

FORUM OF REGULATORS (FOR)



STATUS REPORT

ON

“ISSUES PERTAINING TO NATIONAL ELECTRICITY POLICY”

2007-08

FORUM OF REGULATORS (FOR)

Sectt: C/o Central Electricity Regulatory Commission (CERC)

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1. GRID Codes

Provision in NEP (National Electricity Policy)

5.3.2

- *The State Regulatory Commissions who have not yet notified the grid code under the Electricity Act 2003 should notify the same not later than September 2005.*

<u>S. No.</u>	<u>SERC</u>	<u>Date of Notification</u>	<u>Status</u>
1.	APERC	1999	Notified
2.	AERC	Aug 7 th , 2004	Notified
3.	BERC	N/A	Under preparation
4.	CSERC	Dec 30, 2006	Notified
5.	DERC	Mar 31 st , 2008	Notified
6.	GERC	Aug 25, 2004	Notified
7.	HERC		Interim Grid Code is in place.
8.	HPERC	N/A	Under preparation
9.	JSERC	N/A	Grid Code issued for comments
10.	J&KSERC	N/A	Draft Notified
11.	KERC	Jan 26, 2006	Notified
12.	KSERC	Jan 13, 2006	Notified
13.	MPERC	Aug 20 th , 2005	Notified
14.	MERC	April 1 st , 2006	Notified
15.	MsERC	N/A	Not notified.
16.	OERC	June 14, 2006	Notified
17.	PSERC	Mar 9, 2006	Notified
18.	RERC	Oct 15, 2007	Notified and for the revised Grid Code will notify shortly.
19.	TNERC	Dec 14, 2005	Notified
20.	TERC	N/A	Awaiting for publication
21.	UERC	April 09, 2007	Notified
22.	UPERC	July 14, 2007	New Grid Code Notified
23.	WBERC	Jan 16, 2006	Notified

2. Technology Up-gradation

Provision in NEP:

5.3.3 The Regulatory Commissions need to provide facilitative framework for non-discriminatory open access. This requires load dispatch facilities with state-of-the art communication and data acquisition capability on a real time basis. While this is the case currently at the regional load dispatch centers, appropriate State Commissions must ensure that matching facilities with technology upgrades are provided at the State level, where necessary and realized not later than June 2006.

<u>S. No.</u>	<u>SERC</u>	<u>Status</u>
1.	APERC	For all high value services, high quality static meters are being installed, GIS/GPS based consumer indexing and Asset Tracking work is under progress, Computerization of Circle offices and section offices by providing connectivity through WAN is under progress
2.	AERC	SLDC equipped with technology equivalent to RLDC. LDC not yet established
3.	BERC	SLDC is functioning at BSEB H.Q. Upgradation of SLDC has been taken up by Powergrid under ULDC project. The work of SCADA is under progress by Powergrid.
4.	CSERC	Up-gradation in progress. SCADA installed-up-gradation in progress.
5.	DERC	<ol style="list-style-type: none"> 1. Billing by all the three discoms completely computerized 2. Electronic meters installed in about 90% cases. 3. HVDS / LT Aerial bunched (AB) Conductors installation being vigorously pursued for AT&C loss reduction. 4. Installation of Gas Insulated Switchgear(GIS) being pursued by Delhi Transco Limited and Discoms to overcome space constraint. 5. Automatic Meter Reading (AMR) for high end consumers. 6. GIS mapping and indexing of consumers in progress. 7. DT metering completed. 8. SCADA system installation completed. 9. SLDC fully functional and properly interfaced with RLDC as well as Discoms' control centres.

6.	GERC	Upgrades almost complete with aid of 'Powergrid' as consultant
7.	HERC	SLDC is functional at Panipat (Sewah), HVPNL(STY) is responsible for its up-gradation for which necessary directions have been issued by the HERC.
8.	HPERC	SLDC & ALDC have been established, but their functioning is limited to data acquisition. SLDC may require up-gradation once the intra state ABT taken place.
9.	JSERC	No plan has been submitted by JSEB.
10.	J&KSERC	Facilities available.
11.	KERC	KPTCL has taken up the upgradation of SCADA under integrated SCADA scheme and proposes to complete the same by the end of 2008.
12.	KSERC	SCADA already implemented through ULDCs in 2001.
13.	MPERC	SLDC has made provision to display the online activities and power flow from generation. Sub-SLDC at Bhopal and Indore under ULDC projects has been completed. SLDC has been made technologically equipped for implementation of Intra-state ABT. Necessary hardware and software have been procured and presently are under trial. The implementation of Intra-state ABT is under progress. Only the Balancing and Settlement Code is to be notified.
14.	MERC	<ol style="list-style-type: none"> 1. The Commission has directed STU (MSETCL) to increase Remote terminal Units (RTU) from 65 to 140 and also undertake Comprehensive Communication Plan utilizing optical fiber backbone and multi access radio equipments. 2. Implementation of SAP for Maha Transco & Maha Genco is in process of approval. 3. Installation of ABT by Maha Transco is in progress expected to complete by Sept'08 4. TPC-T has proposed for high opacity Conductors, which is in principle approved by the Commission. 5. REL-D has proposed to implement of Distribution Management System. 6. SCADA system has been recommended for the all the Utilities.
15.	MsERC	No information from Meghalaya State Electricity Board.
16.	OERC	ULDC though set up by <u>OPTCL</u> requires further up-gradation

17.	PSERC	Technology up-gradation of SLDC already done.
18.	RERC	Technological up gradation of SLDC and SCADA has been completed. Display of Discom-wise data at Discom HQ is yet to be completed.
19.	TNERC	<ul style="list-style-type: none"> • The provision of SCADA and communication facility to all SS under progress is likely to be completed by Dec 2007 by TNEB. • Automatic Data Logging System (ADLS) has been already introduced in substation and is being extended to all other substations in phased manner by TNEB. • The proposal for connecting additional 230KV SS and hydro power houses to the SLDC through PLCC modems is under progress.
20.	TERC	Project in progress
21.	UERC	SLDC is being upgraded.
22.	UPERC	SLDC has established Multi-Buyer Multi-Seller Unit with necessary infrastructure to undertake energy UI accounting under ABT, however, licensees have informed that real time online data exchange system is yet to be operationalized Accounting software developed are under test and personnel are being trained in ABT related matter. SLDC is already functioning and carrying out energy accounting from Tanda TPS under ABT.
23.	WBERC	SLDC matches the facilities that of RLDC

3. Open Access Transmission Charges & Distribution networks Charges

Provision in NEP:

5.3.3 Non-discriminatory open access shall be provided to competing generators supplying power to licensees upon payment of transmission charge to be determined by the appropriate Commission. The appropriate Commissions shall establish such transmission charges no later than June 2005.

