

FY10 SEB finances provide comfort (PFC report)

Expect FY12 to be the tipping point

- **Commercial losses have increased from INR537b in FY09 to INR635b in FY10, but the pace of increase has moderated (FY10 up INR98b, v/s up INR218b in FY09).**
- **Subsidy payment stood lower at 56% of subsidy booked in FY10, led by default in releasing subsidy by 3 states, while others have paid full subsidy**
- **Tariff revisions: All top 10 loss making States (contributing 90%+ of FY10 commercial losses) have revised tariffs in past 18 months and FY10 commercial losses of INR635b is on expected lines (our est INR588b) and vindicates our view that the pace of increase in loss has declined. We expect losses to peak at INR669b in FY11 and then moderate.**

Also refer our report date 27-Oct-10



SEBs: Deep in the red

- FY09 losses of INR500b+, 2x of FY07
- Subsidy received from State govts is only 61% of provisions made
- Players in the value chain at risk
- Commercial banks' exposure at INR3 tn (FY09)

FY10 losses continue at unacceptable levels, but incremental datapoints provide comfort:

Power Finance Corporation (PFC) has recently released financial and operating data (for FY10) on State Electricity Boards (SEBs). While commercial losses have increased from INR537b in FY09 to INR635b in FY10; the pace of increase has moderated (FY10 up INR98b, vs up INR218b in FY09). Cash losses stood at INR384b (INR333b in FY09), an increase of INR51b (vs increase of INR244b in FY09). Most importantly, top 3 states, viz. Rajasthan (INR112b, 29% of total), Tamil Nadu (INR98b, 26%) and Uttar Pradesh (INR84b, 22%) account for 77% of total cash losses in the system. Subsidy payment also stood lower at 56% of subsidy booked in FY10, which again was due to default by 3 states, while others have paid full subsidy. These includes Rajasthan (7.3% of booked paid), Andhra Pradesh (44.75%) and Karnataka (89.83%).

22 states have revised tariffs in 18 months, including all Top 10 loss making states:

All Top 10 loss making States (contributing 90%+ of FY10 commercial losses) have revised tariffs in past 18 months. Rajasthan has recently increased tariffs by 23% after a gap of 6 years, while states like Tamil Nadu, Maharashtra, Karnataka, West Bengal are expected to undertake tariffs increases in Nov/Dec 2011. The trend is encouraging and though this may not completely address entire losses of DISCOMs, the incremental negative impact is arrested.

AT&C losses declining: DISCOMs have recorded improvement in the physical performance with 1-3% improvement in Aggregate Technical and Commercial losses (AT & C) losses for major region (Southern Region distorts picture due to sudden increase in FY10) and have

initiated the work under Revised Accelerated Power Development and Reforms Programme to prepare base line data on an IT platform. We strongly believe that these initiatives will start yielding visible results from early FY13 onwards.

Expect FY12 to be the Tipping Point: FY10 commercial losses of INR635b are on expected lines (our est INR588b) and thus, vindicates our view that the pace of loss increase has declined. We expect losses to peak at INR669b in FY11 and then start moderating. Given the robust pace of capacity addition (8GW added YTD FY12, 17GW target in FY12 and 52GW for 11th plan), the LT availability of power at competitive cost is set to improve. This, coupled with decline in merchant tariffs will lead to continued lower power purchase costs. The initial signs of cost moderation are clearly visible with Avg Cost of Supply (ACS) in FY10 at INR3.54/unit, up marginally from INR3.41/unit in FY09 (FY09 was a cost shock with increased merchant rates and higher Wages, leading to ACS of INR3.41 vs INR2.93/unit in FY08). In FY11, five highest loss making have also increasingly resorted to blackouts, leading to demand growth of just 2.2% vs ~9.5% in FY10; reducing power purchase costs. Juxtaposed with tariff hikes happening, makes us re-iterate our positive stance on expected improvement in SEB finances. We highlighted that health of distribution companies would improve from FY11 peak levels in our sector report (Indian Utilities: Just an Eclipse...Brighter days ahead, dated June 2011). We are positive about companies that are relatively better positioned on these fronts. Our top picks in the sector are **NTPC**, **Powergrid** and among mid-caps we prefer **CESC**. **PFC** and **REC** continue to be important plays on the theme of improvement in SEB finances.

