

NORTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED

(Distribution & Retail Supply Licensee)



Filing of ARR & Wheeling Tariff Proposals for
Distribution Business for 4th Control Period



December 2019

**BEFORE THE HONOURABLE
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION**
At its office at 5th Floor, Singareni Bhavan, Red Hills, Hyderabad 500 004

FILING NO. _____/2019
CASE NO. _____/2019

In the matter of:

Filing of the ARR & Tariff applications for the Distribution Business for 4th Control Period (FY2019-20 to FY2023-24) 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” as adopted by TSERC vide regulation No.1 of 2014 by the Northern Power Distribution Company of Telangana Limited (‘TSNPDCL’ or ‘the Company’ or ‘the Licensee’) as the Distribution Supply Licensee.

In the matter of:

NORTHERN 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 29th state of the Republic India on appointed day i.e., on 02.06.2014. In accordance with the APR Act, 7 mandals (Chintoor, Kunavaram, Vararamachandrapuram, Kukunuru, Velairupadu, Badrachalam (excluding Badrachalam town) and part of Burgampadu (excluding 12 revenue villages) of the TSNPDCL (erstwhile APNPDCL) were to be transferred to residual state of Andhra Pradesh. Further, name of the Licensee has been changed from Northern Power Distribution Company of Andhra Pradesh Limited (APNPDCL) to Northern Power Distribution Company of Telangana Limited (TSNPDCL) w.e.f 28.05.2014.
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.
6. The Licensee is required to file the ARR & FPT for Distribution Business for the Fourth control period (2019-20 to 2023-24) by 30th November, 2018 (i.e. not less than 120 days before the commencement of fourth control period). TS Discoms (TSSPDCL and TSNPDCL) having same cause of action for filing the application, have joined together in filing the application before the Hon'ble Commission, for seeking extension of time for

filing of ARR for Distribution Business for the Fourth Control Period up to 31st December 2018 along with filing of ARR for Retail Supply Business for FY 2019-20 due to enforcement of model code of conduct in view of state Assembly Elections and subsequently till 31st March 2019.

7. The Hon'ble Commission vide Lr.No.S/RO-1/5/RO-1/D.No.772, Dated:11.12.2018 & Lr.No.S/RO-1/5/RO-2/D.No.21, Dated:10.01.2019 informed that the petition was assigned number I.A.No.44 of 2018 & I.A.No.1 of 2019 respectively and stated that it will be taken up along with the ARR when it is filed and numbered.
8. As the Order on Wheeling Tariffs for Distribution Business for 3rd Control period shall cease by 31.03.2019 and due to delay in ARR filings, the licensees have filed interlocutory applications in O.P.No. 78 & 79 of 2015 before the Hon'ble Commission on 19.03.2019 for continuation of existing wheeling charges and wheeling losses (in kind) from 01.04.2019 till the issue of Wheeling Tariff Order for the Fourth Control Period (FY 2019-20 to FY 2023-24).
9. Further, because of enforcement of Model Code of Conduct in the State of Telangana from 10.03.2019 till 23.05.2019, the Discoms have filed a petition on 19.03.2019 to extend the time limit till 30th June 2019 for filing of ARR & Tariff proposals.
10. However, as the TSERC was not in operation from 9th Jan 2019, the order in the above I.A. was expected only after formation of the Commission. Hence, a letter was addressed on 13.03.2019 to the Special Chief Secretary to the Govt., Energy Department, GoTS with a request to take further necessary steps for appointment of members of TSERC at the earliest so as to issue an order for continuation of existing tariffs.
11. The Secretary, TSERC has informed to take appropriate action by forwarding the letter dated 26.3.2019 received from the Energy Department wherein a direction u/s 108 of the Electricity Act was given by the GoTS to continue all the existing tariffs along with terms & conditions and assured the TSDiscoms to provide required subsidy to avoid revenue loss in continuation of present tariffs till the issuance of Tariff Order for FY2019-20 by TSERC. A public notice was also published in this regard on 28.3.2019 in the daily newspapers having wide circulation in the State of Telangana.

12. Further, expecting probable revisions in the cost estimates due to finalization of actual values for the base year 2018-19, the licensees on 29th June 2019 have sought extension of time till 30th September 2019.

13. Meanwhile, the annual accounts for the base year have just been finalized in the Board Meeting, which values needs to be considered for making revisions in the cost estimates of ARR for Distribution Business to be filed for 4th control period. Hence, the licensees have once again requested the Hon'ble Commission to grant time up to 30th November 2019 for filing of ARR & Tariff Petitions.

14. After assuming office by the Honble Chairman and Members of the TSERC on 30.10.2019, the interlocutory applications filed by the Discoms for continuation of existing tariffs have been considered by the Hon'ble Commission and has passed the interim order dated 6.11.2019 in I.A.No.4 of 2019 in O.P.No.78 & 79 of 2015 in accordance to powers conferred u/s. 94(2) of the Electricity Act,2003 which is extracted below:

“the wheeling charges and losses in kind as applicable on 31.3.2019 as per the order dated 27.3.2015 are applicable and can be levied pending disposal of this application finally.”

15. The licensee has filed petition on 30.11.2019 to further extend the time limit for filing of ARR & Tariff Proposals upto 31st December 2019 due to pending information from ICAD department on LI schemes.

16. The Licensee humbly prays the Hon'ble Commission to condone the delay in filing the MYT ARR & Tariff Petition for Distribution Business for Fourth Control period (FY 2019-20 to FY 2023-24) for the reasons as explained in the various Petitions filed before the Commission on this subject matter.

Past ARR & FPT Filings by Licensee for Distribution Business

17. The erstwhile Hon'ble APERC has 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.”

18. 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.
19. For the reasons stated above, the licensee filed the ARR and Wheeling Charges Petitions for Distribution Business for the balance period (FY 2015-16 to FY 2018-19) of 3rd Control Period, and also for the first year (FY 2014-15) of 3rd Control Period on 4th March, 2015.
20. After comprehensive public consultation process on the filings made by the Licensee, the Hon'ble Commission passed orders on 27th March, 2015 for Wheeling Tariffs for Distribution Business for the 3rd control Period.

Present ARR & Tariff applications for 4th Control Period of Distribution Business

21. Accordingly, this filing is made by the Northern Power Distribution Company of Telangana Limited (TSNPDCL) under section 61 of the Electricity Act, 2003 for determination of the ARR and Tariff for the Distribution Business for 4th Control Period viz., FY2019-20 to FY2023-24.
22. The ARR and Tariff Proposals (“Wheeling Charges”) for the Distribution Business of the licensee for the 4th Control Period (FY2019-20 to FY2023-24), includes
 - (a) Aggregate Revenue Requirement for 4th Control Period (FY2019-20 to FY2023-24) for the Distribution Business.
 - (b) Wheeling Tariff Proposals for 4th Control Period (FY2019-20 to FY2023-24) for Distribution Business.
 - (c) Loss reduction trajectory for 4th control period (FY 2019-20 to FY 2023-24) for Distribution business.

SUMMARY OF FILINGS:

Capital Investment Plan for 4th Control Period

23. The licensee has prepared a detailed capital investment plan for the 4th Control Period FY 2018-19 to FY 2023-24 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 4th Control Period based on the projected load growth and the same was filed vide petition dated 31st October 2018.

