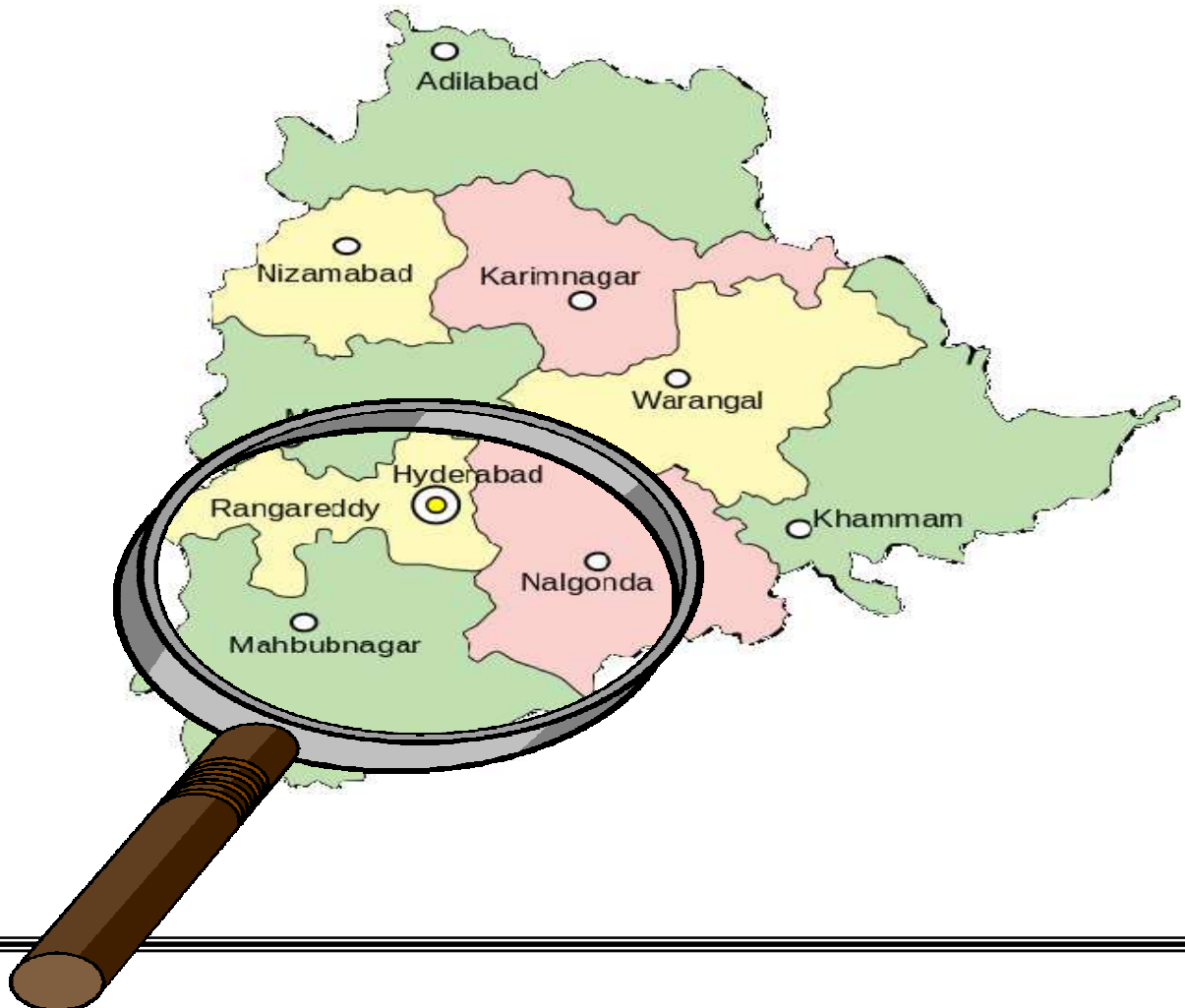


# SOUTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED

(Distribution & Retail Supply Licensee)



Filing of ARR & Proposed Tariffs for  
Distribution Business for  
Third Control Period (FY 2014-15 to FY 2018-19)



**BEFORE THE HONOURABLE  
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION**

At its office at 5<sup>th</sup> Floor, Singareni Bhavan, Red Hills, Hyderabad 500 004

FILING NO. \_\_\_\_\_/2015

CASE NO. \_\_\_\_\_/2015

In the matter of:

Filing of the ARR & Tariff applications for the Distribution Business for 3<sup>rd</sup> Control Period (FY2014-15 to FY2018-19) under Multi-Year-Tariff principles in accordance with the “Andhra Pradesh Electricity Regulatory Commission (Terms And Conditions For Determination Of Tariff For Wheeling And Retail Sale Of Electricity) Regulation, 2005” by the Southern Power Distribution Company of Telangana Limited (‘TSSPDCL’ or ‘the Company’ or ‘the Licensee’) as the Distribution Supply Licensee.

In the matter of:

**SOUTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED**

... Applicant

The Applicant respectfully submits as under:-

1 With the enactment of Andhra Pradesh Reorganisation Act, 2014 [the APR Act] the Telangana state has been carved out from the undivided Andhra Pradesh state as the 29<sup>th</sup> state of the Republic India on appointed day i.e., on 02.06.2014. In accordance with the APR Act, the distribution business of Anantapur and Kurnool districts which fall within the jurisdiction of the erstwhile Central Power Distribution Company of Andhra Pradesh Limited (APCPDCL) have been reassigned to the Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL) vide G.O.Ms.No.24, dated 29.05.2014. Further, name of the Licensee has been changed from Central Power Distribution Company of Andhra Pradesh Limited (APCPDCL) to Southern Power Distribution Company of Telangana Limited (TSSPDCL) w.e.f. 27<sup>th</sup> May, 2014.

2 Consequently, the Electricity Regulatory Commission of the undivided state of Andhra Pradesh has notified Regulation No.3 of 2014 (Reorganisation) Regulation, 2014 on 26.05.2014, wherein Clause 3 stipulates that, “*All the notified*

*regulations as well as their supplementary regulations/amendments, rules, orders, proceedings, guidelines, memos, notifications, other instruments issued immediately before 2<sup>nd</sup> June, 2014 by the APERC for conduct of business and other matters shall fully & completely apply to the whole of the states of Telangana and Andhra Pradesh and shall similarly apply in relation to all matters falling within the jurisdiction of the Commission until they are altered, repealed or amended by the respective State Electricity Regulatory Commissions.”*

3 Later on the Hon’ble Telangana State Electricity Regulatory Commission (TSERC) has notified its first Regulation No.1 of 2014 on 10.12.2014 viz., Telangana State Electricity Regulatory Commission (Adoption of Previously Subsisting Regulations, Decisions, Directions or Orders, Licenses and Practice of Directions) Regulation of 2014, wherein Clause 2 stipulates that *“All regulations, decisions, directions or orders along with all the licences and practice direction issued by the erstwhile Andhra Pradesh Electricity Regulatory Commission (Regulation Commission for States of Andhra Pradesh and Telangana) in existence as on the date of the constitution of the Telangana State Electricity Regulatory Commission and in force, shall mutatis-mutandis apply in relation to the stakeholders in electricity in the State of Telangana including the Commission and shall continue to have effect they are until duly altered, repealed or amended by any of the Regulation by the Commission with effect from the date of notification as per Notification issued by the Government of Telangana in G.O.Ms.No.3 Energy (Budget) Department, dated 26.07.2014 constituting the Commission.”*

4 As such, all the regulations framed by erstwhile Commission will continue to apply for the state of Telangana.

#### **Introduction of MYT framework for determination of Tariff**

5 The earlier Commission notified the Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Wheeling and Retail Sale of Electricity) Regulation, 2005 (RegulationNo.4 of 2005) on 14.11.2005. This regulation introduced Multi-Year-Tariff framework and specify the principles and procedures of filings. Accordingly the Licensee has to make the filing for their Annual Aggregate Revenue Requirement (ARR) along with its Filings for Proposed

Tariff (FPT) with the Commission for determination of Wheeling Charges for five years period called Control Period.

6 The essential characteristic of this regulation is to provide incentivization on certain performance parameters and provide a degree of regulatory certainty for the Control Period. This system of an incentive based system of regulation is a challenging one especially in the present case where the Control Period is for a period of five years. The challenges arise due to the difficulty in establishing appropriate targets five years ahead and the tendency to adopt uniform and universal performance norms for the licensees.

#### **Past ARR & FPT Filings by Licensee for Distribution Business**

7 In accordance with the Regulation No.4 of 2005. The Licensee (APCPDCL), has filed application for approval of its Aggregate Revenue Requirement (ARR) and Tariff proposals for the Wheeling Charges of Distribution business for 3<sup>rd</sup> Control Period i.e., from FY2014-15 to FY2018-19, on 4<sup>th</sup> December, 2013, which were admitted by the Hon'ble Commission and assigned O.P.No.64 of 2013.

8 This filing was based on the projections already made in the Resource Plan (including Anantapur and Kurnool circles) for the next ten (10) years (FY2014-15 to FY2023-24) submitted as per the provisions of the Regulation No.4 of 2005, to the Hon'ble Commission on 17.08.2014 viz., Sales forecast, Loss Trajectory, Load Forecast, Power Procurement Plan, Capital Investment Plan.

9 After comprehensive public consultation process on the filings made by the Licensee, the Hon'ble Commission passed orders on 9<sup>th</sup> May, 2014 for Wheeling Tariffs for Distribution Business for the 3<sup>rd</sup> control Period wherein it is indicated that -

“.....

*Accordingly, this Commission has decided to issue this Order which though nominally is indicated as applicable for the 3<sup>rd</sup> Control Period (FY2014-15 to FY2018-19) and which consistent with its existing regulations, will be subject to review by the Successor Regulatory Commissions of the two States whenever deemed necessary by the respective Commissions.”*

10 Subsequently, the Hon'ble Telangana State Electricity Regulatory Commission has directed the Discoms vide Lr.No.TSERC/Distribution/Secy/2, dated 02.01.2015 to file the ARR for Distribution Business and FPT of Wheeling Charges afresh for the remaining part of the Control Period in view of the state bifurcation.

### **Present ARR & Tariff applications for 3<sup>rd</sup> Control Period of Distribution Business**

11 Accordingly, this filing is made by the Southern Power Distribution Company of Telangana Limited (TSSPDCL) under section 61 of the Electricity Act, 2003 for determination of the ARR and Tariff proposals for the Wheeling Charges for the distribution business for 3<sup>rd</sup> Control Period.

12 This filing is excluding the figures of Anantapur and Kurnool circles. Further, ARR of the base year i.e., FY2013-14 has been segregated between TSSPDCL and Anantapur & Kurnool circles.

13 The ARR and Tariff Proposals ("Wheeling Charges") for the Distribution Business of the licensee for the 3<sup>rd</sup> Control Period (FY2014-15 to FY2018-19), includes -

- (a) True-up for FY2013-14 of Distribution Business
- (b) Capital Expenditure Plan for 3<sup>rd</sup> Control Period
- (c) Loss Reduction Trajectory

### **SUMMARY OF FILINGS:**

#### **True-up of Distribution Business for 2<sup>nd</sup> Control Period**

14 The MYT Distribution Business Tariff Order for the 2<sup>nd</sup> Control Period includes ARR of Anantapur and Kurnool circles. Consequent upon assignment of Anantapur and Kurnool circles to APSPDCL, the line items of ARR of the Tariff Order for FY 2013-14 has been segregated between TSSPDCL and Anantapur & Kurnool circle in proportion to their actual values of line items.

15 TSSPDCL files for the truing-up of Rs.93.18 crore including carrying cost for the terminal year of 2<sup>nd</sup> MYT Control Period i.e., FY2013-14. Actual cost of debt @ 11.50% has been considered for computing carrying cost. Summary of ARR line

items and revenue for FY2013-14 separately for the TSSPDCL and Anantapur & Kurnool districts is shown in the table below.

All figures in Rs. crore

TSSPDCL Distribution True-Up			2013-14								
S. No.	Name of the Parameter	Units	TSSPDCL			ATP &KNL			CPDCL		
			Approved	Actuals	Deviation	Approved	Actuals	Deviation	Approved	Actuals	Deviation
A	O & M Expenses	Rs. Crs.	728	932	204	226	289	63	954	1,222	268
B	Return on Capital Employed	Rs. Crs.	193	261	68	64	87	23	257	348	91
C	Depreciation during the year	Rs. Crs.	391	216	(175)	123	67.82	(55)	514	284	(230)
D	Taxes on Income	Rs. Crs.	1.12	-	-	0	-	-	2	-	(2)
E	Special Appn. for Safety measures	Rs. Crs.	4	-	(4)	1	-	(1)	5	-	(5)
F	Other Expenditure	Rs. Crs.	-	-	-	-	-	-	-	-	-
X	Gross ARR	Rs. Crs.	1,318	1,410	93	414	444	30	1,732	1,854	122
G	Revenue	Rs. Crs.	-	0.08	0	-	-	-	-	0.08	0.08
H	Non Tariff Income	Rs. Crs.	26	40	14	7	10	4	32	50	18
Y	Total Revenue	Rs. Crs.	26	40	14	7	10	4	32	50	18
Z	Total Gap	Rs. Crs.	1,292	1,370	79	408	434	27	1,700	1,804	104

### Capital Investment Plan for 3<sup>rd</sup> Control Period

16 The licensee has prepared a detailed capital investment plan for the 3<sup>rd</sup> Control Period FY2014-15 to FY2018-19 based on a comprehensive analysis of state of the existing network loading conditions and the expected future loading of the network during each year of the 3<sup>rd</sup> Control Period based on the projected load growth and the same is explained in detail in Section 3. The proposed capital investment of the licensee has been classified into the following areas-

- **Base Capital Expenditure:** The primary purpose of the capital expenditure proposed under this head is to meet the load growth of the licensee and to strengthen its distribution network. The key elements of the proposed base capital expenditure include the following
  - Substation Additions
  - New PTR additions in existing substations
  - Feeder Additions
  - DTR Additions

To estimate the above network additions for the Control Period, the licensee has defined certain trigger points for peak loading of each of the above network elements. Network additions are proposed once the peak loading exceeds the predefined trigger points. The extent of network capacity proposed to be added is commensurate to meet the increased load growth.

▪ **Other Capital Expenditure**

- **Loss Reduction:** The licensee has identified certain areas viz. installation of high quality meters, HVDS conversion, laying of AB cables, replacement of existing conductor with higher capacity conductor and installation of capacitor banks, etc., which have a good potential of reducing losses. Accordingly the licensee has proposed the requisite capital expenditure under this head.
- **Reliability and Contingency Improvement:** The licensee has identified certain areas such as reconductoring of lines, replacement of over head (OH) lines with underground (UG) cables, installations of 3-way & 5-way Ring Main Units (RMUs) and provision of alternate supplies at 33 kV, 11 kV and LT voltage levels, etc., which have a good potential for improving the reliability and quality of supply to the consumer. Accordingly the licensee has proposed the requisite capital expenditure under this head.
- **Renovation and Modernization:** The licensee has proposed certain capex under this head to replace the assets which have outlived their useful lives and also in improving the performance of certain existing assets
- **Technology Upgradation:** Keeping in view the changing electricity distribution business environment and with the objective of providing the best quality of service to consumers, the licensee would like to leverage technology in an optimal manner. In this regard, licensee has identified Geographical Information System (GIS), Wide Area Network (WAN), Automatic Meter Reader (AMR) solutions, Supervisory Control and Data Acquisition (SCADA), Enterprise Resource Plan

(ERP)/Information Technology (IT) application has key areas of investment.

- **New Consumer Related Capex:** The meter and the associated network infrastructure related to the release of service to a new consumer falls under this head.
- **Civil Infrastructure Development:** The licensee has proposed investments under this head to cater to construction of new office buildings and in improving the amenities at the existing offices.

17 The following table provides a summary of the investment plan for each of the years of the Control Period:

All figures in Rs. crore

TSSPDCL Capital Expenditure Summary (Rs. Crs.)						
All values in Rs Crs	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control Period ( FY 14-19)
<b>Load Growth &amp; Network Strengthening ( Base Capex)</b>	<b>1,014</b>	<b>1,557</b>	<b>1,474</b>	<b>1,485</b>	<b>1,623</b>	<b>7,153</b>
SS Unit Additions (Outdoor)	279	291	313	281	314	1,478
SS Unit Additions (Indoor)	156	168	182	196	212	914
PTR Additions (Exsiting SS)	2	18	2	2	-	23
Feeder Additions	83	159	32	37	106	417
DTR Additions	495	921	945	969	991	4,322
<b>Other Capex Total</b>	<b>472</b>	<b>568</b>	<b>642</b>	<b>707</b>	<b>746</b>	<b>3,134</b>
AT & C Loss Reduction	75	85	107	128	128	524
Reliability Improvement & Contingency Schemes	38	45	54	64	77	278
Renovation & Modernisation	147	170	184	197	212	910
Technology Upgradation	13	31	32	32	5	113
New Consumer Capex	24	48	58	69	82	280
Civil Infrastructure Development	9	10	11	12	14	56
Land Cost for SS	42	42	46	38	43	210
Road Cutting Cost (Cables for SS)	48	54	62	71	81	316
Evacuation from 132/33 kV SS	41	44	47	51	55	238
Cost of 33 kV Feeder Bifurcation	36	38	42	45	48	209
<b>Total Capex Expenditure for Discom (A+B)</b>	<b>1,486</b>	<b>2,125</b>	<b>2,116</b>	<b>2,192</b>	<b>2,368</b>	<b>10,287</b>

### Loss Reduction Trajectory

18 The Licensee has classified the total distribution losses into three voltage level losses viz., LT, 11 kV and 33 kV. The Licensee is striving to reduce the losses by implementation of loss reduction measures like strengthening of the network



infrastructure, addition of network elements, and vigorously undertaking the Energy Audit to keep a close tab on the losses. Hence, the licensee requests the Hon'ble Commission to approve the loss reduction trajectory as given in the below table.

Voltage wise Losses	2014-15	2015-16	2016-17	2017-18	2018-19
LT Loss (%)	8.87%	8.52%	8.18%	7.85%	7.54%
11 kV Loss (%)	5.28%	5.07%	4.87%	4.67%	4.48%
33 kV Loss (%)	4.32%	4.15%	3.98%	3.82%	3.67%

#### Aggregate Revenue Requirement (ARR) for each year of 3<sup>rd</sup> Control Period

19 The ARR for the Distribution business for each year of 3<sup>rd</sup> Control Period is determined as follows.

All figures in Rs. crore

Particulars	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Operation and Maintenance Charges	1001.09	1226.24	1515.12	1879.21	2279.90	2739.02
Depreciation	405.74	507.66	637.74	780.98	953.68	1134.02
Advance Against Depreciation						
Taxes on Income		36.61	52.98	69.22	85.45	103.20
Other Expenditure	0.00	0.48	93.69	0.53	0.56	0.59
Special Appropriations	0.00	30.00	35.00	40.00	45.00	50.00
<b>Total Expenditure</b>	<b>1406.83</b>	<b>1800.99</b>	<b>2334.53</b>	<b>2769.94</b>	<b>3364.59</b>	<b>4026.84</b>
Less: IDC and expenses capitalized*						
Less: O&M expenses capitalized	68.62	147.17	208.83	207.14	213.94	230.65
<b>Net Expenditure</b>	<b>1338.21</b>	<b>1653.82</b>	<b>2125.69</b>	<b>2562.80</b>	<b>3150.65</b>	<b>3796.19</b>
Add Return on Capital Employed	261.11	336.99	491.74	639.10	795.48	963.14
<b>Total Distribution ARR</b>	<b>1599.32</b>	<b>1990.82</b>	<b>2617.43</b>	<b>3201.90</b>	<b>3946.14</b>	<b>4759.32</b>
Less: Wheeling Revenue from Third Party/Open Access/NTI (if any)	229.59	241.30	266.26	304.06	346.23	378.97
<b>Revenue Requirement, (Net transferred to Retail Supply Business)</b>	<b>1369.73</b>	<b>1749.52</b>	<b>2351.17</b>	<b>2897.83</b>	<b>3599.90</b>	<b>4380.35</b>

#### Wheeling Charges and Losses

20 The licensee is proposing the following distribution wheeling charges for each year of the 3<sup>rd</sup> Control Period.

Wheeling Tariff - Rs./kVA/month					
Voltage Level	FY14-15	FY15-16	FY16-17	FY17-18	FY18-19
33 kV (Rs./kVA/Month)	46.90	58.90	67.58	77.31	84.08
11 kV (Rs./kVA/Month)	199.41	256.72	298.99	347.45	391.12
LT (Rs./kVA/Month)	357.51	436.89	492.01	561.03	630.91

21 Based on the information available, the Applicant has made sincere efforts to comply with the Regulation of the Hon'ble Commission and discharge its obligations to the best of its abilities. However, should any further material information become available in the near future, the Applicant reserves the right to file such additional information and consequently amend/revise the application.

22 This filing has been discussed and approved by the Board of Directors of TSSPDCL and Sri G.Raghuma Reddy, Chairman and Managing Director of TSSPDCL has been authorised to execute and file the said document on behalf of TSSPDCL. Accordingly, the current filing documents are signed and verified by, and backed by the affidavit of Sri G.Raghuma Reddy, the Chairman and Managing Director of TSSPDCL.

23 In the aforesaid facts and circumstances, the Applicant request that this Hon'ble Commission may be pleased to:

- Take the accompanying ARR and Wheeling Tariff application of TSSPDCL on record for Distribution Business and treat it as complete;
- Grant suitable opportunity to TSSPDCL within a reasonable time frame to file additional material information that may be subsequently available;
- Consider and approve TSSPDCL's ARR and Tariff application including all requested regulatory treatments in the filing;
- Pass such order as the Hon'ble Commission may deem fit and proper in the facts and circumstances of the case.

**SOUTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED**

... Applicant

Through

Place: Hyderabad  
Dated: 03 .03.2015

**CHAIRMAN AND MANAGING DIRECTOR**

**BEFORE THE HONOURABLE  
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION  
AT ITS OFFICE AT 5<sup>th</sup> Floor, SingareniBhavan, Red Hills, Hyderabad - 500 004**

FILING NO. \_\_\_\_\_/2015

CASE NO. \_\_\_\_\_/2015

In the matter of:

Filing of the ARR & Tariff applications for the Distribution Business for 3<sup>rd</sup> Control Period (FY2014-15 to FY2018-19) under Multi-Year-Tariff principles in accordance with the “Andhra Pradesh Electricity Regulatory Commission (Terms And Conditions For Determination Of Tariff For Wheeling And Retail Sale Of Electricity) Regulation, 2005” by the Southern Power Distribution Company of Telangana Limited (‘TSSPDCL’ or ‘the Company’ or ‘the Licensee’) as the Distribution Supply Licensee.

In the matter of:

**SOUTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED**

... Applicant

**AFFIDAVIT OF APPLICANT VERIFYING THE APPLICATION  
ACCOMPANYING FILING AS PER TERMS AND CONDITIONS OF TARIFF  
FOR WHEELING AND RETAIL SALE OF ELECTRICITY**

I, Sri G.Raghuma Reddy, son of Sri G.Janga Reddy (Late), working for gain at the Southern Power Distribution Company of Telangana Limited do solemnly affirm and say as follows:

- 1 I am the Chairman and Managing Director of TSSPDCL, the Licensee that has, vide the Hon’ble Commission’s approval in proceedings No. APERC/Secy/Engg/No.6 dt.31.3.2000, been granted the distribution and retail supply functions that Transco was authorised to conduct or carry out under the Act and the license, with respect to the business of distribution and retail supply of electricity in the Southern distribution zone in Telangana. On December 27, 2000, the Hon’ble Commission has awarded a Distribution and Retail Supply License to APCPDCL(now TSSPDCL) effected from April 1, 2001.

- 2 Consequent to the bifurcation of the Andhra Pradesh State as per the Andhra Pradesh Reorganization Act, the two districts of Anantapur and Kurnool were moved from the jurisdiction of APCPDCL to APSPDCL and the name of the licensee was changed from APCPDCL to TSSPDCL.
- 3 As per the section 92 read with the twelfth schedule of the AP Reorganisation Act, 2014 the then APERC functioned as Joint regulatory body and issued Regulation No.3 of 2014 ( Reorganisation) Regulation,2014 and as per clause 5 of the regulation which reads as “ *the area of supply of existing distribution & Retail supply licensees shall deemed to be reassigned as per the provisions of the Andhra Pradesh Reorganisation Act 2014 until amended or separate licenses are issued by the respective state electricity Regulatory Commissions.*”
- 4 I am competent and duly authorised by TSSPDCL to affirm, swear, execute and file this affidavit in the present proceedings.
- 5 As such, I submit that I have been duly authorised by the Board of Directors of TSSPDCL to submit the application, as per Terms and Conditions of Tariff for Wheeling and Retail Sale of Electricity (Regulation 4 of 2005) of TSSPDCL for the 3<sup>rd</sup> control period i.e. FY 2014-15 to FY 2018-19 to Hon’ble Commission.
- 6 I submit that I have read and understood the contents of the appended application of TSSPDCL. The facts stated in the application are true to the best of my knowledge, which are derived from the official records made available and certain facts stated are based on information and advice which, I believe to be true and correct.
- 7 I submit that for the reasons, and facts stated in the appended application this Applicant pray that the Hon’ble Commission may be pleased to
- (a) Take the accompanying ARR and Tariff application for Distribution business of 3<sup>rd</sup> control period i.e. FY 2014-15 to FY 2018-19 of TSSPDCL on record and treat it as complete;

- (b) Grant suitable opportunity to TSSPDCL within a reasonable time frame to file additional material information that may be subsequently available;
- (c) Consider and approve TSSPDCL's ARR and Tariff application including all requested regulatory treatments in the filing;
- (d) Pass such order as the Hon'ble Commission may deem fit and proper in the facts and circumstances of the case.

**DEPONENT**

**VERIFICATION:**

I, the above named Deponent solemnly affirm at Hyderabad on this 03 day of March, 2015 that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from.

**DEPONENT**

Solemnly affirmed and signed before me.

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# **1 Introduction**

1 With the enactment of Andhra Pradesh Reorganisation Act, 2014 [the APR Act] the Telangana state has been carved out from the undivided Andhra Pradesh state as the 29<sup>th</sup> state of the Republic India on appointed day i.e., on 02.06.2014. In accordance with the APR Act, the distribution business of Anantapur and Kurnool districts which fall within the jurisdiction of the erstwhile Central Power Distribution Company of Andhra Pradesh Limited (ACPDCL) have been reassigned to the Southern Power Distribution Company of Andhra Pradesh Limited (APSPDCL) vide G.O.Ms.No.24, dated 29.05.2014. Further, name of the Licensee has been changed from Central Power Distribution Company of Andhra Pradesh Limited (APCPDCL) to Southern Power Distribution Company of Telangana Limited (TSSPDCL) w.e.f 27.05.2014.

2 Consequently, the Electricity Regulatory Commission of the undivided state of Andhra Pradesh has notified Regulation No.3 of 2014 (Reorganisation) Regulation, 2014 on 26.05.2014, wherein Clause 3 stipulates that, “All the notified regulations as well as their supplementary regulations/amendments, rules, orders, proceedings, guidelines, memos, notifications, other instruments issued immediately before 2nd June, 2014 by the APERC for conduct of business and other matters shall fully & completely apply to the whole of the states of Telangana and Andhra Pradesh and shall similarly apply in relation to all matters falling within the jurisdiction of the Commission until they are altered, repealed or amended by the respective State Electricity Regulatory Commissions.”

3 Later on the Hon’ble Telangana State Electricity Regulatory Commission (TSERC) has notified its first Regulation No.1 of 2014 on 10.12.2014 viz., Telangana State Electricity Regulatory Commission (Adoption of Previously Subsisting Regulations, Decisions, Directions or Orders, Licenses and Practice of Directions) Regulation of 2014, wherein Clause 2 stipulates that “All regulations, decisions, directions or orders along with all the licences and practice direction issued by the erstwhile Andhra Pradesh Electricity Regulatory Commission (Regulation Commission for States of Andhra Pradesh and Telangana) in existence as on the date of the constitution of the Telangana State Electricity Regulatory Commission and in force, shall mutatis-mutandis apply in relation to the stakeholders in



electricity in the State of Telangana including the Commission and shall continue to have effect they are until duly altered, repealed or amended by any of the Regulation by the Commission with effect from the date of notification as per Notification issued by the Government of Telangana in G.O.Ms.No.3 Energy (Budget) Department, dated 26.07.2014 constituting the Commission.”

4 As such, all the regulations framed by erstwhile Commission will continue to apply for the state of Telangana.

### **Introduction of MYT framework for determination of Tariff**

5 The earlier Commission notified the Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination of Tariff for Wheeling and Retail Sale of Electricity) Regulation, 2005 (RegulationNo.4 of 2005) on 14.11.2005. This regulation introduced Multi-Year-Tariff framework and specify the principles and procedures of filings. Accordingly the Licensee has to make the filing for their Annual Aggregate Revenue Requirement (ARR) along with its Filings for Proposed Tariff (FPT) with the Commission for determination of Wheeling Charges for five years period called Control Period.

### **Past ARR & FPT Filings by Licensee for Distribution Business**

6 In accordance with the Regulation No.4 of 2005. The Licensee (APCPDCL), has filed application for approval of its Aggregate Revenue Requirement (ARR) and Tariff proposals for the Wheeling Charges of Distribution business for 3<sup>rd</sup> Control Period i.e., from FY2014-15 to FY2018-19, on 4<sup>th</sup> December, 2013, which were admitted by the Commission and assigned O.P. No. 64 of 2013.

7 After comprehensive public consultation process on the filings made by the Licensee, the Hon’ble Commission passed orders on 9th May, 2014 for Wheeling Tariffs for Distribution Business for the 3rd control Period wherein it is indicated that –

“.....

*Accordingly, this Commission has decided to issue this Order which though nominally is indicated as applicable for the 3rd Control Period (FY2014-15 to FY2018-19) and which consistent with its existing regulations, will be subject to review by the*

*Successor Regulatory Commissions of the two States whenever deemed necessary by the respective Commissions.”*

8 Subsequently, the Hon’ble Telangana State Electricity Regulatory Commission has directed the Discoms vide Lr.No.TSERC/Distribution/Secy/2, dated 02.01.2015 to file the ARR for Distribution Business and FPT of Wheeling Charges afresh for the remaining part of the Control Period in view of the state bifurcation.

**Present ARR & Tariff applications for 3rd Control Period of Distribution Business**

9 Accordingly, this filing is made by the Southern Power Distribution Company of Telangana Limited (TSSPDCL) under section 61 of the Electricity Act, 2003 for determination of the ARR and Tariff for the Distribution Business for 3<sup>rd</sup> Control Period viz., FY2014-15 to FY2018-19.

10 The ARR and Tariff Proposals (“Wheeling Charges”) for the Distribution Business of the licensee for the 3rd Control Period (FY2014-15 to FY2018-19), includes

- (a) True-up for FY2013-14 of Distribution Business
- (b) Capital Expenditure Plan for 3<sup>rd</sup> Control Period
- (c) Loss reduction trajectory for 3<sup>rd</sup> Control Period

## **2 True-up for FY 2013-14 of Distribution Business**

This filing is made by the Distribution Licensee, Southern Power Distribution Company of Telangana Limited (TSSPDCL) under **Clause 19, of the ‘Andhra Pradesh Electricity Regulatory Commission** (Terms and Conditions for Determination Of Tariff For Wheeling and Retail Sale of Electricity)’ Regulation No. 4 of 2005 for corrections for “uncontrollable” and “controllable” items and as well as sharing of gains/losses for the Third control period (FY 2014-15 till FY 2018-19)

This filing has been prepared as per the provisions of the above mentioned Regulation. The Licensee is submitting the following as part of the Correction filings for the Third control period (FY FY 2014-15 till FY 2018-19)

Allocation statement to segregate expenses and income of Controllable and Uncontrollable items under Distribution Business

- i. Statement of Variance with Tariff Order approved figures pertain to items under Distribution Business for the terminal year of the Second Control Period i.e. FY 2013-14. The licensee is not seeking true-ups for the other years of the Second Control Period, since many of the variations have been covered as per the FRP scheme implemented by the Licensee
- ii. Corrections for Uncontrollable items under Distribution Business along with reasons for variation
- iii. Corrections for Controllable items under Distribution Business along with reasons for variation

As per the ‘Andhra Pradesh Electricity Regulatory Commission (Terms and Conditions for Determination Of Tariff For Wheeling and Retail Sale of Electricity)’ Regulation No. 4 of 2005, Clause 10, –

“1. ....  
.....

.....