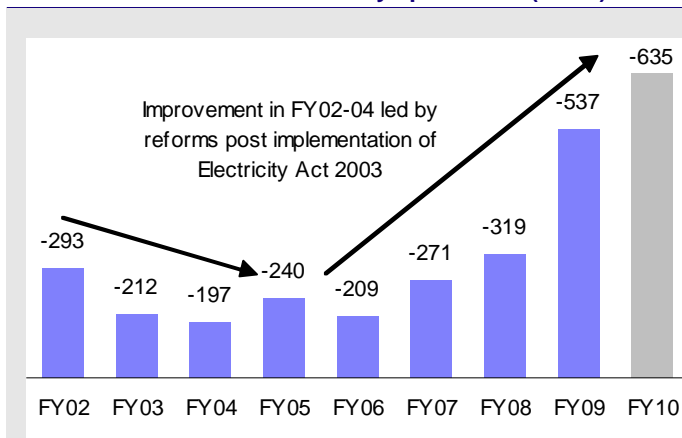
SEB losses widen in FY10 (over FY09), on expected lines; importantly pace of loss increase moderates

SEB's commercial losses have increased from INR537b in FY09 to INR635b in FY10; the pace of increase has moderated (FY10 up INR98b, vs up INR218b in FY09)

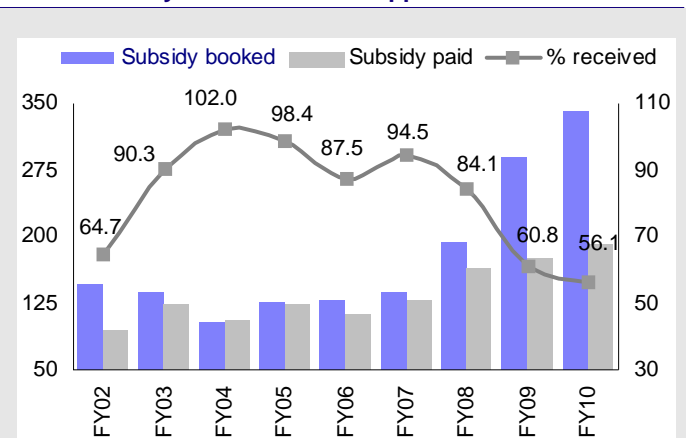
- Power Finance Corporation (PFC) has recently released financial and operating data (for FY10) on State Electricity Boards (SEBs). While commercial losses have increased from INR537b in FY09 to INR635b in FY10; the pace of increase has moderated (FY10 up INR98b, vs up INR218b in FY09). This is on the expected lines (our est INR588b) and thus, vindicates our view that the pace of loss increase has declined. We expect losses to peak at Rs669b in FY11 and then start moderating.
- Cash losses stood at INR384b (INR333b in FY09), an increase of INR51b (vs increase of INR244b in FY09). Most importantly, top 3 states, viz. Rajasthan (INR112b, 29% of total), Tamil Nadu (INR98b, 26%) and Uttar Pradesh (INR84b, 22%) account for 77% of total cash losses in the system. Subsidy payment also stood lower at 56% of subsidy booked in FY10, which again was due to default by 3 states, while others have paid full subsidy. These includes Rajasthan (7.3% of booked paid), Andhra Pradesh (44.75%) and Karnataka (89.83%). Thus, while the losses continue to remain at unacceptable levels, the incremental datapoints provide some comfort. Also, the problem is more state specific and not systemic.
- DISCOMs have recorded improvement in the physical performance with 1-3% improvement in AT&C losses for major regions (Southern Region distorts picture due to sudden increase in FY10, up 257bps to 19.5%) and have initiated the work under Revised Accelerated Power Development and Reforms Programme to prepare base line data on an IT platform. We strongly believe that these initiatives will start yielding visible results from early FY13 onwards. AT&C losses for the system stood marginally lower at 27.15% in FY10, vs 27.74% in FY09. All other regions have seen 100-300bps fall in AT&C losses.
- Gross debt for all SEBs have increased from INR2,011b in FY09 to INR2,665b, a large part of the increase is being contributed by commercial banks, bonds & debentures. Share of State government loan has come down from 14% in FY09 to 12% in FY10. This is worrying as we understand that a large part of the borrowings from banks have been in the nature of working capital; unlike PFC / REC which is largely project specific and with escrow mechanism.

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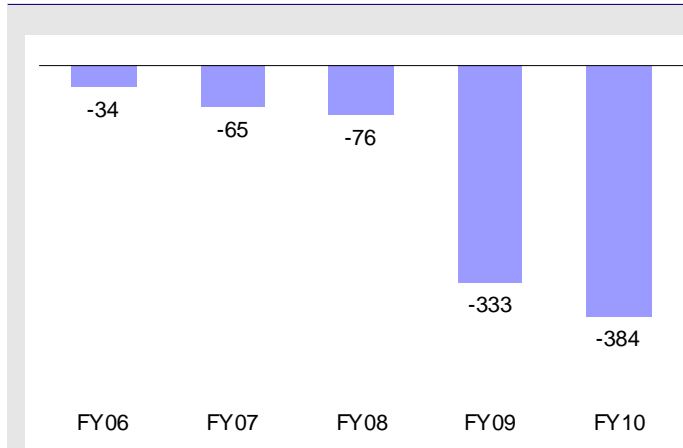
FY10: SEB losses without subsidy up 18% YoY (INR b)



