

Section – 3- Annual Revenue Requirement for FY 11-12

3. As has been mentioned earlier, the distribution companies viz. JVVNL, AVVNL and JdVVNL (Discoms) have filed petition for determination of Annual Revenue Requirement (ARR) and revision of retail tariff for FY 11-12. The ARR would need to be decided first and this would then facilitate decision on tariff revision for different consumer categories proposed by Discoms.

4. Analysis of Aggregate Revenue Requirement for FY 2011-12

Determination of ARR requires assessment of energy sales as well as cost of various elements like power purchase cost, O&M expenses, interest cost and depreciation, etc. Projection of the petitioners as regards various components of ARR, the Commission's analysis thereon and decision in respect of items given below are discussed in the following paras:

- (1) Energy sales
- (2) Losses, both transmission and distribution
- (3) Power purchase cost, including transmission charges and SLDC charges
- (4) Operation and maintenance expenses
- (5) Interest and finance charges, including interest on working capital
- (6) Depreciation
- (7) Revenue from existing tariff
- (8) Non-tariff and other income
- (9) Revenue deficit based on existing tariff

5. Energy Sales

5.1. Discoms have worked out the energy sales on the basis of actual sales of previous years. The consumer category wise sales projected by the three Discoms vis-a-vis that approved vide the Commission's MYT order dt. 15.4.2010 and the energy sales being approved now by the Commission have been discussed in the following sub-paras.

5.2. It may be mentioned that all consumers in the State, except Flat Rate Agriculture consumers, have metered energy supply and fall within the metered category. Commission normally considers Compounded Annual Growth Rate (CAGR) of 3 or 5 previous years, as the case may be, in assessing energy requirement in a year. However, in case of Agriculture, connected load and specific consumption have been used in MYT order dated 15.4.2010 to assess energy sales. This methodology is more appropriate than using CAGR of sales as agricultural consumption varies considerably on year to year basis due to erratic nature of rainfall in the State. In addition, supply hours for agriculture in the past have varied considerably due to various reasons, which also lead to significant changes in consumption of power in agriculture. Similar methodology has been used in this order for estimating the energy sales of Agriculture consumers (both metered and flat rate).

5.3. Commission has, accordingly, analysed separately the projections of

energy sales for FY 11-12 by Discoms in respect of the following consumer categories in view of the different methodology adopted to finalise energy of such categories:

- (1) All consumers category, except Agriculture
- (2) Agriculture consumers (Metered)
- (3) Agriculture consumers (Flat Rate)

5.4. **Petitioners' Submission**

The basis of estimation and projections made by Discoms in respect of the consumer categories mentioned in earlier para are now being discussed in the following sub-paras.

5.4.1. **Energy Sales for Metered Categories (except Agriculture)**

Discoms have submitted that the energy sales for FY 2011-12 have been projected based on the Compounded Annual Growth Rate (CAGR) for past 5 years for all the consumer categories (except Flat Rate Agriculture consumers) based on actual energy sales of FY 2009-10. The increase in domestic consumption has been attributed primarily to the electrification of large number of rural households under RGGVY. Petitioner have submitted that due to power cuts imposed on industries, the sales to small, medium and large industrial consumers have been lower than that approved in MYT Order for Jaipur and Jodhpur Discoms resulting in adverse impact on the revenues of the licensees.

5.4.2. **Energy sales to Agriculture Metered (M) consumers**

In case of Agriculture (Metered) consumer category, Discoms have considered five year CAGR for projection of sales for FY 10-11 and FY 11-12. The petitioners submitted that energy sales is an uncontrollable parameter and is dependent on a number of factors including addition of number of consumers, increase in connected load, rainfall, number of agriculture connections converted from flat rate , etc. High sales in Agriculture consumption have been attributed to the above mentioned reasons. In reply to data gaps conveyed by the Commission, Discoms furnished the following information regarding no. of consumers, connected load and specific consumption, which corresponds to the growth rate based on CAGR assumed by them.

Table 1-Agriculture (M) sales for FY 2011-12-JVVNL

Particulars	Consumers (Number)	Connected load per consumer (kW)	Total connected load (kW)	Specific consumption (kWh/kW/year)	Consumption (sales) (MU)
Existing	329045	5.82	1913922		
Add: converted	7035	4.84	34024		
New	49896	7.94	395984		
Total	385976		2343930	2152	5045

Table 2-Agriculture (M) sales for FY 2011-12- AVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total Connected load (KW)	Specific consumption (kWh/kW/year)	Consumption (Sales) (MU)
Existing	265822	6.05	1607393		
Add: converted	1200	8	9600		
New	18228	6.5	118482		
Total	285250	6.08	1735475	1783	2980

Table 3-Agriculture (M) sales for FY 2011-12- JdVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total Connected load (KW)	Specific consumption (kWh/kW/year)	Consumption (Sales) (MU)
Existing	177472	17.59	3122138		
Add: converted	762	21.57	16436		
New	23631	28.00	661767		
Total	201865	18.82	3800341	1735	6595

5.4.3. Energy Sales for Agriculture Flat Rate (FR) Consumers

- (1). JVVNL and AVVNL in their petitions have submitted that they have considered 5 year CAGR growth rate and JdVVNL has submitted that it has considered 10% growth rate on the actual unaudited sales of FY 2009-10 to estimate the sales for agriculture flat consumers for FY 2010-11 and FY 2011-12.
- (2). All the three Discoms have projected higher sales in agriculture (Flat Rate) consumer category than that approved by the Commission in the MYT Order dated 15.04.10 and have submitted that it is primarily on account of slower pace of conversion of this category to metered category due to resistance from farmers. They have further submitted that despite reduction in number of flat rate consumers but due to increase in their connected load, the energy sales to this category has increased and this trend is expected to continue. They also stated that consumption per HP is higher as flat rate consumers do not disclose their actual load.
- (3). In reply to data gaps conveyed by the Commission, Discoms indicated the following details as regards number of consumers, connected load and specific consumption which corresponds to the growth rate based on CAGR assumed by them in the petition.

Table: 4-Agriculture (FR) Sales for FY 2011-12 – JVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total Connected load (KW)	Specific consumption (kWh/kW/year)	Consumption (sales) (MU)
Existing	49207	6.8	334650	-	-
Less: converted	7035	4.84	34024	-	-
Total	42172		300626	4119	1238

Table: 5-Agriculture (FR) Sales for FY 2011-12 – AVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total Connected load (KW)	Specific consumption (kWh/kW/year)	Consumption (sales) (MU)
Existing	71167	8.54	607763	-	-
Less: converted	2602	8.54	22236	-	-
Total	68565		585527	2464	1525

Table: 6-Agriculture (FR) Sales for FY 2011-12 – JdVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total Connected load (KW)	Specific consumption (kWh/kW/year)	Consumption (sales) (MU)
Existing	44147	21.57	952282	-	-
Less: converted	762	21.57	16436	-	-
Total	43385		935847	1863	1743

5.4.4. Total energy sales projected by Discoms:

The projection of energy sales of different consumer categories discussed in preceding sub-paras and comparison with energy sales approved in MYT order dated 15.4.2010 are as given in the following table:

Table: 7- Total Energy Sales for FY 2011-12- Discoms' Projection (MU)

Consumer Category	JVNL		AVVNL		JdVVNL		Total	
	As per MYT order	As per petition	As per MYT order	As per petition	As per MYT order	As per petition	As per MYT order	As per petition
1. Metered Category except Agriculture								
(i) Domestic	3183	3417	1986	1962	1967	1882	7136	7261
(ii) Non-Domestic	1219	1110	555	472	581	485	2355	2067
(iii) Public Street Light	106	99	49	47	142	164	297	310
(iv) Small Industry	278	268	223	240	233	222	734	730
(v) Medium Industry	705	651	631	638	497	451	1833	1740
(vi) Large Industry	4209	4046	2530	2191	1243	1055	7982	7292
(viii) Public Water Works (S)	264	240	219	216	235	267	718	723
(viii) Public Water Works (M)	31	26	32	31	108	111	171	168
(ix) Public Water Works (L)	113	130	151	137	397	394	661	661
(x) Mixed Load	445	533	252	363	488	605	1185	1501
(xi) Electric Traction	350	409	0	0	0	0	350	409
2. Agriculture Metered								
Agriculture (Metered)	2774	5045	2822	2980	3856	6595	9452	14620
3. Agriculture Flat Rate								
Agriculture (Flat Rate)	433	1238	613	1525	595	1743	1641	4506
Total Sales	14110	17212	10062	10802	10343	13974	34515	41988

5.5. Commission's Analysis

5.5.1. Energy Sales for Metered Categories (except Agriculture)

- (1). Commission's energy assessment for FY 2011-12 of the said categories is based on 12 months actual sale (unaudited) of Metered Categories for FY 2009-10, as submitted by Discoms and tabulated as under:

Table: 8-Actual Sales of the three Discoms for FY 2009-10 (MU)

Consumer Category	JVVNL	AVVNL	JdVVNL	Total
Domestic	2658	1609	1561	5828
Non-Domestic	898	404	417	1719
Public Street Light	79	42	107	228
Small Industry	248	232	195	675
Medium Industry	548	524	381	1453
Large Industry	3095	1937	915	5947
PWW (S)	207	185	227	619
PWW (M)	26	31	105	162
PWW (L)	114	122	324	560
Mixed Load	333	227	457	1017
Railway Traction	350	0	0	350
Total	8556	5313	4689	18558

- (2). In the MYT Order dated 15.04.10 the Commission had considered 3-year CAGR for Domestic and Non-domestic categories and 5-year CAGR for remaining categories except Agriculture for computation of energy sales in FY 2009-10 and subsequent years of the MYT control period. Considering the same approach, the Commission has considered the energy sales on the basis of 3-year CAGR for Domestic and Non-domestic categories and 5-year CAGR for remaining categories (except agriculture) based on the energy sales from FY 2004-05 to FY 2009-10.
- (3). The 3-year CAGR and 5-year CAGR for different consumer categories and the growth rate, accordingly adopted by the Commission and the energy sales are as given in the tables below:

Table: 9-Growth rates and energy sales for FY 2011-12 – JVVNL

Consumer Category	5-Year CAGR	3-Year CAGR	Growth Rate Adopted by Commission	Energy Sales (MU)
Domestic	13.39%	17.94%	17.94%	3697
Non-Domestic	11.16%	11.55%	11.55%	1117
Public Street Light	11.86%	12.74%	11.86%	99
Small Industry	4.05%	3.70%	4.05%	268
Medium Industry	8.96%	9.04%	8.96%	651
Large Industry	14.32%	14.34%	14.32%	4046
PWW (S)	7.81%	6.76%	7.81%	240
PWW (M)	0.00%	-3.58%	0.00%	26
PWW (L)	6.61%	8.29%	6.61%	130
Mixed Load	26.48%	26.42%	26.48%	533
Electric Traction	8.17%	7.55%	8.17%	409
Total	-	-	-	11216

Table: 10-Growth rates and energy sales(MU) for FY 2011-12 – AVVNL

Consumer Category	5-Year CAGR	3-Year CAGR	Growth Rate Adopted by Commission	Energy Sales
Domestic	10.43%	14.61%	14.61%	2114
Non-Domestic	8.09%	10.82%	10.82%	497
Public Street Light	5.63%	3.46%	5.63%	47
Small Industry	1.71%	7.06%	1.71%	240
Medium Industry	10.42%	11.09%	10.42%	638
Large Industry	6.37%	6.00%	6.37%	2191
PWW (S)	7.86%	10.87%	7.86%	216
PWW (M)	0.58%	-0.12%	0.58%	31
PWW (L)	5.98%	8.59%	5.98%	137
Mixed Load	26.50%	28.06%	26.50%	363
Electric Traction	-	-	-	-
Total	-	-	-	6474

Table: 11-Growth rates and energy sales for FY 2011-12 – JdVVNL

Consumer Category	5-Year CAGR	3-Year CAGR	Growth Rate Adopted by Commission	Energy Sales (MU)
Domestic	9.80%	13.38%	13.38%	2007
Non-Domestic	7.83%	10.03%	10.03%	505
Public Street Light	23.73%	40.12%	23.73%	164
Small Industry	6.56%	6.40%	6.56%	222
Medium Industry	8.80%	7.71%	8.80%	451
Large Industry	7.41%	-1.63%	7.41%	1055
PWW (S)	8.48%	12.58%	8.48%	267
PWW (M)	2.50%	3.84%	2.50%	111
PWW (L)	10.24%	9.61%	10.24%	394
Mixed Load	15.03%	16.93%	15.03%	605
Electric Traction	-	-	-	-
Total	-	-	-	5781

5.5.2. Agriculture Metered (M) consumers

- (1). Commission has accepted Discoms submissions as regards, number of existing, new and consumers to be converted from flat rate to metered category.
- (2). Commission has noticed discrepancies in projections made by Discoms regarding connected load per consumer for existing as well as converted consumers. These include indicating different number of converted consumers and their connected load at different places while working out sales for metered and flat category. It was also noticed that in the petition of JdVVNL, the load of converted consumer has been added to the load of flat category instead of reducing it for FY 09-10 which has affected calculations of subsequent years. Due to these reasons the Commission has, therefore, reworked the average connected load per consumer For

FY 10-11 and FY 11-12 for existing as well as converted consumers based on data submitted by Discoms for FY 09-10. Commission has considered that on an average the converted consumers would be in the metered category for six months during the year in working out their annual consumption. In respect of new consumers, the Commission has considered the connected load per consumer as projected by Discoms.