4. *Controllable and Uncontrollable items of ARR:- The expenditure of the Distribution Licensee considered as “controllable” and “uncontrollable” shall be as follows:*

<b>Distribution Business</b>	
<b>ARR Item</b>	<b>“Controllable”/”Uncontrollable”</b>
Operation & Maintenance expenses	Controllable
Return on Capital Employed	Controllable
Depreciation	Controllable
Taxes on Income	Uncontrollable
Non-tariff income	Controllable

*In addition to the above items the retail supply business shall include the following:*

<b>Retail Supply Business</b>	
<b>ARR Item</b>	<b>“Controllable”/”Uncontrollable”</b>
Cost of power purchase	Uncontrollable

5. *Pass-through of gains and losses on variations in “uncontrollable” items of ARR:- The Distribution Licensee shall be eligible to claim variations in “uncontrollable” items in the ARR for the year succeeding the relevant year of the Control Period depending on the availability of data as per actuals with respect to effect of uncontrollable items:*

*Provided that the Commission shall allow the financing cost on account of the time gap between the time when the true-up becomes due and when it is actually allowed and the corrections shall not be normally revisited.*

6. *Sharing of gains and losses on variations in “controllable” items of ARR:- The Distribution Licensee in its annual filings during the Control Period shall present gains and losses for each controllable item of the Aggregate Revenue Requirement.*

*A statement of gain and loss against each controllable item will be presented after adjusting for any variations on account of uncontrollable factors.*

*7. For the purpose of sharing gains and losses with the consumers, only aggregate gains or losses for the Control Period as a whole will be considered. The Commission will review the gains and losses for each item of the ARR and make appropriate adjustments wherever required:*

*Provided that for the first Control Period, insofar as the gains and losses from the Retail Supply Business of the Distribution Licensee are concerned, these will be shared with the consumers on yearly basis.”*

Hence, this Petition details the total truing up gap arising out of the deviations in both “uncontrollable” and “controllable” items for the Third MYT Control Period (terminal year only) in subsequent sections of this Petition.

## **2.1 True-up of Aggregate Revenue Requirement (ARR) Components & Total Revenue Gap from Distribution Business including Carrying Cost**

In this petition the licensee has requested for Distribution true-up of FY 2013-14 alone as gains/losses upto FY 2012-13 is almost covered under FRP scheme and the same is claimed under Retail supply Business Filings dated 07.02.2015.

The Distribution Licensee TSSPDCL files for the truing-up of **Rs 93.18 Crs** including carrying cost for the last year of the Second MYT Control Period i.e. FY 2013-14. cost of debt of **11.5%** for FY 2013-14 has been considered for computing carrying cost. Summary of ARR line items and revenue for FY 2013-2014 of TSSPDCL and Anantapur, Kurnool is shown in the table below.

As the MYT distribution business tariff order for 2<sup>nd</sup> control period has been issued including ARR of Anantapur & Kurnool circles. Hence the ARR line items as per the Tariff Order for FY 2013-14 has been divided between TSSPDCL and Ananthapur & Kurnool circles in the proportion of their actual line items.

TSSPDCL Distribution True-Up			2013-14								
S. No.	Name of the Parameter	Units	TSSPDCL			ATP &KNL			CPDCL		
			Approved	Actuals	Deviation	Approved	Actuals	Deviation	Approved	Actuals	Deviation
A	O & M Expenses	Rs. Crs.	728	932	204	226	289	63	954	1,222	268
B	Return on Capital Employed	Rs. Crs.	193	261	68	64	87	23	257	348	91
C	Depreciation during the year	Rs. Crs.	391	216	(175)	123	67.82	(55)	514	284	(230)
D	Taxes on Income	Rs. Crs.	1.12	-	-	0	-	-	2	-	(2)
E	Special Appn. for Safety measures	Rs. Crs.	4	-	(4)	1	-	(1)	5	-	(5)
F	Other Expenditure	Rs. Crs.	-	-	-	-	-	-	-	-	-
X	Gross ARR	Rs. Crs.	1,318	1,410	93	414	444	30	1,732	1,854	122
G	Revenue	Rs. Crs.	-	0.08	0	-	-	-	-	0.08	0.08
H	Non Tariff Income	Rs. Crs.	26	40	14	7	10	4	32	50	18
Y	Total Revenue	Rs. Crs.	26	40	14	7	10	4	32	50	18
Z	Total Gap	Rs. Crs.	1,292	1,370	79	408	434	27	1,700	1,804	104
	O & M Expenses ( net of expenses capitalised)	Rs. Crs.	728	932	204	226	289	63	954	1,222	268
	-Employee Expenses	Rs. Crs.		637	(91)		216	(10)		852.72	(102)
	-A&G Expenses	Rs. Crs.	728	75	75	226	26	26	954	101.18	101
	-Repairs & Maintainance	Rs. Crs.		221	221		47	47		268.06	268
	Return on Capital Employed	Rs. Crs.	187	261	74	70	87	17	257	348	91
	Capital Expenditure	Rs. Crs.	842	874	32	213	221	8	1,055	1,095	40
	-Investment	Rs. Crs.	733	764	31	187	195	8	920	959	39
	-O&M Expenses Capitalised	Rs. Crs.	74	69	(5)	18	17	(1)	92	86	(6)
	-Interest During Construction capitalised	Rs. Crs.	36	42	6	8	9	1	43	51	7
	Gross Fixed Assets										
	-Opening Balance	Rs. Crs.	6,089	6,001	(88)	1,665	1,641	(24)	7,753	7,642	(112)
	- Additions	Rs. Crs.	745	776	31	225	234	9	970	1,010	41
	-Closing balance	Rs. Crs.	6,834	6,777.33	(56)	1,890	1,875.04	(14)	8,723	8,652.37	(71)
	Depreciation during the year	Rs. Crs.	391	216	(175)	123	68	(55)	514	284	(230)
	Accumulated Depreciation										
	-Opening Balance	Rs. Crs.	2,560	2,713	153	744	788	44	3,304	3,501	198
	-Depreciation	Rs. Crs.	411	406	(5)	103	102	(1)	514	508	(7)
	-Closing balance	Rs. Crs.	2,971	3,118.44	148	847	890.26	43	3,818	4,008.70	191
	Consumer Contribution										
	-Opening Balance	Rs. Crs.	1,906	1,490	(416)	334	261	(73)	2,240	1,752	(489)
	-Additions	Rs. Crs.	305	132	(173)	68	29	(38)	373	161.88	(211)
	-Closing balance	Rs. Crs.	2,211	1,623	(588)	402	291	(111)	2,613	1,914	(700)
	Working Capital	Rs. Crs.	67	83.42	17	20	25.54	5	87	108.97	22
	Regulatory Rate Base	Rs. Crs.	1,704	2,000	296	634	668	34	2,338	2,668	331
	-Change in Rate Base	Rs. Crs.	14	119	105	27	51	25	41	171	129
	-Cost of Debt	%	10.00%	12.74%	2.74%	10.00%	12.74%	2.74%	10.00%	12.74%	2.74%
	-Return on Equity	%	14.00%	14.00%	0.00%	14.00%	14.00%	0.00%	14.00%	14.00%	0.00%
	WACC	%	11.00%	13.05%	2.05%	11.00%	13.05%	2.05%	11.00%	13.05%	2.05%
	Revenue	Rs. Crs	-	0	0	-	-	-	-	0	0
	-Revenue from Retail Supply Business			-	-		-	-		-	-
	-Revenue from Open Access Consumers			0.08	0			-		0.08	0
	Debt Equity Ratio (Normative)										
	Debt	75%									
	Equity	25%									

As shown in the table above, the actual Gross ARR of TSSPDCL was Rs 1410 Crores as against an approved value of Rs 1317 Crores resulting in ARR gap of Rs 93 Crores. However, actual Total Revenue was Rs 40 Crores, as against a value of Rs 26 Crores approved by the Hon'ble Commission, which is higher by Rs 14 Crores. These items together have led to a total gap of Rs 1370 Crores against an approved value of Rs 1291 Crores.

TSSPDCL has assumed a carrying cost of 11.5% on the above gap of Rs 79 Crores. TSSPDCL has computed the year-wise true-up to be claimed as a part of the distribution business ARR on annuity basis. Computations are presented in the table below:

S. No.	Name of the Parameter	Units	FY 2013-14	FY 2014-15
			A	Carrying cost of unclaimed true-up
B	Opening Balance of True Up	Rs. Crs.	79.03	83.57
C	Carrying Cost	Rs Crs	4.54	9.61
D	Closing balance of True-Up	Rs. Crs.	83.57	93.18

## 2.2 Reasons for Deviation in Aggregate Revenue Requirement for distribution business for the year FY 2013-14

### 2.2.1 Operation & Maintenance (O&M) Expenses

TSSPDCL O&M expenses in FY 2013-14 were higher by Rs 204 Crores as against the approved figure of Rs 728 Crores. Anantapur & Kurnool O&M expenses in FY 2013-14 were higher by Rs 63 Crores as against the approved figure of Rs 226 Crores. Break-up of O&M expenses is shown in the table below

Name of the Parameter	Units	TSSPDCL			ATP &KNL			CPDCL		
		Approved	Actuals	Deviation	Approved	Actuals	Deviation	Approved	Actuals	Deviation
<b>O &amp; M Expenses ( net of expenses capitalised)</b>	<b>Rs. Crs.</b>	<b>728</b>	<b>932</b>	<b>204</b>	<b>226</b>	<b>289</b>	<b>63</b>	<b>954</b>	<b>1,222</b>	<b>268</b>
-Employee Expenses	Rs. Crs.	728	637	(91)	226	216	(10)	954	852.72	(102)
-A&G Expenses	Rs. Crs.		75	75		26	26		101.18	101
-Repairs & Maintainance	Rs. Crs.		221	221		47	47		268.06	268

## **Reasons for deviations in O&M Expenses**

From the above table, it is observed that the O&M expenses for the year FY 2013-14 are higher by Rs 268 Crores and this is primarily happened due to the following reasons, which were not considered while fixing the O&M Cost target for the Distribution Business for the year 2013-14.

- Wage Revision w.e.f. 01.04.2010
- Actuarial Valuation Report
- Leave Encashment
- DA hike and new recruitment
- Increase in Repairs and Maintenance cost
- Increase in travelling and vehicle hire expenses

### **a. Employee Expenses**

#### **i. Wage Revision Impact ( w.e.f. 01.04.2010):**

Pay Revision of the employees has taken place w.e.f. 01.04.2010 due to which pay was increased over the years from 2010-11 onwards. This was already mentioned by the Licensee during the process of MYT filing. Due to wage revision impact, the Licensee requests the Hon'ble Commission to provide a true-up to meet the increased O&M cost in FY 2013-14.

#### **ii. Actuarial Valuation report:-**

The Licensee has received the Actuarial Valuation report and based on the report, the provision for terminal benefits was made for FY 2013-14. There is no provision for Pension & Gratuity as per the Commission approved figures.

#### **iii. Leave Encashment:-**

Based on the actuarial valuation report, the Licensee has made Leave Encashment Provision for FY 2013-14. There is no provision for Leave encashment as per the Commission approved figures.



**b. Increase in Repairs & Maintenance Cost:-**

Increase in DTR repairs cost due to unforeseen increase in material and labour cost and maintenance cost of Lines and Cables & metering equipment.

**c. Increase in Travelling and Vehicle hire expenses:-**

Increase in Travelling Expenditure and Vehicle Hire Charges due to rigorous inspection of field units and unforeseen increase in fuel cost etc resulted in increase in administration and general expenses.

**2.2.2 Regulated Rate Base (RRB)**

TSSPDCL's actual Regulated Rate Base (RRB), was Rs 2000 Crores as against Commission's approved values of Rs 1704 Crores. Actual RRB of Anantapur & Kurnool was Rs 668 Crores as against Commission's approved values of Rs 634 Crores. Break-up of RRB for the year FY 2013-14 is shown in the table below:

Sl.No	Name of the Parameter	Units	TSSPDCL			ATP &KNL			CPDCL		
			Approved	Actuals	Deviation	Approved	Actuals	Deviation	Approved	Actuals	Deviation
A	Regulated Rate Base	Rs Crs	1,704	2,000	296	634	668	34	2,338	2,668	331
B	Additions to GFA	Rs Crs	745	776	31	225	234	9	970	1,010	41
C	Additions to Consumer Contribution	Rs Crs	305	132	(173)	68	29	(38)	373	161.88	(211)
D	Working Capital	Rs Crs	67	83.42	17	20	25.54	5	87	108.97	22

As can be seen from the table, deviation in RRB is primarily because of higher actual working capital in comparison to Commission's approved figures, followed by higher additions to GFA.

**Reasons for deviations in RRB**

**a. Additions to GFA:**

As there is deviation in the opening balance of GFA for FY 2013-14, though the Licensee is able to achieve more GFA than the commission approved one for the FY 2013-14, the net GFA is less than the approved value.

**b. Deviation in Working Capital**

As the O&M expenses has been increased to the tune of Rs. 204 crores, corresponding working capital requirement has also been increased to an amount of Rs. 17 crores as against the Commission approved value.

**2.2.3 Return on Capital Employed (ROCE)**

TSSPDCL’s actual Return on Capital Employed (ROCE) was Rs 261 Crores as against Commission’s approved figures of Rs 187 Crores resulting in a deviation of Rs 74 Crores for the year FY 2013-14. Actual ROCE of Anantapur & Kurnool was Rs 87 Crores as against Commission’s approved figures of Rs 70 Crores resulting in a deviation of Rs 17 Crores for the year FY 2013-14. Key components comprising ROCE is shown in the table below.

Sl. No	Name of the Parameter	Units	TSSPDCL			ATP &KNL			CPDCL		
			Approved	Actuals	Deviation	Approved	Actuals	Deviation	Approved	Actuals	Deviation
A	Return on Capital Employed	Rs Crs	187	261	74	70	87	17	257	348	91
B	Regulated Rate Base	Rs Crs	1,704	2,000	296	634	668	34	2,338	2,668	331
C	WACC (%age)	%age	11.00%	13.05%	2.05%	11.00%	13.05%	2.05%	11.00%	13.05%	2.05%
D	Cost of Debt	%age	10.00%	12.74%	2.74%	10.00%	12.74%	2.74%	10.00%	12.74%	2.74%
E	Return on Equity	%age	14.00%	14.00%	0.00%	14.00%	14.00%	0.00%	14.00%	14.00%	0.00%

**Reasons for deviations in ROCE**

**Regulatory Rate Base (RRB):**

The Regulated Rate Base in FY 2013-14 is higher than Commission’s approved value due to higher GFA additions and higher working capital in comparison to Commission’s approved values.

**Weighted Average Cost of Capital (WACC):**

Higher WACC is because of higher cost of debt. Average Cost of debt was 12.74% in FY 2013-14 as against 10% approved by the Commission. This has resulted in WACC going up from 11% projected by the Commission to 13.05% in actual.

#### 2.2.4 Depreciation

Depreciation for the year FY 2013-14 was lower by Rs 230 Crores as against the Commission's approved figures of Rs 514 Crores.

Name of the Parameter	Units	TSSPDCL			ATP &KNL			CPDCL		
		Approved	Actuals	Deviation	Approved	Actuals	Deviation	Approved	Actuals	Deviation
<b>Depreciation during the year</b>	<b>Rs. Crs.</b>	<b>391</b>	<b>216</b>	<b>(175)</b>	<b>123</b>	<b>68</b>	<b>(55)</b>	<b>514</b>	<b>284</b>	<b>(230)</b>
<b>Accumulated Depreciation</b>										
<i>-Opening Balance</i>	Rs. Crs.	2,560	2,713	153	744	788	44	3,304	3,501	198
<i>-Depreciation</i>	Rs. Crs.	411	406	(5)	103	102	(1)	514	508	(7)
<i>-Closing balance</i>	<b>Rs. Crs.</b>	<b>2,971</b>	<b>3,118.44</b>	<b>148</b>	<b>847</b>	<b>890.26</b>	<b>43</b>	<b>3,818</b>	<b>4,008.70</b>	<b>191</b>

#### **Reasons for deviations in Depreciation**

The deviation in the GFA resulted the deviation in Depreciation. Further the Hon commission has not considered the depreciation on the assets additions during the year while issuing the Tariff Order.

#### 2.2.5 Taxes on Income

There is a deviation in taxes of income for Rs 2 Crores. TSSPDCL's actual taxes on income were Nil during the year FY 2013-14.

Name of the Parameter	Units	TSSPDCL			ATP &KNL			CPDCL		
		Approved	Actuals	Deviation	Approved	Actuals	Deviation	Approved	Actuals	Deviation
<b>Taxes on Income</b>	<b>Rs. Crs.</b>	<b>1.12</b>	<b>-</b>	<b>(1.12)</b>	<b>0.88</b>	<b>-</b>	<b>(0.88)</b>	<b>2</b>	<b>-</b>	<b>(2)</b>

#### 2.2.6 Special Appropriation for Safety Measures

While the Hon'ble Commission has approved Rs 5 Crores towards special appropriation for safety measures, expenditure incurred by the Licensee on the account was Nil as can be seen from the table below:

Name of the Parameter	Units	TSSPDCL			ATP &KNL			CPDCL		
		Approved	Actuals	Deviation	Approved	Actuals	Deviation	Approved	Actuals	Deviation
<b>Special Appn. for Safety measures</b>	<b>Rs. Crs.</b>	<b>4</b>	<b>-</b>	<b>(4)</b>	<b>1</b>	<b>-</b>	<b>(1)</b>	<b>5</b>	<b>-</b>	<b>(5)</b>

### **Reasons for deviations in Special Appropriation for Safety Measures**

The licensee has incurred the following capital works expenses towards safety measures.

- i. Erection of intermediate poles for proper clearance
- ii. Providing of Earthing
- iii. Providing of fencing
- iv. Reconstruction of damaged DTR plinth
- v. Plinth Raisings
- vi. Providing of SMC Distribution boxes
- vii. Providing of foot Crs.oss arms
- viii. Rectification of DTR structures
- ix. Replacement of damaged AB cable
- x. Providing of safety materials viz. Gum boots, Helmets, Safety belt, Earth rods, Gloves etc.

As the same has been considered in Asset base under Capital Expenditure it has not been shown under Special appropriations head.

### **2.2.7 Other Expenditure**

There was no deviation in other expenditure. TSSPDCL's and Anantapur, Kurnool's actual taxes on income as well as Commission's approved values were Nil during the year FY 2013-14

Name of the Parameter	Units	TSSPDCL			ATP &KNL			CPDCL		
		Approved	Actuals	Deviation	Approved	Actuals	Deviation	Approved	Actuals	Deviation
<b>Other Expenditure</b>	<b>Rs. Crs.</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## 2.2.8 Non-Tariff Income

Name of the Parameter	Units	TSSPDCL			ATP &KNL			CPDCL		
		Approved	Actuals	Deviation	Approved	Actuals	Deviation	Approved	Actuals	Deviation
<b>Non Tariff Income</b>	<b>Rs. Crs.</b>	<b>26</b>	<b>40</b>	<b>14</b>	<b>7</b>	<b>10</b>	<b>4</b>	<b>32</b>	<b>50.13</b>	<b>18</b>

### Reasons for Deviation in year wise Non Tariff Income

Actual Non Tariff Income is higher by Rs 18 Crs. compared to the Commission approved figures. TSSPDCL has received the Non Tariff Income under the following heads.

S.No.	Particulars	2013-14
		TSSPDCL
1	Interest on Staff Loans and Advances	0.06
2	Fines and Penalties from suppliers/contractors	2.79
3	Profit on Sale of scrap	0.05
4	Excess found on physical stock verification	0.00
5	Sale of Tender schedules	0.28
6	Rental contractors	0.20
7	Supervision charges (Turnkey works 6200930)	27.05
8	Interest on instalments due from consumers	0.00
9	Security deposits forfeited	8.78
10	Discounts received from vendors	0.01
11	Rebate from funding agencies	0.27
12	Misc.Income-	
	Price variation	0.04
13	Other Income	
	a. Meter testing charges	0.16
	b Transformer testing charges	0.03
	c. Hire charges equipment	0
	d. Registration fee	0.16
	e.Rental from Staff quarters	0.07
	f. Rent on fixtures	0
	<b>Total</b>	<b>39.95</b>

### 2.2.9 Carrying Cost

TSSPDCL has considered a carrying cost of Rs 14.15 Crores, taking into account an interest cost of 11.5% on the carry forward deviation amount.

S. No.	Name of the Parameter	Units		
			FY 2013-14	FY 2014-15
A	Carrying cost of unclaimed true-up	%age	11.5%	
B	Opening Balance of True Up	Rs. Crs.	79.03	83.57
C	Carrying Cost	Rs Crs	4.54	9.61
D	Closing balance of True-Up	Rs. Crs.	83.57	93.18

Carrying cost of True-Up has been computed basis 11.5%, since this has been the interest cost on short-term loans taken by the TSDISCOMS. Carry forward of true-up has been computed assuming annuity implication so that the total true-up amount claimed each year is equal.

Accordingly, while the base true-up amount is Rs 79.03 Crores, total true-up proposed to be claimed for the last year of the second Control Period is Rs 93.18 Crores, inclusive of carrying cost

### 2.3 Prayer

The Petitioner (Distribution Licensee) prays that the Hon'ble Commission may:

- i. Approve the true-up of expenses and revenue for the Distribution Business for the terminal year of the Second Control Period i.e. FY 2013-14 of Rs. 79.03 crores
- ii. Approve Rs 14.15 Crs. as carrying cost for total revenue gap from the Distribution Business for the terminal year of the Second Control Period
- iii. Approve **Rs. 93.18 Crores as the true-up of total gap for distribution business for the terminal year of the Second Control Period** i.e. FY 2013-14

## **3 Capital Expenditure Plan**

### **3.1 Base Capital Expenditure**

The Base Capex is planned to cater the load growth and network strengthening. The following methodology has been adopted for the estimation of the Base Capex:

#### ***Methodology***

The following data has been gathered for all the sub-divisions in a DISCOM:

#### **Sales Forecast**

Projection of sub-division wise sales for the control period has been carried out on the basis of the actual sales of the last six years. The sales projections were done for LT, HT 11 kV, total HT sales and the total sales for the DISCOM for each year in the control period. The growth-rates were calculated for each sub-division for each year in the control period. CAGR (Compounded Annual Growth Rate) for a five year period was computed for each sub-division. CAGR for LT sales and 11kV sales was computed to project the loading of network elements (viz. (33/11 kV Sub station, PTR, 11 Kv Feeder and DTR) for the 3<sup>rd</sup> control period.

#### **Sub-division Classification**

Sub-divisions are classified as Urban, Semi-urban and Rural based on the current location and current load pattern.

This classification helps the Licensee to compute the load density in the respective area. Addition of S/s or PTR will be proposed based on the load growth and Load density in that area. For example, load density would be high in urban area rather than sub-urban and rural area and hence, addition of S/s would be optimal in rural areas rather than addition of PTR to reduce line losses.

#### **Network Loading Data**

The details of all Sub Stations in the Licensee area were gathered along with the location area classification, details of constituent network elements and their respective peak loading values.

#### **Power Transformer Details**

The power transformer (PTR) capacities installed in each substation were gathered along with the peak loading details of PTRs'. The data used for analysis is the year end values of 2013-14 and is as received from the field to ensure that the model captures and reflects the real situation as in the fields. The peak loading details as received from the field was validated to remove any exceptions.

### **Feeder Details**

The details captured for analysis are the total number of feeders installed in a substation and the peak currents flowing through the same. This data was captured from the field during the year 2013-14. The peak current data in feeders of a sub-station have been validated to remove exceptions, if any.

### **Distribution Transformer Details**

The total number of distribution transformers catered by a substation at the end of the year 2013-14 has been considered. The DTRs in every Sub-Station have been categorized into five ranges based upon their respective peak loading.

## **3.2 Modelling for Network Additions (Substations; PTRs; Feeders; DTRs)**

The PTR and feeder loadings in every substation (in a sub-division) have been assumed to grow at the same rate as the year-on-year sales growth of sum of LT and HT 11 kV sales of that particular subdivision. The substation capacity limit has been capped at 16 MVA for Urban substations, 10 MVA for sub-urban substations, and 5 MVA for rural substations. These limits have been set with an objective to reduce line losses and improve the voltage profile.

For example, if a S/s having a 10 MVA PTR capacity, 90% of peak load, sub urban area, 10% growth rate. This requires additional PTR capacity to cater to the load growth in that area. However, with the threshold limit, a new S/s will be proposed closer to the load center to reduce line losses and improve voltage profile.

A new substation will be proposed as per the following conditions:

- 1 If an additional PTR is required and the substation cannot accommodate any further PTRs based on the criteria mentioned above.
- 2 Average loading on PTRs' in substation is greater than the threshold set (% loading of its capacity) for new substation addition.

A certain loading of the PTRs' in the present substation is transferred to the new substation. The PTR capacity to be installed in the new substation is 5 MVA in rural and semi-urban areas and 8 MVA in case of urban areas. The load transfer from a present substation to a new substation has been factored in such a way that in most situations the average loading on PTRs' in the present substation after the load transfer doesn't exceed 80% in any of the years in the control period. The load transfer from a present substation to a new substation in the later years in the control period has been increased to ensure that total network is well balanced at the end of the control period.

The number of feeders proposed for a new substation is a factor of the new capacity installed in that substation, the average new substation loading, and a maximum feeder current limit. For



the FY 2014-15 as the projects have already started for new substations installation, and a few of them proposed for this year are already operational, the difference in the additions as proposed by the model and the estimates for 2014-15 has been carried forward to the subsequent years in the control period. This has been done so to ensure that the network is strengthened to cater to the load growth expected during the control period.

### **Power Transformers**

A new PTR will be proposed as per the following conditions:

- 1 If the peak loading of any of the PTRs' installed exceeds the threshold set (% loading of its capacity) and if the substation can accommodate a new PTR i.e. Urban- 16 MVA, SU – 10 MVA, Rural -5 MVA

The PTR capacity proposed is either 5 MVA or 8 MVA, depending on substation capacity.

The final loading on the PTRs' after a new PTR is proposed is such that the distribution of peak loads on all PTRs' is the same. This shall ensure that all the PTRs' are loaded equally unlike the scenario of peak loading on one of them being very high.

A similar carry forward approach has been adopted for the PTR additions as done for substations.

### **Feeders**

The total number of feeders in a substation has been capped to 16. New feeders will be proposed under the following condition:

- 1 Peak feeder current exceeds more than 130 Amps from FY 2015-16 to FY 2018-19 and whereas for FY 2014-15, the feeder limit kept as 170Amps.
- 2 If no new substation addition is being proposed;
- 3 If additional feeder can be accommodated in the substation.

The peak currents in the feeders are distributed equally among the ones over loaded and the new feeders proposed.

A similar carry forward approach has been adopted for the feeder additions as done above for substations and PTRs'.

### **Distribution Transformers**

The number of DTRs' has been categorized in various load bands as can be seen in the table below:

Name of Sub-Station	DTR Loading Information ( Beginning of the Year )					
	No. of DTRs'	<40%	40-60%	60%-80%	80%- 100%	>100%
SS - 1	29	7	3	2	5	12
SS - 2	135	12	6	14	35	68
SS - 3	277	66	13	21	35	142
SS - 4	165	15	10	14	35	91

The median value of the bands has been assumed to grow at the same rate as that of year-on-year growth rate of LT sales. For e.g., the median value of the band 40%-60% is 50%, and if a substation has LT sales growth of 10% for that year, the median loading value would shift to 55%. As there is a shift in the median value, some of DTRs' in this band of 40%-60%, may have peak loads more than 60%. Certain of these DTRs' which may be overloaded have been shifted to the next band level.

Shift in DTR loading during the year					
No. of DTRs' shifted	40%	40-60%	60%-80%	80%-100%	>100%
52	34	1	0	0	17
317	210	1	1	2	103
547	360	6	1	3	177
386	256	1	1	2	126

Of the 142 DTRs' in the band of >100%, 3 DTRs' have moved to the next band of 40% for the shift in median loading. The shift of DTRs' to other bands also has been worked out on similar lines. We have assumed that, for LT sales growth of around 14% to 25% w.r.t various load-bands, about one-fourth of the DTRs' would shift from one band to the next higher band. The shift is more than one-fourth for higher growth rates and less for lesser growth rates.

The addition of DTRs' has been proposed in case the loading exceeds 95%. These overloaded DTRs' are supported with equivalent number of additional DTRs' in the same year. The overloaded and new DTRs' would share the load and hence at the end of the year shall have a loading of approximately 40%.

As for the e.g. mentioned above, the final scenario would look as captured in table below:

DTRs added during the year	DTR Loading Information ( End of the Year )					
	No. of DTRs'	40%	40%-60%	60%-80%	80%-100%	>100%
17	46	40	4	2		
105	240	221	6	13		
180	457	420	18	19		
128	293	270	10	13		

A similar carry forward approach has been adopted for the DTR additions as done above for others.

**Threshold Peak Loading of Network Elements**

With the current loading of the network elements, very large number of new S/s , PTR's, feeder's and DTR's are being proposed in the first of the control period or current year. Licensee adopted differential threshold limits to ensure uniform network additions each year during the control period. Summary of the threshold peak loading are shown below.

	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Urban SS threshold	75%	80%	75%	75%	75%	75%
SU SS threshold	85%	85%	80%	80%	80%	80%
Rural SS threshold	95%	100%	90%	90%	90%	90%
Urban PTR threshold	95%	100%	75%	75%	75%	75%
SU PTR threshold	90%	95%	75%	75%	75%	75%
Rural PTR threshold	90%	95%	75%	75%	75%	75%
Urban DTR threshold	100%	100%	95%	95%	95%	95%
SU DTR threshold	100%	100%	95%	95%	95%	95%
Rural DTR threshold	100%	100%	95%	95%	95%	95%
Feeder Threshold (Amp)	170	170	130	130	130	130

### **3.3 Network Element Cost**

#### **Network Element Definition and Cost Details**

The following approach has been considered to estimate the Network cost details which is important to convert the network additions to Base Capex:

#### **3.3.1 Substation Unit Cost (Rs. / substation):**

For calculating the cost of a substation added Licensee have considered the following to be a part of a substation unit:

- 33 kV line of 6 kms;
- 132/33 kV tapping bay;
- 33 kV VCB;
- Substation unit cost includes the PTRs, 11 kV bay and AB switches;
- It includes all the relevant material cost, construction cost and labor charges.

The substation unit cost arrived above is the value pertaining to 2014-15. Considering the possible increase in material and labour costs, the substation cost has been escalated by a certain percentage year-on-year. The number of substation additions each year has been multiplied by the substation unit cost for that year to arrive at the total cost of installing all new substations in that year.

#### **3.3.2 PTR Unit Cost (Rs. / Unit):**

For calculating the cost of installing a PTR in a substation we have considered the following for the year 2014-15:

- PTR of 5 MVA and 8 MVA capacities in Rural and Urban areas respectively;
- HV Breaker;
- LV Breaker;
- Associated Equipment and labor cost.

The cost incurred for installing a 5 MVA PTR as above is divided with the PTR size to arrive at the PTR unit cost. The total PTR unit additions in Rural and Urban areas in a year, which includes the additions in existing substations, is multiplied with the PTR unit cost in Rural and Urban areas respectively for that year to arrive at the total cost of installing all the PTRs'. On

similar lines as the substation unit cost, the PTR unit cost of 2014-15 has been escalated by a certain percentage year-on-year to get the PTR unit cost for subsequent years of the control period. This has been done to account for the possible increase in the material and labor cost during the 3<sup>rd</sup> control period.

### **3.3.3 Feeder Unit Cost (Rs. / feeder):**

For calculating the cost of a installing a feeder in a substation we have considered the following for the year 2014-15:

- Feeder breaker and metering set (including CT/PT);
- Bay extension;
- 11 kV line;
- Poles;
- Associated Equipment and labor cost.

The total feeder addition in a year, which includes the additions in existing and new substations, is multiplied with the feeder unit cost for that year to arrive at the total cost of installing all the feeders. The feeder unit cost of 2014-15 has been escalated by a certain percentage year-on-year to get the feeder unit cost for subsequent years of the control period.

### **3.3.4 DTR Unit Cost (Rs. / kVA):**

For calculating the cost of a installing a DTR we have considered the following for the year 2014-15:

- The weighted average DTR size has been has been moderated downwards to 60 kVA.
- AB switches;
- DTR structure;
- 0.3 km of LT line;
- 0.4 km of 11 kV line;
- Associated Equipment and labor cost.

The cost incurred for installing a 100 kVA DTR as above is divided with the DTR size to arrive at the DTR per kVA cost. The total kVA addition in a year is multiplied with the DTR unit cost for that year to arrive at the total cost of installing all the DTRs'. The DTR unit cost of 2014-15

on similar lines as others above has been escalated by a certain percentage year-on-year to get the DTR unit cost for subsequent years of the control period.

### 3.3.5 Capital Cost Escalation Factor

The escalation parameter that has been considered on the unit costs of 2014-15 to arrive at the unit costs for every year of the 3<sup>rd</sup> control period is as mentioned below in the table below.

2015-16	2016-17	2017-18	2018-19
8%	8%	8%	8%

### 3.4 Base Capex Network Additions Summary

The network to be added in the 3<sup>rd</sup> control period in CPDCL is as mentioned below in the table:

	Unit	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	3 <sup>rd</sup> Control Period (FY14-19)
Substation Additions	Nos.	137	135	134	116	119	641
PTR Additions	Nos.	4	33	4	3	-	44
Feeder Additions	Nos.	469	828	155	165	439	2,056
DTR Additions	Nos.	21,656	37,338	35,465	33,668	31,891	<b>160,018</b>

### 3.5 Base Capital Expenditure:

The network to be added in the 3<sup>rd</sup> control period is as mentioned below in the table:

CPDCL	Unit	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19	3 <sup>rd</sup> Control Period (FY14-19)
Substation Additions	RsCrs	434	459	495	477	525	2,391
PTR Additions	RsCrs	2	18	2	2	-	<b>24</b>
Feeder Additions	RsCrs	83	159	32	37	106	<b>417</b>
DTR Unit Additions	RsCrs	495	921	945	969	991	<b>4,322</b>
<b>Total Base Capex</b>	<b>RsCrs</b>	<b>1,014</b>	<b>1,557</b>	<b>1,474</b>	<b>1,485</b>	<b>1,623</b>	<b>7,153</b>

### 3.6 Other Capital Expenditure

Apart from the base capital expenditure projected based on the load growth and existing load on the net work, it is proposed to invest an amount of Rs.5245 Crores for loss reduction, technology up gradation and improvement of existing network. The expenditure is basically divided into following heads:

1. AT&C loss reduction
2. Reliability Improvement & Contingency Schemes
3. Renovation & Modernisation
4. Technology Up gradation
5. New Consumer Capex
6. Civil Infrastructure Development
7. Evacuation from the new 132/33 KV Substaion

The actual expenditure towards each line item has been considered and indexation of 8% every year towards increase in cost for the next 5 years. The current Wholesale Price Index (WPI) and Consumer Price Index (CPI) and the past trend have been considered to arrive at escalation rate.

