

Coal Power Stations

Erstwhile Andhra Pradesh was rich in coal resources due to Singareni coal fields, and hence most of coal based power plants were set-up near to the coal fields, which are now located in Telangana. Post separation, in new Andhra Pradesh total installed capacity of coal based power plants (both utility based and captive) was around 8 GW in 2015. These power plants are mainly run on coal supplied from fields located outside the state. This lever provides options to users to select between most optimistic trajectory wherein coal based power plants grows substantially in coming decades and most pessimistic trajectory wherein no new capacities are added. In all the four levels, it is assumed that existing plants which are under construction will be commissioned as per plan.

Level 2

Level 2 assumes that historic trend of coal based capacity addition will continue in future and total installed capacity will almost double by 2025 reaching up to 17 GW. Thereafter the growth is slow due to tightening of emission norms and it will reach up to 28 GW by 2050. Due to improved coal supply, plant load factor of power plants will improve from 61% in 2015 to 70% in 2050.

Level 1

Owing to government focus on increasing electricity generation from renewable energy sources, no new coal based power plants are added in level 1. Further, it is assumed that existing plants will continue to operate at 61% PLF.

Level 3

Level 3 assumes slightly higher growth rate of coal based capacity addition due to development of infrastructure for imported coal and improved domestic coal production in the country. Total installed capacity will reach unto 29 GW by 2040 and then growth will slow down to reach 33 GW by 2050. PLF will also improve from 61% in 2015 to 75% in 2050.

Level 4

Level 4 assumes there are no constraints to addition of coal based power plants. Infrastructure for coal imports and increase in coal production in the country will increase coal based capacity. Growth rate of capacity addition will be higher than historical growth leading to installed capacity of 29 GW by 2030. Thereafter it will slow down and total installed capacity will reach up to 39 GW by 2050.

