

Comments on
Crystal River Units 3 and 4
Florida Power Corporation

Prepared by
Environmental Meteorology Branch
Air Resources Laboratory
Environmental Science Services Administration
October 18, 1967

The meteorological conditions assumed for the accident case are conservative. For the first period (0 - 24 hours) Pasquill Type F, 1 m/sec, a ground source, and an invariant plume centerline was used, in addition to a building wake dilution effect which amounted to an extra dilution factor of 1.5 at the site boundary of 1340m. For the remaining period up to 30 days the concentrations were averaged over a 22 1/2 degree sector which amounts to about a factor of 3 at a distance of 10^3 meters as compared to an invariant plume centerline.

Since the plant is to be located 1 mile inland from the Gulf of Mexico shoreline, there probably will be very little stabilizing effect remaining on a ground source because of the air having initially traveled over a smooth water surface.

In summary, there appear to be no unique meteorological situations that have not been considered in the application. The net result of the atmospheric diffusion parameters assumed for the accident case is a conservative set of dose calculations.

8003160182