- (3). Similarly, in case of specific consumption the Commission has observed that growth projected by Discoms is far more than that indicated by them in the MYT petition and accepted by the Commission. In the current petition, the growth rate for specific consumption projected by Discoms is in the range of 10.2% to 13.71%. In the MYT order, it was nil in case of JVVNL and varying from 2% to 3.77% in case of AVVNL & JdVVNL. Commission finds that the growth rate projected by Discoms is unrealistic and, therefore, considers it appropriate to consider a growth rate of 3% p.a. in specific consumptions over FY 09-10 and FY 10-11 for all Discoms which is close to the rate on an average of all Discoms considered in the MYT order. This has been adopted for all agriculture metered consumers except those converted from flat rate to metered category. In respect of converted consumers the Commission has retained the specific consumption of 1945 kWh/kW/year as used for flat rate consumers. Accordingly, the connected load per consumer, the specific consumption and estimated sales for FY 11-12 are approved as under:

Table: 12-Agriculture (M) sales approved by the Commission for FY 2011-12 - JVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total Connected load (KW)	Specific consumption (kWh/kW/year)	Consumption (sales) (MU)
Existing	329045	5.91	1944779	1883	3662
Add: converted	7035	6.50	22863.75	1945	44
New	49896	7.94	198087.1	1883	373
Total	385976				4080

Table: 13-Agriculture (M) sales approved by the Commission for FY 2011-12 - AVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total Connected load (KW)	Specific consumption (kWh/kW/year)	Consumption (sales) (MU)
Existing	268837	6.09	1638238	1475	2416
Add: converted	2602	8.94	11633.32	1945	23
New	18228	6.50	59241	1475	87
Total	289667				2526

Table: 14-Agriculture (M) sales approved by the Commission for FY 2011-12 - JdVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total Connected load (KW)	Specific consumption (kWh/kW/year)	Consumption (sales) (MU)
Existing	177472	18.48	3278834	1429	4686
Add: converted	762	16.67	6350	1945	12
New	23631	28.00	330834	1429	473
Total	201865				5171

5.5.3. Energy Sales for Agriculture Flat Rate (FR) Consumers

Connected Load per Consumer for Flat Rate Consumers

- (1). Commission has observed that Discoms have projected different average connected load per consumer for existing consumers and converted consumers which is quite unlikely. Commission has, therefore, considered the same average connected load for both existing as well as converted consumers. As already explained at para 5.5.2(2), Commission has worked out the average connected load per consumer for FY 09-10 and has retained the same for FY 11-12 considering the fact that no new connections are released in this category. The converted consumers have been considered to be in the flat category on an average for a period of six months during the year. The numbers of consumers as submitted by Discoms have been considered for estimation of sales.

Specific Consumption for Flat Rate Consumers

- (2). As has been discussed earlier, the Commission is not agreeable to allow increase in specific consumption of Agriculture Flat Rate consumers. Accordingly, specific consumption of 1945 kWh/kW/year, as approved by the Commission in MYT order dated 15.4.2010, has been taken for working out consumption of this category of consumers.
- (3). The energy sales approved by the Commission for Agriculture (FR) category for the three Discoms for FY 2011-12 have been provided in the tables below:

Table: 15-Agriculture (FR) sales approved by the Commission for FY 2011-12 - JVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total connected load (KW)	Specific consumption kWh/kW/year	Consumption (sales) (MU)
Existing	49207	6.5	319846	1945	622
Less: converted	7035	6.5	22864	1945	44
Total	42172			1945	578

Table: 16-Agriculture (FR) sales approved by the Commission for FY 2011-12 - AVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total Connected load (KW)	Specific consumption (kWh/kW/year)	Consumption (sales) (MU)
Existing	71167	8.94	636363	1945	1238
Less: converted	2602	8.94	11633	1945	23
Total	68565			1945	1215

Table: 17 -Agriculture (FR) sales approved by the Commission for FY 2011-12 -JdVVNL

Particulars	Consumers (Number)	Connected load per consumer (KW)	Total connected load (KW)	Specific consumption kWh/kW/year	Consumption (sales) (MU)
Existing	44147	16.67	735828	1945	1431
Less: converted	762	16.67	6350	1945	12
Total	43385			1945	1419

5.6. Energy Sales as approved by the Commission for all categories

- 5.6.1. Based on the adopted growth rates discussed in the preceding paras and Agriculture sales as worked out on the basis of connected load and accepted specific consumption, the energy sales for Discoms are being approved as under:

Table: 18-Energy Sales approved by the Commission for Discoms for FY 2011-12 (MU)

Consumer Category	JVVNL	AVVNL	JdVVNL	Total
Domestic	3697	2114	2007	7817
Non-Domestic	1117	497	505	2119
Public Street Light	99	47	164	310
Agriculture (Metered)	4080	2526	5171	11776
Agriculture (Flat)	578	1215	1419	3212
Small Industry	268	240	222	729
Medium Industry	651	638	451	1741
Large Industry	4046	2191	1055	7292
Public Water Works (S)	240	216	267	723
Public Water Works (M)	26	31	111	168
Public Water Works (L)	130	137	394	660
Mixed Load	533	363	605	1501
Electric Traction	409	0	0	409
Total Sales	15874	10214	12370	38458

6. Distribution and Transmission Losses

6.1. Distribution Loss

6.1.1. Petitioners' Submission

- (1). Discoms have submitted that the feeder renovation program has helped them in reducing the losses from the beginning of the FY 2009-10.
- (2). JVVNL has submitted that the actual distribution losses for FY 2010-11 and FY 2011-12 for JVVNL is expected to be similar to the distribution loss trajectory approved by the Commission in its MYT Order. It has, accordingly, proposed distribution losses of 20.50% and 19.00% for FY 2010-11 and FY 2011-12 in line with what stands approved by the Commission in the MYT order.
- (3). AVVNL has submitted that the distribution losses for FY 2010-11 and FY 2011-12 are expected to be lower than that approved by the Commission in its MYT Order dated 15.04.10. It has proposed distribution losses of 24% for FY 2010-11 and 21% for FY 2011-12, compared to distribution losses of 27% and 25% as approved by Commission for respective years in the MYT order.

- (4). JdVVNL has submitted that the actual distribution losses of the licensee for FY 2010-11 is estimated to be lower than that approved by the Commission in the MYT order. It has considered distribution loss of 21% for FY 2010-11 as against the Commission's approved loss of 23% and loss of 19% as against 21% approved by the Commission for FY 2011-12 in the MYT order.

Table: 19-Distribution Losses for 2011-12 – Petitioners' Submission

Name of Discom	Losses as per MYT order	Losses Proposed
JVVNL	19.00%	19.00%
AVVNL	25.00%	21.00%
JdVVNL	21.00%	19.00%

6.1.2. Commission's Analysis

- (1). For FY 2011 -12, the Commission has accepted the distribution losses as proposed by Jaipur Discom, which is at the same level as approved earlier by the Commission in MYT order. Ajmer and Jodhpur Discoms have proposed lower distribution losses for FY 2011-12 as compared to that approved in the MYT order dated 15.04.10. Commission has accepted the projections of distribution losses of Ajmer and Jodhpur Discoms for FY 2011-12 as reduction in losses is in the consumer's interest. The distribution loss target as approved by the Commission for FY-11-12 is as under:

Table: 20-Distribution Losses for 2011-12

Name of Discom	Losses Proposed by Discoms	Losses Approved by Commission
JVVNL	19.00%	19.00%
AVVNL	21.00%	21.00%
JdVVNL	19.00%	19.00%

6.2. Transmission Losses

6.2.1. Petitioners' Submission

Discoms have submitted that in the past 52 weeks actual inter-state losses of 3.66% and intra-state losses of 4.40% have been assumed for computing the availability from various generating stations.

6.2.2. Commission's Analysis

As regards intra-state transmission losses, the Commission has adopted transmission loss of 4.30%, which is the loss approved by the Commission vide its order dated 1.8.2009 as against the loss of 4.40% considered by Discoms. However, the transmission loss outside the State has been taken to be same as proposed by Discoms.

7. Energy Requirement as approved vis-à-vis petitioners' submission

- 7.1. On the basis of the sales, distribution and transmission losses discussed above, Discoms have proposed energy requirement for FY 2011-12 as

proposed by Discoms and what is being approved is given in the following table:

Table: 21- Energy Requirement for FY 2011-12

Particulars	JVNL		AVVNL		JdVVNL		Total	
	Proposed	Approved	Proposed	Approved	Proposed	Approved	Proposed	Approved
Energy Sales to Consumers (MU)	17212	15874	10802	10214	13974	12370	41988	38458
Distribution Loss (%)	19.00%	19.00%	21.00%	21.00%	19.00%	19.00%	N.A.	N.A.
Add: Distribution Loss (MU)	4037	3724	2871	2715	3278	2902	10186	9340
Energy Required at Discoms periphery (MUs)	21249	19598	13673	12929	17252	15271	52174	47798
Intra-State Transmission Losses (%)	4.40%	4.30%	4.40%	4.30%	4.40%	4.30%	4.40%	4.30%
Add: Intra-State Transmission Losses (MU)	932	881	721	581	748	686	2401	2148
Energy Requirement at Transco periphery	22181	20479	14394	13510	18000	15957	54575	49946
Inter-State Transmission Losses (%)	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%	3.66%
Add: Inter-States Transmission Loss	264	333	239	150	239	244	742	727
Gross Energy Requirement (MU)	22447	20811	14634	13660	18239	16201	55320	50672

8. Power Purchase Cost

8.1. Petitioners' Submission

- 8.1.1. Discoms have submitted that power purchase quantum and cost have been higher than that approved in the MYT order for FY 2009-10. Power purchase has been higher due to higher sales resulting in power purchase through short term and bilateral sources. They have further submitted that the variations on account of power purchase expenses are beyond the control of Discoms.
- 8.1.2. Discoms have projected requirement of power purchase for 2011-12 considering the sales projection and loss projection, as submitted in their petition. The power requirement has been planned to be met through power purchase from state generating units, allocation from shared projects, purchase from renewable sources, latest allocation of power from the central generating stations, entitlement from new generating stations and purchase through short term sources.
- 8.1.3. Discoms have submitted that they have made the following assumptions while projecting the power purchase cost for FY 2011-12:
- Generation from all power plants is to be shared amongst JVNL, AVVNL and JdVVNL in the ratio 38:31:31.
 - The power purchase cost from various generating stations as available has been considered.

- Power availability from state generating units for FY 2011-12 has been considered based on availability of power during FY 2009-10.
- Fixed cost for FY 2010-11 and FY 2011-12 has been projected considering a 5% escalation per annum over the fixed cost for FY 2009-10.
- The latest allocation of power from the Central Generating Stations including, coal, gas and nuclear power stations has been considered as per CEA's letter dated 30 November, 2010.
- The power availability from wind, solar and bio-mass stations have been considered as per the Commission's MYT Order dt. 15.4.10 for the respective years.

8.1.4. Summary of the power purchase quantum and cost as submitted by Discoms is as under:

Table: 22-Power Purchase (MU) and Cost (Rs. Cr.) for FY 2011-12 – submitted by Discoms

Stations	Jaipur Discom		Ajmer Discom		Jodhpur Discom	
	Units	Cost	Units	Cost	Units	Cost
NTPC	3301	854	2693	697	2693	697
NHPC	659	187	538	152	538	152
NPCIL	1041	274	849	223	849	223
RVUN/ State Generation	12544	4137	10233	3375	10233	3375
Shared Projects	1516	148	1237	121	1237	121
Others	523	185	278	101	278	101
Non-conventional & CPP	966	403	788	328	788	328
Bilateral/ Trading	905	452	0	0	632	316
Inter Discom Purchase	991	297	-1983	-595	991	297
Total	22447	6937	14633	4404	18239	5612

8.2. Commission's Analysis

- 8.2.1. While estimating energy availability and power purchase cost for 2011-12 , the Commission has kept in view the generation from state generating units based on their latest tariff petitions , available with the Commission instead of power availability based on what was the position during FY 09-10 assumed by Discoms in their petition. Similarly, latest position of allocation as well as availability from Central Generating Stations has been taken into consideration. Likewise, the position as per latest tariff orders/petitions has been considered in working out power purchase cost, as discussed later in the order.
- 8.2.2. For estimating the power purchase cost, the Commission has considered availability from various sources for the State as a whole. For working out Discom wise availability and cost, the allocation of power to JVVNL, AVVNL and JdVVNL from all generating stations has been considered in the ratio of 38%, 31% and 31% respectively, except that the 100% allocation of RFF share has been considered for JVVNL.

8.3. Energy Availability and Cost for FY11-12

RVUN Stations

- a) For existing RVUN generating stations including KTPS-VII & STPS-VI, the Commission has considered the PLF and energy availability as per the Tariff petition for FY 2011-12 of RVUN generation stations dated 30.11.2010. The fixed charge for KTPS-VII and STPS-VI have been considered for FY 2011-12 as approved by the Commission for FY 2011-12 vide Tariff Order dated 27.5.2010. For other stations, fixed charges have been considered for FY 2011-12 as approved by the Commission for FY 2010-11 vide Tariff Order dated 16.11.2010. The variable charges have been considered as approved by the Commission for FY 2010-11 in the Tariff Order dated 27.5.2010 and 16.11.2010 and the same has been escalated by 5% to arrive at the variable charge for FY 2011-12. For Mahi, primary energy charges have been considered same as that for FY-11.
- b) The energy available and cost from RVUN's generating stations as considered by the Commission have been shown in the table below :

Table: 23-PLF, Energy Availability (MU) and cost (Rs. Cr.)- RVUN stations for FY 2011-12

Station	PLF	Energy Availability	Cost
KTPS	87.22%	7264	1787
STPS	82%	8193	2641
KTPS – VII	87.22%	1355	417
STPS - VI	82%	1639	606
RGTPS	70%	646	160
Dholpur GTPP	80%	2250	742
MahilHydel Station (Mahi)	-	118	17.09
Mini and Micro Hydel Generating Stations (MMH)	-	2	1.15

Incentive for KTPS

- c) As per the latest petition of RVUN for FY-11-12 , only KTPS is eligible for incentive. Accordingly, the Commission has calculated incentive for KTPS based on approved PLF and target PLF for FY 2011-12, which works out to be Rs.14.18 Crore.

