काकरापार परमाणु विद्युत परियोजना-3व4

KAKRAPAR ATOMIC POWER PROJECT-3&4

CONSTRUCTION COMPLETION OF FULL SCOPE SIMULATOR FOR KAPP-3&4

First of its kind, two PHWR units each of 700 MWe, are under construction and commissioning at KAPS-3&4. These plants are also provided with a state-of-the-art control room with HMI based controls and DCS systems. Compared to 540 MWe plants at Tarapur, 700 MWe plants are different in many process systems, control philosophies and operations. Hence it was proposed to build a full scope replica operator training simulator for these plants which can provide, sufficient and effective operator training. The simulator will also demonstrate the working of many critical systems which are new in design philosophy even before the criticality of the reference plant. The operators can be trained to operate these systems in the plant well in advance.

Detailed simulator network configuration consisting of the Host Simulation Server (HP-ALPHA machine), Instructor Station PCs, CBS PCs/servers, peripherals like printers, I/O nodes and I/O cabinet requirements, control panels and other network devices have been erected by C&I construction Group. These requirements are included in the Control Centre Instrumentation Package (CCIP) of the reference plant.

The general arrangement (GA) of the simulator control room and other peripheral simulator facilities like UPS room, BCR, computer room, Instructor Station, etc. have been constructed by the site construction group.

The KAPP-3 simulator is a full scope **replica** operator training simulator in all aspects like approach, layout, lighting, noise levels, room temperature etc. The simulator building has been constructed at STC, KAPS site. MCR layout plan, panel dimensions, details of panel devices mounted on the panels and their locations on the panels, arrangement of the operator consoles, operator desk, computer systems, HMIs etc are constructed identical to KAPP-3 main control room. The simulator BCR is also identical to the main plant BCR

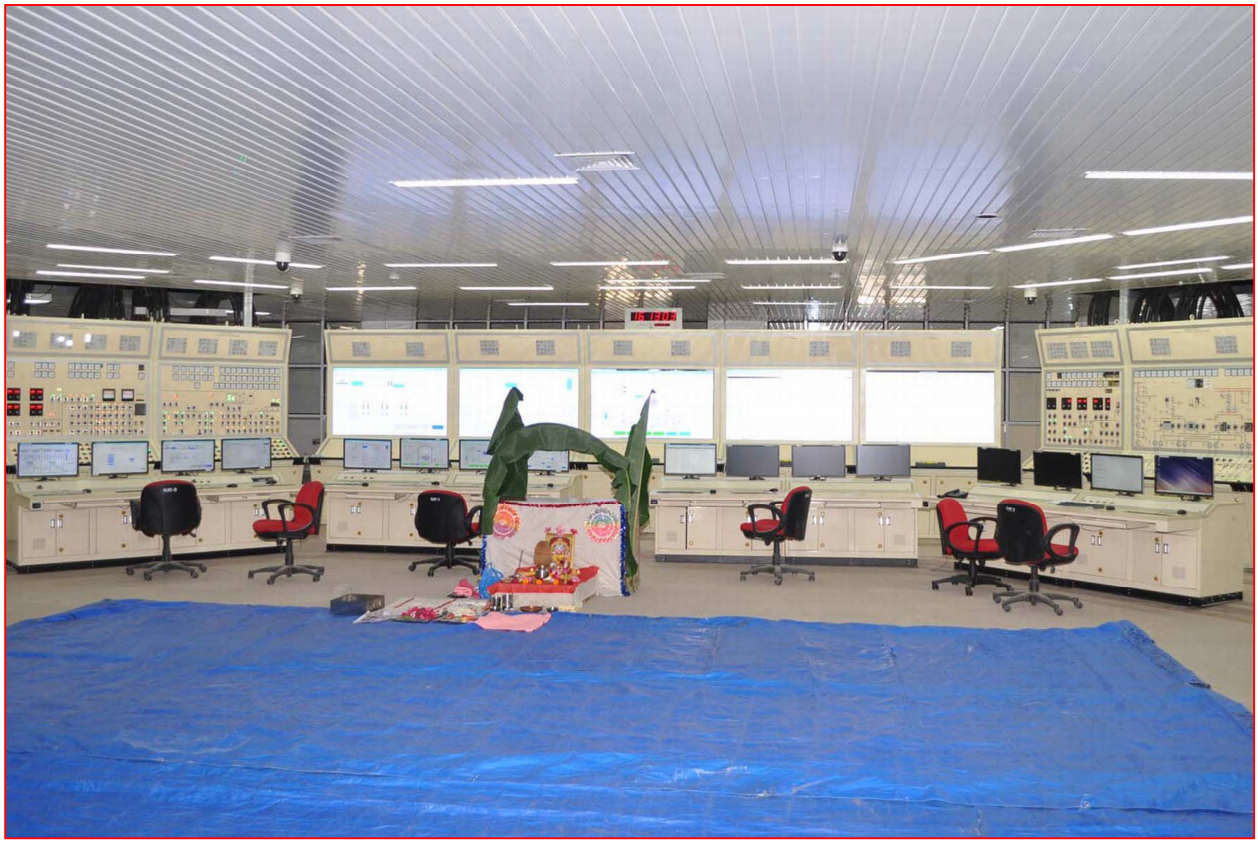
As per the stipulations of AERB, Simulator is proposed to be made available for training one year before the first criticality of the KAPP-3. Keeping this as target, all works on round the clock basis was done by construction group and all activities have been completed by site C&I section and other construction groups. Main Plant simulator handed over to O&M/Training Section for further commissioning on 30-12-2017.

C&I work completed are as:-

SL NO	Erection of equipment	QTY	STATUS
1.	Main Control Room Panels	07	Erected and pre-commissioned
2.	LVS panels	05	Erected and pre-commissioned
3.	FHS MCRP	03	Erected and pre-commissioned
4.	Backup control room panel	01	Erected and pre-commissioned
5.	I/O Panels	25	Erected and pre-commissioned
6.	Operator work stations (OWS)	23	Received 23/30 and installed all 23. (07 Nos are yet to receive)
7.	Servers	02	Installed by STC.
8.	Wire termination	50000	Completed all wire terminations.
9.	DCN Implementation		Implemented to incorporate the changes proposed by the design group

4/1/2018

N Rambabu
ACE(C&I)

4.1.2018

SK Verma
ACE(Plg)