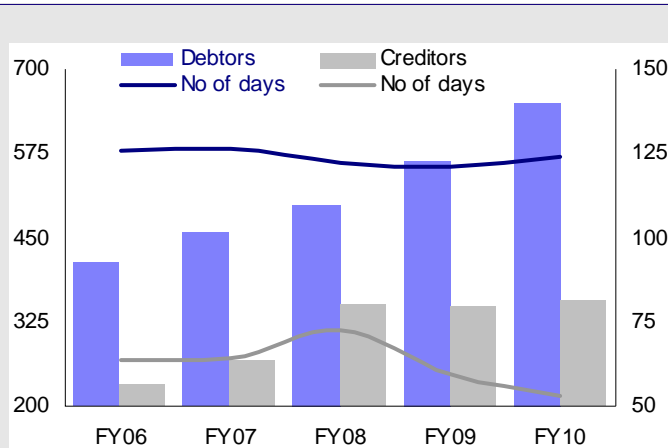
FY10: Subsidy received further dipped to 56%



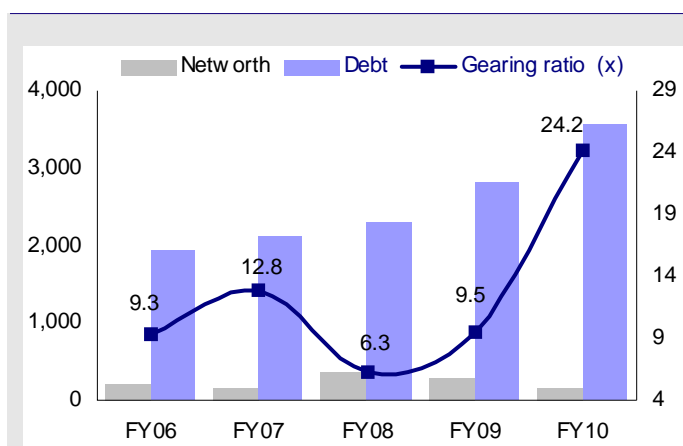
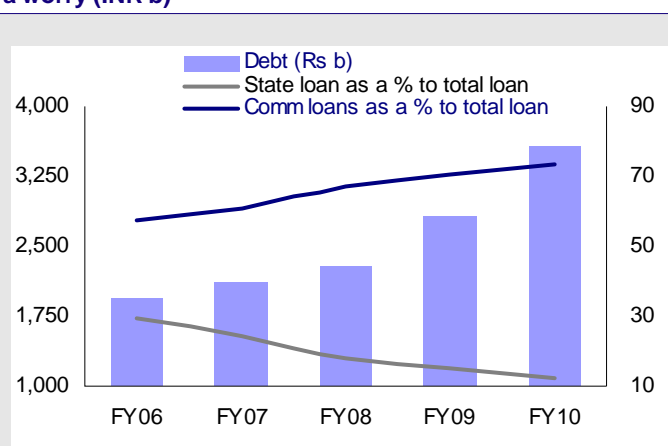
Source: PFC's analysis on SEB Financials

FY10: Cash losses stood at 384b (INR b)*

* On revenue, subsidy realized basis

Working capital investments for SEBs at near 2 months

Source: PFC's analysis on SEB Financials

FY10: Gearing at 24x, uncomfortable levels (INR b)**FY10: Banks funded 90% of incremental losses, a worry (INR b)**

Source: PFC's analysis on SEB Financials

Top 10 states accounts for 94% of total SEB losses*

States	PAT (INR b)		FY10 Loss as a % to	
	FY09	FY10	Top 10	Total SEBs
Rajasthan	-79	-119	20.9	18.7
Tamil Nadu	-96	-114	19.9	17.9
Uttar Pradesh	-60	-71	12.5	11.2
Andhra Pradesh	-79	-66	11.7	10.5
Haryana	-41	-48	8.5	7.6
Madhya Pradesh	-34	-44	7.8	7.0
Punjab	-36	-44	7.8	7.0
Bihar	-17	-23	4.0	3.5
J&K	-13	-21	3.7	3.3
Karnataka	-31	-19	3.3	3.0
Total (Top Ten)	-488	-569	100	89.6
Total SEB losses*	-537	-635		100

