

**Power & Electricity Department**  
**Government of Mizoram**

# *ANNUAL REPORT*

## *2006-2007*

**Issued by**  
**Chief Engineer,**  
**Power & Electricity Department**

**Power & Electricity Department  
Government of Mizoram**

**ANNUAL REPORT FOR 2006-07**

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# ANNUAL REPORT FOR 2006-07

*Prepared by*

**Planning Cell**

Office of Chief Engineer  
Power & Electricity Department  
Government of Mizoram  
Aizawl – 796001

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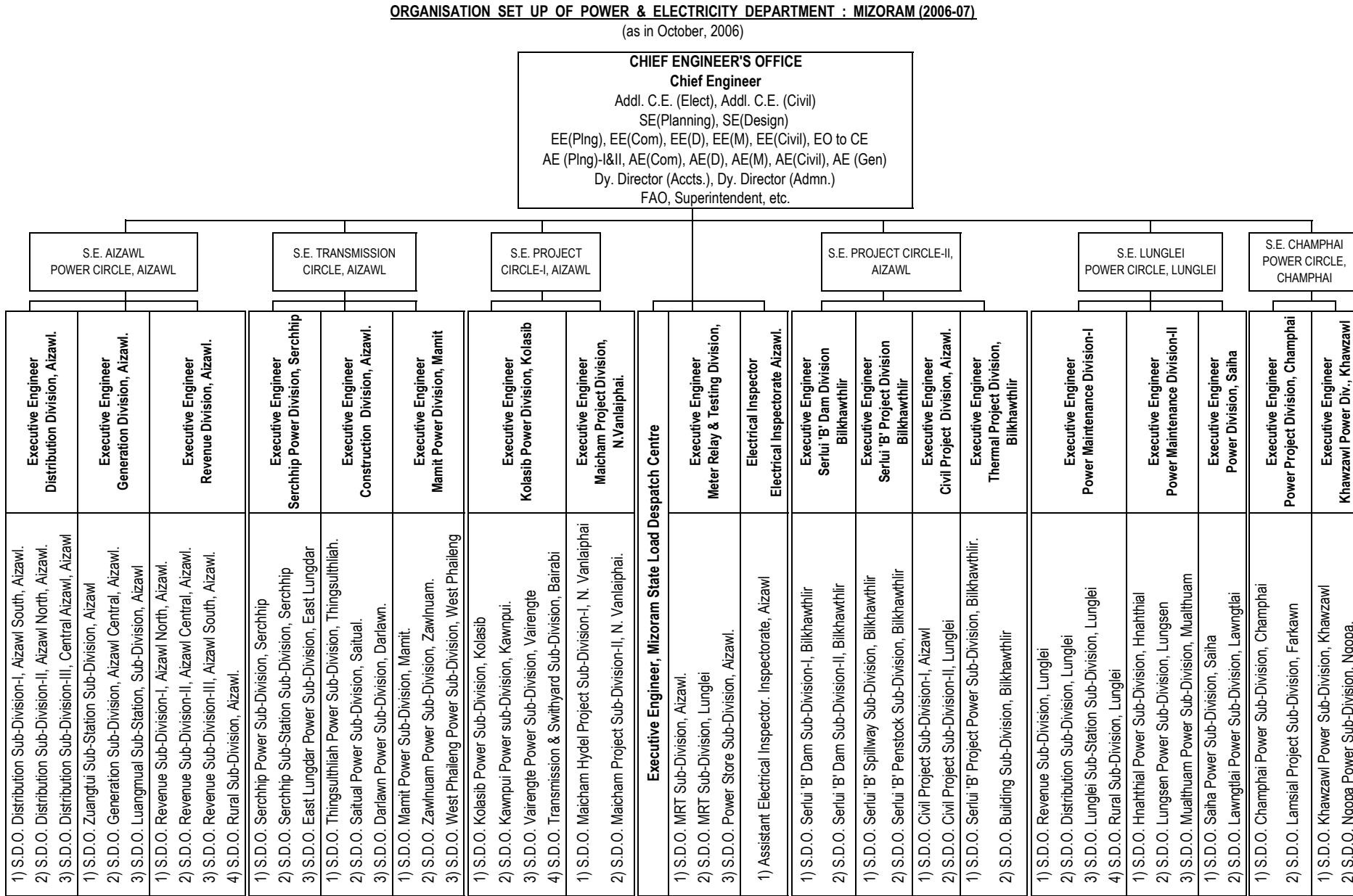
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# ANNUAL REPORT 2006-07

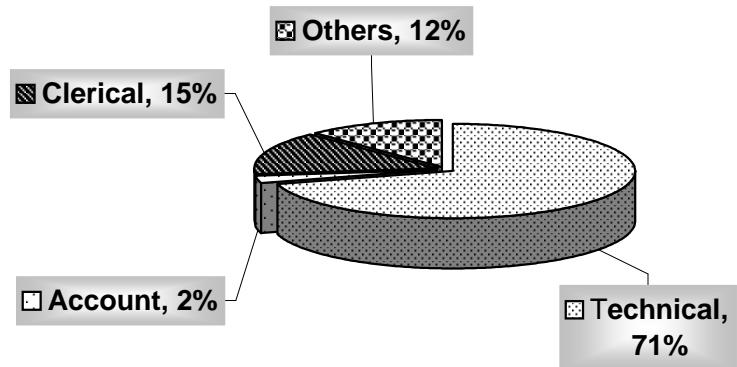
## Organisation Set up



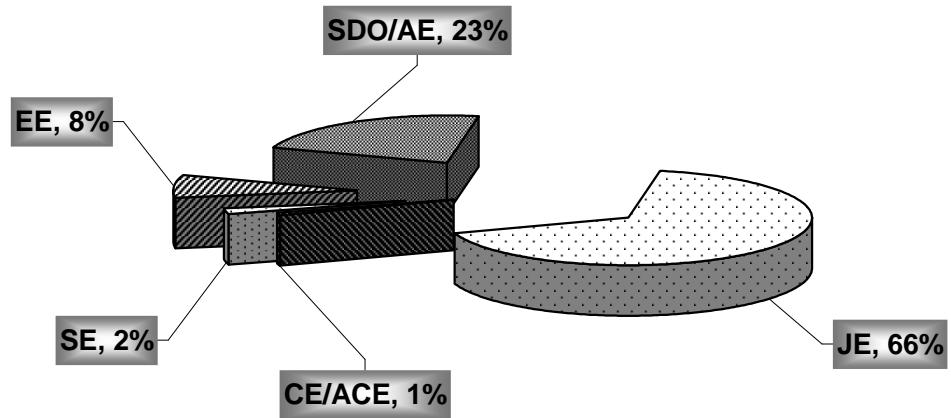
**POWER & ELECTRICITY DEPARTMENT : MIZORAM**  
**STATISTIC OF WORKCHARGED (AS ON MARCH 2007)**

Sl. No.	Category of posts (Work Charged)	CE Office			Aizawl Power Circle			Lunglei Power Circle			Transmission Circle			Project Circle-I		Champhai Power Circle		Project Circle - II				TOTAL
		SLDC	MRT Div.	Inspec.	Gen. Div	Rev. Div.	Distr. Div.	PMD-I, Lunglei	PMD-II, Lunglei	Saiha PD	Serchhip PD	Constn. Div.	Mamit PD	Kolasib PD	Maicham PD	Khawzawl PD	PPD, Champhai	Thermal PD	Civil Proj. Div.	Serlui 'B' Proj. Div.	Serlui 'B' Dam Div.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	Junior Engineer	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2
2	Line Supervisor	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3	Section Assistant	1	0	2	0	0	0	3	4	1	4	0	1	2	0	1	1	1	2	4	2	29
4	Surveyor	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5	Microscopist.	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6	Lineman - II	1	0	2	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
7	Electrician-II	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8	E.O.-II	0	0	0	0	0	0	3	0	0	0	0	0	1	2	2	0	0	1	0	1	10
9	S.B.O - II	0	0	0	0	0	0	2	0	0	0	0	0	0	5	0	0	0	0	0	0	7
10	Mechanic - II	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4
11	Welder	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12	Electrical Worker	1	3	0	11	16	14	28	26	15	13	19	4	32	2	13	12	1	1	2	3	216
13	Computer Optr.	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5
14	W.T. Optr.	3	1	0	1	2	5	3	3	1	2	3	1	7	1	0	1	0	0	0	0	34
15	Meter Reader	0	0	0	0	84	0	21	15	10	14	10	2	10	5	7	11	0	0	0	0	189
16	Carpenter	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	3	0	0	5
17	Mason	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Blue Printer	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3
19	Tracer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
20	Compressor Optr.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
21	J.C.B. Operator	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
22	Bulldozer Optr.	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	2	5
23	Driver	1	1	2	7	2	4	1	1	1	1	2	1	3	3	0	2	0	2	0	0	34
24	Store keeper	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
25	Sweeper	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	1	0	0	0	0	7
26	Chowkidar/Peon	1	4	0	0	2	1	2	2	1	2	3	0	1	2	0	2	0	1	0	1	25
	TOTAL	9	11	6	26	111	26	66	52	30	37	39	10	62	22	21	30	4	9	10	11	592

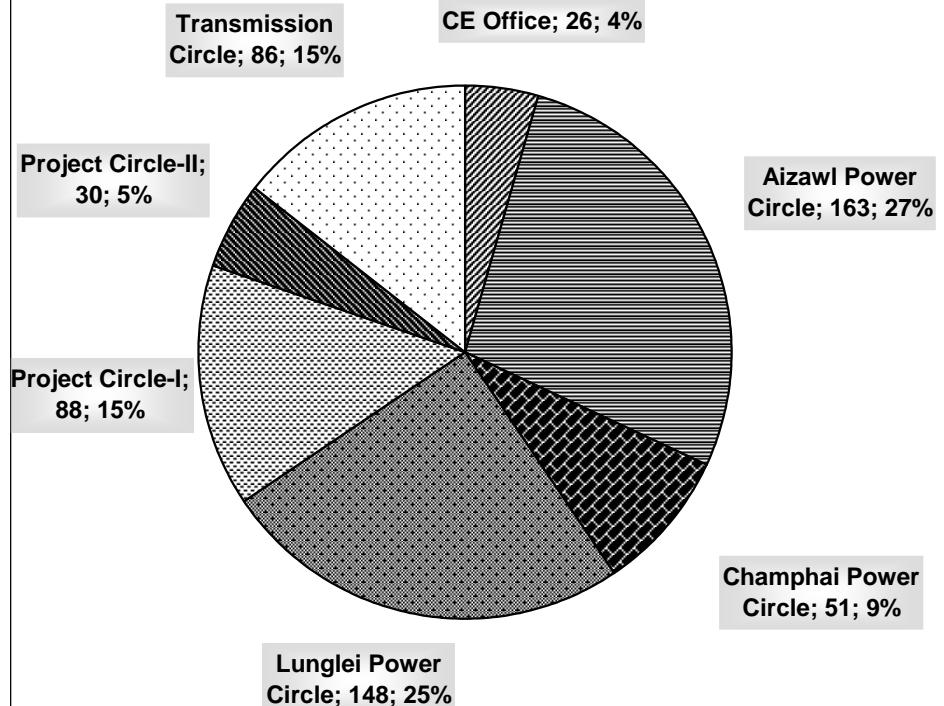
**Percentage of Organisation Structure of Power Deptt**



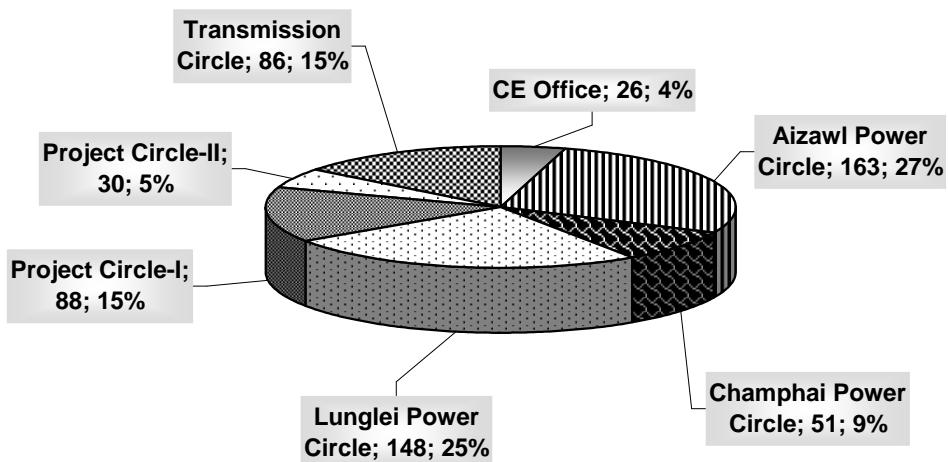
**Percentage of Technical Posts (above JE)**



**Circle-wise No. & Percentage of WC Staff  
(As in March 2007)**



**Circle-wise No. & Percentage of MR Labourers (As in March 2007)**



# ANNUAL REPORT 2006-07

## Annual Plan & Budget

## ANNUAL PLANS AT A GLANCE

The annual plan outlay for the last 6 years and for the year for 2006-07 under State Plan is highlighted below: -

S/No.	Year	Non-Earmarked	Earmarked	NCSE / IREP	Rs Lakhs. TOTAL
1	2000 - 01	3867.00	1065.00	55.00	<b>4987.00</b>
2	2001 - 02	2947.00	1196.00	55.00	<b>4198.00</b>
3	2002 - 03	1089.00	3111.00	142.22	<b>4342.87</b>
4	2003 -04	1076.00	3464.00	61.00	<b>4601.00</b>
5	2004 -05	1226.00	5560.00	61.00	<b>6847.00</b>
6	2005-06	2884.35	6170.65	61.00	<b>9116.00</b>
7	2006-07	4685.00	4050.00	61.00	<b>8796.00</b>

**The salient component of distribution of fund and major works taken up during 2006-07 were highlighted below:**

**1. Direction & Administration:** There are 72 nos. of gazetted plan posts and 1013 nos. of non-gazetted plan posts which are not been converted into non-plan posts. The establishment of these posts had to be met from plan fund. In addition to the above posts there were many infrastructural assets created since 7<sup>th</sup> Five Year Plan. The maintenance of these assets is still met from plan fund as the same are not yet committed to non-plan. The total outlay for maintenance of assets, Direction & Administration including grant-in-aid to Zoram Energy Development Agency (ZEDA), Work Charge & Muster Roll establishment for 2006-2007 was Rs 28.90 crores. In December 2006, 679 non-gazetted plan posts are converted into non-plan posts, however the financial expenditure on this conversion will effective from 1st April, 2007 only.

**2. State Normal Assistance (SNA):** The total outlay of State Normal Assistance (SNA) excluding REC Negotiated loan during 2006-07 was Rs 4,027.00 lakhs as below:

1) Direction & Administration	Rs 2,890.00
2) For various improvement works	Rs 1,137.00
<b>Total</b>	<b>Rs 4,027.00</b>

**3. Rural Electrification Corporation Ltd. Negotiated Loan:**

Negotiated Loan of Rs 658.00 lakhs was availed from Rural Electrification Corporation Ltd, Government of India against approved schemes.