5.4.5 Section 49 of the Act provides that such consumers who have been allowed open access under section 42 may enter into agreement with any person for supply of electricity on such terms and conditions, including tariff, as may be agreed upon by them. While making regulations for open access in distribution, the SERCs will also determine wheeling charges and cross-subsidy surcharge as required under section 42 of the Act.

WHEELING CHARGES(Paise/Unit)

S.No	SERC	Year	EHT/132k		HT/33/66k	HT/11kV	LT
			Utility	v	V		
1	AERC	2007-08	LAEDCL		79.00	79.00	79.00
			CAEDCL		106.00	106.00	106.00
			UAEDCL		73.00	73.00	73.00
2	BERC	2007-08			32.70		
3	CSERC	2007-08			15.00		
4	DERC	2007-08	BRPL	0.00	7.66	32.80	62.19
			BYPL	0.00	7.96	34.13	70.71
			NDPL	0.00	9.32	40.90	72.71
5	HERC	2007-08			25.00	25.00	25.00
6	HPERC	2007-08				66.00	137.00
7	JSERC				15.60	15.60	15.60
8	KERC	2007-08	BESCOM		6.00	6.00	14.00
			MESCOM		17.00	17.00	40.00
			CESCO		16.00	16.00	36.00
			HESCOM		17.00	17.00	38.00
			GESCOM		20.00	20.00	47.00
9	MsERC				20.05	20.05	20.05
10	OERC	2008-09	WESCO		52		
			NESCO		64		

			SOUTH O		67		
			CESU		74		
11	RERC	2008-09		1.00	11.00	32.00	
12	TNERC	2005-06			14.74	14.74	14.74
13	UPERC	2008-09	LTOA		28.00	45.00	
			STOA		7.00	11.00	
14	WBERC	2007-08		(a) Long-term customers		(b) Short-term customers	
				A	B	A	B
			CESC LTD	26.26	78.78	21.21	63.02
			WBSIEDCL	24.00	72.01	19.20	57.61
			DPSCL	8.07	24.21	6.46	19.37
			DPL	5.63	16.88	4.50	13.50
			A= For energy generating from co-generation and non-conventional/renewable energy sources				
B=For energy generation from other sources							

S.No.	States	Year	Utility		33/66kV	11kV	LT	
1	APERC	2008-09	APCPDCL	Rs/ KVA/Month	32.77	92.52	130.37	
			APEPDCL	Rs/ KVA/Month	10.74	53.98	218.94	
			APNPDCL	Rs/ KVA/Month	24.65	90.2	194.61	
			APSPDCL	Rs/ KVA/Month	23.82	104.83	146.63	
2	GERC	2007-08		Rs/MW/Month	67210.00	67210.00	67210.00	
				Rs/MW/Day	2205.00	2205.00	2205.00	
3	J&KERC	2008-09		As per ST rate of NR				
4	KSERC							
5	MERC	2007-08	MSEDCL	Rs/KW/Month	38.00	245.00		
			REL	Rs/KW/Month	120.82	120.82		
			TPC	Rs/KW/Month	111.00	111.00		
6	MPERC	2008-09			NA			
7	PSERC	2008-09	LTOA	Rs/MW/Day	4431.00			
			STOA	Rs/MW/Day	2659.00			
8	TERC				-			
9	UERC	2008-09	To be decided on case to case basis					

Transmission Charges(28.08.08)

S. No.	SERC	Year	LTOA (Rs./MW/Month)		STOA (Rs./MW/Day)
1	APERC	2008-09	38910.00		1297.00
2	AERC	2007-08	54 Paise/Unit		54 Paise/Unit
3	BERC	2007-08	70509.00		579.00
4	CSERC	2007-08	63030.00		518.00
5	DERC	2007-11	As per the MYT order issued on 20.12.2007 for DTL		
6	GERC	2007-08	76521.00		627.50
7	HERC	2007-08	120.85		1007.00
8	HPERC	2007-08	16.00 Paise/Unit		As per CERC Regulations
9	JSERC	2006-07	11.00 Paise/Unit		11.00 Paise/Unit
10	J&KSERC	2007-08	As per ST rate of NR		
12	KERC	2008-09	95869.00		788.00
11	KSERC		10.00 Paise/Unit		10.00 Paise/Unit
13	MPERC	2008-09	67649.70		563.75
14	MERC	2007-08	126860.00		1057.33
15	MsERC		20.05 Paise/Unit		20.05 Paise/Unit
16	OERC	2008-09	151200.00		1260.00
17	PSERC	2008-09	132930.00		2659.00
18	RERC	2008-09	94780.00		3159.00
19	TNERC	2005-06	83430.00		695.25
20	TERC		Yet to be decided		
21	UERC	2008-09	40320.00		1344.00
22	UPERC	2008-09	132KV& above	16.00 Paise/Unit	04.00 Paise/Unit
			132 KV	22.00 Paise/Unit	05.00 Paise/Unit
23	WBERC	2007-08	111678.00		930.65

Total 22 SERCs have determined Transmission Charges

4. Time-Bound Program on Aggregate Technical & Commercial Losses

Provision in NEP:

5.4.6 A time-bound programme should be drawn up by the State Electricity Regulatory Commissions (SERC) for segregation of technical and commercial losses through energy audits. Energy accounting and declaration of its results in each defined unit, as determined by SERCs, should be mandatory not later than March 2007. An action plan for reduction of the losses with adequate investments and suitable improvements in governance should be drawn up. Standards for reliability and quality of supply as well as for loss levels shall also be specified, from time to time, so as to bring these in line with international practices by year 2012.

