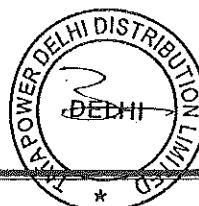


Chapter 4

Review of FY 2014-15 & ARR for FY 2015-16



Sales Forecast

Estimated Energy Sales for FY 14-15 and FY 15-16

While estimating the sale for FY 2014-15 & FY 2015-16, the Petitioner has considered previous available trends and assumes that the underlying factors which drive the demand for electricity are expected to follow the same trend as in the past. The forecast is also based on the assumption that the past consumption trend will continue in the future.

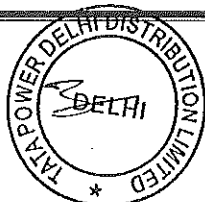
The basis of category wise sale forecast is discussed below:

1. The category wise Compounded Annual Growth Rate (CAGR) has been calculated for the past sales pattern.
2. For those category where CAGR/ past trends are not shown any trend then the demand is forecast based on considering its consumption pattern and future growth.

Past Trends

Table 4.1: Y-o-Y Sub-Category wise units sold from FY 09 to FY 14

Sl. No.	Category	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15(H1)
		Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)
A	Domestic								
i	Domestic - Others than A(ii)	1,967	2,041	2,396	2,673	2,807	2,911	3,036	2,015
ii	Single delivery point for CGHS	54	50	37	57	58	57	59	37
B	Non -Domestic								
i	Non -Domestic Low Tension (NDLT)	494	568	669	710	791	823	851	510
ii	Non -Domestic High Tension (NDHT)	421	424	333	372	394	417	427	238
C	Industrial								
i	Small Industrial Power (SIP) [less than 200kW/215kVA]	1,353	1,395	1,488	1,582	1,643	1,748	1,831	955
ii	Industrial Power on 11 kV Single Point Delivery for Group of SIP Consumers	0	0	0	0	0	1	1	0
iii	Large Industrial Power (LIP) (Supply at 11kV and above)	390	371	395	380	369	356	361	176
D	Agriculture	11	27	19	16	14	12	12	7
E	Mushroom Cultivation		0	0	0			0	0
F	Public Lighting								
i	Metered	67	66	55	89	20	20	21	26
ii	Unmetered					77	89	103	29
G	Delhi Jal Board (DJB)								
i	Supply at LT	-	-	153	182	172	5	8	10



ARR for FY 15-16

Sl. No.	Category	FY 08	FY 09	FY 10	FY11	FY12	FY13	FY14	FY15(H1)
		Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)
ii	Supply at 11kV and above						199	196	93
H	DIAL								
I	Railways Traction	48	48	54	52	57	50	46	23
J	DMRC	79	76	99	157	163	160	134	74
K	Adv. & Hoardings						1	1	0
L	Temporary Supply	25	33	35	48	52	57	61	32
M	Others	66	60	65	82	83	63	41	17
	Total	4,975	5,161	5,800	6,400	6,699	6,968	7,187	4,242

Table 4.1(i): Y-o-Y Main Category wise summary of units sold from FY 09 to FY 14

Sl. No.	Category	FY 08	FY 09	FY 10	FY11	FY12	FY13	FY14
		Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)	Sales (MU)
1	Domestic	2,027	2,102	2,447	2,752	2,888	2,994	3,109
2	Non Domestic	933	1,014	1,023	1,125	1,226	1,272	1,329
3	Industrial	1,744	1,767	1,884	1,962	2,012	2,105	2,192
4	Irrigation & Agriculture	12	29	20	17	17	13	13
5	Railway	48	48	54	52	57	50	46
6	DMRC	78	76	99	157	163	160	134
7	Street Lighting	66	66	55	89	97	109	124
8	Own Consumption	19	19	19	19	16	17	17
9	Theft/ Others	47	41	45	45	49	46	19
10	Delhi Jal Board	-	-	153	182	172	203	204
	Total	4,975	5,161	5,800	6,400	6,699	6,968	7,187

*as per Form 2.1a for respective years, all subcategory including temporary are merged into one main category, hence figures at some places are not matched with information provided in table 4.1

Table 4.2: CAGR of Units Billed based on Main Category wise consumption

Sl. No.	Category	CAGR for 7 years	CAGR for 6 years	CAGR for 5 years	CAGR for 4 years	CAGR for 3 years	CAGR for 2 years	CAGR for 1 years
1	Domestic	7.91%	7.39%	8.14%	6.16%	4.14%	3.74%	3.84%
2	Non Domestic	6.88%	6.08%	5.57%	6.78%	5.72%	4.13%	4.53%
3	Industrial	6.25%	3.90%	4.42%	3.88%	3.78%	4.40%	4.18%
4	Agricultural & Mushroom	6.03%	2.42%	-14.11%	-9.74%	-8.06%	-11.20%	5.44%
5	Railways	-0.26%	-0.77%	-1.05%	-4.33%	-4.50%	-10.58%	-8.21%
6	DMRC	8.60%	9.21%	12.05%	7.78%	-5.12%	-9.41%	-16.31%
7	Street Lighting	9.30%	10.89%	13.31%	22.58%	11.81%	12.92%	13.99%
8	Delhi Jal Board				7.43%	3.90%	8.91%	0.33%
	TOTAL			6.85%	5.51%	3.94%	3.59%	3.15%



Table 4.3: Sub category wise Consumers from FY 2007-2008 to FY 2014-15 (H1)

Sl. No.	Category	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15 (H1)
A	Domestic								
i	Domestic - Others than A(ii)	743,087	820,785	901,334	970,348	1,027,031	1,073,363	1,148,705	1,172,330
ii	Single delivery point for CGHS	50	50	45	50	51	54	23	4,085
B	Non -Domestic								
i	Non -Domestic Low Tension (NDLT)	126,297	144,117	176,610	167,510	194,376	198,079	198,753	203,355
ii	Non -Domestic High Tension (NDHT)	345	361	362	422	431	428	464	470
C	Industrial								
i	Small Industrial Power (SIP) [less than 200kW/215kVA]	34,062	34,368	32,765	33,837	33,379	32,840	31,706	32,084
ii	Industrial Power on 11 kV Single Point Delivery for Group of SIP Consumers	1	1	1	1	1	1	2	2
iii	Large Industrial Power (LIP), (Supply at 11kV and above)	551	513	510	497	479	462	462	467
D	Agriculture	3,123	3,922	4,360	4,302	3,568	3,971	4,496	4,541
E	Mushroom Cultivation		1	1	1			2	2
F	Public Lighting	35	40	181	392				
i	Metered					353	432	3,198	4,026
ii	Unmetered					27	41	47	47
G	Delhi Jal Board (DJB)								
i	Supply at LT			56	51	56	240	839	837
ii	Supply at 11kV and above						58		
H	DIAL								
I	Railways Traction	1	1	1	1	1	1	1	1
J	DMRC	2	2	3	3	3	3	4	4
K	Adv. & Hoardings						221	284	298
L	Temporary Supply	15,355	24,975	27,491	37,002	18,034	15,448		
M	Others								
	Total	922,911	1,029,136	1,143,719	1,214,416	1,277,790	1,325,642	1,388,986	1,422,549

Table 4.3(i): No of Consumer (main category wise) from FY 07-08 onwards

Sl. No.	Category	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14
1	Domestic	749987	833572	917316	988879	1035905	1082998	1148728
2	Non Domestic	134415	155606	187265	185283	200810	203832	199217
3	Industrial	34619	34886	33278	34339	35199	33297	32170
4	Agricultural & Mushroom	3849	5027	5620	5469	4105	4519	4498
5	Railways	1	1	1	1	1	1	1
6	DMRC	2	2	3	3	3	3	4
7	Street Lighting	40	40	181	391	383	474	3245
8	Delhi Jal Board			56	51	56	298	839
	TOTAL	922913	1029134	1143719	1214415	1276462	1325646	1388986

*as per Form 2.1a for respective years, all subcategory including temporary are merged into one main category, hence figures at some places are not matched with information provided in table 4.3

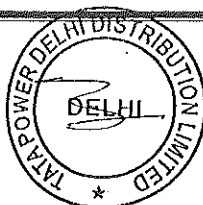


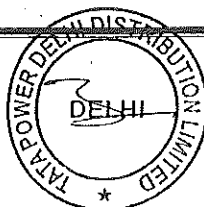
Table 4.4: Connected Load from FY 2007-2008 to FY 2014-15 (H1)

Sl. No.	Category	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15 (H1)
A	Domestic								
i	Domestic - Others than A(ii)	1,417	1,587	1,883	2,206	2,024	2,734	3,105	3,334
ii	Single delivery point for CGHS	35	32	25	29	29	31	16	50
B	Non -Domestic								
i	Non -Domestic Low Tension (NDLT)	370	503	598	614	766	886	859	905
ii	Non -Domestic High Tension (NDHT)	189	202	180	205	218	221	245	250
C	Industrial								
i	Small Industrial Power (SIP) [less than 200kW/215kVA]	846	926	934	1,016	1,151	1,317	1,230	1,257
ii	Industrial Power on 11 kV Single Point Delivery for Group of SIP Consumers	0	0	0	0	0	0	0	0
iii	Large Industrial Power (LIP) (Supply at 11kV and above)	132	128	128	128	125	123	130	131
D	Agriculture	13	21	24	22	20	22	21	26
E	Mushroom Cultivation		0	0	0			0	0
F	Public Lighting								
i	Metered	21	17	22	25	4	6	123	96
ii	Unmetered					36	32		
G	Delhi Jal Board (DJB)								
i	Supply at LT			55	50	51	10	76	75
ii	Supply at 11kV and above						52		
H	DIAL								
I	Railways Traction	20	18	17	17	18	16	21	21
J	DMRC	18	17	26	33	40	39	31	31
K	Adv. & Hoardings						0	1	1
L	Temporary Supply	32	49	59	70	40	49		
M	Others	-	-	-	-	-	-		
	Total	3,093	3,501	3,951	4,416	4,524	5,538	5,856	6,178

Table 4.4(i): Connected Load (Main Category wise) from FY 2007-2008 on wards

Sl. No.	Category	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14
1	Domestic	1463	1638	1934	2261	2066	2783	3121
2	Non Domestic	577	713	805	857	1027	1134	1104
3	Industrial	978	1055	1062	1145	1355	1439	1360
4	Agricultural & Mushroom	16						
5	Railways	20	18	17	17	18	16	21
6	DMRC	18	17	26	33	40	39	31
7	Street Lighting	21	17	22	25	41	39	123
8	Delhi Jal Board			55	50	51	62	76
	TOTAL	3093	3484	3951	4416	4622	5538	5856

*as per Form 2.1a for respective years, all subcategory including temporary are merged into one main category, hence figures at some places are not matched with information provided in Table 4.4



Domestic

The consumption of energy by domestic category constitutes to about 43% of total sales in FY 2013-14. The domestic consumption in FY 2013-14 was 3109 MU representing a growth of 3.84% over FY 2012-13. The compounded annual growth rate in during 5 year period (FY 2009 to FY 2014) was 8.14%, 6.16% during 4 year period (FY 2010 to FY 2014), 4.14% during 3 year period (FY 2011- to FY 2014), 3.74% during 2 year period (FY 2012- to FY 2014) respectively.

It is observed that during the last three year growth in domestic category is in the range of 4% in last three years. Considering the trend, the Petitioner has considered a growth rate of 4.14%, (i.e. 3 year CAGR of FY 2011 to FY 2014) for estimation of sales to domestic consumers.

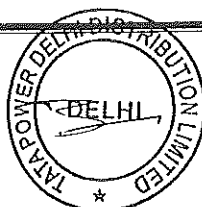
Based on the above the sale for FY 2014-15 at 3239 MU & FY 2015-16 at 3373 MU for domestic category has been projected.

Non Domestic

The sales to non-domestic category constitute about 18% of total sales of the Petitioner for FY 2013-14. The growth in non-domestic category has been 5.57% during the 5 year period (FY 2009 to FY 2014), 6.78% during the 4 year (FY 2010 to 2014), 5.72 % during the 3 year period (FY 2011 to FY 2014), and 4.13% during 2 year period (FY 2012 to FY 2014).

It is observed that growth in non - domestic category is in the range of 5.72% - 5.57%. In view of past growth of commercial sector the Petitioner has considered a growth rate of 5.72%, (i.e. 3 year CAGR of FY 2011 to FY 2014) for estimation of sales to non-domestic consumers for FY 14-15 & FY 14-15.

Based on the above the sale for FY 2014-15 at 1405 MU & FY 2015-16 at 1486 MU for non - domestic category has been projected.



Industrial

The sales of industrial category constitute to about 31% of total sales in FY 2013-14.

The growth in industrial category has been 4.42% during the 5 year period (FY 2009 to FY 2014), 3.88% during the 4 year (FY 2010 to 2014), 3.78 % during the 3 year period (FY 2011 to FY 2014), and 4.40% during 2 year period (FY 2012 to FY 2014).

In view of past growth in Industrial sector the Petitioner has considered growth rate of 3.78% (i.e. 3 year CAGR of FY 2011 to FY 2014) for projecting the demand in FY 14-15 & FY 15-16.

Based on the above the sale of 2288 MU has been projected for FY 2014-15 & 2375 MU for FY 2015-16 respectively for Industrial consumers.

Agriculture and Mushroom Cultivation

The consumption by agriculture/ mushroom consumers has been in the range of 13MU since FY 2013. Considering the normal growth of 5% the Petitioner has estimated 14 MU and 15 MU for FY 2014-15 & FY 2015-16 respectively.

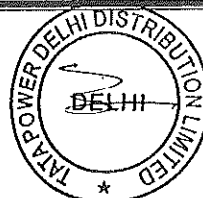
Railway Traction

The sale to the Railway Traction has not shown any particular trend over the last 5 years (FY 2009-10 to FY 2013-14). The consumption pattern of the railway is as 54 MU, 52 MU, 57 MU, 50 MU and 46 MU respectively over 5 years.

Therefore, the Petitioner has considered normal growth of 5% and estimated 48 MU and 50 MUs for FY 2014-15 and FY 2015-16 respectively.

Delhi Metro Rail Corporation (DMRC)

The sale to DMRC during FY 2010-11, FY 2011-12 and FY 2012-13 have been at 157 MU, 163 MU and 160 MU respectively. However in FY 2013-14 the sale was only for 134 MU.



DMRC vide its letter No. DMRC/O&M/TR/RSJ/T-4 dated June 16, 2014 has intimated the projected sales of 154 MU during FY 2014-15 to the Hon'ble Commission. Considering the letter the quantum of sale at 154.00 MU has been considered for FY 2014-15.

For FY 2015-16, it was submitted that two new lines will be added in the network of DMRC in TPDDL region. Considering the growth due to new additions in network, the quantum of sale at 210 MU has been considered for FY 2015-16.

Public lighting

The sales to this category constitute about 1.7% of total sales of FY 2013-14. As there is no constant growth rate hence normal growth rate of 5% has been assumed for FY 2014-15 & FY 2015-16.

Based on the above the sale of 130 MU and 136 MU has been projected for FY 2014-15 and FY 2015-16 respectively.

Delhi Jal Board (DJB)

The data on the energy sales for Delhi Jal Board is available for since FY 2009-10. The sales have been at 153 MU, 182 MU, 172 MU, 203 MU & 204 MU during the FY 2009-10, FY 2010-11, FY 2011-12, FY 2012-13 and FY 2013-14 respectively.

DJB vide its No. DJB/Fin./D.D.-III/DERC/2014/464 dated June 10, 2014 has intimated the projected purchase of 245.55 MU during FY 2014-15. Therefore, the Petitioner has thus considered the quantum of sale at 245.55 MU for FY 2014-15.

However for FY 2015-16, the petitioner has considered growth rate of 3.90% (i.e. 3 year CAGR) and projected 255 MU.