**4. Accelerated Power Development & Reform Programme (APDRP):**

This scheme was under earmarked sector of which an outlay of Rs 1900.00 lakhs was for improvement of sub-transmission & Distribution networks within Mizoram under approved schemes of APDRP.

**5. A.C.A.(One-time Additional Central Assistance):**

One Time Additional Central Assistance (ACA) earmarked for Power Development during 2006–07 and the budget provision is Rs 650.00 lakhs which was meant for clearing liabilities for the works of Thermal Power Plant, Bairabi.

**6. Non-Conventional Source of Energy (NCSE):**

For Non-Conventional Source of Energy Rs 50.00 lakhs were set aside during 2006-07 for taking up non-conventional system of energy sources. This fund was transferred to nodal agency, ZEDA as grant-in-aid for carrying out such works.

**7. Integrated Rural Electric Programme (IREP):**

Under this scheme Rs 11.00 lakhs was made available and transferred to the State nodal agency, ZEDA as grant-in-aid for the doing the works.

**8. R &M of Hydel Stations in Mizoram:**

To enable the existing Small Hydel Stations in tip-top condition and to give optimum generation, Renovation & Modernisation works of Serlui 'A' Mini Hydel Project (1 MW) and Tuipui Mini Hydel Project (0.5 MW) were taken up with the capital subsidy from Ministry of Non-Conventional Energy Sources (MNES) which is targetted to complete during 2006-07.

**9. Power Generation:**

1) **Serlui 'B' HEP (12MW):** The construction work of Serlui 'B' Small Hydel Project under the funding of MNES, REC Loan, LIC loan & State Plan was continued and scheduled completion of the Project is December, 2007. The approved cost of the project is Rs 135.20 crore.

2) **Maicham-II SHP (3MW):** The construction work of Maicham SHP Stage-II is underway below Maicham SHP Stage-I under the funding of MNES & State. The original estimated cost is Rs 1887.80 lakhs.

3) **Lamsial Mini Hydel Project (500kW):** The construction work of Lamsial Mini Hydel project is on the way near Farkawn village under the funding of MNES and State. The original estimated cost is Rs 445.00 lakhs.

4) Renovation & Modernization work of Serlui 'A' Mini Hydel Project (1MW) near Aizawl and Tuipui Mini Hydel Project (300kW) near Champhai is being done under the funding of MNES and State to be completed during 2007-08.

**10. Transmission, Distribution and Transformation Schemes:** The on-going transmission and transformation projects were continued during the year:

- 1) Khawzawl – E.Lungdar 132kV S/C line (47.89 CKm)
- 2) Khawzawl – Ngopa 132kV S/C line (52.27 CKm) (completed during the year)
- 3) Saitual – Darlawn 132kV S/C line (57.09 CKm)
- 4) Bairabi – Bawktlang 132kV S/C line (30.01 CKm)
- 5) Upgradation of 66kV Sub-Station at Saitual to 132kV level (completed during the year)
- 6) 132kV Sub-Station at Kolasib, Bawktlang
- 7) Improvement of Sub-Transmission and Distribution Network within Aizawl Town
- 8) 33kV Sub-Station at Darlawn and Hnahlan (under NEC funding)

In addition to the above transmission & transformation works as below are being taken up under the funding by NEC, DoNER (NLCPR):

- 1) 132kV S/C line Bairabi - Kolasib (30.41 CKm) funded by DoNER under NLCPR for evacuation of Bairabi Thermal Power Plant.
- 2) 132kV S/C line on D/C tower Kolasib - Melriat (Aizawl) (90 CKm) funded by NEC.
- 3) 132kV S/C line Khawzawl-Champhai (30 CKm) funded by DoNER under NLCPR is being initiated.
- 4) 33kV D/C line on tower Serlui 'B' - Kolasib (25 CKm) funded by DoNER under NLCPR for evacuation of Serlui 'B' SHP.
- 5) 25MVA, 132/33kV Sub-Station at Melriat (Aizawl) funded by NEC.

**11. Functional Building:** Renovation and construction of new functional buildings at various places were also taken up during the year.

**BUDGET 2006-2007 (RE)**

*Rupees in lakh*

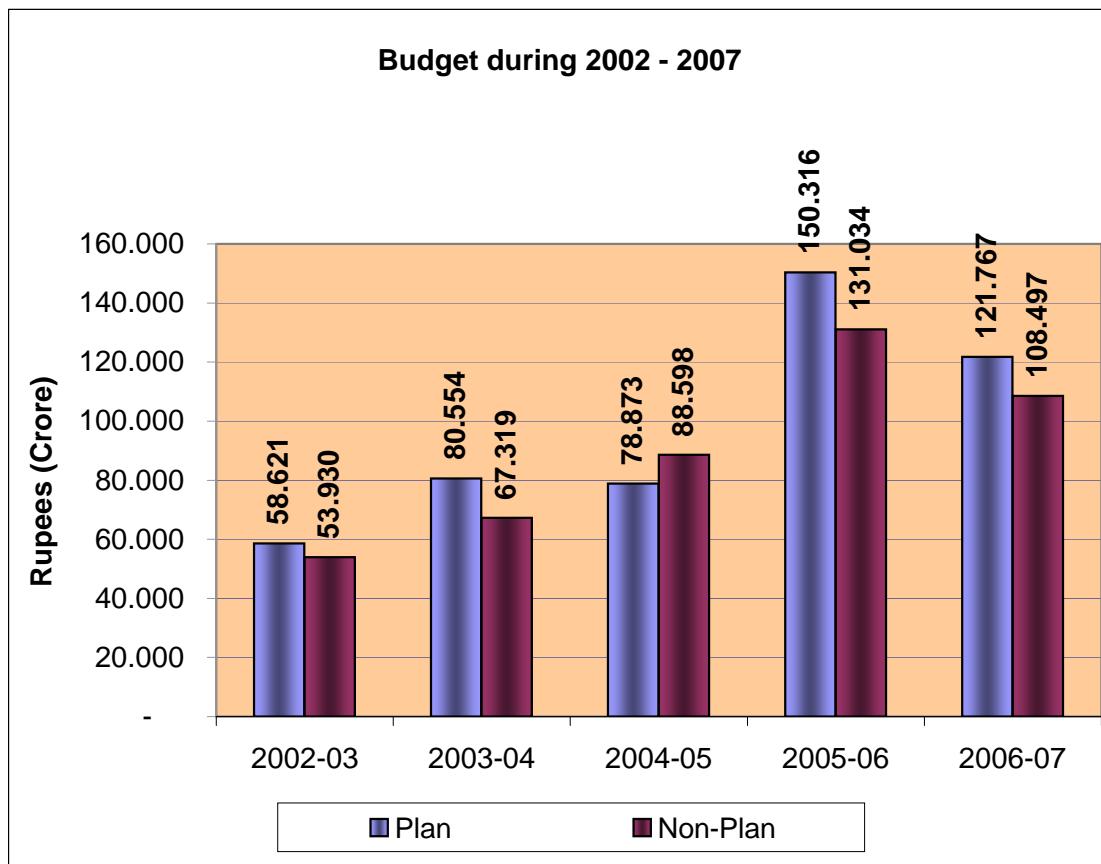
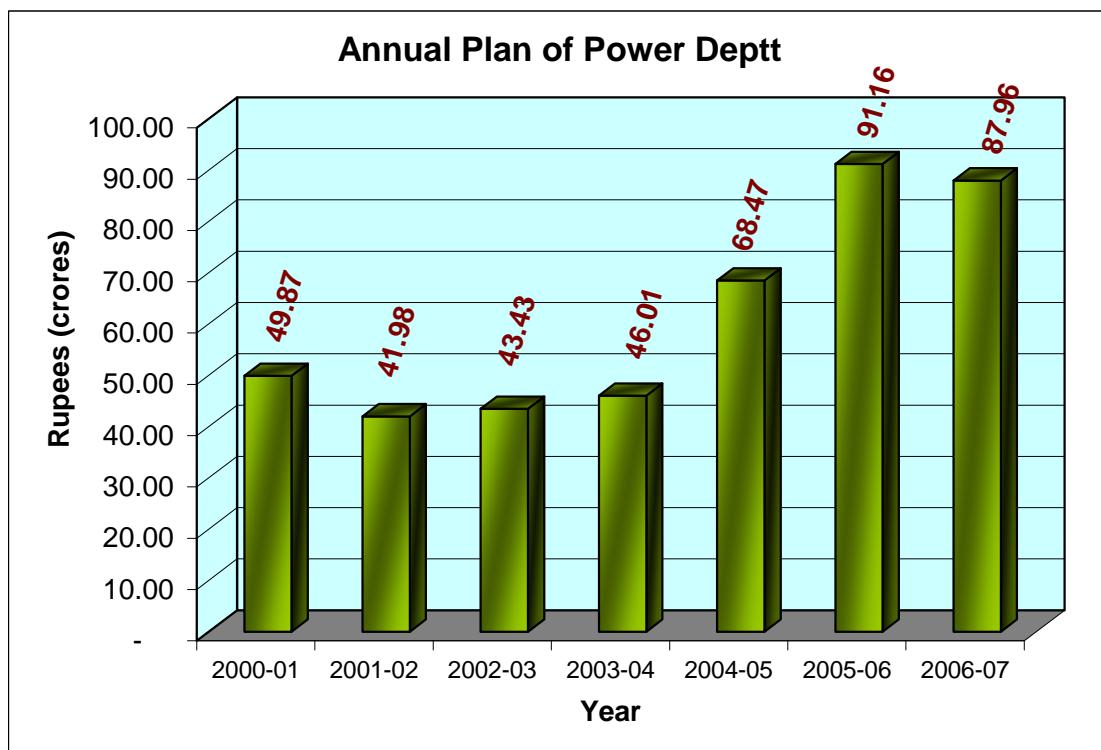
Sl. No.	Object	Plan	Non-Plan	Total
1	2	3	4	5
	<b>D&amp;A, Minor works</b>			
1	Salary	1,215.70	1,608.80	2,824.50
2	Medical Treatment	90.00	78.66	168.66
3	TE, OE, Rent, etc.	88.00	101.20	189.20
4	Motor Vehicles	40.00	46.00	86.00
5	Scholarship/Stipend	26.00		26.00
6	Machinery & Equipments	5.00		5.00
7	Other Charges	50.00		50.00
8	Stock Suspense		50.00	50.00
	<b>Total D&amp;A, Minor works</b>	<b>1,514.70</b>	<b>1,884.66</b>	<b>3,399.36</b>
	<b>Maintenance</b>			
9	Purchase of grid power		8,000.00	8,000.00
10	Maintenance of Lines/Buildings	1,000.00	350.00	1,350.00
11	Maintenance of Power House	361.00	350.00	711.00
12	Maintenance of Bairabi Thermal Generation		315.00	315.00
	<b>Total Maintenance</b>	<b>1,361.00</b>	<b>9,015.00</b>	<b>10,376.00</b>
	<b>ZEDA (Grant-in-Aid, works)</b>			
13	D&A	14.30		14.30
14	IREP	11.00		11.00
15	NCSE	50.00		50.00
	<b>Total ZEDA</b>	<b>75.30</b>	<b>-</b>	<b>75.30</b>
	<b>Other Deptt's work</b>			
16	Construction of Buildings under Administration of Justice	7.11		7.11
17	Minor works under 1st Bn MAP	0.77		0.77
18	Minor works under 3rd IR Bn	15.00		15.00
	<b>Total Other Deptt works</b>	<b>22.88</b>	<b>-</b>	<b>22.88</b>
	<b>Total D&amp;A, Minor works, Maintenance, etc.</b>	<b>2,973.88</b>	<b>10,899.66</b>	<b>13,873.54</b>
	<b>Capital Works</b>			
	<b>State Plan (SNA)</b>			
18	Thermal Power Generation	550.00		550.00
20	Streetlights for District headquarters	25.00		25.00
21	R&M of Tuipui mHP	13.50		13.50
22	Construction of Transmission Lines	177.17		177.17
23	Construction of Building	45.94		45.94
24	R&M	265.39		265.39
25	Transformation	60.00		60.00
	<b>Total State Plan (SNA)</b>	<b>1,137.00</b>	<b>-</b>	<b>1,137.00</b>
	<b>REC Negotiated Loan (State Plan)</b>	<b>658.00</b>		<b>658.00</b>
	<b>State Plan (ACA)</b>			
27	Thermal Generation	650.00		650.00
	<b>Total ACA</b>	<b>650.00</b>		<b>650.00</b>
28	<b>APDRP (State Plan)</b>	<b>2,610.65</b>		<b>2,610.65</b>

Sl. No.	Object	Plan	Non-Plan	Total
1	2	3	4	5
<b>Outside State Plan (P&amp;E Deptt)</b>				
29	Serlui 'B' SHP(REC loan)	858.34		858.34
30	Serlui 'B' SHP(LIC)	1,500.00		1,500.00
31	Maicham SHP-II (MNRE)	180.00		180.00
32	Lamsial mHP (MNRE)	180.00		180.00
33	R&M of Serlui 'A' (MNRE)	28.68		28.68
34	R&M of Tuipui (MNRE)	20.65		20.65
35	33kV D/C Serlui 'B' to Kolasib(NLCPR)	100.00		100.00
36	132kV Trans.line Kolasib-Melriat (NLCPR)	677.60		677.60
37	132kV Trans.line Khawzawl - Champhai (NLCPR)	178.00		178.00
38	Stringing of 2nd circuit Luangmual-Zuangtui 132kV line (NEC)	45.90		45.90
39	Darlawn Sub-Station (NEC)	37.30		37.30
40	Hnahan Sub-Station (NEC)	53.00		53.00
41	Melriat 132kV Sub-station (NEC)	180.00		180.00
42	LT Overhead lines with Aerial Bunching Cables in Aizawl (NEC)	45.00		45.00
43	Rural Electrification (BPL connections)	62.65		62.65
<b>Total Outside State Plan (P&amp;E Deptt)</b>		<b>4,147.12</b>	-	<b>4,147.12</b>
<b>Total Capital Works</b>		<b>9,202.77</b>	-	<b>9,202.77</b>
<b>Total Department</b>		<b>12,176.65</b>	<b>10,899.66</b>	<b>23,076.31</b>
44	Deduct Recoveries from Stock		50.00	50.00
45	Deduct fund transferred to PWD (Scholarship)			-
<b>Net total Budget for 2006-07</b>		<b>12,176.65</b>	<b>10,849.66</b>	<b>23,026.31</b>
A	Percentage of Salary over Total Budget	9.98	14.83	<b>12.27</b>
B	Percentage of D&A (3 to 5) over Total Budget	2.20	2.08	<b>2.14</b>
C	Percentage of Power purchase over total non-plan budget	-	73.74	73.74
D	Percentage of Plan & Non-Plan over total budget	<b>52.88</b>	<b>47.12</b>	