<u>S. No.</u>	<u>SERC</u>	<u>Status</u>																																																																												
1.	APERC	<p>Following targets has been decided by SERC:</p> <p>Distribution Losses:</p> <table border="1"> <thead> <tr> <th colspan="4">CPDCL</th> </tr> <tr> <th></th> <th>2006-07</th> <th>2007-08</th> <th>2008-09</th> </tr> </thead> <tbody> <tr> <td>33 KV</td> <td>4.21%</td> <td>4.00%</td> <td>3.81%</td> </tr> <tr> <td>11 KV</td> <td>11.34%</td> <td>10.73%</td> <td>10.25%</td> </tr> <tr> <td>LT</td> <td>22.37%</td> <td>20.33%</td> <td>19.58%</td> </tr> <tr> <th colspan="4">EPDCL</th> </tr> <tr> <td>33 KV</td> <td>6.10%</td> <td>5.92%</td> <td>5.78%</td> </tr> <tr> <td>11 KV</td> <td>10.85%</td> <td>10.51%</td> <td>10.27%</td> </tr> <tr> <td>LT</td> <td>19.11%</td> <td>17.84%</td> <td>17.11%</td> </tr> <tr> <th colspan="4">NPDCL</th> </tr> <tr> <td>33 KV</td> <td>5.45%</td> <td>5.18%</td> <td>4.92%</td> </tr> <tr> <td>11 KV</td> <td>11.40%</td> <td>10.83%</td> <td>10.29%</td> </tr> <tr> <td>LT</td> <td>21.24%</td> <td>19.28%</td> <td>18.29%</td> </tr> <tr> <th colspan="4">SPDCL</th> </tr> <tr> <td>33 KV</td> <td>4.85%</td> <td>4.67%</td> <td>4.49%</td> </tr> <tr> <td>11 KV</td> <td>10.34%</td> <td>9.94%</td> <td>9.56%</td> </tr> <tr> <td>LT</td> <td>18.92%</td> <td>17.47%</td> <td>16.64%</td> </tr> </tbody> </table> <p>Transmission Losses :</p> <table border="1"> <thead> <tr> <th></th> <th>FY 2006-07</th> <th>FY 2007-08</th> <th>FY 2008-09</th> </tr> </thead> <tbody> <tr> <td>Transmission Losses %</td> <td>4.45%</td> <td>4.30%</td> <td>4.20%</td> </tr> </tbody> </table>	CPDCL					2006-07	2007-08	2008-09	33 KV	4.21%	4.00%	3.81%	11 KV	11.34%	10.73%	10.25%	LT	22.37%	20.33%	19.58%	EPDCL				33 KV	6.10%	5.92%	5.78%	11 KV	10.85%	10.51%	10.27%	LT	19.11%	17.84%	17.11%	NPDCL				33 KV	5.45%	5.18%	4.92%	11 KV	11.40%	10.83%	10.29%	LT	21.24%	19.28%	18.29%	SPDCL				33 KV	4.85%	4.67%	4.49%	11 KV	10.34%	9.94%	9.56%	LT	18.92%	17.47%	16.64%		FY 2006-07	FY 2007-08	FY 2008-09	Transmission Losses %	4.45%	4.30%	4.20%
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2.	AERC	Discoms have initiated a study on AT&C losses in selected 11kV feeders through Consultant M/s Price Water House Coopers.																																																																												

		Actions were taken as per report submitted by the Consultant.
3.	BERC	Road map for reduction of AT&C loss and also segregation of AT&C losses given to BSEB.
4.	CSERC	Board proceeding with T&D loss study. Targets for loss reduction 3% have been given up to 2007-08 bringing it down to 32.54%.
5.	DERC	The Commission has finalised the AT&C loss targets and incentivisation framework for the Control Period 2007-11 ending 31 st March, 2011: <ul style="list-style-type: none"> (a) AT&C loss levels have been specified at 17 percent for NDPL and BRPL, 22 percent for BYPL and 10 percent for NDMC at the end of the Control Period; (b) Equal sharing of benefits between the licensee and the contingency reserve (which is used for consumers benefit), on account of gains arising out of better performance vis-à-vis the approved AT&C loss target; and (c) Licensees to retain all gains accruing out of achieving loss levels below 15 percent for NDPL and BRPL, 20 percent for BYPL and 9 percent for NDMC.
6.	GERC	In Tariff Order dated, 31-03-2007, the distribution licensees are directed to prepare a road map to reduce the distribution losses over the next five years (2007-08 to 2011-12). Details regarding Energy Audit also called from unbundled licensees.
7.	HERC	Set target of 30.5% distribution loss level to be achieved in FY 2006-07. A view on AT&C loss shall be taken once segregation of feeder is completed by the Discoms by the end of the year.
8.	HPERC	Draft Report for T&D loss submitted by Consultant and is under examination.
9.	JSERC	No action taken by Licensee
10.	J&KSERC	Likely to take more time.
11.	KERC	KERC has furnished a road map to CEA for reduction in T&D losses. ESCOM have been directed to segregate Technical & Commercial losses suitably justified by relevant studies.
12.	KSERC	Implemented in those parts where APDRP is implemented.
13.	MPERC	Time bound program issued. The State Govt. has notified milestones for distribution losses for three Discoms of the State for the period from 2006-07 to 2010-11, as given below:

		Loss Targets (in %)						
		Year	Discom East	Discom Central	Discom West			
		2006-07	34.5	43	30.0			
		2007-08	32.5	40	28.5			
		2008-09	29.5	37	27.0			
		2009-10	26.5	34	25.5			
		2010-11	23.5	31	24.0			
14.	MERC	Targeted loss reduction levels for FY 2007-08:						
		Utilities	Current level of Distribution loss during FY 2006-07	Targeted % loss reduction Trajectory during FY 2007-08	Target Distribution loss during FY 2007-08			
		MSEDCL	31.70 %	4.00	27.70 %			
		REL	12.00 %	0.50	11.50 %			
		BEST	11.50 %	0.50	11.00 %			
15.	MsERC	Description	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
		T & D Loss %	33.95	28.41	24.42	20.05	15.69	11.32
		AT & C Loss %	36.80	35.62	31.29	26.68	22.05	15.11
16.	OERC	The commission had conducted sample energy audit initially on five feeders through an independent group of professionals which was followed up for another 20 nos. of 11kV feeders with mixed loads. The Commission has fixed the following targets for AT&C loss for different utilities for FY 2008-09.						
		Utility	Target AT&C loss for FY 2008-09	Actuals for 2006-07	Actuals for 2007-08 (Upto 9/07)			
		NESCO	29	40.9 %	35.7 %			
		WESCO	28	40.0 %	40.3 %			
		SOUTHCO	34.6	47.4 %	51.4 %			
		CESU	32.84	47.1 %	46.7 %			
		All Orissa	30.36	43.3 %	42.4 %			
17.	PSERC	The T&D loss reduction trajectory for utility was fixed for a period of four years upto 2007-08. The same is due for a review in Tariff Order for 2008-09.						
18.	RERC	SERC has assigned the targets for loss reduction by the Distribution Licensee for the year 2007-08 & 2008-09 in its order issued for MYT.						
19.	TNERC	SERC is discussing with the Board and is in the process of setting targets for reduction of AT&C losses.						
20.	TERC	The licensee has able to quantify HT input energy by installing						

		meter. The report of the energy auditor appointed by the licensee is yet to be received. The programme for reduction of ATC loss from the present level of about 35% may come to 25% overall by 2011-12. In urban area, the loss would figure better than that of rural and hilly areas.																																																															
21.	UERC	Trajectory for loss reduction fixed by the Commission in T.O. dt. 08.09.2003 to reduce losses by 4% each year to arrive at a distribution loss level of 24.32% by 2007-08. For 2008-09, the Commission considered a loss reduction target of 2%. For Energy audit exercise, the Commission has given direction to the licensee.																																																															
22.	UPERC	In consultation with Distribution Licensee, the Commission had fixed AT&C trajectory for six years in the year 2000-01. In the current tariff order for 2006-07, the loss levels that should have been achieved as per that trajectory have been allowed. Accordingly AT&C loss of 27.4% has been allowed by the Commission.																																																															
23.	WBERC	<p>Time bound program on AT&C losses:</p> <table border="1"> <thead> <tr> <th colspan="9">Norms of Distribution loss in % for Distribution Licensee</th> </tr> <tr> <th>Discoms</th> <th>2008-09</th> <th>2009-10</th> <th>2010-11</th> <th>2011-12</th> <th>2012-13</th> <th>2013-14</th> <th>2014-15</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>WBSEDCL</td> <td>18.75</td> <td>18.25</td> <td>17.75</td> <td>17.50</td> <td>17.25</td> <td>17.00</td> <td>16.75</td> <td>16.50</td> </tr> <tr> <td>CESC LTD.</td> <td>15.11</td> <td>14.90</td> <td>14.75</td> <td>14.60</td> <td>14.25</td> <td>14.30</td> <td>14.15</td> <td>14.00</td> </tr> <tr> <td>DPL</td> <td>6.10</td> <td>5.90</td> <td>5.70</td> <td>5.50</td> <td>5.30</td> <td>5.20</td> <td>5.10</td> <td>5.00</td> </tr> <tr> <td>DPSC LTD.</td> <td>5.54</td> <td>5.40</td> <td>5.25</td> <td>5.10</td> <td>4.95</td> <td>4.90</td> <td>4.65</td> <td>4.50</td> </tr> <tr> <td>DVC</td> <td>2.78</td> <td>2.60</td> <td>2.50</td> <td>2.40</td> <td>2.30</td> <td>2.20</td> <td>2.10</td> <td>2.00</td> </tr> </tbody> </table>	Norms of Distribution loss in % for Distribution Licensee									Discoms	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	WBSEDCL	18.75	18.25	17.75	17.50	17.25	17.00	16.75	16.50	CESC LTD.	15.11	14.90	14.75	14.60	14.25	14.30	14.15	14.00	DPL	6.10	5.90	5.70	5.50	5.30	5.20	5.10	5.00	DPSC LTD.	5.54	5.40	5.25	5.10	4.95	4.90	4.65	4.50	DVC	2.78	2.60	2.50	2.40	2.30	2.20	2.10	2.00
Norms of Distribution loss in % for Distribution Licensee																																																																	
Discoms	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16																																																									
WBSEDCL	18.75	18.25	17.75	17.50	17.25	17.00	16.75	16.50																																																									
CESC LTD.	15.11	14.90	14.75	14.60	14.25	14.30	14.15	14.00																																																									
DPL	6.10	5.90	5.70	5.50	5.30	5.20	5.10	5.00																																																									
DPSC LTD.	5.54	5.40	5.25	5.10	4.95	4.90	4.65	4.50																																																									
DVC	2.78	2.60	2.50	2.40	2.30	2.20	2.10	2.00																																																									

5. Metering Plans

Provision in NEP:

5.4.9 The Act requires all consumers to be metered within two years. The SERCs may obtain from the Distribution Licensees their metering plans, approve these, and monitor the same. The SERCs should encourage use of pre-paid meters. In the first instance, TOD meters for large consumers with a minimum load of one MVA are also to be encouraged. The SERCs should also put in place independent third-party meter testing arrangements.