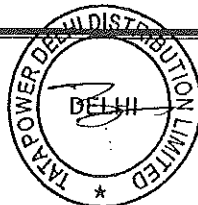
The category wise estimated summary of billed sale is given below:

Table 4.5: Projected Sales (MU) for FY 2015-16

Sl. No.	Category	FY 2014-15 (Estimated)	Growth Rate	FY 2015-16 (Projections)
A	Domestic	3,237.31	4.14%	3,371.45
i	Domestic - Others than A(ii)	3,176.26		3,307.87
ii	Single delivery point for CGHS	61.05		63.58
B	Non -Domestic	1,355.65	5.72%	1,433.15
i	Non -Domestic Low Tension (NDLT)	904.14		955.83
ii	Non -Domestic High Tension (NDHT)	451.50		477.31
C	Industrial	2,276.12	3.78%	2,362.21
i	Small Industrial Power (SIP) [less than 200kW/215kVA]	1,900.84		1,972.73
ii	Industrial Power on 11 kV Single Point Delivery for Group of SIP Consumers	0.76		0.79
iii	Large Industrial Power (LIP) (Supply at 11kV and above)	374.52		388.68
D	Agriculture	13.35	5%	14.02
E	Mushroom Cultivation	0.00		0.00
F	Public Lighting	129.74	5%	136.22
i	Metered	22.32		23.44
ii	Unmetered	107.42		112.79
G	Delhi Jal Board (DJB)	245.21	3.9% for FY15-16	254.77
i	Supply at LT	16.03		16.66
ii	Supply at 11kV and above	229.18		238.11
H	DIAL			
I	Railways Traction	47.78	5%	50.17
J	DMRC	154.00	As per letter	210.00
K	Adv. & Hoardings	0.75		1.04
L	Temporary Supply	64.66		68.08
M	Others	24.54		25.45
	Total	7,549.12		7,926.56

Table 4.5(i): Projected Category wise Units Billed for FY 2014-15 & FY 2015-16

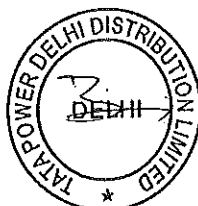
Categories	FY 2014-15	FY 2014-15	% Increase based on CAGR	FY 2015-16
	as projected by DERC Units (MU)	Units (MU) revised		Units (MU) Projected
Domestic	3,255.80	3,239.06	4.14%	3,373.27
Non domestic	1,352.21	1,405.39	5.72%	1,485.74
Industrial	2,276.75	2,288.34	3.78%	2,374.88
Agriculture	11.79	14.31	5%	15.02
Public lighting	130.30	129.74	5%	136.22
Railway Traction	45.51	47.78	5%	50.17
DMRC	154.00	154.00	Projected	210.00



Categories	FY 2014-15	FY 2014-15	% Increase based on CAGR	FY 2015-16
	as projected by DERRC Units (MU)	Units (MU) revised		Units (MU) Projected
Others	39.92	25.29		26.49
Delhi Jal Board	245.55	245.21	3.9%	254.77
Total	7,511.83	7,549.12		7,926.56

Table 4.6: Projected Number of Consumers, Connected load and Sales (MU) for FY 2015-16

Sl. No.	Category	Numbers of Consumers	Connected Load (MW)	Sales (MU)
A	Domestic	1,218,471.26	3,664.26	3,371.45
i	Domestic - Others than A(ii)	1,218,414.09	3,627.01	3,307.87
ii	Single delivery point for CGHS	57.17	37.24	63.58
B	Non -Domestic	208,116.03	1,426.87	1,433.15
i	Non -Domestic Low Tension (NDLT)	207,664.69	1,156.07	955.83
ii	Non -Domestic High Tension (NDHT)	451.34	270.79	477.31
C	Industrial	33,115.38	1,627.07	2,362.21
i	Small Industrial Power (SIP) [less than 200kW/215kVA]	32,642.76	1,488.84	1,972.73
ii	Industrial Power on 11 kV, Single Point Delivery for Group of SIP Consumers	1.03	0.39	0.79
iii	Large Industrial Power (LIP) (Supply at 11kV and above)	471.59	137.84	388.68
D	Agriculture	4,720.80	30.09	14.02
E	Mushroom Cultivation	0.13	-	0.00
F	Public Lighting	3,245.00	122.87	136.22
i	Metered	3,245.00	122.87	23.44
ii	Unmetered			112.79
G	Delhi Jal Board (DJB)	698.83	80.90	254.77
i	Supply at LT	634.18	19.31	16.66
ii	Supply at 11kV and above	64.65	61.60	238.11
H	DIAL			
I	Railways Traction	1.00	17.00	50.17
J	DMRC	4.00	60.75	210.00
K	Adv. & Hoardings	210.67	1.00	1.04
L	Temporary Supply	750.32	59.75	68.08
M	Others			25.45
	Total	1,469,333.41	7,090.56	7,926.56



The Petitioner has considered following Power Factor for categories where KvAh billing has been done.

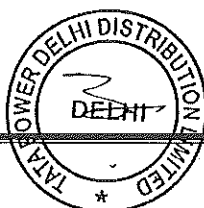
Table 4.7: Summary of Power factor

Consumer slab	Power Factor
Non Domestic Low Tension (NDLT)	
Between 10-100 kW	0.91
Above 100 kW	0.91
Non Domestic High Tension (NDHT)	
Non Domestic Light/Power on 11kV Single Delivery Point for Commercial Complexes	0.90
Supply in 11kV and above (above 100kW)	0.90
Small Industrial Power (SIP)	
Between 10-100 kW	0.92
Above 100 kW	0.93
Large Industrial Power (LIP)	
Supply in 11kV and above (above 100kW)	0.96
Industrial Power on 11 kV Single Delivery Point for group of consumers	0.93
Railway Traction (other than DMRC)	0.97
DMRC	0.98
DJB	0.85

Based on the above, the Petitioner has estimated billed revenue of Rs. 6680.51 Cr (inclusive of 8% revenue deficit surcharge). Category wise billed revenue for FY 2014-15 & FY 2015-16 is given below:

Table 4.8(i): Category wise estimated billed revenue including DRRS (Rs Cr):

Categories	FY 2014-15	FY 2015-16
	Amount	Amount
Domestic	1,950.79	2,020.14
Non domestic	1,583.03	1,711.60
Industrial	2,219.71	2,370.86
Public lighting	108.61	113.49
Agriculture	5.56	5.78
Railway Traction	38.77	41.39
DMRC	113.95	158.17
Others	11.84	12.91
Delhi Jal Board	227.12	246.16
Total	6,259.38	6,680.51
Less- DRRS	457.59	494.85
Revenue net of DRRS	5,801.79	6,185.66



Further the category wise break of billed revenue in fixed charges and revenue charges for FY 2015-16 is given below:

Table 4.8: Category wise estimated billed revenue including DRRS (Rs Cr).

Categories	FY 2015-16		
	Fixed Charges	Energy Charges	Total
Domestic	111.99	1,757.31	1,869.29
Non domestic	189.80	1,333.78	1,523.58
Industrial	182.10	1,999.31	2,181.41
Public lighting	-	105.08	105.08
Agriculture	0.72	4.08	4.80
Railway Traction	3.06	35.26	38.32
DMRC	9.11	137.34	146.46
Others	3.32	85.47	88.79
Delhi Jal Board	11.30	216.63	227.92
Total	511.40	5,674.26	6,185.66

Detailed data is given in Form R1, R2, R3, and R3a for FY 2014-15 & FY 2015-16 respectively.

Estimated Collection

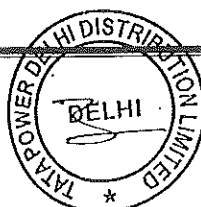
The Hon'ble Commission has approved the energy collection target of 99.50% in its Tariff order dated 13.07.12. Based on the same, estimated energy collection works out as follows:

Table 4.8(i) Estimated Energy Collection (Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Estimated Billing at Current Tariffs	5,801.79	6,185.66	Table 4.8
B	Collection Efficiency	99.50%	99.50%	
C	Estimated Collection	5,772.78	6,154.73	A*B

Revised AT&C loss level for FY 2014-15 & Proposed AT&C Loss Level for FY 2015-16

The Hon'ble Commission while laying down the AT&C targets for the extended MYT control period FY 2011-12 had adopted the approach of allowing normative O&M expenses on one hand while adopting the actual level of AT&C loss achieved by Licensees on the other hand. The said approach was erroneous and TPDDL earnestly submitted the concerns in this regard and challenged this approach in the Appeal No. 14/2012 against Tariff Order of FY 2011-12. It is pertinent to mention that the Hon'ble Appellate Tribunal for Electricity vide its



judgment dated 28.11.2013 in Appeal No. 14 /2012 agreed with TPDDL contentions and declared this approach of the Hon'ble Commission as erroneous and struck it down.

The Relevant extracts of the said judgment are reproduced below:

Para 186: *While fixing the targets for the AT&C losses, the Delhi Commission has considered actual AT&C losses achieved during the previous year. However, while fixing the O&M expenses, the Delhi Commission has ignored actual expenses and indexed the normative expenses as per 2007 MYT Regulations.*

187: *This approach taken by the Delhi Commission is not correct. It should have adopted either the normative AT&C losses trajectory or O&M expenditure as per 2007 MYT Regulations or actual. The Delhi Commission cannot adopt a method under which the Appellant is at loss under all the circumstances.*

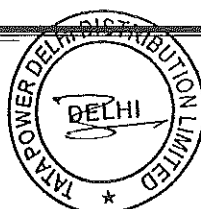
188: *This issue is decided accordingly in favour of Appellant.*

In compliance to the Judgment of Hon'ble ATE in Appeal no. 14 of 2012, the Hon'ble Commission in its Tariff Order dated July 2014 has taken of the view that ***the AT&C Loss target is now revised on normative basis at 15.325%, instead of revising the O&M expenditure on actual basis as claimed by the Petitioner.***

It is further clarified that while setting the AT&C loss trajectory for second control period (i.e. for FY 2012-13 to FY 2014-15) in its second MYT order dated July 2012, the Hon'ble Commission has taken the base year AT&C loss target of 13% which has to be further reduced by 1.50% over the next MYT control period (i.e. 0.50% for each year of the second control period)

Given below is the approved AT&C loss trajectory as per Tariff order 2012

Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15
Base year AT&C Target		13.00%	12.50%	12.00%
Approved reduction in y-o-y AT&C loss over the previous year AT&C loss target in second control period		0.50%	0.50%	0.50%
Approved AT&C Target	13.00%	12.50%	12.00%	11.50%



It is submitted that while computing the AT&C overachievement incentive for FY 2012-13 in its Tariff order dated July, 2014, the Hon'ble Commission has not given the subsequent impact of such revision in AT&C loss trajectory for next control period.

Now due to revision in Base year AT&C target for FY 2011-12 i.e. from 13% to 15.325% by the Hon'ble Commission, the AT&C loss trajectory for second control period should also be revised by reducing the AT&C loss level by 0.50% per year from revised target of 15.32% for FY 11-12 which is in line with the methodology as per second year MYT order, as the y-o-y AT&C loss targets has to be reduced from the previous year AT&C loss target. The revised AT&C trajectory as now sought is given below:

Revised AT&C loss reduction trajectory due to revision in base year AT&C loss

Particulars	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15
Revised Base year AT&C Target		15.325%	14.825%	14.325%
Approved reduction in y-o-y AT&C loss over the previous year AT&C loss in second control period		0.50%	0.50%	0.50%
Revised AT&C Target should be	15.325%	14.825%	14.325%	13.825%

In line with the earlier approach adopted for FY 2011-12 by the Hon'ble commission, the Petitioner has proposed AT&C loss reduction by 0.50% over the previous year target.

Table 4.9: AT&C Loss Level

Sl. No.	Particulars	Revised AT&C loss for FY 14-15	Proposed AT&C loss for FY 15-16	Remark
A	T&D losses	13.89%	13.39%	
B	Collection efficiency	99.50%	99.50%	
C	AT&C Loss	13.825%	13.325%	

Power Purchase Requirement

Based on the same energy requirement for FY 14-15 and FY 15-16 works out as follows:

Table 4.10: Estimated Energy Requirements

Sl. No.	Particulars	UoM	FY 14-15	FY 15-16	Remark
A	Expected Sales	MU	7,549.12	7,926.56	Table 4.5
B	Distribution Loss	%	13.89%	13.39%	Table 4.9
C	Energy Input (at TPDDL periphery)	MU	8,767.28	9,152.23	$(A/(1-B))*100$

Power Purchase Projections for FY 14-15

For projection of power purchase cost for the FY 14-15, the actual invoices billed by the generation companies for the period Apr'14 to Aug'14 have been considered. However, for the period Sep'14 to Mar'15, the projection is based on the estimated availability, Fixed Cost and Variable Cost. The assumptions for projections of Sep'14 to Mar'15 are explained in the following paragraphs.

Energy availability from Delhi Gencos:

For the period Apr'14 to Aug'14, the actual energy scheduled and actual amount billed from the Delhi Gencos is considered.

The estimate for energy availability from Rajghat (RPH) for Sep'14 is based on the average of month wise availability (PAFM) of the stations for the past 3 years prorated for TPDDL share. For the period Oct'14 to Mar'15, RPH is considered to be backed down as per the MoM of DPPG meeting dated 29-Sep-14 and as per DTL letter number F./DTL/207/14-15/GM(SLDC)/F-30/101 dated 30-Sep-14, wherein it is mentioned that RPH is to be closed down from 01-Oct-14 on account of emission norms.

Further, for gas based stations (GT, PPCL and Bawana), only 60 MW have been considered to be scheduled to TPDDL from each plant throughout the year keeping in view the present curtailments in gas allocations.

However, no energy is considered to be scheduled from Rithala in view of present gas curtailments and high costs of spot RLNG.



Solar generation has been considered equal to the MUs generated in FY 13-14.

Exception: For BTPS, The energy, Variable Cost and Fixed Cost for the period Oct'14 to Mar'15 have been taken after considering the reallocation of 285 MW from BTPS to Madhya Pradesh as per letter from Ministry of Power (GoI) dated 01-Oct-14.

Estimated Costs: For the purpose of calculation of fixed costs to be paid by TPDDL during the period Sep'14 to Mar'15, the availability percentage of past 12 months has been considered in order to take in to account the present situation of gas availability in the country.

The fixed costs have been taken as TPDDL percentage share of the AFC of the respective stations as approved by the Hon'ble Commission in its MYT order issued in July 2012.

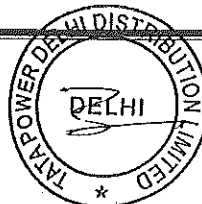
Although, all units of Bawana (PPCL III) have been commissioned, the provisional Annual Fixed Cost (AFC) of only 1GT and ½ STG is allowed as per provisional CERC order dated 25.05.2012. Accordingly the fixed cost to be paid is extrapolated for complete Bawana plant (4GTs and 2STG) and further prorated for TPDDL share.

Fixed cost for Rithala has been considered in line with the tariff petition filed by TPDDL with the Hon'ble Commission.

The variable cost for Sep'14 to Mar'15 for each station has been considered to be same as the variable rates of Jul'14 for each station. The projected energy availability from the Delhi Gencos with the estimated cost is detailed in the table as under:

Projected net energy available from Delhi Gencos for FY 14-15

Generating stations	Projected for FY 14-15		
	Mu	(Rs Cr)	Average Rate
BTPS	738.31	433.02	5.87
Rajghat	87.40	55.95	6.40
Pragati	446.14	236.42	5.30
GT	376.84	249.11	6.61
TPDDL Generation	0.00	96.63	
TPDDL Solar	2.08	3.65	17.57
Pragati III	425.26	389.88	9.17
Total	2076.02	1464.66	7.06



Energy Availability from the Central Sector Generating Stations

Thermal Plants: For the period Apr'14 to Aug'14, the actual energy scheduled and actual amount billed from the CSGS is considered.