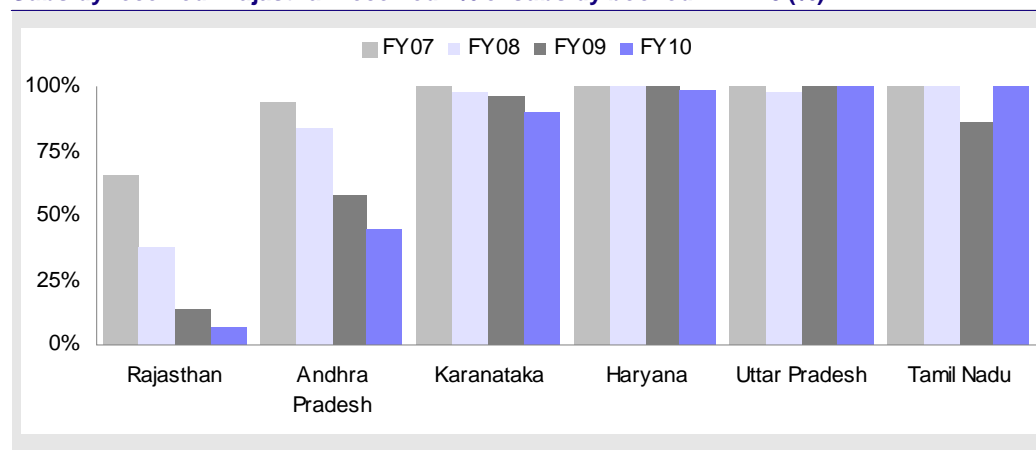
* PAT without subsidy

Source: PFC's analysis on SEB Financials

Cash Profits on Revenue and Subsidy realized basis

States	PAT (INR b)		FY10 Loss as a % to	
	FY09	FY10	Top 10	Total SEBs
Maharashtra	(35)	(11)	2.6	2.5
Bihar	8	(14)	3.4	3.3
Haryana	(14)	(14)	3.3	3.2
Delhi	9	(15)	3.5	3.4
J&K	(14)	(22)	5.2	5.1
Madhya Pradesh	(42)	(36)	8.4	8.2
Andhra Pradesh	(52)	(41)	9.5	9.2
Uttar Pradesh	(56)	(67)	15.7	15.2
Tamil Nadu	(71)	(98)	22.8	22.1
Rajasthan	(61)	(110)	25.6	24.7
Total (Top Ten)	(328)	(429)	100.0	96.7
Total SEB losses*	(370)	(444)		100

Source: PFC's analysis on SEB Financials

Subsidy received: Rajasthan received 7% of subsidy booked in FY10 (%)

Source: PFC's analysis on SEB Financials

All-India SEBs financial position

	FY06	FY07	FY08	FY09	FY10
Equity	620.9	669.2	868.4	1,032.9	1,191.6
Reserves	54.5	99.1	109.4	123.6	175.8
Accumulated losses	(447.5)	(579.0)	(605.8)	(850.4)	(1,224.1)
Calculated networth	227.9	189.4	372.1	306.2	143.2
Reported Networth	207.7	164.6	362.4	296.5	147.9
Debt	1,934.1	2,113.5	2,296.1	2,813.8	3,571.6
Capital employed	2,141.8	2,278.1	2,658.5	3,110.3	3,719.5
State loan as a % to total loan	29.2	24.1	17.8	15.4	12.4
Comm loans as a % to total loan	57.4	60.9	67.3	69.8	73.7
DER (x)	9.3	12.8	6.3	11.5	24.2

Source: PFC's analysis on SEB Financials

Over FY06-10, SEB debt increased from INR1.9t in FY06 to INR3.6t in FY10 and almost all the increase in debt was contributed by banks

Rajasthan Electricity Regulatory Commission (RERC) has approved tariff hike of INR27.6b (tariff hike of 23%)

Rajasthan SEB: Tariff hike of 23% in Sept-11: Progressive, given after a gap of 6 years

- Rajasthan Electricity Regulatory Commission (RERC) has approved tariff hike of INR27.6b (tariff hike of 23%) for all discoms in Sept-2011, which is after a gap of 6 years (last in 2005). While this has eased the cash flow burden, the under recovery an on-going basis still remains at INR42.1b per annum.
- Current tariff hike would still leave under recoveries for all DISCOMs at INR54b for FY12 (on recovery basis), while arrears till FY11 stands at INR213.5b. RERC has in its petition agreed to look at tariff arrears for FY10/11 and condemned DISCOMs for not seeking any recovery of past arrears. Thus, RERC has allowed DISCOMs to recover the interest cost on loan taken to meet funding gap for FY10 / FY11 only.
- RERC has not taken into account the funding gap of INR155.4b for the period before March 2009, as DISCOMs in past tariff petition had informed that the accumulated deficit as on March 2009 has been decided to be liquidated through Government assistance over a period of 23 years. In turn, DISCOMs have entered into Memorandum of Understanding (MoU) with the Government of Rajasthan.
- This is encouraging as Rajasthan has the highest cash losses. The last tariff revision in Rajasthan happened in 2005. DISCOMs have recorded improvement in the physical performance with 3% improvement in AT&C losses and have initiated

Rajasthan is one of the large borrowers with exposure of 8.8% of loans for PFC and 11% for REC

work under Revised Accelerated Power Development and Reforms Programme to prepare base line data on an IT platform. Also, DISCOMs have started disconnection of defaulting Local bodies and recently have disconnected supply to Kota Nagar Nigam.

