These two projects would develop installed capacity for peaking purposes of 500,000 kilowatts each, and together exhibit a benefit-to-cost ratio of 2.1:1, based on January 1963 price levels.

In connection with our study of Petit Jean and White Oak, we also updated the cost figures for these projects. We added 27 percent to the district engineer's estimate of initial cost, based on the 27 percent increase since 963 indicated by Engineering News-Record's construction cost index. We applied an interest rate of 5 percent investment. We also increased O.M. & R. costs by 27 percent and used a 50-year amortization period. Even with all of these changes, the Petit Jean project shows a benefit-to-cost ratio of 1.50 and White Oak shows a benefit-to-cost ratio of 1.48.

There has been considerable testimony asserting that peaking power can be produced more cheaply from thermal plants. Thermal plant investment costs as low as $80 per kilowatt have been mentioned. To my knowledge, Arkansas Power & Light Co. has not, in recent years, built any station for $80 per kilowatt, although some units may have been added to existing stations at that cost.

However, new steam units, because they are the most economic generation available, are generally operated around the clock; whereas what we are speaking of here is peaking capacity.

Even assuming an $80 per killowatt installed cost, peaking capacity utilized at 1,000 hours per year, which is about what Petit Jean and White Oak would operate, would cost 14 mills per kilowatt-hour. FPC estimates are that peaking capacity of this type produced at privately financed plants in the southwest, would cost over 18 mills. Peaking energy produced from White Oak and Petit Jean would cost 11.4 and 13.4 mills, respectively.

There is also considerable testimony to the effect that the peakload in the southwest area, occurs during 11 hours each day, whereas these two projects would operate only 6 hours per day, 5 days per week. Mr McCollam later revised his oral testimony to say that peakloads are experienced "up to 11 hours each day."

Mr. Chairman, you will recall that the testifying officer representing the Chief of Engineers stated that he had rechecked this matter with the FPC and that the Commission, as of March 1968, was still of the opinion that these two projects could be economically utilized as peaking capacity for 6 hours per day, 5 days per week; as was determined by the Commission in its 1962 study of this matter.

Power and energy from Petit Jean and White Oak would be marketed at wholesale through the system of the Southwestern Power Administration, which is interconnected with all Federal, public, cooperative, and private power suppliers in and adjacent to its service area. Thus, 1 million kilowatts of additional peaking capability would be available to help carry the peakload of the entire southwest area.

SPA provided wholesale power service to rural electric systems in a five-State area including Arkansas, Oklahoma, Missouri, Texas, and Louisiana. SPA also sells substantial blocks of peaking capacity to the investor-owned power companies in its region.

Hydroelectric capacity can be brought into production almost instantaneously. By contrast, it takes several hours to bring a steam electric station up to temperature and place it on the line. For this reason, large hydro stations are ideally suited to meeting peakload