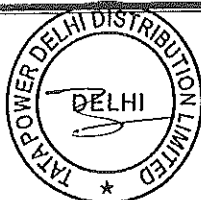
The estimates for energy availability from coal based plants for the period Sep'14 to Mar'15 are based on the average of month wise availability (PAFM) of the stations for the past 3 years.

However, for gas stations of NTPC namely Anta, Auraiya and Dadri gas, the energy has been taken as average MUs scheduled from the respective stations in FY 13-14 in view of prevailing gas situation expected to be continued in FY 14-15 as well.

Energy from hydro stations (NHPC, SJVN and THDC) have been taken as per TPDDL share from the Design Energy of the respective stations. Energy from nuclear stations (NAPS and RAPS) and for TALA is taken as per actual energy scheduled from the respective stations during FY 13-14.

Exceptions:

- Full allocation from CLP (124MW) has been considered to be availed during Sep'14 to Oct'14. However due to low demand in winter months, it is expected that no power shall be required from CLP during Nov'14 to Mar'15. Hence, energy scheduled from CLP during the period Nov'14 to Mar'15 is considered to be zero.
- As per NRPC allocation Order number 10 of FY 14-15 dated 30-Jun-14, the power from Aravali (Jhajjar) has been reallocated w.e.f 00hrs of 01-Jul-14. Hence, the energy from Aravali to TPDDL during the period Sep'14 to Mar'15 has been considered zero.
- As per NRPC allocation order number 14 of FY 14-15 dated 08-Sep-14, 180 MW from the TPDDL share from Dadri Thermal Stage-I is reallocated w.e.f. 00hrs of 10-Sep-14. Hence the energy from Dadri Thermal Stage-I to TPDDL during the period Sep'14 to Mar'15 has been considered as 11 MW only.



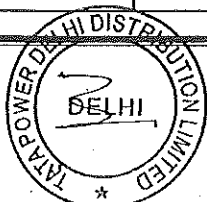
The fixed costs of the generating stations as approved for FY 13-14 in the respective Tariff Orders issued by the CERC have been escalated by 4% to arrive at the AFC of the stations. The fixed charges expected to be paid by TPDDL have been calculated as per CERC Tariff Regulations 2014-19.

The variable cost for Sep'14 to Mar'15 for each station has been considered to be same as the variable rates of Jul'14 for each station. For TALA, NAPS and RAPS a single rate of FY 13-14 has been considered. The rates of CLP and Sasan are considered as per the terms of the PPA.

The projected availability and the estimated cost of the CSGS are given in the Table as under:

Projected net energy available from CSGS and Bilateral arrangements for FY14-15

Generating stations	Projection FY 14-15 (TPDDL)		
	MUs	(Rs Cr)	Av. Rate
<u>NTPC</u>			
Singrauli	340.64	58.40	1.71
Rihand-I	212.03	51.25	2.42
Rihand-II	282.58	71.65	2.54
Rihand-III	240.70	50.80	2.11
Anta	47.94	19.66	4.10
Auriya	40.12	23.60	5.88
Dadri GPP	67.10	33.44	4.98
Unchahar-I	48.32	18.02	3.73
Unchahar-II	94.84	35.77	3.77
Unchahar-III	58.30	24.47	4.20
Dadri Thermal I	555.49	253.32	4.56
Kahalgaoon-I	96.87	37.25	3.85
Kahalgaoon-II	291.11	118.25	4.06
Farakka	45.23	18.73	4.14
Dadri Thermal II	1659.98	778.65	4.69
NTPC TOTAL	4081.24	1593.17	3.90
<u>NHPC</u>			
Bairasul	24.79	4.00	1.61
Salal- I	115.24	14.73	1.28
Tanakpur	13.30	3.59	2.70
Chamera -I	55.29	9.73	1.76
Chamera-II	59.82	18.49	3.09
URI	88.53	16.74	1.89



Generating stations	Projection FY 14-15 (TPDDL)		
	MUs	(Rs Cr)	Av. Rate
URI II	49.81	19.23	3.86
Dhauliganga	31.38	10.76	3.43
Sewa II	20.78	9.49	4.57
Chamera-III	39.13	15.86	4.05
Parbati HEP-III	29.54	16.51	5.59
Dulhasti	74.85	44.75	5.98
NHPC TOTAL	602.45	183.88	3.05
Other Stations			
Aravali Jhajjar	19.93	21.69	10.88
CLP Jhajjar	247.74	169.03	6.82
Maithon Long Term	2214.55	741.86	3.35
Koteshwar HEP	36.87	14.95	4.05
Sasan	662.55	46.74	0.71
Nathpa Jhakri HPS	191.71	96.91	5.06
Tehri HPP	100.82	42.94	4.26
Tala HEP	29.03	5.86	2.02
CTPS 7 & 8	600.98	246.57	4.10
Mejia 6	235.18	92.32	3.93
OTHERS TOTAL	4339.35	1478.87	3.41
Nuclear			
Narora APS	74.70	18.84	2.52
RAPP 5 & 6	124.62	43.54	3.49
NUCLEAR TOTAL	199.33	62.38	3.13
Total-Existing stations	9222.37	3318.41	3.60

Purchase of REC

In the tariff order issued on 23.07.2014 by the Hon'ble Commission, the Commission had approved the renewable power purchase cost to the extent of Rs.83.58 Cr, the details of which are as under:

Summary of REC

Sources of Renewable Energy	Quantity to be purchased (MU)	Average Rate (Rs/kWh)	Total cost (Rs Cr)
Petitioner's Solar	1.93	4.50	0.87
Non-solar RECs	446.95	1.50	67.04
Solar RECs	16.85	9.30	15.67
Total	465.73		83.58

It is estimated that approx. 2.08 MUs from TPDDL own solar generation shall be scheduled to TPDDL during FY 14-15. Hence, rest Solar RPO to be met by TPDDL is estimated to be (18.87-2.08) 16.80 MU. Hence, for the purpose of projections, the RPO cost considered against purchase of RECs is as under:

Cost of REC

Sources of Renewable Energy	Units sold during the year	RPO obligation (%)	MU required	Quantity to be purchased (MU)	Average Rate (Rs/kWh)	Total cost (Rs Cr)
Non-solar RECs		5.95%	449.17	449.17	1.50	67.38
Solar RECs		0.25%	18.87			
Less- met through own generation				2.08		
Solar required to be met from other sources				16.80	9.30	15.62
Total	7549.12		468.05	465.96		83.00

Since it is expected that only the certificate shall be purchased and not the actual renewable energy, the MUs considered above are only for the purpose of calculation of amount and not considered in the energy balance.

TPDDL shall be making its efforts to meet the rest of the RPO of FY 14-15. However, TPDDL requests DERC to defer the obligations to further years so that physical renewable power can be procured for the benefit of the consumers.

Power Purchase estimation from Other Sources: Intra State, Short Term Bilateral & Banking

Other than power availability against the Long Term PPAs, TPDDL makes Bilateral arrangements such as Direct Purchases as well as Banking arrangements to balance its energy requirement as 100% Long Term tie-ups for meeting the peak load demand for full year is not an economically viable proposition. Further, short term arrangements need to be made to balance the demand and supply on day to day basis and that too on 15 minutes time intervals basis.

Short term bilateral arrangements already done till Apr'14 to Aug'14 has been considered as per actuals. TPDDL has entered into banking agreements for import of power during the period Sep'14 to Mar'15 and the same have been considered in the projections.

Projected Units purchase and sale from other sources

Other Sources	Projection FY 14-15 (TPDDL)		
	MUs	(Rs Cr)	Av. Rate
Power Purchase from Other Sources			
Inter-State Bilateral Purchase	462.97	182.30	3.94
Intra-State Power Purchase			
Other Purchases Total	462.97	182.30	3.94
Power Sold to Other Sources			
Inter State Power sale	(2,541.25)	(840.00)	3.30

Further, TPDDL has projected 2541.25 MU of surplus power. The short term surplus power was sold through available mechanisms i.e. banking, bilateral sale, exchange and UI.

Transmission Losses

0.95% losses have been considered for intrastate transmission i.e. for DTL network and rest of the losses are assumed as PGCIL losses.

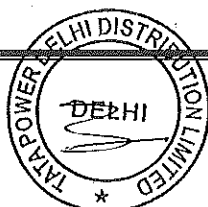
Transmission Charges

The transmission charges of PGCIL for the period Sep'14 to Mar'15 have been taken to be same as the average transmission charges billed by PGCIL during Apr'14 to Aug'14.

Transmission Charges for DTL have been taken at the amount approved by the Hon'ble Commission for FY 14-15 in its MYT Order dated 13.07.2012 prorated for TPDDL share.

Apart from the above, other transmission related costs such as BBMB charges, Delhi SLDC charges, NRLDC System Operating charges, Reactive energy charges (paid to DTL) and CLP transmission charges of approx. Rs.1.34 Cr per month have also been considered while projecting the power purchase cost for FY 14-15. No transmission charges for Aravali (Jhajjar) have been considered for the period Sep'14 to Mar'15 as the power from Aravali has been reallocated.

Apart from the above, the Short Term Open Access charges are required to be paid for sale of surplus power up to the delivery point which varies from contract to contract. The actual STOA charges paid from Apr'14 to Aug'14 are included as per actuals. However, STOA charges pertaining to the period Sep'14 to Mar'15 are taken to be approx. 50paise/unit of the surplus energy to be sold.



Total transmission charges considered for projections of FY 14-15 are as under:

Transmission charges

Transmission charges	Amount (Rs Cr)
PGCIL Charges	334.48
DTL & SLDC charges	223.42
NRLDC SO charges	1.40
SLDC charges	2.84
Reactive energy charges	0.64
BBMB Charges	0.43
APCPL Tx Charges	0.41
CLP Tx Charges	11.84
Short Term Open Access Charges	127.73
Total	703.19

Normative Rebate

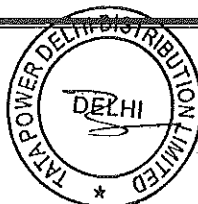
MYT Regulations, 2011 provided that normative rebate has to be considered. Based on the same normative rebate of Rs 93.67 Cr has been projected.

Revised Power Purchase Cost for FY 2014-15

Based on the above submission, Revised Power Purchase cost for FY 2014-15 is given below:

Energy Balance Summary and Power Purchase Cost for FY 14-15

Description	Actually incurred by TPDDL (B)		
	Energy (Mu)	Amount (Rs Cr)	Av. Rate (Rs/unit)
Power Purchase -CSGS*	9,222.37	3,318.29	3.60
Inter-State Bilateral Purchase	462.97	182.30	3.94
Power Purchase - Delhi Gencos#	2,076.02	1,464.87	7.06
Cost towards RPO		83.00	
Gross Power Purchase	11,761.36	5,048.46	4.29
Less: Surplus Power sold / Banked / UI sales	(2,541.25)	(840.00)	3.31
Net Power Purchase	9220.11	4,208.46	4.56
Transmission Charges			
PGCIL Losses	(350.87)		
DTL Losses	(101.95)		
PGCIL charges		334.48	
DTL charges		223.42	
Other transmission charges		145.29	
Power required for NDPL's consumers	8,767.28	4,911.65	5.60
Less- Net Normative Rebate		93.67	
Net Power Purchase Cost including Transmission Charges after Rebate		4,817.98	



Power Projections for FY 15-16

Energy availability from Delhi Gencos: The estimate for energy availability from Rajghat (RPH) for FY 15-16 is based on the average of month wise availability (PAFM) of the station for the past 3 years prorated for TPDDL share.

Further, for gas based stations (GT, PPCL and Bawana), only 60 MW have been considered to be scheduled to TPDDL from each plant throughout the year keeping in view the present curtailments in gas allocations.

However, no energy is considered to be scheduled from Rithala in view of present gas curtailments and high costs of spot RLNG. Solar generation has been considered equal to the MUs generated in FY 13-14.

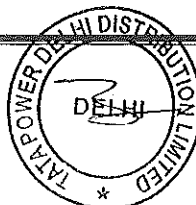
Estimated Costs: For the purpose of calculation of fixed costs to be paid by TPDDL during FY 15-16, the availability percentage of past 12 months has been considered in order to take in to account the present situation of gas availability in the country.

The fixed costs have been taken after 4% escalation on the AFC of the respective stations, as approved by the Hon'ble Commission in its MYT order issued in July 2012 prorated for TPDDL share.

Although, all units of Bawana (PPCL III) have been commissioned, the provisional Annual Fixed Cost (AFC) of only 1GT and ½ STG is allowed as per provisional CERC order dated 25.05.2012. Accordingly the fixed cost to be paid is extrapolated for complete Bawana plant (4GTs and 2STG) prorated for TPDDL share.

Fixed cost for Rithala has been considered in line with the tariff petition filed by TPDDL with the Hon'ble Commission.

The variable cost for FY 15-16 for each station has been considered at 5% over the variable rates of Jul'14 for each station. The projected energy availability from the Delhi Gencos with the estimated cost is detailed in the table given below:



Projected net energy available from Delhi Gencos for FY 15-16

Generating stations	Projection FY 15-16 (TPDDL)		
	Mu	(Rs Cr)	Avg rate
BTPS	1247.63	717.75	5.75
Rajghat	224.82	91.29	4.06
Pragati	488.25	277.77	5.69
GT	451.83	318.39	7.05
TPDDL Generation	0.00	96.20	
TPDDL Solar	1.95	3.60	18.49
Pragati III	508.53	436.98	8.59
Total	2923.00	1941.99	6.64

Energy Availability from the Central Sector Generating Stations

Thermal Plants: The estimates for energy availability from coal based plants for the period FY 15-16 are based on the average of month wise availability (PAFM) of the stations for the past 3 years.

However, for gas stations of NTPC namely Anta, Auraiya and Dadri gas, the energy has been taken as average MUs scheduled from the respective stations in FY 13-14 in view of prevailing gas situation expected to be continued in FY 14-15 as well.

Energy from nuclear stations (NAPS and RAPS) and for TALA HEP is taken as per actual energy scheduled from the respective stations during FY 13-14. Energy from hydro stations such as NHPC, THDC and SJVNL is taken as per the design energy prorated for TPDDL share.

Exceptions:

- Allocation from APCPL is being considered as per allocation number 4 of FY 14-15, wherein allocation to Delhi is from APCPL is 25.13% (approx. 376 MW after re-allocation to Andhra Pradesh and Kerala); which translates into approx. 116 MW to TPDDL.
- Due to low demand in winter months and high variable costs of CLP, it is expected that the requirement of power from CLP shall be limited. Hence energy scheduled



from CLP during the period Apr'15 to Sep'15 is considered as full 124 MW, for Oct'15 energy to be scheduled is considered as 60MW and for the period Nov'15 to Mar'16 the same is considered to be zero.

- As per NRPC allocation order number 14 of FY 14-15 dated 08-Sep-14, 180 MW from the TPDDL share from Dadri Thermal Stage-I is reallocated from Sep'14 to Aug'15. Hence the energy from Dadri Thermal Stage-I to TPDDL during the period Apr'15 to Aug'15 has been considered as 11 MW only.

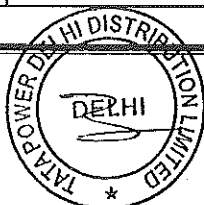
The fixed costs of the generating stations as approved for FY 13-14 in the respective Tariff Orders issued by the CERC have been escalated by 4% year on year to arrive at the AFC of the stations for the period FY 15-16. The fixed charges expected to be paid by TPDDL have been calculated as per CERC Tariff Regulations 2014-19.

The variable cost of thermal stations, for FY 15-16 for each station has been considered at 5% over the variable rates of Jul'14 for each station. The variable cost of hydro stations (NHPC, THDC & SJVNL) has been calculated as per the CERC Regulations 2014-19. For TALA a single rate of FY 14-15 has been considered. The rates of CLP and Sasan are considered as per the terms of the PPA.