S. No	SERC	<u>Metering Plan</u>
1.	APERC	Issued a proceeding under section 55 of the Electricity Act 2003, extending the time limit to fix correct meters for all unmetered agricultural services up to 31-03-2008, after which the Discoms shall not supply power to any consumer except through installation of a correct meter.
2.	AERC	(1) TOD meters placed for HT categories such as Tea, Coffee, Rubber, Oil & Coal and industry. Third party arrangement for meter testing done at E.T.D.C (GoI org.). (2) Action taken by utilities to convert all electromechanical meters to static meters. All new connections are released through static meters.
3.	BERC	Directive for cent percent metering has been given to BSEB in Tariff Order of 2006-07. BSEB has been directed to provide no new connection without meter.
4.	CSERC	Target date of 100% meterisation has been extended up to March, 2009. No new connection without meter. Commission is the process of putting in place a third party meter testing arrangement.
5.	DERC	100% meterization has been achieved at 11 KV feeders at all Discoms & for other consumers three Discoms viz. BRPL, BYPL and NDPL has achieved 98.23%, 99.35%, and 97.63% meterization.
6.	GERC	All categories metered. For metering of all Agricultural consumers time limit extended up to Dec '07. TOD metering for HT with load above 500kVA, exclusive night use tariff for HT with load above 100kVA already exists. In agriculture sector, 30% (approx.) connections are metered. The Commission has extended the date for 100% metering upto 31/12/2007 and the matter is under consideration of

		the Commission.
7.	HERC	HERC has made it mandatory for the Discoms to release only metered supply connections. The Discoms are in the process of putting meters on the un-metered agriculture pump-set supply.
8.	HPERC	TOD meters installed for all categories of consumers having connected load above 20KW, except domestic consumer. Electronic meters being installed for all new domestic consumer and old electro-mechanised meters being replaced in phased manner.
9.	JSERC	JSEB has no metering plans. Commission is trying to put in place a third party meter testing arrangements.
10.	J&KSERC	The commission has directed the J&K state Utilities to furnish details of metering plan and to install TOD meters.
11.	KERC	Discoms have installed meters for all the installations except IP sets and BJ/KJ. Specific metering plan is yet to be furnished by Discoms
12.	KSERC	TOD meters made compulsory for all HT and EHT consumers across the State.
13.	MPERC	MPERC had extended the time period for 100% meterization to all unmetered consumers vide Gazette notification dated 18/10/2005. The time limit to achieve 100% meterization for domestic and agricultural consumers had been fixed by the Commission by March 2006 and September 2007, respectively. The licensees could not complete the 100% meterization program and have again filed a petition with MPERC seeking further extension of the time limit to achieve 100% meterization in domestic and agricultural category by March 2010 and March 2011, respectively. MPERC has sought the reasons for non achievement of meterization target and a firm metering plan vis-à-vis meter procurement program from the licensee before further notification. MPERC encourages use of pre-paid meters and spot billing. TOD meters have been installed for all HT consumers. However TOD tariff is not applied to railways, coal mines, irrigations, public water works and bulk supply exemptees till FY 07-08. MPERC has authorized M/s. CPRI, Bhopal and M/s. ERDA, Vadodara as third party independent meter testing

		agencies.			
14.	MERC	SERC has directed MSEDCL to comply with the statutory provisions as well as the National Tariff Policy in respect of individual consumer metering. The Commission also directed MSEDCL to install appropriate tri-vector meters capable of recording maximum demand for LT industrial consumers.			
15.	MsERC	Sl. No.	Particulars	33 KV	11 KV
		1.	Total no. of unmetred HT Feeders as on 01.04.07	8	41
		2.	Program of Meterisation of Feeders during FY 07-08	4	41
		3.	Progress up to 31.12.07	0	8
		4.	Program of Meterisation of Feeders during FY 08-09	$\frac{8}{7^*}$	25
		*-17 new 33 KV feeders were commissioned without meters during the year 2007-08.			
16.	OERC	The provisions have been incorporated in OERC Distribution Code, 2004 in line with CEA (Installation & Operation of Meters) Regulation, 2006. The progress is monitored from Grid substations upto consumer end. Status being reviewed in every two months.			
17.	PSERC	Utility has installed electronic meters on all industrial consumers. Replacement of electro mechanical meters with electronic meters in respect of NRS and DS consumers is in progress. Metering of AP consumers is yet to be undertaken.			
18.	RERC	All metered except agriculture consumers, time extended up to 09-06-08			
19.	TNERC	Time extended to 31-03-09 for installation of meter in agricultural & hut services by the Commission. Submission of metering plan extended up to 31-12-07. TOD meters installed in all HT consumers. With regards to DT metering, out of the total 1.71 Lakhs Nos. of DTs (as on 30.11.06), 89738 Nos. have been metered as on 30.11.07. The metering of balance DTs is under process.			
20.	TERC	Completion of energy metering of consumer premises in progress. Significant computerized billing achieved in the urban sector and in most of the rural areas.			
21.	UERC	Directions issued for 100% metering. Penalty imposed for			

		non compliance. TOD implemented on a large scale.
22.	UPERC	All 11 KV Feeders have been metered, TOD meters for Large and Heavy Power Consumers (HV-2) have been installed. Directions have been issued for 100% metering; Discoms are in the process of installing electronic meters on all consumers but have not submitted any specific metering plan for metering of unmetered consumers.
23.	WBERC	Completed

6. Implementation of HVDS, SCADA & Data-Base Management

Provision in NEP:

5.4.11 High Voltage Distribution System is an effective method for reduction of technical losses, prevention of theft, improved voltage profile and better consumer service. It should be promoted to reduce LT/HT ratio keeping in view the techno economic considerations.

5.4.12 SCADA and data management systems are useful for efficient working of Distribution Systems. A time bound programme for implementation of SCADA and data management system should be obtained from Distribution Licensees and approved by the SERCs keeping in view the techno economic considerations. Efforts should be made to install substation automation equipment in a phased manner.

