STATEMENT SUBMITTED TO THE SUBCOMMITTEE ON SCIENCE, RESEARCH, AND DEVELOPMENT BY ALEX RADIN, AMERICAN PUBLIC POWER ASSOCIATION, AUGUST 10, 1966

## ELECTRIC VEHICLES AND AIR POLLUTION ABATEMENT

The motor vehicle commonly is described as a major source of air pollution. A report by the Department of Health, Education, and Welfare, published last November, estimated that about half of the total air pollution problem in the United States is caused by cars, trucks, and buses. A report published in June in St. Louis, Mo., indicated that 63 percent of the hydrocarbons discharged into the atmosphere in that city during a 1963 test period were attributed to automobiles.

Efforts are being made to control the exhausting of hydrocarbons and carbon monoxide by vehicles, but even the best of these provide something less than 100 percent control. For example, 1966 auto models for sale in California, where a stringent exhaust control law is in effect, are equipped with exhaust control systems that reduce hydrocarbon emissions by about 65 percent and carbon monoxide emissions by about 50 percent, according to the HEW report.

## A PERMANENT SOLUTION POSSIBLE

On this basis, even the adoption of California-type legislation by all of the other States would not solve the vehicular pollution problem; it would merely permit a doubling of the number of automotive vehicles without any increase in the present level of pollution, admittedly too high. Population projections indicate that a doubling of the number of vehicles can be anticipated within a relatively few years, and automotive pollution will rise accordingly.

Members of the American Public Power Association are deeply interested in what appears to offer a solution to a major part of the automotive pollution problem—the electric battery-powered vehicle. Although it is not likely that battery-powered automobiles would completely replace combustion-powered vehicles, the air pollution problem would be materially alleviated by the widespread use of battery-powered automobiles and trucks.

Development of new types of batteries which are lighter in weight and more long lasting than earlier types has stimulated much interest in the battery-operated vehicle. Our association has established a new committee to promote the electric auto. Battery-powered forklift vehicles, golf carts, delivery trucks, and other specialized vehicles are beginning to catch on, particularly in Great Britain.

The early development of the automobile proceeded along three principal routes—the gasoline-powered engine, the steam engine, and battery-driven electric vehicle. Some of the early manufacturers switched from one type to the other; all types had certain advantages.