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

All figures in Rs. crore

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24	4th Control Period (FY 19-24)
A Load Growth & Network Strengthening (Base Capex)	849.1	1,299.8	1,515.0	2,093.1	1,938.7	7,695.6
SS Unit Additions	191.8	541.2	696.4	1,185.8	944.3	3,559.60
PTR Additions	16.1	31.3	24.0	37.8	41.6	150.72
PTR up-gradation	12.0	13.0	13.2	11.1	16.1	65.36
Feeder Additions	4.8	24.7	19.7	16.8	6.7	72.63
DTR Additions	624.5	689.6	761.6	841.5	930.1	3,847.28
B Other Capex Total	502.1	637.5	511.0	502.2	545.5	2,698.2
AT & C Loss Reduction	202.0	301.3	167.6	129.3	136.0	936.21
Reliability Improvement & Contingency Schemes	194.6	221.9	224.1	241.6	265.1	1,147.19
Renovation & Modernisation	19.7	23.2	22.3	26.0	29.3	120.48
Technology Upgradation	29.4	30.3	31.2	31.6	32.6	155.09
New Consumer Capex	30.3	31.7	33.2	34.7	36.3	166.21
Civil Infrastructure Development	26.2	29.2	32.5	39.0	46.1	173.06
A+B Total Capex Expenditure for TSNPDCL	1,351.2	1,937.3	2,025.9	2,595.2	2,484.2	10,393.8

Loss Reduction Trajectory

24. The Licensee has classified the total distribution losses into three voltage level losses viz., LT, 11 kV and 33 kV. The licensee has revised the loss trajectory based on the actual losses arrived for base year 2018-19. The licensee proposes the following voltage wise loss trajectory for the 4th control period. Hence, the licensee requests the Hon'ble Commission to approve the loss reduction trajectory as given in the below table.

Losses	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Actuals	Projection				
LT Loss (%)	5.01%	5.01%	5.00%	5.00%	4.99%	4.99%
11 kV Loss (%)	3.92%	3.92%	3.92%	3.92%	3.92%	3.91%
33 kV Loss (%)	3.58%	3.58%	3.58%	3.57%	3.57%	3.57%

Aggregate Revenue Requirement (ARR) for each year of 4th Control Period

25. The ARR for the Distribution business for each year of 4th Control Period is determined as follows.

ARR for Distribution Business for the 4th Control period					Rs. In Crores
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Projection				
Operation and Maintenance Charges	2050	2358	2718	3220	3704
Depreciation	417	545	688	872	1073
Advance Against Depreciation	0	0	0	0	0
Taxes on Income	16	22	28	35	43
Other Expenditure	0	0	0	0	0
Special Appropriations	57	60	60	60	60
Total Expenditure	2540	2985	3495	4187	4880
Less: O&M expenses capitalized	135	194	203	260	248
Net Expenditure	2405	2792	3292	3928	4631
Add: Return on Capital Employed	350	514	694	897	1112
Total Distribution ARR	2755	3305	3986	4825	5744
Less: Wheeling Revenue from Third Party/Open Access/NTI (if any)	141	152	161	175	188
Revenue Requirement, (Net transferred to Retail Supply Business)	2614	3153	3825	4649	5555

Wheeling Charges Proposals

26. The licensee is proposing the following distribution wheeling charges for each year of the 4th Control Period.

Wheeling Tariff – Rs./kVA/month					
Voltage Level	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24
33 kV (Rs./kVA/Month)	50.05	59.49	70.93	85.48	100.82
11 kV (Rs./kVA/Month)	508.28	594.07	702.02	841.21	981.19
LT (Rs./kVA/Month)	1,078.42	1,243.51	1,451.42	1,696.73	1,955.64

Though the licensee has proposed the Wheeling Tariff applicable for FY 2019-20 based on the Distribution Cost Estimates; but the licensee is currently collecting the wheeling charges as applicable for FY 2018-19 in view of Honble Commission order in IA No.4 of 2019 in OP No.78 &79 of dt.06.11.2019.

27. 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.

28. This filing has been discussed and approved by the Board of Directors of TSNPDCL and Sri A. Gopal Rao, Chairman and Managing Director of TSNPDCL has been authorised to execute and file the said document on behalf of TSNPDCL. Accordingly, the current filing documents are signed and verified by, and backed by the affidavit of Sri A. Gopal Rao, the Chairman and Managing Director of TSNPDCL.

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

- Condone the delay in filing of this petition.
- Take the accompanying ARR and Wheeling Tariff application of TSNPDCL on record for Distribution Business and treat it as complete;
- Grant suitable opportunity to TSNPDCL within a reasonable time frame to file additional material information that may be subsequently available;
- Consider and approve TSNPDCL'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.

NORTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED

... Applicant

Through

Place: Hyderabad
Dated: 16.12.2019



CHAIRMAN AND MANAGING DIRECTOR

Chairman and Managing Director,
TSNPDCL / Warangal

**BEFORE THE HONOURABLE
TELANGANA STATE ELECTRICITY REGULATORY COMMISSION**
At its office at 5th Floor, Singareni Bhavan, Red Hills, Hyderabad 500 004

**FILING NO. _____/2019
CASE NO. _____/2019**

In the matter of:

Filing of the ARR & Tariff applications for the Distribution Business for 4th Control Period (FY2019-20 to FY2023-24) 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” as adopted by TSERC vide regulation No.1 of 2014 by the Northern Power Distribution Company of Telangana Limited (‘TSNPDCL’ or ‘the Company’ or ‘the Licensee’) as the Distribution Supply Licensee.

In the matter of:

NORTHERN POWER DISTRIBUTION COMPANY OF TELANGANA LIMITED

... Applicant

**Affidavit of Applicant verifying the application filed under section 64 of the
Electricity Act, 2003 and in accordance with the Regulation 4 of 2005.**

I, Sri A Gopal Rao, son of Sri A. Chalapathi Rao, working for gain at the Northern Power Distribution Company of Telangana Limited do solemnly affirm and say as follows:

1. I am the Chairman and Managing Director of Northern Power Distribution Company of Telangana Limited (TSNPDCL).
2. I am competent and duly authorised by TSNPDCL to affirm, swear, execute and file this affidavit in the present proceedings.
3. I submit the application of TSNPDCL for determination of ARR and wheeling Charges of Distribution Bussiness for Fourth control period (FY 2019-20 and FY 2023-24).

4. As such, I submit that I have been duly authorised by the Board of Directors of TSNPDCL to submit the application, as per Terms And Conditions Of Tariff For Wheeling and Retail Sale of Electricity (Regulation 4 of 2005) of TSNPDCL for the Control Period FY 2019-20 to FY 2023-24 to Hon'ble Commission.
5. I submit that I have read and understood the contents of the appended application of TSNPDCL. 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.
6. 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 of TSNPDCL on record and treat it as complete;
 - (b) Grant suitable opportunity to TSNPDCL within a reasonable time frame to file additional material information that may be subsequently available;
 - (c) 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.

VERIFICATION:

I, the above named Deponent solemnly affirm at Hyderabad on this 16th day of December 2019 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

**Chairman and Managing Director
TSNPDCL / Warangal**



DEPONENT

**Chairman and Managing Director
TSNPDCL / Warangal**

Solemnly affirmed and signed before me.


