

GPS Actuator

By Bernard Controls

The best way to find your electric actuation solution



Nuclear site

- Nuclear Power Plants required special design of actuators which are qualified according to RCC-E or IEEE safety standards and can be installed either inside or outside containment area.
- The RCC-E and IEEE documents specify the rules for design, qualification and construction of electrical materials for nuclear power plants.
- Three main levels of requirements and qualification exist depending on the type of application. Please note that these three types of application exist in all standards but may be named differently.
- **The three levels of requirements are :**
 - **Non safety requirements (NC)** : actuators designed for operation in normal environment for 30 years (referred as "NC" type in the RCC-E standard)
 - **Safety requirements outside containment (Nuc OC)** : actuators designed for operation in normal environment for 30 years and during seismic accidents (referred as "K3" type in the RCC-E standard)
 - **Safety requirements inside containment (Nuc IC)** : actuators designed for operation during 40 years in ionizing environment and remaining operational in case of seismic accidents and LOCA, Loss of Coolant Accident (referred as "K1" type in the RCC-E standard)

1 - Conventional island(Turbin, BOP...)
NC actuators (Non safety related equipment)

NUCLEAR ISLAND

2A - Inside Reactor Building :
Nuc IC actuators

2B - Auxiliary Buildings :
Nuc OC actuators (safety related)
and/or NC actuators (non safety application)

