

Large Hydro Power Plant

The total installed capacity of large hydro power plants in the state was around 3.5 GW in 2015, which includes close to 15 power plants. As per the Central Electricity Authority (CEA), total hydro power generation potential in the state is around 6.5 GW of which around 55% has already been exploited. This lever provides choices of selecting different growth scenarios for large hydro power plants in the state.

Level 1

Level 1 is a pessimistic scenario, in which it is assumed that only current plants continue to operate with scheduled maintenance efforts and no new hydro plant is built. This could be due to issues of large-scale ecological damage, resettlement and rehabilitation. The electricity generated in 2050 would increase from 7.2 TWh in 2015 to 12.7TWh in 2050.

Level 2

Level 2 assumes that the installed capacity will reach 4.3 GW by 2050 and generation will increase from 7.2 TWh in 2015 to 15.5 TWh in 2050. This could be because issues related to ecological damage, resettlement and rehabilitation might get resolved over a long period of time.

Level 3

Level 3 assumes that total installed capacity will reach 5.3 GW by 2050. Electricity generation will reach 19 TWh by 2050. This could be because government efforts might result in improvement in public sentiments and key issues related to hydro power development might get resolved. The sector could also benefit from completion of Renovation & Modernization (R&M) and Life Extension (LE) efforts.

Level 4

Level 4 is the most aggressive scenario which assumes that there might not be any constraints for development of hydro plants. The total installed capacity reaches its potential of 6.5 GW and electricity generation will reach 23.2 TWh by 2050.