**Company Secretary (GR-II)
TSNPDCL, Warangal.**

Contents

1	INTRODUCTION.....	6
2	CAPITAL EXPENDITURE PLAN.....	10
2.1	Base Capex Network Additions	10
2.2	Base Capital Investment.....	11
2.3	Other Capital Expenditure Plan.....	13
2.4	Total Capital Expenditure.....	13
3	ARR OF DISTRIBUTION BUSINESS FOR FOURTH CONTROL PERIOD	14
3.1	Gross Fixed Assets Projections	15
3.2	Depreciation & Advance Against Depreciation.....	16
3.3	Consumer Contribution & Grants	17
3.4	Working Capital.....	18
3.5	Regulated Rate Base	18
3.6	Operation & Maintenance Expense projections	19
3.7	Weighted Average Cost of Capital (WACC).....	27
3.8	Return on Capital Employed	29
3.9	Special Appropriations for safety measures.....	29
3.10	Taxes on Income.....	30
3.11	Other Expenses.....	31
3.12	Revenue Requirement FOR 4 TH CONTROL PERIOD.....	31
3.13	Wheeling REVENUE.....	31
3.14	Non-Tariff Income	31
4	WHEELING LOSSES	32
5	PROPOSED WHEELING CHARGES & LOSSES	33
6	STATUS OF DIRECTIVE COMPLIANCE	39
7	DISTRIBUTION BUSINESS FILING FORMATS.....	41

Abbreviations

AB Cable	Aerial Bundled Cable
ARR	Aggregate Revenue Requirement
A&G	Administration & General
AMR	Automatic Meter Reading
AT&C	Aggregate Technical & Commercial
CAGR	Compound Annual Growth Rate
CC	Consumer Contributions
CEA	Central Electricity Authority
CPI	Consumer Price Index
CT/PT	Current Transformer- Potential Transformer
CWIP	Capital Work In Progress
DA	Dearness Allowance
DDUGJY	Deen Dayal Upadhaya Gram Jyoti Yojana
DISCOM	Distribution Company
DNR	Distribution Network Renovation
DTR	Distribution Transformer
D/E Ratio	Debt to Equity ratio
EE	Employee Expenses
EHT	Extra High Tension
ERP/IT	Enterprise Resource Planning – Information Technology
FDA	Fully Depreciated Assets
FPT	Filing for Proposed Tariff
FRP	Financial Restructuring Plan
FSA	Fuel Surcharge Adjustment
FY	Financial Year
GFA	Gross Fixed Assets
GIS	Geographic Information System
Gol	Government of India
GoTS	Government of Telangana
HT	High Tension
IDC	Interest During Construction
IE Rules	Indian Electricity Rules, 1956
IPDS	Integrated Power Development Scheme
JICA	Japan International Cooperation Agency
kV	Kilo Volt
LT	Low Tension
MAT	Minimum Alternate Tax
MRI	Meter Reading Instrument
MoP	Ministry of Power

MoU	Memorandum of Understanding
MU	Million Units
MVA	Mega Volt Ampere
MW	Mega Watt
MYT	Multi Year Tariff
NTI	Non Tariff Income
O&M	Operation and Maintenance
OCFA	Original Cost of Fixed Assets
OH line	Overhead power line
UG cable	Underground Cable
WACC	Weighted Average Cost of Capital
WC	Working Capital
WPI	Wholesale Price Index
PAA	Private Accounting Agencies
PFC	Power Finance Corporation Ltd.
PTR	Power Transformer
R&M	Repairs and Maintenance
RAPDRP	Restructured Accelerated Power Development & Reforms Programme
REC	Rural Electrification Corporation Ltd.
RoE	Return on Equity
RGGVY	Rajeev Gandhi Grameen Vidyutikaran Yojana
RMU	Ring Main Unit
RoCE	Return on Capital Employed
RoSC	Release of Services
RT-DAS	Real Time Data Acquisition System
RRB	Regulated Rate Base
SCADA	Supervisory Control & Data Acquisition
SS	Sub Station
ST&D	Sub-Transmission & Distribution
T&D	Transmission and Distribution
TSERC	Telangana State Electricity Regulatory Commission
UDAY	Ujwal DISCOM Assurance Yojana

Glossary

“1st Control Period” refers to the period from FY 2006-07 to FY 2008-09.

“2nd Control Period” refers to the period from FY 2009-10 to FY 2013-14.

“3rd Control Period” refers to the period from FY 2014-15 to FY 2018-19.

“4th Control Period” refers to the period from FY 2019-20 to FY 2023-24.

“Aggregate Revenue Requirement (ARR)” means the revenue required to meet the costs pertaining to the licensed business; herein Distribution Business, for the control period, which would be permitted to be recovered through tariffs and charges by the Hon’ble Commission.

“Base Year” means the financial year immediately preceding the first year of the Control Period.

“Coincident Demand (CID)” in MW of a consumer category means estimated contribution of that category to the system peak demand i.e., the load of the corresponding consumer category at the system peak hour.

“Compound Annual Growth Rate (CAGR)” is the mean annual growth rate over a specified period of time longer than one year. CAGR is calculated as

$$N \text{ year CAGR} = (\text{Final value}/\text{Initial Value})^{1/N} - 1$$

“Control Period” means multi year period fixed by the Hon’ble Commission from time to time, usually 5 years.

“Base year” refers to FY: 2018-19.

“Consumer/User Contributions” means any contributions made by those using or intending to use the Distribution network of a licensee for supply or wheeling of electricity. Any grant received by the licensees would also be treated as Consumer/User Contribution.

“Distribution Business” means the business of operating and maintaining a distribution system for supplying electricity in the area of supply of the Distribution Licensee in terms of the Distribution and Retail Supply License.

“Distribution Licensee” means a licensee authorized to operate and maintain a distribution system for supplying electricity to the consumers in his area of supply.

“Distribution Cost” refers to the distribution cost borne by the licensee to serve the consumers within the area of supply and not availing supply under Open Access.

“Distribution Losses” means aggregate technical and commercial losses from LT level to 33kV voltage.

“Ensuing control period” refers to period from FY 2019-20 to FY 2023-24.

“Financial Year” means the period commencing on 1st April of a calendar year and ending on 31st March of the subsequent calendar year.

“Financial Restructuring Plan (FRP)” is a Government scheme formulated to enable the turnaround of the State DISCOMs and ensure their long term viability.

“Licensee” hereafter refers to TSNPDCL.

“LT” refers to a voltage of 415V (Three phase supply) and 230V (Single phase supply).

“HT” refers to a voltage of 11 kV and above but less than 132 kV.

“EHT” refers to a voltage of 132 kV and above.

“Non Tariff Income” means income relating to the licensed business other than from tariffs for wheeling and retail sale, and excludes any income from other business and income on account of Fuel Surcharge Adjustment, Cross Subsidy Surcharge and Additional Surcharge.

“Operation & Maintenance Expenses” comprises Employee Expenses, Administrative & General expenses and Repairs and Maintenance (R&M) expenses

“Regulated Rate Base (RRB)” is the value of the gross fixed assets net of the consumer contributions and accumulated depreciation

“Wheeling tariff/charges” are the charges paid by a consumer for availing the facilities of a distribution system of a distribution licensee for conveyance of electricity.