### 3.7 AT & C Loss Reduction

TSSPDCL proposes to undertake capital works of Rs. 524 crores for reduction of losses and achieving the targets planned in ensuing five years. The Discom is planning to reduce its loss for the 3<sup>rd</sup> control period i.e. from 2014-15 to 2018-19 as shown in the Loss Trajectory. To accomplish this loss reduction trajectory the Discom is planning for following programmes during the control period –

- **Replacement of existing mechanical meters with high quality meters**  
A Metering plan has already been initiated to convert the existing age old meters with high quality electronic meters in a phased manner. Under this plan every year approximately 1,40,000 meters are being replaced in all the circles. The Discom proposes 6,79,000 meters will be replaced in the next 5 years of the control period with high accurate meters to reduce technical and commercial losses in the Discom.

- **Implementation of High Voltage Distribution System(HVDS)**

Currently HVDS scheme is being carried out in all rural circles under JICA programme. The TSSPDCL intends to continue the HVDS programme.

- **Replacement of conductor**

To reduce the line losses and to reduce the breakdowns due to overloading of conductors the Discom proposes to replace 2230 kms of 34 sq mm conductors with 55 sq mm during the next 5 years of the control period. Further 225 kms of 20 sq mm conductor is proposed to replace with 34 sq mm conductor in the ensuing control period.

The details of network additions proposed under AT&C loss reduction measures and financials for the same are as follows:

Network Additions

S. No.	Investment area	Units	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
1	Meter replacement (Installation of High quality Meters)	in Lakhs	1.19	1.4	1.4	1.4	1.4	<b>6.79</b>
2	HVDS conversion (No of Agl DTRs to be converted to HVDS)	Nos	600	600	800	1000	1100	<b>4100</b>
4	Capacitor Banks	No's	-	73	73	73	-	<b>219</b>
5	MRI Instruments	No's	385	-	-	-	-	<b>385</b>
6	Replacement of existing 34 sq mm conductor with 55 sq. mm conductor.	Kms	404	424	445	467	490	<b>2230</b>
7	Replacement of existing 20 sq mm conductor with 34 sq. mm conductor.	Kms	41	43	45	47	49	<b>225</b>



Financial Summary:

(Rs in Crores)

S.No.	Investment area	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
1	Meter replacement (Installation of High quality Meters)	12.5	15.1	15.6	16.1	16.5	<b>75.8</b>
2	HVDS conversion (including Laying of AB cables)	60	60	80	100	110	<b>410</b>
3	Cost of Capacitor bank	-	9	10	11	-	<b>29</b>
4	MRI Instruments	1.1	-	-	-	-	<b>1.1</b>
5	Replacement of existing 34 sq mm conductor with 55 sq. mm conductor and 20sqmm with 34 sqmm	1.2	1.3	1.4	1.6	1.8	<b>7.3</b>
	<b>Total</b>	<b>74.8</b>	<b>85.5</b>	<b>106.8</b>	<b>128.3</b>	<b>128.4</b>	<b>524</b>

### 3.8 Reliability improvement and Contingency Schemes:

TSSPDCL is proposing to invest Rs. 278 crores (approx) in improvement of reliability of power supply to consumers by re-conductoring lines and replacing Over Head Lines with UG cables and usage of 3-way RMUs & 5-way RMUs.

- The TSSPDCL is proposed to re-conductor 4065 Km (approx.) of line length in the next 5 years of the control period by removing aged lines to increase dependability and useful life of the equipment.
- The Discom is proposing to replace OH line with UG cable of 610 kms in the GHMC area to increase the reliability and to avoid right of way limitations.

To meet unforeseen situations in the dynamic environment, the Discom is also proposed to spend around Rs.137.8 crores in provision of alternate supply to 33 KV, 11 KV and LT consumers.

- The TSSPDCL propose 410 kms, 1624 kms and 812 kms of alternate supply line for 33 KV, 11 KV and LT consumers and corresponding Bays as standalone to meet contingencies.

The details of network additions proposed and financials for the same are as follows:

Network Addition

S. No.	Investment area	Units		2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
1	<b>Reliability Improvement</b>								
	Re conductoring of lines with 55 sq mm (avg)	Kms		735	772	811	852	895	<b>4065</b>
	Replacing OH line with UG cables ( at road crossings etc)	Kms		110	116	122	128	134	<b>610</b>
	3-way RMU	No's		56	66	91	116	141	470
	5-way RMU	No's		59	69	94	119	144	485
2	<b>Contingency Schemes</b>								
a	<b>- Provision of alternate supply at 33KV SS/ Consumers</b>								
	- Addition of 33KV lines	Kms		74	78	82	86	90	<b>410</b>
	- No. of Bays	No's		29	30	32	34	36	<b>161</b>
b	<b>-Provision of alternate supply at 11KV Consumer</b>								
	- Addition of 11KV line	Kms		294	309	324	340	357	<b>1624</b>
	- No. of Bays	No's		51	54	57	60	63	<b>285</b>
c	<b>-Provision of alternate supply for LT consumers</b>								
	- Addition of LT line ( for ring fencing etc)	Kms		147	154	162	170	179	<b>812</b>

Financial Summary:

(Rs in Crores)

S.No	Investment area			2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
1	<b>Reliability Improvement</b>								
	Reconductoring of lines with 55 sq mm (avg)			2.0	2.2	2.5	2.8	3.2	<b>12.7</b>
	Replacing OH line with UG cables ( at road crossings etc)			7.5	8.5	9.7	11.0	12.4	<b>49.0</b>
	Installation of 3-way RMU			2.7	3.5	5.2	7.1	9.4	<b>27.9</b>
	Installation of 5-way RMU			5.0	6.4	9.4	12.8	16.7	<b>50.3</b>
2	<b>Contingency Schemes</b>								
a	<b>- Provision of alternate supply at 33KV SS/ Consumers</b>								
	- Addition of 33KV lines			3.0	3.4	3.9	4.4	5.0	<b>19.7</b>
	- No. of Bays			2.8	3.1	3.5	4.1	4.7	<b>18.1</b>
b	<b>-Provision of alternate supply at 11KV Consumer</b>								
	- Addition of 11KV line			9.8	11.2	12.6	14.3	16.2	<b>64.0</b>
	- No. of Bays			1.6	1.8	2.1	2.4	2.7	<b>10.7</b>
c	<b>-Provision of alternate supply for LT consumers</b>								
	- Addition of LT line ( for ring fencing etc)			3.9	4.4	5.0	5.6	6.4	<b>25.2</b>
	<b>Total</b>			<b>38.4</b>	<b>44.5</b>	<b>53.9</b>	<b>64.5</b>	<b>76.5</b>	<b>278</b>

### 3.9 Renovation and Modernization

TSSPDCL is proposing to invest Rs. 910 crores in renovation and modernization of substations and replacing of existing old and obsolete equipments with new ones.

- The TSSPDCL is planning to renovate and modernise 431 substations under R&M scheme in order to increase their life span and update with latest technology.
- Further every year significant numbers of assets viz. PTRs, DTRs, Lines, LT meters & HT meters are getting scrapped due to ageing, worn out or obsolete and the Discom need to incur expenditure to replace such retired assets. Hence TSSPDCL considering the past year experience and the age-wise analysis of the assets, proposed to replace them.
- Network Additions

S.No	Investment area	Units	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
1	<b>R&amp;M of existing assets</b>							
	R&M of SS	Nos	78	82	86	90	95	<b>431</b>
	R&M of DTR	Nos	30,000	35,000	40,000	45,000	50,000	200,000
2	<b>Proposed retirement of existing assets</b>							
	- PTRs	No's	10	12	14	16	18	<b>70</b>
	-PTRs Capacity	MVA	47.2	36.1	49.5	50.4	56.7	<b>239.9</b>
	- 33KV line	kms	22	23	24	25	26	<b>120</b>
	- 11KV line	kms	34	36	38	40	42	<b>190</b>
	- DTR	KVA	68985	72434	76056	79859	83852	<b>381,186</b>
	- LT line	circuit kms	48	50	53	56	59	<b>266</b>
	-LT 1-Phase meter	No's in Lakhs	3.25	3.57	3.00	2.50	2.00	<b>14.32</b>
	-LT 3-Phase meter	No's in Lakhs	0.93	1.02	1.00	0.90	0.90	<b>4.76</b>

S.No	Investment area	Units	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
	-LT CT meter	No's in Lakhs	0.23	0.26	0.25	0.25	0.25	1.24
	-HT meter	No's	888	881	881	881	881	4412

Financial Summary:

(Rs in Crores)

S.No	Investment area	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
1	<b>R&amp;M of existing assets</b>						
	R&M of SS	2.7	3.1	3.5	4.0	4.5	17.8
	R&M of DTR	60.0	70.0	80.0	90.0	100.0	400.0
2	<b>Proposed retirement of existing assets</b>						
	- PTRs	1.8	0.8	1.7	1.7	2.3	8.2
	- 33KV line	0.9	1.0	1.1	1.3	1.4	5.8
	- 11KV line	1.1	1.3	1.5	1.7	1.9	7.5
	- DTR	19.3	21.9	24.8	28.2	31.9	126.2
	- LT line	1.3	1.4	1.6	1.8	2.1	8.3
	-LT 1-Phase meter	26.3	31.3	28.3	25.5	22.0	133.5
	-LT 3-Phase meter	18.0	21.4	22.5	21.9	23.6	107.4
	-LT CT meter	14.3	17.0	18.0	19.4	21.0	89.7
	-HT meter	0.9	1.0	1.1	1.2	1.3	5.4
	<b>Total</b>	<b>83.9</b>	<b>97.1</b>	<b>100.7</b>	<b>102.7</b>	<b>107.6</b>	<b>491.9</b>
	<b>Total</b>	<b>147</b>	<b>170</b>	<b>184</b>	<b>197</b>	<b>212</b>	<b>910</b>

### 3.10 Technology Up gradation:

Most of the Sub-stations and offices are situated in remote centres. The major challenge has been the interconnection (networking) of all the functional offices at all levels. The major IT initiative to be taken up in the Company has been the interconnecting of all the offices through the WAN/LAN and leased line networking. Further, various technical projects like SCADA, GIS/GPS, AMR, etc are proposed to be implemented throughout the Company in the coming few years.

- The TSSPDCL has proposed to take up works of automation of 114 substations in each of the year 2015-16 to 2017-18 with a cost of Rs. 25.6 crores in each year
- The GIS mapping scheme under R-APDRP currently cover 21 towns in the TSSPDCL which costs around Rs. 11.9 crores during the control period.
- The TSSPDCL proposed to incur Rs. 4 crores to provide Wide Area Network (WAN) to the circle offices during the control period.
- The TSSPDCL intends to cover around 12000 no of meters under AMR scheme in the next 5 years with a capital cost of Rs. 7.8 crores.
- The TSSPDCL proposed to spend Rs. 12.5 crores in the next 5 years of the control period under IT applications for hardware backup systems under Disaster Recovery.

#### Financial Summary:

(Rs in Crores)

S.No.	Investment area	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
1	Automation of Substations	-	25.6	25.6	25.6	-	<b>76.7</b>
2	GIS mapping	7.9	1.0	1.0	1.0	1.0	<b>11.9</b>
3	WAN	1.0	1.0	1.0	1.0		<b>4.0</b>
4	AMR solutions	1.3	1.4	1.6	1.7	1.8	<b>7.8</b>
5	ERP/IT applications	2.5	2.5	2.5	2.5	2.5	<b>12.5</b>
	<b>Total</b>	<b>12.7</b>	<b>31.5</b>	<b>31.6</b>	<b>31.7</b>	<b>5.3</b>	<b>112.9</b>

### 3.11 New consumer Capital Expenditure:

The following investment is proposed for release of these services on account of new consumers.

#### Network Additions

Investment area	Units	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
<b>Network additions for release of new service connections</b>							
33KV line for new consumer(Including LI schemes)	Kms	143	157	171	188	207	<b>865</b>
Service Wire	No's	5077	5838	6714	7721	8879	<b>34,229</b>
<b>Consumer Meters</b>							
LT 1-Phase meters	No's (in lakhs)	0.47	1.90	2.08	2.29	2.52	<b>9.27</b>
LT 3-Phase meters	No's (in lakhs)	0.24	0.47	0.51	0.56	0.62	<b>2.40</b>
LT CT meters	No's (in lakhs)	0.06	0.12	0.13	0.14	0.15	<b>0.60</b>
HT metering set (Meter cost including CT/PT)	No's	526	644	813	887	969	<b>3,839</b>

#### Financial Summary

(Rs in Crores)

Investment area	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
<b>Network additions for release of new service connections</b>						
33KV line for new consumer ( Including LI schemes)	5.9	6.9	8.1	9.6	11.4	<b>41.9</b>
Service Wire	3.7	4.5	5.5	6.8	8.4	<b>28.9</b>
<b>Consumer Meters</b>						
LT 1-Phase meters	4	17	20	24	28	<b>92</b>

Investment area	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
LT 3-Phase meters	5	10	12	14	16	56
LT CT meters	4	8	9	11	13	45
HT metering set (Meter cost including CT/PT)	2.1	2.6	3.4	3.8	4.3	16.2
<b>Total</b>	<b>23.8</b>	<b>48.4</b>	<b>57.8</b>	<b>68.7</b>	<b>81.6</b>	<b>280</b>

### 3.12 Civil Infrastructure Development

TSSPDCL proposes to invest the following expenditure for construction of office buildings in next five years.

Network Additions

Investment area	Units	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
<b>Construction of Office Buildings</b>							
Construction of office buildings	Nos	32	34	36	38	40	180
Administrative support ( furniture)	No's	32	34	36	38	40	180
Administrative support ( Acs )	No's	32	34	36	38	40	180
Administrative support (Computers etc)	No's	500	500	500	500	500	2,500

Financial Summary:

(Rs in Crores)

Investment area	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control period
Construction of office buildings	6.0	6.9	7.9	9.0	10.2	40.0
Administrative support ( furniture/ Computers/ACs etc)	2.8	3.0	3.2	3.5	3.7	16.3
<b>Total</b>	<b>8.8</b>	<b>9.9</b>	<b>11.1</b>	<b>12.5</b>	<b>14.0</b>	<b>56.2</b>



### 3.13 Land Cost for Substation

The land cost for the construction of substations varies from place to place and from urban to rural areas. Considering the number of substations proposed in the Base capital expenditure for the control period TSSPDCL proposed Land cost of SS of Rs. 210.30 crores

### 3.14 Road Cutting Permission cost within GHMC and major municipalities

In the GHMC area, TSSPDCL need to pay the road cutting charges levied by Municipal authorities for lying of cable. Hence, the total expenditure proposed to be incurred for Road cutting charges comes to Rs. 315Cr during the control period.

The Other Capital Expenditure is determined by multiplying the units planned for each year with their respective costs, suitably adjusted for inflation. The total other Capex required for the control period is shown in the below table.

### 3.15 Total Capital Expenditure

In the whole process of Total Capital Expenditure calculation Anantapur and Kurnool have been excluded from the existing districts considering there are no longer under licensee zone. The total capital expenditure projected by the licensee for the 3<sup>rd</sup> control period has been tabulated below:

Capital Expenditure Summary							
All values in RsCr	2014-15	2015-16	2016-17	2017-18	2018-19	Total Control Period (FY 14-19)	
<b>A</b>	<b>Load Growth &amp; Network Strengthening ( Base Capex)</b>	<b>1,014</b>	<b>1,557</b>	<b>1,474</b>	<b>1,485</b>	<b>1,623</b>	<b>7,153</b>
	SS Unit Additions (Outdoor)	279	291	313	281	314	<b>1,478</b>
	SS Unit Additions (Indoor)	156	168	182	196	212	<b>914</b>
	PTR Additions	2	18	2	2	-	<b>23</b>
	Feeder Additions	83	159	32	37	106	<b>417</b>
	DTR Additions	495	921	945	969	991	<b>4,322</b>
<b>B</b>	<b>Other Capex Total</b>	<b>472</b>	<b>568</b>	<b>642</b>	<b>707</b>	<b>746</b>	<b>3,134</b>
	AT & C Loss Reduction	75	85	107	128	128	<b>524</b>
	Reliability Improvement & Contingency Schemes	38	45	54	64	77	<b>278</b>
	Renovation & Modernisation	147	170	184	197	212	<b>910</b>

	Technology Upgradation	13	31	32	32	5	<b>113</b>
	New Consumer Capex	24	48	58	69	82	<b>280</b>
	Civil Infrastructure Development	9	10	11	12	14	<b>56</b>
	Land Cost for SS	42	42	46	38	43	<b>210</b>
	Road Cutting Cost (Cables for SS)	48	54	62	71	81	<b>316</b>
	Evacuation from 132/33 kV SS	41	44	47	51	55	<b>238</b>
	Cost of 33 kV Feeder Bifurcation	36	38	42	45	48	<b>209</b>
<b>C</b>	<b>Total Capex Expenditure for Discom (A+B)</b>	<b>1,486</b>	<b>2,125</b>	<b>2,116</b>	<b>2,192</b>	<b>2,368</b>	<b>10,287</b>

### 3.16 Scheme wise Capital Expenditure proposed

Project Code - Project Title	Project Purpose	Investments proposed (Rs. In Crores)				
		14-15	15-16	16-17	17-18	18-19
APTD-Dis-078 SPA : PE	Electrification of Agriculture pumpsets in rural areas	198.79	242.52	300.48	371.33	457.82
DAP-TD-DIS-078-2013-7199 Scheme for installation of 55 Nos 33/11 KV SS along with 33 KV & 11 KV lines in 6 districts of	Erection of new 33/11 KV SS	21.69	30.75			
C&I / 966 65 Nos 33/11 KV SS in Rural Districts	Erection of new 33/11 KV SS	12.32				
Loan agreement No ID-P216 Implementation of APRHVDS project under JICA funding	Conversion of LVDS to HVDS	40.51	202.53	162.02		
To be formulated New	Conversion of LVDS to HVDS			43.00	200.00	200.00
Scheme preparation is under progress SI:Material	Bulk Scheme	774.99	955.96	955.96	955.96	955.96

Project Code - Project Title	Project Purpose	Investments proposed (Rs. In Crores)				
		14-15	15-16	16-17	17-18	18-19
31533012, 31534024, R-APDRP Part-B	System Improvement project for erection of 100 KVA DTR and allied I11KV & LT lines, Reconductoring of LT Lines/ Replacement with LT AB Cable, Conversion of 1-Ph to 3-Ph line	14.69	6.78	1.13	0.00	0.00
31533012.00 R-APDRP Part-B	System Improvement project for erection of 100 KVA DTR and allied I11KV & LT lines, Reconductoring of LT Lines/ Replacement with LT AB Cable, Conversion of 1-Ph to 3-Ph line	27.30	12.60	2.10	0.00	0.00
31533012.00 R-APDRP Part-B	System Improvement project for erection of 100 KVA DTR and allied I11KV & LT lines, Reconductoring of LT Lines/ Replacement with LT AB Cable, Conversion of 1-Ph to 3-Ph line	102.00	47.21	7.86	0.00	0.00
31533012.00 R-APDRP Part-B	System Improvement project for erection of 100 KVA DTR and allied I11KV & LT lines, Reconductoring of LT Lines/ Replacement with LT AB Cable, Conversion of 1-Ph to 3-Ph line	253.17	116.90	19.47	0.00	0.00
31533001 to 31533018, 31533020- 31533031, 31538012 R-APDRP Part-A	IT implementation and SCADA/DMS project	27.92	0.00	0.00	0.00	0.00

Project Code - Project Title	Project Purpose	Investments proposed (Rs. In Crores)				
		14-15	15-16	16-17	17-18	18-19
Scheme preparation under progress DDUGJY	Feeder Segregation, T&D improvement, Metering, HVDS & RGGVY	0.00	119.62	239.24	239.24	0.00
Scheduled Caste Sub Plan SCSP	Electrification of SC Colonies under SCSP	12.61	82.90	0.00	0.00	0.00
New Scheme Smartgrid Pilot in Jeddimetla Indl. Area	AT&C Loss reduction, Automation	0.00	20.92	20.90	0.00	0.00
TL-TD-DIS-468-2014-8847 Installation of 63 Nos. of 33/11 KV Sub-stations along with 33 KV and 11 KV lines in 4 Districts of Telangana	Erection of new 33/11 KV SS	0.00	30.00	30.00	36.21	
IPDS scheme for Urban area Distribution net work strenthening in 34 Nos. Towns of TSSPDCL	Distribution net work strenthening in 34 Nos. Towns of TSSPDCL	0.00	93.79	187.39	187.39	0.00
ST&D Strengthening	New Scheme	0.00	162.79	146.06	201.50	754.55
<b>Total</b>		<b>1485.99</b>	<b>2125.27</b>	<b>2115.61</b>	<b>2191.63</b>	<b>2368.33</b>

**Up coming schemes :**

**a) Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY):**

- ❖ The Scheme is aimed at ensuring around eight hours of quality power supply to agricultural consumers and 24-hour electricity to households in rural areas.
- ❖ The source of financing of the scheme is as follows  
Grant: 60% can be extended to 75% (50% of loan), Internal accruals:10% and Loan : 30% can be reduced to 15% (i.e. converted in to grant 50% of 30%)

**b) Integrated power development scheme (IPDS)**

- ❖ Scheme is for strengthening of sub transmission and distribution network in urban & Semi urban areas including provisioning of solar panels, metering and IT establishment in distribution sector.
- ❖ The source of financing of the scheme is as follows  
Grant: 60% can be extended to 75%(50% of loan), Internal accruals:10% and Loan : 30% can be reduced to 15% (i.e. converted in to grant 50% of 30%)

#### **4 Aggregate Revenue Requirement of TSSPDCL's Distribution Business for Third Control Period**

**APERC Regulation 4 of 2005 states that** “Every Distribution Licensee shall file for each of its licensed business an application for approval of its Aggregate Revenue Requirement (ARR) for each year of the Control Period, not less than 120 days before the commencement of the first year of the Control Period. This filing shall be in such form and in such manner as specified and in accordance with the Guidelines issued by the Commission. The Distribution Licensees may file such applications for ARR of the first Control Period within a period not less than 90 days before the commencement of the Control Period. The ARR filing for the Distribution business shall be for the entire Control Period”

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“The ARR filings shall contain the following

1. The Operation and Maintenance (O&M) costs which include employee-related costs, repair & maintenance costs and administrative & general costs, estimated for the Base Year and the year prior to the Base Year in complete detail, together with the forecast for each year of the Control Period based on the norms proposed by the Distribution Licensee including indexation and other appropriate mechanisms in terms of the principles enunciated in this Regulation for O&M cost allowance.
2. Regulated Rate Base (RRB) for the Base Year and each year of the Control Period which requires submission of the working capital requirement and a detailed scheme/project-wise Capital Investment Plan with a capitalisation schedule covering each year of the Control Period consistent with the Commission's approved Resource Plan.
3. A proposal for appropriate capital structure and its cost of financing (interest cost and return on equity) for the purpose of computing Weighted Average Cost of Capital.
4. Targets proposed for reduction of distribution losses during the Control Period duly adhering to the Licensees' Standards of Performance Regulation.
5. Details of depreciation, including Advance against depreciation if any required and capitalisation schedules for each year of the Control Period.
6. Description of external parameters proposed to be used for indexation;
7. Details of taxes on income;
8. Any other relevant expenditure;
9. Proposals for sharing of gains and losses;
10. Proposals for efficiency parameter targets;
11. Proposals for rewarding efficiency in performance
12. Any other matters considered appropriate”

The Distribution licensee has filed the Aggregate Revenue Requirement for Distribution Business for the period FY 2014-15 to FY 2018-19 on 04.12.2013.

The then Hon'ble APERC has issued the Tariff Order for Distribution Business of 3<sup>rd</sup> MYT Control period i.e. FY 2014-15 to FY 2018-19 on 09.05.2014 which is inclusive of ARR of Anantapur and Kurnool circles. As Anantapur & Kurnool circles were moved to APSPDCL in view of state bifurcation, the Hon'ble TSERC has directed the Discoms to file the ARR and FPT of wheeling charges afresh for the remaining part of the control period. Accordingly, the capital investment plan and loss trajectory for the 3<sup>rd</sup> MYT control period is reworked which is detailed in chapter 3.

#### **4.1 ARR of Base Year**

The figures considered in these filings pertain to TSSPDCL i.e. excluding Anantapur & Kurnool circles. The Base Year Aggregate Revenue Requirement i.e. for FY 2013-14 has been divided between the TSSPDCL and Anantapur & Kurnool circles based on the G.O. Ms. No. 24 dt.29.05.2014.

#### **4.2 Gross Fixed Assets Projections**

##### **4.2.1 Asset additions**

The revised capital investment plan as detailed in the above chapter has been considered for arriving at the Distribution Cost for the 3<sup>rd</sup> control period. The licensee continues to lay utmost importance on timely completion of projects undertaken and has been following the practice of capitalizing (adding to fixed assets) only those works which have actually been completed. Total capitalisation for the Base Year and the Control Period has been projected based on the following assumptions:

1. 60% of capital investments during the year are assumed to be capitalized every year.
2. 100% of the opening Capital Work-in-Progress for the year will be assumed to be completed and also be capitalized during the year.
3. IDC(Interest During Construction) has been calculated as a percentage of the average Capital Works-in-Progress for the year. The average cost of debt assumed to be 12.25% for the control period. The Expenses Capitalized has been projected at 10% of Capital Expenditure incurred for the year after netting off Release of services.

Thus, the licensee has projected capital investment undertaken and its capitalization for the Base Year and Control Period as given below:

Details	2013-14 (Base Year)	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Balance of Capital Work in Progress (CWIP)	691.86	790.07	685.92	961.93	959.00	997.7114
<b>Capital Expenditure during the year</b>						
Base Capital Expenditure	763.98	1,485.99	2,125.27	2115.587	2,191.63	2368.33
Expenses Capitalised	68.62	147.17	208.83	207.14	213.94	230.64
IDC	41.67	81.63	70.73	74.77	88.71	107.86
<b>Transfer to fixed assets</b>	776.06	1,818.94	2,128.82	2,400.43	2,455.57	2621.81
Closing CWIP	<b>790.07</b>	<b>685.92</b>	<b>961.93</b>	<b>959.00</b>	<b>997.71</b>	<b>1082.74</b>

### 4.3 Depreciation

The depreciation has been calculated for the every year considering the Depreciation rates for each class of asset base and also Fully Depreciated Assets during the control period.

The Depreciation rates as per Ministry of Power guidelines have been assumed to arrive at next 5 years depreciation which is shown below:

Description of asset	Rate of Depreciation
Buildings and Other Civil Works	3.02%
Battery Chargers	33.40%
Material Handling Equipments	7.84%
Meters / Meter Equipments	12.77%
Office Equipments and Air Conditioners	12.77%
Plant & Machinery and Lines, Cables & Network	7.84%
Capacitor Banks	5.27%
Furniture & Fixtures	12.77%
Vehicle – Car / Jeep / Scooter / Motor Cycle	33.40%
Vehicle – Lorry / Truck	33.40%
Computers and IT Equipments	12.77%

The Fully depreciated assets during the year have been deducted from the opening balance of the next consecutive year to calculate the depreciation.

Depreciation computation after considering the Fully Depreciated Assets (FDA) balances is tabulated below:

Particulars –Rs. Crs.	2013-14 (Base year)	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Balance of assets	6000.91	6777.33	8596.27	10725.09	13125.52	15581.09
Asset Additions during the Year	776.42	1818.94	2128.82	2400.43	2455.57	2621.82
Fully Depreciated assets Balance		1383.99	1662.32	2050.82	2237.10	2470.28
<b>Depreciation During the Year</b>	405.74	507.66	637.74	780.98	953.68	1134.02

#### 4.4 Consumer Contribution & Grants

The development charges and service line charges collected from the consumers will be form part of the consumer contributions towards capital assets The Consumer Contribution and Grants received during the year as per audited accounts of FY 2013-14 are as follows.

Particulars –Rs. Crs.	FY 2013-14
<b>a. Consumer Contribution towards capital assets</b>	
Opening Balance	1981.97
(+) Current Year Additions	319.89
Closing Balance	2301.86
<b>b. Subsidies towards cost of capital assets</b>	
Opening Balance	71.04
(+) Current Year Additions	0.00
Closing Balance	71.04
<b>c. Grants/Donations towards cost of capital assets</b>	
Opening Balance	279.57
(+) Current Year Additions	2.09
Closing Balance	281.66
<b>Total (Closing balance of a+b+c)</b>	2654.56
Less:Withdrawal towards cost of Capital Assets	-1031.81
<b>Total</b>	1622.75



The consumer contribution additions have been estimated based on the past trend and the Grants has been projected as per the schemes to be envisaged to meet the capital expenditure plan. The new consumer additions in the next 5 years of the control period projected is as follows

Particulars –Rs. Crs	2013-14 (Base year)	2014-15	2015-16	2016-17	2017-18	2018-19
Consumer Contribution additions	319.89	236.94	309.15	317.98	339.16	366.83
Grants	2.09	12.61	253.42	330.42	319.97	0.00
<b>Total</b>	<b>321.98</b>	<b>249.55</b>	<b>562.57</b>	<b>648.40</b>	<b>659.13</b>	<b>366.83</b>

Further, in proportion in which depreciation on the consumer contributed assets has been charged during every year of the control period, the following amounts have been treated as withdrawal from consumer contribution as per the accounting standard 12 and thus reduced from the Consumer contribution additions during the year.

Particulars –Rs. Crs.	2013-14 (Base year)	2014-15	2015-16	2016-17	2017-18	2018-19
With drawl of depreciation on Consumer Contribution	189.56	208.93	232.38	268.62	309.14	340.15
<b>Net Consumer Contribution &amp; Grants</b>	<b>132.41</b>	<b>40.62</b>	<b>330.18</b>	<b>379.78</b>	<b>349.99</b>	<b>26.68</b>

The Consumer Contribution and Grants balances at the end of the years are arrived as follows.

Particulars –Rs. Crs.	2013-14 (Base year)	2014-15	2015-16	2016-17	2017-18	2018-19
Opening Balance	1490.34	1622.75	1663.37	1993.55	2373.33	2723.32
<b>During the Year Transfers</b>	<b>132.41</b>	<b>40.62</b>	<b>330.18</b>	<b>379.78</b>	<b>349.99</b>	<b>26.68</b>
<b>Closing Balance</b>	<b>1622.75</b>	<b>1663.37</b>	<b>1993.55</b>	<b>2373.33</b>	<b>2723.32</b>	<b>2750.00</b>

#### 4.5 Working Capital

The working capital (WC) requirements has been calculated as per Regulatory norm of 1/12 th of O&M expenses.

Particulars –Rs. Crs.	2013-14 (Base year)	2014- 15	2015-16	2016-17	2017-18	2018-19
<b>O&amp;M expenses</b>	<b>1001.09</b>	<b>1226.24</b>	<b>1515.12</b>	<b>1879.21</b>	<b>2279.90</b>	<b>2739.02</b>
R&M expenses	167.07	185.81	233.53	288.27	346.96	408.33
A&G expenses	85.01	106.05	130.63	162.16	197.02	237.56
Employee expenses	749.01	934.38	1150.96	1428.78	1735.92	2093.13
<b>Working capital requirement (1/12) of O&amp;M</b>	<b>83.42</b>	<b>102.19</b>	<b>126.26</b>	<b>156.60</b>	<b>189.99</b>	<b>228.25</b>

#### 4.6 Regulated Rate Base

APERC Regulation 4 of 2005 states that the Regulated Rate Base (RRB) for the purpose of computing the Return on Capital Employed (ROCE) for the **ith** year of the Control Period will be computed in the following manner

$$RRB_i = RRB_{i-1} + (\text{Change in RAB}_i) + WC_i$$

where

$RRB_{i-1}$  is the Regulated Rate base at the opening of the year  $i = (\text{Original Cost of Fixed Assets} - \text{Accumulated Depreciation} - \text{outstanding Consumer Contributions})_i$

$(\text{Change in RAB}_i)$  is computed as  $= (\text{Capitalised Investments} - \text{Depreciation} - \text{Consumer Contribution})/2$

$WC_i = \text{Working Capital requirement for the year } i$

The licensee has computed the RRB for all five years of the control period including Base year as follows:

Particulars –Rs. Crs.	2013-14 (Base year)	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Assets</b>	<b>6777.33</b>	<b>8596.27</b>	<b>10725.09</b>	<b>13125.52</b>	<b>15581.09</b>	<b>18202.91</b>
OCFA Opening Balance	6000.91	6777.33	8596.27	10725.09	13125.52	15581.09
Additions to OCFA	776.42	1818.94	2128.82	2400.43	2455.57	2621.82
<b>Depreciation</b>	<b>3118.44</b>	<b>3626.10</b>	<b>4263.83</b>	<b>5044.81</b>	<b>5998.49</b>	<b>7132.51</b>
Opening Balance	2712.70	3118.44	3626.10	4263.83	5044.81	5998.49
Depreciation during the Year	405.74	507.66	637.74	780.98	953.68	1134.02
<b>Consumer Contributions</b>	<b>1622.75</b>	<b>1663.37</b>	<b>1993.55</b>	<b>2373.33</b>	<b>2723.32</b>	<b>2750.00</b>
Cons Contributions Opening	1490.34	1622.75	1663.37	1993.55	2373.33	2723.32

Balance						
Additions to Cons Contributions	132.41	40.62	330.18	379.78	349.99	26.68
<b>Working Capital</b>	83.42	102.19	126.26	156.60	189.99	228.25
<b>Change in Rate Base</b>	<b>119.13</b>	<b>635.33</b>	<b>580.45</b>	<b>619.84</b>	<b>575.95</b>	<b>730.56</b>
<b>Regulated Rate Base</b>	<b>2000.43</b>	<b>2773.66</b>	<b>4013.52</b>	<b>5244.15</b>	<b>6473.32</b>	<b>7818.09</b>

#### 4.7 Operation & Maintenance Expense projections

The Operation & Maintenance (O&M) Expenses consist of the following components:

- Employee Expenses (EE) including Salaries, wages and other employee costs;
- Administrative & General costs (A&G) including legal charges, audit fees, rent, rates and taxes;
- Repairs and Maintenance (R&M) including equipment maintenance, repairs, fault corrections, etc.