Chabbra

- d) It has been observed that Discoms have considered availability for the first 4 units of Chabbra. Since units 3 & 4 will not start production in FY 2011-12, no availability has been considered by the Commission from these units. The energy availability and total cost for FY 2011-12 for the 1st unit have been taken as approved by the Commission vide its order dated 13.06.11. For Chabbra unit II, energy availability and fixed charges have been considered on prorata basis considering operation for 8 months. The Variable charge for this plant has been considered as per that approved for Chabbra unit I. Accordingly, the energy available and cost have been shown in the table below.

Table 24-Energy Availability (MU) and cost (Rs. Cr.)-Chabbra for FY 2011-12

Station	Energy Availability	Total Cost
Chabbra-1	1599	445
Chabbra-2	1066	296

Lignite based projects

- e) Discoms in their petition have considered availability from 4 Lignite based plants namely : Giral-1, Giral-2 belonging to RVUN , Barsingsar belonging to NLC and that of Rajwest Power Ltd. . Discoms have considered energy availability from the first two units of Giral during the entire period of FY 2011-12 whereas the availability is highly uncertain from Giral-1 which is yet to achieve COD . For Barsingsar, Discoms have taken availability for full year whereas the plant is yet to achieve COD. For Raj west Power, Discoms in their submission have projected energy availability from its all 8 units. However, the energy availability is possible only from unit-1 and 2.
- f) Commission has further observed that so far, no Lignite based project has achieved COD except Giral-2 and tariff for none of the projects has been determined so far. In absence of any tariff, the Commission has estimated the Cost of Lignite based power plants equivalent to overall pooled cost of power purchase. Accordingly, the Commission has adopted lump sum availability and cost from lignite based power plants as under:

Table 25-Energy Availability (MU) and cost (Rs. Cr.)- Lignite based plants for FY 2011-12

Energy Availability	Total Cost
2500	728

Nuclear Power Corporation of India Ltd. (NPCIL)

- g) Actual Power purchase quantum for all the NPCIL plants provided by the 3 Discoms for FY 2010-11 has been considered for FY 2011-12. The variable charge per unit has been computed by the Commission for FY 2011-12 by escalating the actual variable charges for FY 2010-11 by 5%. Further, the Commission has not considered any energy availability from the RAPP –I, as the plant is not in operation since long.
- h) The energy availability and total power purchase cost for NPC plant have been summarized in the table below

Table: 26-Energy Availability (MU) and cost (Rs. Cr.)- NPC for FY 2011-12

Energy Availability	Total Cost
3089	904

Partnership projects (PP)

- i) Total Power purchase quantum and cost for partnership projects has been

considered as per petition of RVPN for FY 2011-12. Energy availability and total power purchase cost for partnership projects have been summarized in the table below

Table: 27- Energy Availability (MU) and cost (Rs. Cr.)- Partnership Projects for FY 2011-12

Energy Availability	Total Cost
3178	123

NTPC, NHPC & Others

- j) The actual power purchase quantum and cost for existing plants of NTPC, NHPC & Others sources for FY 2010-11 have been used for estimation of power purchase cost from these sources.
- k) The quantum of power purchase from these sources for FY 11-12 has been retained at the same level as in FY 10-11. To account for cost escalation, 5% increase has been allowed in variable component of FY 2010-11 to estimate the likely power cost from these sources for FY 2011-12.
- l) For new plants the Commission has considered availability of plant as anticipated by SLDC, whereas energy availability and cost is estimated based on submission of Discoms. For CPP, power purchase is allowed as per submission of Discoms.
- m) The energy availability and total power purchase cost for NTPC, NHPC, Tehri, SJVNL & other plants have been summarized in the table below.

Table: 28 - Energy Availability (MU) and cost (Rs. Cr.)- NTPC & NHPC and Other Generating Stations for FY 2011-12

Plants	Energy Availability	Total Cost
NTPC Stations	7093	1806
NHPC Stations	1450	362
Nathpa-Jhakri	566	163
Tehri Hydro	250.61	122
Tala	53.13	10
RFF	182.5	64
CPP	40	12

Non-Conventional Energy Sources

a. Solar

- n) Solar power during the year is expected to be available under different programmes namely; GBI Scheme (2008) and National Solar Mission. The tariff payable by Discoms under GBI Scheme is Rs. 3.78/kWh with Rs. 12.00/kWh coming as subsidy from the Central Govt. Similarly, net rate for roof top and small solar projects under National Solar Mission is Rs. 3.08/kWh. The weighted average cost under Migration Scheme and the new projects under NSM along with bundled conventional power comes to Rs. 5.58/kWh and Rs. 4.43/kWh respectively based on likely available

energy under these schemes. It is estimated that 276 MU, including bundled conventional power, at an average purchase price of RS. 4.81/kWh would be available to Discoms in the year under consideration .

b. Wind

- o) The power purchase from Wind Power Projects for FY 2011-12 has been allowed by the Commission by taking into consideration the actual availability of 1376.05 MU in 2010-11 and the fact that the approximate installed capacity in FY 2010-11 was 1521 MW which is likely to increase to 1966 MW by end of FY 2011-12, the Commission estimates the availability from wind power as 1778 MU at an average purchase price of Rs. 4.00.

c. Biomass

- p) Power purchase quantum for biomass as submitted by the three Discoms for FY 2011-12 has been allowed. Some Biomass plants are getting tariff under Government policies and some under tariff determined by the Commission. Taking into consideration these rates, the Commission has considered the purchase from biomass at an estimated average price of Rs. 4.75 per unit. Accordingly, the total cost and availability for the three Discoms from non conventional sources has been summarized in the table below:

Table: 29 -Energy Availability (MU) and cost (Rs. Cr.)- Solar, wind & biomass for FY 2011-12

Plants	Energy Availability	Total Cost
Solar	276	133
Wind	1778	711
Bio mass	464	220
Total	2518	1064

Short term Sources

- q) After considering the energy available to Discoms based on their respective allocated share, the Commission has estimated certain surplus in case of Ajmer Discom and shortfall in case of JVVNL and JdVVNL in FY 2011-12 as indicated in the annexure-4 and also in the table given in following sub para for total power purchase cost . Commission has considered that this shortfall will be met by procuring additional quantum of power through Intra-State purchase from Ajmer at the rate proposed by the petitioner i.e. Rs 3.00/KWh and the remaining energy deficit is estimated to be met by power purchase through short term sources including UI which have been estimated for calculating ARR at Rs. 4.00/unit.

8.4. Total Power Purchase Cost

- 8.4.1. Based on the above, the source wise and Discom wise breakup of power purchase quantum and cost for 2011-12 as considered by the Commission is provided in annexure-4 to the order. The summary of the power purchase cost details for the 3 Discoms is given in the table below:

Table: 30-Energy Availability (MU) and cost (Rs. Cr.) for FY 2011-12

Stations	JVNL		AVNL		JdVNL		Total	
	Units	Cost	Units	Cost	Units	Cost	Units	Cost
NTPC	2695	686	2199	560	2199	560	7093	1806
NHPC	551	138	449	112	449	112	1449	362
NPCIL	1174	343	957	280	957	280	3088	903
RVUN/ State Generation	9169	2708	7480	2209	7480	2209	24129	7126
Shared Projects	1208	47	985	38	985	38	3178	123
Others	513	176	270	92	270	92	1053	360
Lignite Based Power Plants	950	276	775	226	775	226	2500	728
Non-conventional & CPP	972	409	793	334	793	334	2558	1077
Bilateral/ Trading	3428	1371	0	0	2195	878	5623	2249
Inter Discom Purchase	152	45	-249	-75	97	29	0	0
Total	20811	6200	13660	3775	16201	4757	50672	14732

9. Transmission Charges

9.1. Petitioners' Submission

- 9.1.1. Discoms have submitted that the Intra-State transmission charges of PGCIL, RVPN and SLDC charges for FY 2011-12 have been taken as per the approved charges in the MYT order dated 15.4.10. The detail of the transmission and SLDC charges submitted by Discoms have been summarized in the table below:

Table: 31- Transmission Charges & SLDC Charges for 2011-12 (Rs Crore)

Particulars	As per MYT Order			Discoms' submission		
	JVNL	AVNL	JdVNL	JVNL	AVNL	JdVNL
PGCIL Charges	74.01	60.38	60.38	74.01	60.38	60.38
RVPN Charges	470.23	383.61	383.61	470.23	383.61	383.61
SLDC Charges	12.78	10.43	10.43	12.78	10.43	10.43
Total Transmission Charges	557.03	454.42	454.42	557.03	454.42	454.42

9.2. Commission's Analysis

- (1). Commission has observed that it had approved Transmission, PGCIL and SLDC charges for FY 2011-12 in the MYT order dated 15.4.2010 based on the information furnished by the respective Discoms in their petition filed in 2009. The same figures submitted by Discoms in their current petitions cannot be accepted as they have changed over time.
- (2). Discoms have subsequently provided the details of payments made to PGCIL during FY 2010-11 which stand at Rs. 128.02 Crore, 109.57 Crore and 107.04 Crore respectively for JVNL, AVNL and JdVNL. These are substantially higher than the submission of Discoms made in the petition and the Commission has therefore considered the actual amount paid in FY 2010-11 as PGCIL charges for FY 2011-12 without any escalation.

- (3). Regarding Transmission charges RVPN had filed a petition for determination of transmission charges and SLDC charges in March 2011 wherein they proposed a steep hike in transmission charges and the Commission vide its order dated 31.3.11 approved an interim tariff for 2011-12 as Rs. 152/kW/month as transmission tariff, based on which the total transmission charges works out to be Rs. 1628.28 Crore. Commission vide same order also approved an interim tariff of Rs. 3.08 Crore per month i.e. Rs. 36.96 Crore per annum towards SLDC charges. Both these charges have been considered for FY 2011-12.
- (4). Commission has considered allocation of these charges in the ratio of 38:31:31 for Jaipur, Ajmer and Jodhpur Discoms, respectively. The transmission & SLDC charges ,accordingly, being approved by the Commission for FY 2011-12 are as under:

Table: 32-Transmission Charges approved by the Commission for FY 2011-12 (Rs Crore)

Particulars	JVVNL	AVVNL	JdVVNL	Total
PGCIL Charges	128	110	107	345
RVPN Charges	619	505	505	1628
SLDC Charges	14	11	11	37
Total Transmission Charges	761	626	623	2010

10. Operation and Maintenance Expenses

10.1. Petitioners' Submission

Discoms have estimated O&M expenses based on the O&M norms specified in RERC Tariff Regulations, 2009. The O&M expenses projected by Discoms for FY 2011-12 have been summarized below:

Table: 33-Operation and Maintenance Expenses for FY 2011-12 (Rs crore)

Particulars	JVVNL's submission	AVVNL's submission	JdVVNL's submission	Total
Employee Costs	500	314	406	1220
Administrative & General Costs	58	36	47	141
Repairs & Maintenance Costs	115	72	94	281
Total O&M Costs	673	423	547	1643
Expenses to be Capitalized	239	18	93	350
Net O&M Costs charged to revenue	434	404	454	1293

10.2. Commission's Analysis

10.2.1. Commission has allowed O&M expenses in accordance with Regulation 119 of RERC Tariff Regulations, 2009:

10.2.2. Commission has considered sales allowed for FY 2011-12 for projecting normative O&M expenses. O&M expenses capitalized have been considered in the same ratio as projected by Discoms. O&M expense

approved by the Commission for Discoms for FY 2011-12 has been summarized below:

Table: 34-Operation and Maintenance Expenses approved by the Commission for FY 2011-12 (Rs Crore)

Particulars	Approved JVVNL	Approved AVVNL	Approved JdVVNL	Total
Employee Costs	461	297	359	1117
Administrative & General Costs	53	34	41	128
Repairs & Maintenance Costs	106	68	83	257
Total O&M Costs	621	400	484	1505
Expenses to be Capitalized	221	17	82	320
Net O&M Costs charged to revenue	400	382	402	1184

11. Terminal Benefit

11.1. Petitioners' Submission

Discoms have submitted that they have projected terminal benefit liability for FY 09-10 to FY 11-12 based on the actuarial valuation report by valuer which has been tabulated below:

Table: 35-Terminal Benefit for FY 2011-12 (Rs crore)

Particulars	JVVNL's submission			AVVNL's submission			JdVVNL's submission		
	2009-10	2010-11	2011-12	2009-10	2010-11	2011-12	2009-10	2010-11	2011-12
Terminal Benefit submitted	398	413	429	352	361	375	202	209	218

11.2. Commission's Analysis

- 11.2.1. Discoms have claimed this liability for the first time with retrospective effect from FY 2009-10. The actuary report shows that the unfunded liability is in respect of Discoms' employees only. In case of other Companies, the Commission has taken a view that the unfunded terminal benefit liability claimed in the petition would be spread during the present control period at an appropriate rate.
- 11.2.2. Accordingly, the Commission has considered that the 50% of total terminal liability up to FY 2011-12 claimed in the petition would be spread equally during the remaining period of present control period i.e. from FY 11-12 to FY 13-14. Accordingly, liability allowed by the Commission for FY 2011-12 is as under:

Table: 36-Terminal Benefit approved by the Commission for FY 2011-12 – JVVNL (Rs Crore)

Particulars	JVVNL			AVVNL			JdVVNL		
	2009-10	2010-11	2011-12	2009-10	2010-11	2011-12	2009-10	2010-11	2011-12
Terminal Benefit submitted	398	413	429	352	361	375	202	209	218
Approved Terminal Benefit	0	0	207	0	0	181	0	0	105

12. Interest and Finance charges and interest on working capital

12.1. Capital Expenditure and Capitalization

12.2. Petitioners' Submission

Capital expenditure and capitalization are two important variables that influence various parameters such as gross fixed assets, depreciation, interest on long term debt, and return on equity. Discoms have submitted that they are executing some new schemes i.e. Mukhya Mantri Sab Ke Liye Vidhyut Yojna (MMSLVY), Gram Panchyat Vidhyut Vitran Yojana (GPVVY), Rajiv Gandhi Gramin Vidhyutikaran Yojna (RGGVY) and other schemes under R-APDRP. Huge capital expenditure shall be made in the execution of these schemes. Under MMSLVY, 11 KV lines will be extended & single phase transformers will be installed for releasing domestic connection to group of consumer not situated in main Abadi area of the villages. Under GPVVY scheme one substation has been proposed between each three gram panchayats, due to this the length and loading of 11 KV feeders will be reduced which in turn would result in reduction in losses and increase in reliability of supply. Discoms in their submission projected total capital expenditure and capitalisation as summarized below:

Table: 37-Projected capital expenditure and capitalization for FY 2011-12 (Rs Crore)

Particulars	JVVNL's submission	AVVNL's submission	JdVVNL's submission	Total
Capital Expenditure	1250	1059	1250	3559
Capitalization	1314	1099	1300	3713

12.3. Commission's Analysis

12.3.1. Commission has observed that the capital expenditure and the capitalization submitted by Discoms for FY 2011-12 is much higher than submitted in the MYT petition and subsequently allowed by the Commission in order dated 15.4.2010.

