

Section K - Oconee Nuclear Plant

Duke Power Company Plant Oconee is a three-unit Pressurized Water Reactor (PWR) facility located adjacent to Lake Keowee, near Senaca, South Carolina, approximately 20 miles northeast of Toccoa, Georgia. It discharges into the headwaters of the Savannah River upstream of Lake Hartwell. Babcock and Wilcox Company supplied this facility, which has been in operation since 1974.

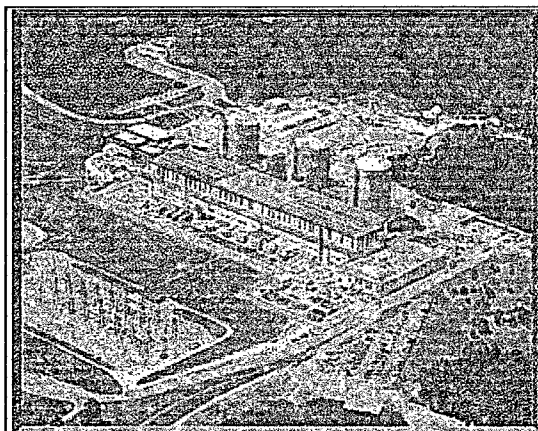


Figure K-1 (Oconee Nuclear Plant)

Several land and aquatic sample locations (**Figures K-3 and K-4**) are included in DNR's network, which includes the northeast corner of Georgia, around and including Lake Hartwell. DNR has monitored Plant Oconee since approximately 1978, with no detectable Site-related activity except for periodic low-level H-3 in surface water collected from Lake Hartwell (near the Hartwell Dam). However, several global fallout-related radionuclides (Nb-95, Zr-95, Ru-103, Ru-106, Ce-141, Ce-144, and Cs-137) were detected many years ago (1981) during the Chinese weapons testing period. Cs-137 is the only one of these fallout-related gamma-emitting radionuclides that is still detectable.

Surface Water: Low-level H-3 (up to 2x Bkg.) in surface water (**Table K-5**) was the only Site-related radionuclide detected during the current monitoring period, with the maximum concentration (400 pCi/l) equal to two percent of the Safe Drinking Water MCL (**Figure K-2**). Results were generally non-detectable for other tests (alpha, beta, and gamma-isotopic including Cs-137 and I-131).