During the Second Control period (FY 09-14), the Licensee had projected O & M Expenses by considering norms linked to number of consumers, line length (Circuit KM) and number of Substations. The Hon'ble Commission has approved O&M expenses based on Compounded Annual Growth Rate (CAGR) of historical values, without considering the effect of increase in network elements and growth in Gross Fixed Assets (GFA) on R&M Expenses and increase in Employee Expenses due to Pay Revision.

Employee expenses and A&G expenses are linked to inflation and thus should be escalated using (Consumer Price Index) CPI and (Wholesale Price Index) WPI. Therefore, Employee Expenses have increased owing to inflation, which has been disregarded while approving expenses for the Second Control period using historical values and CAGR method as well as in the projections done by the Distribution Licensees linking O&M Expenses to the number of consumers, line length (Circuit km) and number of Substations. Increase in CPI and WPI during the Second MYT Control Period are as depicted in the table below.

Particulars	FY 2009-10	FY 2010-11	FY 2011-12	FY 2012-13	FY 2013-14
CPI	147.75	165.33	180.33	200.08	221.58
% Increase in CPI		12%	9%	11%	11%
WPI	129.75	142.23	155.18	166.86	176.79
% Increase in WPI		10%	9%	8%	6%

Source: CPI & WPI computed for common base 2004 by considering Actual CPI - [www.labourbureau.nic.in](http://www.labourbureau.nic.in), Actual WPI - [www.eaindustry.nic.in](http://www.eaindustry.nic.in) (Office of the Economic Advisor website)

O&M expenses have increased mainly due to the following reasons, which were not considered while approving the O&M cost for the Second Control Period by the Hon'ble Commission.

- Wage Revision w.e.f. 01.04.2010
- Actuarial Valuation Report
- Leave Encashment
- DA hike and new recruitment
- Increase in Repairs and Maintenance cost
- Increase in travelling and vehicle hire expenses

Hence, Distribution Licensee would like to propose new methodology based on norms which factor increase in network elements and inflationary cost.

#### **4.7.1 Proposed Methodology for Projection of O & M expenses**

The Licensee proposes norm based methodology to project O&M expenses for the Third Control period. This method accounts for both inflationary cost on existing O&M expenses and increase in expenses due to addition of employees & office space. The proposed methodology correlates expenses to sales (discom and open access) and Gross fixed assets as shown below.

- Employee expenses (EE) and Administrative & General (A&G) expenses is based on total sales in the discom
- Repairs and Maintenance expenses (R&M) is based on Gross fixed assets (GFA)

Maharashtra Electricity Regulatory Commission (MERC) has followed a similar approach for approving O&M expenses by linking it to sales and GFA for Tata Power. In MERC Tata Power Company Limited's Distribution Business Order on '**Approval of Aggregate Revenue Requirement for FY 2011-12 and Multi Year Tariff for the Second Control Period (FY 2012-13 and FY 2015-16)**', dated 28<sup>th</sup> June, 2013 has specified that it has approved O&M expenses based on per unit of wheeled energy and opening GFA (R&M Expenses linked to GFA). Relevant excerpt from Para 5.4.2 of the Tariff Order has been reproduced below.

*"The Commission has approved O&M expenses for FY 2012-13 to FY 2015-16 in accordance with the provisions of MERC MYT Regulations, 2011, based on the approved sales and wheeled energy for FY*

2012-13 to FY 2015-16, along with the capitalisation approved by the Commission during the years starting from FY 2012-13. The Commission has considered the segregation of Opening GFA between the Wires Business and Supply Business same as that for FY 2011-12 as discussed in Section 4 of this Order. Further, to arrive at opening GFA for FY 2012-13, the closing GFA of FY 2011-12, as approved by the Commission in the previous Section of this Order has been considered.”

The Distribution Licensee (TSSPDCL) has arrived at below norms for O&M expenses based on the above methodology:

**Linking of O&M components to sales and GFA**

The licensee has observed that with increase in sales, there is a proportional increase in the Employee Expenses as well as A&G expenses. Also, an increase in the Gross Fixed Assets (GFA) proportionately increases the R&M expenses. Hence, the licensee would like to project the EE and A&G expenses proportional to sales and the R&M expenditure proportional to GFA.

**4.7.2 Projection of O&M Expenses**

**4.7.2.1 Determination of Repairs and Maintenance Expenses**

The Licensee has observed that R&M expenses are directly proportional to Gross Fixed Assets (GFA) of the corresponding financial year. Existing assets and further addition to assets will directly increase the repairs and maintenance expenses. Hence, a correlation between R&M expenses and average GFA in a year can be determined by observing the previous Control period figures. Since GFA depends on Capital Expenditure, therefore by linking increase in R&M to increase in GFA, inflationary cost is also factored in. Hence escalation rate which is the weighted average of CPI and WPI has not been used to project R&M Expenses.

The Licensee has followed the method suggested by the Commission where the norms for R&M expenses were determined with the following method. i.e. R&M expenses of year/ Opening value of GFA of that corresponding year. The average norm for past five years period (FY 2009-10 to FY 2013-14) of TSSPDCL is determined as base norm. This base norm is applied on the approved GFA of each year of the third control period to arrive at the R&M expenses for each year. The norms determined for R&M expenses for the third control period for TSSPDCL is indicated below:

Norms for R&M expenses in % of GFA	2.42%
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The below table summarizes the projection of the Distribution Licensee Average GFA for the Third control period and the associated R&M expenses

R&M Expenses projection	Unit	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Opening GFA	Rs. Crs	6002	6777.3	8596.3	10725.1	13125.5	15581.1
Closing GFA	Rs. Crs	6777.3	8596.3	10725.1	13125.5	15581.1	18202.9
Average GFA	Rs. Crs	6390	7686.8	9660.7	11925.3	14353.3	16892.0
<b>R&amp;M Cost</b>	<b>Rs. Crs</b>	167.07	185.8	233.5	288.3	347.0	408.3

The total R&M expense for the third Control period is projected to be **Rs1463 Crs.** as seen from the table above.

#### 4.7.2.2 Determination of Employee expenses and Administrative & General expenses

The Licensee has captured the EE and A&G expenses along with the sales (including open access sales) for FY 13-14 which are summarized below.

Employee Expenses/ A&G Unit cost computation		FY 13-14
<b>Total sales</b>	<b>MU</b>	25651
Employee Expenses/Sales	<b>Rs./Unit</b>	0.29
A&G Expenses/Sales	<b>Rs./Unit</b>	0.03
(EE and A&G Expenses)/Sales	<b>Rs./Unit</b>	<b>0.32</b>

It can be observed from the above table that for FY 13-14 the EE per unit sales was **Rs. 0.29 /Unit** while the A&G per unit sales was **Rs. 0.03/Unit**.

**Escalation Rate:** The norms arrived at for the year 2013-14 is escalated year on year using the weighted average of Consumer Price Index (CPI) for industrial workers and Wholesale Price Index (CPI- Industrial Workers: 80% and WPI: 20%). An increase in CPI proportionately increases impacts EE while an increase in WPI proportionately increases the A&G Expenses. The Distribution Licensee's historical EE and A&G expenses are in the ratio of 80:20. . Hence, 80% and 20% weightage have been assigned to CPI and WPI respectively.

The below table lists the CPI (Industrial Worker) data for the period from FY 2009-10 to FY 2014-15 and WPI from FY 2009-10 to FY 2014-15 are detailed in the below table:

Normalised CPI with base 2004 = 100												
Period	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2009-10	137.00	137.00	137.00	138.44	138.88	139.77	146.22	148.22	148.67	149.58	152.58	153.58
2010-11	161.00	159.00	159.00	158.44	159.88	160.77	164.22	164.22	164.67	165.58	166.58	169.58
2011-12	177.00	174.00	174.00	174.44	174.88	175.77	179.22	180.22	182.67	182.58	183.58	181.58
2012-13	187.00	188.00	190.00	193.44	193.88	194.77	198.22	200.22	200.67	201.58	202.58	203.58
2013-14	210.00	212.00	213.00	214.44	215.88	217.77	221.22	223.22	223.67	225.58	227.58	223.58
2014-15	226.00	227.00	228.00	230.44	231.88	232.77	238.22	239.22	238.67	237.58	237.58	237.58

Normalised WPI with base 2004 = 100												
Period	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2009-10	124.4	123.3	123.5	125	125.9	126.8	128.2	129.6	130.3	131	132.9	133.4
2010-11	135.2	135.2	136.3	138.6	139.1	139.8	141	141.1	142	142.9	143.8	146
2011-12	148	148.1	149.5	152.1	152.4	153.1	154.2	154.9	156.2	157	157.4	157.3
2012-13	158.7	159.3	161	163.5	163.9	164.7	165.8	167.3	168.8	168.5	168.8	168.8
2013-14	170.3	170.9	170.1	171.3	171.4	173.2	175.5	179	180.7	180.7	181.5	179.6
2014-15	179	179.5	180.3	180.8	182	183	185	185.9	185	183.7	181.2	179.8

The weighted average of CAGR of CPI (from FY 2009-10 to FY 2014-15) and CAGR of WPI (from FY 2009-10 to FY 2014-15) has been calculated as shown in the table below.

Particulars		
CPI Index (2014-15)	<b>235.20</b>	<b>Escalation Rate</b>
WPI Index (2014-15)	<b>182.67</b>	
Weights- CPI:WPI	80:20	
<b>Escalation Index</b>	224.69	9.28%

The escalation rate of 9.28% is arrived by calculating 5-year CAGR of the Indices arrived based on the norms mentioned above. The EE per unit expenses and A&G per unit expenses have been escalated at the rate of **9.28 %** for each year of the third control period.

Considering the above Escalation rate of 9.28% on FY 2013-14 Employee cost and A&G cost per unit. The per unit cost for the 3<sup>rd</sup> control period are arrived as shown below:

#### Employee and A & G Expenses/ Sales

	2014-15	2015-16	2016-17	2017-18	2018-19
Employee Cost per unit sold (Rs/unit)	0.319	0.349	0.381	0.416	0.455
A & G expenses per unit sold (Rs/unit)	0.036	0.040	0.043	0.047	0.052

The Licensee has linked the Employee expenses and Administrative & General expenses to the total sales for the respective year. This is considered on the premise that, the sales in an area is directly linked to these expenses as higher the number of sales, more the number of substations, deputation of more employees and higher expenses. Hence, the Licensee has determined that the total Employee expenses and A&G expenses can be computed using the sales projections and escalated per unit costs.

Taking the sales projections for the Third Control period (for FY 2014-15 and FY 2015-16 the sales projected by the Licensee in the Retail supply filings for FY 2015-16 dated 07.02.2015 are considered and for the remaining period of the control period 2% of additional growth rate is considered over and above the growth rate of 2015-16 over 2014-15 except for the Lift Irrigation schemes for which the

actual expected LI schemes were considered) and escalating the per unit costs using the weighted average of CPI and WPI, the Licensee arrived at the following per year Employee Expenses and A&G Expenses.

Employee and A&G expense projection	Unit	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Consumer sales	MU	28,290	32,013	36,499	40,689	44,996
Open Access sales	MU	991	991	991	991	991
<b>Total Sales</b>	<b>MU</b>	<b>29,281</b>	<b>33,004</b>	<b>37,490</b>	<b>41,680</b>	<b>45,987</b>
Employee Cost/Sales	Rs./Unit	0.319	0.349	0.381	0.416	0.455
A&G Expenses/Sales	Rs./Unit	0.036	0.040	0.043	0.047	0.052
<b>Employee Cost</b>	<b>Rs. Crs</b>	<b>934</b>	<b>1,151</b>	<b>1,429</b>	<b>1,736</b>	<b>2,093</b>
<b>A&amp;G Expenses</b>	<b>Rs. Crs</b>	<b>106</b>	<b>131</b>	<b>162</b>	<b>197</b>	<b>238</b>

The Licensee has projected that the total O&M expenses for the Third Control period to be **Rs.9640 Crs.** O&M projections for the Control period and other details are shown in the table below.

O&M cost projection	Unit	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	Total
Employee Cost	Rs. Crs	934	1,151	1,429	1,736	2,093	7,343
A&G Expenses	Rs. Crs	106	131	162	197	238	833
R&M Cost	Rs. Crs	186	234	288	347	408	1,463
<b>Total O&amp;M Expenses</b>	<b>Rs. Crs</b>	<b>1,226</b>	<b>1,515</b>	<b>1,879</b>	<b>2,280</b>	<b>2,739</b>	<b>9,640</b>

#### 4.8 Weighted Average Cost of Capital (WACC)

The Regulation prescribes that the licensees will be compensated for the financing costs through Return on Capital Employed (ROCE) principle. This principle is aimed at providing the licensee with the return on debt as well as return on equity at a normative level. The licensee has computed the ROCE as provided in Clause 15 of the Regulation which specifies that the ROCE be computed by multiplying the Regulated Rate Base (RRB) by the Weighted Average Cost of Capital (WACC).

The Regulation specifies the following methodology for computation of ROCE:

Return on Capital Employed (RoCE) for the RRB for the year 'i' shall be computed in the following manner:



$$RoCE_i = WACC * RRB_i$$

Where RRB is the Regulated Rate Base for the year i and WACC is the Weighted Average Cost of Capital. The detailed computation of RRB is explained in Section 4.2 above. With respect to the WACC, the Regulation specifies the the formula as follows:

$$WACC_{RRB} = \left[ \frac{D/E}{1 + D/E} \right] r_d + \left[ \frac{1}{1 + D/E} \right] r_e$$

Where,

D/E is the Debt to Equity Ratio – Licensee is proposing a normative Debt : Equity ratio of 75:25

$r_d$  is the Cost of Debt

$r_e$  is the Return on Equity which is taken at 14%.

### Interest Rate

As the Weighted Average Cost of Capital (WACC) is expected to remain unchanged during the Control Period and the interest rates are showing signs of hardening up with inflation also showing an upward trend has resulted upward trend in nominal interest rate in the recent past.

The licensee debt structure in the FY 2013-14 has been shown below

Lender	Tenure	ROI
<b>Vidyut Bonds</b>		11.60%
<b>Working Capital</b>		
SBH (CC on Current Assets)		12.00%
Tamilnadu Merchentaile Bank		12.00%
Indian Overseas Bank		11.75%
Bank of India		11.50%
Andhra Bank		11.50%
Syndicate Bank		11.50%
Canara Bank		11.25%
State Bank of Mysore		12.50%
Vijaya Bank		11.45%
Federal Bank		12.25%
Central Bank of India		11.50%
Punjab & Sind Bank		11.50%
Indian Bank Koti		11.40%
M/s REC LTD		12.75%

Lender	Tenure	ROI
BANK OF INDIA		11.00%
Oriental Bank of commerce		11.00%
UNION BANK OINDIA		11.00%
BANK OF MAHARASTRA		11.00%
<b>Secured Long term loans</b>		
REC	5 to 15 years	10.50 to 12.75%
PFC	13 years	9.00 to 12.75%
Syndicate Bank	13 years	11.15 to 11.50%
CANARABANK	13 years	11.15 to 11.75%
State Bank of Hyderabad	13 years	11.70 to 11.75%
Corporation Bank	13 years	12.00%
Karnataka Bank	12 years	12.25%
<b>Unsecured Long term loans</b>		
Syndicate Bank	10 years	12.00%
AB	10 years	12.00%
State Bank of Hyderabad	3 years	12.00%
Canara Bank	3 years	11.00%

Hence, after considering the inflation impact, the licensee has proposed a rate of 12.25 % as the cost of debt for new loans.

The Weighted average Cost of Capital (WACC) arrived for the five years of Control Period is as follows:

Particulars	2013-14 (Base year)	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Capital Structure</b>						
Debt Percent	75.00%	75.00%	75.00%	75.00%	75.00%	75.00%
Equity percent	25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
<b>Cost of Funds</b>						
Cost of Debt percent	12.74%	11.53%	11.67%	11.58%	11.72%	11.76%
Return on Equity percent	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
<b>WACC</b>	<b>13.05%</b>	<b>12.15%</b>	<b>12.25%</b>	<b>12.19%</b>	<b>12.29%</b>	<b>12.32%</b>

#### 4.9 Return on Equity

As per the Hon'ble Commission 2<sup>nd</sup> MYT Tariff order, the Return on Equity considered for arriving at Weighted Average Cost of Capital is taken as 14%.

#### 4.10 Return on Capital Employed

The licensee has arrived at RoCE for all five years of the control period as a product of Regulated Rate Base (RRB) and Weighted Average Cost of Capital (WACC) which is as follows:

RoCE	2013-14 (Base year)	2014-15	2015-16	2016-17	2017-18	2018-19
RRB	2000.43	2773.66	4013.52	5244.15	6473.32	7818.09
WACC	13.05%	12.15%	12.25%	12.19%	12.29%	12.32%
<b>RoCE (RRB * WACC)</b>	<b>261.11</b>	<b>336.99</b>	<b>491.74</b>	<b>639.10</b>	<b>795.48</b>	<b>963.14</b>

#### 4.11 Special Appropriations for safety measures

The licensee has planned to incur the following expenditure exclusively towards safety of Consumers and employees of the organisation

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Erection of intermediate poles for proper clearance	2.76	3.23	3.69	4.15	4.61
Providing of Earthing	0.31	0.36	0.41	0.46	0.51
Providing of fencing	0.21	0.25	0.28	0.32	0.35
Reconstruction of damaged DTR plinth	2.96	3.45	3.95	4.44	4.93
Plinth Raisings	1.94	2.26	2.59	2.91	3.23
Providing of SMC Distribution boxes	0.28	0.32	0.37	0.41	0.46
Providing of foot cross arms	0.51	0.60	0.68	0.77	0.85
Rectification of DTR structures	16.36	19.09	21.82	24.55	27.28
Replacement of damaged AB cable	1.14	1.32	1.51	1.70	1.89
Providing of safety materials viz. Gum boots, Helmets,	1.02	1.19	1.36	1.53	1.70
Running of Neutral wire from SS	2.51	2.93	3.35	3.77	4.19
<b>Total</b>	<b>30.00</b>	<b>35.00</b>	<b>40.00</b>	<b>45.00</b>	<b>50.00</b>

#### 4.12 Taxes on Income

The licensee is allowed a Return on Equity on 25% of RRB at 16% (including Supply Margin). The licensee has assumed that this return would be the profit accrued to it every year and accordingly computed the Income tax on this considering an Income tax rate of 33% for the Third control period

Particulars –Rs. Crs.	2013-14 (Base year)	2014- 15	2015- 16	2016- 17	2017- 18	2018-19
Taxes on Income		36.61	52.98	69.22	85.45	103.20

#### 4.13 Other Expenses

The licensee has proposed to incur the following expenditure towards welfare of employees during the next control period.

Particulars	2014-15	2015-16	2016-17	2017-18	2018-19
Library expense	0.02	0.02	0.02	0.02	0.02
Children Creche	0.02	0.03	0.03	0.03	0.04
Primary Health Care centre	0.08	0.08	0.08	0.08	0.09
Canteen expenditure	0.14	0.15	0.16	0.18	0.19
Employee Pool vehicle charges	0.06	0.07	0.08	0.08	0.09
Physical fitness(Zym) expenses	0.12	0.12	0.13	0.13	0.13
Sports Meet charges	0.03	0.03	0.03	0.03	0.03
Distribution True-up gap of FY 2013-14 of TSSPDCL		79.03			
Carrying cost on Distribution True-up gap of FY 2013-14		14.15			
<b>Total Other expenses</b>	<b>0.48</b>	<b>93.69</b>	<b>0.53</b>	<b>0.56</b>	<b>0.59</b>

The Distribution true-up gap for TSSPDCL for the 2<sup>nd</sup> control period arrived is Rs. 79.03 crores and carrying cost at 11.5% p.a. comes to Rs. 14.15 crores.

#### 4.14 Anticipated Revenue Requirement

The anticipated consolidated ARR for the Distribution business for each year of the Control Period is determined as follows:

Particulars	2013-14 (Base year)	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19
<b>Operation and Maintenance Charges</b>	1001.09	1226.24	1515.12	1879.21	2279.90	2739.02
Depreciation	405.74	507.66	637.74	780.98	953.68	1134.02
Advance Against Depreciation						
Taxes on Income		36.61	52.98	69.22	85.45	103.20
Other Expenditure	0.00	0.48	93.69	0.53	0.56	0.59
Special Appropriations	0.00	30.00	35.00	40.00	45.00	50.00
<b>Total Expenditure</b>	<b>1406.83</b>	<b>1800.99</b>	<b>2334.53</b>	<b>2769.94</b>	<b>3364.59</b>	<b>4026.84</b>
Less: IDC and expenses capitalized*						
Less: O&M expenses capitalized	68.62	147.17	208.83	207.14	213.94	230.65
<b>Net Expenditure</b>	<b>1338.21</b>	<b>1653.82</b>	<b>2125.69</b>	<b>2562.80</b>	<b>3150.65</b>	<b>3796.19</b>
Add Return on Capital Employed	261.11	336.99	491.74	639.10	795.48	963.14
<b>Total Distribution ARR</b>	<b>1599.32</b>	<b>1990.82</b>	<b>2617.43</b>	<b>3201.90</b>	<b>3946.14</b>	<b>4759.32</b>
Less: Wheeling Revenue from Third Party/Open Access/NTI (if any)	229.59	241.30	266.26	304.06	346.23	378.97
<b>Revenue Requirement, (Net transferred to Retail Supply Business)</b>	<b>1369.73</b>	<b>1749.52</b>	<b>2351.17</b>	<b>2897.83</b>	<b>3599.90</b>	<b>4380.35</b>

#### 4.15 Non-Tariff Income

The licensee has projected the Non-tariff income under Distribution Business under the following heads

Particulars	2013-14 (Base year)	2014-15	2015-16	2016-17	2017-18	2018-19
Staff Loans & Advances	0.06	0.07	0.08	0.09	0.10	0.11
Sale of Tender schedules	0.28	0.29	0.29	0.30	0.30	0.31
Supervision charges	27.05	28.40	29.82	31.31	32.88	34.52
Discounts received from vendors	0.01	0.00	0.00	0.00	0.00	0.00
Rebate from funding agencies	0.27	0.05	0.05	0.05	0.05	0.05
Meter testing charges	0.16	0.16	0.17	0.17	0.17	0.18
Transformer testing charges	0.03	0.03	0.03	0.03	0.03	0.03
Registration fee	0.16	0.16	0.17	0.17	0.17	0.18
Other miscellaneous income	11.93	3.21	3.27	3.32	3.38	3.44
Amortisation of dep on CC assets	189.56	208.93	232.38	268.62	309.14	340.15
<b>Total</b>	<b>229.51</b>	<b>241.30</b>	<b>266.26</b>	<b>304.06</b>	<b>346.23</b>	<b>378.97</b>

The Amortisation of depreciation on CC assets shown under the Non-tariff income is the depreciable value of consumer contributed assets during the year shown as a deferred revenue as explained in the **Para 4.4** above.

## 5 Wheeling Losses

For loss trajectory for the 3<sup>rd</sup> Control Period, the licensee has taken the losses as approved by APERC. Current distribution losses as on today have been classified into three voltage level losses – LT, 11 KV and 33 kV by taking some approximation as 100% metering of 11 kV feeders and DTRs has still not been achieved. The voltage level loss computation for the licensee is given in the below table.

<b>FY 2013-14 Losses</b>			
<b>Item</b>	<b>Unit</b>	<b>Value</b>	<b>APERC approved</b>
Energy Input at DISCOM Periphery (excl EHT sales)	<b>MU</b>	27,158	
33 kV sales	<b>MU</b>	4,064	
33 kV loss	<b>MU</b>	1,222	
<b>33 kV losses (%)</b>	<b>%</b>	4.50%	<b>3.99%</b>
Energy Input at 11 kV	<b>MU</b>	21,872	
11 kV Sales	<b>MU</b>	3,702	
11 kV Loss	<b>MU</b>	1,203	
<b>11 kV losses (%)</b>	<b>%</b>	5.50%	<b>5.0%</b>
Energy Input at LT	<b>MU</b>	16,967	
LT Sales	<b>MU</b>	15,399	
LT Loss	<b>MU</b>	1,568	
<b>LT Loss (%)</b>	<b>%</b>	9.24%	<b>8.0%</b>
Total Distribution Losses (MU)	<b>MU</b>	3,993	
Total Distribution Losses (%)	<b>%</b>	14.70%	

The licensee observes that in spite of considering the minimum of approved Agriculture sales and actual Agriculture sales, the losses at various voltage levels is higher than the losses approved by the Hon'ble Commission. The licensee requests the Hon'ble Commission to consider the actual losses of FY 2013-14 as computed above to arrive at the loss trajectory for the 3<sup>rd</sup> Control Period, i.e. from FY 2014-15 to FY 2018-19.

The licensee is striving to reduce the losses by 4.0% every year by implementation of loss reduction measures like strengthening of the network infrastructure, addition of network elements, and vigorously undertaking the Energy Audit to keep a close tab on the losses. Hence, the licensee humbly requests the Hon'ble Commission to approve the loss trajectory as given in the below table

Losses	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
LT Loss (%)	8.87%	8.52%	8.18%	7.85%	7.54%
11 kV Loss (%)	5.28%	5.07%	4.87%	4.67%	4.48%
33 kV Loss (%)	4.32%	4.15%	3.98%	3.82%	3.67%

## 6 Wheeling Charges and Losses

The licensee has determined voltage wise wheeling charges and losses to recover ARR and distribution network losses. As per the Regulation, the licensee has determined the ARR for the distribution business and that forms the basis for determination of wheeling charges.

### ***Proposed Cost Allocation Methodology***

Distribution Licensee has proposed allocation of ARR components to the various voltages for determination of wheeling charges as shown below

1. Operation and Maintenance expenses
  - a. Employee Expenses (EE) – Driven by assets
  - b. Administrative & General Expenses (A&G) – *Driven by Contracted demand (HT)/ Coincident demand (LT)*
  - c. Repairs & Maintenance (R&M) expenses – Driven by assets
2. Depreciation – Driven by assets
3. Interest/ROCE – Driven by assets
4. Other Expenses– Driven by assets

Allocation of ARR components excluding A&G expenses have been allocated in proportion to net GFA pertaining to that respective voltage. Whereas, allocation of A&G expenses are being done in proportion to contracted demand/ coincident demand to that respective voltage.

Step 1: Voltage wise (exclusive) allocation of Gross fixed assets

Step 2: Voltage wise determination of contracted load for HT and coincident demand for LT

Step 3: Allocation of ARR components for the respective voltage based on Gross fixed assets (GFA) and contracted load/ coincident demand

### Determination of voltage wise asset base

The Distribution licensee has projected voltage wise asset base (GFA) for each year of the control period based on assets addition. The following table summarizes voltage wise assets based on projected capitalization schedule

Voltage wise Gross fixed Asset Base (Rs. Crs.)					
	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
33 kV	1,240	1,568	1,934	2,294	2,796
11 kV	4,271	5,391	6,796	8,188	10,555
LT	2,216	2,409	2,749	3,120	3,972
<b>Total</b>	<b>7,726</b>	<b>9,369</b>	<b>11,479</b>	<b>13,601</b>	<b>17,323</b>

### Determination of voltage wise demand

The Distribution Licensee has captured the historical Contracted Demand of 33 kV and 11 kV. Coincident demand of LT category is arrived by considering 25% of the connected load due to high diversity factor in LT connected load. This is the similar approach followed by the then Hon APERC in the MYT order dated 09.5.2014. Considering the historical growth of the above, the Licensee has projected the Contracted Demand of 33 kV and 11 kV and Coincident demand of LT for each year of the third Control Period as shown in the below table

Determination of contracted load ( 33 kV and 11 kV) and Coincident Demand (LT) – MW						
Parameter	Voltage Level	FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
Contracted Load – CD <sub>33</sub>	33 kV	1,435	1,547	1,668	1,799	1,939
Contracted Load – CD <sub>11</sub>	11 kV	1,947	2,135	2,342	2,568	2,817
Coincident Demand – CID <sub>LT</sub>	LT	2,804	3,021	3,256	3,509	3,781



To arrive the contracted capacity at 11 KV voltage, LT demand is grossed up with the Losses as filed in the Loss Trajectory at LT & 11 KV contracted load grossed up with 11 Losses are summed up.

The same procedure is followed to arrive the 33 KV and LT contracted capacity.

<b>Voltage Level Losses (%)</b>					
	<b>FY 14-15</b>	<b>FY 15-16</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>
<b>33 kV</b>	<b>4.32%</b>	<b>4.15%</b>	<b>3.98%</b>	<b>3.82%</b>	<b>3.67%</b>
<b>11 kV</b>	<b>5.28%</b>	<b>5.07%</b>	<b>4.87%</b>	<b>4.67%</b>	<b>4.48%</b>
<b>LT</b>	<b>8.87%</b>	<b>8.52%</b>	<b>8.18%</b>	<b>7.85%</b>	<b>7.54%</b>

The below table lists the Demand and Contracted load after adjusting for the losses

<b>Total Demand contribution at each voltage level after loss adjustment – MW</b>						
		<b>FY 14-15</b>	<b>FY 15-16</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>
	<b>Load at 33 kV</b>	<b>7,043</b>	<b>7,590</b>	<b>8,183</b>	<b>8,824</b>	<b>9,519</b>
	<b>Load at 11 kV</b>	<b>5,304</b>	<b>5,728</b>	<b>6,189</b>	<b>6,688</b>	<b>7,230</b>
	<b>Load at LT</b>	<b>3,077</b>	<b>3,303</b>	<b>3,546</b>	<b>3,808</b>	<b>4,089</b>

The GFA additions are projected based on **physical assets** added to the respective voltages. However, voltage wise GFA should be segregated based on exclusive utilization of asset for the respective voltage level i.e 11 kV assets being used by 11 kV loads and LT loads, 33 kV assets being used by all 33 kV, 11 kV and LT loads.

Exclusive voltage wise assets have been segregated based on Contracted demand for 33 kV and 11 kV and Coincident demand for LT after adjusting for losses - apportioning of 33 kV asset base towards 33 kV, 11 kV and LT, apportioning of 11 kV asset base towards 11 kV and LT. The LT asset base is considered for 100% towards LT. Voltage wise asset base after apportioning is as shown below

<b>Voltage wise Asset Base Apportioning - Net (Rs. Crs.)</b>					
	<b>FY 14-15</b>	<b>FY 15-16</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>
<b>33 kV</b>	264	333	411	486	591
<b>11 kV</b>	2,033	2,602	3,309	4,026	5,204
<b>LT</b>	5,429	6,433	7,760	9,089	11,527
<b>Total</b>	<b>7,726</b>	<b>9,369</b>	<b>11,479</b>	<b>13,601</b>	<b>17,323</b>

## Allocation of ARR components

### a) Allocation of expenses based on GFA

#### O&M Expense allocation

The O&M expenses have been segregated into three major components – EE, A&G and R&M. The Distribution licensee has observed that the actual Employee expenses and Repairs & Maintenance expenses are a function of asset base. An increase in the asset base leads to a proportional increase in EE and R&M expenses. Hence, Employee Expenses and Repairs & Maintenance Expenses have allocated based on the voltage level asset base (net).

The Distribution licensee has observed that Administrative & General expenditure incurred are linked to the Contracted Demand at 33 kV and 11 kV level and to the Coincident demand at LT level (due to high Diversity factor of LT) as expenses like Building maintenance, stationary, meter billing equipment etc. are planned considering the Contracted demand at the 33 kV and 11 kV and Coincident demand at LT level.

#### Depreciation/ROCE allocation

Depreciation and ROCE computation is directly linked to the asset base. Hence, the Depreciation and ROCE have been allocated based on the apportioned asset base.

#### Other Expense allocation

The other expenses have also been allocated based on the apportioned asset base.

The voltage wise ARR has been arrived with the methodology explained above which is summarized in the below table.

		Voltage wise ARR Apportioning (Rs. Crs.)				
		FY 14-15	FY 15-16	FY 16-17	FY 17-18	FY 18-19
ARR <sub>33</sub>	33 kV	81	109	135	167	196
ARR <sub>11</sub>	11 kV	466	658	840	1,071	1,322
ARR <sub>LT</sub>	LT	1,203	1,584	1,922	2,362	2,863
	<b>Total</b>	<b>1,750</b>	<b>2,351</b>	<b>2,898</b>	<b>3,600</b>	<b>4,380</b>

The voltage level wheeling charges are computed by dividing the ARR at that voltage level divided by the Demand at that voltage level as summarized in the below table.