12.3.2. Commission agrees that due to execution of new schemes, the capital expenditure would increase. However, as investment plan has not yet been approved by the Commission nor true up of past years have been filed by Discoms, only 80% of the proposed capitalisation is being considered for ARR. Accordingly, the capitalisation is being allowed as under:

Table: 38-Projected capitalization approved by the Commission for FY 2011-12 (Rs Crore)

Particulars	Approved JVNL	Approved AVVNL	Approved JdVVNL	Total
Capitalization	1051	879	1040	2970

12.4. Interest on loans, Lease Rentals and Finance charges

12.4.1. Petitioners' Submission

- (1). Discoms have projected interest on long-term loan based on the past long-term loans and future requirements of Capital expenditure. Discoms have submitted that they have not been able to recover the full cost from the tariff in the past which has resulted in large revenue deficit. Therefore, Discoms had to borrow short-term loans for meeting this revenue deficit.
- (2). The Interest Charges and Finance Charges for FY 2011-12 have been summarized in the table below:

Table: 39- Interest and Financing charges for FY 2011-12 (Rs crore)

Description	JVVNL's submission	AVVNL's submission	JdVVNL's submission
Interest Charges	1422	1777	1251
Interest Expenses Capitalized	11	574	50
Total Interest & Finance Charges	1411	1203	1201

- (3). Discoms have further submitted that the annual repayments would be more than the depreciation allowed annually.

12.4.2. Commission's Analysis

- (1). The interest and finance charges with respect to the assets capitalized have been calculated by the Commission considering the following:
 - a) The closing balance of long-term loans for FY 2010-11 allowed in the MYT Order dated 15.04.2010, which incorporates impact of truing up for the past years, has been considered by the Commission as the opening balance of FY 2011-12 with a view to maintain the effect of truing up.
 - b) The long-term loans required for capitalization during the year have been reduced by the amount of consumer contribution, capital grants and equity received during the year.
 - c) Repayment for FY 2011-12 has been pegged at the depreciation allowed by the Commission for FY 2011-12 as prescribed in the RERC Tariff Regulations, 2009.
 - d) Capitalization for FY 2011-12 has been considered as discussed in foregoing paras.
 - e) Equity, consumer contribution and grants have been considered as submitted by the three Discoms in the MYT Formats for FY 2011-12.

- f) Weighted average interest rate has been considered for FY 11-12.
- g) Finance Charges have been allowed as sought by the three Discoms.
- h) Security deposit has been considered as submitted by Discoms in their working capital format. Interest on security deposit has been allowed as per the prevailing bank rate.
- i) Interest capitalized has been taken as per the ratio of interest capitalized and total gross interest charges submitted by Discoms.
- (2). Based on the above, the approved interest and finance charges (with respect to the assets capitalized) approved for FY 2011-12 for the three Discoms have been summarized in the tables below:

Table: 40-Interest and Finance Charges approved by the Commission for FY 2011-12 (Rs crore)

Particulars	Approved JVVNL	Approved AVVNL	Approved JdVVNL	Total
Opening balance of LTL	3710	2316	2018	8044
Capitalisation	1051	879	1040	2970
Capital expenditure financed by Equity	200	160	250	610
Capital expenditure financed by Consumer Contribution and grants	300	209	280	789
Receipt of LTL for Capital expenditure	551	510	510	1571
Principal Repayment	244	119	131	494
Closing balance of LTL	4017	2708	2397	9122
Average LTL	3863	2512	2208	8583
Average Interest rate of LTL (%)	10.79%	10.55%	9.75%	
Interest Charges on LTL	417	265	215	897
Interest on Security Deposit	30	23	18	70
Finance Charges & Lease Rental	9	-	-	9
Gross Interest Charges	455	288	233	976
Interest Expenses Capitalized	4	93	9	106
Total Interest & Financing Charges	452	195	224	871

12.4.3. Additional loan to meet revenue gap of past years

- (1). Revenue gap of Discoms has accumulated over the years on account of increase in cost of supply on the one hand and the inability of licensees to get the cost increase adjusted through tariff revision or else through additional subsidy from the State Govt. The uncovered revenue deficit upto 31-3-2009 assessed as Rs. 15,540 Cr. in the MYT order, has increased further in FY 09-10 and FY 10-11. During the hearing in MYT petition, it was

informed by Discoms that the accumulated deficit as on 31-3-2009 has been decided to be liquidated through Govt. assistance over a period of 23 years. Discoms have, accordingly, entered into an MoU with the Govt. The said deficit further grew in FY 09-10 and 10-11 which has been indicated by Discoms to be much higher than the unfunded gap assessed in the MYT order.

- (2). Discoms have taken recourse to heavy borrowing to meet the deficit with a view to sustain their operations. Commission is inclined to allow interest on loan taken on account of said deficit in their ARR but only partly. The onus lies on the licensees to manage their affairs within the means or else they ought to have taken steps to get tariff adjusted or obtain additional subsidy from the Govt. Uncontrolled borrowing to bridge the revenue deficit has a cascading effect and increases consumers burden. Also, ARR for FY 09-10 and FY 10-11 has not been tried up yet. Therefore, loan against revenue deficit only to the extent of the unfunded gap assessed in MYT order, is being allowed for ARR 11-12, which is much lower than gap of Rs. 21579 Cr. based on the accounts of Discoms for FY 09-10 and projections made in the petition for FY 10-11. Also unfunded gap of only FY 09-10 and FY 10-11 is being taken into consideration on account of Govt. decision to liquidate accumulated deficit as on 31-3-2009.
- (3). Accordingly, the unfunded gap being admitted for the purpose of loan is as under:

Table : 41- Revenue gap at existing tariff (as per MYT)

Licensee	Unfunded Gap (Rs. Crore)		
	FY 10	FY 11	Total
JVVNL	519	396	915
AVVNL	1112	1353	2465
JdVVNL	1109	1322	2431
Grand Total	2740	3071	5811

- (4). The additional interest allowed on above amount and the total interest charges for all Discoms for FY 2011-12 have been summed up in the table give below:

Table: 42- Total Interest charges for FY 2011-12 (Rs. Crore)

Particulars	Approved JVVNL	Approved AVVNL	Approved JdVVNL	Total
Additional loan to meet revenue gap	915	2465	2431	5810
Average Interest rate (%)	10.79%	10.55%	9.75%	
Interest liability	99	260	237	596
Total Interest (for capitalized assets) and finance charges	452	195	224	871
Total Interest and finance charges for FY 2011-12	550	455	461	1466

12.5. Interest on Working Capital

12.5.1. Petitioners' Submission

Discoms have submitted that working capital is required to meet their operational requirements and to fund their respective revenue deficits. Discoms estimated their working capital requirement for FY 2011-12 as per the RERC Tariff Regulations and the same has been tabulated below:

Table: 43- Interest on Working Capital for FY 2011-12 (Rs. Crore)

Description	JVVNL's submission	AVVNL's submission	JdVVNL's submission	Total
O&M expenses (as per norms)	72	65	56	193
Maintenance Spare (as per norms)	129	117	101	347
Receivables (as per norms)	1,263	874	1020	3157
Less:				
Security deposit of Consumers	495	381	297	1173
Total Working Capital	969	676	880	2525
Interest Rate (%)	12.25%	12.25%	12.25%	
Interest on Working Capital	119	83	108	310

12.5.2. Commission's Analysis

- (1). The normative interest on working capital has been calculated by the Commission considering the following:
 - i. Norms specified in RERC Tariff Regulations, 2009.
 - ii. O&M expenses approved by the Commission for FY 2011-12, have been considered for the purpose of calculation of working capital requirement.
 - iii. Receivables have been considered based on the revenue from sale of power approved by the Commission for FY 2010-11 and FY 2011-12
 - iv. Security deposit submitted by Discoms has been approved by the Commission for FY 2011-12.
 - v. The rate of interest on working capital considered by Discoms is higher than the weighted average interest rate computed from Discoms' submissions in Form No. 3.6 with respect to short term loans for FY 2011-12. Commission has therefore considered the rate of interest as per Form No. 3.6 of the petition.
 - vi. Accordingly, the interest on working capital approved by the Commission is as under:

Table: 44-Interest on Working Capital approved by the Commission for FY 2011-12 (Rs crore)

Description	Approved JVVNL	Approved AVVNL	Approved JdVVNL	Total
O&M expenses (as per norms)	33	32	33	98
Maintenance Spare (as per norms)	60	57	60	177
Receivables (as per norms)	1,042	684	806	2,532
Less:				
Security deposit of Consumers	495	381	297	1173
Total Working Capital	640	392	603	1635
Interest Rate (%)	11.01%	10.99%	9.51%	
Interest on Working Capital	70	43	57	170

13. Depreciation

13.1. Petitioners' Submission

Discoms have submitted that depreciation for FY 2011-12 has been projected by applying applicable depreciation rates on the opening Gross Fixed Assets & addition during the year. The submission of the three Discoms with respect to depreciation has been tabulated below:

Table: 45-Depreciation for FY 2011-12 (Rs. crore)

Particulars	JVVNL's submission	AVVNL's submission	JdVVNL's submission
Depreciation	319	185	204

13.2. Commission's Analysis

- 13.2.1. Commission has allowed depreciation based on the following consideration:
- The closing balance of depreciable asset for FY 2010-11 allowed in the MYT order dated 15.04.2010 which incorporates the impact of truing up for the past years has been considered by the Commission as the opening balance for FY 2011-12 with a view to maintain the effect of truing up.
 - For FY 2011-12, capitalization has been considered as discussed earlier.
 - Depreciable assets for FY 2011-12 have been reduced by the amount of consumer contribution and capital grants received in the respective year.
 - Consumer contribution and grant submitted by the three Discoms respectively, for FY 2011-12 has been considered.
 - Average Depreciation rate has been calculated as a percentage of Depreciation during the year on the average of opening and closing

- GFA, as submitted by the three Discoms respectively, for FY 2011-12.
- f) Depreciation allowed by the Commission for each of the three Discoms has been tabulated below.

Table: 46-Depreciation allowed by the Commission for FY 2011-12 (Rs Crore)

Particulars	Approved JVVNL	Approved AVVNL	Approved JdVVNL	Total
Depreciable Assets at the beginning of the Year	6024	4655	3904	14583
Capitalisation during the year	1051	879	1040	2970
less Consumer Contribution and Capital Grants during the year	300	209	280	789
Depreciable Assets added during the Year	751	670	760	2181
Depreciable Assets at the end of the Year	6775	5325	4664	16764
Average Depreciable Assets during the Year	6400	4990	4284	15674
Average Depreciation Rate	3.82%	2.38%	3.05%	
Depreciation	244	119	131	494

14. Return on Equity

14.1. Petitioners' Submission

Discoms have submitted that since the licensees have not been able to recover the full cost from the tariffs as explained earlier and have to depend on the GoR subsidy to meet the revenue gap, the licensees have not proposed any return on equity for FY 11-12.

14.2. Commission's Observation

Since, Discoms have not sought Return on Equity; the Commission has also not considered Return on Equity.

15. Non-tariff Income

15.1. Petitioners' Submission

Discoms have projected Non-Tariff Income for FY 11-12, including interest on loan from staff, interest on fixed deposit, gain on sale of fixed assets, etc. as given below:

Table: 47-Non-Tariff Income for FY 2011-12 (Rs Crore)

Particulars	JVVNL	AVVNL	JdVVNL	Total
Total Non-tariff Income	99	112	89	300

15.2. Commission's Analysis

Commission observes that non-tariff income cannot be accurately estimated. Therefore, the Commission has no option but to accept the non-tariff Income for FY 2011-12 as projected by Discoms. The same therefore is being allowed.

