purpose, it is difficult to understand how the Petit Jean and White Oak projects (which are purely power projects and nothing more) can be

justified from an engineering or legal standpoint.

Moreover, I am unaware of any study or analysis that has been made showing how the Federal power marketing agency, Southwestern Power Administration, will be able economically to dispose of additional short time peaking capacity, a commodity they already have in overabundance. In short, pumped storage projects have no place in a hydroelectric system such as that of the Southwestern Power Administration.

Finally, in May, 1964, an independent engineering firm, Bechtel Corporation, made a feasibility study of the Petit Jean and White Oak pumped storage projects. They concluded that both projects were economically unsound and that it was not necessary to build such projects in order to meet the future power requirements of the area. That report was submitted to Colonel Edmund H. Lang, Resident Member, Board of Engineers for Rivers and Harbors, United States Army Corps of Engineers, Washington, D.C. by Mr. J. Robert Welsh on behalf of the member companies of the Southwest Power Pool and associated companies. The facts and data on which the Bechtel report is based and the conclusions reached therein are still valid and sound today. We support and concur in that report.

Accordingly, in view of the foregoing, we respectfully urge that this subcommittee disapprove he projects here under consideration.