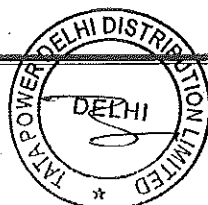
The projected availability and the estimated cost of the CSGS are given in the Table below:

Projected net energy available from CSGS / long term bilateral arrangements for FY15-16

Generating stations	Projection FY 15-16 (TPDDL)		
	MU	(Rs Cr)	Av. Rate
NTPC			
Singruali	345.56	57.90	1.68
Rihand-I	224.89	50.83	2.26
Rihand-II	298.27	70.23	2.35
Rihand-III	240.13	57.25	2.38
Anta	60.00	23.67	3.94
Auriya	60.00	33.91	5.65
Dadri GPP	84.00	43.97	5.23
Unchahar-I	59.71	21.61	3.62
Unchahar_II	117.87	42.15	3.58
Unchahar_III	72.43	28.92	3.99



Generating stations	Projection FY 15-16 (TPDDL)		
	MU	(Rs Cr)	Av. Rate
Dadri Thermal I	1008.45	428.19	4.25
Kahalgaon-I	108.58	44.34	4.08
Kahalgaon-II	324.11	135.96	4.19
Farakka	48.10	19.85	4.13
Dadri Thermal II	1999.38	919.60	4.60
NTPC TOTAL	5051.48	1978.36	3.92
NHPC			
Bairasul	25.01	3.78	1.51
Salal- I	104.50	9.85	0.94
Tanakpur	16.90	3.79	2.25
Chamera-I	38.37	7.11	1.85
Chamera-II	58.34	14.83	2.54
URI	83.35	12.56	1.51
URI II	25.96	7.71	2.97
Dhauliganga	43.74	12.00	2.74
Sewa II	20.75	8.41	4.05
Chamera-III	35.69	12.41	3.48
Parbati HEP-III	22.05	10.39	4.71
Dulhasi	71.39	41.19	5.77
NHPC TOTAL	546.06	144.04	2.64
Other Stations			
Aravali Jhajjar	959.29	486.49	5.07
CLP Jhajjar	464.18	239.27	5.15
Malton Long Term	2212.86	707.88	3.20
Koteshwar HEP	33.70	13.72	4.07
Sasan	895.39	66.54	0.74
Nathpa Jhakri HPS	166.36	47.17	2.84
Tehri HPP	79.63	38.37	4.82
Tala HEP	31.05	6.27	2.02
CTPS 7 & 8	636.42	251.92	3.96
Mejla 6	241.30	102.21	4.24
OTHERS TOTAL	5720.18	1959.84	3.43
Nuclear			
Narora APS	73.72	19.24	2.61
RAPP 5 & 6	127.69	46.04	3.61
NUCLEAR TOTAL	201.41	65.28	3.24
Total-Existing stations	11519.13	4147.52	3.60



Given below is the consolidated plant wise generation summary

Table 4.11: Energy Requirement for FY 2015-16

Sl. No.	Stations	Installed Capacity	Firm share of Delhi		Unallocated share of Delhi		Firm and Unallocated share of Delhi		Share Allocation to Petitioner		Plant Load factor *	Total Energy Available in Delhi	Petitioner Share
		(MW)	(%)	(MW)	(%)	(MW)	(%)	(MW)	(%)	(MW)	(%)	(MU)	(MU)
1	2	3	4	5	6	7	8=6+4	9=7+5	10	11=9*10	12	13=9*12	14=13*10
A	Central Sector Generating Stations (CSGS)												
B	NTPC												
i	Anta Gas	419	11	44	0	0	11	44	31	14	85	329	101
ii	Auraiya Gas	663	11	72	0	0	11	72	31	22	85	538	165
iii	Dadri Gas	830	11	91	0	0	11	91	31	28	85	679	208
iv	Dadri - I (Apr'15 to Aug'15)	840	69	569	0	0	69	569	2	11	85	1776	34
	Dadri - I (Sep'15 to Mar'16)		90	756	0	0	90	756	25	191	85	3285	830
v	Dadri - II	980	75	735	0	0	75	735	31	225	85	5488	1684
vi	Farakka	1600	1	22	0	0	1	22	31	7	85	166	51
vii	Kahalgaoon - I	840	6	51	0	0	6	51	31	16	85	381	117
viii	Kahalgaoon - II	1500	10	157	0	0	10	157	31	48	85	1175	360
ix	Rihand - I	1000	10	100	0	0	10	100	31	31	85	747	229
x	Rihand - II	1000	13	126	0	0	13	126	31	39	85	941	289
xi	Rihand - III	1000	13	132	0	0	13	132	31	40	85	985	302
xii	Singrauli	2000	8	150	0	0	8	150	31	46	85	1120	344
xiii	Unchahar - I	420	6	24	0	0	6	24	31	7	85	179	55
xiv	Unchahar - II	420	11	47	0	0	11	47	31	14	85	351	108
xv	Unchahar - III	210	14	29	0	0	14	29	31	9	85	217	66
xvi	Aravali Jhajjar	1500	25	377	0	0	25	377	31	116	85	2814	863
xv	Total												
C	NHPC												
i	Baira Siul	180	11	20	0	0	11	20	31	6	50	87	27
ii	Chamera - I	540	8	43	0	0	8	43	31	13	50	187	57
iii	Chamera - II	300	13	40	0	0	13	40	31	12	50	176	54
iv	Chamera - III	231	13	29	0	0	13	29	31	9	50	129	40
v	Dhauliganga	280	13	37	0	0	13	37	31	11	50	162	50
vi	Dulhasti	390	13	50	0	0	13	50	31	15	50	220	67
vii	Salal	690	12	80	0	0	12	80	31	25	50	352	108
viii	Tanakpur	94	13	12	0	0	13	12	31	4	50	53	16

ix	Uri	480	11	53	0	0	11	53	31	16	50	233	71
x	Sewa - II	120	13	16	0	0	13	16	31	5	50	70	22
xi	Parbati-III	520	13	66	0	0	13	66	31	20	50	291	89
xii	Uri-II	240	13	32	0	0	13	32	31	10	50	142	44
xiii	Total												
D	THDC												
i	Tehri HEP	1000	10	103	0	0	10	103	31	32	50	452	139
ii	Koteshwar	400	10	39	0	0	10	39	31	12	50	173	53
iii	Total												
E	DVC												
i	DVC (CTPS 7&8)	500	60	300	0	0	60	300	31	92	85	2240	687
ii	DVC (MTPS 6)	250	40	100	0	0	40	100	31	31	85	747	229
iii	Total												
F	NPCIL												
i	NAPS	440	11	47	0	0	11	47	31	14	50	206	63
iii	RAPP C Units 5&6	440	13	56	0	0	13	56	31	17	50	245	75
iv	Total												
G	SJVNL												
i	Nathpa Jhakri	1500	9	142	0	0	9	142	31	44	50	624	191
iii	Total												
H	Others												
i	Tala HEP	1020	3	30	0	0	3	30	31	9	50	132	40
	Sasan	3960	11	446	0	0	11	446	31	137	85	3326	1021
	CLP Jhajjar	1320	10	132	0	0	10	132	100	132	85	986	986
ii	Maithon Long Term	1050	29	300	0	0	29	300	100	300	85	2240	2240
iii	Total												
I	Total CSGS												
J	State Generating Stations (SGS)												
i	BTPS	705	92	646	8	59	100	705	23	161	85	5264	1202
ii	Rajghat	135	86	116	14	19	100	135	30	41	85	1008	306
iii	Pragati	330	85	281	15	50	100	330	21	70	85	2464	520
iv	GT	282	85	240	15	42	100	282	30	85	85	2106	638
v	Pragati III	1371	80	1097	0	0	80	1097	27	298	85	8189	2226
vi	TPDDL Rithala	95	100	95	0	0	100	95	100	95	85	706	706
vii	TPDDL Solar												
viii	Total SGS												
K	Grand Total												

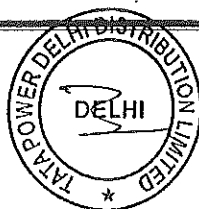
"NOTE: The MUs available from the generating stations have been considered after auxiliary consumption of the plant. Also the average availability of the stations for past 3 years have been taken into consideration. However, for gas stations of NTPC namely Anta, Auraiya and Dadri gas, the energy has been taken as average MUs scheduled from the respective stations in FY 13-14 in view of prevailing gas situation expected to be continued in FY 14-15 as well."



Given below is the consolidated summary of power purchase through generating stations

Table 4.12: Power Purchase cost proposed for FY 2015-16

Sl. No.	Stations	Petitioner Share (MU)	Fixed Charge (Rs Cr)	Variable Charge (Rs Cr)	Total Charge (Rs Cr)	Average Rate (Rs./kWh)	Remarks
1	2	3	4	5	6=4+5	7=6/3	8
A	Central Sector Generating Stations (CSGS)						
B	NTPC						
i	Anta Gas	60.00	7.00	16.67	23.67	3.94	
ii	Auraiya Gas	60.00	9.94	23.98	33.91	5.65	
iii	Dadri Gas	84.00	13.94	30.03	43.97	5.23	
iv	Dadri - I	1008.45	74.84	353.35	428.19	4.25	
v	Dadri - II	1999.38	257.25	662.35	919.60	4.60	
vi	Farakka	48.10	4.13	15.72	19.85	4.13	
vii	Kahalgaon - I	108.58	10.70	33.63	44.34	4.08	
viii	Kahalgaon - II	324.11	41.18	94.78	135.96	4.19	
ix	Rihand - I	224.89	17.91	32.92	50.83	2.26	
x	Rihand - II	298.27	25.82	44.41	70.23	2.35	
xi	Rihand - III	240.13	20.84	36.41	57.25	2.38	
xii	Singrauli	345.56	17.66	40.24	57.90	1.68	
xiii	Unchahar - I	59.71	4.51	17.10	21.61	3.62	
xiv	Unchahar - II	117.87	9.12	33.03	42.15	3.58	
xv	Unchahar - III	72.43	8.61	20.30	28.92	3.99	
xvi	Aravali Jhajjar	959.29	93.66	392.83	486.49	5.07	
xv	Total	6010.77	617.11	1847.74	2464.85	4.10	
C	NHPC						
i	Baira Siul	25.01	1.76	2.02	3.78	1.51	
ii	Chamera - I	38.37	3.31	3.80	7.11	1.85	
iii	Chamera - II	58.34	6.91	7.93	14.83	2.54	
iv	Chamera - III	35.69	5.78	6.63	12.41	3.48	
v	Dhauliganga	43.74	5.60	6.40	12.00	2.74	
vi	Dulhasti	71.39	19.18	22.01	41.19	5.77	
vii	Salal	104.50	4.59	5.27	9.85	0.94	
viii	Tanakpur	16.90	1.77	2.03	3.79	2.25	
ix	Uri	83.35	5.85	6.71	12.56	1.51	
x	Sewa - II	20.75	3.92	4.49	8.41	4.05	
xi	Parbati-III	22.05	4.84	5.55	10.39	4.71	
xii	Uri-II	25.96	3.91	3.80	7.71	2.97	
xiii	Total	546.06	67.41	76.63	144.04	2.64	
D	THDC						
i	Tehri HEP	79.63	17.85	20.53	38.37	4.82	



ii	Koteswar	33.70	6.11	7.60	13.72	4.07	
iii	Total	113.33	23.96	28.13	52.09	4.60	
E	DVC						
i	DVC (CTPS 7&8)	636.42	116.54	135.39	251.92	3.96	
ii	DVC (MTPS 6)	241.30	30.88	71.33	102.21	4.24	
iii	Total	877.72	147.41	206.72	354.13	4.03	
F	NPCIL						
i	NAPS	73.72	0.00	19.24	19.24	2.61	
ii	RAPP C Units 5&6	127.69	0.00	46.04	46.04	3.61	
iv	Total	201.41	-	65.28	65.28	3.24	
G	SJVNL						
i	Nathpa Jhakri HEP	166.36	21.94	25.23	47.17	2.84	
ii	Total	166.36	21.94	25.23	47.17	2.84	
H	Others						
i	Tala HEP	31.05	0.00	6.27	6.27	2.02	
ii	Sasan	895.39	14.60	51.93	66.54	0.74	
iii	CLP Jhajjar	464.18	98.88	140.39	239.27	5.15	
iv	Maithon Long Term	2212.86	264.79	443.09	707.88	3.20	
v	Total	3603.48	378.27	641.69	1019.96	2.83	
I	Total CSGS	11519.13	1256.10	2891.42	4147.52	3.60	
J	State Generating Stations (SGS)						
i	BTPS	1247.63	96.68	621.07	717.75	5.75	
ii	Rajghat	224.82	12.49	78.80	91.29	4.06	
iii	Pragati	488.25	10.77	267.01	277.77	5.69	
iv	GT	451.83	18.57	299.82	318.39	7.05	
v	Pragati III (Bawana)	508.53	282.90	154.07	436.98	8.59	
vi	TPDDL Rithala	0.00	96.20	0.00	96.20		
vii	TPDDL Solar	1.95	0.00	3.60	3.60	18.49	
viii	Total SGS	2,923.00	517.61	1,424.37	1,941.99	6.64	
K	Grand Total	14,442.13	1,773.72	4,315.79	6,089.51	4.22	

Power Purchase estimation from Other Sources: Intra State, Short Term Bilateral & Banking

Other than power availability against the Long Term PPAs, TPDDL makes Bilateral arrangements such as Direct Purchases as well as Banking arrangements to balance its energy requirement. However, no shortages for FY 15-16 have been estimated and hence no short term power purchase is expected.

Table 4.13: Projected Units purchase from other sources

Sl. No.	Source	Energy Purchase Projection	Cost per Unit	Total Cost	Remarks/Reference
		(MU)	(Rs./unit)	(Rs Cr)	
1	2	3	4	5=3*4	6
A	Bilateral	NIL	NIL	NIL	NIL
B	Banking	NIL	NIL	NIL	NIL
C	Exchange	NIL	NIL	NIL	NIL
D	Intra State	NIL	NIL	NIL	NIL
E	Unscheduled Interchange	NIL	NIL	NIL	NIL
	Total	NIL	NIL	NIL	NIL

Purchase of REC

In the tariff order issued in Oct'12 by the Hon'ble Commission, the Commission had directed the DISCOM to purchase the renewable power as under:

A) Solar

It is estimated that approx. 1.95 MUs from TPDDL own solar generation shall be scheduled to TPDDL during FY 15-16. Hence rest Solar RPO required to be met by TPDDL is estimated to be (26.74-1.95) 24.79 MUs. Hence for the purpose of projections, the RPO cost considered against purchase of RECs at the current floor price is as under:

Table 4.14: Summary of Solar - REC Requirement

Sl. No.	Particulars	UoM	FY 2015-16
1	2	3	4
A	Energy sales	MU	7926.56
B	RPO target-Solar	%	0.30
C	RPO target-Solar	MU	23.78
D	Availability from Solar	MU	1.95
E	Required to be met through RECs	MU	21.83
F	REC rate	Rs/kWh	9.30
G	Cost for REC purchase	(Rs Cr)	20.30

B) Non Solar

Based on the RPO regulations the requirement for FY 15-16 comes to 578.64 MU. Given below is the working and cost of the same.

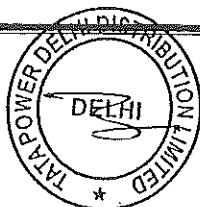


Table 4.15: Summary of non Solar - REC Requirement

Sl. No.	Particulars	UoM	FY 2015-16
1	2	3	4
A	Energy Sales	MU	7926.56
B	RPO Target-Non-Solar	%	7.30
C	RPO Target-Non-Solar	MU	578.64
D	Availability from Non-Solar	MU	0.00
E	Required to be met through REC's	MU	578.64
F	REC Rate	Rs./ kWh	1.50
G	Cost for REC Purchase	(Rs Cr)	86.80

It is further clarified that only the certificate shall be purchased and not the actual renewable energy, the MUs considered above are only for the purpose of calculation of amount and not considered in the energy balance.