16. Aggregate Revenue Requirement

16.1. Petitioners' Submission

The Annual Revenue Requirement for FY 2011-12 proposed by the three Discoms has been given in the table below:

Table: 48-Summary of ARR for FY 2011-12 – Discoms' submission (Rs Crore)

Particulars		2011-12			
		JVVNL	AVVNL	JdVVNL	Total
1	Power purchase	6937	4,404	5612	16,953
2	<i>Transmission Charges:</i>				
	(i)PGCIL	74	60	60	194
	(ii)RVPN	470	384	384	1,238
	(iii)SLDC	13	10	10	33
3	O&M Expense (Normative)	434	404	454	1,292
4	Terminal Benefit	429	375	218	1,022
5	Interest and Finance Charges	1411	1203	1201	3,815
6	Interest on Working Capital (Normative)	119	83	108	310
7	Depreciation	319	185	204	708
8	Other Expenses	0	0	0	0
9	Gross Aggregate Revenue Requirement	10206	7108	8251	25,565
10	Less: Non-Tariff Income	99	112	89	300
11	Less: Income from trading activity	0		0	0
12	Aggregate Revenue Requirement	10108	6995	8162	25,265

16.2. Commission's Approval

Commission has approved the ARR for FY 2011-12 based on the items of expenditure discussed in the preceding sections and the same has been summarized in the table below:

Table: 49 Summary of ARR for all the three Discoms for FY 2011-12 – Approved by Commission (Rs Crore)

Particulars		JVVNL	AVVNL	JdVVNL	Total
1	Power purchase	6200	3775	4757	14732
2	<i>Transmission Charges</i>				
	(i)PGCIL	128	110	107	345
	(ii)RVPN	619	505	505	1628
	(iii)SLDC	14	11	11	37
3	Operation and Maintenance Expenses	400	382	402	1184
4	Terminal Benefit	207	181	105	493
5	Interest and Finance Charges	550	455	461	1466
6	Interest on working Capital	70	43	57	170
7	Depreciation	244	119	131	494
8	Aggregate Revenue Requirement	8433	5581	6536	20550
9	Less: Non Tariff Income	99	112	89	300
10	Net Aggregate Revenue Requirement	8334	5469	6446	20249

16.3. Revenue and Revenue deficit based on existing tariff

16.3.1. Petitioners' Submission

16.3.2. Revenue on existing tariff

Discoms have projected the revenue from sale of power based on the projected energy sales for different consumer categories. The revenue for each category has been calculated on the basis of retail tariff approved by the Commission vide order dt. 17.12.2004.

16.3.3. Other Charges/Income

Discoms have proposed for other charges (including Electricity Duty) over and above non-tariff income for FY 2011-12 stating that it is presumed that Government will allow licensees to retain Electricity Duty collected on behalf of Government. Discoms have also proposed for other income (such as meter and transformer rent, theft & malpractice etc.). The other charges and other income submitted by Discoms have been summarized below:

Table: 50 -Other Charges and other income for FY 2011-12 (Rs crore)

Particular	JVVNL's submission	AVVNL's submission	JdVVNL's submission
Other Charges	360	246	224
Other Income	124	94	167

The revenue in FY 11-12 from existing tariff as per Discoms' submission is as under:

Table: 51- Revenue from existing tariff for FY 2011-12- Discoms' submission (Rs Crore)

Consumer Categories	FY 2011-12	FY 2011-12	FY 2011-12	FY 2011-12
	JVVNL	AVVNL	JdVVNL	Total
Domestic	1,263	771	737	2,771
Non- Domestic	590	258	263	1111
Public Street Lighting	37	17	59	113
Agriculture (M)	620	365	766	1751
Agriculture (F)	93	134	213	440
Small Industrial	117	100	93	310
Medium Industrial	295	272	206	773
HT- Large industrial	1,697	987	465	3,149
Public Water Works-Small	89	81	101	271
Public Water Works -Medium	11	13	45	69
Public Water Works -Large	54	59	166	279
Bulk Supply for Mixed Load	227	150	250	627
HT- Electric Traction – Railways	173	-	-	173
Total	5,265	3207	3,364	11,836
Other Charges *	360	246	224	830
Other Income**	124	94	167	385
Total	5,749	3,547	3,755	13,051

*It is presumed that Government will allow licensees to retain Electricity Duty collected on behalf of Government

**Revenue from meter & transformer rent, theft and malpractices, DPS and other income

16.4. Revenue Deficit

The revenue deficits submitted by Discoms for FY 2011-12 without tariff increase have been provided in the table below:

Table: 52-Revenue deficit/Surplus at existing tariff for FY 2011-12 (Rs Crore)

Particular	JVVNL	AVVNL	JdVVNL	Total
Aggregate Revenue Requirement	10108	6995	8162	25265
Revenue generation for Full Year at existing tariff (including other charges including ED & other income)	5749	3547	3755	13051
Revenue Deficit	4359	3448	4407	12214
Transitional Cash Support from GoR	152	124	124	400
Net Revenue Deficit	4207	3324	4283	11814

16.5. Commission's Analysis

- 16.5.1. Commission has calculated the revenue from existing tariff on the basis of approved consumer category wise energy sales by the Commission and retail tariff as approved by the Commission vide order dt. December 17, 2004. In their petition Discoms have shown Govt. subsidy Rs. 1.10/unit for BPL category, Rs. 0.25/unit for small Domestic, Rs. 0.20 unit for agriculture metered general category and Rs. 55/HP for agriculture flat general category at present tariff. Commission has worked out revenue at the tariff determined by it as Discoms are receiving the subsidy component from Government and balance from consumers i.e. revenue based on full tariff. Other income proposed by Discoms has been accepted. The estimated revenue at existing tariff for different consumer categories for all the three Discoms for FY 2011-12 has been summarized in the tables below:

Table: 53- Revenue from existing Tariff for FY 2011-12- Approved by the Commission (Rs Crore)

Consumer categories	JVVNL	AVVNL	JdVVNL	Total
Domestic	1,353	817	775	2,945
Non-Domestic	594	269	272	1,136
Public Street Light	39	19	61	119
Agriculture (Metered)	506	311	602	1419
Agriculture (Flat)	69	143	166	378
Small Industry	117	100	93	311
Medium Industry	295	272	206	772
Large Industry	1,697	987	465	3,149
Public Water Works (Small)	89	81	101	271
Public Water Works (Medium)	11	13	45	69
Public Water Works (Large)	54	59	166	279
Bulk Supply to Mixed Load	227	150	250	627
Electric Traction	173	-	-	173
Revenue from Tariff	5,224	3,220	3,204	11,648
Other income*	124	94	167	385
Total Income	5,348	3,314	3,371	12,033

*Revenue from meter & transformer rent, theft and malpractices, DPS and other income

- 16.5.2. Commission has observed that Discoms while working out revenue deficit have taken electricity duty as revenue, which is incorrect. E.D. is imposed by the State Government, therefore, the receipt and retention of the same by Discoms amounts to sub-vention/subsidy from the State Government. Commission has, accordingly, considered this as subsidy from the State Govt. along with other grants as shown by Discoms in their petition, while working out the net deficit.
- 16.5.3. Considering the ARR and Revenue at existing tariff as determined by the Commission and subsidy from Government & Transitional support as shown by Discoms in their petition, the revenue gap for all the three Discoms at the existing tariff works out as under:

Table: 54-Revenue deficit/Surplus at existing tariff for FY 2011-12 – Approved by the Commission (Rs Crore)

Particular	JVVNL	AVVNL	JdVVNL	Total
Aggregate Revenue Requirement	8334	5469	6446	20249
Revenue generation for Full Year at existing tariff (including other income)	5348	3314	3371	12033
Revenue Deficit	2986	2155	3075	8216
Support from Govt. including ED retention	366	251	228	845
Transitional Cash Support from GoR	152	124	124	400
Net Revenue Deficit	2468	1780	2723	6971

Note: The Govt. support of Rs. 1245 Crore (Rs. 845+Rs 400 Crore) is over and above the subsidy to be given by the State Government against tariff of specific consumer groups determined by Commission.

Section 4-Tariff proposals and approved tariff

17. Tariff proposals

- 17.1. As discussed in the foregoing paragraphs, even after taking the effect of improved Transmission & Distribution Losses, allowing of interest and other expenses on normative basis and accounting for the subsidy expected from the State Government, an uncovered gap of Rs. 2468, 1780 and 2723 crores would remain for JVVNL, AVVNL & JdVVNL respectively at existing tariff. This amounts to a deficit of Rs. 6971 Crore for all Discoms put together.
- 17.2. Discoms have proposed revision of tariff which would have led to an additional revenue of Rs. 3168 Crore for Discoms during 2011-12, as follows:

Table: 55-Expected additional revenue as proposed by Discoms for FY 2011-12 (Rs. Crore)

Particulars	Expected additional revenue
JVVNL	1478.00
AVVNL	856.00
JdVVNL	834.00
Total	3168.00

- 17.3. The additional revenue, proposed to be raised by revision of tariff during 2011-12 would not be enough to cover the entire revenue deficit and still a large uncovered deficit would remain.
- 17.4. As discussed earlier, a large gap still remains and the revenue gap will not be bridged as difference in Cost of Supply and average realization is very high. Therefore, a revision of tariff to cover the revenue deficit seems not only justified but is inescapable. Financial position of Discoms is indeed very precarious on account of non revision of tariff since past more than six years whereas cost of supply in this duration has gone up considerably.
- 17.5. The specific proposals of Discoms are discussed in the following paragraphs. The views of the Commission indicated earlier in this order while dealing with the objections/comments of stakeholders have been incorporated in decision of the Commission on tariff proposals.
- 17.6. Discoms have stated that they will be receiving subsidy from State Govt. for certain categories. The tariff has been determined for each category without subsidy but the subsidy indicted by Discoms has also been mentioned. The subsidy to be provided by the Govt. would result in amount payable by consumer of such category getting reduced by the subsidy amount.
- ### **18. Determination of Tariff**
- 18.1. **Domestic Service (LT-1 and HT-1)**
- 18.1.1. Discoms have proposed to increase the number of slabs in the domestic category from the existing two slabs to four slabs. They have argued that slabs have been increased keeping in view that it does not unduly burden

consumers with less consumption but at the same time provides for charging appropriately from high-consuming consumers. This would also help in encouraging judicious consumption of electricity.

- 18.1.2. Discoms have argued that their fixed costs have increased over the years and have requested to increase the same of general domestic consumers from Rs 105 a month to Rs 160 a month for consumers having average consumption between 51 – 300 units per month and to Rs 205 for consumer with average consumption greater than 300 units per month. No increase in fixed charges has been proposed for consumers with average consumption below 50 units per month as well as BPL and small domestic consumers. In case of HT domestic category, the licensees have proposed an increase from Rs 100 per KVA per month to Rs 150 per KVA per month.
- 18.1.3. They have proposed to raise energy charges from Rs1.95 to Rs 2.25 per unit and Rs 2.50 per unit for BPL and small consumers (with average consumption of not more than 50 units per month) respectively.
- 18.1.4. An increase in energy charges from Rs 3.50 per unit for consumption above 50 units to Rs 4.10 per unit, Rs 4.30 per unit and Rs 4.50 per unit for consumption between 51-150 units per month, 151-300 units per month and above 300 units per month respectively has been proposed. In case of HT domestic category, the licensees have proposed an increase from 3.50 units per month to Rs 4.50 units per month.
- 18.1.5. Commission agrees with the petitioners regarding lower tariff for small consumers. The proposal of Discoms also envisages increasing the number of slabs in General Domestic category from existing 2 to 4. Commission considers it appropriate and accepts the same.
- 18.1.6. Commission has observed that increase proposed in the highest slab of general domestic is higher than what is proposed for other slabs. Though the Commission also feels that under present scenario people in higher consumption slab should pay more but at the same time increase should not be too high to result in shock to consumers. It has, accordingly , determined the tariff for various slabs by giving an appropriate increase.
- 18.1.7. Commission has observed that there is a steep increase proposed in fixed charges in some of the slabs as well as for HT domestic consumers. Fixed charges proposed for HT category are equivalent to proposed fixed charges of NDS category and higher than proposed fixed charges of Industrial and Mixed Load category.
- 18.1.8. Similarly in the case of HT Domestic consumers it has been observed that apart from increasing the fixed charges, Discoms have proposed a steep hike in energy charges. In case of HT consumers, the metering is done on HT side due to which burden of transformation or line losses shifts to consumers. Moreover, internal distribution system are also owned & maintained by the H.T. consumer. Meter Readings, Billings & Collection of Revenue are done by the H.T. consumer thereby saving cost to Discoms. For system improvement and reduction of losses HT/LT ratio should be higher as such

connection on HT need to be promoted and the Commission has accordingly determined the tariff for this category.

18.1.9. Though as per existing tariff schedule there are no such categories as BPL/Small Domestic, the Commission accepts the proposal of Discoms for nomenclature of these two categories. However, only the consumers possessing BPL card issued by the Government of Rajasthan shall be considered under the BPL category.