“True up/down” refers to loss/gain to the Distribution Company due to over or under recovery of costs/revenue against Tariff Order approved values.

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 29th state of the Republic India on appointed day i.e., on 02.06.2014. In accordance with the APR Act, 7 mandals (Chintoor, Kunavaram, Vararamachandrapuram, Kukunuru, Velairupadu, Badrachalam (excluding Badrachalam town) and part of Burgampadu (excluding 12 revenue villages) of the TSNPDCL (erstwhile APNPDCL) were to be transferred to residual state of Andhra Pradesh. Further, name of the Licensee has been changed from Northern Power Distribution Company of Andhra Pradesh Limited (APNPDCL) to Northern Power Distribution Company of Telangana Limited (TSNPDCL) w.e.f 28.05.2014.

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 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 Licensee is required to file the ARR & FPT for Distribution Business for the Fourth control period (2019-20 to 2023-24) by 30th November, 2018 (i.e. not less than 120 days before the commencement of fourth control period). TSDiscoms (TSSPDCL and TSNPDCL) having same cause of action for filing the application, have joined together in filing the application before the Hon'ble Commission, for seeking extension of time for filing of ARR for Distribution Business for the Fourth Control Period up to 31st December 2018 along with filing of ARR for Retail Supply Business for FY 2019-20 due to enforcement of model code of conduct in view of state Assembly Elections and subsequently till 31st March 2019.

7 The Hon'ble Commission vide Lr.No.S/RO-1/5/RO-1/D.No.772, Dated:11.12.2018 & Lr.No.S/RO-1/5/RO-2/D.No.21, Dated:10.01.2019 informed that the petition was

assigned number I.A.No.44 of 2018 & I.A.No.1 of 2019 respectively and stated that it will be taken up along with the ARR when it is filed and numbered.

- 8 As the Order on Wheeling Tariffs for Distribution Business for 3rd Control period shall cease by 31.03.2019 and due to delay in ARR filings, the licensees have filed interlocutory applications in O.P.No. 78 & 79 of 2015 before the Hon'ble Commission on 19.03.2019 for continuation of existing wheeling charges and wheeling losses (in kind) from 01.04.2019 till the issue of Wheeling Tariff Order for the Fourth Control Period (FY 2019-20 to FY 2023-24).
- 9 Further, because of enforcement of Model Code of Conduct in the State of Telangana from 10.03.2019 till 23.05.2019, the Discoms have filed a petition on 19.03.2019 to extend the time limit till 30th June 2019 for filing of ARR & Tariff proposals.
- 10 However, as the TSERC was not in operation from 9th Jan 2019, after the Chairman, TSERC demitted office after attaining the age of 65 years, the order in the above I.A.s was expected only after formation of the Commission. Hence, a letter was addressed on 13.03.2019 to the Special Chief Secretary to the Govt., Energy Department, GoTS with a request to take further necessary steps for appointment of members of TSERC at the earliest so as to issue an order for continuation of existing tariffs.
- 11 The Secretary, TSERC has informed to take appropriate action by forwarding the letter dated 26.3.2019 received from the Energy Department wherein a direction u/s 108 of the Electricity Act was given by the GoTS to continue all the existing tariffs along with terms & conditions and assured the TSDiscoms to provide required subsidy to avoid revenue loss in continuation of present tariffs till the issuance of Tariff Order for FY2019-20 by TSERC. A public notice was also published in this regard on 28.3.2019 in the daily newspapers having wide circulation in the State of Telangana.
- 12 Further, expecting probable revisions in the cost estimates due to finalization of actual values for the base year 2018-19, the licensees on 29th June 2019 have sought extension of time till 30th September 2019.

13 Meanwhile, the annual accounts for the base year are just been finalized in the Board Meeting, which values needs to be considered for making revisions in the cost estimates of ARR for Distribution Business to be filed for 4th control period. Hence, the licensees have once again requested the Hon'ble Commission to grant time up to 30th November 2019 for filing of ARR & Tariff Petitions.

14 After assuming office by the Honble Chairman and Members of the TSERC on 30.10.2019, the interlocutory applications filed by the Discoms for continuation of existing tariffs have been considered by the Hon'ble Commission and has passed the interim order dated 6.11.2019 in I.A.No.4 of 2019 in O.P.No.78 & 79 of 2015 in accordance to powers conferred u/s. 94(2) of the Electricity Act,2003 which is extracted below:

“the wheeling charges and losses in kind as applicable on 31.3.2019 as per the order dated 27.3.2015 are applicable and can be levied pending disposal of this application finally.”.

15 The licensee had filed an application for extension of time for ARR filings and Tariff Proposals of Retail Supply Business for FY 2019-20 and FY 2020-21 and MYT filing for Distribution business for 4th control period i.e., FY 2019-20 to FY 2023-24 from 30th November 2019 to 31st December 2019 citing delay due to information availability for Retail supply ARR finalization

16 The Licensee humbly pray the Honble Commission to condone the delay in filing the MYT ARR & Tariff Petition for Distribution Business for Fourth Control period (FY 2019-20 to FY 2023-24) for the reasons as explained in the various Petitions filed before the Commission in this subject matter.

ARR & Tariff applications for 4th Control Period of Distribution Business

17 Accordingly, this filing is made by the Northern Power Distribution Company of Telangana Limited (TSNPDCL) under section 61 of the Electricity Act, 2003 for determination of the ARR and Tariff for the Distribution Business for 4th Control Period viz., FY2019-20 to FY2023-24.

18 The ARR and Tariff Proposals (“Wheeling Charges”) for the Distribution Business of the licensee for the 4th Control Period (FY2019-20 to FY2023-24), includes

- (a) Aggregate Revenue Requirement for 4th Control Period (FY2019-20 to FY2023-24) for the Distribution Business.
- (b) Tariff Proposals for 4th Control Period (FY2019-20 to FY2023-24) for Distribution Business.

2 CAPITAL EXPENDITURE PLAN

In accordance to Clause 9 of APERC Regulation 4 of 2005 as adopted by TSERC vide Regulation No. 1 of 2014, the Distribution licensee has filed Resource Plan for the Fourth control period i.e. from FY 2019-20 to 2023-24 which inter alia contains Sales Forecast, Distribution loss trajectory, Load Forecast and Distribution Plan as per the guidelines for the approval of the Honble Commission on 31.10.2018.

As the Honble Commission’s approval is still awaited, the licensee adopts the Distribution Plan submitted in the Resource Plan filings in the current Multi-Year and Annual filings.

2.1 BASE CAPEX NETWORK ADDITIONS

As detailed in the Resource Plan, the Distribution Plan is prepared considering all the network elements required for system expansion to cater to the load growth and network strengthening. In the network additions, the substation additions, PTR capacity additions, Feeder additions, and DTR additions has been captured. The proposed network additions for the 4th MYT Control Period as submitted in the Resource Plan filings is summarised below:

Particulars	Unit	2019-20	2020-21	2021-22	2022-23	2023-24	4th Control Period (FY 19-24)
Substation Additions	No's	64	173	212	343	260	1,052
PTR Additions	No's	103	254	267	430	349	1,403
PTR up-gradation	No's	34	36	35	28	39	172
Feeder Additions	No's	301	856	1,011	1,583	1,177	4,928
DTR Unit Additions	No's	16,670	17,568	18,519	19,529	20,599	92,885

2.2 BASE CAPITAL INVESTMENT

As detailed in the Resource Plan Filings, the capital investment required for each element of network projections for 4th Control Period (FY2019-20 to FY2023-24) is estimated by considering the following approach.