Transmission Losses

0.95% losses have been considered for intrastate transmission i.e. for DTL network and rest of the losses are assumed as PGCIL losses.

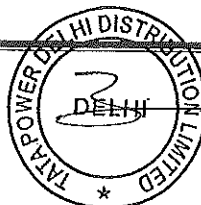
Transmission Charges

The transmission charges of PGCIL for the period FY 15-16 have been taken at 5% escalation over the average transmission charges billed by PGCIL during Apr'14 to Aug'14.

Transmission Charges for DTL as approved by the Hon'ble Commission for FY 14-15 in its MYT Order dated 13.07.2012 have been escalated by 5% to arrive at the wheeling charges of DTL for FY 15-16 which are further prorated for TPDDL share.

Apart from the above, other transmission related costs such as BBMB charges, Delhi SLDC charges, NRLDC System Operating charges, Reactive energy charges (paid to DTL) and CLP transmission charges of approx. Rs.1.43 Cr per month have also been considered while projecting the power purchase cost for FY 14-15.

Apart from the above, the Short Term Open Access charges are required to be paid for sale of surplus power up to the delivery point which varies from contract to contract. Hence,



STOA charges pertaining to the surplus sale during FY 15-16 are taken to be approx. 50paise/unit of the surplus energy to be sold.

Total transmission charges considered for projections of FY 15-16 are as under:

Table 4.16: Transmission losses & Transmission charges

Transmission charges	Amount (Rs Cr)
Transmission Losses (MU)	673.01
Inter-State Transmission (MU)	535.74
Intra-State Transmission(MU)	137.27
Transmission Charges	
PGCIL Charges	340.20
DTL & SLDC charges	232.08
NRLDC SO charges	1.44
SLDC charges	2.85
Reactive energy charges	0.60
BBMB Charges	0.43
APCPL Tx Charges	1.08
CLP Tx Charges	10.80
Short Term Open Access Charges	230.85
Total transmission charges	820.33

Short Term surplus Power Sales

TPDDL has projected 4617 MU's surplus power available for sale on account of surplus energy available to it which shall be sold and the sale proceeds shall entirely go towards reducing the net power purchase cost charged to TPDDL consumers.

Given below is the breakup of sale of surplus power proposed to be done through various available mechanism.

Table 4.18: Projected Units sold from other sources

Sl. No.	Particulars	Surplus Energy (MU)	Average Sale Price (Rs. / kWh)	Total Cost (Rs Cr)
1	2	3	4	5=3*4
A	Bilateral	1200.41	3.55	426.15
B	Banking	1292.75	4.00	517.10
C	Exchange	1754.45	3.00	526.33
D	Intra State	19.19	3.20	6.14
E	Unscheduled Interchange	350.17	1.37	47.86
F	Total	4,616.97	3.30	1523.58

Based on the above submission, energy balance for FY 2015-16 is given below

Table 4.19: Energy Balance for FY 2015-16

Sl. No.	Particulars	UoM	FY 2015-16	Remarks
1	2	3	4	5
A	Energy Availability			
i	Total energy available (excluding BTPS, SGS TOWMCL & Solar)	MU	11519.13	Table 4.12 & 4.13
ii	Inter-State Transmission Losses	%	4.65%	
		MU	535.74	
iii	Energy available from BTPS, SGS TOWMCL & Solar	MU	2923.00	Table 4.12
iv	Energy available at State Transmission Periphery	MU	13906.39	A(i) + A(iii) - A(ii)
B	Energy Requirement			
i	Energy sales	MU	7926.56	
ii	Distribution loss	%	13.392%	
		MU	1225.67	
iii	Energy requirement at distribution periphery	MU	9152.23	
iv	Intra-State Transmission Loss *	%	0.95%	Normative
		MU	137.20	[A(i) + A(iii)] X B(iv)
v	Energy Requirement at Transmission Periphery	MU	9289.43	B(iii) + B (iv)
C	Surplus Energy	MU	4616.97	A(iv) - B(v)

Normative Rebate

MYT Regulations, 2011 provided that normative rebate has to be considered. Based on the same normative rebate of Rs 102.76 Cr has been projected.

Summary of Power Purchase cost & Quantum

The Petitioner has proposed the average rate of Rs 6.00/unit for FY 2015-16.

Given below is the summary of power purchase quantum and cost for FY 2015-16

Table 4.20: Energy Balance Summary and Power Purchase Cost for FY 15-16

Description	Actually Incurred by TPDDL (B)		
	Energy (Mu)	Amount (Rs Cr)	Av. Rate (Rs/unit)
Power Purchase from CSGS	11,519.13	4,147.52	3.60
Power Purchase from Delhi Gencos	2,923.00	1,941.99	6.64
Cost towards RPO		107.10	
Gross Power Purchase	14,442.13	6196.61	4.29
Less: Surplus Power sold / Banked / UI sales	(4,616.97)	(1523.58)	3.30
Net Power Purchase	9825.23	4673.02	4.76
Transmission Charges			
PGCIL Losses	(535.74)		
DTL Losses	(137.20)		
PGCIL charges		340.20	
DTL charges		232.08	
Other transmission charges		248.05	
Power required for NDPL's consumers	9,152.23	5493.36	6.00
Less- Net Normative Rebate		102.76	
Net Power Purchase Cost including Transmission Charges after Rebate	9,152.23	5390.60	

Proposed O&M expenses for FY 2015-16

Repair & Maintenance Expenses for FY 14-15 & FY 15-16- Form 5:

As mentioned earlier, R&M expenses are directly linked with Opening GFA of respective year whereas K factor will be treated as constant. Based on the methodology the revised computation of R&M expense is given below;

Table 4.22(i) R&M expense based on revised GFA

Sl. No.	Particulars	FY 14-15	FY 15-16	Remarks
A	Opening Balance of GFA	4,586.50	5,061.50	Table 3.22
B	Revised K Factor.(%)	2.96%	2.96%	Table 3.18(v)
C	R&M Expenses	135.76	149.82	

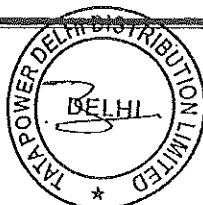
Employee Costs & Provisions – Form 6

It is submitted while seeking Employee Expenses for FY 2015-16, following approach/justification have been kept in mind:

The Hon'ble Commission is aware that the MYT Regulations 2011, has been extended for one year i.e. FY 15-16, similarly for FY 11-12, MYT Regulations 2007 was extended for one year. While extending the MYT Regulation 2007, the Hon'ble Commission fixed the AT&C target based on actual achievement of AT&C losses but correspondingly didn't allow O&M expenses on actual basis. Aggrieved by the approach followed by the Hon'ble Commission, the petitioner had filed an Appeal no 14/2012, where in this issue was raised and decided in favour of TPDDL.

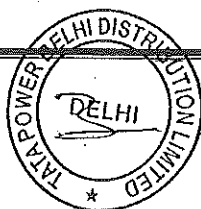
The Hon'ble Tribunal dated 28.11.2013 in Appeal No.14 of 2012 held that the approach adopted by the Commission in determining AT&C loss levels on actual basis and O&M on normative basis as incorrect. The Learned Commission in the impugned order re-determined the AT&C loss target for year 2011-12 at 15.325% instead of 13% that was allowed in the tariff order dated 26.08.2011. The relevant extract of the impugned order are reproduced herein below:

"3.143 The Hon'ble ATE has directed in the Appeal no 14 of 2012 and the relevant extract is as below



"This approach taken by the Delhi Commission is not correct. It should have adopted either the normative AT&C losses trajectory or O&M expenditure as per 2007 MYT Regulations or actual. The Delhi Commission cannot adopt a method under which the Appellant is at loss under all the circumstances. Accordingly, this issue is decided in favour of the Appellant."

- a) In view of the above judgment it is submitted that the AT&C loss target for FY 15-16 may be decided based on likely actual achievement of AT&C loss for FY 14-15 and correspondingly O&M expenses may also be allowed on likely actual O&M expenses for FY 14-15 as worked out in this petition.
- b) It is submitted that since the actual AT&C loss reduction target of FY 15-16 may be fixed based on actual likely AT&C loss reduction for which certain O&M expenses have actually been incurred, therefore, to sustain the same and further reduction, minimum actual O&M expenses further increase by inflation, statutory levies, service binding conditions of FRSR employees, growth etc. should be allowed for FY 15-16.
- c) Further TPDDL has been regularly requesting the Hon'ble Commission to modify the norms for allowance of O&M expenses so as to meet the actuals costs required to provide/maintain better service to the consumers. It is also pertinent to mention that the revised expenses for FY 2015-16 should be considered by the Hon'ble Commission while considering the base cost for Discoms for FY 14-15.
- d) FRSR Structure employees – comprising of the employees who were transferred from erstwhile Delhi Vidyut Board and whose terms of service are governed by FRSR Rules (Govt. Rules) and their service conditions are protected by the Tri-partite agreement – in pursuance to the Transfer Scheme. Any increase in the salary of FRSR employees is uncontrollable in the hands of licensee.
- e) Non-FRSR Structure – The existing formula of allowance in increase in the salary of Non-FRSR structure employees does not addresses the increase required for the factors beyond average inflation like current inflation, career growth/promotions, increase required in proportion to increase in electricity demand growth , increasing social commitments.

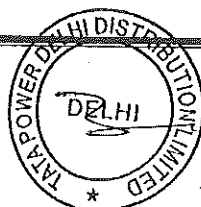


- f) Current Inflation formula which is a combination of CPI and WPI is not appropriate and only CPI should be used for inflation index for manpower costs as individuals (i.e. employees) are affected by changes in CPI and Wholesale Price is irrelevant for household consumers. Further, annual salary increments have to be allowed exceeding the inflation numbers, to allow for a real increase based on performance of employees to keep them motivated. Hence, it is imperative that the allowance of employee expense should also have a factor for such increase.
- g) TPDDL has reduced AT&C loss level below 11% as on 31.03.2014 and has reached a stage where further reduction in AT&C loss and sustaining the same is possible only with help of skilled and talented manpower. The infusion of such talented and skilled manpower is possible only at competitive salary levels, which should be allowed to licensee.
- h) The proposed formula does not factor any increase necessitated due to increase in units handled which has been possible by allowing industry comparable increments against better employee engagement level, better efficiency , etc.
- i) Replacement of manpower against retirement/resignation is available in market at salaries 20%-30% higher than the last drawn salary of the retiree/resignee.
- j) It is submitted that as against the increase allowed in employees cost, given here under is the rise in salary of FRSR Salary Structure, which totally uncontrollable in the hands of petitioner.

Increase in DA in July 2011	7 (From 51% to 58%)
Increase in DA in Jan 2012	7 (From 58% to 65%)
Increase in DA in July 2012	7 (From 65% to 72%)
Increase in DA in Jan 2013	8 (From 72% to 80%)
Increase in DA in July 2013	10 (From 80% to 90%)
Increase in DA in Jan 2014	10 (From 90% to 100%)
Increase in DA in July 2014	7 (From 100% to 107%)

Table no 3.8.4.16 clearly shows that on an average a FRSR structure employee having basic salary of Rs 100 & total salary of Rs 337.66 in 2011-12 becomes Rs. 368 in FY 12.13 and Rs. 443 in FY 14-15 showing an overall increase in the salary in the range of 10% as against increase allowed by the Hon'ble Commission in the range of 4% to 6% with further reduction by efficiency factor, the breakup of same comes as follows. It is evident that if the increase in salary is grossly insufficient for FRSR structure employees, it leaves no increase in salary to CTC structure employee.

- k) The Hon'ble Commission has prescribed increase in employee's salary based on 5 yrs. average increase in CPI/WPI which is not the true reflection of current increase in inflation. Inflation is a rate at which the general level of prices for goods and services is rising, and as a consequence purchasing power is on decline. An average of 5 years may not be true reflection of the current rate of inflation, as inflation has been consistently high in recent few years. While for FRSR structure employees and Govt servants are covered thru a DA mechanism, it is compensated as a component of increment in case of others especially the CTC structure employees.
- l) Current Inflation rate is not the sole and true reflection of a dynamic and liberal economy as it covers only certain basic items of necessities as the basis in arriving at such index, and does not recognize or provide for the rise in living standards of common man/employees as well as factors such as increase in the employee costs due to hike allowed in 6th pay Commission, increase due to career growth and increasing personal and social liabilities and obligations.
- m) Increments are required to cover not only the inflation but also some increase to award the performance of an employee and to keep them motivated. If only inflation factor is covered in inflation that would mean that real salary of an employee would be stagnant. In addition, for promotions cases some hike in salary is also required to be given.
- n) Further it is submitted that as the tariff is moving upward due to increase in uncontrollable power purchase cost, there are likely chances of an increase in theft of electricity and to curb the same, high level of vigilant efforts would be required



not only to sustain the achieved levels of AT&C loss but also to further reduce the same in line with targets set.

Achieving these challenges is possible only with ensuring that skilled and talented manpower is available with TPDDL. The infusion of such talented and skilled manpower is possible only at salary levels higher than generally prevailing in the market.

- o) In any of the organisation, the growth of the employees is necessary as it is directly link to the increasing knowledge and experience of the employee. As the knowledge and experience of an employee increases with the passes of tenure in any organisation, there is corresponding commitment/growth expectation also increases in personal/ social life and to match the same career progression/ promotions are necessary for employees.

Apart from above career progression is also necessary for any of the organisation for succession planning.

- p) Promotion as entry level or junior level are given little faster than middle/higher management employees as opportunities in market are plenty at junior levels and the aspirations of young professionals are generally high and in absence of a career progression path it is difficult to stop them from jumping the jobs. To retain employees, every organisation has to incur costs in the form of recruitment costs, and functional and non-functional trainings etc.
- q) It is submitted that in TPDDL promotions are given in every 3rd year on an average basis. Though on promotion TPDDL allows higher percentage on promotions but keeping in mind efficiency, promotions at higher level are given after a period of more than 3 years. Keeping in mind all above factors TPDDL has considered only 3% increment in every third year beginning from FY 12-13. Means if the first increment has been considered in FY 12-13, the next increment has been projected in FY 15-16.



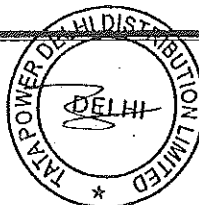
- r) Under 'The Minimum Wages Act, 1948', there had been very steep increases resulting in higher compensation at the junior most level. The table given below indicates an increase of up to 34.25% in case of Graduate and 33.89% and 34.43% in case of Semi-skilled and skilled workers respectively. This increase in Minimum Wages Act has forced to increase the salary at junior level of which cascading effect was required to be given.

Apart from above there are some uncontrollable variables that needs to be accounted for at the time of fixation of O&M expenses, example of the same is given below:-

- i) Consumer base increase
- ii) Sales Growth
- iii) Inflation
- iv) Performance Assurance guidelines of the Hon'ble Commission
- v) Increase in electrical network length
- vi) Aging of equipment's
- vii) Fast changing technologies, hence rapid obsolescence of various communication and control equipment , IT hardware etc. leading to exorbitant maintenance cost
- viii) Other uncontrollable items such as increase in statutory levies, substantial wage revision, change in accounting policies issued by ICAI, new initiatives, force majeure.

For example, Service Tax rate was increased from 10.30% to 12.36% in FY 12-13 and also almost all the services are now covered within the scope of Service Tax.

It is worth mention the benchmarking approach considered and adopted by the Hon'ble Commission in MYT Regulation 2011 is in itself erroneous. It is settled principle that the benchmarking exercise can only be undertaken amongst equals and not unequal's in terms of performance, consumer base /mix, efficiency etc. No consideration has been given to other performance parameters or factors attributable for such difference in expenses. The O&M expense and performance levels are directly linked to each other and the benchmarking exercise needs to take care of both the parameters. Thus, the benchmarking exercise needs to be more pragmatic and real.



