

Additional agenda item proposed by PGCIL for the Special meeting of SCM on Power System Planning of WR to be held on 18-4-2009

1. Associated 220 kV Line bays along with 400/220kV ICTS

In the 23rd Standing committee meeting on power system planning in Northern region held on 16.02.08, It was agreed that in view of increasing demand density the norm of providing 220 kV bays with 400/220 kV transformers would be revised as following:-

- For 2x315 MVA - 6 nos. of line bays
- For 3rd 315 MVA transformer - 2 line bays
- For 500 MVA transformer - 4 nos. of line bays

In Western region, a number of new transmission projects are coming up, therefore decision in the above matter in regard to Western region tr. schemes also needs to be discussed and decided.

2. Requirement of Bus Reactors at Nagda/Rajgarh to control high voltages in Dhule Area

In 9th WRPC meetings held on 16.01.09, to control high voltages in Dhule area and avoid frequent opening of 400kV Sardar Sarovar-Dhule line, provision of bus reactors at Nagda or Rajgarh was deliberated. Member Secretary (WRPC) informed that the matter was already discussed in the 28th Standing committee meeting on power system planning in WR held on 06.12.08. It was observed that after commissioning of all the reactors that are under implementation, voltage at Rajgarh, Nagda and Dhule remain under permissible limits without any additional reactor at Nagda or Rajgarh. It was therefore suggested that to contain high voltage phenomenon in WR grid efforts may be made by the respective utilities to install the bus reactors already plan at various 400kV substations expeditiously. In addition other means of voltage control like switching off shunt capacitors during lean hours, setting of transformer taps etc. may also be explored. However, as the high voltage problem, even after opening of no. of lines is still persisting, the TCC members requested POWERGRID to carry out the studies fresh to examine the bus reactors around 400kV Nagda/Rajgarh substation.

Further MPPTCL informed that due to space constraint they will not be in a position to install earlier proposed 1x125 MVAR bus reactor at Indore S/s. In view of the above, studies have been carried out to examine the requirement of 400kV bus reactor at Nagda or Rajgarh S/s in off peak condition considering other proposed bus reactors are available. It has been observed that to control high voltage in this part of the grid and the fact that proposed location of 1x125 MVAR reactor at Indore is not feasible due to space constraint, installation of 1x125 MVAR bus reactor at Nagda would be beneficial. Members may deliberate and concur.