18.1.10. The proposed tariff and that approved by the Commission are being given in the following tables.

Table: 56- Domestic Category Existing and Proposed tariff for FY 2011-12

Existing Tariff				Proposed Tariff					
Category	Energy Charges (EC)			Fixed Charges (FC)	Category	Energy Charges			Fixed Charges
Domestic Rural & Urban	EC	Subsidy by GoR*	Effective EC after subsidy		Domestic Rural & Urban	EC	Subsidy by GoR*	Effective EC after subsidy	
Upto 50 units per month (BPL)	Rs 1.95/ unit	Rs 1.10/ unit	Rs 0.85/ unit	Rs 80/ consumer/ month (effective FC Rs 50 consumer/month after subsidy of Rs. 30/connection/month)	0- 50 units per month (BPL)	Rs. 2.25/ unit	Rs 1.40/ unit	Rs 0.85/ unit	Rs 80/ consumer/ month (effective FC Rs 50 consumer/month after subsidy of Rs. 30/connection/month)
0- 50 units per month (small DL)	Rs 1.95/ unit	Rs 0.25/ unit*	Rs 1.70/ unit	Rs 80/ consumer/ month	0- 50 units per month (small DL)	Rs 2.50/ unit	Rs 0.80/ unit*	Rs 1.70/ unit	Rs 80/ consumer/ month
0- 50 units per month (General DL)	Rs 1.95/ unit		Rs 1.95/ unit	Rs 80/ consumer/ month	0- 50 units per month (General DL)	Rs 2.50/ unit		Rs 2.50/ unit	Rs 80/ consumer/ month
Above 50 units per month	Rs 3.50/ unit		Rs 3.50/ unit	Rs 105/ consumer/ month	51-150 units per month	Rs 4.10/ unit		Rs 4.10/ unit	Rs 160/ consumer/ month
					151-300 units per month	Rs 4.30/ unit		Rs 4.30/ unit	Rs 160/ consumer/ month
					>300 units per month	Rs 4.50/ unit		Rs 4.50/ unit	Rs 205/ consumer/ month
HT – Domestic				HT – Domestic					
For contract demand over 50 KVA	Rs. 3.00/ unit		Rs. 3.00/ unit	Rs. 100 per KVA/month	For contract demand over 50 KVA	Rs. 4.50/ unit		Rs. 4.50/ unit	Rs. 150 per KVA/month

*Subsidy allowed as per GoR for BPL and Small Domestic Consumers consuming upto 50 units in a month

Table: 57- Domestic Category (LT-1 ad HT-1)-Approved tariff for FY 2011-12

Category	Energy Charges			Fixed Charges
Domestic	EC	Subsidy indicated to be received from GoR	Effective EC after subsidy	
LT-Domestic (LT-1)				
B P L*				
Consumption upto first 50 units per month	Rs. 2.25/ unit	Rs 1.40/ unit	Rs 0.85/ unit	Rs 80/ connection/ month (effective FC Rs 50 /connection /month after subsidy of Rs. 30/connection/month)
Small Domestic (Consumption up to 50 units/month)				
Consumption up to 50 units/month	Rs 2.50/ unit	Rs 0.80/ unit	Rs 1.70/ unit	Rs 80/ connection / month
General Domestic (Consumption above 50 units/month)				
(i) For consumption upto first 50 units per month	Rs 2.50/ unit		Rs 2.50/ unit	Rs 140/ connection / month
(ii) For consumption above 50 units and upto 150 units per month	Rs 4.00/ unit		Rs 4.00/ unit	
(iii) For consumption above 150 units and upto 300 units per month	Rs 4.15/ unit		Rs 4.15/ unit	Rs 150/ connection / month
(iv) For consumption above 300 units per month	Rs 4.35/ unit		Rs 4.35/ unit	Rs 180/ connection / month
HT – Domestic (HT-1)				
For contract demand over 50 KVA	Rs. 4.15/ unit		Rs. 4.15 / unit	Rs. 125 per KVA of Billing Demand per month

* Note: The BPL domestic tariff shall be exclusively applicable to individual consumer /person and shall not be applicable to any institution. In case any BPL consumer has consumed more than 50 units per month in any billing cycle, the consumer will be charged as per the applicable tariff of the respective slab under the LT-I domestic category for the additional units consumed.

18.2. Incentive on use of Solar Water Heating System

Discoms have proposed to increase the incentive on use of solar water heaters by the domestic consumers from the earlier rebate of 5 paise per unit to 25 paise per unit subject to a maximum of Rs. 300 per month for a maximum period of 5 years with a view to encourage consumers for usages of solar water heaters. Commission accepts the proposal of the Discoms.

18.3. **Abolition of Rural Rebate**

- 18.3.1. Discoms have proposed to abolish the existing rebate of 10% allowed to domestic consumers in rural areas which are not getting round the clock single phase supply as majority of the feeders are now getting round the clock supply.
- 18.3.2. Commission has observed that in 2004 also Discoms had put forth a proposal stating that the rebate would be withdrawn only in those rural areas where round the clock supply is maintained and the Commission accepted it. In the booklet "Tariff for supply of electricity" published by Discoms the note (2) under item (c) of Domestic Service schedule states that for Domestic connections in Rural areas, a rebate of 10% in the "Energy Charges" shall be allowed but where round the clock supply of electricity is provided, such rebate shall not be available.
- 18.3.3. Looking to the objections raised by stakeholders during the public hearing saying that round the clock supply is still not available in rural areas, the Commission does not find the current proposal of Discoms acceptable. In any case, even under existing provision, 10% rebate is to be given only if round the clock supply of electricity is not available. Where is the need, therefore, to amend this? Accordingly, the rural rebate where round the clock supply is not available is being continued.

18.4. **Non- Domestic Service (LT-2 & HT-2)**

- 18.4.1. Discoms have also proposed to increase the number of slabs in the non - domestic category from the existing two slabs to three slabs for both subcategories of upto 5 KW and above 5 KW of Sanctioned Connected Load (SCL). They have argued that slabs have been increased keeping in view that it does not unduly burden consumers with less consumption but at the same time provides for charging appropriately from consumers with higher consumption. Commission accepts the proposal of Discoms for increasing the number of slabs.
- 18.4.2. They have argued that their fixed costs have increased over the years and have requested to increase the fixed charges for categories with SCL upto 5 kW from Rs 80/month and Rs. 120/month to Rs 160/month for consumers with average consumption between 1-200 units per month and to Rs 205 for consumer with average consumption greater than 200 units per month. For categories with sanctioned connected load greater than 5 KW of SCL, Discoms have proposed an increase in fixed charges from Rs 40/KW of SCL per month to Rs 60/KW of SCL per month. In the case of HT non-domestic category, the licensees have proposed an increase in fixed charges from Rs 60/KVA of billing demand per month to Rs 150/KVA of billing demand per month.
- 18.4.3. It has been argued that since cost of supply has increased over the years, the energy charges be increased from Rs 4.50 per unit to Rs 5.40 for consumption between 1-100 units per month, Rs 4.90 per unit to Rs 6.25 and Rs 6.75 per unit for consumption between 101-200 units per month and a

new slab having consumption of greater than 200 units per month respectively. In the case of HT non-domestic category, the licensees have proposed an increase in energy charges from Rs 4.50 per unit and Rs 4.90 per unit to Rs 6.75 per unit.

18.4.4. Commission has examined the proposals of Discoms and has observed that this Category is the highest cross subsidising category. Though this is a fact that tariff for this category has not been revised since 2001 the Commission feels that tariff proposed by the petitioner is on a higher side.

18.4.5. The proposed tariff and that approved by the Commission are being given in the following tables

Table: 58- Non-Domestic Category(LT-2 and HT-2)- Existing and Proposed tariff for FY 2011-12

Existing Tariff			Proposed Tariff		
Non-Domestic	Energy Charges	Fixed Charges	Non-Domestic	Energy Charges	Fixed Charges
NDS up to 5 KW of SCL			NDS up to 5 KW of SCL		
Upto 100 units	Rs.4.50/unit	Rs.80/ connection/ month	0-100 units	Rs.5.40/unit	Rs. 160/ connection/ month
Above 100 units	Rs.4.90/unit	Rs.120/ connection/ month	101-200 Unit	Rs.6.25/unit	Rs.160/ connection/ month
			Above-200 Unit	Rs.6.75/unit	Rs.205/ connection/ month
NDS above 5 KW of SCL			NDS above 5 KW of SCL		
Upto 100 units	Rs.4.50/unit	Rs.40/ KW of SCL / month	0-100 units	Rs.5.40/unit	Rs.60/ KW of SCL / month
Above 100 units	Rs.4.90/unit	Rs.40/ KW of SCL / month	101-200 Unit	Rs.6.25/unit	Rs.60/ KW of SCL / month
			Above-200 Unit	Rs.6.75/unit	Rs.60/ KW of SCL / month
HT- NDS			HT-NDS		
For contract demand over 50 KVA			For contract demand over 50 KVA		
Upto 100 units	Rs.4.50/ unit	Rs.60/ KVA of Billing Demand per month	Upto 100 units	Rs.6.75/unit	Rs.150/ KVA of Billing Demand per month
Above 100 units	Rs.4.90/ unit	Rs.60/ KVA of Billing Demand per month	Above 100 units	Rs.6.75/unit	Rs.150/ KVA of Billing Demand per month

Table: 59- Non-Domestic Category (LT-2 and HT-2) –Approved tariff for FY 2011-12

Non-Domestic	Energy Charges	Fixed Charges
LT-NDS(LT-2)		
NDS up to 5 KW of SCL		
Consumption upto first 100 units per month	Rs.5.10/unit	Rs. 150/ connection/ month
Consumption above 100 units and upto 200 Unit per month	Rs.5.50/unit	
Consumption above 200 Unit per month	Rs.5.90/unit	Rs.180/ connection/ month
NDS above 5 KW of SCL		
Consumption upto first 100 units per month	Rs.5.10/unit	Rs.60/ KW of SCL / month
Consumption above 100 units and upto 200 Unit per month	Rs.5.50/unit	Rs.60/ KW of SCL / month
Consumption above 200 Unit per month	Rs.5.90/unit	Rs.60/ KW of SCL / month
HT-NDS (HT-2)		
For contract demand over 50 KVA		
All Units	Rs.5.90/unit	Rs.125/ KVA of Billing Demand per month

18.5. **Proposal for Change in Categorisation:**

Inclusion of Tariff for Telephone Exchanges in NDS category:

- 18.5.1. Discoms have proposed to include all telephone service operators (BSNL or otherwise), telephone/mobile exchanges/switches including attached offices under NDS category as the telephone companies are run on a commercial basis and should not be kept at par with the Gol-P&T Department which so far have been covered under ML/LT-7.
- 18.5.2. Commission finds force in this proposal. Some of the objectors also raised the issue. Last tariff order was issued in 2004 and since then telecom sector has witnessed sea change and a total transformation. Commission, therefore, accepts the proposal of Discoms in this regard.
- 18.5.3. Discoms further proposed inclusion of educational institutions, hospital, and dispensaries maintained and run by agencies other than state Government or agencies of the state Government in NDS category.
- 18.5.4. Education and Health industries have seen a massive growth over the years and there is a lot of difference in the services as well as load factor, load requirement & consumption pattern of such institutions as compared to Government owned or run institutions. As such there is no logic to keep such activities out of Non-Domestic ambit. Commission accepts the proposal of Discoms. Following the same principles, the clinics and nursing homes run by other than State Government or agencies of the State Government shall

also be covered under NDS category. However, hospitals/dispensaries, nursing homes or clinics run by Red Cross Society will continue to be under Mixed Load category.

18.6. Public Street Lighting Service (LT-3)

- 18.6.1. Discoms have proposed to raise tariff for public street lighting both for areas with less than 1 lac population and with more than 1 lac population.
- 18.6.2. Discoms have proposed an increase in fixed charges from Rs 30/lamp point/month to Rs. 50/lamp point/month for areas with population less than 1 lakh and from Rs 45/lamp point/month to Rs 60/lamp point/month for areas with population greater than 1 lakh.
- 18.6.3. They have also proposed an increase in energy charges from Rs 3.50 per unit to Rs 4.10 per unit for areas with population less than 1 lakh and from Rs 3.75 per unit to Rs 4.50 per unit for areas with population greater than 1 lakh.
- 18.6.4. Discoms further proposed to continue rebate of 30 paise per unit currently applicable on the Street Lights installed with time switch, subject to verification every six month of operation of time switch, which has been accepted by the Commission.
- 18.6.5. Commission accepts the proposal regarding fixed charges and Energy Charges by Discoms. In existing tariff, fixed charges are Rs. 30/point/month subject to maximum of Rs. 300 per service connection per month for areas with population less than 1 lakh and Rs. 45/point/month subject to max of Rs. 900 per service connection per month for areas with population more than 1 lakh. Since Discoms have proposed increase in fixed charges and the same has been accepted, the upper limit for service connection has to obviously increase. This has been suitably incorporated in the tariff structure. The tariff proposed and approved is given in the following tables.

Table: 60- Public Street lighting(LT-3) Category -Existing and Proposed tariff for FY 2011-12

Particulars	Existing Tariff		Proposed Tariff	
	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges
Population <1 Lakh	Rs.3.50/unit	Rs.30/ Lamp point/ month	Rs. 4.10/ unit	Rs. 50/ Lamp point/ month
Population = >1 Lakh	Rs.3.75/unit	Rs.45/ Lamp point/ month	Rs. 4.50/ unit	Rs. 60/ Lamp point/ month

Table: 61- Public Street lighting (LT-3) Category-Approved tariff for FY 2011-12

Particulars	Approved by Commission	
	Energy Charges	Fixed Charges
Population <1 Lakh	Rs. 4.10/ unit	Rs. 50/ Lamp point/ month subject to a maximum of Rs. 500 /service connection/month
Population = >1 Lakh	Rs. 4.50/ unit	Rs. 60/ Lamp point/ month subject to a maximum of Rs. 1200 /service connection/month

18.7. Agriculture Supply (LT-4)

- 18.7.1. Discoms in their petition stated that the tariff in the state has not been revised since 2004. However, the average cost of supply has increased during the period leading to an increase in cross subsidy requirement. Accordingly they proposed to increase the tariff of both the metered and un-metered agricultural consumers which has been summarized in the table after the following sub-paras.
- 18.7.2. Discoms also made a proposal to provide incentive of 10 paise per unit in energy charges for installing energy efficient pump sets (3 star and above) as well as sprinklers sets by metered agriculture consumers.
- 18.7.3. The Government of Rajasthan would be providing subsidy support to the general category not getting round the clock supply for both metered and un-metered agriculture consumers. Discoms have submitted that the subsidy would be increased from the existing Rs 0.20 per unit to Rs 0.33 per unit for metered consumers. In case of Flat Rate consumers, the Govt. subsidy would be increased from existing Rs.55/- per H.P. to Rs.74/- per H.P.
- 18.7.4. Further, Discoms have proposed to abolish minimum charges for agriculture metered category of consumers as fixed charges are already being collected from the agricultural consumers irrespective of energy drawl.
- 18.7.5. The existing and the proposed tariff for agriculture supply are summarized below.

