

eral Government. In its Order No. 541 dated May 14, 1968, the Federal Power Commission issued a license for the Northfield Mountain pumped storage project in New England. I would like to quote here paragraph 2, page 8, of the FPC Opinion and Order, because it has significant relevance to the situation here at hand.

Quoting:

In accordance with the provisions of section 7(b) of the Federal Power Act, the Commission has also given consideration to the question as to whether the construction of the Northfield project should be undertaken by the United States rather than by the applicants. On the basis of the record before us, and particularly in light of the dependence of the Northfield project upon the thermal generating facilities and transmission network of the applicants, we find that this is not the type of project to be undertaken by the United States.

The same factors which influenced the Federal Power Commission to conclude that pumped storage in New England should not be undertaken by the United States are equally applicable to the construction of any pumped storage in Arkansas because here, too, even if pumped storage could be justified at all, it would certainly be dependent upon the thermal generating facilities and transmission network of the investor-owned companies who have primary responsibility to serve the bulk of customers in the area.

Aside from these questions of policy, there are compelling economic and technical reasons why these projects in the Southwest cannot be justified at this time under any type ownership and should, therefore, not be authorized or built.

First, I would like to make it clear that the Arkansas Power & Light Co. and the other investor-owned electric utility companies in the area would look with favor on building pumped storage facilities in cases where they could be built at a cost less than the least costly alternative and where their output would fit into the peak season load shapes of the area. As a matter of fact, our company owns a pumped storage site which is superior to those proposed to be built by the Government; and we would, without hesitation, build pumped storage facilities if they would serve the needs of the area better and more economically than could be done by other alternatives. At this time, pumped storage in this area simply does not meet these basic conditions which are enumerated below:

1. The proposed Federal pumped storage projects were estimated to cost a minimum of \$125 million, or \$125 per kilowatt, not including necessary costs for transmission lines to carry offpeak pumping energy to the projects and onpeak power and energy from the projects to the load centers. These estimates were based on 1963 cost figures. Certainly the cost would be much higher now. Due to tremendous advances in the state of the art, companies in the area are now building very large high efficiency thermal generating plants at a cost of approximately \$80 per kilowatt. Such thermal plants have great advantages over pumped storage plants in that they are capable of generating 24 hours per day across the peakload periods, if necessary, whereas these pumped storage plants can operate only 6½ to 7 hours per day.

This is a critical limitation in the Southwestern part of the United States because during the crucial periods of the summer when peaking capacity is needed most, our daily peakloads now have a duration of up to 11 hours per day. In simple terms, this means that the investor-