

ELECTRICITY IMPORTS

India is importing Hydro power from its neighbor Bhutan, of the order of 1.5 GW from Tala and Chukha HEP. Power is basically injected into the grid in the Eastern part of India, and then transferred to Northern Region. During the 12<sup>th</sup> Five Year Plan, import has been pegged at about 3 GW under Bilateral agreements. Import of electricity is also envisaged during the 13th Plan under Pancheshwar under Mahakali agreement, between India and Nepal. Options of power imports from Myanmar, Bangladesh and Sri Lanka are also being explored. While working out the scenarios, likely import during 12<sup>th</sup> Plan period (2012-17) has been assumed constant across all levels. As the import option has been considered only from Hydro projects promoted with Indian investments, the import projections can be based on PLF (35%) basis. Power generation in TWh corresponding to 35% on annual basis has been assumed for future imported hydro capacity envisaged under bilateral agreements. The inter-connection with India’s neighbours, is also important from future exports and balancing viewpoints. This analysis captures the contracted electricity imports only, which are assured supplies.

Level 1

Level 1 assumes that the imports continue to be low as India also has opportunities for domestic power generation. Nevertheless, an increase in electricity imports of 3.5 GW during 13<sup>th</sup> Plan and thereafter 3 GW during every Plan has been assumed and after 2042, it has been frozen at that level.

Level 2

Level 2 assumes imports continue to grow at a moderate pace of 5 GW from 13<sup>th</sup> Plan up to 2037 and thereafter maintain same level.

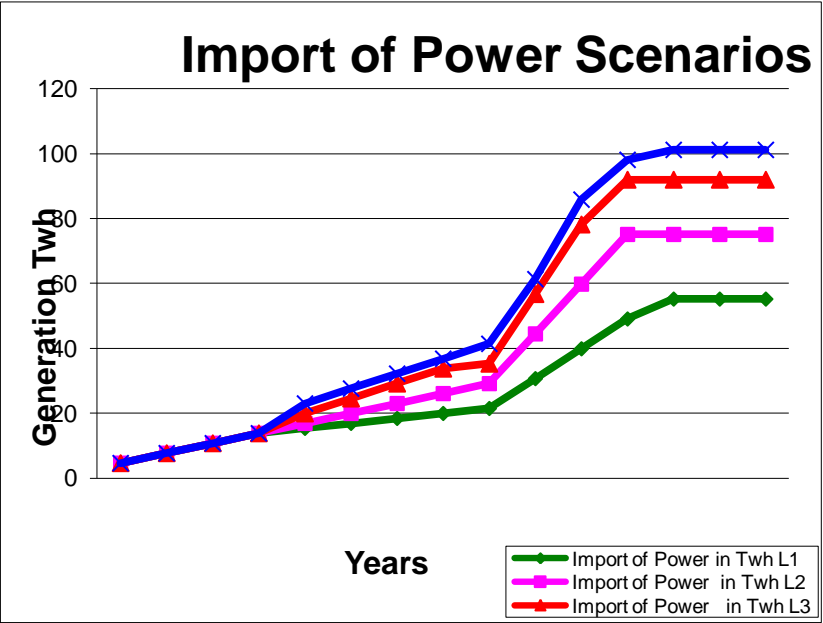
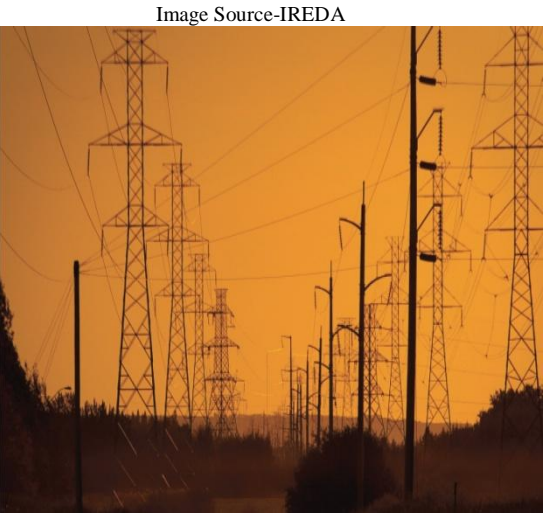
Level 3

Level 3 assumes aggressive growth in imports and assumes 7 GW from 13<sup>th</sup> Plan up to 2037 and thereafter it remains constant. Electricity import will be maintained at the level 75 TWh from 2037 onwards up to 2047.

Level 4

Level 4 assumes optimistic growth in imports and assumes power import from countries other than Bhutan and Nepal (an international grid). The imports may go up to 33 GW and remain constant at that level. The electricity import will be about 101 TWh from 2042 onward till 2047.

Import of Power Scenarios for India				
Generation in TWh				
Year	Import of Power in Twh L1	Import of Power in Twh L2	Import of Power in Twh L3	Import of Power in Twh L4
2013-14	5	5	5	5
2014-15	8	8	8	8
2015-16	11	11	11	11
2016-17	14	14	14	14
2017-18	15	17	20	23
2018-19	17	20	25	28
2019-20	18	23	29	32
2020-21	20	26	34	37
2021-22	21	29	35	41
2026-27	31	44	57	61
2031-32	40	60	78	86
2036-37	49	75	92	98
2041-42	55	75	92	101
2046-47	55	75	92	101



Note: Please see detailed documentation for references.