Table: 62- Agriculture Category (LT-4)— Existing and Proposed tariff for FY 2011-12

Particulars	Existing Tariff				Proposed Tariff			
	Energy Charges (EC)			Fixed Charges	Energy Charges			Fixed Charges
Metered (AG/MS/LT-4)	EC	Subsidy by GoR	Effective EC after subsidy		EC	Subsidy by GoR	Effective EC after subsidy	
General (Not getting round the clock supply)	Rs. 1.10/unit	Rs. 0.20/unit	Rs. 0.90/unit	Rs.50/ connection / month	Rs. 1.23/unit	Rs. 0.33/unit	Rs. 0.90/unit	Rs.50/ connection / month
Farm house	Rs. 3.40/unit		Rs. 3.40/unit	Rs.50/ connection / month	Rs. 4.05/unit	Rs. 0.65/unit	Rs. 3.40/unit	Rs.50/ connection / month
All others not covered under items above and getting round the clock supply & Poultry Farm.	Rs. 2.10/unit		Rs. 2.10/unit	Rs.50/ connection / month	Rs. 2.55/unit	Rs. 0.45/unit	Rs. 2.10/unit	Rs.50/ connection / month

Particulars	Existing Tariff				Proposed Tariff			
	Energy Charges (EC)		Fixed Charges		Energy Charges		Fixed Charges	
Flat/ unmetered (AG/FR/LT-4)								
General (Not getting round the clock supply)	Rs. 140/ HP/ Month	Rs. 55/ HP/ Month	Rs. 85/ HP/ Month	Rs.20/ connection / month	Rs. 159/ HP/ Month	Rs. 74/ HP/ Month	Rs. 85/ HP/ Month	Rs.20/ connection / month
Fodder	Rs. 200/ HP/ Month		Rs. 200/ HP/ Month	Rs.20/ connection / month	Rs. 240/ HP/ Month	Rs. 40/ HP/ Month	Rs. 200/ HP/ Month	Rs.20/ connection / month
All others not covered under items above and getting round the clock supply & Poultry Farm.	Rs 230/ HP/ Month		Rs 230/ HP/ Month	Rs.20/ connection / month	Rs 280/ HP/ Month	Rs. 50/ HP/ Month	Rs. 230/ HP/ Month	Rs.20/ connection / month

- 18.7.6. There were lot of objections from stakeholders against lower tariff for this category and their contention was that the provisions of Electricity Act, Tariff Policy and Tariff Regulations should be given due consideration as far as cross-subsidy is concerned. It was also stressed that lower tariff leads to indiscriminate usage of ground water causing depletion of ground water thereby further increasing the load requirement and energy consumption. It was argued that a higher tariff with suitable incentive structure may lead to energy conservation as well as judicious use of ground water resources.
- 18.7.7. The tariff for agricultural category has to be seen in the context of the relatively poorer quality of supply, restricted supply, that too during non-peak hours. The energy consumption in agriculture is comparatively high as ground water in major parts of the State is quite deep and agro-climatic conditions are adverse. Even the Tariff Policy recognizes the need of higher level of subsidy in the region where adverse ground water table conditions lead to higher consumption of electricity for irrigation.
- 18.7.8. In view of the discussed position, high increase in tariff of this category would be inappropriate and the reduction in cross-subsidy of this sector has to be gradual.
- 18.7.9. The potential for energy efficiency/DSM is extremely high in agriculture sector. It has a very short payback period due to high cost of supply and lower tariff. The agriculture consumers are required to be incentivized for using energy efficiency devices. Commission, accordingly, accepts the proposal of Discoms regarding incentive of 10 paisa per unit in energy charges for installing energy efficient pump sets (3 star and above) as well as sprinklers sets by metered agriculture consumers.
- 18.7.10. Regarding Discoms' proposal to abolish minimum charges the Commission feels that any provision for minimum charges may lead to wastage of energy in case where consumption falls below the minimum level. Moreover, for all other categories, the Commission has already abolished

provision for minimum billing. As such the Commission accepts the proposal of Discoms for abolition of minimum billing.

18.7.11. Accordingly, the tariff determined by the Commission for this category is as under:

Table: 63- Agriculture Category(LT-4)-Approved Tariff for FY 2011-12

Agriculture Supply	Energy Charges (EC)			Fixed Charges
	EC	Subsidy indicated to be received from Govt*	Effective EC after subsidy	
Metered (AG/MS/LT-4)				
(i) General (Not getting round the clock supply)	Rs. 1.36/unit	Rs. 0.33/unit	Rs. 1.03/unit	Rs.60/ connection/ month
(ii) Farm house	Rs. 4.20/unit	Rs. 0.65/unit	Rs. 3.55/unit	Rs.60/ connection/ month
(iii)All others not covered under items (i) & (ii) above and getting round the clock supply & Poultry Farm.	Rs. 2.60/unit	Rs. 0.45/unit	Rs. 2.15/unit	Rs.60/ connection/ month
Flat/ unmetered (AG/FR/LT-4)				
(i)General (Not getting round the clock supply)	Rs. 175/ HP/ Month	Rs. 74/ HP/ Month	101 / HP/ Month	Rs.25/ connection/ month
(ii)Fodder Scheme	Rs. 250/ HP/ Month	Rs. 40/ HP/ Month	Rs. 210/ HP/ Month	Rs.25/ connection/ month
(iii)All others not covered under items (i) & (ii) above and getting round the clock supply & Poultry Farm.	Rs 290/ HP/ Month	Rs. 50/ HP/ Month	Rs. 240/ HP/ Month	Rs.25/ connection/ month

*From the proposals of Discoms it appears that the Government is inclined to provide subsidy to Discoms towards consumption by agriculture consumers so as to keep their rates at earlier level. If, the Government wants to keep effective rates for agriculture consumers at the same level, the subsidy to be provided by the Government will increase to that extent.

18.8. Small Industries (LT-5)

18.8.1. Discoms proposed to have differential tariff for upto 5 KW and more than 5 KW of connected load but not exceeding 18.65KW (25 HP) consumers under small industrial service. They requested to increase the fixed charges from Rs. 35/ HP/ month to Rs. 50/ HP/ month. For energy charges in case of up to 5 KW consumers, Discoms have proposed to increase that from Rs. 3.50/ unit to Rs. 4.10/ unit. Similarly, for consumers with load of more than 5 KW but not exceeding 18.65KW (25 HP), Discoms proposed to increase the energy charges from Rs.3.50/ unit to Rs.4.50/ unit, as could be seen from the table below:

Table: 64- Small Industries (LT-5)- Existing and Proposed tariff for FY 2011-12

Particulars	Existing Tariff		Proposed Tariff		
	Energy Charges	Fixed Charges	Particulars	Energy Charges	Fixed Charges
LT Categories					
Small Industrial Service (LT-5)			Small Industrial Service (LT-5)		
Up to 5 KW	Rs. 3.50/ unit	Rs. 35/ HP/ month	Up to 5 KW	Rs. 4.10/ unit	Rs. 50/ HP/ month
Above 5 KW But not exceeding 18.65 KW (25HP)	Rs.3.50/ unit	Rs. 35/ HP/ month	Above 5 KW But not exceeding 18.65 KW (25HP)	Rs.4.50/ unit	Rs. 50/ HP/ month

18.8.2. Commission has noted that the hike proposed by Discoms in Fixed Charges is on the higher side. Commission has rationalized the energy charges whereas fixed charges have been increased marginally which is lower than fixed charges proposed by Discoms. Accordingly, the Commission determines the tariff for this category as under:

Table: 65- Small Industries(LT-5)- Approved Tariff for FY 2011-12

Small Industrial Service (LT-5)	Energy Charges	Fixed Charges
Up to 5 KW	Rs.4.00/ unit	Rs. 45/ HP/ month of sanctioned connected load
Above 5 KW But not exceeding 18.65 KW (25HP)	Rs.4.35/ unit	Rs. 45/ HP/ month of sanctioned connected load

18.9. Medium Industry (LT-6 and HT-3)

18.9.1. In case of medium industries, the petitioners have proposed increase in fixed charges from Rs. 80/ KVA/ month to Rs. 125/ KVA/ month for HT-3 consumer category. For Medium Industrial consumers at LT, Discoms have not proposed any hike in the fixed charges. Under energy charges, Discoms have requested for an increase in both LT and HT consumer categories. Under LT category, they have proposed an increase from Rs.3.75/ unit to Rs.4.75/ unit, whereas under HT category, they have proposed an increase from Rs.3.75/ unit to Rs.5.00/ unit as given in the table below:

Table: 66- Medium Industrial Service(LT-6 and HT-3)- Existing & Proposed tariff for FY 2011-12

Particulars	Existing Tariff		Proposed Tariff		
	Energy Charges	Fixed Charges	Particulars	Energy Charges	Fixed Charges
Medium Industrial Service (LT-6)					
Sanctioned Connected Load (SCL) above 18.65 KW (25HP) but not exceeding 112 KW (150HP) &/or Maximum Demand of 50 KVA	Rs.3.75/ unit	Rs. 50/ HP/ month	SCL above 18.65 KW (25HP) but not exceeding 112 KW (150HP) &/or Maximum Demand of 50 KVA	Rs.4.75/ unit	Rs. 50/ HP/ month
HT Categories					
Medium Industrial Service (HT-3)					
SCL above 18.65 KW (25HP) but not exceeding 112 KW (150HP) &/or Maximum Demand of 125 KVA	Rs.3.75/ unit	Rs. 80/ KVA/ month	SCL above 18.65 KW (25HP) but not exceeding 112 KW (150HP) &/or Maximum Demand of 125 KVA	Rs.5.00/ unit	Rs. 125/ KVA/ month

18.9.2. Regarding fixed charges of HT Medium Industrial category, the Commission has observed that Discoms have proposed the fixed charges equivalent to Large Industrial category, which seems unreasonable. Commission, therefore, determines the fixed charges for HT Medium Industrial category as Rs.112/kVA/month.

18.9.3. In view of the suggestions given by the various stakeholders regarding tariff design and keeping in view the existing energy charges of this category for HT & LT consumers, the Commission finds it appropriate to determine energy charges for both HT and LT category at the same level as proposed for LT Medium Industrial category .Accordingly, the tariff determined by the Commission for this category shall be as under:

Table: 67- Medium Industrial Service (LT-6 and HT-3)-Approved Tariff for FY 2011-12

Particulars	Energy Charges	Fixed Charges
Medium Industrial Service (LT-6)	Rs.4.75/ unit	Rs. 50/ HP/ month of sanctioned connected load
Medium Industrial Service (HT-3)	Rs.4.75/ unit	Rs. 112/ KVA of Billing Demand per month

18.10. Bulk Supply for Mixed Load (LT-7 and HT-4)

18.10.1. Under Bulk Supply for Mixed Load, Discoms have requested increase in fixed charges from Rs.80/KVA/month to Rs. 125/ KVA/ month for HT consumer category. For LT category, petitioners have not sought any increase in fixed charges. The energy charges have been proposed to be increased from Rs.3.75/unit to Rs.4.75/ unit for LT category and from Rs.3.75/unit to Rs.5.00/ unit for HT category as under:

Table: 68- Bulk Supply for Mixed Load Category (LT-7 and HT-4)- Existing and Proposed tariff for FY 2011-12

Bulk Supply for mixed Load	Existing Tariff		Proposed Tariff	
	Energy Charges	Fixed Charges	Energy Charges	Fixed Charges
<u>Schedule ML/LT-7</u>				
Up to 50 KVA	Rs.3.75/unit	Rs.50/HP/month	Rs.4.75/ unit	Rs.50/ HP/ month
<u>Schedule ML/HT-4</u>				
Above 50 KVA	Rs.3.75/unit	Rs.80/KVA/month	Rs.5.00/ unit	Rs. 125/ KVA/ month

18.10.2. For this category, Discoms have proposed similar increase as submitted for medium industrial category. Historically also this category has the same tariff as that of Medium Industry. Looking to this, the Commission has determined tariff for this category at the same level as that of Medium Industrial category, as under:

Table: 69- Bulk Supply for Mixed Load Category (LT-7 and HT-4)-Approved tariff for FY 2011-12

Particulars	Energy Charges	Fixed Charges
Schedule ML/LT-7	Rs.4.75/ unit	Rs.50/ HP/ month of sanctioned connected load
Schedule ML/HT-4	Rs.4.75/ unit	Rs. 112/KVA of Billing Demand per month

18.11. Large Industries (HT-5)

18.11.1. Discoms have proposed increase in fixed charges from Rs. 90/ KVA/ month to Rs. 125/ KVA/ month. In energy charges, Discoms have requested increase from Rs.4.01/ unit to Rs.5.25/ unit. Discoms, further, proposed to abolish the incentive scheme linked to consumption for LIP consumers including railways and public water works in view of the energy deficit scenario.