As the Petitioner has sought revised employee expenses for second control period based on actual of FY 2011-12, hence has revised employee expenses for FY2014-15 & FY 2015-16 are computed as below.

Table 4.22(ii): computation of Employee Expenses for FY 2014-15 & FY 2015-16 (Rs Cr)

Sl. No.	Particulars	FY 13-14	FY 14-15	FY 15-16	Remark
A	Employees Expenses sought for FY 2013-14	409.22			
B	Add: Increased due to Growth in sale as projected		4%	4%	
C	Add: Increased due to Growth in Consumers – 50% of 5 years CAGR*		0%	3%	
D	Add: Inflation factor of 1.08 as per table 78 of July 2012 tariff order		8%	8%	
E	Revised Employee expense		458.48	527.44	
F	Less- capitalization @ 10%		45.85	52.74	
G	Employee Expenses net of capitalization		412.64	474.70	
K	Add- SVRS Pension Trust*		3.14	3.14	
L	Total Employee expense		415.78	477.84	

*Subject to tried up on actual basis

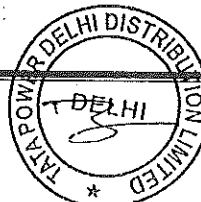
***Liability towards VSS optees with respect to retiral dues and Savings accruing due to VSS**

TPDDL introduced a Voluntary Separation Scheme in December, 2003 which was implemented in January-February, 2004. 1798 employees opted for the scheme.

TPDDL has paid Rs 95 Cr. under Golden handshake Scheme which was allowed in the ARR. A dispute arose between the GNCTD, Pension Trust and TPDDL regarding liability towards payment of pension and terminal Benefits to SVRS optees. TPDDL and SVRS optees approached the Hon'ble Delhi High Court in Writ petitions and the Hon'ble High Court vide its detailed judgment in Writ petition No. 4827/2005 dated July 2, 2007 prescribed exercise of either of the two options by TPDDL for way forward, the options being:

(i) IPGCL Model (as adopted by IPGCL):

Full terminal benefits to be paid by TPDDL to SVRS Optees till normal retirement/ death of such VRS optees, which shall be reimbursed to Discoms by the Pension Trust (ETBF-2002) without any interest on such amounts.



Discoms to pay Residual Pension till date of normal retirement, after which the Pension Trust (ETBF-2002) shall take over disbursement of pension payments.

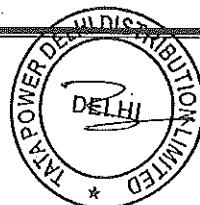
(ii) Actuarial Model:

Pension trust to pay the Terminal Benefits subject to Discoms competency for the additional burden on the trust

Additional Contribution required from Discoms on account of premature payout by the Trust to be computed by Arbitral Tribunal comprising of Actuaries.

Tribunal to publish its award within six months from date of constitution

TPDDL, BSES, Pension Trust (ETBF-2002) post examination of the two options offered by the Hon'ble High Court sought certain clarifications in the order, which the Hon'ble High Court was pleased to allow vide order dated 08.10.2007 in CM Nos. 11099 and 10963/2007. TPDDL confirmed exercising option-II from the judgment dated 02.07.2007 and accordingly informed the other parties. The actuarial nominee for TPDDL was also confirmed and communicated to the parties concerned. However there was no development in appointment of the Pension Trust and GNCTD's actuarial Nominee to complete the mandatory quorum of the Arbitral tribunal in compliance of the Hon'ble High Court's judgment in the matter. TPDDL made repeated follow ups with GNCTD and Pension Trust seeking appointment of their Nominee to the Arbitral Tribunal, but no response came forth from the GNCTD. It was only in Appeal No. 36/2008 filed by BRPL in the Hon'ble Appellate Tribunal for electricity against the Hon'ble Commission's MYT order dated 23.02.2008, that GNCTD categorically confirmed that no obligation is cast on GNCTD to appoint any Nominee to Arbitration Tribunal. TPDDL has moved an application No. 15596/2009 seeking clarification and directions in the Hon'ble high Court, to direct GNCTD, Pension Trust for appointing its nominee to the Arbitral Tribunal or in the alternative, the Hon'ble High Court may proceed with appointing a person as nominee to the Arbitral Tribunal. In response to the same, Pension Trust has opposed the maintainability of the said clarification application. The said application is pending disposal before the Hon'ble High Court for directions. Pending the said application, the present petition has been prepared based on the Option 1 i.e. Pension till



the date of normal retirement shall be paid by TPDDL i.e. Rs 5.20 Cr for FY 12-13, Rs 3.53 Cr for FY 13-14 and Rs 3.14 Cr for FY 14-15 (since the terminal benefits payments of Rs 80 Cr were made upfront by the TPDDL voluntarily pursuant to interim order passed in the High Court writ petition proceedings) and along with other terminal benefits paid to such optees, be refunded by the pension Trust without interest at superannuation age/or death of the VSS Optees.

Administrative and General Expenses: Form F7

As the Petitioner has sought revised A&G expenses for second control period based on actual of FY 2011-12, hence has revised employee expenses for FY 2014-15 & FY 2015-16 are computed as below.

Table 4.22(iii): computation of A&G Expenses for FY 2014-15 & FY 2015-16 (Rs Cr)

Sl. No.	Particulars	FY 13-14	FY 14-15	FY 15-16	Remark
A	Actual A&G Expenses now sought for FY 2013-14	62.28			
B	Add: Increased due to Growth in sale – 50% of 5 year CAGR		4.00%	4.00%	
C	Add: Promotions impact		0.00%	3.00%	
D	Add: Add: Promotions impact		8.04%	8.04%	
E	Revised A&G cost now sought		69.78	80.27	

Based on the above justification/ submissions, the petitioner seeks following O&M expenses.

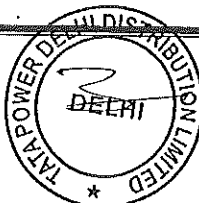
Summary of Revised/proposed O&M Expenses is given below

Table 4.22: Revised O&M Expenses

(Rs Cr)

Sl. No.	Particulars	As approved by the Hon'ble Commission FY 14-15	Revised now sought FY 14-15	Now sought by the Petitioner FY 15-16	Remark
A	R & M Expenses	105.66	135.76	149.82	Table 4.22(i)
B	Employee Expenses	294.29	412.64	474.70	Table 4.22(ii)
C	A&G Expenses	53.00	69.78	80.27	Table 4.22(iii)
D	Total O&M Expenses	452.95	618.18	704.79	(A+B+C)
E	Efficiency Improvement*	4.00%	4%	0	
F	Add SVRS Pension	3.14	3.14	3.14	
G	Net O&M Expenses	437.97	596.59	707.93	D-D*E+F

*Efficiency factor is considered as per MYT Order, 2012 however the same is subject to the outcome of Appeal/ Writ Petition. However for FY 2015-16 efficiency factor has been proposed as Nil.



Additional O&M expenses to be incurred in FY 15-16 shall be sought at the time of true up based on actual basis but following additional expenses are submitted for the consideration of the Hon'ble Commission for prior approval.

Additional O&M Expenses**a) Due to change in statutory levies/ change in applicable law****1) Change in Service Tax provisions****a) Change in Service Tax Rate – (A Statutory Levy due to change in Tax Rate)**

From 1.07.2012 the rate of Service Tax has changed from 10.30% to 12.36%, impacting increase in O&M expenses by 2.06%.

b) Introduction of Reverse Charge Mechanism – (A statutory Levy due to change in Service Tax provisions)

Due to introduction of concept of Negative List and Reverse Charge Mechanism (introduction of negative list, services which were earlier exempted from applicability of service tax till June, 2012 are now chargeable under service tax), thereby increase in the O&M expenses by 12.36% on almost all the services other than either covered in negative list or the services on which there was already service tax applicable @ 10.30% earlier.

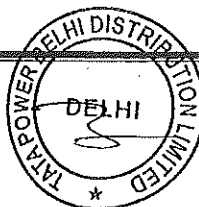
2) Minimum Wages Act

There has been substantial increase in Minimum Wages Act, which is likely to continue year by year, therefore increase effected in O&M cost due to increase in Minimum Wages Act.

3) Increase in statutory levies/duties due to implementation of Companies Act, 2013

The Ministry of Law and Justice (Legislative Department) vide its notification dated 30th August, 2013 in "The Gazette of India" has published the Companies Act, 2013.

TPDDL wants to clarify that due to implementation of new Companies Act, 2013 the company has to incur additional expenditure in relation to some of the heads (major one is CSR) which was not considered to be the part of Base Year expenses, owing

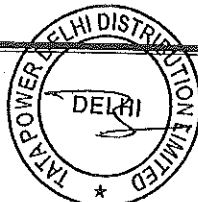


to later developments, hence all legitimate expenditure in relation to these is allowed on actual basis.

Based on the above it is respectfully submitted that any expenses due to change in law or any statutory levies should be allowed on actual basis being uncontrollable in nature.

The said expenses now sought to be incurred and are to be covered under the head statutory levies/change in law which has to be allowed on actual basis. The major one is CSR expenditure. Section 135 of new the Companies Act, 1913 stipulates that

- "(1) Every company having net worth of rupees five hundred crore or more, or turnover of rupees one thousand crore or more or a net profit of rupees five crore or more during any financial year shall constitute a Corporate Social Responsibility Committee of the Board consisting of three or more directors, out of which at least one director shall be an independent director.*
- (2) The Board's report under sub-section (3) of section 134 shall disclose the composition of the Corporate Social Responsibility Committee.*
- (3) The Corporate Social Responsibility Committee shall,—*
 - (a) formulate and recommend to the Board, a Corporate Social Responsibility Policy which shall indicate the activities to be undertaken by the company as specified in Schedule VII;*
 - (b) recommend the amount of expenditure to be incurred on the activities referred to in clause (a); and*
 - (c) monitor the Corporate Social Responsibility Policy of the company from time to time.*
- (4) The Board of every company referred to in sub-section (1) shall,—*
 - (a) after taking into account the recommendations made by the Corporate Social Responsibility Committee, approve the Corporate Social Responsibility Policy for the company and disclose contents of such Policy in its report and also place it on the company's website, if any, in such manner as may be prescribed; and*
 - (b) ensure that the activities as are included in Corporate Social Responsibility Policy of the company are undertaken by the company.*
- (5) The Board of every company referred to in sub-section (1), shall ensure that the company spends, in every financial year, at least two per cent. of the*



average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy;

Provided that the company shall give preference to the local area and areas around it where it operates, for spending the amount earmarked for Corporate Social Responsibility activities:

Provided further that if the company fails to spend such amount, the Board shall, in its report made under clause (o) of sub-section (3) of section 134, specify the reasons for not spending the amount.

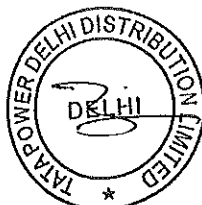
Explanation.—For the purposes of this section "average net profit" shall be calculated in accordance with the provisions of section 198."

Based on the requirement as mentioned above, amount of CSR expenditure required to be incurred in FY 2014-15 is computed below. An equal amount is sought for FY 2015-16 which will be subject to true up based on actuals.

(Rs Cr)

Sl. No.	Particulars	FY 11-12	FY 12-13	FY 13-14	Remark
A	Net profit before tax	427.92	390.2	423.94	
B	Add: Loss on retirement	0.04	3.76	8.13	
C	Total profit	427.96	393.96	432.07	A+B
D	Average profit for past 3 years- "A"			418	
E	CSR expenditure			8.36	2%*D

In addition to CSR activities expenses which are not forming part of base year like Constitution of various committees, Secretarial Audit and Reporting of other statutory compliance etc. will require to be allowed on actual basis.



b) Specific Addition Expenses / New Initiative**1. Demand Side Management**

Demand Side Management implementation and Energy Efficient practices has an inherent potential to mitigate the demand and bridge demand supply gap through an integrated approach of installation of energy saving device, promotion of energy conservation measures and energy efficient appliances. Implementation of DSM programs results in curtailment of power purchase cost of the petitioner and to continue supplying uninterrupted and reliable electricity to its consumers.

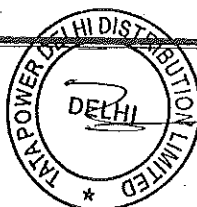
The Hon'ble Commission has also notified in its Demand Side Management Regulations, 2012 that "Distribution Licensees may recover all justifiable costs incurred by them in any DSM related activity including planning, designing, implementing, monitoring and evaluation DSM programme, by adding these cost to their Annual Revenue Requirement to enable their funding through tariff or by implementing programme at the consumer's premises that would attract appropriate return on investment."

In order to promote Demand side management measures in its area of operation the petitioner intends to launch an "Energy Efficient Air conditioner Programme" for its consumers in its area of supply.

Salient Features of the Scheme

Objective of the proposed programme is reduction in peak summer demand of the petitioner due to additional load contributed by Air conditioners, flattening of load curve, phasing out of energy consuming air conditioner without any energy efficient certification/ star rating, change in consumer choice by encouraging energy efficient Air conditioner and enhancing awareness about the cost and saving in this regard.

Estimated demand Energy saving: it is expected the demand energy consumption shall be reduced by a conservative estimate of 814 kWh/year for BEE 5 star rated Air conditioner to be used in place of old, non-star rated Air conditioner as per the Bureau of energy Efficient.



Under the proposed scheme an upfront Rebate of Rs 8000/Ac purchased is being offered on exchange on old, non-star rated Air conditioner. As a result the consumers would have to pay the price being the market price as offered by the manufacture less the rebate amount. The total amount to be recovered through consumers is Rs. 60 Cr over a period of 3 years, which is an approximate pass through of approximately Rs 20 Cr annually for 3 years.

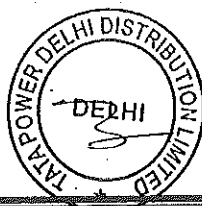
Outcome of the Scheme

The amount of energy that will be conserved after implantation of the scheme is 15.25 MU annually with a cumulative benefit of 45.74 MU over the three years implementation.

The Petitioner has filed a separate petition dated 26th September 2014 with the Hon'ble Commission showing cost benefit analysis of the aforesaid scheme and sought Rs 20 Cr under implantation of DSM measures as a part of Annual Revenue Requirement for FY 2015-16.

2. Consumer Awareness/Education

It has been desired and expressed by consumers during various Forums and Meets, public hearings and also endorsed by CGRF that there is a need for creating general awareness on electricity usage and its rules & regulations. TPDDL has been doing the same through Bills, Hoardings and Website. However, it has been felt that such campaigns are well effective if disseminated through Print media like newspapers. A Consumer Education and Awareness Campaign can be designed on regular interval to cover the objective of educating people at large about their rights & duties etc. The Hon'ble Commission has earlier also in its True up order for FY 2007-08 has agreed for this kind of programmes. Therefore, TPDDL requests the Hon'ble Commission to approve a budget of Rs. 2 Cr p.a. for FY 15-16.

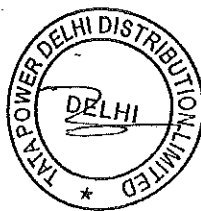


3. Additional Budget for Training

The Hon'ble Commission vide its letter dated 11.11.2010 has communicated regarding implementation of National Tariff policy issued by CEA on training. Under the National Tariff Policy, training has been identified an integral part of Human Resource Development and is crucial for organizational effectiveness. In the policy, it has been observed that organizations face challenges due to technical and economic changes and hence need to prepare themselves to adapt to these changes. These require up-gradation of skill, knowledge and change in the attitude and perception of individuals and groups. Though TPDDL has been providing training to its officials (constitute appx 0.60% of employee cost) but as advised by the Hon'ble Commission, as to further strengthen and to meet shortage of trained manpower at various levels due to inadequate training/development of the officials in the organization, induction training and refresher training with respect to operation and maintenance, safety, latest technical development in Power sector, management information technology etc., an additional budget of Rs. 5 Cr has been provided in the ARR for the consideration of the Hon'ble Commission.