<u>S.No</u>	<u>SERC</u>	<u>HVDS</u>	<u>SCADA & Data Base Management</u>
1.	APERC	HVDS Phase-1 and Phase-2 works were already completed. The Discoms are now took HVDS Phase-3 works. Under this scheme, all agricultural service lines are being converted to HVDS, so that both technical and commercial losses would come down.	All Discoms are implementing SAP. GIS/GPS works are under progress. Computerization of Discom offices is under progress in phased manner.
2.	AERC	HT tariff rates are separately notified & kept lower to encourage the consumers to opt for supply at a higher voltage with effect from 2005-06. As a result, HT consumers increased from 6,641 in 2006-07 to 10,704 in 2007-08.	SCADA implemented in phases.
3.	BERC	HVDS is being provided under rural electrification.	SCADA & Database Management work is under progress.
4.	CSERC	Board has started converting LT system to HVDS. Scheme prepared for two areas for availing REC funds.	SCADA implemented. Substation automation in process
5.	DERC	HVDS-Implemented in the	SCADA –Implemented in the

		past but not favoured now. Low Tension Aerial Bunched Cables (LT ABC) introduced in a big way due to cost effectiveness.	three Discoms.
6.	GERC	N/A	SCADA work is almost completed through consultancy assignment to PGCIL.
7.	HERC	HVDS is being implemented by the Discoms.	SCADA & Database Management for all intra- state generating stations and limited no. of 220KV/132KV Grid substations operational at SLDC Panipat (Sewah). SCADA and database management scheme for sub-transmission system envisaged to be part of Area LDC established by the Discoms for which necessary directions have been issued by the Commission.
8.	HPERC	<p>Directions issued to board on HVDS, SCADA is limited to data acquisition as done by SLDC. DBM to take place in MYT which has been initiated in 2007.</p> <p>(i) As a first step, the HPSEB has completed the study on SCADA on the unnamed substation at Nagwain (Kullu) and submitted the report to the Commission. The report being examined by the Commission.</p> <p>(ii) The IT pilot project in Shimla operation Circle is expected to be completed by June, 2008. The same would be replicated to majority of the other operation circle.</p>	
9.	JSERC	Not yet decided	Not yet decided
10.	J&KSER C	To be taken care in the 1st Tariff Order.	Commission has already directed licensees to furnish details upon the matter. Results awaited
11.	KERC	KERC has been monitoring LT/HT ratio.	KPTCL has taken up the upgradation of SCADA under

			integrated SCADA scheme. For data base management, ESCOM's have taken up computerization for implementation of MIS and the Commission is monitoring the status.
12.	KSERC	Being implemented	SCADA implemented in one city. Data acquisition from sub stations implemented in areas covered by APDRP
13.	MPERC	As per the directives given by MPERC in respect of reducing LT/ HT ratio and loss level through HVDS, all the three distribution companies have included several HVDS schemes in their investment plan filed with the Commission and now approved by the Commission. Some pilot projects of HVDS in each Discoms have been completed and encouraging results have been observed after execution of the scheme. The Commission has also seen a few of them during the Commission's visit to the areas of all three distribution licensees.	The Commission has reviewed the status of implementation of SCADA earlier and found that it was not feasible to implement SCADA in the distribution system in the present scenario. However, the licensees have been directed to review the matter and prepare a plan for implementation of SCADA. As far as data base management of the Discom is concerned, it has been given to understand that the work in this direction is going on with the help of their consultants KPMG under DFID phase II programme.
14.	MERC	MSEDCL has proposed the HVDS/ Infrastructure scheme for 119 divisions in rural areas of Maharashtra, which have been approved by the Commission.	Information through SCADA is available for all generating stations and grid substations of MSETCL at MSLDC. In respect of distribution, REL has implemented SCADA under disaster management

			<p>scheme, which covers 50 receiving stations.</p> <p>As regards data base management, the Commission has initiated process of implementation Regulatory Information Management Schemes (RIMS).</p>
15.	OERC	<p>The Commission has directed in the ARR & RST order for 2008-09 that "In case the electrification (rural) is done by extending the grid supply then the extension should be on HVDS by extending the HT lines up to the load centre of the village."</p>	<p>Commission in its order dated 13.03.2008 observed that all agencies connected to or planning to connect to STS shall provide Remote Terminal Units (RTUs) and other communication equipments for sending real time data. They shall make available output of their respective operational meters to SCADA interface equipment installed by the STU/Transmission Licensee.</p>
16.	PSERC	<p>REC has sanctioned DPRs worth Rs. 1000 crores (out of Rs.2387 crores) for HVDS for AP connections in the month of sept.,2006</p>	<p>Real time SCADA system along with Communication system already in operation in the utility is the state of art system and support all the functional features as available in SCADA system of North Regional Control Centre at New Delhi. SCADA system meets with requirements of NEP guidelines. Implementation of SCADA for distribution with Ludhiana city as a pilot project is being taken up/completed by the utility during 2008-09 and 2009-10.</p>
17.	RERC	<p>SERC in its regulations for investment approval has prescribed the appointment of plan expenditure for related schemes under</p>	

		<p>which the works are taken up by the Discoms for technological upgradation as under :</p> <table border="1"> <thead> <tr> <th>S. No.</th> <th>Catagory</th> <th>Ceiling limit of outlay</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Load dispatch metering</td> <td>5%</td> </tr> <tr> <td>2</td> <td>Consumer servicing</td> <td>1%</td> </tr> <tr> <td>3</td> <td>Institutional strengthening</td> <td>1%</td> </tr> </tbody> </table> <p>The Discoms have also undertaken feeder renovation programme with rural focus, urban focus and industrial focus, which include HVDS, Metering etc.</p>		S. No.	Catagory	Ceiling limit of outlay	1	Load dispatch metering	5%	2	Consumer servicing	1%	3	Institutional strengthening	1%
S. No.	Catagory	Ceiling limit of outlay													
1	Load dispatch metering	5%													
2	Consumer servicing	1%													
3	Institutional strengthening	1%													
18.	TNERC	Licensee has been directed to improve HT/LT ratio 1:1.5 in the distribution code	Provision of SCADA and communication facility to all substations is likely to be completed by June 2008 by TNEB.												
19.	TERC	Schemes under preparation by the licensee and yet to be furnished. This would take some time for this State due to limitation of size and consumers spread uneven.													
20.	UERC	The commission has directed all loads above 75kW on HT.	Centralised commercial Database MIS has been implemented at corporate office of the distribution licensee and integration to divisional MIS is under progress. The DISCOM has taken up the project for AMR and data logging for high value consumers in accordance with the directions of the Commission. Consumer indexing and GIS mapping has been completed in few circles and is under progress in other circles.												
21.	UPERC	HT tariff rates are fixed so as to encourage the consumers to opt for supply at a higher voltage. Licensees have informed about adoption of HVDS for rural network.	SCADA and Database Management are available at 400 KV and 220 KV Transmission System.												

