The Beginning of the Minicomputer Era

In 1963, Digital Equipment Corporation installed a control system for a nuclear reactor at the Chalk River laboratories of Atomic Energy of Canada Ltd. The PDP-5 shown above was the first 12 bit computer supplied by Digital and it was designed specifically for this application. Digital's original plans for a small computer involved a 10 bit computer patterned after the L-1 designed at the MIT's Lincoln Laboratory. AECL insisted on a 12 bit machine because 12 bit analog-to-digital converters were used to collect signals from the reactor. The PDP-5 was succeeded by the PDP-8 which ushered in the minicomputer era a year later.

The cabinet to the left of the PDP-5 was required to house an additional 8K of memory (12 bit words) in addition to the 4K contained in the main cabinet. The cost of this installation was about $250,000 (about $2.5 million in 1991 dollars).