Table 4.22 (A) summary of New Initiatives proposed for FY 2015-16

Sl. No.	Particulars	FY 15-16 (Rs Cr)	Remark
A	Demand Side Management	20.00	
B	CSR	8.36	
C	Consumer Awareness/Education	2.00	
D	Additional Budget for Training	5.00	
	Total	35.36	(A+B+C+D)



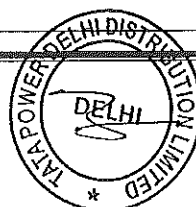
Investment Plan Master - Form F2b, Form F2b-loan, Form F2b(i), Form F2b(ii), Form F2b(ii)-Loan, Form F2b(iii), Form F2b(iii)-Loan

To achieve the anticipated load growth, improved safety conditions for public, employee, operator & machines, and targeted AT&C loss reduction, TPDDL has carried out a detailed analysis of capital investment plan without considering the (Deposit work and IDC)(copy attached as Annexure B1 in Volume II of the Petition) required for next year.

Based on the analysis, the Petitioner has proposed to the Hon'ble Commission to approve the Capex plan of Rs. 527 Cr for FY 2014-15 and Rs. 533 Cr for FY 2015-16.

Estimated Capital expenditure for FY 14-15 & FY 2015-16 (Rs Cr)

BUDGET HEAD	ESTIMATE Amount	ESTIMATE Amount
	FY 2014-15	FY 2015-16
1. AT&C Loss Reduction		
a) HVDS Work	0.00	0.00
b) LT ABC	0.00	10.00
c) Meter Replacement	19.32	30.00
e) Miscellaneous 11 kV Works	0.66	0.00
SUBTOTAL-AT&C LOSS REDUCTION	19.98	40.00
2. Reliability		
a) 11 kV Sick Cable Replacement	8.58	0.00
b) EHV System Improvement	7.98	0.00
c) Automation Implementation	25.95	15.00
d) Protection & Testing Instruments	3.62	2.00
e) 11 kV RMUs & Sectionalizes		8.00
f) Safety Related	16.15	15.00
g) GIS, Communication, OMS	7.20	120.00
h) 11 kV System Improvement	12.39	10.00
SUBTOTAL-RELIABILITY	81.86	170.00
3. Load Growth		
a) EHV system Augmentation Works	28.40	
b) New Grid Substations	28.80	
c) 11 kV system Augmentation works	53.84	60.00
d) LT Works	7.28	15.00
e) New Meter	50.51	45.00
f) 66 & 33 kV Addition/Augmentation of Bays/Transformers/lines & cables		60.00
SUBTOTAL-LOAD GROWTH	168.83	180.00
4. Infrastructure Development		
a) Administration Support	12.60	10.00
b) Civil Infrastructure Projects	15.20	10.00
c) Information Technology	36.22	10.00
SUBTOTAL-INFRASTRUCTURE DEVELOPMENT	64.02	30.00
5. Special Project-New Technologies(Smart Grid)	86.60	0.00
GRAND TOTAL	421.30	420.00
6. Deposit Work	50.00	50.00



BUDGET HEAD	ESTIMATE Amount	ESTIMATE Amount
	FY 2014-15	FY 2015-16
Total (without IDC)	471.30	470.00
IDC (salary + Interest)	55.85	62.74
Total Capital expenditure	527.15	532.74

It is further clarified that Loans are not taken specifically for any scheme as it is an expensive proposition to borrow on individual scheme and administratively, extremely inconvenient.

The loans are taken against total capital expenditure approved by the Hon'ble Commission.

The relevant information of loan financing of Capex for FY 14-15 onwards has been provided in the Form 3a and 3b and explanation notes to these forms.

Capital Works in Progress Form F2c:

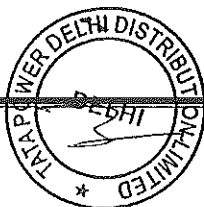
It is estimated that the Petitioner will be able to capitalized Rs 475 Cr and Rs 500 Cr for FY 2014-15 & FY 2015-16 respectively out of fresh investment and opening CWIP respectively.

Summary of Capital Work in Progress				(Rs Cr)
Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Fresh Investment during the year	527.15	532.74	
B	Total Capitalization during the year (out of opening CWIP & Fresh Investment made during the year)	475.00	500.00	

Capitalization - Gross Fixed Assets Form F2:

The Hon'ble Commission has provisionally allowed the capitalization for FY 12-13 to FY 14-15 based on the provisional allowance of capital expenditure allowed for the above mentioned years. It is submitted that TPDDL is filing for the truing up of capital expenditure as well as capitalization for the First Control Period.

Clause 4.17 of MYT Regulations provides that the Hon'ble Commission may revise the capitalization as well as capex based on true up of any years.



"4.17 The Commission may also revise the capital expenditure and capitalization for remaining years of the Control Period based on trued up capital expenditure and capitalization for any year."

The Hon'ble Commission is requested to revise the provisional amount allowed towards capital expenditure incurred as capitalization as based on the capex plan of TPDDL. Based on the revised capex plan for FY 2014-15, the detailed capex plan for FY 15-16 is attached as Annexure B-1 in volume II of the Petition and refer explanation to Form F2c, the revised gross block works out as follows:

Table 4.23: Capitalization of Fixed Assets (Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Opening Balance	4,586.50	5,061.50	Table 3.22
B	Addition during the year	475.00	500.00	Form F2c
C	Deletion during the year*			see note below: statement of Assets not in use
D	Closing Balance	5,061.50	5,561.50	(A+B-C)
E	Average Balance of Fixed Assets	4,824.00	5,311.50	(A+C)/2

*** Statement of Assets Not in Use- Form F2e:**

Pending the final true up of capitalization, no retirement has been considered for FY 2014-15 & FY 2015-16.

Contributions, Grants, subsidies towards cost of Capital Assets - Form F2f:

The contribution towards cost of capital assets is transferred to sources of funds in the balance sheet when the assets for which such contribution is received are capitalized.

The consumer contribution received and capitalized from 1st MYT Control Period (i.e. FY 08 to FY 12), FY 2013 & FY 2014 are as per the explanation given above in True up section respectively.

It is estimated that Rs 50 Cr will be capitalized towards consumer contribution during FY 14-15 and FY 15-16 respectively.



Table 4.24: Estimated Consumer Contribution capitalized

(Rs Cr)

Sl. No.	Consumer Contribution/Grant	FY 14-15	FY 15-16	Remark
A	Opening Balance	527.54	577.54	Table 3.24
B	Capitalized during the year	50.00	50.00	
C	Closing Balance	577.54	627.54	A+B
D	Average Cumulative Capitalized Consumer Cont.	552.54	602.54	(A+C)/2

Depreciation and provision of depreciation - Form F2a:

The Hon'ble Commission is allowing the depreciation on net fixed assets i.e. Gross Addition – Consumer Contribution/capital subsidy/grant. For the purpose of computation of final depreciation to be claimed as a part of Annual Revenue Requirement, first depreciation is computed on Gross Block of Assets and average depreciation rate is worked out which is applied on average Fixed assets (net of consumer contribution/grants).

Depreciation rate at Gross Fixed Assets level has been computed as follows:

Table 4.26: Estimated Depreciation (without Consumer Cont.)

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Average of Gross Fixed Assets	4,824.00	5,311.50	Table 4.23
B	Depreciation	188.47	208.15	Form F2a
C	Average Depreciation Rate	3.91%	3.92%	B/A*100

By applying above average depreciation rate, depreciation has worked out on GFA (Net of consumer contribution) as below:

Table 4.26(i): Depreciation on Net Fixed Assets

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Opening Assets (Net of Consumer Contribution)	4,058.96	4,483.96	(Table 4.23)- (Table 4.24)
B	Closing Assets (Net of Consumer Contribution)	4,483.96	4,933.96	(Table 4.23)- (Table 4.24)
C	Average GFA (Net of Consumer Contribution)	4,271.46	4,708.96	(A+B)/2
D	Average Depreciation Rate	3.91%	3.92%	Table 4.26
E	Depreciation (Net of Consumer Contribution)	166.88	184.53	C*D

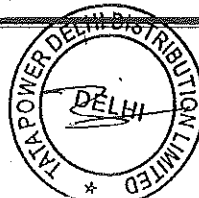
The summary of addition in opening depreciation is given below.

Table 4.26(ii): Estimated Depreciation (Net of Consumer Cont.)

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Opening Balance	1,554.22	1,721.10	Table 3.27
B	Addition during the year	166.88	184.53	Table 4.26(i)
C	Advance Against Depreciation	-	43.40	Table 4.27
D	Deletion during the year*			
E	Closing Balance	1,721.10	1,949.03	A+B+C-D

* pending the final true up of capitalization, no deletion has been considered



As per MYT Regulation, 2011 the allowed depreciation should be utilized firstly for the repayment of loan, hence the Petitioner has considered the proposed depreciation for repayment of loan.

Table 4.26(iii): Utilization of Depreciation

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Depreciation	166.88	184.53	Table 4.26(i)
B	Utilized for Debt repayment	166.88	184.53	

Explanation Note to Form F2a (i): Advance against Depreciation

The requirement of Advance against Depreciation (AAD) is computed as prescribed in the MYT Regulation.

As per MYT Regulations, 2011

AAD = Loan (raised for capital expenditure) repayment amount based on loan repayment tenure, subject to a ceiling of 1/10th of loan amount minus depreciation as calculated on the basis of these Regulations;

Provided that Advance Against Depreciation shall be permitted only if the cumulative repayment up to a particular year exceeds the cumulative depreciation up to that year;

Provided further that Advance Against Depreciation in a year shall be restricted to the extent of difference between cumulative repayment and cumulative depreciation up to that year.

Based on the above provision, the 1/10th value of the loan is computed based on true of financing of capitalization sought for First Control Period as well as new loans required for FY 14-15 and FY 15-16 (Refer Form F3b).

The amount of repayment of loan for the year is taken from 3b.

The current depreciation amount is linked to Form F2a.

The Cumulative Depreciation is considered as per the computation given above.



Table 4.27: computation of Advance Against Depreciation*

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	1/10th of Loan(s) - A	251.59	269.31	
B	Repayment of the Loan(s) as considered for working out Interest on Loan - B	222.85	237.81	Form R3b
C	Minimum of A and B	222.85	237.81	
D	Less: Depreciation routed during the year for repayment of loans	166.88	184.53	Table 4.26(i)
E	Excess of Min (A,B) over Depreciation	55.97	53.28	
F	Cumulative Repayment of the Loan(s) as considered for working out Interest on Loan (C)	1,332.90	1,570.71	
G	Less: Total Cumulative Depreciation	1,721.10	1,905.64	
H	Depreciation Considered for Capex & WC in Previous years	378.32	378.32	
I	Cumulative Depreciation considered for AAD (D)	1,342.78	1,527.32	G-H
J	Excess of (C) over (D) D ¹	(9.88)	43.40	
K	Advance Against Depreciation (Minimum of C & D)	-	43.40	

*subject to the outcome of appeal pending with the Hon'ble Supreme Court

Financing of Capitalization

The Hon'ble Commission is allowing the financing of capitalization in Debt : Equity ratio of 70:30, after adjusting amount of consumer contribution capitalized corresponding to capitalization.

Table 4.28: Financing of Capitalization

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Total Capitalization	475.00	500.00	Form F2c
B	Consumer Contribution	50.00	50.00	Table 4.24
C	Balance Capitalization	425.00	450.00	A-B
D	Loan	297.50	315.00	70% of C
E	Equity	127.50	135.00	30% of C

Working Capital Requirement Form F4:

Working capital requirement has been computed as per the MYT regulations, 2011.

- 5.14 Working capital for wheeling business of electricity shall consist of
- (c) Receivables for two months of Wheeling Charges.
- 1.15 Working capital for retail supply of electricity shall consist of
- (a) Receivables for two months of revenue from sale of electricity;
- (b) Less: Power purchase costs for one month;
- (c) Less: Transmission charges for one month; and

(d) Less: Wheeling charges for two month

Depreciation aggregating to Rs. 53.15 Cr has been considered as available and allowed by the Hon'ble Commission during FY 03 to FY 05 towards financing of opening working capital requirement.

Table 4.29: Computation of revised working capital

(Rs Cr)

Sl. No.	Particulars	Amount		Amount		Remark
		FY 14-15		FY 15-16		
A	Annual revenues requirement	5,957.24		6,790.20		Table 4.37
B	Receivables equivalent to 2 months ARR		992.87		1,131.70	A*2/12
C	Power Purchase expenses	4,817.98		5,390.59		Table 4.20
D	Less: 1/12th of power purchase expenses		401.50		449.22	C*2/12
E	Total		591.37		682.48	B-D
F	Opening working capital**		563.86*		591.37	*Table 3.30
G	Change in working capital		27.51		91.11	E-F

** Inclusive of Rs 53.15 Cr which has already been funded through depreciation in policy direction period

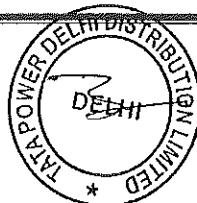
It is requested that Working Capital be trued up based on the trued up figures of power purchase/revenue requirement.

It is further clarified that The Hon'ble ATE in Appeal No. 52 of 2008 has already decided that working capital to be allowed in 70:30 debt equity ratio. Based on the Hon'ble ATE judgment the funding of the working capital for each year is considered in 70:30 debt equity ratio. It is worth to mention that for the purpose of cost of working capital, the return on equity portion is considered equal to the cost of debt.

Table 4.29(i): Debt/ Loan – Approved for Working Capital

(Rs Cr)

Sl. No.	Particulars	FY 2014-15 Amount		FY 2015-16 Amount		Remark
A	Total Average Debt-opening		385.48		412.99	
	Approved working capital Debt	357.50		376.76		
	Approved working capital Equity	27.98		36.23		
B	Additions- working Capital		27.51		91.11	
	through Debt -70% of B	19.26		63.78		
	through Equity – 30% of B	8.25		27.33		
C	Closing Debt- Working Capital		412.99		504.10	(A+B)
	through Debt	376.76		440.53		
	through Equity	36.23		63.57		
D	Average Debt		399.23		458.55	(A+C)/2
	through Debt	367.13		408.65		
	through Equity	32.11		49.90		



Regulated Rate Base - Form - F14:

RRB is computed as per Regulations 5.9 of the MYT Regulations, 2011.

Table 4.30: Computation of Regulated Rate Base

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Opening Balance of OCFA	4,586.50*	5,061.50	*Table 3.22
B	Opening Balance of Working Capital	563.86*	591.37	*Table 3.30
C	Opening Balance of Accumulated Depreciation	1,554.22*	1,721.10	*Table 3.27
D	Opening balance of Accumulated Consumer Contribution	527.54*	577.54	*Table 3.24
E	RRB – Opening	3,068.61	3,354.24	
F	Capitalization during the year	475.00	500.00	Table 4.28
G	Depreciation for the year (Including AAD)	166.88	227.93	Table 4.26(ii)
H	Consumer Contribution, Grants,	50.00	50.00	Table 4.24
I	Change in Working Capital	27.51	91.11	Table 4.29
J	ΔAB (Change in Regulated Base)	156.57	202.14	E+(F-G-H)/2+I
K	RRB – Closing	3,354.24	3,667.42	E+F-G-H+I
L	RRB(i)	3,225.18	3,556.38	

Based on the above, the summary of addition in Equity and Free Reserve is given below;

Table 4.31(i): Estimated Average Equity

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Opening Balance	1,245.50	1,373.00	Table 3.34(i)
B	Addition during the year	127.50	135.00	Table 4.28
C	Closing Balance	1,373.00	1,508.00	A+B
D	Average Equity	1,309.25	1,440.50	(A+C)/2

Based on the financing of capitalization, the summary of addition in approved Debt for capex loan is given below;

Table 4.31(ii): Average Debt – Capex Loan

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Opening Balance Capex	1,215.15	1,289.80	Table 3.34(ii)
B	Additions	297.50	315.00	Table 4.28
C	Repayment	222.85	237.81	Form F3b
D	Closing Balance	1,289.80	1,366.98	A+B-C
E	Average Debt	1,252.48	1,328.39	(A+D)/2



The summary of addition in approved Debt for working capital is given below;

Table 4.31(iii): Average Debt/ - working Capital (Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Opening Debt	385.48	412.99	Table 3.31
B	Addition	27.51	91.11	Table 4.29
C	Closing Debt	412.99	504.10	A+B
D	Average Debt	399.23	458.55	(A+C)/2

Explanation to form F3: Summary of Interest and Financing charges

The rate of interest for loans has been taken @11.21% p.a. for capex and 11.62% for working capital as approved by the Hon'ble Commission in its MYT Order is considered.