<b>Voltage Level</b>	<b>Voltage-wise wheeling charges</b>
<b>33kV</b>	ARR <sub>33</sub> / CD <sub>33</sub>
<b>11kV</b>	ARR <sub>11</sub> / CD <sub>11</sub>
<b>LT</b>	ARR <sub>LT</sub> / CID <sub>LT</sub>

CD - Contracted demand adjusted for losses

CID - Coincident demand

Based on the methodology explained above, the licensee is proposing the following distribution wheeling charges for each of the control period.

<b>Wheeling Tariff – Rs./kVA/month</b>					
<b>Voltage Level</b>	<b>FY 14-15</b>	<b>FY 15-16</b>	<b>FY 16-17</b>	<b>FY 17-18</b>	<b>FY 18-19</b>
33 kV (Rs./kVA/Month)	<b>46.90</b>	<b>58.90</b>	<b>67.58</b>	<b>77.31</b>	<b>84.08</b>
11 kV (Rs./kVA/Month)	<b>199.41</b>	<b>256.72</b>	<b>298.99</b>	<b>347.45</b>	<b>391.12</b>
LT (Rs./kVA/Month)	<b>357.51</b>	<b>436.89</b>	<b>492.01</b>	<b>561.03</b>	<b>630.91</b>

# **7 E-Filing Forms**

Company Name	TSSPDCL
Filing Date (dd/mm/yy)	Annual
Multi Year Tariff Period	FY2014-19
Year	
Date Submitted	3-Mar-2015
No. of Years	
Type of Data	Filing
Business type	Distribution

S. No.	Title	Form No.
1	Revenue Requirement	<a href="#">Form 1.0</a>
2	Regulated Rate Base	<a href="#">Form 1a</a>
3	Capital Structure	<a href="#">Form 1b</a>
4	Wheeling Revenue from Third Party/Open Access	<a href="#">Form 1.c</a>
5	BALANCE SHEET	<a href="#">Form 1.1(i)</a>
6	GROSS FIXED ASSETS	<a href="#">Form 1.1 a</a>
7	ACCUMULATED DEPRECIATION	<a href="#">Form 1.1 b</a>
8	Capital Work in Progress	<a href="#">Form 1.1 c</a>
9	INVESTMENT PLAN	<a href="#">Form 1.1d</a>
10	Voltage wise asset base	<a href="#">Form 1.1e</a>
11	New Loans	<a href="#">Form 1.1 g(i)</a>
12	Loans	<a href="#">Form 1.1g</a>
13	FOREIGN CURRENCY LOANS & CREDIT	<a href="#">Form 1.1h</a>
14	CURRENT ASSETS	<a href="#">Form 1.1j</a>
15	CURRENT LIABILITIES	<a href="#">Form 1.1k</a>
16	RESERVES	<a href="#">Form 1.1n</a>
17	Cash Flow Statement	<a href="#">Form 1.2</a>
18	Operation and Maintenance Expenses	<a href="#">Form 1.3a</a>
19	WORKING CAPITAL	<a href="#">Form 1.3(i)</a>
20	Other Expenses	<a href="#">Form 1.3j</a>
21	Distribution System Losses	<a href="#">Form 3.3</a>
22	Contributions and Grants	<a href="#">Form 7.0</a>
23	Revenue Surplus / (deficit) at current tariffs	<a href="#">Form 8</a>
24	Revenue Surplus / (deficit) at Proposed tariffs	<a href="#">Form 9</a>
25	Non Tariff Income	<a href="#">Form 10</a>

**Form 1.0 - Revenue Requirement**

This form refers to the net revenue requirements transferred to Retail Supply Business

Particulars	Lin	Amount in Rs Crores						Remarks					
		Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Operation and Maintenance Charges</b>		1001.09	1226.24	1515.12	1879.21	2279.90	2739.02	Figures represents TSSPDCL only for all the years in					
Depreciation		405.74	507.66	637.74	780.98	953.68	1134.02	all the forms including Base Year and Year 1					
Advance Against Depreciation													
Taxes on Income			36.61	52.98	69.22	85.45	103.20						
Other Expenditure		0.00	0.48	93.69	0.53	0.56	0.59						
Special Appropriations		0.00	30.00	35.00	40.00	45.00	50.00						
<b>Total Expenditure</b>		1406.83	1800.99	2334.53	2769.94	3364.59	4026.84						
Less: IDC and expenses capitalized*													
Less: O&M expenses capitalized		68.62	147.17	208.83	207.14	213.94	230.65						
<b>Net Expenditure</b>		1338.21	1653.82	2125.69	2562.80	3150.65	3796.19						
Add Return on Capital Employed		261.11	336.99	491.74	639.10	795.48	963.14						
<b>Total Distribution ARR</b>		1599.32	1990.82	2617.43	3201.90	3946.14	4759.32						
Less: Wheeling Revenue from Third Party/Open Access/NTI (if any)		229.59	241.30	266.26	304.06	346.23	378.97						
<b>Revenue Requirement, (Net transferred to Retail Supply Business)</b>		<b>1369.73</b>	<b>1749.52</b>	<b>2351.17</b>	<b>2897.83</b>	<b>3599.90</b>	<b>4380.35</b>						

\*To be provided only if included as part of Total expenditure

**Form 1a - Regulated Rate Base**

This form pertains to the rate base calculation

Amount in Rs Crores

Particulars	D Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Assets</b>		<b>6777.33</b>	<b>8596.27</b>	<b>10725.09</b>	<b>13125.52</b>	<b>15581.09</b>	<b>18202.91</b>
OCFA Opening Balance		6000.91	6777.33	8596.27	10725.09	13125.52	15581.09
Additions to OCFA		776.42	1818.94	2128.82	2400.43	2455.57	2621.82
<b>Depreciation</b>		<b>3118.44</b>	<b>3626.10</b>	<b>4263.83</b>	<b>5044.81</b>	<b>5998.49</b>	<b>7132.51</b>
Opening Balance		2712.70	3118.44	3626.10	4263.83	5044.81	5998.49
Depreciation during the Year		405.74	507.66	637.74	780.98	953.68	1134.02
<b>Consumer Contributions</b>		<b>1622.75</b>	<b>1663.37</b>	<b>1993.55</b>	<b>2373.33</b>	<b>2723.32</b>	<b>2750.00</b>
Cons Contributions Opening Balance		1490.34	1622.75	1663.37	1993.55	2373.33	2723.32
Additions to Cons Contributions		132.41	40.62	330.18	379.78	349.99	26.68
<b>Working Capital</b>		<b>83.42</b>	<b>102.19</b>	<b>126.26</b>	<b>156.60</b>	<b>189.99</b>	<b>228.25</b>
<b>Change in Rate Base</b>		<b>119.13</b>	<b>635.33</b>	<b>580.45</b>	<b>619.84</b>	<b>575.95</b>	<b>730.56</b>
<b>Regulated Rate Base</b>		<b>2000.43</b>	<b>2773.66</b>	<b>4013.52</b>	<b>5244.15</b>	<b>6473.32</b>	<b>7818.09</b>

**Form 1b - Capital Structure**

This form pertains to the calculation of the Weighted Average Cost of capital

**In Percentage**

<b>Particulars</b>	<b>D Link</b>	<b>Base Year</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
<b>Capital Structure</b>							
Debt Percent		75.00%	75.00%	75.00%	75.00%	75.00%	75.00%
Equity percent		25.00%	25.00%	25.00%	25.00%	25.00%	25.00%
<b>Cost of Funds</b>							
Cost of Debt percent		12.74%	11.53%	11.67%	11.58%	11.72%	11.76%
Return on Equity percent		14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
<b>WACC</b>		<b>13.05%</b>	<b>12.15%</b>	<b>12.25%</b>	<b>12.19%</b>	<b>12.29%</b>	<b>12.32%</b>



**Form 1 c Wheeling Revenue from Third Party/Open Access**

This form refers to the wheeling revenues generated from the third party or open access

Please fill in the required details pertaining to each year

S.No.	Voltage Level	D Link	Base Year			Year 1			Year 2			Year 3		
			Contracted Capacity (MVA)	Monthly Wheeling Charges Rs/kVA/month	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	Monthly Wheeling Charges	Total Charges (Rs. Crs.)
	33 kV				0.08			0.00			0.00			0.00
	11 kV				0.00			0.00			0.00			0.00
	LT				0.00			0.00			0.00			0.00
	<b>Total</b>		0.00		0.08	0.00		0.00	0.00		0.00	0.00		0.00

**33kV**

S.No.	Third Party/Open Access Consumer (Particulars)	D Link	Base Year				Year 1				Year 2			
			Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges Rs/kVA/month	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	Recorded Maximum Demand (MVA)	Monthly Wheeling Charges	Total Charges (Rs. Crs.)
	HEAVY ELECTRICALS L		1.89	12.00	33.43	0.08			0.00					0.00
						0.00			0.00					0.00
						0.00			0.00					0.00
						0.00			0.00					0.00
						0.00			0.00					0.00
	<b>Total</b>					0.08			0.00					0.00

**11kV**

S.No.	Third Party/Open Access Consumer (Particulars)	D Link	Base Year				Year 1				Year 2			
			Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges Rs/kVA/month	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)
						0.00			0.00					0.00
						0.00			0.00					0.00
						0.00			0.00					0.00
						0.00			0.00					0.00
	<b>Total</b>		0.00			0.00	0.00		0.00	0.00				0.00

LT

S.No.	Third Party/Open Access Consumer (Particulars)	D Link	Base Year				Year 1				Year 2			
			Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges Rs/kVA/month	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
	<b>Total</b>		0.00			0.00	0.00			0.00	0.00			0.00

**Form 1 c Wheel**

This form refers to ti

Please fill in the req

S.No.	Voltage Level	D Link	Year 4						Year 5						Remarks					
			Contracted Capacity (MVA)	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Base Year	year 1	year 2	year 3	year 4	year 5			
	33 kV				0.00					0.00										
	11 kV				0.00					0.00										
	LT				0.00					0.00										
	<b>Total</b>			0.00		0.00		0.00		0.00										

**33kV**

S.No.	Third Party/Open Access Consumer (Particulars)	D Link	Year 3				Year 4				Year 5					
			Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)		
	HEAVY ELECTRICALS L					0.00				0.00						0.00
						0.00				0.00						0.00
						0.00				0.00						0.00
						0.00				0.00						0.00
						0.00				0.00						0.00
	<b>Total</b>					0.00				0.00						0.00

**11kV**

S.No.	Third Party/Open Access Consumer (Particulars)	D Link	Year 3				Year 4				Year 5					
			Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)		
						0.00				0.00						0.00
						0.00				0.00						0.00
						0.00				0.00						0.00
						0.00				0.00						0.00
	<b>Total</b>		0.00			0.00	0.00			0.00	0.00					0.00

LT

S.No.	Third Party/Open Access Consumer (Particulars)	D Link	Year 3				Year 4				Year 5			
			Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)	Contracted Capacity (MVA)	No of Months Contracted for	Monthly Wheeling Charges	Total Charges (Rs. Crs.)
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
						0.00				0.00				0.00
	<b>Total</b>		0.00			0.00	0.00			0.00	0.00			0.00



Form 1.1 a - GROSS FIXED ASSETS

Base Year

Amount in Rs. Crores

Asset Particulars	D Link	At the beginning of the year	Additions during the year	Adjustment & deductions	At the end of the year	Remarks
Land & land rights		6.15	0.00		6.15	
Buildings		180.16	12.34		192.50	
Intangible Assets		19.56	0.06		19.62	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		43.03	14.58		57.61	
<b>Plant &amp; Machinery</b>		3368.69	470.55	0.00	3839.24	
Plant and Machinery - 33 KV		610.11	64.23		674.34	
Plant and Machinery - 11 KV		2123.62	285.42		2409.03	
Plant and Machinery - LT		634.97	120.90		755.87	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		0.00	0.00		0.00	
Others		0.00	0.00		0.00	
<b>Line Cable Network</b>		2286.27	263.82	0.00	2550.09	
Line Cable Network - 33KV		288.57	41.58		330.15	
Line Cable Network - 11KV		927.54	120.04		1047.58	Fully depreciated assets[FDA] have
Line Cable Network - LT Category		1070.15	102.20		1172.36	been reflected in each year in the
Others					0.00	Opening balance.Since, the FDA
<b>Vehicles</b>		2.86	-0.04		2.82	value is also included in the total
<b>Furniture &amp; Fixtures</b>		6.74	0.55		7.29	formula of additions the same has
<b>Office Equipment</b>		87.44	14.56		102.00	not been reflected in each year.
<b>Fully Depreciated Fixed Assets</b>		0.00	0.00		0.00	
<b>Others</b>		0.00	0.00		0.00	
<b>Spare Units/ Service units</b>		0.00	0.00		0.00	
<b>Total</b>		<b>6000.91</b>	<b>776.42</b>	<b>0.00</b>	<b>6777.33</b>	

Year 1

Amount in Rs. Crores

Asset Particulars	D Link	At the beginning of the year	Additions during the year	Adjustment & deductions	At the end of the year	Remarks
Land & land rights		6.15	25.35		31.50	
Buildings		192.50	3.60		196.10	
Intangible Assets		18.16	0.00		18.16	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		57.61	30.35		87.96	
<b>Plant &amp; Machinery</b>		3086.90	1026.52	0.00	4113.42	
Plant and Machinery - 33 KV		512.25	174.80		687.05	
Plant and Machinery - 11 KV		2060.91	661.34		2722.25	
Plant and Machinery - LT		513.75	190.38		704.12	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		0.00	0.00		0.00	
Others		0.00	0.00		0.00	
<b>Line Cable Network</b>		1941.11	731.45	0.00	2672.56	
Line Cable Network - 33KV		220.92	110.68		331.60	
Line Cable Network - 11KV		886.25	409.48		1295.73	Fully depreciated assets[FDA] have
Line Cable Network - LT Category		833.94	211.29		1045.23	been reflected in each year in the
Others		0.00	0.00		0.00	Opening balance.Since, the FDA
<b>Vehicles</b>		0.00	0.00		0.00	value is also included in the total
<b>Furniture &amp; Fixtures</b>		4.80	1.68		6.48	formula of additions the same has
<b>Office Equipment</b>		86.10	0.00		86.10	not been reflected in each year.
<b>Fully Depreciated Fixed Assets</b>		1383.99	0.00		1383.99	
<b>Others</b>		0.00	0.00		0.00	
<b>Spare Units/ Service units</b>		0.00	0.00		0.00	
<b>Total</b>		<b>6777.33</b>	<b>1818.94</b>	<b>0.00</b>	<b>8596.27</b>	

Year 2

Amount in Rs. Crores

Asset Particulars	D Link	At the beginning of the year	Additions during the year	Adjustment & deductions	At the end of the year	Remarks
Land & land rights		31.50	41.98		73.48	
Buildings		196.10	6.54		202.64	
Intangible Assets		14.40	0.00		14.40	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		87.96	52.05		140.01	
<b>Plant &amp; Machinery</b>		<b>3952.89</b>	<b>1101.64</b>	<b>0.00</b>	<b>5054.53</b>	
Plant and Machinery - 33 KV		663.27	199.18		862.46	
Plant and Machinery - 11 KV		2638.32	737.17		3375.49	
Plant and Machinery - LT		651.29	165.29		816.58	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		0.00	0.00		0.00	
Others		0.00	0.00		0.00	
<b>Line Cable Network</b>		<b>2562.44</b>	<b>923.69</b>	<b>0.00</b>	<b>3486.13</b>	
Line Cable Network - 33KV		313.09	148.98		462.07	
Line Cable Network - 11KV		1205.37	592.25		1797.62	
Line Cable Network - LT Category		1043.98	182.46		1226.44	Fully depreciated assets[FDA] have
Others		0.00	0.00		0.00	been reflected in each year in the
<b>Vehicles</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	Opening balance.Since, the FDA
<b>Furniture &amp; Fixtures</b>		<b>6.10</b>	<b>2.93</b>		<b>9.03</b>	value is also included in the total
<b>Office Equipment</b>		<b>82.57</b>	<b>0.00</b>		<b>82.57</b>	formula of additions the same has
<b>Fully Depreciated Fixed Assets</b>		<b>1662.32</b>	<b>0.00</b>		<b>1662.32</b>	not been reflected in each year.
Others		0.00	0.00		0.00	
<b>Spare Units/ Service units</b>		<b>0.00</b>	<b>0.00</b>		<b>0.00</b>	
<b>Total</b>		<b>8596.27</b>	<b>2128.82</b>	<b>0.00</b>	<b>10725.09</b>	



Year 3

Amount in Rs. Crores

Asset Particulars	D Link	At the beginning of the year	Additions during the year	Adjustment & deductions	At the end of the year	Remarks
Land & land rights		73.48	44.04		117.52	
Buildings		202.64	7.48		210.12	
Intangible Assets		14.40	0.00		14.40	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		140.01	55.45		195.46	
Plant & Machinery		4859.48	1275.56	0.00	6135.04	
Plant and Machinery - 33 KV		844.75	208.93		1053.68	
Plant and Machinery - 11 KV		3260.60	872.63		4133.23	
Plant and Machinery - LT		754.13	194.00		948.13	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		0.00	0.00		0.00	
Others		0.00	0.00		0.00	
Line Cable Network		3298.38	1014.75	0.00	4313.13	
Line Cable Network - 33KV		459.94	161.99		621.93	
Line Cable Network - 11KV		1703.87	629.19		2333.06	
Line Cable Network - LT Category		1134.58	223.57		1358.14	Fully depreciated assets[FDA] have
Others		0.00	0.00		0.00	been reflected in each year in the
Vehicles		0.00	0.00		0.00	Opening balance.Since, the FDA
Furniture & Fixtures		8.86	3.15		12.00	value is also included in the total
Office Equipment		77.04	0.00		77.04	formula of additions the same has
Fully Depreciated Fixed Assets		2050.82	0.00		2050.82	not been reflected in each year.
Others		0.00	0.00		0.00	
Spare Units/ Service units		0.00	0.00		0.00	
<b>Total</b>		<b>10725.09</b>	<b>2400.43</b>	<b>0.00</b>	<b>13125.52</b>	

Year 4

Amount in Rs. Crores

Asset Particulars	D Link	At the beginning of the year	Additions during the year	Adjustment & deductions	At the end of the year	Remarks
Land & land rights		117.52	40.98		158.50	
Buildings		210.12	8.54		218.66	
Intangible Assets		14.40	0.00		14.40	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		195.46	54.33		249.79	
Plant & Machinery		6018.47	1329.73	0.00	7348.20	
Plant and Machinery - 33 KV		1051.95	207.93		1259.88	
Plant and Machinery - 11 KV		4069.39	922.52		4991.91	
Plant and Machinery - LT		897.13	199.28		1096.41	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		0.00	0.00		0.00	
Others		0.00	0.00		0.00	
Line Cable Network		4249.66	1018.60	0.00	5268.25	
Line Cable Network - 33KV		618.39	172.45		790.84	
Line Cable Network - 11KV		2299.33	614.78		2914.10	Fully depreciated assets[FDA] have
Line Cable Network - LT Category		1331.94	231.37		1563.31	been reflected in each year in the
Others		0.00	0.00		0.00	Opening balance.Since, the FDA
Vehicles		0.00	0.00		0.00	value is also included in the total
Furniture & Fixtures		10.90	3.38		14.29	formula of additions the same has
Office Equipment		71.90	0.00		71.90	not been reflected in each year.
Fully Depreciated Fixed Assets		2237.10	0.00		2237.10	
Others		0.00	0.00		0.00	
Spare Units/ Service units		0.00	0.00		0.00	
<b>Total</b>		<b>13125.52</b>	<b>2455.57</b>	<b>0.00</b>	<b>15581.09</b>	

Year 5

Amount in Rs. Crores

Asset Particulars	D Link	At the beginning of the year	Additions during the year	Adjustment & deductions	At the end of the year	Remarks
Land & land rights		158.50	40.85		199.35	
Buildings		218.66	9.72		228.38	
Intangible Assets		14.40	0.00		14.40	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		249.79	55.99		305.78	
Plant & Machinery		7237.36	1405.48	0.00	8642.84	
Plant and Machinery - 33 KV		1251.70	221.92		1473.62	
Plant and Machinery - 11 KV		4903.69	983.58		5887.27	
Plant and Machinery - LT		1081.97	199.98		1281.95	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		0.00	0.00		0.00	
Others		0.00	0.00		0.00	
Line Cable Network		5153.22	1106.14	0.00	6259.37	
Line Cable Network - 33KV		778.53	184.48		963.01	
Line Cable Network - 11KV		2857.30	675.21		3532.51	
Line Cable Network - LT Category		1517.39	246.45		1763.84	Fully depreciated assets[FDA] have
Others		0.00	0.00		0.00	been reflected in each year in the
Vehicles		0.00	0.00		0.00	Opening balance.Since, the FDA
Furniture & Fixtures		14.10	3.64		17.74	value is also included in the total
Office Equipment		64.77	0.00		64.77	formula of additions the same has
Fully Depreciated Fixed Assets		2470.28	0.00		2470.28	not been reflected in each year.
Others		0.00	0.00		0.00	
Spare Units/ Service units		0.00	0.00		0.00	
<b>Total</b>		<b>15581.09</b>	<b>2621.82</b>	<b>0.00</b>	<b>18202.91</b>	

**Form 1.1 b - ACCUMULATED DEPRECIATION**

Please fill in the required details pertaining to each year

**Base Year**

Asset Particulars	Balance of accumulated depreciation at the beginning of the year	Balance of arrears of depreciation at the beginning of the year	Additions during the year				Withdrawals during the year	Balance of accumulated depreciation at the end of the year	Balance of arrears of depreciation at the end of the year	Remarks
			Rate of depreciation	Depreciation provided for the year	Arrears of depreciation written off during the year	Total				
<b>Land &amp; land rights</b>	0.00		0.00%	0.00		0.00		0.00		
<b>Buildings</b>	33.90		3.02%	5.58		5.58		39.48		
<b>Intangible Assets</b>	7.02		0.00%	3.57		3.57		10.59		
<b>Hydraulic Works</b>	0.00		0.00%	0.00		0.00		0.00		
<b>Other civil works</b>	3.54		3.02%	1.46		1.46		5.00		
<b>Plant &amp; Machinery</b>	<b>1474.34</b>	<b>0.00</b>		<b>243.73</b>	<b>0.00</b>	<b>243.73</b>	<b>0.00</b>	<b>1718.07</b>	<b>0.00</b>	
Plant and Machinery - 33 KV	275.38		7.84%	37.38		37.38		312.76		
Plant and Machinery - 11 KV	848.78		7.84%	151.64		151.64		1000.42		
Plant and Machinery - LT	350.17		7.84%	54.71		54.71		404.88		
Material Handling Equipments	22.90		7.84%	8.21		8.21		31.11		
Construction Equipments	0.00		0.00%	0.00		0.00		0.00		
Miscellaneous Equipments	0.00		7.84%	0.00		0.00		0.00		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Line Cable Network</b>	<b>1155.83</b>	<b>0.00</b>		<b>140.87</b>	<b>0.00</b>	<b>140.87</b>	<b>0.00</b>	<b>1296.70</b>	<b>0.00</b>	
Line Cable Network - 33KV	155.07		7.84%	15.04		15.04		170.11		
Line Cable Network - 11KV	450.93		7.84%	64.82		64.82		515.75		
Line Cable Network - LT Category	549.83		7.84%	61.01		61.01		610.84		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Vehicles</b>	<b>2.61</b>		<b>33.40%</b>	<b>0.00</b>		<b>0.00</b>		<b>2.61</b>		
<b>Furniture &amp; Fixtures</b>	<b>3.70</b>		<b>12.77%</b>	<b>0.61</b>		<b>0.61</b>		<b>4.31</b>		
<b>Office Equipment</b>	<b>8.86</b>		<b>12.77%</b>	<b>1.71</b>		<b>1.71</b>		<b>10.57</b>		
<b>Fully Depreciated Fixed Assets</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Others</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Spare Units/ Service units</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Grand Total</b>	<b>2712.70</b>	<b>0.00</b>		<b>405.74</b>	<b>0.00</b>	<b>405.74</b>	<b>0.00</b>	<b>3118.44</b>	<b>0.00</b>	

Year 1

Amount in Rs. Crores

Asset Particulars	Balance of accumulated depreciation at the beginning of	Balance of arrears of depreciation at the beginning of	Additions during the year				Withdrawals during the year	Balance of accumulated depreciation at the end of the year	Balance of arrears of depreciation at the end of the year	Remarks
			Rate of depreciation	Depreciation provided for the year	Arrears of depreciation written off during the year	Total				
<b>Land &amp; land rights</b>	0.00		0.00%	0.00		0.00		0.00		
<b>Buildings</b>	39.48		3.02%	5.87		5.87		45.35		
<b>Intangible Assets</b>	10.59		0.00%	0.00		0.00		10.59		
<b>Hydraulic Works</b>	0.00		0.00%	0.00		0.00		0.00		
<b>Other civil works</b>	5.00		3.02%	2.20		2.20		7.19		
<b>Plant &amp; Machinery</b>	<b>1718.07</b>	<b>0.00</b>		<b>307.02</b>	<b>0.00</b>	<b>307.02</b>	<b>0.00</b>	<b>2025.09</b>	<b>0.00</b>	
Plant and Machinery - 33 KV	312.80		7.84%	47.08		47.08		359.89		
Plant and Machinery - 11 KV	999.55		7.84%	189.54		189.54		1189.09		
Plant and Machinery - LT	405.72		7.84%	70.39		70.39		476.11		
Material Handling Equipments	31.11		7.84%	0.00		0.00		31.11		
Construction Equipments	0.00		0.00%	0.00		0.00		0.00		
Miscellaneous Equipments	0.00		7.84%	0.00		0.00		0.00		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Line Cable Network</b>	<b>1296.70</b>	<b>0.00</b>		<b>180.86</b>	<b>0.00</b>	<b>180.86</b>	<b>0.00</b>	<b>1477.55</b>	<b>0.00</b>	
Line Cable Network - 33KV	170.11		7.84%	21.66		21.66		191.77		
Line Cable Network - 11KV	515.75		7.84%	85.53		85.53		601.29		
Line Cable Network - LT Category	610.84		7.84%	73.66		73.66		684.50		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Vehicles</b>	2.61		33.40%	0.00		0.00		2.61		
<b>Furniture &amp; Fixtures</b>	4.31		12.77%	0.72		0.72		5.03		
<b>Office Equipment</b>	10.57		12.77%	11.00		11.00		21.57		
<b>Fully Depreciated Fixed Assets</b>	0.00		0.00%	0.00		0.00		0.00		
<b>Others</b>	0.00		0.00%	0.00		0.00		0.00		
<b>Spare Units/ Service units</b>	0.00		0.00%	0.00		0.00		0.00		
<b>Grand Total</b>	<b>3118.44</b>	<b>0.00</b>		<b>507.66</b>	<b>0.00</b>	<b>507.66</b>	<b>0.00</b>	<b>3626.10</b>	<b>0.00</b>	

Year 2

Amount in Rs. Crores

Asset Particulars	Balance of accumulated depreciation at the beginning of	Balance of arrears of depreciation at the beginning of	Additions during the year				Withdrawals during the year	Balance of accumulated depreciation at the end of the year	Balance of arrears of depreciation at the end of the year	Remarks
			Rate of depreciation	Depreciation provided for the year	Arrears of depreciation written off during the year	Total				
Land & land rights	0.00		0.00%	0.00		0.00		0.00		
Buildings	45.35		3.02%	6.02		6.02		51.37		
Intangible Assets	10.59		0.00%	0.00		0.00		10.59		
Hydraulic Works	0.00		0.00%	0.00		0.00		0.00		
Other civil works	7.19		3.02%	3.44		3.44		10.64		
<b>Plant &amp; Machinery</b>	<b>2025.09</b>	<b>0.00</b>		<b>379.66</b>	<b>0.00</b>	<b>379.66</b>	<b>0.00</b>	<b>2404.75</b>	<b>0.00</b>	
Plant and Machinery - 33 KV	359.89		7.84%	59.89		59.89		419.78		
Plant and Machinery - 11 KV	1189.09		7.84%	237.77		237.77		1426.87		
Plant and Machinery - LT	476.11		7.84%	81.99		81.99		558.10		
Material Handling Equipments	31.11		7.84%	0.00		0.00		31.11		
Construction Equipments	0.00		0.00%	0.00		0.00		0.00		
Miscellaneous Equipments	0.00		7.84%	0.00		0.00		0.00		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Line Cable Network</b>	<b>1477.55</b>	<b>0.00</b>		<b>237.10</b>	<b>0.00</b>	<b>237.10</b>	<b>0.00</b>	<b>1714.66</b>	<b>0.00</b>	
Line Cable Network - 33KV	191.77		7.84%	30.39		30.39		222.15		
Line Cable Network - 11KV	601.29		7.84%	117.72		117.72		719.01		
Line Cable Network - LT Category	684.50		7.84%	89.00		89.00		773.50		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Vehicles</b>	<b>2.61</b>		<b>33.40%</b>	<b>0.00</b>		<b>0.00</b>		<b>2.61</b>		
<b>Furniture &amp; Fixtures</b>	<b>5.03</b>		<b>12.77%</b>	<b>0.97</b>		<b>0.97</b>		<b>6.00</b>		
<b>Office Equipment</b>	<b>21.57</b>		<b>12.77%</b>	<b>10.54</b>		<b>10.54</b>		<b>32.11</b>		
<b>Fully Depreciated Fixed Assets</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Others</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Spare Units/ Service units</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Grand Total</b>	<b>3626.10</b>	<b>0.00</b>		<b>637.74</b>	<b>0.00</b>	<b>637.74</b>	<b>0.00</b>	<b>4263.83</b>	<b>0.00</b>	

Year 3

Amount in Rs. Crores

Asset Particulars	Balance of accumulated depreciation at the beginning of	Balance of arrears of depreciation at the beginning of	Additions during the year				Withdrawals during the year	Balance of accumulated depreciation at the end of the year	Balance of arrears of depreciation at the end of the year	Remarks
			Rate of depreciation	Depreciation provided for the year	Arrears of depreciation written off during the year	Total				
Land & land rights	0.00		0.00%	0.00		0.00		0.00		
Buildings	51.37		3.02%	6.23		6.23		57.60		
Intangible Assets	10.59		0.00%	0.00		0.00		10.59		
Hydraulic Works	0.00		0.00%	0.00		0.00		0.00		
Other civil works	10.64		3.02%	5.07		5.07		15.70		
<b>Plant &amp; Machinery</b>	<b>2404.75</b>	<b>0.00</b>		<b>460.14</b>	<b>0.00</b>	<b>460.14</b>	<b>0.00</b>	<b>2864.88</b>	<b>0.00</b>	
Plant and Machinery - 33 KV	419.78		7.84%	74.52		74.52		494.30		
Plant and Machinery - 11 KV	1426.87		7.84%	291.80		291.80		1718.66		
Plant and Machinery - LT	558.10		7.84%	93.82		93.82		651.92		
Material Handling Equipments	31.11		7.84%	0.00		0.00		31.11		
Construction Equipments	0.00		0.00%	0.00		0.00		0.00		
Miscellaneous Equipments	0.00		7.84%	0.00		0.00		0.00		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Line Cable Network</b>	<b>1714.66</b>	<b>0.00</b>		<b>298.37</b>	<b>0.00</b>	<b>298.37</b>	<b>0.00</b>	<b>2013.03</b>	<b>0.00</b>	
Line Cable Network - 33KV	222.15		7.84%	42.41		42.41		264.56		
Line Cable Network - 11KV	719.01		7.84%	158.25		158.25		877.25		
Line Cable Network - LT Category	773.50		7.84%	97.71		97.71		871.22		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Vehicles</b>	<b>2.61</b>		<b>33.40%</b>	<b>0.00</b>		<b>0.00</b>		<b>2.61</b>		
<b>Furniture &amp; Fixtures</b>	<b>6.00</b>		<b>12.77%</b>	<b>1.33</b>		<b>1.33</b>		<b>7.33</b>		
<b>Office Equipment</b>	<b>32.11</b>		<b>12.77%</b>	<b>9.84</b>		<b>9.84</b>		<b>41.95</b>		
<b>Fully Depreciated Fixed Assets</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Others</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Spare Units/ Service units</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Grand Total</b>	<b>4263.83</b>	<b>0.00</b>		<b>780.98</b>	<b>0.00</b>	<b>780.98</b>	<b>0.00</b>	<b>5044.81</b>	<b>0.00</b>	