- **Substation Unit Cost (Rs./substation):** For calculating the cost of a substation added the following have been considered to be a part of a substation unit:
 - 33 kV line of 12 kms with alternate supply;
 - 11KV each feeder 5kms (6 Feeders for Urban & Semi Urban and 4 Feeders for Rural)
 - 132/33 kV tapping bay;
 - 33 kV VCB;
 - Substation unit cost includes the PTRs, 11 kV bay and AB switches;
- **PTR Unit Cost (Rs. / MVA):** For calculating the cost of installing a PTR in a substation the following have been considered:
 - PTR of 5 MVA and 8 MVA capacities in Rural and Urban & Semi Urban areas respectively;
 - 33 KV AB switch;
 - Associated Equipment and labour cost.

- **Feeder Unit Cost (Rs. / feeder):** For calculating the cost of a installing a feeder in a substation following have been considered:
 - Feeder breaker and metering set (including CT/PT);
 - Bay extension;
 - 11 kV line;
 - Poles;
 - Associated Equipment and labour cost.
- **DTR Unit Cost (Rs. / kVA):** For calculating the cost of a installing a DTR the following have been considered:
 - Relevant DTR cost;
 - AB switches;
 - DTR structure;
 - 0.3 km of LT line;
 - 0.4 km of 11 kV line;
 - Associated Equipment and labour cost.

The base unit cost has been determined for each network element considering the cost data of 2018-19 and it is being escalated by **4.68%** Year-on-Year by considering 60% of CPI and 40% of WPI variation over past five years. The Unit cost escalated YoY for the next 5-Year control Period is multiplied with the corresponding Network additions to arrive at the Capital Investment required for 4th MYT period which is tabulated below:

Particulars	Unit	2019-20	2020-21	2021-22	2022-23	2023-24	4th Control Period (FY 19-24)
Substation Additions	Rs. Crs	191.83	541.25	696.42	1,185.84	944.27	3,559.60
PTR Additions	Rs. Crs	16.08	31.30	24.00	37.78	41.56	150.72
PTR up-gradation	Rs. Crs	11.98	12.98	13.22	11.10	16.08	65.36
Feeder Additions	Rs. Crs	4.75	24.66	19.70	16.83	6.70	72.63
DTR Unit Additions	Rs. Crs	624.47	689.58	761.61	841.53	930.08	3,847.28
Total Base Capex	Rs. Crs	849.11	1,299.76	1,514.95	2,093.07	1,938.68	7,695.58

2.3 OTHER CAPITAL EXPENDITURE PLAN

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.2,698 Crores in the 4th control period i.e., FY 2019-20 to FY 2023-24 for achieving loss trajectory, technology up gradation and system improvement of existing net work.

The expenditure is basically divided into following heads:

- AT&C loss reduction
- Reliability Improvement & Contingency Schemes
- Renovation & Modernisation
- Technology Up gradation
- New Consumer Capex
- Civil Infrastructure Development

The details of Other Capital Expenditure that the licensee is expected to incur for the 4th control period is summarised below:

Figures in Rs. Crores

Particulars	Unit	2019-20	2020-21	2021-22	2022-23	2023-24	4th Control Period (FY 19-24)
AT & C Loss Reduction	Rs. Crs	201.96	301.33	167.65	129.27	136.00	936.21
Reliability Improvement & Contingency Schemes	Rs. Crs	194.56	221.86	224.12	241.56	265.10	1,147.19
Renovation & Modernisation	Rs. Crs	19.70	23.18	22.32	26.00	29.28	120.48
Technology Upgradation	Rs. Crs	29.37	30.27	31.22	31.61	32.62	155.09
New Consumer Capex	Rs. Crs	30.29	31.68	33.18	34.71	36.34	166.21
Civil Infrastructure Development	Rs. Crs	26.23	29.22	32.47	39.01	46.13	173.06
Total Other Capex	Rs. Crs	502.10	637.54	510.96	502.17	545.47	2,698.24

2.4 TOTAL CAPITAL EXPENDITURE

The total capital Expenditure projections as submitted in the Distribution Plan in the Resource Plan filings which is being adopted in the current filings to arrive at ARR for the MYT for 4th Control Period filing is summarised below:

Figures in Rs. Crs

Particulars		2019-20	2020-21	2021-22	2022-23	2023-24	4th Control Period (FY 19-24)
A	Load Growth & Network Strengthening (Base Capex)	849.1	1,299.8	1,515.0	2,093.1	1,938.7	7,695.6
	SS Unit Additions	191.8	541.2	696.4	1,185.8	944.3	3,559.60
	PTR Additions	16.1	31.3	24.0	37.8	41.6	150.72
	PTR up-gradation	12.0	13.0	13.2	11.1	16.1	65.36
	Feeder Additions	4.8	24.7	19.7	16.8	6.7	72.63
	DTR Additions	624.5	689.6	761.6	841.5	930.1	3,847.28
B	Other Capex Total	502.1	637.5	511.0	502.2	545.5	2,698.2
	AT & C Loss Reduction	202.0	301.3	167.6	129.3	136.0	936.21
	Reliability Improvement & Contingency Schemes	194.6	221.9	224.1	241.6	265.1	1,147.19
	Renovation & Modernisation	19.7	23.2	22.3	26.0	29.3	120.48
	Technology Upgradation	29.4	30.3	31.2	31.6	32.6	155.09
	New Consumer Capex	30.3	31.7	33.2	34.7	36.3	166.21
	Civil Infrastructure Development	26.2	29.2	32.5	39.0	46.1	173.06
A+B	Total Capex Expenditure for TSNPDCL	1,351.2	1,937.3	2,025.9	2,595.2	2,484.2	10,393.8

3 ARR OF DISTRIBUTION BUSINESS FOR FOURTH CONTROL PERIOD

APERC Regulation 4 of 2005 as adopted by TSERC vide Regulation 1 of 2014 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”

..
..
..

“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"

In accordance to the regulation, the DISCOM has computed the ARR of Distribution business against each cost element based on the Resource Plan filings as elaborated below.

3.1 GROSS FIXED ASSETS PROJECTIONS

The licensee has projected Gross Fixed Assets for the 4th Control period duly considering the above proposed capital expenditure in Resource Plan which was filed before the Hon'ble Commission on 31-10-2018. Gross Fixed Assets for the for 4th Control period has been projected with the following assumptions.

- i. The value of Gross Fixed Assets in the Balance Sheets as on March 31, 2019 reflects the balance as on April 1, 2019 duly adjusted for the additions estimated / projected for the 4th control period from FY 2019-20 to FY 2023-24.
- ii. The CWIP at the beginning of the year is capitalized during the year and 60% of the investment made during the year is capitalized for the base year and control period.
- iii. Removals of assets have been estimated as 'Nil' for the base year and 4th control period.

The table below shows the opening balance of gross fixed assets and additions during the year.