22.	WBERC	In new extension of network HVDS concept is being in practice. For old network upgradation to HVDS is taking place as where it is felt necessary.	Action not yet started
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7. Norms for Standard of Performance

Provision in NEP:

5.13.1 Appropriate Commission should regulate utilities based on pre-determined indices on quality of power supply. Parameters should include, amongst others, frequency and duration of interruption, voltage parameters, harmonics, transformer failure rates, waiting time for restoration of supply, percentage defective meters and waiting list of new connections. The Appropriate Commissions would specify expected standards of performance.

<u>S. No.</u>	<u>SERC</u>	<u>SoP – Date of Notification</u>	<u>Summary</u>
1.	APERC	2004	Notified and amended in 2005
2.	AERC	Feb 4, 2005	Regulation notified and is effective
3.	BERC	Jan 22 nd ,2007	Notified
4.	CSERC	July 14, 2006	SoP has already been notified along with Supply Code. Penalties for delay in consumer services have also notified.
5.	DERC	April, 2007	Notified
6.	GERC	March 31, 2005	Notified with provision for penalties in case of non-performance of distribution licensee.
7.	HERC	July 16 th , 2004	Notified
8.	HPERC	Nov 3 rd ,2005	Notified
9.	JSERC	Aug 12 th , 2005	Notified
10.	J&KSERC	June 19, 2006	Notified
11.	KERC	June 10, 2004	Regulations issued.
12.	KSERC	May 9, 2006	Notified. Date of implementation extended up to 30 th April 2008
13.	MPERC	July 13, 2004 and revised on Sep. 26 th , 2005	Payment of compensation for delay in consumer services also notified in the regulation. Quarterly report is being submitted by Discoms on Sop. SERC also spreading awareness in consumers about SoP.
14.	MERC	Jan 20, 2005	Notified
15.	MsERC	December, 2006	Notified and Payment of compensation for delay in consumer services also notified in the regulation.
16.	OERC	May 28 th ,2004	The commission has approved a Business plan with incentive for

			improved AT&C loss.
17.	PSERC	June 29 th ,2007	Notified
18.	RERC	Notified	For transmission & Distribution
19.	TNERC	Sept 01,2004	Order for the payment of compensation incase the Distribution Licensee fails to meet the stipulated standards has already been issued.
20.	TERC	Notified	Regulation issued and performance being monitored. Response from State Government and utility yet to come at desired level.
21.	UERC	April 17, 2007	Payment of compensation and penalties for delay in consumer services also notified in the regulation. Quarterly report is being submitted by the distribution licensee on SoP. SERC also spreading awareness in consumers about SoP.
22.	UPERC	Feb 18, 2005	SoP have been included in the Electricity Supply Code and notified. Compensation to consumers for non-adherence to some of the standards has been made effective from the date of notification of the Code. For the remaining Standards, penalties shall be made effective in phases.
23.	WBERC	Oct 18 th ,2005	SoP shall soon be amended for further up gradation. Draft publication is already done and comments and suggestions already received.

8. Setting up of CGR Forum & Ombudsman

Provision in NEP:

5.13.3 It is advised that all State Commissions should formulate the guidelines regarding setting up of grievance redressal forum by the licensees as also the regulations regarding the Ombudsman and also appoint/designate the Ombudsman within six months.

S. No.	SERC	CGR Regulation	Summary
1.	APERC	2004	Notified
2.	AERC	Dec22 nd ,2003	CGR forum in 3 Discoms, Ombudsman appointed.
3.	BERC	May20 th ,2006	One CGRF is functioning since August 2006 for entire licensed area of BSEB. Ombudsman not yet appointed.
4.	CSERC	Feb15, 2005	CGR established in 3 centers. Ombudsman appointed, and both are functional.
5.	DERC	Nov, 2003	In terms of the Regulations, the distribution company-wise CGRFs were set up in August, 2004. The Appellate Institution of the Electricity Ombudsman was also set up in August, 2004. The Institutions of CGRFs and the Electricity Ombudsman have completed more than 3½ years of existence.
6.	GERC	March 31, 2005	CGRFs in 8 centers. Ahmedabad and Surat Licence areas have two CGRFs respectively. UGVCL, DGVCL and MGVCL have each one CGRF in their licence area and PGVCL has three CGRFs due to large licence area. GERC has appointed Secretary as Ombudsman with effect from August 5, 2005.
7.	HERC	April 12 th ,2004	Discoms have set up CGR forum both are functional. Ombudsman is designated.
8.	HPERC	Oct 23 rd ,2003	HPSEB, the only licensee has constituted CGR forum during June, 2005. Ombudsman appointed during December 2004.
9.	JSERC	Notified	Already Completed
10.	J&KSER C	No provision	No provision in J&K Act-2000
11.	KERC	June 10, 2004	CGR constituted in all five discoms.