Explanation to Form 3a: Loan Master for all loans Outstanding as on 31.03.2014

The details (terms and conditions etc.) of all the loans outstanding as on 31.03.2014, is provided in the form F3a.

Explanation to Form 3b: Calculation of Weighted average rate of interest

Interest rate for loans already tied up and to be tied up during FY 14-15 and FY 15-16 is considered @ 11.21%. However as stipulated in MYT Regulations, 2011 these rates are subject to true up based on $\pm 1\%$ change in Base Rate of SBI during the Control Period.

Interest rate for working capital limit is considered at 11.62% p.a. as approved by the Hon'ble Commission in its MYT Order. However as stipulated in MYT Regulations, 2011 these rates are subject to true up based on $\pm 1\%$ change in Base Rate of SBI during the Control Period.

Computation of Weighted average rate of interest

Sl. No.	Particulars	FY 2014-15	FY 2015-16	Remarks
A	Capex Loans	11.21%	11.21%	Tariff Order dated July 2012
B	working Capital loans	11.62%	11.62%	Table order dated July 2012
C	Cost of Debt	11.31%	11.32%	Form F3b

The detailed computation of loan and computation of weighted average cost of debt is given in Form – F3b.



Weighted Average Cost of Capital

Weighted average cost of capital is computed by considering the average equity and average Debt (net of repayment), whereas the return on equity, on equity portion deployed in working capital is considered equivalent to the cost of debt.

Based on the above, computation of the WACC is given below:

Table 4.32: Computation of WACC

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Equity (Average)	1,309.25	1,440.50	Table 4.31(i)
B	Debt (Average)	1,651.71	1,786.94	Table 4.31(ii)& Table 4.31(iii)
C	Rate of Return on Equity	16.00%	16.00%	
D	Rate of Return on Debt	11.31%	11.32%	Form F3b
E	WACC	13.38%	13.41%	$(A \times C + B \times D) / (A + B)$

Return on Capital Employed is computed by multiplying the weighted average cost of capital to average RRB for the respective year.

Computed of the Return on capital employed is given as under.

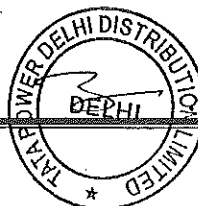
Table 4.33: Computation of Return On Capital Employed

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	RRB (i)	3,225.18	3,556.38	Table 4.30
B	WACC	13.38%	13.41%	Table 4.32
C	Return on Capital Employed	431.63	476.77	A*B

Income Tax Provision - Form F10

Income Tax is computed as per Regulations 5.32 and 5.33 of the MYT regulations, 2011 whereas Regulation 5.32 stipulates that "Tax on income, if any, liable to be paid on the Licensed business of the Distribution Licensee shall be limited to tax on **return on the equity component of capital employed**. Any additional tax other than this shall not be a pass through, and it shall be payable by the Distribution Licensee itself."



The Petitioner has deployed equity in capitalization as well as in working capital, therefore for the purpose of computing income tax entire equity which is deployed as capital employed is considered.

Based on the above, computation of income tax to be allowed as a part of ARR is given below:

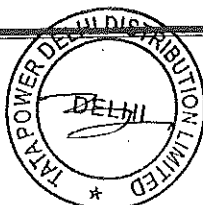
Table 4.34(i): computation of Revised Income Tax for FY 2014-15 (Rs Cr)

Sl. No.	Particulars	Amount		Remark
A	RRB (average)		3,225.18	Table 4.30
B	Average Equity			
	Deployed in Capex	1,309.25	1,309.25	Table 4.31(i)
	Deployed in working capital		32.11	Table 4.29(i)
C	Average Debt			
	Deployed in Capex	1,252.48		Table 4.31(ii)
	Deployed in working capital		367.13	Table 4.29(i)
D	% of Equity	51.11%	8.04%	Average Equity/(Average Debt + Average Equity)
E	Cost of Equity considered	16.00%	11.62%	15.90%
F	RoE			232.24
G	Gross up of Tax (Tax rate @ 20.96%)			293.82
H	Tax			61.59

Table 4.34(ii): computation of Income Tax for FY 2015-16 (Rs Cr)

Sl. No.	Particulars	Amount		Remark
A	RRB (average)		3,556.38	Table 4.30
B	Average Equity – Capex			
	Deployed in Capex	1,440.50	1,440.50	Table 4.31(i)
	Deployed in working capital		49.90	Table 4.29(i)
C	Average Debt			
	Deployed in Capex	1,328.39		Table 4.31(ii)
	Deployed in working capital		408.65	& Table 4.29(i)
D	% of Equity	52.02%	10.88%	Average Equity/(Average Debt + Average Equity)
E	Return considered	16.00%	11.62%	15.85%
F	RoE			260.36
G	Gross up of Tax (Tax rate @ 20.96%)			329.40
H	Tax			69.04

It is further submitted that Income Tax should be trued up based on the Actuals.

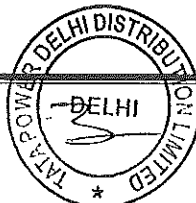


Deferred Tax

The Petitioner is entitled for Income tax including Deferred Tax. At present the Petitioner is making provision for deferred tax as required by Accounting Standard -22 issued by the Institute of Chartered Accountant of India and reversing the same on the premises that the same is recoverable from consumers as and when it became payable after Tax holiday period is over. It is submitted that Deferred tax liability is a liability which will arise in future due to temporary differences or timing differences between the accounting value of assets and liabilities and their value for tax purposes. Therefore the Hon'ble Commission is requested to clarify the mechanism / methodology for treatment of deferred tax once the stand is clarified by the Hon'ble Commission on deferred tax, the petitioner shall submit the claim of remaining Income Tax accordingly as the working of deferred tax would depend on the stand taken by the Hon'ble Commission.

It is respectfully submitted that there is a deferred tax liability of Rs 453 Cr as on 31.03.2014 as per audited financial statements which pertains to primarily on account of claiming tax depreciation at an accelerated rate relative to accounting depreciation.

Further it is submitted that TPDDL's Tax Holiday period will be over in FY 15-16 and TPDDL's tax liability is likely to assessed under normal provision of law of Income Tax Act, therefore, the Hon'ble Commission is requested to clarify at what rate of Income Tax shall be allowed from FY 16-17 onwards so that TPDDL can change accounting of Deferred Tax accordingly from now onwards.



Non-Tariff Income - Form F11, Form F11a, Form 11b

Non-Tariff Income for FY 2014-15 is taken as approved by the Hon'ble Commission in its MYT Order dated July, 2012 and for FY 2015-16 an equal amount of Rs 74.28 Cr has been projected.

It is further submitted that NTI will be trued up based on actual.

Table 4.35 Non-Tariff Income

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16
A	Non-Tariff Income	74.28	74.28

Interest on Consumer Security Deposit

The Petitioner has used the amount of consumer security deposit towards the funding of revenue gap. Therefore the difference of normative interest and the interest to be booked on consumer's security deposit has been offered as non-tariff income.

For FY 2014-15 & FY 2015-16, Interest on consumer security deposit has been kept at the same level as considered in FY 2013-14.

It is further submitted that the same shall be trued up on actual basis.

Table 4.35(ii) Interest on Consumer Security Deposit

(Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16
A	Non-Tariff Income	43.15	43.15

Computation of carrying cost based on the Hon'ble ATE Judgments

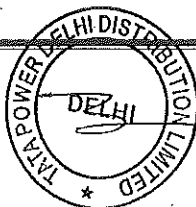
The Petitioner has computed the carrying cost based on prevailing average SBI PLR for six months of FY 2014-15 in debt: equity ratio of 70:30 in line with the Judgment's pronounced by the Hon'ble ATE. The same rate of carrying cost is considered for FY 2015-16. It is further submitted that the carrying cost rate has been subject to true up based on actual SBI PLR for that respective year.

Table 4.36 Computations of carrying cost

(Rs Cr)

Sl. No.	Particular	FY 14-15	FY 15-16	Remarks
A	Opening Revenue Gap	(6,442.58)*	(7,243.30)	*Table 3.40
B	Revenue (Gap)/Surplus for the year	(184.46)	(635.47)	Table 4.39
C	Closing Revenue (Gap)	(6,627.04)	(7,878.77)	(A+B)
D	Carrying Cost Rate#	16.40%	16.40%	Refer Annexure A-14 in Volume II of the Petition
E	Carrying Cost	(1,071.57)	(1,239.85)	(A+B/2)*D

Subject to the true up based on actual SBI PLR



Revised Computation of ARR for FY 2014-15 & FY 2015-16

Based on the above submission the Petitioner has estimated the ARR requirement for FY 2014-15 (revised) & FY 2015-16 as given below.

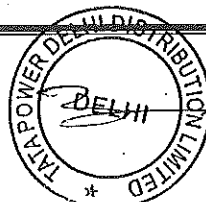
Table 4.37: Summary of Aggregate Revenue Requirement

(Rs Cr)

Sl. No.	Particulars	FY 14-15		FY 15-16	Remark
		Approved*	Revised	Proposed	
A.1	Cost of Power Purchase	4,337.68	4,817.98	5,390.59	
B	Operation & Maintenance Expenses				
B.1	Gross Employee Expenses	326.99	458.48	527.44	Table 4.22(ii)
B.2	Less- Capitalization	32.70	45.85	52.74	Table 4.22(ii)
B.3	Net Employee Expenses	294.29	412.64	474.70	Table 4.22(ii)
B.4	Repair & Maintenance Expenses	105.66	135.76	149.82	Table 4.22(i)
B.5	Administrative & General Expenses	53.00	69.78	80.27	Table 4.22(iii)
B.6	Total O&M Expenses	452.95	618.18	704.79	
B.7	Efficiency factor (%)	4%	4%		
B.8	Less:- on account of Efficiency factor	18.12	24.73	0.00	
B.9	Add: SVRS Pension	3.14	3.14	3.14	Table 4.22(ii)
B.10	Subtotal O&M Expenses (Net of expenses capitalized)	437.97	596.59	707.93	4.22
B.11	Add:- New Initiative			35.36	4.22(A)
B.12	Total O&M Expenses	437.97	596.59	743.29	
C	Depreciation	139.16	166.88	184.53	Table 4.26
D	Advance Against Depreciation			43.40	Table 4.26(i)
E	Return on Capital Employed	324.73	431.64	476.78	Table 4.36
F	Income Tax	30.60	61.59	69.04	Table 4.34(i)&(ii)
G	Sub-Total	5270.14	6074.67	6907.63	
H	Less: Non-Tariff Income/ Interest on consumer security deposit	74.28	117.43	117.43	Table 4.35 & Table 4.35(ii)
I	Sub-Total	74.28	117.43	117.43	
J	PPAC (balance of Q4 for FY14)	50.10			
K	Annual Revenue Requirement (G-I+J)	5245.96	5957.24	6790.20	
L	Add Carrying Cost	433.66			
M	Annual Revenue Requirement including carrying cost (K+L)	5679.62	5957.24	6790.20	

*Figures as per tariff Order dated July 2014

From the above table it can be seen that against the ARR of Rs. 5245.96 Cr (without carrying cost) for FY 2014-15 as estimated by the Hon'ble Commission, the petitioner has estimated ARR of Rs. 5,957.24 Cr and Rs. 6,790.20 Cr for FY 2014-15 & FY 2015-16 respectively.

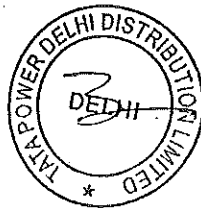


Allocation of ARR into wheeling and Retail Business

Based on the allocation of different expenses in accordance with the methodology specified in chapter 5 of this petition, the ARR for Wheeling and Retail Supply business is indicated in the table as follows:

Table 4.38: Allocation for wheeling and Retail Business (Rs Cr)

Sl. No.	Particulars	FY 15-16		
		Total	Wheeling	Retail
A	Cost of Power Purchase	5,390.59		5,390.59
B	Operation & Maintenance Expenses			
B.1	Gross Employee Expenses	527.44		
B.2	Less- Capitalization	52.74		
B.3	Net Employee Expenses	474.70	306.77	167.93
B.4	Repair & Maintenance Expenses	149.82	82.65	67.17
B.5	Administrative & General Expenses	80.27	26.78	53.49
B.6	Total O&M Expenses	704.79	416.20	288.59
B.7	Efficiency factor (%)	-		
B.8	Less:- on account of Efficiency factor	-		
B.9	Add: SVRS Pension	3.14	2.03	3.11
B.10	Subtotal O&M Expenses (Net of expenses capitalized)	707.93	418.23	289.70
B.11	Add:- New Initiative	35.36		35.36
B.12	Total O&M Expenses	743.29	421.24	322.05
D	Depreciation	184.53		
E	Advance Against Depreciation	43.40	165.72	62.21
F	Return on Capital Employed	476.77	338.36	138.41
G	Income Tax	69.04	49.00	20.04
H	Total	6,907.63	974.32	5933.31
	Less			
I	Non-Tariff Income/ interest on consumer security deposit	117.43	23.49	93.95
J	Total of "B"	117.43	23.49	93.95
K	Annual Revenue Requirement (A-B)	6,790.20	950.84	5839.36



PPAC of FY 14-15 and FY 15-16

The Petitioner has not considered any PPAC for the balance period of FY 2014-15 & for full year of FY 2015-16.

Table 4.39: Estimated Surplus/(Gap) for the Year (Rs Cr)

Sl. No.	Particulars	FY 14-15	FY 15-16	Remark
A	Estimated Revenue at current tariffs	5,801.79	6,185.66	Table 4.8
B	Estimated PPAC			
C	Total Estimated Revenue	5,801.79	6,185.66	(A+B)
D	Collection Efficiency	99.50%	99.50%	
E	Total Estimated Revenue Availability	5,772.78	6,154.73	C*D
F	Estimated Revenue Requirements	5,957.24	6,790.20	Table 4.37
G	Net (Gap)/Surplus without carrying cost	(184.46)	(635.47)	E-F

From the above table, it can be seen that the petitioner has projected Revenue Gap of Rs. 184.46 Cr & Rs. 635.47 Cr for FY 2014-15 & FY 2015-16 respectively.

Computation of Closing Revenue Gap

The summary of addition in opening revenue gap along with carrying cost is given below:

Table 4.40 Computations of Closing Revenue Gap (Rs Cr)

Sl. No.	Particular	FY 14-15	FY 15-16	Remarks
A	Opening Revenue Gap	(6,442.58)*	(7,243.30)	*Table 3.40
B	Revenue (Gap)/Surplus for the year	(184.46)	(635.47)	Table 4.39
C	Closing Revenue (Gap)	(6,627.04)	(7,878.77)	(A+B)
D	Carrying Cost Rate#	16.40%	16.40%	Refer Annexure A-14 in Volume II of the Petition
E	Carrying Cost	(1,071.57)	(1,239.85)	(A+B/2)*D
F	Recovery of carrying cost from 8% Deficit Revenue Recovery Surcharge	455.30	492.38	99.5% of Billed DRRS as per Table 4.8 (i)
G	Closing Revenue Gap (including carrying cost)	(7,243.30)	(8,626.24)	C+E-F

Subject to the true up based on actual SBI PLR.