Year 4

Amount in Rs. Crores

Asset Particulars	Balance of accumulated depreciation at the beginning of	Balance of arrears of depreciation at the beginning of	Additions during the year				Withdrawals during the year	Balance of accumulated depreciation at the end of the year	Balance of arrears of depreciation at the end of the year	Remarks
			Rate of depreciation	Depreciation provided for the year	Arrears of depreciation written off during the year	Total				
Land & land rights	0.00		0.00%	0.00		0.00		0.00		
Buildings	57.60		3.02%	6.47		6.47		64.08		
Intangible Assets	10.59		0.00%	0.00		0.00		10.59		
Hydraulic Works	0.00		0.00%	0.00		0.00		0.00		
Other civil works	15.70		3.02%	6.72		6.72		22.43		
<b>Plant &amp; Machinery</b>	<b>2864.88</b>	<b>0.00</b>		<b>556.59</b>	<b>0.00</b>	<b>556.59</b>	<b>0.00</b>	<b>3421.47</b>	<b>0.00</b>	
Plant and Machinery - 33 KV	494.30		7.84%	90.74		90.74		585.03		
Plant and Machinery - 11 KV	1718.66		7.84%	356.90		356.90		2075.56		
Plant and Machinery - LT	651.92		7.84%	108.95		108.95		760.88		
Material Handling Equipments	31.11		7.84%	0.00		0.00		31.11		
Construction Equipments	0.00		0.00%	0.00		0.00		0.00		
Miscellaneous Equipments	0.00		7.84%	0.00		0.00		0.00		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Line Cable Network</b>	<b>2013.03</b>	<b>0.00</b>		<b>373.10</b>	<b>0.00</b>	<b>373.10</b>	<b>0.00</b>	<b>2386.13</b>	<b>0.00</b>	
Line Cable Network - 33KV	264.56		7.84%	55.24		55.24		319.80		
Line Cable Network - 11KV	877.25		7.84%	204.37		204.37		1081.62		
Line Cable Network - LT Category	871.22		7.84%	113.49		113.49		984.71		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Vehicles</b>	<b>2.61</b>		<b>33.40%</b>	<b>0.00</b>		<b>0.00</b>		<b>2.61</b>		
<b>Furniture &amp; Fixtures</b>	<b>7.33</b>		<b>12.77%</b>	<b>1.61</b>		<b>1.61</b>		<b>8.94</b>		
<b>Office Equipment</b>	<b>41.95</b>		<b>12.77%</b>	<b>9.18</b>		<b>9.18</b>		<b>51.13</b>		
<b>Fully Depreciated Fixed Assets</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Others</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Spare Units/ Service units</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Grand Total</b>	<b>5044.81</b>	<b>0.00</b>		<b>953.68</b>	<b>0.00</b>	<b>953.68</b>	<b>0.00</b>	<b>5998.49</b>	<b>0.00</b>	



Year 5

Amount in Rs. Crores

Asset Particulars	Balance of accumulated depreciation at the beginning of	Balance of arrears of depreciation at the beginning of	Additions during the year				Withdrawals during the year	Balance of accumulated depreciation at the end of the year	Balance of arrears of depreciation at the end of the year	Remarks
			Rate of depreciation	Depreciation provided for the year	Arrears of depreciation written off during the year	Total				
Land & land rights	0.00		0.00%	0.00		0.00		0.00		
Buildings	64.08		3.02%	6.75		6.75		70.83		
Intangible Assets	10.59		0.00%	0.00		0.00		10.59		
Hydraulic Works	0.00		0.00%	0.00		0.00		0.00		
Other civil works	22.43		3.02%	8.39		8.39		30.81		
<b>Plant &amp; Machinery</b>	<b>3421.47</b>	<b>0.00</b>		<b>661.20</b>	<b>0.00</b>	<b>661.20</b>	<b>0.00</b>	<b>4082.68</b>	<b>0.00</b>	
Plant and Machinery - 33 KV	585.03		7.84%	106.96		106.96		691.99		
Plant and Machinery - 11 KV	2075.56		7.84%	424.84		424.84		2500.40		
Plant and Machinery - LT	760.88		7.84%	129.41		129.41		890.29		
Material Handling Equipments	31.11		7.84%	0.00		0.00		31.11		
Construction Equipments	0.00		0.00%	0.00		0.00		0.00		
Miscellaneous Equipments	0.00		7.84%	0.00		0.00		0.00		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Line Cable Network</b>	<b>2386.13</b>	<b>0.00</b>		<b>447.37</b>	<b>0.00</b>	<b>447.37</b>	<b>0.00</b>	<b>2833.50</b>	<b>0.00</b>	
Line Cable Network - 33KV	319.80		7.84%	68.27		68.27		388.07		
Line Cable Network - 11KV	1081.62		7.84%	250.48		250.48		1332.10		
Line Cable Network - LT Category	984.71		7.84%	128.62		128.62		1113.33		
Others	0.00		0.00%	0.00		0.00		0.00		
<b>Vehicles</b>	<b>2.61</b>		<b>33.40%</b>	<b>0.00</b>		<b>0.00</b>		<b>2.61</b>		
<b>Furniture &amp; Fixtures</b>	<b>8.94</b>		<b>12.77%</b>	<b>2.03</b>		<b>2.03</b>		<b>10.97</b>		
<b>Office Equipment</b>	<b>51.13</b>		<b>12.77%</b>	<b>8.27</b>		<b>8.27</b>		<b>59.40</b>		
<b>Fully Depreciated Fixed Assets</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Others</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Spare Units/ Service units</b>	<b>0.00</b>		<b>0.00%</b>	<b>0.00</b>		<b>0.00</b>		<b>0.00</b>		
<b>Grand Total</b>	<b>5998.49</b>	<b>0.00</b>		<b>1134.02</b>	<b>0.00</b>	<b>1134.02</b>	<b>0.00</b>	<b>7132.51</b>	<b>0.00</b>	

**Form 1.1 c - Capital Work in Progress**

This form pertains to the Capital Work in Progress

Particulars							Remarks					
	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Opening balance of CWIP</b>	691.86	790.07	685.92	961.93	959.00	997.7114						
<b>Add: New Investment*</b>	763.98	1,485.99	2,125.27	2115.587	2,191.63	2368.332						
<b>Add: Capitalisation*</b>												
Expenses Capitalised	68.62	147.17	208.83	207.14	213.94	230.6493						
Interest During Construction	41.67	81.63	70.73	74.77	88.71	107.8636						
Total expenses capitalised	110.29	228.80	279.56	281.91	302.65	338.51						
Less : Investment Capitalised	776.06	1,818.94	2,128.82	2,400.43	2,455.57	2621.818						
<b>Closing balance of CWIP</b>	<b>790.07</b>	<b>685.92</b>	<b>961.93</b>	<b>959.00</b>	<b>997.71</b>	<b>1082.74</b>						

\*To be filled in consultation with form 1.1 d

**Form 1.1d -**

**INVESTMENT PLAN** This form captures investments as planned and actually incurred  
Please fill in the required details pertaining to each year

**Base Year**

Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						
Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MON-YY)	Project Completion date (DD-MON-YY)	Base Cost	Contingency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year				
														Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source
APTD-Dis-078	SPA : PE	Electrification	2012-2014	2013-2014	126.29	3.41	0.00	13.64	1.56	16.10	161.00	48.30	0.00	112.70	12.50%	3.00	13.00	REC
DAP-TD-DIS-C&I / 966	Scheme for 65 Nos 33	Erection of n	16.07.2013	15.07.2016	44.71	1.21	0.00	4.83	0.55	5.70	57.00	17.10	0.00	39.90	12.25%	3 years	13 years	REC
			12.12.2012	11.12.2014	50.19	1.36	0.00	5.42	0.62	6.40	63.99	19.20	0.00	44.79	10.75%	3 years	10 years	SBH
											0.00							
Loan agreeme	Implemen	Conversion d	16-06-2011	2016-17	317.76	8.58	0.00	34.32	3.93	40.51	405.10	121.53	0.00	283.57	0.65%	10.00	40.00	JICA
Scheme prepara	SI:Material	Bulk Scheme	2013-14	2013-14	167.08	4.51	0.00	18.04	2.07	21.30	213.00	63.90	0.00	149.10	12.75%	2.00	7.00	REC
31533012.314	R-APDRF	System Impr	20.08.2010	30.04.2015	62.58	1.69	0.00	6.76	0.77	7.98	79.78	5.98	0.00	73.80	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	116.23	3.14	0.00	12.55	1.44	14.82	148.18	11.11	0.00	137.07	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	242.42	6.55	0.00	26.18	3.00	30.91	309.06	23.18	0.00	285.87	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	344.53	9.30	0.00	37.21	4.26	43.92	439.22	32.94	0.00	406.28	11.5/11	5/3	20/13	PFC/REC
31533001 to 3	R-APDRF	IT implement	30.04.2009,2	30.04.2014,3	106.21	2.87	0.00	11.47	1.31	13.54	135.40	0.00	0.00	135.40	11.50%	10.00	10.00	PFC
Scheme submit	RGGVY>	Intensive elec	2014-15	2018-19	188.54	5.09	0.00	20.36	2.33	24.04	240.36	216.32	0.00	24.04	0.00%	0.00	0.00	REC
Scheduled ca	SC&ST S	Electrification	2013-14	2014-15	15.67	0.42	0.00	1.69	0.19	2.00	19.97	0.00	19.98	0.00	0.00%	0.00	0.00	GoAP
DDG	DDG	Electrification	2013-14	2014-15	1.00	0.03	0.00	0.11	0.01	0.13	1.28	0.13	0.00	1.14	12.75%	2.00	7.00	FI/Banks
	T&D	0.00	0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%	0.00	0.00	0.00	0.00
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
					1783.21	48.16	0.00	192.58	22.04	227.35	2273.34	559.69	19.98	1693.66				

Year 1

Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						
Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MON-YY)	Project Completion date (DD-MON-YY)	Base Cost	Contigency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year				
														Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source
APTD-Dis-078	SPA : PE	Electrification	2014-15	2014-15	155.93	4.21		16.84	1.93	19.88	198.79	19.88		178.91	12.50%	3.00	13.00	REC
DAP-TD-DIS-	Scheme f	Erection of n	16.07.2013	15.07.2016	44.71	1.21		4.83	0.55	5.70	57.00	5.70		51.30	12.25%	3 years	13 years	REC
C&I / 966	65 Nos 33	Erection of n	12.12.2012	11.12.2014	50.19	1.36		5.42	0.62	6.40	63.99	6.40		57.59	10.75%	3 years	10 years	SBH
										0.00								
Loan agreeme	Implemen	Conversion o	16-06-2011	2016-17	353.03	9.53		38.13	4.36	45.01	450.06	70.76		379.30	0.65%	10.00	40.00	JICA
Scheme prep	SI: Materia	Bulk Scheme	2014-15	2014-15	607.91	16.41		65.65	7.51	77.50	774.99	77.50		697.49	12.75%	2.00	7.00	REC
										0.00								
31533012, 314	R-APDRP	System Impr	20.08.2010	30.04.2015	41.86	1.13		4.52	0.52	5.34	53.36	4.00		49.36	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRP	System Impr	20.08.2010	30.04.2015	98.91	2.67		10.68	1.22	12.61	126.10	9.46		116.64	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRP	System Impr	20.08.2010	30.04.2015	231.61	6.25		25.01	2.86	29.53	295.27	22.15		273.12	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRP	System Impr	20.08.2010	30.04.2015	320.13	8.64		34.57	3.96	40.81	408.12	30.61		377.51	11.5/11	5/3	20/13	PFC/REC
31533001 to 3	R-APDRP	IT implement	30.04.2009	30.04.2014	126.02	3.40		13.61	1.56	16.07	160.65	12.05		148.60	11.50%	10.00	10.00	PFC
Deendayal Up	DDUGJY	Feeder Segre	2014-15	2017-18	469.15	12.67		50.67	5.80	59.81	598.10	59.81	448.57	89.71	12.25%	3.00	13.00	REC
Scheduled Ca	SCSP	Electrification	2013-14	2014-15	9.89	0.27		1.07	0.12	1.26	12.61		12.61		0.00%	0.00	0.00	0.00
Scheduled Ca	SCSP	Electrification	2014-15	2015-16	3.30	0.09		0.36	0.04	0.42	4.21		4.21					
Tribal Sub Pla	TSP	Electrification	2014-15	2015-16	1.59	0.04		0.17	0.02	0.20	2.03		2.03		0.00%	0.00	0.00	0.00
New Scheme	Smartgrid	AT&C Loss r	2013-14	2016-17	32.80	0.89		3.54	0.41	4.18	41.82		20.91	20.91	12.25%	3.00	13.00	FI/Banks
										0.00								
										0.00								
										0.00								
										0.00								
										0.00								
										0.00								
					2547.05	68.77	0.00	275.08	31.48	324.71	3247.10	318.31	488.33	2440.45				

Year 2

Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						
Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MON-YY)	Project Completion date (DD-MON-YY)	Base Cost	Contigency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year				
														Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source
APTD-Dis-078	SPA : PE	Electrification	2015-16	2015-16	190.23	5.14		20.55	2.35	24.25	242.52	24.25		218.27	12.50%	3.00	13.00	REC
DAP-TD-DIS-1	Scheme f	Erection of n	16.07.2013	15.07.2016	44.71	1.21		4.83	0.55	5.70	57.00	5.70		51.30	12.25%	3 years	13 years	REC
TL-TD-DIS-46	Installatio	Erection of n	2015-16	2017-18	75.47	2.04		8.15	0.93	9.62	96.21	9.62		86.59	12.25%	3.00	13.00	REC
DPR submissi	IPDS sche	Distribution n	2015-16	2017-18	367.55	9.92		39.70	4.54	46.86	468.57	46.86	351.43	70.29	12.25%	3.00	13.00	FI/Banks
Loan agreeme	Implemen	Conversion o	16-06-2011	2016-17	353.03	9.53		38.13	4.36	45.01	450.06	70.76		379.30	0.65%	10.00	40.00	JICA
New Scheme	SI: Materia	Bulk Scheme	2015-16	2015-16	749.86	20.25		80.99	9.27	95.60	955.96	95.60		860.36	12.75%	2.00	7.00	REC
										0.00								
31533012, 314	R-APDRP	System Impr	20.08.2010	30.04.2015	41.86	1.13		4.52	0.52	5.34	53.36	4.00		49.36	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRP	System Impr	20.08.2010	30.04.2015	98.91	2.67		10.68	1.22	12.61	126.10	9.46		116.64	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRP	System Impr	20.08.2010	30.04.2015	231.61	6.25		25.01	2.86	29.53	295.27	22.15		273.12	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRP	System Impr	20.08.2010	30.04.2015	320.13	8.64		34.57	3.96	40.81	408.12	30.61		377.51	11.5/11	5/3	20/13	PFC/REC
31533001 to 3	R-APDRP	IT implement	30.04.2009	30.04.2014	126.02	3.40		13.61	1.56	16.07	160.65	12.05		148.60	11.50%	10.00	10.00	PFC
Deendayal Up	DDUGJY	Feeder Segre	2014-15	2018-19	469.15	12.67		50.67	5.80	59.81	598.10	59.81	448.57	89.71	12.25%	3.00	13.00	REC
Scheduled Ca	SCSP	Electrification	2014-15	2015-16	25.58	0.69		2.76	0.32	3.26	32.61		32.61		0.00%	0.00	0.00	0.00
Scheduled Ca	SCSP	Electrification	2014-15	2015-16	3.30	0.09		0.36	0.04	0.42	4.21		4.21					
Tribal Sub Pla	TSP	Electrification	2014-15	2015-16	1.59	0.04		0.17	0.02	0.20	2.03		2.03		0.00%	0.00	0.00	0.00
Tribal Sub Pla	TSP	Electrification	2014-15	2015-16	34.55	0.93		3.73	0.43	4.41	44.05		44.05		0.00%	0.00	0.00	0.00
New Scheme	Smartgrid	AT&C Loss r	2013-14	2016-17	32.80	0.89		3.54	0.41	4.18	41.82		20.91	20.91	12.25%	3.00	13.00	FI/Banks
New Scheme	ST&D stre	System impr	2015-16	2018-19	992.20	26.79		107.16	12.26	126.49	1264.90	126.49		1138.41	12.25%	3.00	13.00	FI/Banks
										0.00								
										0.00								
										0.00								
					4158.58	112.28	0.00	449.13	51.40	530.15	5301.54	517.35	903.81	3880.37				

Year 3

Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						
Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MON-YY)	Project Completion date (DD-MON-YY)	Base Cost	Contigency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year				
														Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source
APTD-Dis-078	SPA : PE	Electrification	2016-17	2016-17	235.70	6.36		25.46	2.91	30.05	300.48	30.05		270.43	12.50%	3.00	13.00	REC
TL-TD-DIS-46	Installation	Erection of n	2015-16	2017-18	75.47	2.04		8.15	0.93	9.62	96.21	9.62		86.59	12.25%	3.00	13.00	REC
DPR submissi	IPDS sche	Distribution n	2015-16	2017-18	367.55	9.92		39.70	4.54	46.86	468.57	46.86	351.43	70.29	12.25%	3.00	13.00	FI/Banks
Loan agreeme	Implemen	Conversion c	16-06-2011	2016-17	353.03	9.53		38.13	4.36	45.01	450.06	70.76		379.30	0.65%	10.00	40.00	JICA
Scheme to be	Conversio	Conversion c	2016-17	2018-19	347.49	9.38		37.53	4.30	44.30	443.00	44.30		398.70	12.25%	3.00	13.00	FI
31533012, 31	R-APDRF	System Impr	20.08.2010,	30.04.2015,	41.86	1.13		4.52	0.52	5.34	53.36	4.00		49.36	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	98.91	2.67		10.68	1.22	12.61	126.10	9.46		116.64	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	231.61	6.25		25.01	2.86	29.53	295.27	22.15		273.12	11.5/11	5/3	20/13	PFC/REC
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	320.13	8.64		34.57	3.96	40.81	408.12	30.61		377.51	11.5/11	5/3	20/13	PFC/REC
31533001 to 3	R-APDRF	IT implement	30.04.2009,2	30.04.2014,3	126.02	3.40		13.61	1.56	16.07	160.65	12.05		148.60	11.50%	10.00	10.00	PFC
Deendayal Up	DDUGJY	Feeder Segre	2014-15	2018-19	469.15	12.67		50.67	5.80	59.81	598.10	59.81	448.57	89.71	12.25%	3.00	13.00	REC
New Scheme	Smartgrid	AT&C Loss r	2013-14	2016-17	32.80	0.89		3.54	0.41	4.18	41.82		20.91	20.91	12.25%	3.00	13.00	FI/Banks
New Scheme	ST&D str	System impr	2014-15	2018-19	992.20	26.79		107.16	12.26	126.49	1264.90	126.49		1138.41	12.25%	3.00	13.00	FI/Banks
New Scheme	SI:Material	Bulk Scheme	2016-17	2016-17	749.86	20.25		80.99	9.27	95.60	955.96	95.60		860.36	12.75%	2.00	7.00	REC
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
					4441.79	119.93	0.00	479.71	54.90	566.26	5662.60	561.75	820.91	4279.94				

Year 4

Project Details					PLANNED CAPITAL EXPENDITURE							SOURCE OF FINANCING						
Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MON-YY)	Project Completion date (DD-MON-YY)	Base Cost	Contigency	IDC	Duties	Taxes	Expense capitalised	TOTAL COST	Internal Accrual Component of capex in year	Equity Component of capex in year	Debt Component of capex in year				
														Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source
APTD-Dis-078	SPA : PE	Electrification	2017-18	2017-18	291.27	7.86		31.46	3.60	37.13	371.33	37.13		334.20	12.50%	3.00	13.00	REC
TL-TD-DIS-46	Installation	Erection of n	2015-16	2017-18	75.47	2.04		8.15	0.93	9.62	96.21	9.62		86.59	12.25%	3.00	13.00	REC
DPR submissi	IPDS sche	Distribution n	2015-16	2017-18	367.55	9.92		39.70	4.54	46.86	468.57	46.86	351.43	70.29	12.25%	3.00	13.00	FI/Banks
Scheme to be	Conversio	Conversion c	2016-17	2018-19	347.49	9.38		37.53	4.30	44.30	443.00	44.30		398.70	12.25%	3.00	13.00	FI
Deendayal Up	DDUGJY	Feeder Segre	2014-15	2018-19	469.15	12.67		50.67	5.80	59.81	598.10	59.81	448.57	89.71	12.25%	3.00	13.00	REC
New Scheme	ST&D stre	System impr	2014-15	2018-19	992.20	26.79		107.16	12.26	126.49	1264.90	126.49		1138.41	12.25%	3.00	13.00	FI/Banks
New Scheme	SI:Material	Bulk Scheme	2017-18	2017-18	749.86	20.25		80.99	9.27	95.60	955.96	95.60		860.36	12.75%	2.00	7.00	REC
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
											0.00							
					3293.00	88.91	0.00	355.64	40.70	419.81	4198.07	419.81	800.00	2978.26				







Year 1

Amount in Rs Crores

Project Details					Investments proposed for the year				Investments incurred in the year			
Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MON-YY)	Project Completion date (DD-MON-YY)	Annual				Annual			
					Proposed investment in the year (Rs Cr)	Proposed IDC	Proposed other expense	Percentage capitalisation	Actual investment in the year (Rs Cr)	IDC Incurred	Other expense incurred	Percentage capitalisation
APTD-Dis-078	SPA : PE	Electrification	2014-15	2014-15	198.79	10.93	19.88	0.60	198.79	10.93	19.88	0.60
DAP-TD-DIS-4	Scheme f	Erection of n	16.07.2013	15.07.2016	21.69	1.19	2.17	0.60	21.69	1.19	2.17	0.60
C&I / 966	65 Nos 33	Erection of n	12.12.2012	11.12.2014	12.32	0.68	1.23	0.60	12.32	0.68	1.23	0.60
Loan agreeme	Implemen	Conversion d	16-06-2011	2016-17	40.51	2.09	4.05	0.60	40.51	2.09	4.05	0.60
Scheme prepara	St:Material	Bulk Scheme	2014-15	2014-15	774.99	42.60	76.07	0.60	774.99	42.60	76.07	0.60
31533012, 314	R-APDRF	System Impr	20.08.2010,0	30.04.2015,	14.69	0.83	1.47	0.60	14.69	0.83	1.47	0.60
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	27.30	1.54	2.73	0.60	27.30	1.54	2.73	0.60
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	102.00	5.76	10.20	0.60	102.00	5.76	10.20	0.60
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	253.17	14.30	25.32	0.60	253.17	14.30	25.32	0.60
31533001 to 3	R-APDRF	IT implement	30.04.2009,2	30.04.2014,3	27.92	1.71	2.79	0.60	27.92	1.71	2.79	0.60
Deendayal Up	DDUGJY	Feeder Segre	2014-15	2017-18	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.60
Scheduled Ca	SCSP	Electrification	2013-14	2014-15	12.61		1.26	0.60	12.61	0.00	1.26	0.60
Scheduled Ca	SCSP	Electrification	2014-15	2015-16	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.60
Tribal Sub Pla	TSP	Electrification	2014-15	2015-16	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.60
New Scheme	Smartgrid	AT&C Loss r	2013-14	2016-17			0.00	0.60		0.00	0.00	0.60
					1485.99	81.63	147.17	9.00	1485.99	81.63	147.17	

Year 2

Amount in Rs Crores

Project Details					Investments proposed for the year				Investments incurred in the year			
Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MON-YY)	Project Completion date (DD-MON-YY)	Annual				Annual			
					Proposed investment in the year (Rs Cr)	Proposed IDC	Proposed other expense	Percentage capitalisation	Actual investment in the year (Rs Cr)	IDC Incurred	Other expense incurred	Percentage capitalisation
APTD-Dis-078	SPA : PE	Electrification	2015-16	2015-16	242.52	9.28	24.25	0.60	242.52	9.28	24.25	0.60
DAP-TD-DIS-4	Scheme f	Erection of n	16.07.2013	15.07.2016	30.75	1.18	3.08	0.60	30.75	1.18	3.08	0.60
TL-TD-DIS-46	Installation	Erection of n	2015-16	2017-18	30.00	1.15	3.00	0.60	30.00	1.15	3.00	0.60
DPR submissi	IPDS sch	Distribution n	2015-16	2017-18	93.79	0.60	9.38	0.60	93.79	0.60	9.38	0.60
Loan agreeme	Implemen	Conversion d	16-06-2011	2016-17	202.53	7.26	20.25	0.60	202.53	7.26	20.25	0.60
New Scheme	SI:Material	Bulk Scheme	2015-16	2015-16	955.96	36.60	91.90	0.60	955.96	36.60	91.90	0.60
							0.00	0.60	0.00	0.00	0.00	0.60
31533012, 315	R-APDRF	System Impr	20.08.2010,0	30.04.2015,	6.78	0.27	0.68	0.60	6.78	0.27	0.68	0.60
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	12.60	0.50	1.26	0.60	12.60	0.50	1.26	0.60
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	47.21	1.86	4.72	0.60	47.21	1.86	4.72	0.60
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	116.90	4.60	11.69	0.60	116.90	4.60	11.69	0.60
31533001 to 3	R-APDRF	IT implement	30.04.2009,2	30.04.2014,3	0.00	0.00	0.00	0.60	0.00	0.00	0.00	0.60
Deendayal Up	DDUGJY	Feeder Segre	2014-15	2018-19	119.62	0.76	11.96	0.60	119.62	0.76	11.96	0.60
Scheduled Ca	SCSP	Electrification	2014-15	2015-16	32.61	0.00	3.26	0.60	32.61	0.00	3.26	0.60
Scheduled Ca	SCSP	Electrification	2014-15	2015-16	4.21	0.00	0.42	0.60	4.21	0.00	0.42	0.60
Tribal Sub Pla	TSP	Electrification	2014-15	2015-16	2.03	0.00	0.20	0.60	2.03	0.00	0.20	0.60
Tribal Sub Pla	TSP	Electrification	2014-15	2015-16	44.05	0.00	4.41	0.60	44.05	0.00	4.41	0.60
New Scheme	Smartgrid	AT&C Loss r	2013-14	2016-17	20.92	0.44	2.09	0.60	20.92	0.44	2.09	0.60
New Scheme	ST&D str	System impr	2015-16	2018-19	162.79	6.23	16.28	0.60	162.79	6.23	16.28	0.60
					2125.27	70.73	208.83	11.40	2125.27	70.73	208.83	









Year 1

Project Details					Cumulative progress (Year on year)				Remarks
Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MON-YY)	Project Completion date (DD-MON-YY)	Actual investment in the year (Rs Cr)	IDC Incurred	Other expense incurred	Percentage capitalisation	
APTD-Dis-078	SPA : PE	Electrification	2014-15	2014-15	198.79	10.93	19.88	0.60	Amount reflected in Equity
DAP-TD-DIS-14	Scheme for	Erection of n	16.07.2013	15.07.2016	26.25	1.19	2.17	0.60	component of capex column is
C&I / 966	65 Nos 33	Erection of n	12.12.2012	11.12.2014	63.99	0.68	1.23	0.60	govt grants.
Loan agreeme	Implemen	Conversion o	16-06-2011	2016-17	101.28	2.09	4.05	0.60	Amount reflected in internal accrual
Scheme prepa	SI:Material	Bulk Scheme	2014-15	2014-15	774.99	42.60	76.07	0.60	consumer contribution
31533012, 314	R-APDRF	System Impr	20.08.2010,0	30.04.2015,	14.69	0.83	1.47	0.60	
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	27.30	1.54	2.73	0.60	
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	102.00	5.76	10.20	0.60	
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	253.17	14.30	25.32	0.60	
31533001 to 3	R-APDRF	IT implement	30.04.2009,2	30.04.2014,30	27.92	1.71	2.79	0.60	
Deendayal Up	DDUGJY	Feeder Segre	2014-15	2017-18				0.60	
Scheduled Ca	SCSP	Electrification	2013-14	2014-15	12.61	0.00	1.26	0.60	
Scheduled Ca	SCSP	Electrification	2014-15	2015-16	0.00	0.00	0.00	0.60	
Tribal Sub Pla	TSP	Electrification	2014-15	2015-16	0.00	0.00	0.00	0.60	
New Scheme	Smartgrid	AT&C Loss r	2013-14	2016-17	0.00	0.00	0.00		
					1602.99	81.63	147.17		



Year 2

Project Details					Cumulative progress (Year on year)				Remarks
Project Code*	Project Title	Project Purpose**	Project Start Date (DD-MON-YY)	Project Completion date (DD-MON-YY)	Actual investment in the year (Rs Cr)	IDC Incurred	Other expense incurred	Percentage capitalisation	
APTD-Dis-078	SPA : PE	Electrification	2015-16	2015-16	242.52	9.28	24.25	0.60	Amount reflected in Equity
DAP-TD-DIS-4	Scheme for	Erection of n	16.07.2013	15.07.2016	57.00	2.37	5.24	0.60	component of capex column is
TL-TD-DIS-46	Installation	Erection of n	2015-16	2017-18	30.00	1.15	3.00	0.60	govt grants.
DPR submissi	IPDS sche	Distribution n	2015-16	2017-18	93.79	0.60	9.38	0.60	
Loan agreeme	Implemen	Conversion o	16-06-2011	2016-17	303.81	9.35	24.30	0.60	Amount reflected in internal accrual
New Scheme	SI:Material	Bulk Scheme	2015-16	2015-16	955.96	36.60	91.90	0.60	consumer contribution
								0.60	
31533012, 314	R-APDRF	System Impr	20.08.2010,0	30.04.2015,	21.47	1.10	2.15	0.60	
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	39.90	2.04	3.99	0.60	
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	149.21	7.62	14.92	0.60	
31533012.00	R-APDRF	System Impr	20.08.2010	30.04.2015	370.07	18.90	37.01	0.60	
31533001 to 3	R-APDRF	IT implement	30.04.2009,2	30.04.2014,30	27.92	1.71	2.79	0.60	
Deendayal Up	DDUGJY	Feeder Segre	2014-15	2018-19	119.62	0.76	11.96	0.60	
Scheduled Ca	SCSP	Electrification	2014-15	2015-16	32.61	0.00	3.26	0.60	
Scheduled Ca	SCSP	Electrification	2014-15	2015-16	4.21	0.00	0.42	0.60	
Tribal Sub Pla	TSP	Electrification	2014-15	2015-16	2.03	0.00	0.20	0.60	
Tribal Sub Pla	TSP	Electrification	2014-15	2015-16	44.05	0.00	4.41	0.60	
New Scheme	Smartgrid	AT&C Loss r	2013-14	2016-17	20.92	0.44	2.09	0.60	
New Scheme	ST&D stre	System impr	2015-16	2018-19	162.79	6.23	16.28	0.60	
					2677.88	98.15	257.56		







**Form 1.1(e) - Voltage wise asset base**

This form refers to the gross and net asset base calculation

Particulars	D Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks					
								Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Gross Fixed Assets</b>		6238.731	7726.047	9368.577	11478.84	13601.3	17322.89						
33 kV		996.6884	1239.886	1568.2	1933.858	2293.748	2795.836						
11 kV		3373.998	4270.523	5391.306	6795.553	8187.827	10554.77						
LT		1868.044	2215.638	2409.07	2749.43	3119.725	3972.28						
<b>Accumulated Depreciation</b>		3014.767	3606.254	4326.628	5188.748	6222.047	7434.237						
33 kV		482.871	572.2728	683.2118	820.7966	987.4341	1183.321						
11 kV		1516.179	1825.97	2216.175	2700.933	3296.908	4006.94						
LT		1015.717	1208.011	1427.241	1667.018	1937.705	2243.976						
<b>Net Fixed Assets</b>		3223.964	4119.793	5041.949	6290.093	7379.253	9888.653						
33 kV		513.8174	667.6129	884.9885	1113.061	1306.314	1612.516						
11 kV		1857.819	2444.554	3175.131	4094.62	4890.919	6547.834						
LT		852.3274	1007.626	981.8293	1082.412	1182.02	1728.304						

**Form1.1 g(i) - New Loans**

Please fill in the required details pertaining to each year

**Base Year****Amount in Rs. Crores**

Particulars	Amount	Purpose	Status	Agency	Agreed Interest Rate	Moratorium Period (Years)	Repayment period (Years)	Remarks
<b>Total</b>	<b>0.00</b>							

**Year 1****Amount in Rs. Crores**

Particulars	Amount	Purpose	Status	Agency	Agreed Interest Rate	Moratorium Period (Years)	Repayment period (Years)	Remarks
SI:Material	697.49	Bulk Scheme		REC	12.25%	2.00	7.00	
<b>Total</b>	<b>697.49</b>							

**Year 2****Amount in Rs. Crores**

Particulars	Amount	Purpose	Status	Agency	Agreed Interest Rate	Moratorium Period (Years)	Repayment period (Years)	Remarks
Distribution net wo	70.29	IPDS schem	DPR submission under process	FI/Banks	12.25%	3.00	13.00	
Feeder Segregation	89.71	DDUGJY	Deendayal Upadhyaya Gram Jyoti Yojana	REC	12.25%	3.00	13.00	
SI:Material	860.36	Bulk Schem	Scheme yet to be formulated	REC	12.25%	2.00	7.00	
Smartgrid Pilot in J	20.91	AT&C Loss	Scheme yet to be formulated	FI/Banks	12.25%	3.00	13.00	
P:SI	86.59	Erection of	Scheme under preparation	REC	12.25%	3.00	13.00	
ST&D strengthenin	1138.41	System imp	Scheme yet to be formulated	FI/Banks	12.25%	3.00	13.00	
<b>Total</b>	<b>2266.27</b>							

Year 3

Amount in Rs. Crores

Particulars	Amount	Purpose	Status	Agency	Agreed Interest Rate	Moratorium Period (Years)	Repayment period (Years)	Remarks
Conversion of LVDS	398.70	Conversion	Scheme yet to be formulated	FI/Banks	12.25%	3.00	13.00	
SI:Material	860.36	Bulk Schem	Scheme yet to be formulated	REC	12.25%	2.00	7.00	
<b>Total</b>	<b>1259.06</b>							

Year 4

Amount in Rs. Crores

Particulars	Amount	Purpose	Status	Agency	Agreed Interest Rate	Moratorium Period (Years)	Repayment period (Years)	Remarks
SI:Material	860.36	Bulk Schem	Scheme yet to be formulated	REC	12.25%	2.00	7.00	
<b>Total</b>	<b>860.36</b>							