- Subsidy payable by Rajasthan government is expected to go up due to part of increase in tariff is offset through higher subsidy as well as widening net to few other consumer categories. In the past (FY09/10), State government had not disbursed full subsidy to DISCOMs (FY09 was election year), which had increased commercial losses for DISCOMs. Timely payment of subsidy by State government is key.
- From the perspective of PFC and REC, Rajasthan is one of the large borrowers with exposure of 8.8% of loans for PFC and 11% for REC. We understand that these borrowings are guaranteed by the state government.

Over the past 18 months, 22 states increased power tariffs, which is a record

SEB finances: The Tipping Point; Bailouts not an option

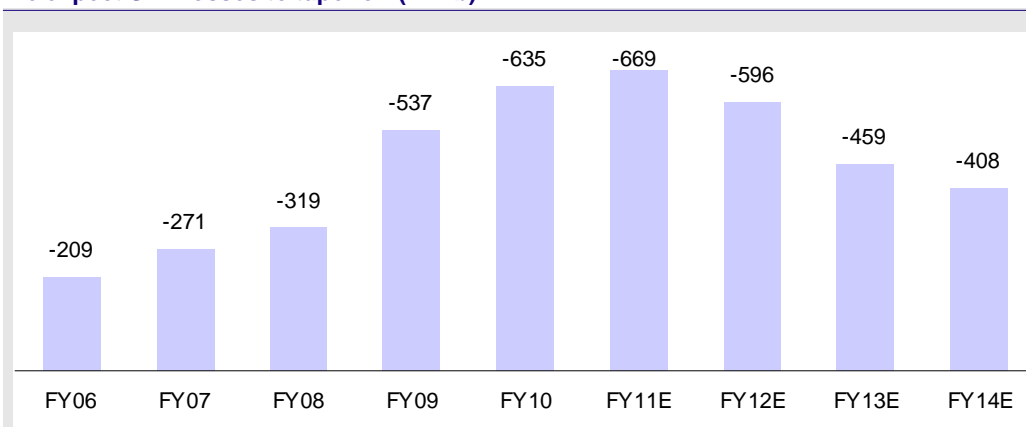
- Over the past 18 months, 22 states increased power tariffs, which is a record. This includes the highest loss making states like Tamil Nadu, Andhra Pradesh, Rajasthan, Madhya Pradesh, Maharashtra, Orissa, Punjab and Uttar Pradesh. We expect several states including Tamil Nadu, Maharashtra, Karnataka and West Bengal to raise tariffs by December 2011 due to SEBs' precarious financial position, improved political will and possibly increased consumer dissent towards blackouts. Also, the fuel cost pass through on an automatic basis is now applicable in 18 states, which means that tariff revisions given costs escalations will not need any regulatory approvals.
- The turnaround of SEBs is a priority for state governments. In a conference on distribution sector reforms, state governments resolved to reduce commercial losses and ensure discoms' financial sustainability with measures like: (1) computerization of accounts, (2) annual tariff petition filing/tariff revision, (3) conversion of loans into perpetual bonds/equity to improve their financial positions. We continue to believe that FY12 will be the tipping point in terms of the deterioration in SEB finances, and things have actually started improving. The improvement is being driven by i) higher tariffs coupled with ii) lower power procurement costs. Power purchase costs will decline due to lower merchant tariffs and large capacity additions in state / central sector - we believe that some of the largest buyers of merchant power like TN, Rajasthan (accounting for ~30% of the merchant power purchases) will become net sellers in next 2 years.
- Our meeting in August with members of the Planning Commission and the Ministry of Power indicates that a central government bailout of discoms is not an option. While power distribution continues to be a state subject, the central government has started financial disciplining of SEBs by two important controlling factors (i) RBI reiterating checks on short-term financing, stating that the end-use of funds is critical, (ii) adhering to a non-interference approach in the commercial working of CPSUs like NTPC, Powergrid and Coal India. SEBs can still raise short-term borrowings through bonds issued on state government guarantees, but the quantum will be a challenge as most states have enacted the FRBM Act. These factors are driving reforms in states.

Planning Commission and the Ministry of Power indicates that a central government bailout of discoms is not an option

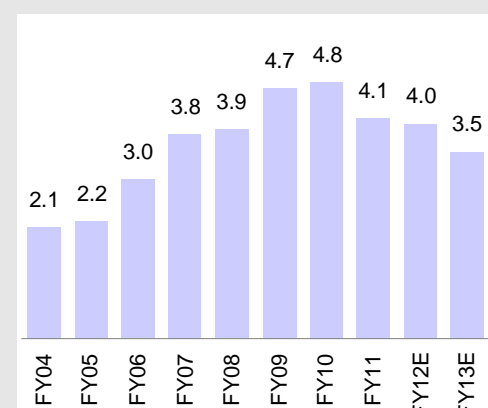
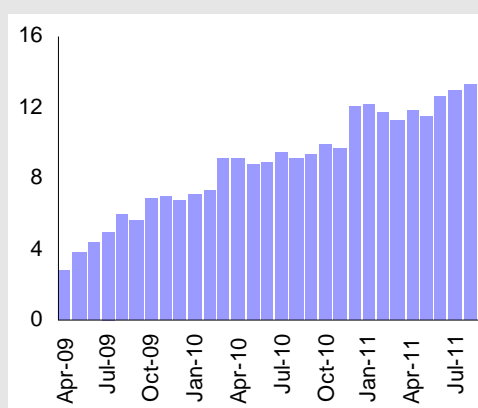
Increasing numbers of states have affected tariff hike over last 18 months

