TO SHOW

## ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

062

RECEIVED

JUN 8 1973

1973 JUN 11 AM 11 09

Mrs. W. W. Sallach P. O. Box 463 Sealy, Texas 77474 ADVISORY COMMITTEE ON

Dear Mrs. Sallach:

The Advisory Committee on Reactor Safeguards has asked us to reply to your letter.

We cannot give you a "direct answer" to the question: "How far must I move from the proposed nuclear power plants to be safe in case of an accident?" Generally speaking, however, we do not believe it would be necessary for you to move at all.

One of the criteria used by the AEC Regulatory Staff in determining if a proposed site is suitable for a nuclear power plant is the consideration of a hypothetical accident which would result in the release of radioactivity in amounts which could be harmful to the public. This hypothetical release of radioactivity then is studied in terms of the meteorological conditions and other characteristics of the proposed site to arrive at what is called an exclusion area.

The exclusion area is defined as that area which would surround the proposed reactor in which the licensee would have
the authority to determine all activities including exclusion
or removal of personnel or property with residence within the
area normally prohibited. It must be of such size that, under
the accident conditions described above, an individual standing
at any point on the boundary for the first two hours following
the hypothetical accident would not be exposed to radiation in
excess of a limit spelled out in AEC Regulations. This limit
is well below exposure levels which are known to be harmful
to people.

The size of the exclusion area varies according to site, but, as an example, the minimum exclusion distance for Alabama Power Company's Joseph M. Farley Nuclear Plant, now under construction near Dothan, is 4300 feet. The closest occupied dwelling is 4500 feet from the plant. This is why we believe it probably would not be necessary for you to move to be safe

if a nuclear power plant were to be built and operated near your home. That is not to say there is not even a very small element of risk involved, since living anywhere on earth poses some risk. You will recall, for example, the record number of tornadoes which touched down over a large part of the country during the recent Memorial Day weekend.

Each of the two reactor units at the Farley Plant will have an electrical capacity of 829,000 kilowatts. In addition, an electrical capacity of 829,000 kilowatts. In addition, Alabama Power Company still is planning to build another two-unit nuclear plant in the State. The planned site for the unit nuclear plant in the State. The planned site for the facility recently was abandoned because of geologic and seismic considerations. The Tennessee Valley Authority is building its three-unit Browns Ferry Nuclear Plant in Limestone building its three-unit will have an electrical capacity of 1,065,000 kilowatts.

We hope this information will be useful to you. However, if we can be of further assistance, please let us know.

Sincerely,

Frank L. Ingram

Frank L. Ingram, Chief Regulatory News Branch Office of Information Services

cc: R. F. Fraley Executive Secretary ACRS