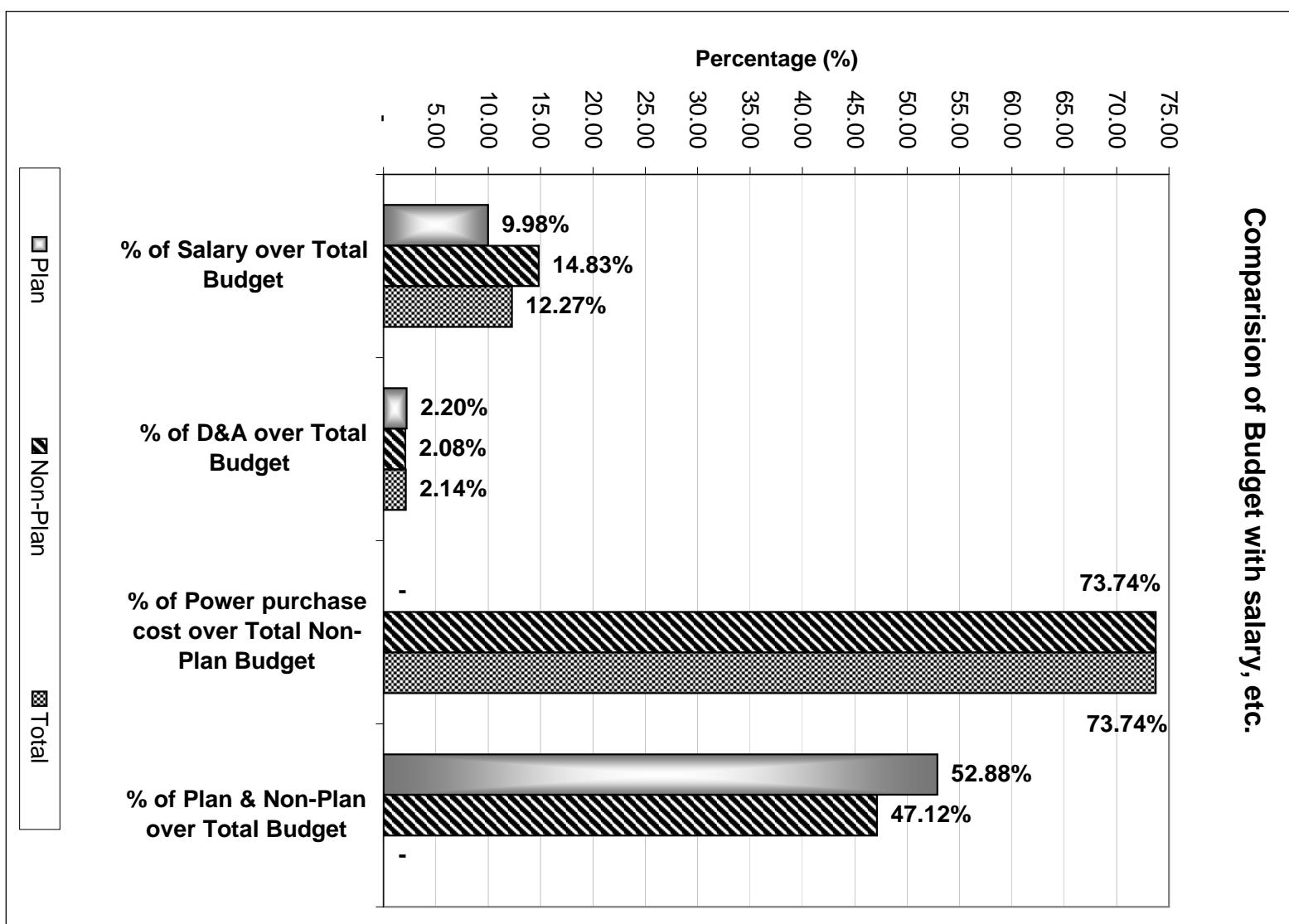
**ACTUAL REVENUE RECEIPT DURING 2006-07**

Amount in Rupees

SI No	Name of Division	CLASSIFICATION OF REVENUE						Total
		Sale of Energy	Misc. Receipt	Housing	Vehicle Fee	Interest on HBA, etc	VAT/ TAX	
1	2	3	4	5	6	7	8	9
1	Revenue Division	151,256,049.00	5,340,578.00	5,271.00	4,187.00		107,062.00	156,713,147.00
2	Distribution Division			30,629.00	2,000.00		332,580.00	365,209.00
3	Generation Division		10,785.00	52,517.00	4,500.00		1,285,917.00	1,353,719.00
4	SE (APC)			1,080.00	4,500.00	14,314.00		19,894.00
	<b>Total APC</b>	<b>151,256,049.00</b>	<b>5,351,363.00</b>	<b>89,497.00</b>	<b>15,187.00</b>	<b>14,314.00</b>	<b>1,725,559.00</b>	<b>158,451,969.00</b>
5	Power Proj. Div, Champai	8,321,684.00	898,081.00	20,623.00	1,500.00		770,013.00	10,011,901.00
6	Khawzawl Power Division	5,512,186.00	1,052,063.00	10,251.00	3,000.00		364,838.00	6,942,338.00
7	SE (CPC)			1,997.00				1,997.00
	<b>Total CPC</b>	<b>13,833,870.00</b>	<b>1,950,144.00</b>	<b>32,871.00</b>	<b>4,500.00</b>	<b>-</b>	<b>1,134,851.00</b>	<b>16,956,236.00</b>
8	Power Maint. Division-I	21,900,449.00	1,945,747.00	10,725.00	8,000.00	20,999.00	252,320.00	24,138,240.00
9	Power Maint. Division-II	6,999,888.00	1,110,848.00				10,844.00	8,121,580.00
10	Saiha Power Division	9,436,752.00	692,784.00	19,497.00				10,149,033.00
11	SE (LPC)		1,521.00	4,641.00	8,000.00	34,185.00		48,347.00
	<b>Total LPC</b>	<b>38,337,089.00</b>	<b>3,750,900.00</b>	<b>34,863.00</b>	<b>16,000.00</b>	<b>55,184.00</b>	<b>263,164.00</b>	<b>42,457,200.00</b>
12	Kolasib Power Division	20,274,059.00	1,296,990.00	43,100.00			1,432,892.00	23,047,041.00
13	Thermal Project Division	659,072.00	64,996.00	2,708.00			58,675.00	785,451.00
14	Maicham Project Division	1,127,165.00	274,000.00	16,833.00	1,000.00		178,187.00	1,597,185.00
15	SE (PC-I)				5,500.00			5,500.00
	<b>Total PC-I</b>	<b>22,060,296.00</b>	<b>1,635,986.00</b>	<b>62,641.00</b>	<b>6,500.00</b>	<b>-</b>	<b>1,669,754.00</b>	<b>25,435,177.00</b>
16	Civil Project Division			6,096.00			134,518.00	140,614.00
17	Serlui 'B' Project Division						22,718.00	22,718.00
18	Serlui 'B' Dam Division			41,126.00	4,308.00		123,554.00	168,988.00
19	SE (PC-II)			1,986.00	5,500.00			7,486.00
	<b>Total PC-II</b>	<b>-</b>	<b>-</b>	<b>49,208.00</b>	<b>9,808.00</b>	<b>-</b>	<b>280,790.00</b>	<b>339,806.00</b>
20	Construction Division	9,201,939.00	1,019,815.00	29,656.00	2,000.00		362,395.00	10,615,805.00
21	Mamit Power Division	4,948,838.00	728,257.00	11,251.00	7,000.00		673,686.00	6,369,032.00
22	Serchhip Power Division	11,340,541.00	974,088.00	57,886.00	11,400.00		611,896.00	12,995,811.00
23	SE (TC)				7,500.00	30,156.00		37,656.00
	<b>Total TC</b>	<b>25,491,318.00</b>	<b>2,722,160.00</b>	<b>98,793.00</b>	<b>27,900.00</b>	<b>30,156.00</b>	<b>1,647,977.00</b>	<b>30,018,304.00</b>
24	Power Store Division	157,050,000.00		6,731.00	4,350.00			157,061,081.00
25	MRT		21,479.00	11,121.00	18,000.00		214,009.00	264,609.00
26	Inspectorate		550.00			95,063.00		95,613.00
27	CE(P)		28,434,348.00	18,238.00	1,999,519.00	209,664.00	24,145.00	30,685,914.00
	<b>Total CE</b>	<b>157,050,000.00</b>	<b>28,456,377.00</b>	<b>36,090.00</b>	<b>2,021,869.00</b>	<b>304,727.00</b>	<b>238,154.00</b>	<b>188,107,217.00</b>
	<b>TOTAL DEPTT</b>	<b>408,028,622.00</b>	<b>43,866,930.00</b>	<b>403,963.00</b>	<b>2,101,764.00</b>	<b>404,381.00</b>	<b>6,960,249.00</b>	<b>461,765,909.00</b>



### Comparision of Budget with salary, etc.



ANNUAL REPORT 2006-07

**Report On  
Distribution Transformers**

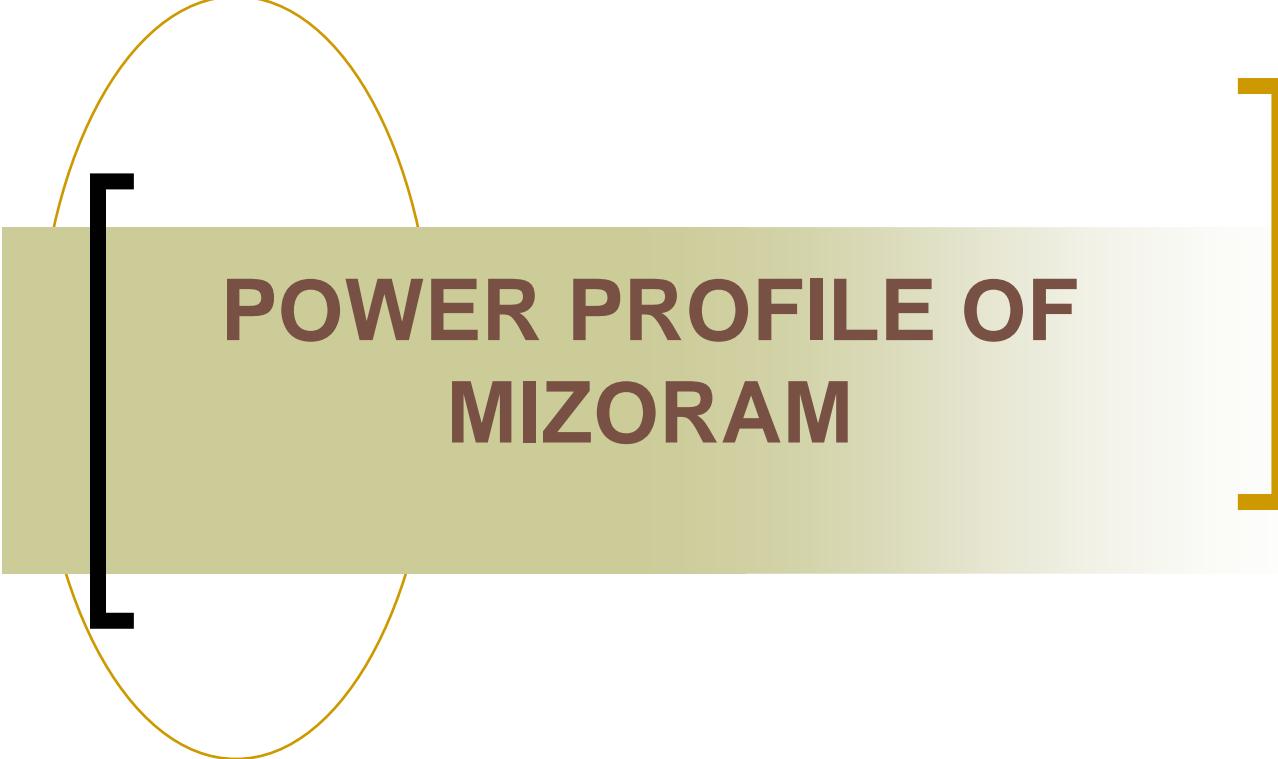
**Abstract of Existing Distribution Transformers during 2006-07**

SI No.	Name of Division	1500kVA, 11/0.4kV	1000kVA, 11/0.4kV	750kVA, 11/0.4kV	630kVA, 11/0.4kV	500kVA, 11/0.4kV	315kVA, 11/0.4kV	300kVA, 11/0.4kV	250kVA, 11/0.4kV	200kVA, 11/0.4kV	150kVA, 11/0.4kV	100kVA, 11/0.4kV	63kVA, 11/0.4kV	50kVA, 11/0.4kV	25kVA, 11/0.4kV	25kVA, 11/0.2kV	16kVA, 11/0.4kV	16kVA, 11/0.2kV	Div-wise Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Revenue Division, Aizawl							9			18	15		12					54
2	Distribution Division, Aizawl		6	1	4	13	4	2	114		1	57	10			7			219
	<b>TOTAL AIZAWL POWER CIRCLE</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>4</b>	<b>13</b>	<b>4</b>	<b>2</b>	<b>123</b>	<b>0</b>	<b>1</b>	<b>75</b>	<b>25</b>	<b>0</b>	<b>12</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>273</b>
3	Khawzawl Power Division							7			33	18		13					71
4	Power Project Division, Champhai							19			27	26		14				3	89
	<b>TOTAL CHAMPHAI POWER CIRCLE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>60</b>	<b>44</b>	<b>0</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>160</b>
5	Maicham Project Division							2			7	10	1	3					23
6	Kolasib Power Division	2	1			2			16			26	13		12			3	75
	<b>TOTAL PROJECT CIRCLE-I</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>33</b>	<b>23</b>	<b>1</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>98</b>
7	Serchhip Power Division					1			7			30	25		17		2		82
8	Mamit Power Division								7			20	22		26		3		78
9	Constructon Division, Aizawl							10			30	26	1	10	4	5			86
	<b>TOTAL TRANSMISSION CIRCLE</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>48</b>	<b>1</b>	<b>36</b>	<b>4</b>	<b>8</b>	<b>0</b>	<b>246</b>
	Power Maintenance Div-I, Lunglei		3		1	1			15			22	7		14	2	2	3	70
10	Power Maintenance Div-II, Lunglei								8			20	23		27	4	14		96
11	Saiha Power Division		2		5	11			38			29	12		5		2	2	106
	<b>TOTAL LUNGLERI POWER CIRCLE</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>5</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>46</b>	<b>0</b>	<b>0</b>	<b>49</b>	<b>35</b>	<b>0</b>	<b>32</b>	<b>4</b>	<b>16</b>	<b>2</b>	<b>272</b>
	<b>Rating-wiseTotal</b>	<b>2</b>	<b>9</b>	<b>1</b>	<b>9</b>	<b>26</b>	<b>4</b>	<b>2</b>	<b>230</b>	<b>0</b>	<b>1</b>	<b>267</b>	<b>175</b>	<b>2</b>	<b>122</b>	<b>15</b>	<b>24</b>	<b>8</b>	<b>1049</b>