Year 5

Amount in Rs. Crores

Particulars	Amount	Purpose	Status	Agency	Agreed Interest Rate	Moratorium Period (Years)	Repayment period (Years)	Remarks
SI:Material	860.36	Bulk Schem	Scheme yet to be formulated	REC	12.25%	2.00	7.00	
<b>Total</b>	<b>860.36</b>							





Loan Type	Account Code	Loan Agency (Source of Loan)	Loan Code*	Related Project Code	Year of incurring loan	Moratorium Period (in years)	Tenure of Loan (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on (if any)	Principle payment defaulted on (if any)
Funds from State Government and Institution approved by State Government			all						2234.72	617.69	190.44	2661.98	287.46	287.46		
REC						3 to 5 yrs	5 to 15 years	10.50 to 12.75%	887.88	350.02	78.31	1159.60	128.69	128.69		
PFC						3 yrs	13 years	9.00 to 12.75%	308.74	75.67	33.96	350.44	26.03	26.03		
Syndicate Bank						3 yrs	13 years	11.15 to 11.50%	472.96	0.00	21.23	451.73	53.67	53.67		
CANARABANK						3 yrs	13 years	11.15 TO 11.75%	128.37	26.86	19.29	135.94	15.62	15.62		
State Bank of Hyderabad						3 yrs	13 years	11.70 to 11.75%	235.91	165.14	12.28	388.77	40.47	40.47		
Corporation Bank						3 yrs	13 years	12.00%	173.87	0.00	18.09	155.78	20.06	20.06		
Karnataka Bank						2 yrs	12 years	12.25%	26.99	0.00	7.26	19.73	2.92	2.92		
Other Secured Loans			all						0.00	0.00	0.00	0.00	0.00	0.00		
Unsecured Loans			all						231.58	0.00	142.84	88.74	19.89	19.89		
Bonds			all						0.00	0.00	0.00	0.00	0.00	0.00		
Debentures			all						0.00	0.00	0.00	0.00	0.00	0.00		
Borrowings for working capital			all						0.00	0.00	0.00	0.00	0.00	0.00		
Government and Institution approved by			all						19.68	0.00	4.10	15.58	0.00	0.00		
Govt. Loan						0 to 3 yrs	13 to 15 yrs		19.68	0.00	4.10	15.58	0.00	0.00		
Other Unsecured Loans			all						211.90	0.00	138.74	73.16	19.89	19.89		
Syndicate Bank							10.00	12.00%	24.00	0.00	16.78	7.21	1.47	1.47		
AB							10.00	12.00%	10.51	0.00	5.49	5.03	1.00	1.00		
State Bank of Hyderabad							10.00	12.00%	123.83	0.00	62.90	60.92	14.78	14.78		
Canara Bank							3.00	11.00%	53.57	0.00	53.57	0.00	2.63	2.63		
<b>TOTAL</b>			<b>all</b>						<b>5433.39</b>	<b>2937.14</b>	<b>2035.60</b>	<b>6334.93</b>	<b>749.48</b>	<b>749.48</b>		

Loan Type	Account Code	Loan Agency (Source of Loan)	Loan Code*	Related Project Code	Year of incurring loan	Moratorium Period (in years)	Tenure of Loan (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on (if any)	Principle payment defaulted on (if any)
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Year 1

Amount in Rs. Crores

<b>Secured Loans</b>			all						6246.19	1694.68	340.82	7600.05	798.37	798.37		
Bonds			all						2349.79	0.00	30.34	2319.45	232.94	232.94		
Vidyut Bonds								11.60%	30.34	0.00	30.34	0.00	0.99	0.99		
FRP Bonds								10.00%	2319.45		0.00	2319.45	231.94	231.94		
									0.00							
									0.00							
Debentures			all						0.00	0.00	0.00	0.00	0.00	0.00		
Borrowings for working capital			all						1234.43	0.00	61.91	1172.52	136.24	136.24		
SBH (CC on Current Assets)						1.00		12.00%	223.19	0.00	0.00	223.19	26.78	26.78		
Tamilnadu Merchantaile Bank						10.00		12.00%	61.91	0.00	61.91	0.00	0.00	0.00		
Indian Overseas Bank						10.00		11.75%	103.19	0.00	0.00	103.19	12.12	12.12		
Bank of India						10.00		11.50%	144.46	0.00	0.00	144.46	16.61	16.61		
Andhra Bank						10.00		11.50%	216.69	0.00	0.00	216.69	24.92	24.92		
Syndicate Bank						10.00		11.50%	0.00	0.00	0.00	0.00	0.00	0.00		
Canara Bank						10.00		11.25%	0.00	0.00	0.00	0.00	0.00	0.00		
State Bank of Mysore						10.00		12.50%	0.00	0.00	0.00	0.00	0.00	0.00		
Vijaya Bank						10.00		11.45%	123.83	0.00	0.00	123.83	14.18	14.18		
Federal Bank						10.00		12.25%	30.96	0.00	0.00	30.96	3.79	3.79		
Central Bank of India						10.00		11.50%	103.19	0.00	0.00	103.19	11.87	11.87		
Punjab & Sind Bank						10.00		11.50%	82.55	0.00	0.00	82.55	9.49	9.49		
Indian Bank Koti						10.00		11.40%	144.46	0.00	0.00	144.46	16.47	16.47		
Funds from State Government and Institution approved by State Government			all						0.00	0.00	0.00	0.00	0.00	0.00		
Other Secured Loans			all						2661.98	1694.68	248.57	4108.08	429.20	429.20		

Loan Type	Account Code	Loan Agency (Source of Loan)	Loan Code*	Related Project Code	Year of incurring loan	Moratorium Period (in years)	Tenure of Loan (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on (if any)	Principle payment defaulted on (if any)
REC						3 to 5 yrs	5 to 15 years	10.50 to 12.75%	1159.60	1326.88	78.66	2407.82	250.29	250.29		
PFC						3 yrs	13 years	9.00 to 12.75%	350.44	127.21	33.96	443.69	49.05	49.05		
Syndicate Bank						3 yrs	13 years	11.15 to 11.50%	451.73	0.00	51.00	400.73	48.28	48.28		
CANARABANK						3 yrs	13 years	11.15 TO 11.75%	135.94	0.00	16.26	119.67	14.65	14.65		
State Bank of Hyderabad						3 yrs	13 years	11.70 to 11.75%	388.77	11.09	43.65	356.21	46.80	46.80		
Corporation Bank						3 yrs	13 years	12.00%	155.78	0.00	17.85	137.93	17.92	17.92		
Karnataka Bank						2 yrs	12 years	12.25%	19.73	0.00	7.21	12.52	2.02	2.02		
JICA						10 years	40 years	0.60%	0.00	34.14	0.00	34.14	0.19	0.19		
FI/Banks						3 yrs	13 years	12.25%	0.00	195.36	0.00	195.36	0.00	0.00		
<b>Unsecured Loans</b>			all						88.74	0.00	16.34	72.40	9.36	9.36		
Bonds			all						0.00	0.00	0.00	0.00	0.00	0.00		
Debentures			all						0.00	0.00	0.00	0.00	0.00	0.00		
Borrowings for working capital			all						0.00	0.00	0.00	0.00	0.00	0.00		
Funds from State Government and Institution approved by State Government			all						15.58	0.00	4.10	11.48	0.00	0.00		
Govt. Loan						0 to 3 yrs	13 to 15 yrs	1-7.5%	15.58	0.00	4.10	11.48	0.00	0.00		
<b>Other Unsecured Loans</b>			all						73.16	0.00	12.24	60.92	9.36	9.36		
Syndicate Bank							10.00	12.00%	7.21	0.00	7.21	0.00	1.57	1.57		
AB							10.00	12.00%	5.03	0.00	5.03	0.00	0.78	0.78		
State Bank of Hyderabad							10.00	12.00%	60.92	0.00	0.00	60.92	7.01	7.01		
<b>TOTAL</b>			all						6334.93	1694.68	357.17	7672.44	807.73	807.73		



Loan Type	Account Code	Loan Agency (Source of Loan)	Loan Code*	Related Project Code	Year of incurring loan	Moratorium Period (in years)	Tenure of Loan (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on (if any)	Principle payment defaulted on (if any)
<b>Other Secured Loans</b>			all						4108.08	1352.54	284.66	5175.97	581.90	581.90		
REC						3 to 5 yrs	5 to 15 years	10.50 to 12.75%	2407.82	964.94	124.60	3248.15	388.33	388.33		
PFC						3 yrs	13 years	9.00 to 12.75%	443.69	45.87	24.09	465.47	58.73	58.73		
Syndicate Bank						3 yrs	13 years	11.15 to 11.50%	400.73	0.00	51.00	349.74	42.65	42.65		
CANARABANK						3 yrs	13 years	11.15 TO 11.75%	119.67	0.00	16.26	103.41	12.85	12.85		
State Bank of Hyderabad						3 yrs	13 years	11.70 to 11.75%	356.21	0.00	43.65	312.57	42.14	42.14		
Corporation Bank						3 yrs	13 years	12.00%	137.93	0.00	17.85	120.08	15.82	15.82		
Karnataka Bank						2 yrs	12 years	12.25%	12.52	0.00	7.21	5.31	1.14	1.14		
JICA						10 years	40 years	0.60%	34.14	170.69	0.00	204.83	1.15	1.15		
FI/Banks						3 yrs	13 years	12.25%	195.36	171.04	0.00	366.40	19.09	19.09		
<b>Unsecured Loans</b>			all						72.40	0.00	4.10	68.30	7.31	7.31		
Bonds			all						0.00	0.00	0.00	0.00	0.00	0.00		
Debentures			all						0.00	0.00	0.00	0.00	0.00	0.00		
Borrowings for working capital			all						0.00	0.00	0.00	0.00	0.00	0.00		
Funds from State Government and Institution approved by State Government			all						11.48	0.00	4.10	7.38	0.00	0.00		
Govt. Loan						0 to 3 yrs	13 to 15 yrs	1-7.5%	11.48	0.00	4.10	7.38				
<b>Other Unsecured Loans</b>			all						60.92	0.00	0.00	60.92	7.31	7.31		
State Bank of Hyderabad						3.00	13.00	12.50%	60.92			60.92	7.31	7.31		
<b>TOTAL</b>			all						7672.44	1352.54	288.76	8736.23	957.40	957.40		

Loan Type	Account Code	Loan Agency (Source of Loan)	Loan Code*	Related Project Code	Year of incurring loan	Moratorium Period (in years)	Tenure of Loan (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on (if any)	Principle payment defaulted on (if any)
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Year 3

Amount in Rs. Crores

<b>Secured Loans</b>			all						8667.93	1771.50	550.48	9888.95	1075.64	1075.64		
Bonds			all						2319.45	0.00	0.00	2319.45	231.94	231.94		
									0.00							
FRP Bonds								10.00%	2319.45		0.00	2319.45	231.94	231.94		
									0.00							
									0.00							
Debentures			all						0.00	0.00	0.00	0.00	0.00	0.00		
Borrowings for working capital			all						1172.52	0.00	79.11	1093.40	127.12	127.12		
SBH (CC on Current Assets)								12.00%	223.19		0.00	223.19	26.78	26.78		
Tamilnadu Merchantaile Bank													0.00	0.00		
Indian Overseas Bank								11.75%	103.19		8.60	94.59	11.11	11.11		
Bank of India								11.50%	144.46		12.04	132.42	15.23	15.23		
Andhra Bank								11.50%	216.69		18.06	198.64	22.84	22.84		
Syndicate Bank								11.50%	0.00		0.00	0.00	0.00	0.00		
Canara Bank								11.25%	0.00		0.00	0.00	0.00	0.00		
State Bank of Mysore								12.50%	0.00		0.00	0.00	0.00	0.00		
Vijaya Bank								11.45%	123.83		10.32	113.51	13.00	13.00		
Federal Bank								12.25%	30.96		2.58	28.38	3.48	3.48		
Central Bank of India								11.50%	103.19		8.60	94.59	10.88	10.88		
Punjab & Sind Bank								11.50%	82.55		6.88	75.67	8.70	8.70		
Indian Bank Koti								11.40%	144.46		12.04	132.42	15.10	15.10		
Funds from State Government and Institution approved by State Government			all						0.00	0.00	0.00	0.00	0.00	0.00		
Other Secured Loans			all						5175.97	1771.50	471.37	6476.10	716.57	716.57		
REC					3 to 5 yrs	5 to 15 years		10.50 to 12.75%	3248.15	1418.62	315.90	4350.88	509.82	509.82		
PFC					3 yrs	13 years		9.00 to 12.75%	465.47	7.64	20.80	452.31	62.23	62.23		
Syndicate Bank					3 yrs	13 years		11.15 to 11.50%	349.74	0.00	51.00	298.74	36.77	36.77		

Loan Type	Account Code	Loan Agency (Source of Loan)	Loan Code*	Related Project Code	Year of incurring loan	Moratorium Period (in years)	Tenure of Loan (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on (if any)	Principle payment defaulted on (if any)
CANARABANK						3 yrs	13 years	11.15 TO11.75%	103.41	0.00	16.26	87.15	10.97	10.97		
State Bank of Hyderabad						3 yrs	13 years	11.70 to 11.75%	312.57	0.00	44.75	267.82	36.54	36.54		
Corporation Bank						3 yrs	13 years	12.00%	120.08	0.00	17.85	102.23	13.64	13.64		
Karnataka Bank						2 yrs	12 years	12.25%	5.31	0.00	4.81	0.50	0.27	0.27		
JICA						10years	40 years	0.60%	204.83	136.53	0.00	341.36	1.98	1.98		
FI/Banks						3 yrs	13 years	12.25%	366.40	208.71	0.00	575.11	44.36	44.36		
<b>Unsecured Loans</b>			all						68.30	0.00	9.18	59.12	6.42	6.42		
Bonds			all						0.00	0.00	0.00	0.00	0.00	0.00		
Debentures			all						0.00	0.00	0.00	0.00	0.00	0.00		
Borrowings for working capital			all						0.00	0.00	0.00	0.00	0.00	0.00		
Funds from State Government and Institution approved by State Government			all						7.38	0.00	4.10	3.27	0.00	0.00		
Govt. Loan						0 to 3 yrs	13 to 15 yrs	1-7.5%	7.38	0.00	4.10	3.27				
Other Unsecured Loans			all						60.92	0.00	5.08	55.84	6.42	6.42		
State Bank of Hyderabad						3.00	13.00	12.50%	60.92		5.08	55.84	6.42	6.42		
									0.00							
<b>TOTAL</b>			all						8736.23	1771.50	559.66	9948.07	1082.06	1082.06		

Loan Type	Account Code	Loan Agency (Source of Loan)	Loan Code*	Related Project Code	Year of incurring loan	Moratorium Period (in years)	Tenure of Loan (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on (if any)	Principle payment defaulted on (if any)
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Year 4

Amount in Rs. Crores

<b>Secured Loans</b>			all						9888.95	1871.24	1138.02	10622.16	1202.37	1202.37		
Bonds			all						2319.45	0.00	386.57	1932.87	231.94	231.94		
									0.00			0.00				
FRP Bonds								10.00%	2319.45		386.57	1932.87	231.94	231.94		
									0.00			0.00				
									0.00							
Debentures			all						0.00	0.00	0.00	0.00	0.00	0.00		
Borrowings for working capital			all						1093.40	0.00	79.11	1014.29	118.00	118.00		
SBH (CC on Current Assets)								12.00%	223.19	0.00	0.00	223.19	26.78	26.78		
Tamilnadu Merchantaile Bank													0.00	0.00		
Indian Overseas Bank								11.75%	94.59	0.00	8.60	85.99	10.10	10.10		
Bank of India								11.50%	132.42	0.00	12.04	120.39	13.84	13.84		
Andhra Bank								11.50%	198.64	0.00	18.06	180.58	20.77	20.77		
Syndicate Bank								11.50%	0.00	0.00	0.00	0.00	0.00	0.00		
Canara Bank								11.25%	0.00	0.00	0.00	0.00	0.00	0.00		
State Bank of Mysore								12.50%	0.00	0.00	0.00	0.00	0.00	0.00		
Vijaya Bank								11.45%	113.51	0.00	10.32	103.19	11.81	11.81		
Federal Bank								12.25%	28.38	0.00	2.58	25.80	3.16	3.16		
Central Bank of India								11.50%	94.59	0.00	8.60	85.99	9.89	9.89		
Punjab & Sind Bank								11.50%	75.67	0.00	6.88	68.79	7.91	7.91		
Indian Bank Koti								11.40%	132.42	0.00	12.04	120.39	13.72	13.72		
Funds from State Government and Institution approved by State Government			all						0.00	0.00	0.00	0.00	0.00	0.00		
Other Secured Loans			all						6476.10	1871.24	672.34	7674.99	852.43	852.43		
REC						3 to 5 yrs	5 to 15 years	10.50 to 12.75%	4350.88	1481.78	507.96	5324.69	615.23	615.23		
PFC						3 yrs	13 years	9.00 to 12.75%	452.31	0.00	34.51	417.79	63.31	63.31		
Syndicate Bank						3 yrs	13 years	11.15 to 11.50%	298.74	0.00	51.00	247.74	31.13	31.13		
CANARABANK						3 yrs	13 years	11.15 TO 11.75%	87.15	0.00	16.26	70.89	9.12	9.12		



Loan Type	Account Code	Loan Agency (Source of Loan)	Loan Code*	Related Project Code	Year of incurring loan	Moratorium Period (in years)	Tenure of Loan (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on (if any)	Principle payment defaulted on (if any)
State Bank of Hyderabad						3 yrs	13 years	11.70 to 11.75%	267.82	0.00	44.75	223.06	30.69	30.69		
Corporation Bank						3 yrs	13 years	12.00%	102.23	0.00	17.85	84.39	11.49	11.49		
Karnataka Bank						2 yrs	12 years	12.25%	0.50	0.00	0.00	0.50	0.00	0.00		
JICA						10years	40 years	0.60%	341.36	0.00	0.00	341.36	2.05	2.05		
FI/Banks						3 yrs	13 years	12.25%	575.11	389.46	0.00	964.57	89.40	89.40		
<b>Unsecured Loans</b>			all						59.12	0.00	8.35	50.77	5.84	5.84		
Bonds			all						0.00	0.00	0.00	0.00	0.00	0.00		
Debentures			all						0.00	0.00	0.00	0.00	0.00	0.00		
Borrowings for working capital			all						0.00	0.00	0.00	0.00	0.00	0.00		
Funds from State Government and Institution approved by State Government			all						3.27	0.00	3.27	0.00	0.00	0.00		
Govt. Loan						0 to 3 yrs	13 to 15 yrs	1-7.5%	3.27	0.00	3.27	0.00				
Other Unsecured Loans			all						55.84	0.00	5.08	50.77	5.84	5.84		
State Bank of Hyderabad								11.50%	55.84	0.00	5.08	50.77	5.84	5.84		
									0.00							
<b>TOTAL</b>			all						9948.07	1871.24	1146.37	10672.93	1208.21	1208.21		

Loan Type	Account Code	Loan Agency (Source of Loan)	Loan Code*	Related Project Code	Year of incurring loan	Moratorium Period (in years)	Tenure of Loan (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on (if any)	Principle payment defaulted on (if any)
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Year 5

Amount in Rs. Crores

<b>Secured Loans</b>			all						10622.16	2557.77	1393.63	11786.30	1317.93	1317.93		
Bonds			all						1932.87	0.00	386.57	1546.30	193.29	193.29		
									0.00							
FRP Bonds								10.00%	1932.87		386.57	1546.30	193.29	193.29		
									0.00							
									0.00							
Debentures			all						0.00	0.00	0.00	0.00	0.00	0.00		
Borrowings for working capital			all						1014.29	0.00	79.11	935.18	110.74	110.74		
SBH (CC on Current Assets)								12.00%	223.19	0.00	0.00	223.19	28.21	28.21		
Tamilnadu Merchantaile Bank													0.00	0.00		
Indian Overseas Bank								11.75%	85.99	0.00	8.60	77.39	9.14	9.14		
Bank of India								11.50%	120.39	0.00	12.04	108.35	12.53	12.53		
Andhra Bank								11.50%	180.58	0.00	18.06	162.52	18.79	18.79		
								11.50%	0.00	0.00	0.00	0.00				
								11.25%	0.00	0.00	0.00	0.00				
								12.50%	0.00	0.00	0.00	0.00				
Vijaya Bank								11.45%	103.19	0.00	10.32	92.87	10.69	10.69		
Federal Bank								12.25%	25.80	0.00	2.58	23.22	2.86	2.86		
Central Bank of India								11.50%	85.99	0.00	8.60	77.39	8.95	8.95		
Punjab & Sind Bank								11.50%	68.79	0.00	6.88	61.91	7.16	7.16		
Indian Bank Koti								11.40%	120.39	0.00	12.04	108.35	12.42	12.42		
Funds from State Government and Institution approved by State Government			all						0.00	0.00	0.00	0.00	0.00	0.00		
Other Secured Loans			all						7674.99	2557.77	927.95	9304.82	1013.91	1013.91		

Loan Type	Account Code	Loan Agency (Source of Loan)	Loan Code*	Related Project Code	Year of incurring loan	Moratorium Period (in years)	Tenure of Loan (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on (if any)	Principle payment defaulted on (if any)
REC						3 to 5 yrs	5 to 15 years	10.50 to 12.75%	5324.69	1382.79	718.93	5988.55	697.53	697.53		
PFC						3 yrs	13 years	9.00 to 12.75%	417.79	0.00	24.10	393.69	61.63	61.63		
Syndicate Bank						3 yrs	13 years	11.15 to 11.50%	247.74	0.00	51.00	196.75	25.40	25.40		
CANARABANK						3 yrs	13 years	11.15 TO 11.75%	70.89	0.00	16.26	54.62	7.29	7.29		
State Bank of Hyderabad						3 yrs	13 years	11.70 to 11.75%	223.06	0.00	44.75	178.31	24.81	24.81		
Corporation Bank						3 yrs	13 years	12.00%	84.39	0.00	17.85	66.54	9.35	9.35		
Karnataka Bank						2 yrs	12 years	12.25%	0.50	0.00	0.00	0.50	0.00	0.00		
JICA						10 years	40 years	0.60%	341.36	0.00	0.00	341.36	2.05	2.05		
FI/Banks						3 yrs	13 years	12.25%	964.57	1174.98	55.05	2084.50	185.85	185.85		
<b>Unsecured Loans</b>			all						50.77	0.00	5.08	45.69	5.26	5.26		
Bonds			all						0.00	0.00	0.00	0.00	0.00	0.00		
Debentures			all						0.00	0.00	0.00	0.00	0.00	0.00		
Borrowings for working capital			all						0.00	0.00	0.00	0.00	0.00	0.00		
Funds from State Government and Institution approved by State Government			all						0.00	0.00	0.00	0.00	0.00	0.00		
Other Unsecured Loans			all						50.77	0.00	5.08	45.69	5.26	5.26		
State Bank of Hyderabad								11.50%	50.77	0.00	5.08	45.69	5.26	5.26		
<b>TOTAL</b>			all						10672.93	2557.77	1398.71	11831.99	1323.19	1323.19		

**Form 1.1h - FOREIGN CURRENCY LOANS & CREDIT**

This form pertains to the Total Foreign Currency Loans and Debentures

Please fill in the required details pertaining to each year

**Base Year**

Loan Type	Loan Agency (Source of Loan)	Year of Sanction (DD-MMM-YY)	Reason for incurring Loan*	Related Project Code	Tenure of Loan (in years)	Currency of Loan	Amount sanctioned (in FCY)	Initial Exchange Rate	Current Exchange Rate	Moratorium Period (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year
Secured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
Unsecured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
<b>TOTAL</b>												0.00	0.00	0.00	0.00

**Year 1**

Loan Type	Loan Agency (Source of Loan)	Year of Sanction (DD-MMM-YY)	Reason for incurring Loan*	Related Project Code	Tenure of Loan (in years)	Currency of Loan	Amount sanctioned (in FCY)	Initial Exchange Rate	Current Exchange Rate	Moratorium Period (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year
Secured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
Unsecured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
<b>TOTAL</b>												0.00	0.00	0.00	0.00

**Year 2**

Loan Type	Loan Agency (Source of Loan)	Year of Sanction (DD-MMM-YY)	Reason for incurring Loan*	Related Project Code	Tenure of Loan (in years)	Currency of Loan	Amount sanctioned (in FCY)	Initial Exchange Rate	Current Exchange Rate	Moratorium Period (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year
Secured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
Unsecured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
<b>TOTAL</b>												0.00	0.00	0.00	0.00

Year 3

Loan Type	Loan Agency (Source of Loan)	Year of Sanction (DD- MMM- YY)	Reason for incurring Loan*	Related Project Code	Tenure of Loan (in years)	Currency of Loan	Amount sanctioned (in FCY)	Initial Exchange Rate	Current Exchange Rate	Moratorium Period (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year
Secured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
															0.00
															0.00
Unsecured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
															0.00
<b>TOTAL</b>												0.00	0.00	0.00	0.00

Year 4

Loan Type	Loan Agency (Source of Loan)	Year of Sanction (DD- MMM- YY)	Reason for incurring Loan*	Related Project Code	Tenure of Loan (in years)	Currency of Loan	Amount sanctioned (in FCY)	Initial Exchange Rate	Current Exchange Rate	Moratorium Period (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year
Secured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
Unsecured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
<b>TOTAL</b>												0.00	0.00	0.00	0.00

Year 5

Loan Type	Loan Agency (Source of Loan)	Year of Sanction (DD- MMM- YY)	Reason for incurring Loan*	Related Project Code	Tenure of Loan (in years)	Currency of Loan	Amount sanctioned (in FCY)	Initial Exchange Rate	Current Exchange Rate	Moratorium Period (in years)	Rate of Interest	Balance at the beginning of the year	Amount received during the year	Amount redeemed during the year	Balance outstanding at the end of the year
Secured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
Unsecured Loans												0.00	0.00	0.00	0.00
															0.00
															0.00
<b>TOTAL</b>												0.00	0.00	0.00	0.00

**Form 1.1h - FOREIGN C**

This form pertains to the  
Please fill in the required

**Base Year                      Amount in Rs. Crores**

Loan Type	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on	Principle payment defaulted on	Pcode	Loan Code	Remarks
Secured Loans	0.00	0.00					
Unsecured Loans	0.00	0.00					
<b>TOTAL</b>	0.00	0.00	0.00	0.00			

**Year 1                              Amount in Rs. Crores**

Loan Type	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on	Principle payment defaulted on	Pcode	Loan Code	Remarks
Secured Loans	0.00	0.00					
Unsecured Loans	0.00	0.00					
<b>TOTAL</b>	0.00	0.00	0.00	0.00			

**Year 2                              Amount in Rs. Crores**

Loan Type	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on	Principle payment defaulted on	Pcode	Loan Code	Remarks
Secured Loans	0.00	0.00					
Unsecured Loans	0.00	0.00					
<b>TOTAL</b>	0.00	0.00	0.00	0.00			

**Year 3**                      **Amount in Rs. Crores**

Loan Type	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on	Principle payment defaulted on	Pcode	Loan Code	Remarks
Secured Loans	0.00	0.00					
Unsecured Loans	0.00	0.00					
<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>			

**Year 4**                      **Amount in Rs. Crores**

Loan Type	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on	Principle payment defaulted on	Pcode	Loan Code	Remarks
Secured Loans	0.00	0.00					
Unsecured Loans	0.00	0.00					
<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>			

**Year 5**                      **Amount in Rs. Crores**

Loan Type	Interest Expense incurred during the year	Interest Expense paid till end of the year	Interest payment defaulted on	Principle payment defaulted on	Pcode	Loan Code	Remarks
Secured Loans	0.00	0.00					
Unsecured Loans	0.00	0.00					
<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>			

**Form 1.1j - CURRENT ASSETS**

This form refers to the total current assets

Please fill in the required details pertaining to each year

Amount in Rs. Crores

PARTICULARS	D Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks
MATERIAL STOCK & RELATED ACCOUNTS		186.68	206.34	289.63	295.51	312.00	301.54	
SUNDRY DEBTORS		1844.00	2174.42	2395.80	2640.46	2910.89	3209.88	
CASH AND BANK		216.84	146.85	329.98	250.36	154.20	218.07	
LOANS AND ADVANCES		275.66	276.45	277.29	278.16	279.08	280.05	
OTHER CURRENT ASSETS		2217.32	2104.28	1383.31	1649.05	1924.28	2228.73	
<b>GRAND TOTAL</b>		<b>4740.50</b>	<b>4908.34</b>	<b>4676.00</b>	<b>5113.55</b>	<b>5580.45</b>	<b>6238.27</b>	



**Form 1.1k - CURRENT LIABILITIES**

This form refers to the total current liabilities

Please fill in the required details pertaining to each year

Amount in Rs. Crores

PARTICULARS	D Link	Amount in Rs. Crores						Remarks					
		Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
LIABILITIES FOR PURCHASE OF POWER		875.36	1101.47	1199.02	1402.32	1631.95	1885.97						
LIABILITIES FOR CAPITAL WORKS		11.46	22.29	31.88	31.73	32.87	35.52						
LIABILITY FOR O&M SUPPLIES		13.92	15.48	19.46	24.02	28.91	34.03						
STAFF RELATED LIABILITIES		209.78	236.31	267.37	303.83	346.74	397.34						
OTHER LIABILITIES AND PROVISIONS		4036.45	3689.85	3277.14	2811.33	2728.98	2629.76						
DEPOSITS FOR ELECTRIFICATION/SERVICE CONNECTIONS ETC.		30.98	32.53	34.16	35.87	37.66	39.54						
CONSUMPTION DEPOSITS FROM CONSUMERS		1903.83	2094.55	2590.93	3127.02	3682.18	4296.30						
Deposits and retentions from suppliers and contractors		45.57	54.69	57.42	60.29	63.31	66.47						
<b>GRAND TOTAL</b>		<b>7127.35</b>	<b>7247.17</b>	<b>7477.39</b>	<b>7796.42</b>	<b>8552.62</b>	<b>9384.93</b>						

**Form 1.1n - RESERVES**

Amount in Rs.Crore

This form pertains to the total reserves  
Please fill in the required details pertaining to each year

PARTICULARS	D Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks					
								Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Consumer Contributions and Grants		1622.75	1663.37	1993.55	2373.33	2723.32	2750.00						
General Reserve													
Contingency Reserve		29.50	29.50	29.50	29.50	29.50	29.50						
Others		6.72	6.72	6.72	6.72	6.72	6.72						
<b>GRAND TOTAL</b>		<b>1658.97</b>	<b>1699.59</b>	<b>2029.77</b>	<b>2409.55</b>	<b>2759.55</b>	<b>2786.23</b>						

Form : 1.2 - Cash Flow Statement

Cash Flows from Operating Activities	D Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks						
								Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	
Net Profit before Tax			110.95	160.54	209.77	258.93	312.72							
Adjustments for depreciation			298.73	405.35	512.36	644.54	793.87	Depreciation during the year is net off withdrawal of						
Adjustments for foreign exchange loss / (gain)								consumer contribution of the year						
Provision for diminution in value of investments														
Interest expense (income)			807.73	957.40	1082.06	1208.21	1323.19							
Adjustment for employee terminal benefits														
<b>Operating income before working capital charges</b>		<b>0.00</b>	<b>1217.41</b>	<b>1523.29</b>	<b>1804.18</b>	<b>2111.68</b>	<b>2429.79</b>							
Decrease / (increase) in trade and other receivables			-218.17	498.76	-511.28	-546.58	-604.40							
Decrease / (increase) in inventories			-19.66	-83.28	-5.88	-16.49	10.45							
Decrease / (increase) in miscellaneous expenditure not written off														
Interest to consumers on security deposit														
Increase/(Decrease) in trade payables			-77.49	33.23	321.90	759.16	835.37							
<b>Cash generated from operations</b>		<b>0.00</b>	<b>902.09</b>	<b>1972.00</b>	<b>1608.92</b>	<b>2307.77</b>	<b>2671.21</b>							
Interest paid														
Provision for Income Tax			36.61	52.98	69.22	85.45	103.20							
Extraordinary gain / (loss)														
<b>Net cash from generated from operating activities</b>		<b>0.00</b>	<b>865.47</b>	<b>1919.02</b>	<b>1539.70</b>	<b>2222.32</b>	<b>2568.01</b>							
<b>Cash Flows from Investing Activities</b>														
Acquisition of subsidiary														
Purchase of Fixed Assets (Including Interest capitalised)			1714.79	2404.83	2397.50	2494.28	2706.84							
Reserves in Government Bonds														
Interest received														
Dividends received														
Purchase of Other Investment Activities			0.00	0.00	0.00	0.00	0.00							
Sale of Other Investment Activities														
Increase /(Decrease) in liability for Capital works														
Accumulated interest on investments through contingency reserve			0.00	0.00	0.00	0.00	0.00							
<b>Net cash used in (from) investment activities</b>		<b>0.00</b>	<b>1714.79</b>	<b>2404.83</b>	<b>2397.50</b>	<b>2494.28</b>	<b>2706.84</b>							
<b>Cash Flows from Financing Activities</b>														
Proceeds from issuance of share capital			0.00	0.00	0.00	0.00	0.00							
Proceeds from Long Term Debt			1694.68	1352.54	1771.50	1871.24	2557.77							
Repayment of long term debt			357.16	288.76	559.66	1146.37	1398.71							
Proceeds from Govt. Subsidies and Grants			249.55	562.57	648.40	659.13	366.83	This includes consumer contribution and grants.						
Payment of financial lease liabilities														
Interest Paid			807.73	957.40	1082.06	1208.21	1323.19							
Dividends paid			17.10					adjustment						
<b>Net cash from (used in) financing activities</b>		<b>-17.10</b>	<b>779.33</b>	<b>668.95</b>	<b>778.18</b>	<b>175.79</b>	<b>202.70</b>							
<b>Net Change in Cash Equivalents</b>		<b>-17.10</b>	<b>-69.99</b>	<b>183.14</b>	<b>-79.62</b>	<b>-96.17</b>	<b>63.87</b>							
Cash and Cash Equivalents at Beginning of Year		233.93	216.84	146.85	329.98	250.36	154.20							
Cash and Cash Equivalents at End of Year		216.84	146.85	329.98	250.36	154.20	218.07							