18.11.2. The table below gives a snapshot of the existing and proposed tariff structure for Large Industrial category.

Table: 70- Large Industrial Category (HT-5)- Existing and Proposed tariff for FY 2011-12

Particulars	Existing Tariff		Proposed Tariff		
	Energy Charges	Fixed Charges	Particulars	Energy Charges	Fixed Charges
Large Industrial Service (HT-5)					
SCL above 150 HP &/or having Contract/ Maximum Demand above 125 KVA	Rs.4.01/ unit	Rs. 90/ KVA/ month	SCL above 150 HP &/or having Contract/ Maximum Demand above 125 KVA	Rs.5.25/ unit	Rs. 125/ KVA/ month

18.11.3. Looking to present energy deficient scenario, the Commission accepts the proposal of Discoms for abolition of consumption based incentive scheme.

18.11.4. A large no. of Industrial Consumers & organisations opposed the hike in tariff for Large Industries on various grounds as discussed earlier. Though stakeholders have stated that the tariff hike proposed by Discoms is quite steep for this category but at the same time it is also a fact that tariff for this category has not been increased since 2001. Cost of Supply has increased substantially during last 10 years and Discoms are struggling to improve their financial position. However, while determining the tariff the Commission has given due consideration to the suggestions and difficulties highlighted by the stakeholders. Accordingly, the Commission has determined tariff for this category as under:

Table: 71- Large Industrial Category (HT-5)-Tariff as approved by the Commission for FY 11-12

Energy Charges	Fixed Charges
Rs.5.00/ unit	Rs. 125/ KVA of Billing Demand per month

19. General Terms and Condition of Tariff

19.1. Apart from tariff, Discoms made various other proposals under the heading "General Terms and Condition of Tariff" these are discussed below:

19.2. Rebate for taking HT supply by LT consumers –

19.2.1. Discoms proposed a uniform rebate for all categories of LT consumers taking supply on HT. They stated that Presently PSL, Ag (M) and SIP consumers are allowed a rebate of 7.5% on the billed amount whereas domestic consumers are being given a lower rebate and a uniform rebate

of 7.5% for all categories will avoid any ambiguity and encourage more consumers to shift to HT supply.

19.2.2. For the sake of uniformity and to give incentive for shifting to HT supply the Commission accepts the proposal of Discoms.

19.3. **Higher Voltage Rebate**

19.3.1. To provide a substantial incentive to HT consumers to shift to 33kV/132kV, particularly to the consumers requiring changeover from 11kV to 33kV, Discoms proposed to increase the present rebate of 1%, 3% and 5% for taking supply at 33kV, 132kV and 220kV, respectively, to 3%, 4% and 5%, respectively.

19.3.2. Commission vide its order dated 31.8.2007 noted that the present voltage rebates applicable is not adequate and made marginal upward revision in the voltage rebate for 33 kV supply to 1%, and 132kV supply to 3%. It was also stated that further upward revision in voltage rebate, if considered necessary, may be proposed to the Commission with its financial implication, if any, along with next tariff proposal.

19.3.3. Though Discoms have not furnished the financial implication but the Commission finds it appropriate to accept the increase in the higher voltage rebate as proposed by Discoms as it would encourage the consumers to opt for higher voltage thereby strengthening the system and reducing losses.

19.4. **Higher Voltage Surcharge**

19.4.1. Discoms also proposed that the HT consumers taking supply at a voltage lower than the specified voltage corresponding to his contract demand shall be liable to pay surcharge at the rates indicated below:

- i. 220 or 132kV consumers taking supply at 11kV: 5%
- ii. 220 or 132kV consumers taking supply at 33kV: 3%
- iii. 33kV consumers taking supply at 11kV: 3%

19.4.2. In light of stakeholders suggestions as discussed in Section 2 part III, the Commission does not find any justification in the proposal for voltage surcharge as it may create anomaly vis a vis Voltage rebate.

19.5. **Change in Power Factor Clause**

19.5.1. Various stakeholders commented regarding absence of scientific basis for proposal and stated that addition of excess capacitors will cause system over voltage and create grid management problems as the system may not be able to absorb so much capacitors and additional installation of capacitors will lead to switching off of shunt capacitors installed at various substations and rendering that investment infructuous .Discoms in their reply, could not produce any scientific basis as sought by the stakeholders.

19.5.2. Commission has also studied provisions relating to power factor as prevailing in other states and found existing system of surcharge and incentive prevailing in Rajasthan is quite balanced . As such in view of the stakeholders observations and in absence of any supporting technical study or basis from Discoms, the Commission, at present, is not inclined to accept the proposal for change in power factor clause.

19.6. Time of Day (ToD) Tariff

19.6.1. Discoms furnished proposal of ToD tariff stating that ToD is an important Demand Side management tool and is being widely used by different states to flatten their load curve. Vide their supplementary petition ,Discoms proposed to implement the Time of Day (ToD) tariff for all HT consumers having contracted demand above 50 kVA except for HT domestic consumers, HT agriculture consumers and Railway Traction, as under:

Table: 72:- ToD Time Slots and Surcharge/Rebate

Particulars	Time Slot	Surcharge / (Rebate) in Energy Charges
Peak Hours	18:00 hrs to 23:00 hrs (throughout the year)	+10% (Surcharge)
	06.00 hrs to 09:00 hrs (October to March)	
Off Peak Hours	23:00 hrs to 5:00 hrs	-10% (Rebate)

19.6.2. A large no. of stakeholders raised their viewpoints regarding introduction of ToD tariff in the State. Commission has an ardent desire to introduce ToD tariff in the State but on the basis of data furnished by Discoms it is not able to justify the time slot and rebate proposed by Discoms.

19.6.3. As pointed out by Discoms ToD tariff needs to be designed to encourage consumers to shift their consumption, to off-peak hours. ToD tariff can be used as a two-pronged tool, i.e. both to incentivize consumption during off-peak hours and offer disincentives for consumption during peak hours. However, the pre-requisite for an appropriate ToD tariff is to have well established peak and off-peak hours. The information available with the Commission indicates that peak hours in the State vary considerably. Peak hours, therefore, may not necessarily match with peak hours indicated in petitions. In such a situation, extra charge under ToD would be harsh for the consumers and would also not be achieving the intended purpose of the proposal. It, therefore, needs to be re-worked based on comprehensive analysis of load profile for different seasons and months of supply. Based on this, a fresh petition be submitted to the Commission. In view of the above observations ToD proposal for the present is not being accepted.

19.7. Fuel Surcharge :

Discoms requested to allow recovery of the Fuel Surcharge from consumers as per formula approved by the Commission in the RERC Tariff Regulations, 2009. Commission would like to observe that Discoms are already authorized to levy fuel surcharge as per formula prescribed in Tariff Regulations, 2009.

20. Revenue due to tariff revision

Discoms are expected to generate additional revenue as given in the table below for a 12 month period due to revision of tariff allowed by the Commission by this order. This does not account for implication of any incentive/surcharge or rebates, whose implication may be same as existing. Change of categorisation has also not been considered as its impact on revenue will be small. Revenue has been calculated by the Commission at the tariff determined by it. If the State Govt. Provides subsidy for any category of consumers in advance in the manner as specified in RERC(Terms & Conditions of Tariff) Regulations, 2009, the Discoms may apply the subsidised rate to that category.

Table: 73- : Jaipur Discom- Revenue at Existing & Revised Tariff as Approved by the Commission for FY 2011-12 (Rs. crore)

Consumer Categories	Revenue at Existing Tariff	Revenue at Revised Tariff	Increase Allowed
Domestic	1,353	1,650	297
Non-Domestic	594	724	130
Public Street Light	39	48	9
Agriculture (Metered)	506	624	118
Agriculture (Flat)	69	86	17
Small Industry	117	146	29
Medium Industry	295	365	70
Large Industry	1,697	2,134	437
Public Water Works (S)	89	107	18
Public Water Works (M)	11	14	3
Public Water Works (L)	54	67	13
Mixed Load	227	282	55
Electric Traction	173	218	-
Total	5,224	6,465	1,241
Other Income-rental etc.	124	124	0
Total	5,348	6,589	1,241

Table: 74- : Ajmer Discom- Revenue at Existing & Revised Tariff as approved by the Commission for FY 2011-12 (Rs. crore)

Consumer Categories	Revenue at Existing Tariff	Revenue at Revised Tariff	Increase Allowed
Domestic	817	974	157
Non-Domestic	269	332	63
Public Street Light	19	22	3
Agriculture (Metered)	311	384	73
Agriculture (Flat)	143	179	36
Small Industry	100	125	25
Medium Industry	272	338	66
Large Industry	987	1,256	269
Public Water Works (S)	81	97	16
Public Water Works (M)	13	16	3
Public Water Works (L)	59	74	15
Mixed Load	150	187	37
Electric Traction	-	-	-
Total	3,220	3,984	764
Other Income-rental etc.	94	94	0
Total	3,314	4,078	764

Table: 75-: Jodhpur Discom- Revenue at Existing & Revised Tariff as approved by the Commission for FY 2011-12 (Rs. crore)

Consumer Categories	Revenue at Existing Tariff	Revenue at Revised Tariff	Increase Allowed
Domestic	775	931	156
Non-Domestic	272	333	61
Public Street Light	61	72	11
Agriculture (Metered)	602	744	142
Agriculture (Flat)	166	208	42
Small Industry	93	116	23
Medium Industry	206	260	54
Large Industry	465	590	125
Public Water Works (S)	101	121	20
Public Water Works (M)	45	57	12
Public Water Works (L)	166	208	42
Mixed Load	250	312	62
Electric Traction	-	-	-
Total	3,204	3,954	750
Other Income-rental etc.	167	167	0
Total	3,371	4,121	750

21. Revenue Surplus/ Deficit at revised Tariff

21.1. Although the additional revenue on account of tariff revision works out to Rs. 2756 Crores for all Discoms on an yearly basis, but since tariff revision

approved by the Commission would be effective for a lesser period, the additional revenue on account of tariff revision would not be available for the full year and works out to be approximately Rs. 697 Crore for JVVNL, Rs. 429 Crore for AVVNL, Rs.421 Crore for JdVVNL and Rs. 1548 Crore for all Discoms. The position of deficit at revised tariff for the full year and remaining period of FY 11-12 works out to be as under:

Table: 76-: Revenue Deficit as approved by the Commission for FY 2011-12 -JVVNL (Rs. Crore)

Particular	At existing Tariff	At revised Tariff for full year	At revised Tariff for remaining part of the year
Aggregate Revenue Requirement	8334	8334	8334
Revenue generation (including other income)	5348	6589	6045
Revenue Deficit	2986	1745	2289
Support from Govt. including ED retention	366	366	366
Transitional Cash Support from GoR	152	152	152
Net Revenue Deficit	2468	1227	1771

Table: 77- : Revenue Deficit as approved by the Commission for FY 2011-12 (Rs. Crore)-AVVNL

Particular	At existing Tariff	At revised Tariff for full year	At revised Tariff for remaining part of the year
Aggregate Revenue Requirement	5469	5469	5469
Revenue generation (including other income)	3314	4078	3743
Revenue Deficit	2155	1391	1726
Support from Govt. including ED retention	251	251	251
Transitional Cash Support from GoR	124	124	124
Net Revenue Deficit	1780	1016	1351

Table: 78- : Revenue Deficit as approved by the Commission for FY 2011-12-JdVVNL (Rs. Crore)

Particular	At existing Tariff	At revised Tariff for full year	At revised Tariff for remaining part of the year
Aggregate Revenue Requirement	6446	6446	6446
Revenue generation (including other income)	3371	4121	3792
Revenue Deficit	3075	2325	2654
Support from Govt. including ED retention	228	228	228
Transitional Cash Support from GoR	124	124	124
Net Revenue Deficit	2723	1973	2302

- 21.2. Discoms have not proposed to meet the entire deficit of FY 11-12 in the proposed tariff as this would result in a tariff shock for the consumers in the State and proposed the unfunded gap to be considered at the time of true-up / subsequent tariff petition. Commission is of the view that keeping unfunded gap would only aggravate the deteriorating financial state of Discoms. Therefore the Commission allows Discoms to treat the unfunded gap determined by the Commission based on revised tariff for the remaining period of the year as a regulatory asset. Discoms are allowed to borrow short term loans to fund the regulatory asset. The regulatory assets so created shall be amortized in subsequent years as per direction of the Commission based on assessment of the ARR filed by Discoms for respective years.
- 21.3. At the same time, the Commission is concerned about the issues raised by various objectors regarding inventory management, recovery of arrears, excessive short term power purchases and delay in receipt of Government subsidy etc. where Discoms have to take adequate steps to bring in improvement. Commission directs Discoms to introduce effective control measures to ensure that inventory is kept at an optimum level, arrears are not allowed to increase and prudent control is exercised in short term power purchases. Discoms are also directed to furnish details of subsidy due and received from State Govt. on various accounts separately.
- 21.4. This tariff shall remain in force till it is amended by the Commission by a separate order. All existing provisions which are not modified by this order, shall continue to be in force. Discoms shall publish salient features of tariff within one week in two daily newspapers in Hindi and one in English, having wide circulation in their respective areas of supply. The tariff shall come into force only after such publication. Discoms shall revise the existing tariff structure in accordance with this order and publish in Hindi and English a booklet containing all details of tariff and its applicability for the benefit of consumers. It should be made available for sale to general public on a nominal price.
- 21.5. Copy of this order may be sent to petitioners, objectors, CEA and Govt. of Rajasthan. It shall be placed on the website of the Commission.

(S.Dhawan)
Member

(S.K.Mittal)
Member

(D.C. Samant)
Chairman