**Abstract of damaged Distribution Transformers during 2006-07**

Sl No.	Name of Division	500kVA, 11/0.4kV	300kVA, 11/0.4kV	250kVA, 11/0.4kV	200kVA, 11/0.4kV	100kVA, 11/0.4kV	63kVA, 11/0.4kV	25kVA, 11/0.4kV	16kVA, 11/0.4kV	16kVA, 11/0.2kV	Div-wise Total damage DT	Div-wise damage percentage w.r.t. Total damaged DT	Div-wise Total DT of various ratings	Div-wise damaged percentage w.r.t Total DT	
1	2	4	5	6	7	9	10	11	13	14	15	16	17	18	
1	Revenue Division, Aizawl					2	2	4			8	6.67%	#REF!	#REF!	
2	Distribution Division, Aizawl				8		4	1	1		14	11.67%	#REF!	#REF!	
	<b>TOTAL AIZAWL POWER CIRCLE</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>6</b>	<b>3</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>22</b>	<b>18.33%</b>	<b>#REF!</b>	<b>#REF!</b>	
3	Khawzawl Power Division				1	1	2		2		6	5.00%	#REF!	#REF!	
4	Power Project Division, Champhai				1		4	3	3	1		12	10.00%	#REF!	#REF!
	<b>TOTAL CHAMPHAI POWER CIRCLE</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>3</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>18</b>	<b>15.00%</b>	<b>#REF!</b>	<b>#REF!</b>	
5	Maicham Project Division					1	2				3	2.50%	#REF!	#REF!	
6	Kolasib Power Division					4	1				5	4.17%	#REF!	#REF!	
	<b>TOTAL PROJECT CIRCLE-I</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>6.67%</b>	<b>#REF!</b>	<b>#REF!</b>	
7	Serchhip Power Division				1		4	3	4	1	4	17	14.17%	#REF!	#REF!
8	Mamit Power Division					3					3	2.50%	#REF!	#REF!	
9	Constructon Division, Aizawl	1		1		2	3	4			11	9.17%	#REF!	#REF!	
	<b>TOTAL TRANSMISSION CIRCLE</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>9</b>	<b>6</b>	<b>8</b>	<b>1</b>	<b>4</b>	<b>31</b>	<b>25.83%</b>	<b>#REF!</b>	<b>#REF!</b>	
10	Power Maintenance Division-I, Lunglei					3	2	9		3	17	14.17%	#REF!	#REF!	
11	Power Maintenance Division-II, Lunglei			3				4		4	11	9.17%	#REF!	#REF!	
12	Saiha Power Division				1		3	5	3		1	13	10.83%	#REF!	#REF!
	<b>TOTAL TRANSMISSION CIRCLE</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>6</b>	<b>7</b>	<b>16</b>	<b>0</b>	<b>8</b>	<b>41</b>	<b>34.17%</b>	<b>#REF!</b>	<b>#REF!</b>	
	<b>Rating-wise Total damage</b>	<b>1</b>	<b>0</b>	<b>16</b>	<b>1</b>	<b>32</b>	<b>22</b>	<b>34</b>	<b>2</b>	<b>12</b>	<b>120</b>	<b>Total</b>	<b>#REF!</b>	<b>#REF!</b>	
	<b>Rating-wise damage % w.r.t damaged DT</b>	<b>0.83</b>	<b>0.00</b>	<b>13.33</b>	<b>0.83</b>	<b>26.67</b>	<b>18.33</b>	<b>28.33</b>	<b>1.67</b>	<b>10.00</b>					

ANNUAL REPORT 2006-07



## POWER PROFILE OF MIZORAM

## **Highlights of power supply position in Mizoram during 2006-07**

1. Power sources (as per installed capacity):
  - a) From Central Power Sector Unit (NEEPCO & NHPC) = 61.57MW
  - b) From NEC projects in Tripura = 13.25MW
  - c) From local generation of hydel & thermal = 35.02MW

**Total = 109.84MW**
2. Energy available:
  - (a) CPSU Schedule = 243.94 MU
  - (b) TSECL = 15.59 MU
  - (c) Local generation = 13.91 MU

**Total energy = 273.44 MU**
3. Energy drawal (actual):
  - (a) From CPSU = 211.50 MU
  - (b) From TSECL = 15.59 MU
  - (c) From local generation = 13.91 MU

**Total energy drawal = 241.00 MU**
4. UI charges:
  - (a) Payable - Unit = 9.143 MU; Amount = Rs 3909 lakhs
  - (b) Receivable - Unit = 52.15 MU; Amount = Rs 11914 lakhs
5. Peak Demand met = 61 MW on 15.02.2007
6. Max. Energy consumed in a month from CPSU = 19.9 MU in March 2007.
7. Max. local generation in a month = 2.415 MU in September 2006.
8. Frequency; North Eastern Region (NER) system is running in synchronism with Eastern Region (ER), Western Region (WR) & Northern Region (NR) system. Maximum and Minimum Frequencies of the integrated grid during the year 2006-07 were **52.65Hz** and **48.28Hz** respectively.
9. Circle-wise Energy consumption:
  - (a) Aizawl Power Circle = 146.38 MU
  - (b) Champhai Power Circle = 14.64 MU
  - (c) Lunglei Power Circle = 34.39 MU
  - (d) Project Circle-I = 20.69 MU
  - (e) Transmission Circle = 24.90 MU

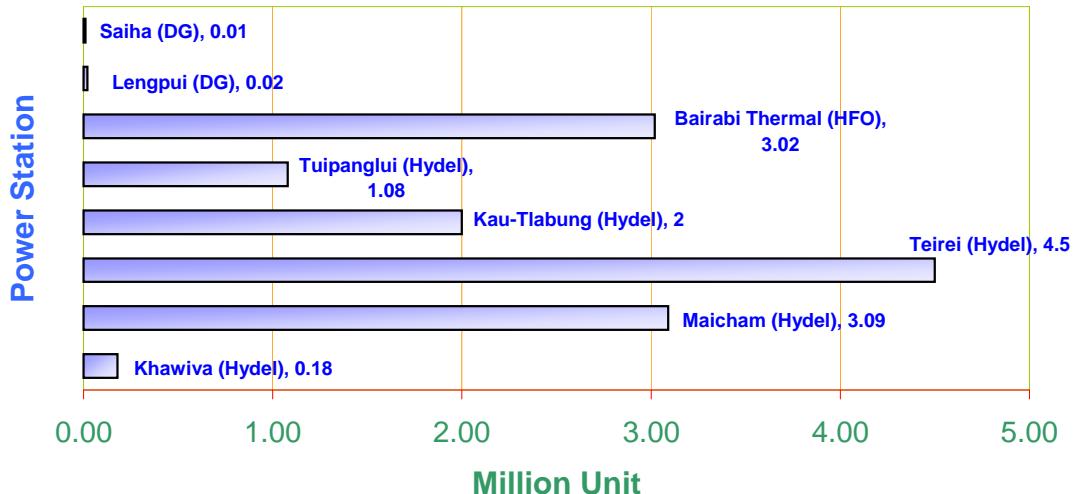
**Total = 241.00 MU**

## LOCAL GENERATION (NET) DURING 2006-2007

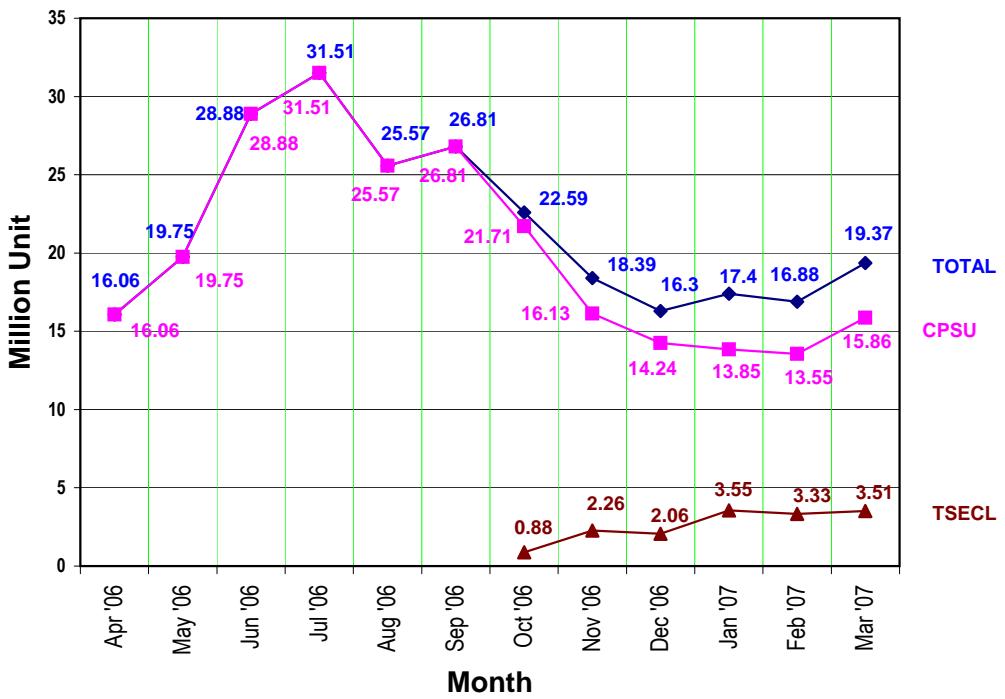
*Figures in kWh*

Month	Khawiva (Hydel)	Maicham (Hydel)	Teirei (Hydel)	Kau-Tlabung (Hydel)	Tuipanglui (Hydel)	Bairabi Thermal (HFO)	Lengpui P/H (Diesel)	Saiha P/H (Diesel)	TOTAL
1	2	3	4	5	6	7	8	9	10
Apr '06	7890	0	14821	18362	16068	351032	2445	1602	412220
May '06	6780	138100	90106	337	98792	423987	1555	2838	762495
Jun '06	32616	601290	417174	336	213900	0	2445	0	1267761
Jul '06.	63590	541946	897406	2033	0	24844	1580	0	1531399
Aug '06.	63770	559032	1073174	270774	0	0	2400	695	1969845
Sep '06.	0	568039	978535	742519	33000	91506	1795	0	2415394
Oct '06.	0	501744	696578	561203	0	114702	2860	0	1877087
Nov '06.	0	132655	195982	184506	233450	650880	965	0	1398438
Dec '06.	2283	28305	64053	123508	325470	78357	1545	0	623521
Jan '07.	1995	15253	29187	63735	156520	136177	1645	0	404512
Feb '07.	2976	7143	26649	30166	0	317401	2510	94	386939
Mar '07.	1310	0	16610	7138	0	834035	1170	0	860263
Total (kWh)	183210	3093507	4500275	2004617	1077200	3022921	22915	5229	13909874
Total (MU)	0.18	3.09	4.50	2.00	1.08	3.02	0.02	0.01	13.91

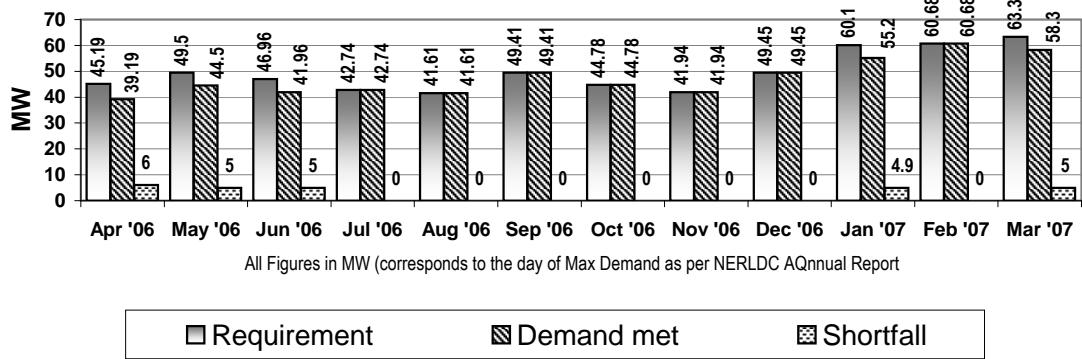
### Local Generation during 2006-07



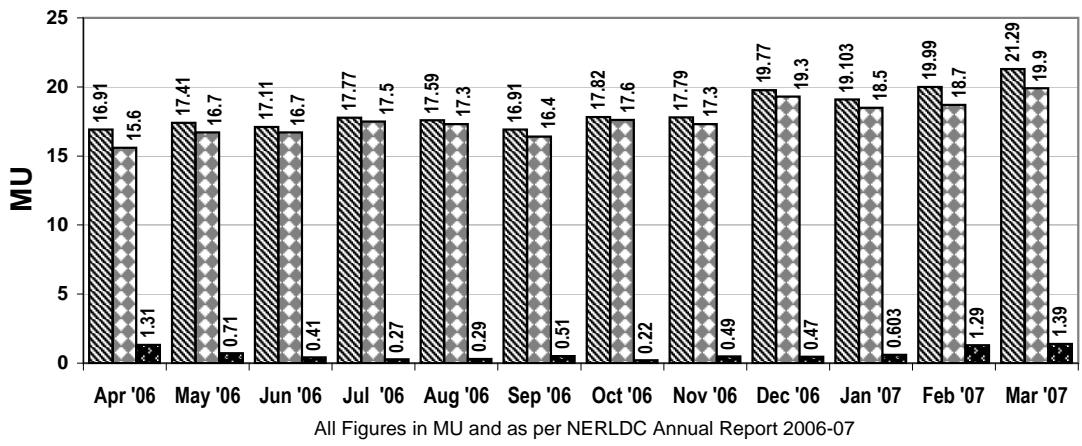
### Power Purchase during 2006-07



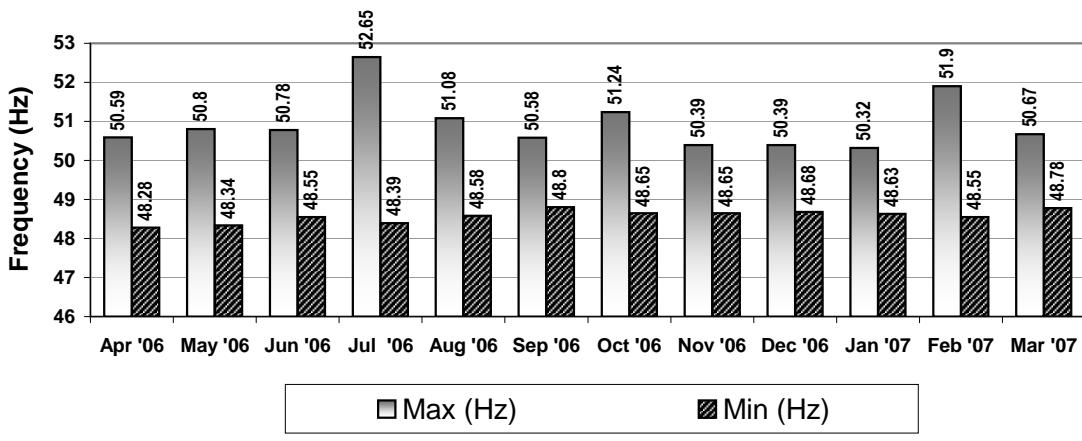
### Peak Demand met vrs Requirement during 2006-07