Tariff revisions	Number of states	States
2011	11	Manipur, Mizoram, Himachal Pradesh, Delhi, Bihar, Madhya Pradesh, Punjab, Jharkhand, Haryana, Rajasthan, Gujarat
2010	11	Andhra Pradesh, Arunachal Pradesh, Gujarat, Jammu & Kashmir, Kerala, Maharashtra, Meghalaya, Orissa, Tamil Nadu, Uttar Pradesh, Uttarakhand, West Bengal
2009	4	Assam, Chhattisgarh, Karnataka, Sikkim
2006	2	Nagaland, Tripura
2002	1	Goa

Source: MOSL/Industry

We expect SEB losses to taper off (INR b)**Short-term power cost as a percentage of procurement cost declines (INR b)**

	FY06	FY07	FY08	FY09	FY10	FY11
Purchase bill of discoms (INR b)	1,317	1,477	1,685	1,976	2,123	2,223
Market size (INR b)	81	116	153	351	318	336
Short-term procurement as a percentage of the power bill	6.2	7.9	9.1	17.7	15.0	15.1

Sustained high TTM capacity addition (GW)**ST prices moderate (INR/unit)**

SEB losses to taper off due to lower power purchase cost (as ST power cost is coming down, while LT availability of power improves) and gradual tariff increases

Source: IEX, CEA, MoP, PFC

Demand growth slows in highest loss making states

	Comm loss (INR b) FY09	Demand growth (% YoY)		CAGR (%) FY06-11
		FY10	FY11	
Tamil Nadu	(89.6)	9.4	5.3	8.2
Andhra Pradesh	(79.4)	10.5	(0.0)	8.3
Rajasthan	(76.6)	16.5	3.5	7.3
Uttar Pradesh	(58.2)	9.6	1.0	6.6
Haryana	(41.2)	15.2	3.4	7.8
Madhya Pradesh	(37.3)	2.6	12.2	5.6
Punjab	(32.4)	9.9	(2.6)	4.6
Karnataka	(31.2)	5.7	10.7	7.8
Bihar	(17.3)	11.7	6.7	9.6
Jharkhand	(13.2)	9.4	5.4	8.9
J&K	(13.2)	12.6	3.2	7.5
Gujarat	(10.9)	4.3	1.8	4.6
Maharashtra	(9.0)	2.5	2.6	4.5
Uttarakhand	(4.7)	19.0	10.9	13.9
Manipur	(1.4)	(6.1)	8.8	2.2
Orissa	(0.8)	2.9	6.2	8.1
Puducherry	(0.8)	4.9	0.2	4.8
Mizoram	(0.7)	6.4	4.3	9.7
Nagaland	(0.7)	10.9	11.6	7.6
Assam	(0.7)	0.4	5.6	6.0
Arunachal Pradesh	(0.5)	(4.7)	24.9	19.5
Meghalaya	(0.0)	(9.5)	0.2	2.4
Sikkim	0.1	11.7	5.0	13.7
Tripura	0.3	8.0	2.2	3.5
Himachal Pradesh	0.3	12.0	8.5	12.1
West Bengal	0.4	8.2	7.9	7.9
Delhi	1.2	8.4	5.8	3.5
Goa	1.6	10.1	2.2	6.2
Kerala	2.2	(0.2)	2.3	5.7
Chattisgarh	7.7	(25.8)	(6.2)	(4.5)

