

KAPP#3 both NDCT tower-3A&3B structures construction completed

The Natural Draught Cooling Tower shell is hyperbolic profile with height of 166 M based on thermal design. Each NDCT is design to dissipated heat load of 790 MW (th) from Condenser Cooling Water & Auxiliary Service Water systems. The foundation of NDCTs & Cold water basin both are independent. The foundation for tower shell is continuous annular reinforced concreting structures. The ring raft of the NDCT is of dia 142.00 m. There are 96 nos. raker columns of Tier-I & Tier-II and 48 nos rectangular pedestals. The raker columns spanning the air intake opening transmits the weight of integral shell, seismic & other forces induced in it to the foundation. The NDCT shell is 1.6 m thick at the bottom, 0.3 m at throat and 0.75 m at the top. NDCT structures were constructed with the help of jump-form shuttering system which helped in speeding up construction activities. The tower shell has been completed in 107 lift with each lift of 1.5 M. The preparatory works, reinforcement, shuttering & concreting of each lift takes around 2.5 to 3 days on an average. Cumulative 17200 Cu.M concrete and 2580 MT reinforcement were used for completion of each shell structure. The total surface area of each Tower is 90,000 Sq.M.

NDCT-3A completion date : 11/05/2017

NDCT-3B completion date : 04/09/2017

By completion of 2nd NDCT tower-3B of KAPP unit#3, both tower structures have been completed on 04-09-2017.



NDCT Construction work in progress



NDCT Construction work in progress



NDCT shell structure work in progress



Completed shell structure of Both NDCT-3A & 3B