### Month-wise Power Supply Position from Grid during 2006-07



### Maximum & Minimum Frequency during 2006-07



**MONTH-WISE POWER PURCHASE DURING 2006 - 07**

*Energy in MU & Rupees in lakhs*

Month	N E E P C O															
	Kopilli HEP (200MW)				Kopilli -II HEP (25MW)				Khandong HEP (50MW)				Ranganadi HEP (405MW)			
	Sch Energy (MU)	Cap. Charge (Rs)	Energy charge (Rs)	Total Bill (Rs)	Sch Energy (MU)	Cap. Charge (Rs)	Energy charge (Rs)	Total Bill (Rs)	Sch Energy (MU)	Cap. Charge (Rs)	Energy charge (Rs)	Total Bill (Rs)	Sch Energy (MU)	Cap. Charge (Rs)	Energy charge (Rs)	Total Bill (Rs)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Apr-06	0.00	-	-	-	0.71	0.09	2.88	2.97	0.00			-	3.54	85.07	14.33	99.41
May-06	1.53	3.33	6.19	9.52	1.04	9.74	4.21	13.96	0.21	0.94	0.85	1.79	4.65	82.50	14.33	96.83
Jun-06	3.23	9.22	13.07	22.29	0.89	11.32	3.60	14.92	1.12	5.35	4.56	9.90	10.78	79.17	43.70	122.87
Jul-06	4.65	13.58	18.83	32.42	0.87	11.98	3.51	15.50	1.15	6.41	4.68	11.09	10.22	170.71	41.44	212.15
Aug-06	5.69	9.47	23.07	32.55	0.47	12.55	1.90	14.45	0.84	7.46	3.42	10.87	5.41	167.29	21.92	189.20
Sep-06	5.38	5.23	21.82	27.05	0.59	11.91	2.39	14.30	0.78	7.98	3.18	11.16	6.10	114.57	24.73	139.30
Oct-06	3.06	16.71	12.39	29.10	0.37	(1.23)	1.50	0.28	0.39	9.14	1.57	10.70	3.49	85.15	14.13	99.27
Nov-06	1.91	6.94	7.72	14.67	0.14	0.57	0.56	1.13	0.21	3.77	0.83	4.60	0.54	16.20	2.19	18.39
Dec-06	1.62	8.14	6.56	14.70	0.10	(0.55)	0.42	(0.13)	0.19	3.81	0.76	4.57	0.00	(4.29)	-	(4.29)
Jan-07	1.51	8.83	6.12	14.95	0.10	(0.38)	0.41	0.03	0.15	3.51	0.60	4.11	0.26	(0.96)	1.07	0.11
Feb-07	0.69	10.37	2.80	13.16	0.06	(0.23)	0.23	-	0.09	3.05	0.35	3.41	2.23	69.46	9.03	78.49
Mar-07	0.61	12.63	2.48	15.11	0.00	-	-	-	0.09	2.26	0.38	2.64	2.86	81.70	11.58	93.28
<b>Total</b>	<b>29.87</b>	<b>104.46</b>	<b>121.06</b>	<b>225.52</b>	<b>5.34</b>	<b>55.77</b>	<b>21.64</b>	<b>77.41</b>	<b>5.23</b>	<b>53.68</b>	<b>21.18</b>	<b>74.86</b>	<b>50.08</b>	<b>946.55</b>	<b>198.46</b>	<b>1,145.02</b>
Rate/unit		0.35	0.41	0.76		1.04	0.41	1.45		1.03	0.41	1.43		1.89	0.40	2.29

**MONTH-WISE POWER PURCHASE DURING 2006 - 07**

*Energy in MU & Rupees in lakhs*

Month	N E E P C O												Total NEEPCO			
	Doyang HEP (75MW)				AGBPP HEP (291MW)				AGTPP HEP(84 MW)							
	Sch Energy (MU)	Cap. Charge (Rs)	Energy charge (Rs)	Total Bill (Rs)	Sch Energy (MU)	Cap. Charge (Rs)	Energy charge (Rs)	Total Bill (Rs)	Sch Energy (MU)	Cap. Charge (Rs)	Energy charge (Rs)	Total Bill (Rs)	Sch Energy (MU)	Cap. Charge (Rs)	Energy charge (Rs)	Total Bill (Rs)
1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Apr-06	0.08	6.26	0.34	6.60	7.96	113.02	31.51	144.53	2.88	29.49	24.06	53.55	15.17	233.94	73.13	307.07
May-06	0.11	15.64	0.43	16.07	8.59	117.28	34.80	152.08	3.03	29.63	25.31	54.94	19.15	259.06	86.13	345.19
Jun-06	0.85	26.23	3.46	29.69	7.32	105.78	29.69	135.46	2.57	28.73	21.50	50.23	26.78	265.78	119.59	385.37
Jul-06	1.85	16.18	7.52	23.70	6.57	97.53	26.63	124.15	3.24	30.15	27.05	57.21	28.56	346.55	129.67	476.22
Aug-06	1.84	63.31	7.45	70.75	5.51	99.31	22.34	121.66	2.92	29.37	24.42	53.79	22.69	388.75	104.52	493.28
Sep-06	1.62	39.88	6.57	46.44	6.35	90.29	25.73	116.02	3.03	29.86	25.29	55.15	23.86	299.73	109.71	409.43
Oct-06	0.92	23.42	3.73	27.15	7.20	99.08	29.19	128.26	3.26	30.21	27.25	57.47	18.69	262.48	89.76	352.24
Nov-06	0.31	14.74	1.25	15.99	8.01	114.18	32.48	146.66	3.13	30.11	26.13	56.24	14.24	186.51	71.17	257.68
Dec-06	0.26	15.26	1.04	16.30	7.29	100.69	29.55	130.23	3.28	30.26	27.41	57.67	12.74	153.31	65.74	219.05
Jan-07	0.24	13.32	0.97	14.29	7.32	101.80	56.16	157.96	3.36	30.47	31.89	62.36	12.95	156.59	97.24	253.82
Feb-07	0.17	12.74	0.68	13.42	6.44	98.88	45.56	144.45	3.02	30.31	29.18	59.49	12.69	224.57	87.85	312.42
Mar-07	0.19	14.36	0.77	15.13	7.89	108.19	46.17	154.36	3.09	29.28	27.44	56.72	14.73	248.43	88.82	337.25
<b>Total</b>	<b>8.44</b>	<b>261.34</b>	<b>34.20</b>	<b>295.54</b>	<b>86.45</b>	<b>1,246.03</b>	<b>409.81</b>	<b>1,655.84</b>	<b>36.83</b>	<b>357.87</b>	<b>316.95</b>	<b>674.82</b>	<b>222.23</b>	<b>3025.70</b>	<b>1123.31</b>	<b>4149.01</b>
<b>Rate</b>		<b>3.10</b>	<b>0.41</b>	<b>3.50</b>		<b>1.44</b>	<b>0.47</b>	<b>1.92</b>		<b>0.97</b>	<b>0.86</b>	<b>1.83</b>		<b>1.36</b>	<b>0.51</b>	<b>1.87</b>

**MONTH-WISE POWER PURCHASE DURING 2006 - 07**

*Energy in MU & Rupees in lakhs*

Month	NHPC				Total CPSU		TSECL						TOTAL			
	Loktak HEP 105 MW						Rokhia (8MW)		B'mura (5.25 MW)		Total		NEEPCO/NHPC/TSECL			
	Sch Energy (MU)	Cap. Charge (Rs)	Energy charge (Rs)	Total Bill (Rs)	Sch Energy (MU)	Total Bill (Rs)	Sch Energy (MU)	Energy charge (Rs)	Sch Energy (MU)	Energy charge (Rs)	Sch Energy (MU)	Total Bill (Rs)	Sch Energy (MU)	Cap. Charge (Rs)	Energy charge (Rs)	Total Bill (Rs)
1	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
Apr-06	0.89	8.83	3.60	12.43	16.06	319.50	0.00	-	-	-	0.00	0.00	16.06	242.77	76.73	319.50
May-06	0.60	27.98	2.44	30.42	19.75	375.61	0.00	-	-	-	0.00	0.00	19.75	287.04	88.57	375.61
Jun-06	2.10	9.88	8.52	18.40	28.88	403.77	0.00	-	-	-	0.00	0.00	28.88	275.67	128.11	403.77
Jul-06	2.95	19.23	11.97	31.21	31.51	507.42	0.00	-	-	-	0.00	0.00	31.51	365.78	141.64	507.42
Aug-06	2.89	18.49	10.43	28.92	25.57	522.20	0.00	-	-	-	0.00	0.00	25.57	407.25	114.95	522.20
Sep-06	2.95	11.98	16.71	28.69	26.81	438.12	0.00	-	-	-	0.00	0.00	26.81	311.70	126.42	438.12
Oct-06	3.02	55.54	12.25	67.79	21.71	420.03	0.88	18.93	-	-	0.88	18.93	22.59	318.02	120.94	438.96
Nov-06	1.89	12.20	7.64	19.85	16.13	277.53	2.26	48.65	-	-	2.26	48.65	18.39	198.71	127.46	326.18
Dec-06	1.50	12.49	6.10	18.59	14.24	237.64	2.06	44.25	-	-	2.06	44.25	16.30	165.80	116.08	281.89
Jan-07	0.90	12.49	5.88	18.37	13.85	272.19	1.99	42.92	1.56	30.30	3.55	73.21	17.40	169.08	176.33	345.40
Feb-07	0.86	11.28	4.60	15.88	13.55	328.30	0.00	-	3.33	64.64	3.33	64.64	16.88	235.85	157.08	392.94
Mar-07	1.16	12.49	6.04	18.53	15.89	355.78	0.00	-	3.51	68.20	3.51	68.20	19.39	260.92	163.07	423.99
<b>Total</b>	<b>21.72</b>	<b>212.89</b>	<b>96.19</b>	<b>309.08</b>	<b>243.94</b>	<b>4458.09</b>	<b>7.19</b>	<b>154.75</b>	<b>8.40</b>	<b>163.14</b>	<b>15.59</b>	<b>317.89</b>	<b>259.54</b>	<b>3,238.59</b>	<b>1,537.38</b>	<b>4,775.97</b>
<b>Rate</b>		<b>0.98</b>	<b>0.44</b>	<b>1.42</b>		<b>1.83</b>		<b>2.15</b>		<b>1.94</b>		<b>2.04</b>			<b>0.59</b>	<b>1.84</b>

**MONTH-WISE POWER PURCHASE DURING 2006 - 07**

*Energy in MU & Rupees in lakhs*

Month	PGCI				Ex PP Drawal incl. TSECL (MU)	Over(+) / Under(-) Drawal (MU)	UI Receivable (+) / Payable (-) (Rs)	Grand TOTAL (After UI Adjustment)		Av. Rate (Rs/unit)	R.H.Construction	
	TR. CHARGE		NER ULDC Charge (Rs)	TOTAL Bill Amount (Rs)				Energy purchd (MU)	Amount (Rs)		Teirei SHP (3MW)	Energy (MU)
	Energy (MU)	Bill Amount (MU)								Bill Amt (Rs)		
1	48	49	50	51	52	53	54	55	56	57	58	59
Apr-06	16.33	57.16	4.22	61.38	16.33	0.27	7.20	16.33	373.67	2.29	0.01	0.14
May-06	19.75	69.12	4.22	73.34	17.45	-2.30	60.54	17.45	388.41	2.23	0.09	0.84
Jun-06	28.88	101.07	4.20	105.27	17.52	-11.36	297.69	17.52	211.35	1.21	0.42	3.88
Jul-06	31.51	110.29	4.20	114.49	18.24	-13.27	257.80	18.24	364.11	2.00	0.90	8.35
Aug-06	25.57	89.51	4.20	93.71	17.91	-7.66	145.48	17.91	470.42	2.63	1.07	9.98
Sep-06	26.81	93.84	4.24	98.08	17.05	-9.76	266.14	17.05	270.06	1.58	0.98	9.10
Oct-06	21.71	75.98	4.24	80.22	19.12	-3.47	120.13	19.12	399.04	2.09	0.70	6.48
Nov-06	18.09	63.31	4.24	67.55	20.35	1.96	16.79	20.35	376.93	1.85	0.20	1.82
Dec-06	20.23	70.79	4.24	75.03	22.28	5.98	-156.00	22.28	512.91	2.30	0.06	0.60
Jan-07	19.40	67.91	4.24	72.15	22.96	5.55	-88.26	22.96	505.81	2.20	0.03	0.27
Feb-07	19.50	68.25	4.24	72.49	22.83	5.95	-98.01	22.83	563.44	2.47	0.03	0.25
Mar-07	20.79	72.75	4.24	76.99	24.30	4.90	-37.96	24.29	538.93	2.22	0.02	0.15
Total	<b>268.56</b>	<b>939.97</b>	<b>50.72</b>	<b>990.69</b>	<b>236.34</b>	<b>-23.19</b>	<b>791.54</b>	<b>236.33</b>	<b>4,975.12</b>	<b>2.11</b>	<b>4.50</b>	<b>41.85</b>
Rate		0.35		0.37					2.11			0.93

### CIRCLE-WISE ENERGY INPUT FOR 2006-2007

S/N	Name of Circle	Apr '06	May '06	Jun '06	Jul '06	Aug '06	Sep '06	Oct '06	Nov '06	Dec '06	Jan '07	Feb '07	Mar '07	Energy in MU	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
1	Aizawl Power Circle	9.654	9.412	9.540	9.448	10.172	10.128	9.658	10.019	10.701	11.005	11.166	9.978	<b>120.879</b>	
2	Champhai Power Circle	0.966	0.938	0.927	0.973	0.975	0.984	1.012	1.009	1.500	0.912	0.909	0.983	<b>12.089</b>	
3	Lunglei Power Circle	2.361	1.912	2.211	2.057	2.520	2.579	2.626	2.471	2.239	2.209	2.410	2.654	<b>28.248</b>	
4	Project Circle-I	1.399	1.410	1.365	1.481	1.656	1.570	1.535	1.539	1.192	1.264	1.313	1.361	<b>17.084</b>	
5	Transmission Circle	1.768	1.425	1.425	1.427	1.646	1.792	1.639	1.642	1.940	1.972	1.845	2.045	<b>20.567</b>	
(A) Total P&E Deptt (based on Circle's figure)		<b>16.147</b>	<b>15.098</b>	<b>15.467</b>	<b>15.385</b>	<b>16.968</b>	<b>17.053</b>	<b>16.470</b>	<b>16.680</b>	<b>17.571</b>	<b>17.362</b>	<b>17.643</b>	<b>17.022</b>	<b>198.867</b>	
6	Actual drawal fr CPSU	15.600	16.700	16.700	17.500	17.300	16.400	17.600	17.300	19.300	18.500	18.700	19.900	<b>211.500</b>	
7	Actual drawal fr TSECL								0.880	2.260	2.060	3.550	3.330	3.510	<b>15.590</b>
8	Local Generation(Hydel)	0.057	0.334	1.265	1.505	1.967	2.322	1.760	0.747	0.544	0.267	0.067	0.025	<b>10.859</b>	
9	Local Generation (Diesel/Thermal)	0.355	0.428	0.002	0.026	0.003	0.093	0.118	0.652	0.080	0.138	0.320	0.835	<b>3.051</b>	
(B) Total energy available for sale within the State at receiving end		<b>16.012</b>	<b>17.463</b>	<b>17.968</b>	<b>19.031</b>	<b>19.270</b>	<b>18.815</b>	<b>20.357</b>	<b>20.958</b>	<b>21.984</b>	<b>22.455</b>	<b>22.417</b>	<b>24.270</b>	<b>241.000</b>	
Difference (B-A) (Transmission & transformation loss, etc. within the State)		-0.135	2.364	2.501	3.646	2.302	1.762	3.887	4.279	4.413	5.093	4.774	7.249	42.133	
% Difference		-0.844	13.540	13.917	19.158	11.944	9.366	19.096	20.414	20.072	22.680	21.295	29.866	17.483	