Source: CEA/CERC

State-wise participation in ST power market is flattening

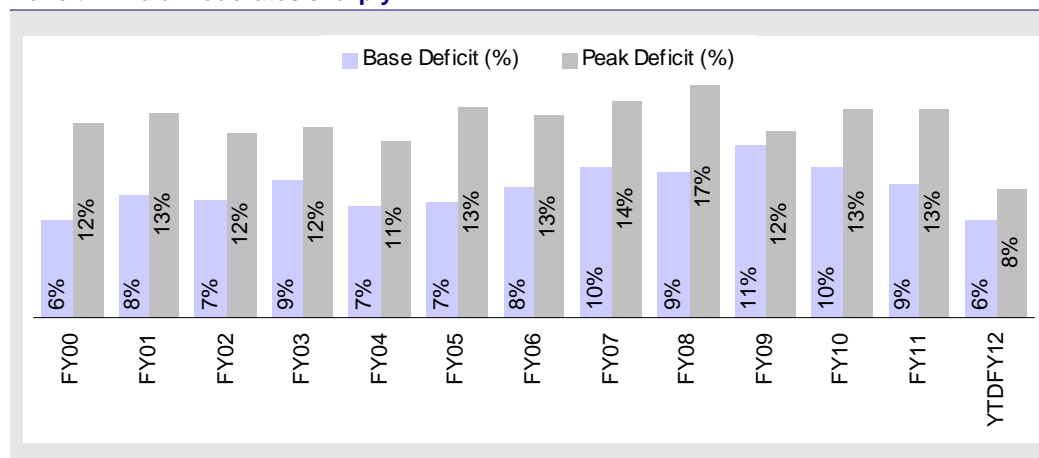
(MUs)	FY09	FY10	FY11
Punjab	(37)	3,108	5,200
Haryana	1,721	5,530	4,994
Rajasthan	5,485	7,966	6,403
Delhi	(3,824)	81	(753)
Uttar Pradesh	2,249	5,532	4,485
Uttarakhand	630	983	560
Himachal Pradesh	(277)	(2,629)	(2,718)
J&K	659	(1,118)	(1,340)
UT Chandigarh	(102)	202	178
MP	2,478	(1,199)	115
Maharashtra	5,191	4,092	5,422
Gujarat	(118)	(4,734)	(7,788)
Chattisgarh	(5,399)	(8,017)	(6,486)
Daman and Diu	154	(44)	(119)
Dadra & Nagar Haveli	595	204	135
Andhra Pradesh	4,708	1,131	(457)
Karnataka	1,178	(2,259)	1,137
Kerala	350	(255)	957
Tamil Nadu	2,254	6,478	9,723
Puducherry	(104)	(124)	(243)
West Bengal	(1,881)	(1,684)	(2,276)
Orissa	(1,950)	(842)	(678)
Bihar	(96)	(655)	327
Jharkhand	(186)	123	1,431
Sikkim	(321)	(335)	(380)
DVC	(600)	(1,990)	(2,195)
Arunachal Pradesh	(412)	(366)	(71)
Assam	(358)	(235)	(336)
Manipur	(188)	13	(89)
Meghalaya	(56)	83	57
Mizoram	(35)	13	(22)
Nagaland	(95)	(11)	6
Tripura	(278)	(202)	(292)
Goa	(300)	(136)	(231)

Source: CERC

Several top loss-making states have seen lowered consumption and participation from the short-term market, in a bid to curtail losses/manage cashflows

Deficit in India moderates sharply

Base/peak deficits have moderated as demand is lower and generation growth has been 10% (which implies consumption growth), indicating marginal demand growth is slower



Source: CEA

State gencos capacity addition in highest loss making states (MW)

States	Comm loss	Consumption	Curr. Cap.	Capacity Addition (MW)			
	FY09 (INR b)	FY11 (BUs)	(MW)	FY08-FY11	FY12	FY13	FY14
Tamil Nadu	(90)	80.2	5,605	92	1,030	3,330	0
Andhra Pradesh	(79)	78.9	8,875	1,615	539	1,570	800
Rajasthan	(77)	45.6	4,344	1,980	0	1,260	600
Uttar Pradesh	(58)	76.5	4,574	0	500	1,500	660
Haryana	(41)	34.6	3,160	1,800	0	0	0
Madhya Pradesh	(37)	48.4	3,807	1,251	0	1,500	600
Punjab	(32)	44.5	3,671	500	0	75	0
Karnataka	(31)	50.4	5,932	980	500	702	200
Bihar	(17)	12.5	310	0	0	0	0
Jharkhand	(13)	6.1	1,320	0	0	0	0
Other State	(50)	384	34,634	4,753	1,727	1,925	5,094
All SEB's	(526)	862.1	76,232	12,971	4,296	11,862	7,954

Source: CEA/CERC

Long-term power availability will increase significantly over FY12-14 in many states, driving overall procurement costs lower

CPSU capacity addition looks up (MW)

	FY08	FY09	FY10	FY11	FY12E	FY13E	FY14E	FY15E	Total
CPSU's									
NTPC	1,740	750	1,240	2,490	4,980	4,620	5,140	1,000	21,960
NHPC	510	-	-	120	515	2,657	2,045	-	5,847
SJVN	-	-	-	-	-	-	412	-	412
NPCIL	220	-	440	220	1,000	1,500	-	-	3,380
NLC	-	-	-	250	250	750	500	-	1,750
DVC	250	-	500	1,000	1,500	2,200	-	-	5,450
Others	520	-	-	200	200	1,326	110	-	2,356
Total	3,240	750	2,180	4,280	8,445	13,053	8,207	1,000	41,155