			Commission has appointed Ombudsman
12.	KSERC	October 6 th ,2005	CGRF and Ombudsman in place and actively issuing orders on consumer grievances.
13.	MPERC	April 12 th ,2004	One Forum each for three Discoms is functional. Ombudsman is also functional. In accordance with the notification of Ministry of Power issued on 26.10.2006, an amendment to the Regulation for "Establishment of Forum and Ombudsman for redressal of grievances of the consumers" has been notified.
14.	MERC	Notified in 2006	One CGRF each for TPC, REL, BEST and MPECS has been constituted. In case of MSEDCL, for Eleven zones of MSEDCL, a total of 11 CGRF's have been constituted. One Ombudsman has been appointed for the State.
15.	MsERC	February 22 nd , 2007	The Procedure for appointment, tenure and functions of Ombudsman have also been spelt out in these Regulations and Ombudsman has assumed office in May, 2007 .
16.	OERC	Notified 17.05.2004	Commission has established two Ombudsmen & 12 grievance redressal forums for the state.
17.	PSERC	Notified	CGRF and Ombudsman are functional
18.	RERC	Notified	CGR formed for the licensees. Ombudsman formed for each of the three licensees.
19.	TNERC	Notified	CGR & Ombudsman regulations specified and functioning
20.	TERC	Notified	CGR formed and Secretary of the Commission appointed as Ombudsman.
21.	UERC	Notified	Two CGR and one Ombudsman functional.
22.	UPERC	December 9, 2003	Offices of Fora are functional. Ombudsman has been appointed and is functional. State Govt. has been requested to expedite sanction of staff for the office of Ombudsman. On the basis of feedback from consumers and stakeholders the Commission has modified these regulations have also been notified. Action to operationalize the Forum as per new regulations is in hand.

23.	WBERC	Notified	CGR and Ombudsman established. Commission provides in its guidelines at least one Grievance Redressal Officer at each sub-district, district, region, zone, head quarter in each organization of the licensee.
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9. Capacity Building for Consumer Groups

Provision in NEP:

5.13.4 The Central Government, the State Governments and Electricity Regulatory Commissions should facilitate capacity building of consumer groups and their effective representation before the Regulatory Commissions. This will enhance the efficacy of regulatory process.

<u>S. No.</u>	<u>SERC</u>	<u>Summary</u>
1.	AERC	12 Consumer groups have been empanelled under Consumer Advocacy Cell. A quarterly info bulletin "The Electricity Consumer Grid" published.
2.	BERC	Action yet to be taken. However, comments/suggestions of consumers/ stake holders and general public are invited on matter relating to tariff determination and finalization of regulations.
3.	CSERC	Consumer Advocacy Cell has been set-up in the Commission. A two day seminar organized for NGO's on regulatory regime. A training programme to train members of NGO's has been conducted in 2007-08 and is being conducted during 08-09.
4.	DERC	Each year with the admission of the Annual Revenue Requirements (ARR) petitions of the Discoms, the Commission gives wide publicity among stakeholders and nominates some of the officers of the Commission for interaction with the stakeholders for enabling them to comprehend the content/import of the ARR petitions. This helps in the stakeholders contributing meaningfully while offering their comments against the ARR petitions and also during the subsequent public hearings. On the initiative of the Commission, the Govt. of NCT of Delhi have recently notified the Electricity Consumers Advocacy Committee(ECAC), rendering a platform to the consumers for protecting their interests before DERC, the Appellate Tribunal for Electricity and other Courts of the land
5.	GERC	Representatives of various consumer groups are made member of State Advisory Committee as well as Supply code Review panel.
6.	HERC	HERC, as provided in section 94(3) may consider to authorize a person to represent the interest of the

		consumers in the proceedings before it.
7.	HPERC	Consumer representative appointed under the Act to protect consumer interest.
8.	JSERC	This is an on going process and the commission is carrying out required activities.
9.	J&KSERC	The Commission has taken note of this issue.
10.	KERC	Capacity building for consumer groups is being done through Office of Consumer Advocacy by conducting workshops, training, Seminars and issue of quarterly magazines/leaflets.
11.	KSERC	Classes for capacity building conducted on subjects like Safety, Supply Code and ARR & ERC. Being done
12.	MPERC	About 120 NGOs have been registered to participate in the reform process and they are also involved in the process of determination of ARR. These NGOs are further requested to spread awareness about rights and responsibilities amongst the consumers. Also an NGOs' workshop has been organized to discuss various consumer related issues.
13.	MERC	<ol style="list-style-type: none"> 1. The SERC has appointed four consumer representative groups as authorized consumer representatives under section 94(3) of the Electricity Act, 2003. 2. Consumer Advocacy Cell is established in MERC office and started functioning from Feb'08
14.	MsERC	This is an ongoing exercise. Two consumer awareness programmes have been organized so far. One more is planned for this month.
15.	OERC	Commission has decided to float some consumer advocacy papers. OERC has played a predominant role by making GRFs and Ombudsmen operational and by creating consumers awareness through publication of Frequently Asked Questions (FAQs)/ What should you do? Both in Oriya and English etc. OERC also publishing "What should you do?" in leading dailies on alternative Sundays for the benefits of the Consumers.
16.	PSERC	Consumer advocacy cell set up. Guide containing information regarding consumer complaint handling procedure and other consumer related issues for guidance of consumers prepared and distribution among

		consumers/consumers groups. Some representatives of consumer groups taken as members of the State Advisory committee of the Commission.
17.	RERC	SERC has kept a provision in the budget estimates towards consumer education/advocacy. The state govt. has also been informed of the same.
18.	TNERC	The commission has appointed a Consumer Advocacy Officer. This officer is coordinating with the consumer group. Consumer centric periodical, Newsletters, etc are sent free of cost to consumer organization, groups and association. "Consumer Query Platform" software has been hosted by the Commissions website facilitating consumers queries. Replies and clarifications are put up within 10 days.
19.	TERC	Awareness campaign – open public discussion being held.
20.	UERC	The Commission has chosen members of Advisory Committee, which meets at least once in quarter, from different fields representing interest of various consumer groups such as domestic, commercial, industrial, agriculture, academic etc. From time to time Commission has been publishing notices in newspapers highlighting the important orders, Regulations issued/to be issued by it seeking comments from all the stakeholders. Further, Commission has been holding various meetings/Jan-Gosthis across the States wherein consumers are told of their rights and duties under the Act and the Regulations.
21.	UPERC	Commission has initiated creation of a Cell for Consumer Education and Advocacy (CCEA) on public-private partnership basis. The CCEA is functioning as per the MoU signed with VOICE, New Delhi. It was formally launched on 14 th November, 2007.
22.	WBERC	Already consumer awareness building is undertaken through different communication to enhance capacity of consumers.