### ANALYSIS OF ENERGY LOSS DURING 2002-03 to 2006-07

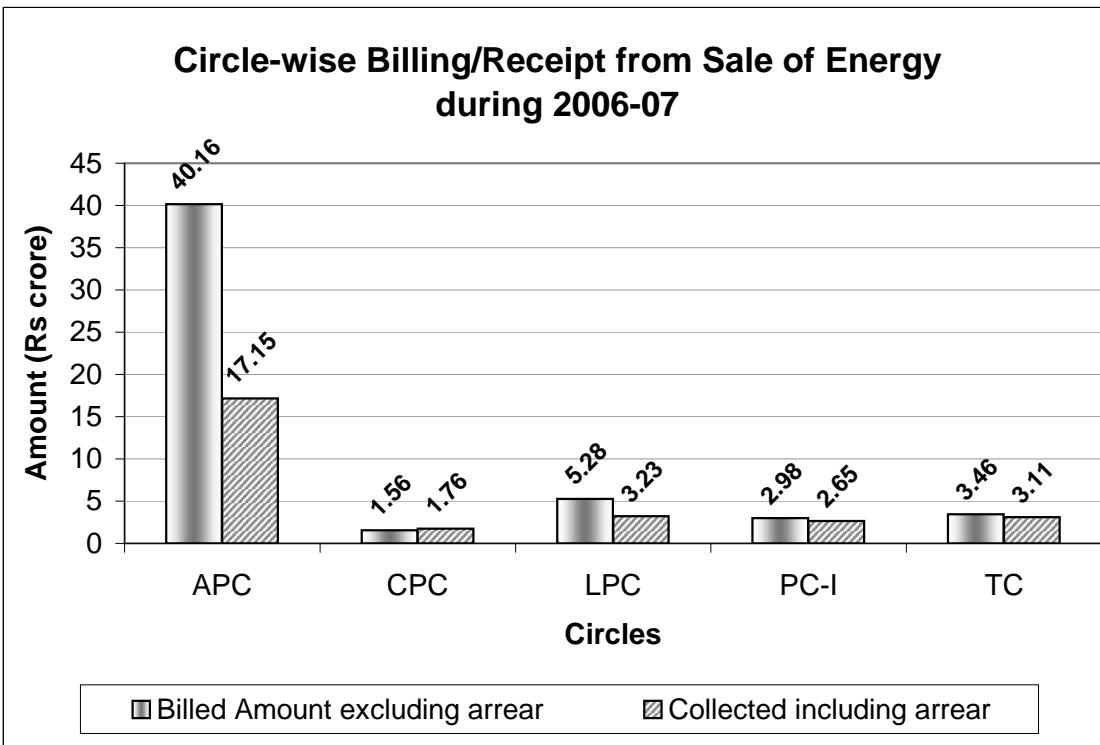
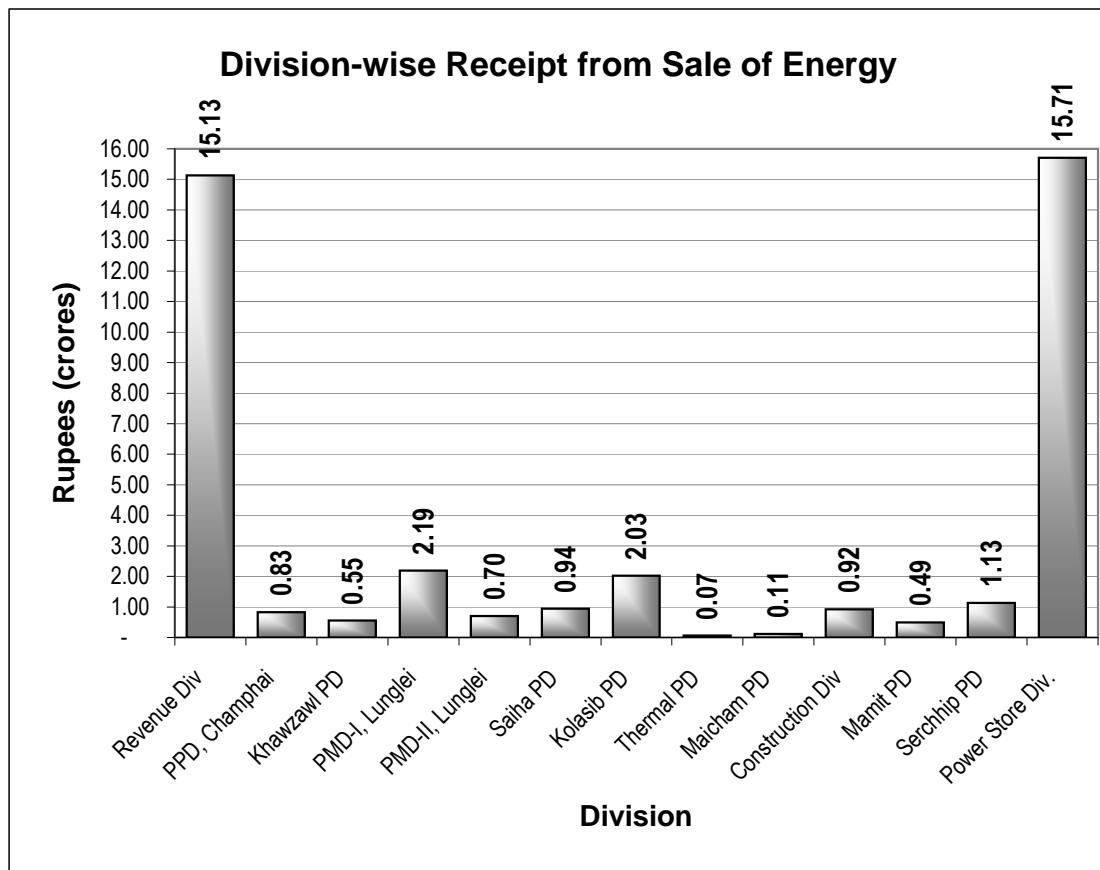
Sl.No	Particulars	2002-03		2003-04		2004-05		2005-06		2006-07	
		Energy Acct.	Actual								
1	2	3	4	5	6	7	8	9	10	11	12
a	Total Energy input (MU)	266.41	264.99	226.92	257.47	195.54	203.26	191.90	209.26	198.87	241.00
b	Energy Billed (MU)	91.51	91.51	115.46	115.46	130.29	130.29	133.16	133.16	140.38	140.38
c	Billing Efficiency (%) $c = (b / a) * 100$	34%	35%	51%	45%	67%	64%	69%	64%	71%	58%
d	Revenue Billed (Rs crores)	20.94	20.94	25.42	26.42	26.86	26.86	34.34	34.34	53.44	53.44
e	Revenue Collected (Rs crores)	17.59	17.59	15.55	15.55	22.59	22.59	32.44	32.44	25.64	27.90
f	Collection Efficiency (%) $f = (e / d) * 100$	84%	84%	61%	59%	84%	84%	94%	94%	48%	52%
g	ARR w.r.t. Energy input (Rs per unit) $g = e / a$	0.66	0.66	0.69	0.60	1.16	1.11	1.69	1.55	1.29	1.16
h	T & D Loss (%) $h = (a-b) / a$	66%	65%	49%	55%	33%	36%	31%	36%	29%	42%
i	Units realised (MU) $i = b * f$	76.87	76.87	70.43	68.12	109.44	109.44	125.17	125.79	67.38	73.00
j	AT&C Loss (%) $j = (a-i) / a$	71%	71%	69%	74%	44%	46%	35%	40%	66%	70%

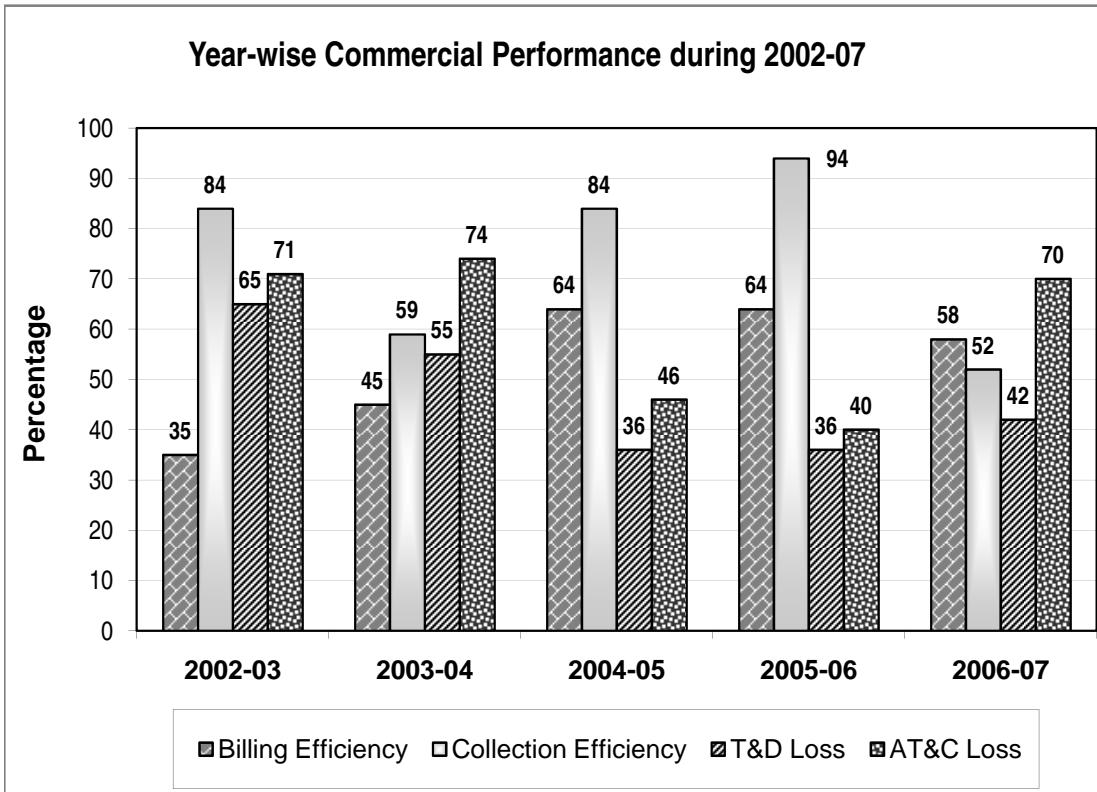
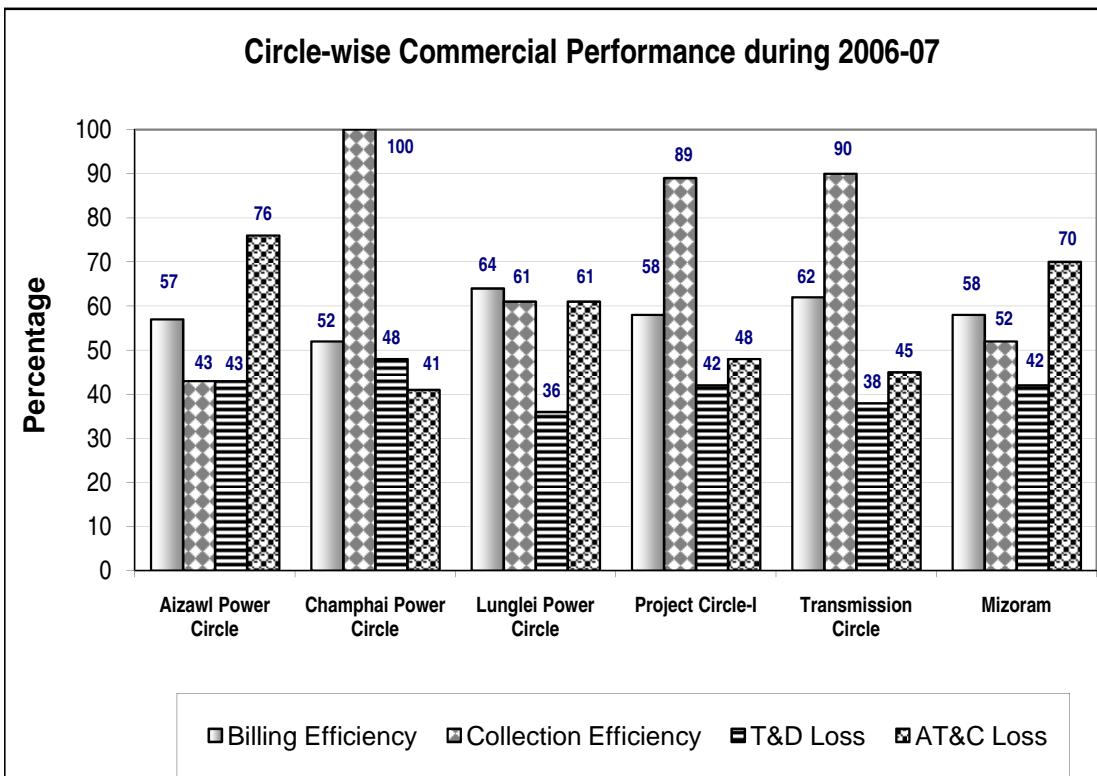
- Note :** 1) Actual =[Circle energy input]+[isolated local generation]+[proportionate distribution of difference of actual energy available and total of Circlewise energy input, i.e. 41.92MU]  
 2) Actual Collection means after addition of Public Lighting directly collected by CE's office to each Circles  
 3) Energy Acct means energy accounting done by each Circle under APDRP