Details of Original Cost of Fixed Assets(OCFA)						Rs. In Crores
Particulars	2018-19 Base Year	2019-20	2020-21	2021-22	2022-23	2023-24
	Projection					
OCFA Opening Balance	6042.99	7030.47	8833.99	10824.05	13154.17	15924.13
Additions to OCFA	987.48	1803.52	1990.06	2330.12	2769.96	2962.32
Closing Balance of OCFA	7030.47	8833.99	10824.05	13154.17	15924.13	18886.45

3.2 DEPRECIATION & ADVANCE AGAINST DEPRECIATION

The Licensee has projected the depreciation based on the Depreciation rates as per the Ministry of Power for existing assets and additions of new assets in the current year and ensuing 4th control period.

- i. **Depreciation on Existing Assets:-** The Depreciation has been projected based on respective depreciation rate for each existing class of assets as per Ministry of Power after considering the fully depreciated assets. The depreciation on existing Gross Fixed Assets created from consumer's contribution & grants (CC&G) has been projected by allocating the above depreciation in the ratio of CC&G assets to total assets.
- ii. **Depreciation on New Assets:-** Depreciation on new assets which is capitalized during the year has been calculated for an average of six months period only

and full year depreciation on assets which were capitalized in previous year or years. Depreciation for new assets, which are created through funds from Consumers' Contribution & Grants has been allocated in the ratio of funds from Consumer's Contribution & Grants to total funds.

- iii. **Gross Depreciation on Fixed Assets** including assets which are created through from Consumers' Contribution & Grants are as follows.

Gross Depreciation		Rs. In Crores				
Particulars	2018-19 Base Year	2019-20	2020-21	2021-22	2022-23	2023-24
	Projection					
Depreciation on Fixed Assets	379.82	417.36	545.28	688.28	871.59	1073.01

- iv. Depreciation on Fixed Assets related to **Consumer Contribution and Grants** is as follows.

Depreciation on Assets related to Consumer Contribution

		Rs. In Crores				
Particulars	2018-19 Base Year	2019-20	2020-21	2021-22	2022-23	2023-24
	Projection					
Depreciation on Fixed Assets Related Consumer Contribution	111.63	88.96	98.85	106.72	120.24	132.11

Advance Against Depreciation (AAD): The Licensee has not proposed any advance against depreciation for the base year and 4th control period since the licensee has adopted the Depreciation rates as per the Ministry of Power.

3.3 CONSUMER CONTRIBUTION & GRANTS

The development charges and service line charges collected from the consumers will form part of the consumer contributions towards capital assets.

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

Consumer Contribution**Rs. In Crores**

Particulars	2018-19 Base Year	2019-20	2020-21	2021-22	2022-23	2023-24
	Projection					
Opening Balance	1017.91	1166.90	1225.05	1276.76	1348.90	1474.01
Additions	260.62	147.11	150.56	178.85	245.35	230.26
Deduction	111.63	88.96	98.85	106.72	120.24	132.11
Closing Balance	1166.90	1225.05	1276.76	1348.90	1474.01	1572.16

3.4 WORKING CAPITAL

The licensee has projected the working capital requirement for the ensuing fourth control period duly considering the 1/12th of the projected gross O&M cost for the year. The year wise projections of the working capital requirement are as follows.

Working Capital Requirement**Rs. In Crores**

Particulars	2018-19 Base Year	2019-20	2020-21	2021-22	2022-23	2023-24
	Projection					
Working Capital Requirement	153.41	170.81	196.52	226.53	268.34	308.64

3.5 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 $= (\text{Capitalised Investments} - \text{Depreciation} - \text{Consumer Contribution})_i / 2$

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

The licensee has computed the RRB for all five years of the 4th control period including Base year as follows:

Regulated Rate Base (RRB)		Rs. In Crores				
Particulars	2018-19 Base Year	2019-20	2020-21	2021-22	2022-23	2023-24
	Projection					
Assets	7030	8834	10824	13154	15924	18886
OCFA Opening Balance	6043	7030	8834	10824	13154	15924
Additions to OCFA	987	1804	1990	2330	2770	2962
Depreciation	3547	3965	4510	5198	6070	7143
Opening Balance	3169	3547	3965	4510	5198	6070
Depreciation during the Year	378	417	545	688	872	1073
Consumer Contributions	1167	1225	1277	1349	1474	1572
Cons Contributions Opening Balance	1018	1167	1225	1277	1349	1474
Additions to Cons Contributions	149	58	52	72	125	98
Working Capital	153	171	197	227	268	309
Change in Rate Base	230	664	697	785	887	896
Regulated Rate Base	2240	3151	4537	6049	7762	9585

3.6 OPERATION & MAINTENANCE EXPENSE PROJECTIONS

As per Telangana State Electricity Regulatory Commission (Adoption) MYT Regulation, 2014 the Operations and Maintenance expenses are described as under:

“The Distribution Licensee in its filings for the Control Period shall submit the consolidated O&M expenses for the Base Year of the Control Period, and two years preceding the Base Year. The O&M expenses for the Base Year shall be determined based on latest audited accounts, best estimates of Distribution Licensee of actual O&M expenses for relevant years and other factors considered relevant. The O&M expenses for the Base Year, if required, will be used for projecting the expenses for each year of the Control Period”.

“The composite O&M expenses permissible towards revenue requirement for each year of the Control Period shall be determined, by using pre-determined norms or formulae for this purpose. These norms or formulae shall be determined by the Commission based on Distribution Licensee’s submissions in this regard, previous years’ actual expenses and any other factors considered relevant by the Commission.

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.

In the third control period distribution business Tariff order, The Commission adopted the norm based methodology to project O&M expenses based on considering norms linked to network elements which include Substations, DTRs, line length (Circuit KM) and number of consumers, this method accounts for *both* inflationary cost on existing O&M expenses and increase in expenses due to addition of employees to cater additional load growth.

- **For Employee and A&G expenses**, The Commission identified the number of consumers, length of lines, number of DTRs and number of sub-stations as the main cost drivers.
- **For R&M cost**, the Commission linked it to GFA, since repair and maintenance activity is related to assets in use, assets replaced and new assets added in the block.
- **Employee and Administration & General (A&G) Cost**: Regarding fixing the norms for employee cost and A&G cost based on the cost drivers identified, the Commission has considered the following approach:

The Commission analyzed the actual expenditure incurred towards employee cost during the base year (FY 2013-14) and preceding year (FY 2012-13). Due to the pay revision w.e.f. 01.04.2014, the actual expenditure incurred during FY2014-15 has been considered.

Similarly, the expenditure incurred towards administrative and general expenses i.e. contract payments, legal charges etc. are examined for the Base year FY 2013-14 and preceding year FY 2012-13 and examined the expenditure incurred for FY 2014-15.

Commission also observed the variation in consumer price index (CPI) and whole sale price index (WPI) over past five years and the escalation rate has been worked out

considering, 60% of CPI and 40% of WPI. Based on these assumptions, the escalation rate works out to be 9.11%.

For correlating the cost of Employee and A&G to cost derivatives, the commission has allocated the cost among the cost drivers in the ratio of 20:10:21:49 to number of consumers: number of DTRs: length of lines: number of substations. The cost allocated to each cost driver was computed year-wise for FY 2012-13, FY 2013-14 and FY 2014-15 and an average cost allocation for each cost driver is arrived. This average cost for a cost driver is taken as base for FY 2014-15. To arrive at the cost allocated to each cost driver for each year of the balance period of third control period, an escalation factor of 9.11% is used year on year for the years of 2015-16 to 2018-19.