FY12 capacity addition is as per CEA, FY13-14 is spill-over capacity

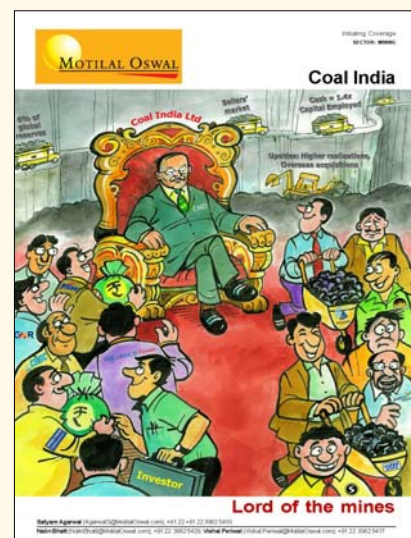
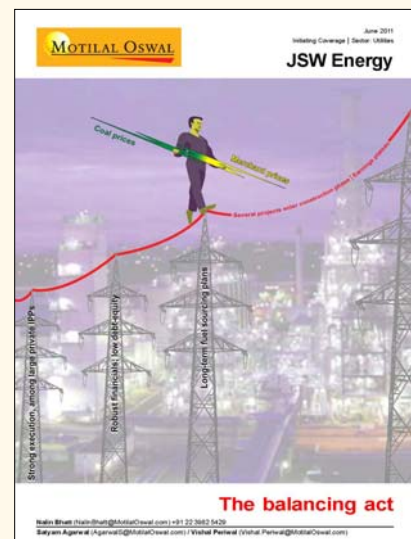
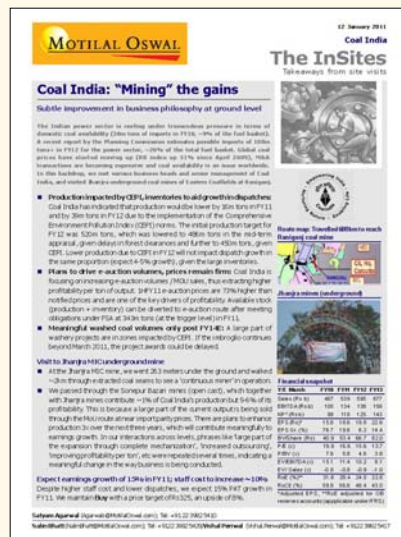
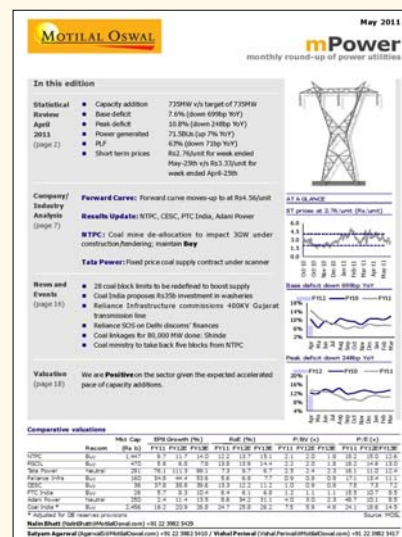
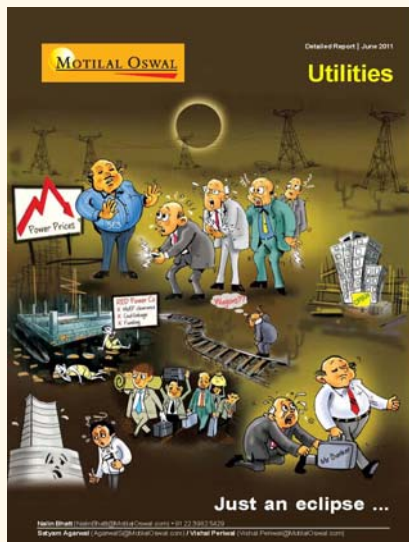
Source: CEA

45GW of tied up capacity under case-1, case-2 bids to increase the long-term power availability for SEBs

Expected power supply: Case-1 and case-2 bids (MW)

	Bids		Grand Total	% share	Case-2 Bids Excl. Krishnapatnam
	Case-2	Case-1			
Chattisgarh	1,320	-	1,320	2.9	1,320
Delhi	600	-	600	1.3	600
Gujarat	2,200	5,810	8,010	17.8	2,200
Haryana	1,050	1,725	2,775	6.2	1,050
MP	1,700	1,541	3,241	7.2	1,700
Maharashtra	3,220	5,150	8,370	18.6	2,420
Punjab	4,850	-	4,850	10.8	4,850
Rajasthan	1,050	1,200	2,250	5.0	1,050
UP	5,550	2,756	8,306	18.5	5,550
Uttarakhand	100	-	100	0.2	100
AP	1,600	-	1,600	3.6	-
Bihar	500	450	950	2.1	500
Jharkhand	1,000	-	1,000	2.2	1,000
Karnataka	800	-	800	1.8	-
Tamil Nadu	800	-	800	1.8	-
Total	26,340	18,632	44,972	100.0	22,340

Motilal Oswal Utilities Research Gallery



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