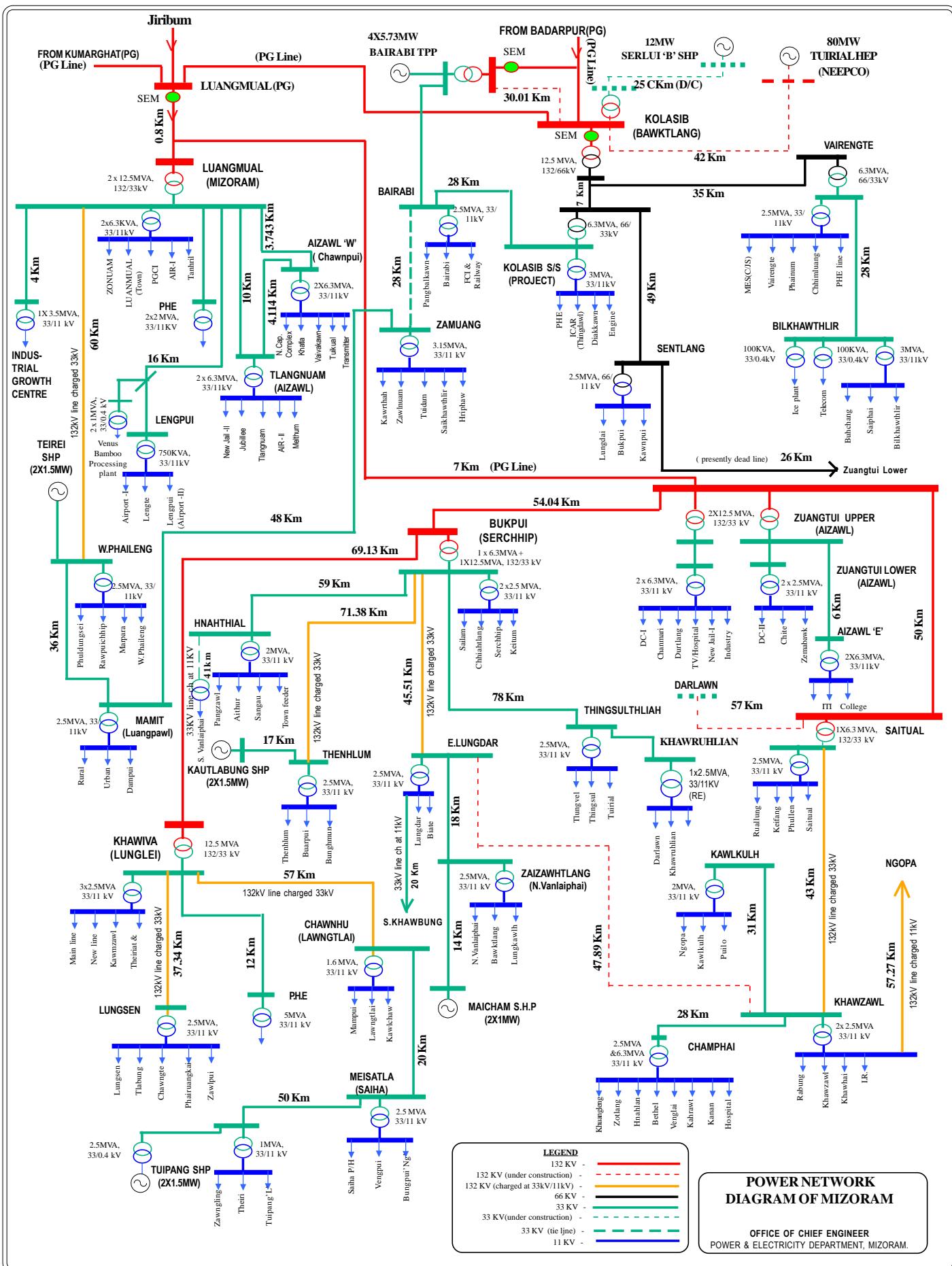
## CIRCLE WISE COMMERCIAL PERFORMANCE OF POWER DEPARTMENT DURING 2006-07

Sl.No	Particulars	Aizawl Power Circle		Champhai Power Circle		Lunglei Power Circle		Transmission Circle		Project Circle-I		Total of Mizoram	
		Energy Acct.	Actual	Energy Acct.	Actual	Energy Acct.	Actual	Energy Acct.	Actual	Energy Acct.	Actual	Energy Acct.	Actual
1	2	3	4	5	6	7	8	9	10	11	12	13	14
a	Total Energy input (MU)	120.88	146.38	12.09	14.64	28.25	34.39	20.57	24.90	17.08	20.69	198.87	241.00
b	Energy Billed (MU)	83.18	83.18	7.66	7.66	22.16	22.16	15.37	15.37	12.01	12.01	140.38	140.38
c	Billing Efficiency (%) $c = (b/a) * 100$	69	57	63	52	78	64	75	62	70	58	71	58
d	Revenue Billed (Rs crores)	40.16	40.16	1.56	1.56	5.28	5.28	3.46	3.46	2.98	2.98	53.44	53.44
e	Revenue Collected (Rs crores)	16.12	17.15	1.50	1.76	2.92	3.23	2.76	3.11	2.34	2.65	25.64	27.90
f	Collection Efficiency (%) $f = (e/d) * 100$	40	43	96	113	55	61	80	90	79	89	48	52
g	ARR w.r.t. Energy input (Rs per unit) $g = e/a$	1.33	1.17	1.24	1.20	1.03	0.94	1.34	1.25	1.37	1.28	1.29	1.16
h	T & D Loss (%) $h = (a-b)/a$	31	43	37	48	22	36	25	38	30	42	29	42
i	Units realised (MU) $i = b * f$	33.39	35.52	7.37	8.64	12.26	13.56	12.26	13.82	9.43	10.68	67.35	73.29
j	AT&C Loss (%) $j = (a-i)/a$	72	76	39	41	57	61	40	45	45	48	66	70

Note : 1) Actual =[Circle energy input]+[isolated local generation]+[proportionate distribution of difference of actual energy available and total of Circlewise energy input, i.e. 41.92MU]  
 2) Actual Collection means after addition of Public Lighting directly collected by CE's office to each Circles  
 3) Energy Acct means energy accounting done by each Circle under APDRP







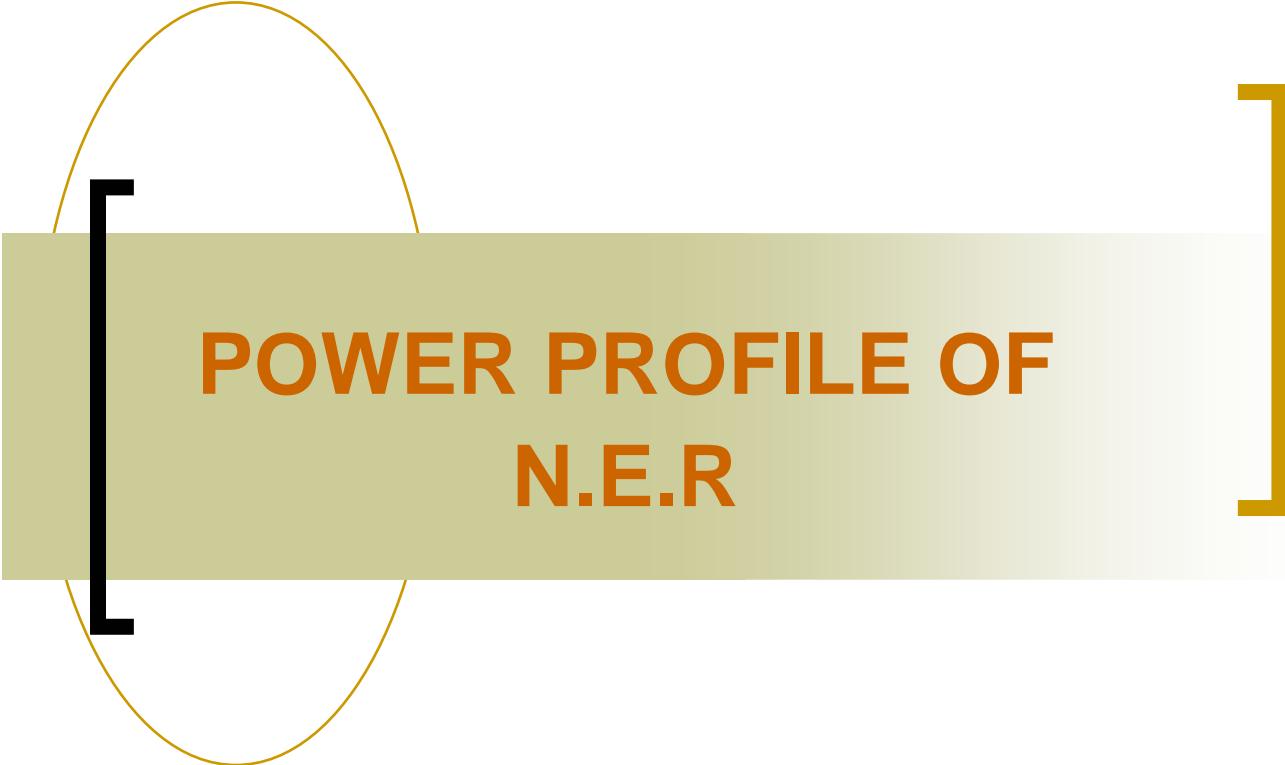
**UI Balance Sheet of Mizoram : 2006-2007**

*Rupees in Crores*

U.I. Week	Period	Payable		Receivable		Net	
		Unit (MU)	Rs	Unit (MU)	Rs	Unit (MU) (Col. 5-3)	Rs (Col. 6-4)
1	2	3	4	5	6	7	8
W-1	27.03.06-02.04.06	0.67	0.158	-	-	(0.670)	(0.158)
W-2	03.04.06-09.04.06	-	-	0.219	0.100	0.219	0.100
W-3	10.04.06-16.04.06	-	-	0.082	0.036	0.082	0.036
W-4	17.04.06-23.04.06	-	-	0.219	0.085	0.219	0.085
W-5	24.04.06-30.04.06	-	-	0.117	0.008	0.117	0.008
W-6	01.05.06-07.05.06	-	-	0.379	0.135	0.379	0.135
W-7	08.05.06-14.05.06	-	-	0.671	0.207	0.671	0.207
W-8	15.05.06-21.05.06	-	-	0.267	0.073	0.267	0.073
W-9	22.05.06-28.05.06	-	-	0.388	0.076	0.388	0.076
W-10	29.05.06-04.06.06	-	-	2.000	0.295	2.000	0.295
W-11	05.06.06-11.06.06	-	-	1.714	0.442	1.714	0.442
W-12	12.06.06-18.06.06	-	-	3.518	1.177	3.518	1.177
W-13	19.06.06-25.06.06	-	-	2.457	0.724	2.457	0.724
W-14	26.06.06-02.07.06	-	-	3.098	0.588	3.098	0.588
W-15	03.07.06-09.07.06	-	-	2.771	0.492	2.771	0.492
W-16	10.07.06-16.07.06	-	-	3.332	0.739	3.332	0.739
W-17	17.07.06-23.07.06	-	-	3.243	0.763	3.243	0.763
W-18	24.07.06-30.07.06	-	-	3.511	0.404	3.511	0.404
W-19	31.07.06-06.08.06	-	-	2.347	0.271	2.347	0.271
W-20	07.08.06-13.08.06	-	-	2.241	0.330	2.241	0.330
W-21	14.08.06-20.08.06	-	-	1.838	0.197	1.838	0.197
W-22	21.08.06-27.08.06	-	-	2.083	0.351	2.083	0.351
W-23	28.08.06-03.09.06	-	-	2.431	0.537	2.431	0.537
W-24	04.09.06-10.09.06	-	-	1.606	0.465	1.606	0.465
W-25	11.09.06-17.09.06	-	-	2.892	0.886	2.892	0.886
W-26	18.09.06-24.09.06	-	-	2.223	0.504	2.223	0.504
W-27	25.09.06-01.10.06	-	-	2.105	0.719	2.105	0.719
W-28	02.10.06-08.10.06	-	-	1.612	0.502	1.612	0.502

U.I. Week	Period	Payable		Receivable		Net	
		Unit (MU)	Rs	Unit (MU)	Rs	Unit (MU) (Col. 5-3)	Rs (Col. 6-4)
1	2	3	4	5	6	7	8
W-29	09.10.06-15.10.06	-	-	0.634	0.117	0.634	0.117
W-30	16.10.06-22.10.06	-	-	0.695	0.200	0.695	0.200
W-31	23.10.06-29.10.06	-	-	0.763	0.252	0.763	0.252
W-32	30.10.06-05.11.06	-	-	0.190	0.061	0.190	0.061
W-33	06.11.06-12.11.06	-	-	0.079	0.032	0.079	0.032
W-34	13.11.06-19.11.06	-	-	0.293	0.112	0.293	0.112
W-35	20.11.06-26.11.06	-	-	0.132	0.034	0.132	0.034
W-36	27.11.06-03.12.06	0.068	0.058	-	-	(0.068)	(0.058)
W-37	04.12.06-10.12.06	0.379	0.190	-	-	(0.379)	(0.190)
W-38	11.12.06-17.12.06	0.803	0.363	-	-	(0.803)	(0.363)
W-39	18.12.06-24.12.06	1.232	0.593	-	-	(1.232)	(0.593)
W-40	25.12.06-31.12.06	0.848	0.395	-	-	(0.848)	(0.395)
W-41	01.01.07-07.01.07	0.641	0.324	-	-	(0.641)	(0.324)
W-42	08.01.07-14.01.07	0.256	0.136	-	-	(0.256)	(0.136)
W-43	15.01.07-21.01.07	0.497	0.264	-	-	(0.497)	(0.264)
W-44	22.01.07-28.01.07	0.123	0.068	-	-	(0.123)	(0.068)
W-45	29.01.07-04.02.07	0.702	0.313	-	-	(0.702)	(0.313)
W-46	05.02.07-11.02.07	0.594	0.255	-	-	(0.594)	(0.255)
W-47	12.02.07-18.02.07	0.526	0.178	-	-	(0.526)	(0.178)
W-48	19.02.07-25.02.07	0.574	0.238	-	-	(0.574)	(0.238)
W-49	26.02.07-04.03.07	0.402	0.145	-	-	(0.402)	(0.145)
W-50	05.03.07-11.03.07	0.275	0.091	-	-	(0.275)	(0.091)
W-51	12.03.07-18.03.07	0.239	0.055	-	-	(0.239)	(0.055)
W-52	19.03.07-25.03.07	0.314	0.085	-	-	(0.314)	(0.085)
W-53	26.03.07-01.04.07	0.286	0.092	-	-	(0.286)	(0.092)
<b>Total</b>		<b>9.143</b>	<b>3.909</b>	<b>52.150</b>	<b>11.914</b>	<b>43.007</b>	<b>8.005</b>

ANNUAL REPORT 2006-07



# **POWER PROFILE OF N.E.R**

**ALLOCATION OF CENTRAL SECTOR POWER IN NE REGION**

Period : 28.02.2006 onwards

Name of Station	Loktak NHPC		Khandong NEEPCO		Kopili-I NEEPCO		Kopili -II NEEPCO		AGTPP NEEPCO		AGBPP NEEPCO		Doyang NEEPCO		Ranganadi NEEPCO		NER TOTAL	
Location of the Projects	Manipur		Assam		Assam		Assam		Tripura		(Kathalguri) Assam		Nagaland		Arunachal Pradesh			
Capacity	105 MW		50 MW		200 MW		25 MW		84 MW		291 MW		75 MW		405 MW		1235 MW	
States	% Share	MW Share	% Share	MW Share	% Share	MW Share	% Share	MW Share	% Share	MW Share	% Share	MW Share	% Share	MW Share	% Share	MW Share	MW Share	% Share
Arunachal Pradesh	4.76	5.00	4.00	2.00	5.00	10.00	6.00	1.50	6.00	5.04	5.50	16.01	6.70	5.03	18.27	73.99	118.56	9.60
Assam	32.01	33.61	59.00	29.50	56.18	112.36	49.34	12.34	47.72	40.08	59.20	172.27	46.40	34.80	46.02	186.38	621.34	50.31
Manipur	30.15	31.66	6.60	3.30	7.42	14.84	7.26	1.82	8.18	6.87	8.16	23.75	7.93	5.95	8.40	34.02	122.20	9.89
Meghalaya	10.18	10.69	14.60	7.30	15.10	30.20	16.60	4.15	9.42	7.91	9.50	27.65	9.23	6.92	9.22	37.34	132.16	10.70
Mizoram	4.71	4.95	3.56	1.78	4.24	8.48	5.90	1.48	5.84	4.91	5.05	14.70	4.88	3.66	5.34	21.63	61.57	4.99
Nagaland	6.38	6.70	6.60	3.30	6.10	12.20	5.60	1.40	5.56	4.67	5.75	16.73	17.88	13.41	5.28	21.38	79.80	6.46
Tripura	11.81	12.40	5.64	2.82	5.96	11.92	9.30	2.33	17.28	14.52	6.84	19.90	6.98	5.24	7.47	30.25	99.37	8.05
<b>TOTAL</b>	<b>100.00</b>	<b>105.00</b>	<b>100.00</b>	<b>50.00</b>	<b>100.00</b>	<b>200.00</b>	<b>100.00</b>	<b>25.00</b>	<b>100.00</b>	<b>84.00</b>	<b>100.00</b>	<b>291.00</b>	<b>100.00</b>	<b>75.00</b>	<b>100.00</b>	<b>405.00</b>	<b>1235.00</b>	<b>100.00</b>