The employee cost and the A&G cost for the years 2015-16 to 2018-19 of the third control period was determined by multiplying the cost allocated to each cost driver for the corresponding year with the number of that particular cost driver existing at the end of that year and summing up all the cost computed gives total employee cost and A&G expenses for each year of control period.

3.6.1 Proposed Methodology for Projection of O & M expenses

The Licensee proposes norm based methodology to project O&M expenses for the fourth control period, as methodology approved by the Hon'ble commission last control period. As this method accounts key parameters such as Number of consumers, Number of DTRs, Substation and Line length as key drivers will have direct impact on network additions and increase in sales. As more number of sales and additional load growth will have direct impact on more number addition of these key cost drivers i.e substations, DTR and line length; will lead to increase in the operation & maintenance cost. As this methodology also has provision for inflationary cost on existing O&M expenses and increase in expenses due to addition of employees & addition of network.

Base Year Norm:

The actual Employee & A&G expenses for Base year FY 2018-19 and network elements as on 31.03.2019 are tabulated below:

Item	Unit	FY 2018-19
Employee Expenses	INR Crs	1681.84
Administration & General Expenses	INR Crs	87.07

Network Numbers for FY 2018-19		
No. of Substations	Nos	1,368
Line Length in KM	Ckt-Kms	262,120
No. of DTRs	Nos	282,666
No. of Consumers	Nos	57,05,258

The Employee expense and A&G expense are allocated to each cost driver i.e. cost per sub station, cost per KM of line, cost per DTR and cost per consumer considering the base year actuals. The cost allocation to each cost driver arrived is as follows.

Particulars	Unit	Norm
EC per SS	Rs/SS	6,024,137
EC per line length	Rs/Ckt-kms	13,474
EC per DTR	Rs/ DTR	5,950
EC per consumer	Rs/Consumer	590
A&G Cost per SS	Rs/SS	311,889
A&G cost per line length	Rs/Ckt-kms	698
A&G cost per DTR	Rs/ DTR	308
A&G cost per DTR	Rs/Consumer	31

3.6.2 Projection of O&M Expenses

3.6.2.1 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 three years period (FY 2016-17 to FY 2018-19) of TSNPDCL 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 fourth control period for TSNPDCL is indicated below:

Norms for R&M expenses in % of GFA	1.34%
------------------------------------	--------------

The below table summarizes the projection of the Distribution Licensee's opening GFA for the Fourth control period and the associated R&M expenses.

Rs. In Crores

R&M Expenses projection	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
Opening GFA	7,030	8,834	10,824	13,154	15,924
R&M Cost	94.1	118.2	144.8	176.0	213.1

The total R&M expense for the fourth Control period is projected to be **Rs. 746Crs.** as seen from the table above.

3.6.2.2 Determination of Employee expenses and Administrative & General expenses

For projecting the cost of Employee and A&G cost, base year i.e., FY 2018-19 Employee cost and A&G cost are allocated to among the cost drivers i.e., number of consumers: number of DTRs: length of lines: number of substations in the ratio of 20:10:21:49 to. The cost allocated to each cost driver was computed base year i.e.,

FY2018-19, based on actual network elements and actual employee and A&G cost per unit of cost driver was derived for year FY 2018-19. To arrive at the cost allocated to each cost driver for each year of the balance period of fourth control period, an escalation factor of 5.42 % is used year on year for the years of 2019-20 to 2023-24.

The employee cost and the A&G expenses for the years 2019-20 to 2023-24 of the fourth control period was determined by multiplying the cost allocated to each cost driver for the corresponding year with the number of that particular cost driver existing at the end of that year and summing up all the cost computed gives total employee cost and A&G expenses for each year of control period. For FY 2018-19, the actual expenditure and actual network elements were considered.

Escalation Rate: The norms arrived at for the year 2018-19 is escalated year on year using the weighted average of Consumer Price Index (CPI) for industrial workers and Wholesale Price Index (CPI- Industrial Workers: 60% and WPI: Wholesale price Index40%). An increase in CPI proportionately increases impacts EE, while an increase in WPI proportionately increases the A&G Expenses.

Based on the CERC adopted methodology, the rate of escalation has been computed using CPI and WPI indices of past 5 years which works out to 5.42% p.a.

The EE per unit norm and A&G per unit norm have been escalated by 5.42 % for each year of the fourth control period over base year norms. Norms for 4th control period are presented in table below.

Revised Norms for the 4 th Control Period Control Period (FY 2019-20 to FY 2023-24) [in Rs.]					
Item	2019-20	2020-21	2021-22	2022-23	2023-24
EC per SS	6,350,382	6,694,295	7,056,834	7,439,006	7,841,876
EC per line length	14,204	14,973	15,784	16,639	17,540
EC per DTR	6,272	6,612	6,970	7,347	7,745
EC per consumer	622	655	691	728	767
A&G per SS	328,780	346,585	365,355	385,141	405,999
A&G per line length	735	775	817	861	908
A&G per DTR	325	342	361	380	401
A&G per consumer	32	34	36	38	40

The Licensee has linked the Employee expenses and Administrative & General expenses to the cost drivers of utility. This is considered on the premise that, number consumers, number of substations, number of DTRS and line length directly linked to sales and serving capacity of licensee; as more number of substations, DTR and Line length direct linkage to more no. of sales, 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 norms based approach as it is linked to utility key network elements and consumers.

For projection of key network elements for 4th control period, Considered the actual network elements of base year i.e., FY 2018-19, for projection of key network elements for 4th control period, considered consumers and load projection projected by the Licensee in the Retail supply filings for FY 2019-20 and FY 2020-21 are considered and for remaining control period considered resource plan projections.

The following methodology has been adopted for the estimation of the additional network elements required to cater to the load growth.

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 of feeders and PTRs, data received from the field to ensure that the model reflects the real situation as in the field. Based on location and current load pattern subdivision are classified as Urban, Semi-urban and rural; based on load density assumed proposed ss capacity.

Substation, PTRS, feeders and DTRs are projected by considering all associated equipments (33 Kv line, 11 KV line, LT Line, VCBs, breaker etc.), based on existing load and sales, assumed 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, 16 MVA for sub-urban substations, and 10 MVA for rural substations. To cater the load

demand explored the potential addition of feeders, enhancement/ addition of PTRs else proposed for new additional substation near to load centres. 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 the Threshold Capacity in any of the years in the control period.

Distribution transformers are categorized as agricultural and non- agricultural. Information of DTRs, circle and capacity wise was collected. LT sales (Non agriculture and agriculture) is adjusted for LT losses and thereafter kWh/kVA computed for each circle based on the existing DTR Capacity (kVA) (Agricultural & Non-agricultural category). Circle wise DTR No's are arrived based on the existing % configuration (kVA capacity) for 25, 63,100,160 & 315 kVA (Non-agricultural) but restricting to only 25 and 63 kVA for DTRs (agricultural category)

The loading of network elements in urban and rural areas display different characteristics as per the peak loading data. It has been observed that the load concentration is higher in urban areas as compared to sub- urban and rural areas. Therefore a higher threshold has been adopted for urban areas to align the network additions of urban and rural/sub-urban areas with each other.