**Form 1.3a - Operation and Maintenance Expenses**

This form pertains to the Operation and Maintenance Expenses

Aggregate of all circles		Amount in Rs crores					
Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Operation &amp; Maintenance Expenses</b>		<b>1001.09</b>	<b>1226.24</b>	<b>1515.12</b>	<b>1879.21</b>	<b>2279.90</b>	<b>2739.02</b>
Employee Cost		749.01	934.38	1150.96	1428.78	1735.92	2093.13
Administrative & General Expenses		85.01	106.05	130.63	162.16	197.02	237.56
Repair & Maintenance Expenses		167.07	185.81	233.53	288.27	346.96	408.33
<b>Technical Details</b>							
Total No of consumers		6295242.00	6730042.00	6504899.00	7433712.00	7879736.00	8352515.00
LT consumers		6287599.00	6721876.00	6496089.00	7424371.00	7869833.00	8342021.00
HT consumers		7643.00	8166.00	8810.00	9341.00	9903.00	10494.00
HT 11kV Consumers		7153.00	7652.00	8260.00	8757.00	9283.00	9837.00
HT 33 kV consumers		433.00	451.00	471.00	500.00	531.00	562.00
HT132 kV consumers		57.00	63.00	79.00	84.00	89.00	95.00
Numer of Substations		1138.00	1275.00	1410.00	1544.00	1660.00	1779.00
Capacity of Substations (kVA)		11222.00	12188.00	13123.00	14056.00	14857.00	15679.00
Peak Demand (MW)							
Total Length (ckt-km)		237613.17	92683.46	109976.34	123516.56	136628.07	150757.83
LT Line Length		159768.00					
11 kV Line Length		66224.38	80023.96	96271.76	108755.16	120896.84	134015.41
33 kV Line Length		11620.79	12659.50	13704.58	14761.40	15731.22	16742.42
Energy Input (MU)		0.00	31654.90	35263.83	39596.53	43773.89	48115.12
Total Sales (MU)		25651.69	28395.89	31603.88	36498.91	40688.56	44998.02
LT Sales		15398.95	16658.24	17664.88	19084.91	20619.08	22277.69
HT Sales		10252.74	11737.64	13939.00	17414.00	20069.48	22720.32
11 kV Sales		3702.94	4044.19	4387.00	4844.00	5351.95	5909.29
33 kV Sales		4063.51	4903.33	5744.00	6846.00	8157.40	9723.09
132 kV Sales		2486.28	2790.13	3808.00	5724.00	6560.13	7087.94

**Circle wise Details**

Circle 1 (Please enter the circle name below)

Mahabubnagar

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Operation &amp; Maintenance Expenses</b>		<b>162.81</b>	<b>202.13</b>	<b>249.43</b>	<b>308.68</b>	<b>373.80</b>	<b>448.06</b>
Employee Cost		114.72	146.50	179.99	222.88	270.30	325.43
Administrative & General Expenses		13.02	16.63	20.43	25.30	30.68	36.93
Repair & Maintenance Expenses		35.07	39.00	49.01	60.50	72.82	85.70
<b>Technical Details</b>							
Total No of consumers		<b>810431.00</b>	<b>866405.00</b>	<b>902807.00</b>	<b>956976.00</b>	<b>1014395.00</b>	<b>1075258.00</b>
LT consumers		809849.00	865785.00	902138.00	956267.00	1013643.00	1074461.00
HT consumers		<b>582.00</b>	<b>620.00</b>	<b>669.00</b>	<b>709.00</b>	<b>752.00</b>	<b>797.00</b>
HT 11kV Consumers		491.00	525.00	567.00	601.00	637.00	675.00
HT 33 kV consumers		80.00	83.00	87.00	92.00	98.00	104.00
HT132 kV consumers		11.00	12.00	15.00	16.00	17.00	18.00
Numer of Substations		269.00	299.00	329.00	359.00	389.00	419.00
Capacity of Substations (kVA)		1899.00	2064.00	2229.00	2394.00	2559.00	2724.00
Peak Demand (MW)							
Total Length (ckt-km)		<b>77472.00</b>	<b>85179.00</b>	<b>93872.00</b>	<b>101199.00</b>	<b>108290.00</b>	<b>115625.00</b>
LT Line Length		52088.00	54865.00	57800.00	60637.00	63376.00	66018.00
11 kV Line Length		22362.00	27022.00	32508.00	36723.00	40823.00	45253.00
33 kV Line Length		3022.00	3292.00	3564.00	3839.00	4091.00	4354.00
Energy Input (MU)			5005.46	5526.70	6083.04	6757.34	7514.67
Total Sales (MU)		<b>3929.00</b>	<b>4382.00</b>	<b>4818.00</b>	<b>5426.00</b>	<b>6071.00</b>	<b>6792.00</b>
LT Sales		2609.00	2822.00	2993.00	3233.00	3493.00	3774.00
HT Sales		<b>1320.00</b>	<b>1560.00</b>	<b>1825.00</b>	<b>2193.00</b>	<b>2578.00</b>	<b>3018.00</b>
11 kV Sales		229.00	250.00	271.00	299.00	330.00	365.00
33 kV Sales		1001.00	1208.00	1415.00	1686.00	2009.00	2395.00
132 kV Sales		90.00	102.00	139.00	208.00	239.00	258.00

Circle 2 (Please enter the circle name below)

Medak

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Operation &amp; Maintenance Expenses</b>		<b>174.78</b>	<b>220.35</b>	<b>271.35</b>	<b>335.61</b>	<b>406.34</b>	<b>487.42</b>
Employee Cost		132.40	170.57	209.36	259.01	313.91	377.70
Administrative & General Expenses		15.03	19.36	23.76	29.40	35.63	42.87
Repair & Maintenance Expenses		27.35	30.42	38.23	47.19	56.80	66.85
<b>Technical Details</b>							
Total No of consumers		<b>834587.00</b>	<b>892230.00</b>	<b>929744.00</b>	<b>985530.00</b>	<b>1044662.00</b>	<b>1107340.00</b>
LT consumers		833235.00	890786.00	928189.00	983881.00	1042914.00	1105488.00
HT consumers		<b>1352.00</b>	<b>1444.00</b>	<b>1555.00</b>	<b>1649.00</b>	<b>1748.00</b>	<b>1852.00</b>
HT 11kV Consumers		1232.00	1318.00	1423.00	1508.00	1599.00	1694.00
HT 33 kV consumers		114.00	119.00	124.00	132.00	140.00	148.00
HT132 kV consumers		6.00	7.00	8.00	9.00	9.00	10.00
Numer of Substations		280.00	310.00	340.00	370.00	400.00	430.00
Capacity of Substations (kVA)		2034.00	2199.00	2364.00	2529.00	2694.00	2859.00
Peak Demand (MW)							
Total Length (ckt-km)		<b>39921.00</b>	<b>44075.00</b>	<b>48773.00</b>	<b>52709.00</b>	<b>56518.00</b>	<b>60472.00</b>
LT Line Length		25268.00	26615.00	28039.00	29415.00	30744.00	32025.00
11 kV Line Length		12584.00	15206.00	18294.00	20666.00	22973.00	25466.00
33 kV Line Length		2069.00	2254.00	2440.00	2628.00	2801.00	2981.00
Energy Input (MU)			5005.00	5527.00	6083.00	6757.00	7515.00
Total Sales (MU)		<b>4535.05</b>	<b>5069.00</b>	<b>5684.00</b>	<b>6600.00</b>	<b>7427.00</b>	<b>8303.00</b>
LT Sales		2251.05	2435.00	2582.00	2790.00	3014.00	3257.00
HT Sales		<b>2284.00</b>	<b>2634.00</b>	<b>3102.00</b>	<b>3810.00</b>	<b>4413.00</b>	<b>5046.00</b>
11 kV Sales		753.00	822.00	892.00	985.00	1088.00	1201.00
33 kV Sales		1130.00	1363.00	1597.00	1903.00	2268.00	2703.00
132 kV Sales		401.00	449.00	613.00	922.00	1057.00	1142.00

Circle 3 (Please enter the circle name below)

Nalgonda

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Operation &amp; Maintenance Expenses</b>		<b>187.73</b>	<b>228.45</b>	<b>282.49</b>	<b>350.59</b>	<b>425.53</b>	<b>511.37</b>
Employee Cost		139.73	173.07	213.36	265.06	322.22	388.71
Administrative & General Expenses		15.86	19.64	24.22	30.08	36.57	44.12
Repair & Maintenance Expenses		32.14	35.74	44.92	55.45	66.74	78.55
<b>Technical Details</b>							
Total No of consumers		<b>1021859.00</b>	<b>1092438.00</b>	<b>1138345.00</b>	<b>1206646.00</b>	<b>1279044.00</b>	<b>1355787.00</b>
LT consumers		1021057.00	1091580.00	1137415.00	1205660.00	1277999.00	1354679.00
HT consumers		<b>802.00</b>	<b>858.00</b>	<b>930.00</b>	<b>986.00</b>	<b>1045.00</b>	<b>1108.00</b>
HT 11kV Consumers		743.00	795.00	858.00	910.00	964.00	1022.00
HT 33 kV consumers		34.00	35.00	37.00	39.00	42.00	44.00
HT132 kV consumers		25.00	28.00	35.00	37.00	39.00	42.00
Numer of Substations		250.00	280.00	310.00	340.00	370.00	400.00
Capacity of Substations (kVA)		2144.00	2309.00	2474.00	2639.00	2804.00	2969.00
Peak Demand (MW)							
Total Length (ckt-km)		<b>63898.08</b>	<b>70148.05</b>	<b>77186.76</b>	<b>83138.90</b>	<b>88898.27</b>	<b>94846.68</b>
LT Line Length		43529.00	45849.55	48302.37	50672.95	52962.24	55169.97
11 kV Line Length		17722.00	21414.79	25762.69	29103.52	32352.74	35863.08
33 kV Line Length		2647.08	2883.71	3121.70	3362.43	3583.29	3813.63
Energy Input (MU)			6020.04	7022.98	8512.01	9437.09	10210.86
Total Sales (MU)		<b>4785.29</b>	<b>5269.13</b>	<b>6120.51</b>	<b>7593.80</b>	<b>8480.30</b>	<b>9228.62</b>
LT Sales		2724.55	2947.48	3125.51	3376.80	3648.30	3941.62
HT Sales		<b>2060.74</b>	<b>2321.64</b>	<b>2995.00</b>	<b>4217.00</b>	<b>4832.00</b>	<b>5287.00</b>
11 kV Sales		380.94	416.19	451.00	498.00	551.00	608.00
33 kV Sales		241.51	291.33	341.00	407.00	485.00	578.00
132 kV Sales		1438.28	1614.13	2203.00	3312.00	3796.00	4101.00

Circle 4 (Please enter the circle name below)

Rangareddy East

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Operation &amp; Maintenance Expenses</b>		<b>86.31</b>	<b>102.72</b>	<b>127.39</b>	<b>158.36</b>	<b>192.41</b>	<b>231.29</b>
Employee Cost		61.25	74.17	91.67	114.16	139.03	167.97
Administrative & General Expenses		6.95	8.42	10.40	12.96	15.78	19.06
Repair & Maintenance Expenses		18.11	20.14	25.31	31.24	37.60	44.25
<b>Technical Details</b>							
Total No of consumers		<b>728247.00</b>	<b>778546.00</b>	<b>811276.00</b>	<b>859952.00</b>	<b>911550.00</b>	<b>966242.00</b>
LT consumers		727286.00	777519.00	810166.00	858776.00	910303.00	964921.00
HT consumers		<b>961.00</b>	<b>1027.00</b>	<b>1110.00</b>	<b>1176.00</b>	<b>1247.00</b>	<b>1321.00</b>
HT 11kV Consumers		936.00	1001.00	1081.00	1146.00	1215.00	1287.00
HT 33 kV consumers		21.00	22.00	23.00	24.00	26.00	27.00
HT132 kV consumers		4.00	4.00	6.00	6.00	6.00	7.00
Numer of Substations		64.00	72.00	80.00	93.00	98.00	104.00
Capacity of Substations (kVA)		833.10	891.10	949.10	1038.10	1072.10	1117.10
Peak Demand (MW)							
Total Length (ckt-km)		<b>10667.15</b>	<b>11680.35</b>	<b>12815.13</b>	<b>13784.46</b>	<b>14720.63</b>	<b>15685.66</b>
LT Line Length		7204.72	7588.81	7994.79	8387.16	8766.07	9131.49
11 kV Line Length		2686.11	3245.83	3904.84	4411.20	4903.69	5435.75
33 kV Line Length		776.31	845.71	915.50	986.10	1050.87	1118.43
Energy Input (MU)			2621.94	2875.33	3165.23	3458.71	3763.05
Total Sales (MU)		<b>2097.82</b>	<b>2295.51</b>	<b>2506.89</b>	<b>2824.29</b>	<b>3108.17</b>	<b>3401.39</b>
LT Sales		1413.82	1529.51	1621.89	1752.29	1893.17	2045.39
HT Sales		<b>684.00</b>	<b>766.00</b>	<b>885.00</b>	<b>1072.00</b>	<b>1215.00</b>	<b>1356.00</b>
11 kV Sales		427.00	466.00	506.00	558.00	617.00	681.00
33 kV Sales		127.00	154.00	180.00	215.00	256.00	305.00
132 kV Sales		130.00	146.00	199.00	299.00	342.00	370.00



Circle 5 (Please enter the circle name below)

Rangareddy North

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Operation &amp; Maintenance Expenses</b>		<b>98.18</b>	<b>121.94</b>	<b>150.37</b>	<b>186.45</b>	<b>226.24</b>	<b>272.12</b>
Employee Cost		79.73	100.13	123.25	152.89	185.66	223.77
Administrative & General Expenses		9.05	11.36	13.99	17.35	21.07	25.40
Repair & Maintenance Expenses		9.39	10.44	13.13	16.20	19.50	22.95
<b>Technical Details</b>							
Total No of consumers		<b>632785.00</b>	<b>676489.00</b>	<b>704947.00</b>	<b>747244.00</b>	<b>792078.00</b>	<b>839604.00</b>
LT consumers		631403.00	675013.00	703356.00	745558.00	790291.00	837709.00
HT consumers		<b>1382.00</b>	<b>1476.00</b>	<b>1591.00</b>	<b>1686.00</b>	<b>1787.00</b>	<b>1895.00</b>
HT 11kV Consumers		1291.00	1381.00	1491.00	1580.00	1675.00	1776.00
HT 33 kV consumers		89.00	93.00	97.00	103.00	109.00	116.00
HT132 kV consumers		2.00	2.00	3.00	3.00	3.00	3.00
Numer of Substations		55.00	62.00	68.00	75.00	80.00	87.00
Capacity of Substations (kVA)		835.65	876.65	921.65	971.65	1005.65	1058.65
Peak Demand (MW)							
Total Length (ckt-km)		<b>8735.27</b>	<b>9575.45</b>	<b>10516.62</b>	<b>11319.89</b>	<b>12095.38</b>	<b>12895.75</b>
LT Line Length		5769.38	6076.95	6402.05	6716.25	7019.67	7312.29
11 kV Line Length		2248.07	2716.51	3268.04	3691.83	4104.00	4549.30
33 kV Line Length		717.83	781.99	846.53	911.81	971.70	1034.17
Energy Input (MU)			3498.75	3879.54	4276.79	4782.71	5361.21
Total Sales (MU)		<b>2730.98</b>	<b>3062.16</b>	<b>3381.56</b>	<b>3814.86</b>	<b>4297.51</b>	<b>4845.42</b>
LT Sales		1260.98	1364.16	1446.56	1562.86	1688.51	1824.27
HT Sales		<b>1470.00</b>	<b>1698.00</b>	<b>1935.00</b>	<b>2252.00</b>	<b>2609.00</b>	<b>3021.16</b>
11 kV Sales		637.00	695.00	754.00	833.00	920.00	1016.07
33 kV Sales		806.00	973.00	1140.00	1358.00	1619.00	1929.09
132 kV Sales		27.00	30.00	41.00	61.00	70.00	76.00

Circle 6 (Please enter the circle name below)

Rangareddy South

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Operation &amp; Maintenance Expenses</b>		<b>90.87</b>	<b>110.90</b>	<b>137.07</b>	<b>170.12</b>	<b>206.51</b>	<b>248.28</b>
Employee Cost		69.34	85.94	105.94	131.61	159.98	192.98
Administrative & General Expenses		7.87	9.75	12.02	14.94	18.16	21.90
Repair & Maintenance Expenses		13.66	15.20	19.10	23.58	28.38	33.40
<b>Technical Details</b>							
Total No of consumers		<b>640095.00</b>	<b>684306.00</b>	<b>713065.00</b>	<b>755850.00</b>	<b>801202.00</b>	<b>849272.00</b>
LT consumers		639456.00	683622.00	712327.00	755067.00	800371.00	848393.00
HT consumers		<b>639.00</b>	<b>684.00</b>	<b>738.00</b>	<b>783.00</b>	<b>831.00</b>	<b>879.00</b>
HT 11kV Consumers		610.00	653.00	704.00	747.00	792.00	839.00
HT 33 kV consumers		21.00	22.00	23.00	24.00	26.00	27.00
HT132 kV consumers		8.00	9.00	11.00	12.00	13.00	13.00
Numer of Substations		115.00	129.00	144.00	155.00	161.00	171.00
Capacity of Substations (kVA)		1116.75	1219.75	1303.75	1373.75	1406.75	1462.75
Peak Demand (MW)							
Total Length (ckt-km)		<b>21270.83</b>	<b>23307.91</b>	<b>25590.70</b>	<b>27538.26</b>	<b>29419.14</b>	<b>31359.42</b>
LT Line length		14228.89	14987.44	15789.23	16564.13	17312.46	18034.13
11 kV Line Length		5455.02	6591.70	7930.03	8958.37	9958.51	11039.03
33 kV Line Length		1586.91	1728.77	1871.45	2015.76	2148.17	2286.26
Energy Input (MU)			2979.47	3346.91	3829.53	4213.88	4580.19
Total Sales (MU)		<b>2374.62</b>	<b>2607.67</b>	<b>2917.12</b>	<b>3416.32</b>	<b>3786.03</b>	<b>4139.19</b>
LT Sales		1552.62	1679.67	1781.12	1924.32	2079.03	2246.19
HT Sales		<b>822.00</b>	<b>928.00</b>	<b>1136.00</b>	<b>1492.00</b>	<b>1707.00</b>	<b>1893.00</b>
11 kV Sales		296.00	323.00	351.00	387.00	428.00	472.00
33 kV Sales		172.00	208.00	243.00	290.00	345.00	412.00
132 kV Sales		354.00	397.00	542.00	815.00	934.00	1009.00



Circle 8 (Please enter the circle name below)

Hyderabad North

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Operation &amp; Maintenance Expenses</b>		<b>106.91</b>	<b>128.80</b>	<b>159.39</b>	<b>198.25</b>	<b>241.09</b>	<b>290.49</b>
Employee Cost		86.01	104.55	129.17	160.79	195.76	236.44
Administrative & General Expenses		9.76	11.87	14.66	18.25	22.22	26.84
Repair & Maintenance Expenses		11.13	12.38	15.56	19.21	23.12	27.21
<b>Technical Details</b>							
Total No of consumers		<b>674186.00</b>	<b>720750.00</b>	<b>751063.00</b>	<b>796126.00</b>	<b>843895.00</b>	<b>894527.00</b>
LT consumers		672912.00	719389.00	749596.00	794571.00	842246.00	892780.00
HT consumers		<b>1274.00</b>	<b>1361.00</b>	<b>1467.00</b>	<b>1555.00</b>	<b>1649.00</b>	<b>1747.00</b>
HT 11kV Consumers		1205.00	1289.00	1392.00	1475.00	1564.00	1657.00
HT 33 kV consumers		68.00	71.00	74.00	79.00	83.00	88.00
HT132 kV consumers		1.00	1.00	1.00	1.00	2.00	2.00
Numer of Substations		53.00	63.00	71.00	79.00	85.00	87.00
Capacity of Substations (kVA)		1143.00	1273.00	1387.00	1501.00	1599.00	1665.00
Peak Demand (MW)							
Total Length (ckt-km)		<b>9460.47</b>	<b>10264.79</b>	<b>11158.87</b>	<b>11935.77</b>	<b>12686.46</b>	<b>13452.25</b>
LT Line Length		7185.03	7568.07	7972.94	8364.23	8742.11	9106.52
11 kV Line Length		1831.22	2212.80	2662.07	3007.28	3343.02	3705.75
33 kV Line Length		444.22	483.93	523.86	564.26	601.33	639.98
Energy Input (MU)			3728.31	4091.83	4469.44	4938.59	5464.50
Total Sales (MU)		<b>2945.52</b>	<b>3262.91</b>	<b>3566.22</b>	<b>3988.34</b>	<b>4437.57</b>	<b>4938.66</b>
LT Sales		1703.52	1842.91	1954.22	2111.34	2281.09	2464.49
HT Sales		<b>1242.00</b>	<b>1420.00</b>	<b>1612.00</b>	<b>1877.00</b>	<b>2156.48</b>	<b>2474.17</b>
11 kV Sales		651.00	711.00	771.00	852.00	940.95	1039.23
33 kV Sales		545.00	657.00	770.00	918.00	1093.40	1303.00
132 kV Sales		46.00	52.00	71.00	107.00	122.13	131.94



Form 1.3(i) - WORKING CAPITAL

Amount in Rs. Crores

PARTICULARS	D Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>O&amp;M expenses</b>		<b>1001.09</b>	<b>1226.24</b>	<b>1515.12</b>	<b>1879.21</b>	<b>2279.90</b>	<b>2739.02</b>
R&M expenses		167.07	185.81	233.53	288.27	346.96	408.33
A&G expenes		85.01	106.05	130.63	162.16	197.02	237.56
Employee expenses		749.01	934.38	1150.96	1428.78	1735.92	2093.13
<b>O&amp;M Stores</b>							
<b>Working Capital Requirement (1/12th of total O&amp;M Expenses+ O&amp;M Stores)</b>		<b>83.42</b>	<b>102.19</b>	<b>126.26</b>	<b>156.60</b>	<b>189.99</b>	<b>228.25</b>

**Form 1.3i - Other Expenses**

Particulars	D-Link	Amount in Rs. Crore					
		Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Library expense			0.02	0.02	0.02	0.02	0.02
Children Creche			0.02	0.03	0.03	0.03	0.04
Primary Health Care centre			0.08	0.08	0.08	0.08	0.09
Canteen expenditure			0.14	0.15	0.16	0.18	0.19
Employee Pool vehicle charges			0.06	0.07	0.08	0.08	0.09
Physical fitness(Zym) expenses			0.12	0.12	0.13	0.13	0.13
Sports Meet charges			0.03	0.03	0.03	0.03	0.03
Distribution True-up gap of FY 2013-14 of TSSPDCL				79.03			
Carrying cost on Distributio true-up gap for FY 2013-14				14.15			
<b>TOTAL OTHER EXPENSES</b>		<b>0.00</b>	<b>0.48</b>	<b>93.69</b>	<b>0.53</b>	<b>0.56</b>	<b>0.59</b>

**Form 3.3**

**Distribution System Losses**

This form Captures the Total Distribution System Losses as incurred due to losses in 33KV, 11KV and LT System  
Please fill in the required details pertaining to each year

Particulars		D - Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
<b>I. Losses in 33 KV System and Connected Equipment</b>								
(i)	Total Energy delivered/required into 33 KV Distribution System from EHT SSs	A	27158.47	29652.79	32451.49	35187.97	38721.86	42699.37
(ii)	Energy delivered/required by all other Generating Stations at 33kV	B						
(iii)	Energy consumed by HT consumers at 33KV (Sales + Third Party)	X	4064.28	4874.14	5838.89	6845.62	8157.91	9721.77
(iv)	Energy delivered/required into 11 KV and LT System from 33/11 KV SS	C	21872.06	23497.65	25266.77	26941.87	29084.77	31410.53
	<b>Losses (33 kV System)</b>	<b>(A + B) - (C + X)</b>	<b>1222.13</b>	<b>1281.00</b>	<b>1345.83</b>	<b>1400.48</b>	<b>1479.18</b>	<b>1567.07</b>
	<b>% Losses (33 kV System)</b>	<b><math>\frac{100 \times [(A+B) - (C+X)]}{(A+B)}</math></b>	<b>4.50</b>	<b>4.32</b>	<b>4.15</b>	<b>3.98</b>	<b>3.82</b>	<b>3.67</b>
<b>II. Losses in 11 KV System and Connected Equipment</b>								
(i)	Energy delivered/required into 11 KV system from 33/11kV SSs	C	21872.06	23497.65	25266.77	26941.87	29084.77	31410.53
(ii)	Energy delivered/required into 11 KV Distribution System from EHT SSs	D						
(iii)	Energy delivered/required at 11kV from all other Generating Stations	E						
(iv)	Total Energy delivered/required into 11 KV and LT Distribution System	C+D+E	21872.06	23497.65	25266.77	26941.87	29084.77	31410.53
(v)	Energy consumed by HT consumers at 11KV (Sales + Third Party)	Y	3702.17	4023.22	4464.75	4844.37	5350.36	5909.19
(vi)	Total Output from 11kV to LT	F	16966.93	18233.76	20789.21	22084.38	23720.83	25487.26
	<b>Losses (11kV System)</b>	<b>(C + D + E) - (Y + F)</b>	<b>1202.96</b>	<b>1240.68</b>	<b>12.81</b>	<b>13.12</b>	<b>13.58</b>	<b>14.07</b>
	<b>% Losses (11kV System)</b>	<b><math>\frac{[(C+D+E) - (Y+F)] \times 100}{(C+D+E)}</math></b>	<b>5.50</b>	<b>5.28</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.04</b>
<b>III. Losses in LT system and connected equipment</b>								
(i)	Energy delivered/required to LT system from 11/400 V DTRs	F	16966.93	18233.76	20789.21	22084.38	23720.83	25487.26
(ii)	Energy sold to metered categories	Z	8704.90	9377.69	10330.35	10951.73	11832.25	12783.56
(iii)	Energy sold to un-metered categories	N	6694.29	7238.26	7528.19	8133.45	8787.38	9493.89



Particulars		D - Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
	<b>Losses (LT System)</b>	<b>F-(Z+N)</b>	<b>1567.74</b>	<b>1617.81</b>	<b>2930.68</b>	<b>2999.20</b>	<b>3101.20</b>	<b>3209.82</b>
	<b>% Losses (LT System)</b>	<b>[F-(Z+N)] x 100 / (F)</b>	<b>9.24</b>	<b>8.87</b>	<b>14.10</b>	<b>13.58</b>	<b>13.07</b>	<b>12.59</b>
<b>IV. Total losses in the Distribution System</b>								
(i)	Total Input to the distribution system	A + B + D + E	27158.47	29652.79	32451.49	35187.97	38721.86	42699.37
(ii)	Total Output from the Distribution Sytem	X + Y + Z + N	23165.63	25513.31	28162.17	30775.17	34127.90	37908.41
(iii)	EHT Sales	G	2485.80	2776.57	3851.06	5723.88	6560.82	7087.68
	<b>Distribution System Losses</b>	<b>(A + B + D + E)-(X + Y + Z + N)</b>	<b>3992.84</b>	<b>4139.49</b>	<b>4289.32</b>	<b>4412.80</b>	<b>4593.96</b>	<b>4790.96</b>
	<b>% Distribution System Losses ( Excluding EHT Sales)</b>	<b>[(A+B+D+E) - (X+Y+Z+N)] x 100 / (A+B+D+E)</b>	<b>14.70</b>	<b>13.96</b>	<b>13.22</b>	<b>12.54</b>	<b>11.86</b>	<b>11.22</b>
	<b>% Distribution System Losses ( Including EHT Sales)</b>	<b>[(A+B+D+E) - (X+Y+Z+N)] x 100 / (A+B+D+E +G)</b>	<b>13.47</b>	<b>12.76</b>	<b>11.82</b>	<b>10.79</b>	<b>10.15</b>	<b>9.62</b>

Form 7.0 - Consumer Contributions and Grants

Base Year

Particulars	D Link	Opening Balance at the beginning of the year	Additions during the year	Deductions during the year	Closing Balance at the End of the Year	Remarks
Consumer Contributions		1210.77	319.89	189.56	1341.09	
Grants		279.57	2.09		281.66	
<b>Total</b>		<b>1490.34</b>	<b>321.98</b>	<b>189.56</b>	<b>1622.75</b>	

Year 1

Particulars	D Link	Opening Balance at the beginning of the year	Additions during the year	Deductions during the year	Closing Balance at the End of the Year	Remarks
Consumer Contributions		1341.09	236.94	208.93	1369.10	
Grants		281.66	12.61		294.27	
<b>Total</b>		<b>1622.75</b>	<b>249.55</b>	<b>208.93</b>	<b>1663.37</b>	

Year 2

Particulars	D Link	Opening Balance at the beginning of the year	Additions during the year	Deductions during the year	Closing Balance at the End of the Year	Remarks
Consumer Contributions		1369.10	309.15	232.38	1445.86	
Grants		294.27	253.42		547.69	
<b>Total</b>		<b>1663.37</b>	<b>562.57</b>	<b>232.38</b>	<b>1993.55</b>	

**Year 3**

Particulars	D Link	Opening Balance at the beginning of the year	Additions during the year	Deductions during the year	Closing Balance at the End of the Year	Remarks
Consumer Contributions		1445.86	317.98	268.62	1495.22	
Grants		547.69	330.42		878.11	
<b>Total</b>		<b>1993.55</b>	<b>648.40</b>	<b>268.62</b>	<b>2373.33</b>	

**Year 4**

Particulars	D Link	Opening Balance at the beginning of the year	Additions during the year	Deductions during the year	Closing Balance at the End of the Year	Remarks
Consumer Contributions		1495.22	339.16	309.14	1525.24	
Grants		878.11	319.97		1198.08	
<b>Total</b>		<b>2373.33</b>	<b>659.13</b>	<b>309.14</b>	<b>2723.32</b>	

**Year 5**

Particulars	D Link	Opening Balance at the beginning of the year	Additions during the year	Deductions during the year	Closing Balance at the End of the Year	Remarks
Consumer Contributions		1525.24	366.83	340.15	1551.92	
Grants		1198.08	0.00		1198.08	
<b>Total</b>		<b>2723.32</b>	<b>366.83</b>	<b>340.15</b>	<b>2750.00</b>	

## Form 8

## Revenue Surplus / (deficit) at current tariffs

Items of Non - Tariff Income (Rs. Crs.)	Detail Links	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Aggregate Revenue Requirement (Rs. Crs.)		1369.73	1749.52	2351.17	2897.83	3599.90	4380.35
Wheeling revenue from current tariffs (Rs. Cr)*		1599.25	1990.82	2617.43	3201.90	3946.135	4759.323
Non Tariff Income (Rs. Cr)		229.51	241.30	266.26	304.06	346.23	378.97
<b>Revenue Surplus / (deficit) at current tariffs (Rs Cr)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

\* Wheeling revenue = Revenue from wheeling from third party+Revenue from wheeling revenue from retail supply business

## Form 9

## Revenue Surplus / (deficit) at Proposed tariffs

Items of Non - Tariff Income (Rs. Crs.)	Detail Links	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Aggregate Revenue Requirement (Rs. Crs.)		1369.73	1749.52	2351.17	2897.83	3599.90	4380.35
Wheeling revenue from proposed tariffs (Rs. Cr)*		1599.25	1990.82	2617.43	3201.90	3946.135	4759.323
Non Tariff Income (Rs. Cr)		229.51	241.30	266.26	304.06	346.23	378.97
<b>Revenue Surplus / (deficit) at proposed tariffs (Rs Cr)</b>		<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

\* Wheeling revenue = Revenue from wheeling from third party+Revenue from wheeling revenue from retail supply business

**Form 10 - Non Tariff Income**

This form captures the Total Non-tariff income during a particular year

Please fill in the required details pertaining to each year

Particulars	D-Link	Amount in Rs. Crore					
		Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Staff Loans & Advances		0.06	0.07	0.08	0.09	0.10	0.11
Sale of Tender schedules		0.28	0.29	0.29	0.30	0.30	0.31
Supervision charges		27.05	28.40	29.82	31.31	32.88	34.52
Discounts received from vendors		0.01	0.00	0.00	0.00	0.00	0.00
Rebate from funding agencies		0.27	0.05	0.05	0.05	0.05	0.05
Meter testing charges		0.16	0.16	0.17	0.17	0.17	0.18
Transformer testing charges		0.03	0.03	0.03	0.03	0.03	0.03
Registration fee		0.16	0.16	0.17	0.17	0.17	0.18
Other miscellaneous income		11.93	3.21	3.27	3.32	3.38	3.44
Amortisation of dep on CC assets		189.56	208.93	232.38	268.62	309.14	340.15
<b>TOTAL Non Tariff Income</b>		<b>229.51</b>	<b>241.30</b>	<b>266.26</b>	<b>304.06</b>	<b>346.23</b>	<b>378.97</b>