### Schedule vs Actual energy drawal from CPSU by NER States during 2006-07

Figures in MU

Month	Assam		Arunachal Pradesh		Manipur		Meghalaya		Mizoram		Nagaland		Tripura		Total NER	
	Schedule	Actual drawal in the state	Schedule	Actual drawal in the state	Schedule	Actual drawal in the state	Schedule	Actual drawal in the state	Schedule	Actual drawal in the state	Schedule	Actual drawal in the state	Schedule	Actual drawal in the state	Schedule	Actual drawal in the states
1	3	5	7	9	11	13	15	17	20	22	24	26	28	30	32	34
April '05	182.00	170.90	23.60	19.30	28.80	27.60	44.00	59.20	16.06	15.60	17.30	20.40	13.10	6.80	324.86	319.80
May '05	231.80	214.60	26.50	19.60	32.80	33.80	59.20	65.10	19.75	16.70	21.40	25.10	13.40	6.60	404.85	381.50
June '05	298.80	261.20	34.80	22.30	54.50	41.50	57.40	58.30	28.88	16.70	34.00	28.80	10.40	6.70	518.78	435.50
July '05	346.60	297.80	49.20	23.80	64.70	42.40	60.00	66.70	31.51	17.50	41.10	27.20	19.50	13.20	612.61	488.60
Aug '05	277.70	297.50	13.40	24.50	57.40	40.10	53.90	62.80	25.57	17.30	33.70	28.40	31.60	11.70	493.27	482.30
Sept '05	273.90	276.40	8.90	24.60	55.70	45.30	59.10	67.60	26.81	16.40	19.30	27.30	21.10	9.40	464.81	467.00
Oct '05	254.70	250.00	-3.60	22.50	47.60	48.70	51.90	66.80	21.71	17.60	22.90	27.40	12.10	8.50	407.31	441.50
Nov '05	230.90	198.30	12.00	14.30	33.60	37.70	54.90	76.20	16.13	17.30	16.50	21.70	6.60	0.50	370.63	366.00
Dec '05	244.20	220.20	14.00	16.00	28.70	34.20	52.50	68.90	14.24	19.30	14.60	24.70	5.10	-5.00	373.34	378.30
Jan '06	215.70	210.40	15.10	17.00	25.30	31.10	49.60	64.30	13.85	18.50	14.80	24.50	-2.70	-2.10	331.65	363.70
Feb '06	199.80	190.60	17.60	19.10	26.30	28.80	47.10	53.30	13.55	18.70	13.70	22.00	0.50	-2.80	318.55	329.70
Mar '06	207.20	207.80	19.70	24.70	32.80	26.40	55.60	60.10	15.89	19.90	15.90	21.10	-1.40	-0.80	345.69	359.20
Total	2963.30	2795.70	231.20	247.70	488.20	437.60	645.20	769.30	243.95	211.50	265.20	298.60	129.30	52.70	4966.35	4813.10

Notes: Figures are as per Monthly Report & Annual Report 2006-07 issued by NERLDC & Regional Energy Accounting(REA) issued by NERPC and it may not have 100% accuracy due to revision of REA from time to time.

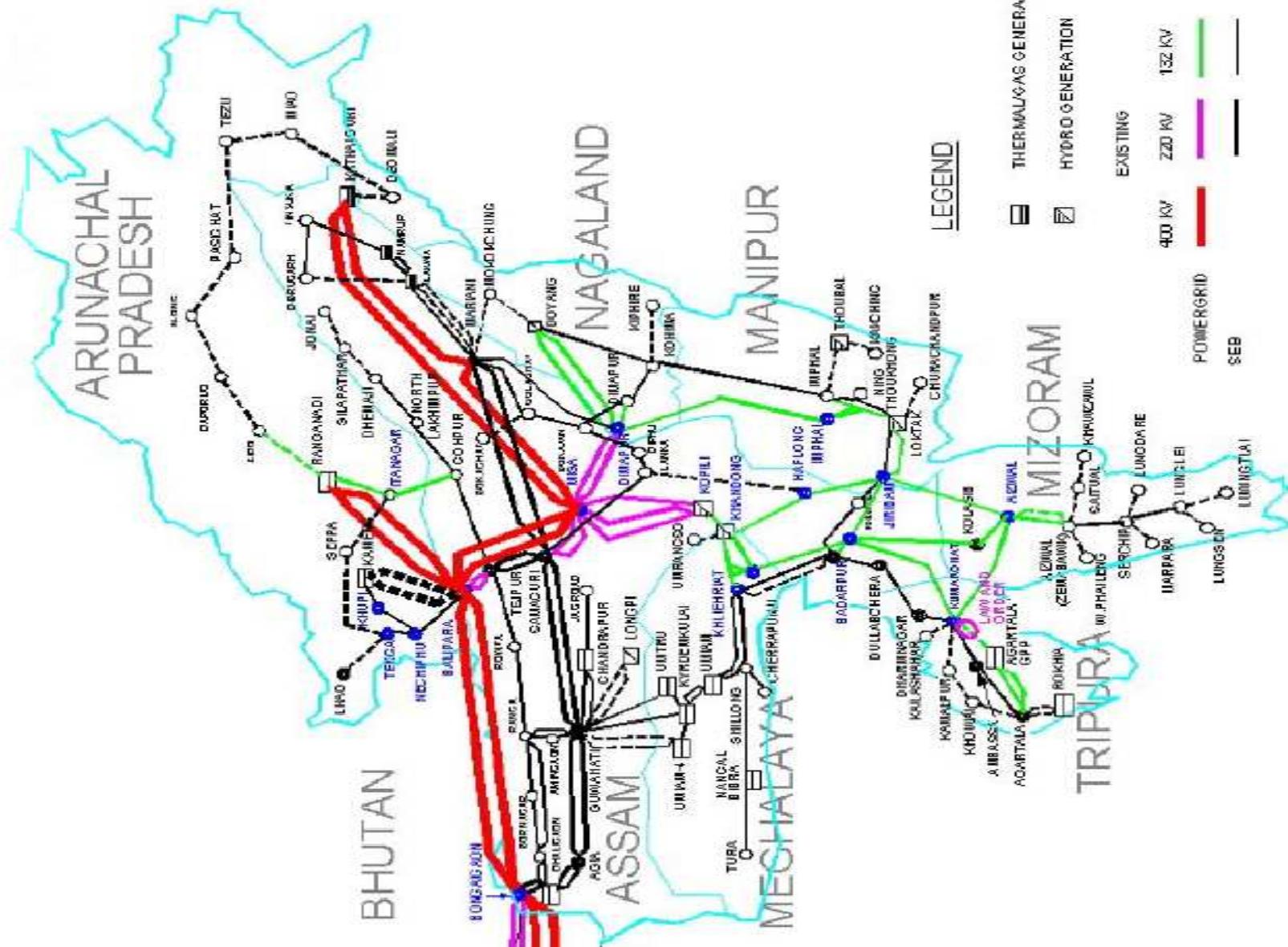
**UI RATE (EFFECTIVE FROM 1.10.2004)**

Average frequency of time block (Hz)		UI Rate	Average frequency of time block (Hz)		UI Rate
Below	Not below	Paise per kWh	Below	Not below	Paise per kWh
.....	50.50	0.00	49.76	49.74	237.00
50.50	50.48	6.00	49.74	49.72	246.00
50.48	50.46	12.00	49.72	49.70	255.00
50.46	50.44	18.00	49.70	49.68	264.00
50.44	50.42	24.00	49.68	49.66	273.00
50.42	50.40	30.00	49.66	49.64	282.00
50.40	50.38	36.00	49.64	49.62	291.00
50.38	50.36	42.00	49.62	49.60	300.00
50.36	50.34	48.00	49.60	49.58	309.00
50.34	50.32	54.00	49.58	49.56	318.00
50.32	50.30	60.00	49.56	49.54	327.00
50.30	50.28	66.00	49.54	49.52	336.00
50.28	50.26	72.00	49.52	49.50	345.00
50.26	50.24	78.00	49.50	49.48	354.00
50.24	50.22	84.00	49.48	49.46	363.00
50.22	50.20	90.00	49.46	49.44	372.00
50.20	50.18	96.00	49.44	49.42	381.00
50.18	50.16	102.00	49.42	49.40	390.00
50.16	50.14	108.00	49.40	49.38	399.00
50.14	50.12	114.00	49.38	49.36	408.00
50.12	50.10	120.00	49.36	49.34	417.00
50.10	50.08	126.00	49.34	49.32	426.00
50.08	50.06	132.00	49.32	49.30	435.00
50.06	50.04	138.00	49.30	49.28	444.00
50.04	50.02	144.00	49.28	49.26	453.00
50.02	50.00	150.00	49.26	49.24	462.00
50.00	49.98	156.00	49.24	49.22	471.00
49.98	49.96	162.00	49.22	49.20	480.00
49.96	49.94	168.00	49.20	49.18	489.00
49.94	49.92	174.00	49.18	49.16	498.00
49.92	49.90	180.00	49.16	49.14	507.00
49.90	49.88	186.00	49.14	49.12	516.00
49.88	49.86	192.00	49.12	49.10	525.00
49.86	49.84	198.00	49.10	49.08	534.00
49.84	49.82	204.00	49.08	49.06	543.00
49.82	49.80	210.00	49.06	49.04	552.00
49.80	49.78	219.00	49.04	49.02	561.00
49.78	49.76	228.00	49.02		570.00

**UI RATE (EFFECTIVE FROM 30.04.2007)**

<i>Average frequency of time</i>		<i>UI Rate</i>	<i>Average frequency of time</i>		<i>UI Rate</i>
<i>Below</i>	<i>Not below</i>	<i>Paise per kWh</i>	<i>Below</i>	<i>Not below</i>	<i>Paise per kWh</i>
.....	<b>50.50</b>	0.0	<b>49.76</b>	<b>49.74</b>	<b>237.0</b>
50.50	<b>50.48</b>	6.0	<b>49.74</b>	<b>49.72</b>	<b>246.0</b>
50.48	<b>50.46</b>	12.0	<b>49.72</b>	<b>49.70</b>	<b>255.0</b>
50.46	<b>50.44</b>	18.0	<b>49.70</b>	<b>49.68</b>	<b>264.0</b>
50.44	<b>50.42</b>	24.0	<b>49.68</b>	<b>49.66</b>	<b>273.0</b>
50.42	<b>50.40</b>	30.0	<b>49.66</b>	<b>49.64</b>	<b>282.0</b>
50.40	<b>50.38</b>	36.0	<b>49.64</b>	<b>49.62</b>	<b>291.0</b>
50.38	<b>50.36</b>	42.0	<b>49.62</b>	<b>49.60</b>	<b>300.0</b>
50.36	<b>50.34</b>	48.0	<b>49.60</b>	<b>49.58</b>	<b>309.0</b>
50.34	<b>50.32</b>	54.0	<b>49.58</b>	<b>49.56</b>	<b>318.0</b>
50.32	<b>50.30</b>	60.0	<b>49.56</b>	<b>49.54</b>	<b>327.0</b>
50.30	<b>50.28</b>	66.0	<b>49.54</b>	<b>49.52</b>	<b>336.0</b>
50.28	<b>50.26</b>	72.0	<b>49.52</b>	<b>49.50</b>	<b>345.0</b>
50.26	<b>50.24</b>	78.0	<b>49.50</b>	<b>49.48</b>	<b>361.0</b>
50.24	<b>50.22</b>	84.0	<b>49.48</b>	<b>49.46</b>	<b>377.0</b>
50.22	<b>50.20</b>	90.0	<b>49.46</b>	<b>49.44</b>	<b>393.0</b>
50.20	<b>50.18</b>	96.0	<b>49.44</b>	<b>49.42</b>	<b>409.0</b>
50.18	<b>50.16</b>	102.0	<b>49.42</b>	<b>49.40</b>	<b>425.0</b>
50.16	<b>50.14</b>	108.0	<b>49.40</b>	<b>49.38</b>	<b>441.0</b>
50.14	<b>50.12</b>	114.0	<b>49.38</b>	<b>49.36</b>	<b>457.0</b>
50.12	<b>50.10</b>	120.0	<b>49.36</b>	<b>49.34</b>	<b>473.0</b>
50.10	<b>50.08</b>	126.0	<b>49.34</b>	<b>49.32</b>	<b>489.0</b>
50.08	<b>50.06</b>	132.0	<b>49.32</b>	<b>49.30</b>	<b>505.0</b>
50.06	<b>50.04</b>	138.0	<b>49.30</b>	<b>49.28</b>	<b>521.0</b>
50.04	<b>50.02</b>	144.0	<b>49.28</b>	<b>49.26</b>	<b>537.0</b>
50.02	<b>50.00</b>	150.0	<b>49.26</b>	<b>49.24</b>	<b>553.0</b>
50.00	<b>49.98</b>	156.0	<b>49.24</b>	<b>49.22</b>	<b>569.0</b>
49.98	<b>49.96</b>	162.0	<b>49.22</b>	<b>49.20</b>	<b>585.0</b>
49.96	<b>49.94</b>	168.0	<b>49.20</b>	<b>49.18</b>	<b>601.0</b>
49.94	<b>49.92</b>	174.0	<b>49.18</b>	<b>49.16</b>	<b>617.0</b>
49.92	<b>49.90</b>	180.0	<b>49.16</b>	<b>49.14</b>	<b>633.0</b>
49.90	<b>49.88</b>	186.0	<b>49.14</b>	<b>49.12</b>	<b>649.0</b>
49.88	<b>49.86</b>	192.0	<b>49.12</b>	<b>49.10</b>	<b>665.0</b>
49.86	<b>49.84</b>	198.0	<b>49.10</b>	<b>49.08</b>	<b>681.0</b>
49.84	<b>49.82</b>	204.0	<b>49.08</b>	<b>49.06</b>	<b>697.0</b>
49.82	<b>49.80</b>	210.0	<b>49.06</b>	<b>49.04</b>	<b>713.0</b>
49.80	<b>49.78</b>	219.0	<b>49.04</b>	<b>49.02</b>	<b>729.0</b>
49.78	<b>49.76</b>	228.0	<b>49.02</b>		<b>745.0</b>

## POWER MAP OF NORTH EASTERN REGION



### NETWORK DIAGRAM OF NORTH EASTERN REGIONAL GRID

