The overall financial savings associated with the reassignment exercise (in ‘ooos of crore) is paltry when compared with the annual expenditure on procurement of electricity (in the ‘ooooos of crore). However, what is crucial and has ramifications for the system as a whole is the ability to breathe new life into the system by decommissioning and moth-balling inefficient assets and giving new life to efficient but stranded assets that can then provide for relief to the banking system, by creating cash flows for stranded assets and slowly but surely resolving the NPA issue. The surplus capacity issue in the Indian system is likely to persist over the course of this decade and this exercise must be taken up officially. More temporally resolved data needs to be used to detail the challenges in achieving the outcomes outlined. Enabling a financially solvent power system can help in moving the power sector to the next step to address more pressing issues of energy transition.

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Annexure

Table A1 Target PLFs assigned to the units in the reassigned scenario

Age group	Target PLF in reassigned scenario (%)
0–5 years	85
5–10 years	85
10–15 years	80
15–20 years	75
20–25 years	70
25–30 years	65
30–35 years	60
35–40 years	55
40-45 years	55
45+ years	55

Source: Authors' analysis

Table A2 The system becomes less flexible in the reallocated scenario losing out on 26 per cent of the ramping capabilities

Region	Actual scenario		Reassigned scenario	
	Ramp up (MW/min)	Ramp down (MW/min)	Ramp up (MW/min)	Ramp down (MW/min)
Eastern Region (ER)	289	279	207	199
North-Eastern Region (NER)	1	1	1	1
Northern Region (NR)	408	363	289	257
Southern Region (SR)	311	322	231	239
Western Region (WR)	648	656	494	501
Total	1657	1621	1223	1198

Source: Authors' analysis based on the POSOCO report on ramping capabilities of coal-fired generation in India

Table A3 Southern region generates 11 per cent more in the reallocated scenario

Region	Actual scenario (MU)	Reassigned scenario (MU)	Difference from actual (%)
SR	496	548	11
NR	570	535	–6
ER	488	444	–9
WR	1158	1188	3
NER	11	9	–16

Source: Authors' analysis based on CEA daily generation reports

Table A4 Daily average generation by states in the actual and reallocated scenario

State	Total capacity—actual scenario (MW)	Actual generation (MU)	Total capacity—reassigned scenario (MW)	Reassigned generation (MU)	Difference in generation from actual scenario (%)
Andhra Pradesh	11,290	156	8380	168	7
Assam	750	11	750	9	–16
Bihar	6040	95	4675	85	–10
Chhattisgarh	22,723	315	18,430	352	12
Gujarat	14,692	213	9800	200	–6
Haryana	5540	61	4620	88	44
Jharkhand	4460	73	3090	58	–20
Karnataka	9480	77	7150	143	85
Madhya Pradesh	20,490	333	17,260	338	1
Maharashtra	23,115	297	16,320	299	0
Odisha	9450	120	8570	163	36
Punjab	5680	68	3920	75	12
Rajasthan	7580	110	4340	84	–23
Tamil Nadu	9220	123	6700	137	11
Telangana	7422.5	139	5600	100	–28
Uttar Pradesh	22,455	331	16,360	287	–13
West Bengal	13,636	199	7700	136	–31
Total	194,023.5	2722	143,665	2723	

Source: Authors' analysis based on CEA daily generation reports

Table A5 Private plants' share increase in the reassigned generation mix

Ownership	Actual scenario (MU)	Reassigned Scenario (MU)	Difference from actual (%)
Central sector	901	868	–4
State sector	872	673	–23
Private sector	949	1182	25

Source: Authors' analysis based on CEA daily generation reports

Table A6 Share of future demand met by retained assets in comparison to all demand from coal-based generation

Year	Average daily demand (MU)	Share of coal (%)	Average demand from coal (MU)	Demand from coal on peak days (MU)	Supply from retained fleet (MU)	Share of average demand met (%)	Share of demand on peak day met (%)
FY 2022	4290	68	2917	3443	3157	108	92
FY 2027	5608	62	3477	4103	2982	86	73
FY 2030	6370	58	3695	4360	2875	78	66

Source: Authors' analysis based on optimal generation mix by 2029–30, National Electricity Plan 2018 and CEA daily generation reports

Table A7 Plants deemed as surplus in the reallocation scenario

Plants to be decommissioned:

Unit ID	State	Ownership	Age	Capacity (MW)	PLF (%)
BAKRESWAR TPS1	West Bengal	State sector	11	210	79
BAKRESWAR TPS2	West Bengal	State sector	21	210	79
BAKRESWAR TPS3	West Bengal	State sector	20	210	74
BAKRESWAR TPS4	West Bengal	State sector	19	210	80
BAKRESWAR TPS5	West Bengal	State sector	12	210	75
BANDEL TPS1	West Bengal	State sector	55	60	36
BANDEL TPS2	West Bengal	State sector	55	60	37
BANDEL TPS5	West Bengal	State sector	38	210	48
BARAUNI TPS7	Bihar	Central sector	3	110	6
BOKARO B TPS3	Jharkhand	Central sector	27	210	22
DR. N TATA RAO TPS1	Andhra Pradesh	State sector	41	210	56
DR. N TATA RAO TPS2	Andhra Pradesh	State sector	40	210	63
DR. N TATA RAO TPS3	Andhra Pradesh	State sector	31	210	75
DR. N TATA RAO TPS4	Andhra Pradesh	State sector	30	210	78
DR. N TATA RAO TPS5	Andhra Pradesh	State sector	26	210	77
DR. N TATA RAO TPS6	Andhra Pradesh	State sector	25	210	76
DURGAPUR TPS4	West Bengal	Central sector	38	220	41
HARDUAGANJ TPS7	Uttar Pradesh	State sector	42	105	21
KORBA-II2	Chhattisgarh	State sector	53	50	1
KORBA-II3	Chhattisgarh	State sector	52	50	31
KORBA-II4	Chhattisgarh	State sector	52	50	26
KORBA-III1	Chhattisgarh	State sector	44	120	64
KORBA-III2	Chhattisgarh	State sector	39	120	62
KORBA-WEST TPS1	Chhattisgarh	State sector	37	210	68
KORBA-WEST TPS2	Chhattisgarh	State sector	36	210	73
KORBA-WEST TPS3	Chhattisgarh	State sector	35	210	65
KORBA-WEST TPS4	Chhattisgarh	State sector	34	210	75
KOTA TPS1	Rajasthan	State sector	37	110	41
KOTA TPS2	Rajasthan	State sector	37	110	57
KOTA TPS3	Rajasthan	State sector	32	210	68
KOTA TPS4	Rajasthan	State sector	31	210	69
KOTA TPS5	Rajasthan	State sector	26	210	71
KOTHAGUDEM NEW TPS10	Telangana	State sector	22	250	86
KOTHAGUDEM NEW TPS9	Telangana	State sector	23	250	86
KOTHAGUDEM TPS1	Telangana	State sector	54	60	70
KOTHAGUDEM TPS2	Telangana	State sector	53	60	73
KOTHAGUDEM TPS4	Telangana	State sector	53	60	76
KOTHAGUDEM TPS5	Telangana	State sector	46	120	67