Based on historic data arrived growth rates for adopted the same for projection of sales for control period; based on projected sales and available capacities at key network elements are estimated.

NETWORK ELEMENTS PROJECTIONS FOR 4TH CONTROL PERIOD

Based on the above mentioned approach, the details of the network elements are projected for the 4th control period. Network elements i.e., substations, network, DTRs and consumers aggregate of all circles has been captured in table below.

Network Elements – Projection for Aggregate of all circles					
Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
No. of Substations	1,432	1,605	1,817	2,160	2,420
Line Length (in km)	274,992	291,205	308,508	328,189	348,033
No. of DTRs	299,336	316,903	335,423	354,951	375,551
No. of Consumers	5,980,563	6,255,315	6,427,694	6,600,069	6,772,444

Based on per unit cost of each cost driver elements for employee expenses and A&G expenses and projected network elements arrived the employee expenses and A&G expenses. The Licensee has projected that the total O&M expenses for the Third Control period to be **Rs.14,050 Crs.** O&M projections for the Control period and other details are shown in the table below.

O&M cost projection	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	Total
Employee Cost (Rs. Crs.)	1859.41	2129.82	2446.89	2894.21	3318.83	12649.15
A&G Expenses (Rs. Crs.)	96.27	110.27	126.68	149.84	171.83	654.89
R&M Cost (Rs. Crs.)	94.07	118.20	144.82	176.00	213.06	746.15
Total O&M Expenses (Rs.Crs.)	2049.75	2358.28	2718.40	3220.05	3703.71	14050.19

3.7 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:

$$\text{RoCE}_i = \text{WACC} * \text{RRB}_i$$

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 showing an upward trend has resulted upward trend in nominal interest rate in the recent past.

In the FY 2018-19, the average interest rate of long term loans from various funding agencies is about 10.72% p.a and further after considering the inflation impact, the licensee has considered cost of debt of 11 % p.a. on future new loans during the 4th Control period.

As per the approved norm for the third control period, the DISCOM is expecting Return on Equity at 14% p.a for the 4th MYT Period.

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

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
	Year	Projection				
Capital Structure						
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%
Cost of Funds						
Cost of Debt percent	10.72%	10.16%	10.43%	10.63%	10.74%	10.81%
Return on Equity percent	14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
WACC	11.54%	11.12%	11.32%	11.47%	11.55%	11.61%

3.8 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:

Return on Capital Employed	Rs. In Crores					
	2018-19 Base Year	2019-20	2020-21	2021-22	2022-23	2023-24
	Projection					
Regulated Rate Base	2239.60	3151.12	4537.38	6048.77	7762.06	9584.58
Weighted Average Cost of Capital (WACC)	11.54%	11.12%	11.32%	11.47%	11.55%	11.61%
Return on Capital Employed	258.52	350.37	513.64	693.84	896.78	1112.46

3.9 SPECIAL APPROPRIATIONS FOR SAFETY MEASURES

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

Rs. Crs

Sl.No.	Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
		Projection				
1	Erection of middle poles	15.76	16.61	16.61	16.61	16.61
2	Rectification of bent poles	0.79	0.83	0.83	0.83	0.83
3	Replacement of damaged poles	5.19	5.46	5.46	5.46	5.46
4	Rectification of Damaged staywire	1.96	2.06	2.06	2.06	2.06
5	Rectification of Damged stud poles	3.97	4.18	4.18	4.18	4.18
6	Rectification of AB Switches	0.60	0.63	0.63	0.63	0.63
7	Replacement of AB switches	1.51	1.60	1.60	1.60	1.60
8	DTR Plinth Raising (If alaramingly Low level)	6.40	6.75	6.75	6.75	6.75
9	Renovation of defective earthing at DTRs	2.26	2.39	2.39	2.39	2.39
10	Rectification of Low level road crossings	0.41	0.43	0.43	0.43	0.43
11	Replacement of Defective insulators	0.25	0.26	0.26	0.26	0.26
12	Rectification of losse spans (Restringing)	9.84	10.36	10.36	10.36	10.36
13	Raising of low height lines (additions T Xarms)	0.24	0.25	0.25	0.25	0.25
14	Fencing of DTRs in Urban areas	1.00	1.05	1.05	1.05	1.05
15	Others	6.69	7.10	7.32	7.54	7.10
	Total	56.87	59.97	60.19	60.41	59.97

3.10 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 30%, surcharge 12% and Cess 3% for the Fourth control period.

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Projection				
25% of Regulated Rate Base (A) (Equity Portion)	787.78	1134.34	1512.19	1940.51	2396.14
Return allowed for Equity % (B) (Incl. Supply Margin)	16.00%	16.00%	16.00%	16.00%	16.00%
Cost of Debt (C)	10.16%	10.43%	10.63%	10.74%	10.81%
Expected Profit on 25% of RRB D= ((B-C)*A)	46.02	63.22	81.24	102.11	124.38
Tax on Income (Incl. Surcharge & Cess)	15.93	21.88	28.12	35.34	43.05

3.11 OTHER EXPENSES

The licensee does not propose any expenses under other expenses for the Control period.

3.12 REVENUE REQUIREMENT FOR 4TH CONTROL PERIOD

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

ARR for Distribution Business for the 4th Control period

Rs. In Crores

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
	Projection				
Operation and Maintenance Charges	2050	2358	2718	3220	3704
Depreciation	417	545	688	872	1073
Advance Against Depreciation	0	0	0	0	0
Taxes on Income	16	22	28	35	43
Other Expenditure	0	0	0	0	0
Special Appropriations	57	60	60	60	60
Total Expenditure	2540	2985	3495	4187	4880
Less: O&M expenses capitalized	135	194	203	260	248
Net Expenditure	2405	2792	3292	3928	4631
Add: Return on Capital Employed	350	514	694	897	1112
Total Distribution ARR	2755	3305	3986	4825	5744
Less: Wheeling Revenue from Third Party/Open Access/NTI (if any)	141	152	161	175	188
Revenue Requirement, (Net transferred to Retail Supply Business)	2614	3153	3825	4649	5555

3.13 WHEELING REVENUE

The Licensee has not proposed any wheeling revenue from Third party/Open Access sales.

3.14 NON-TARIFF INCOME

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

Non-Tariff Income

Rs. In Crores

Particulars	2018-19 Base Year	2019-20	2020-21	2021-22	2022-23	2023-24
		Projection				
Amortisation of dep on CC assets	111.63	88.96	98.85	106.72	120.24	132.11
Interest on Staff Loans and Advances	4.29	4.38	4.47	4.56	4.65	4.74
Income from Investments	20.09	20.50	20.91	21.32	21.75	22.18
Income from Trading - Sale of Scrap / Stores	0.53	0.54	0.55	0.56	0.57	0.58
Excess found on Physical Verification of Stoc	0.18	0.18	0.18	0.19	0.19	0.19
Registration Fees	0.33	0.34	0.34	0.35	0.36	0.37
Fines/Penalties from Contractors	0.00	0.00	0.00	0.00	0.00	0.00
Fines/Penalties from Suppliers/Mat Cust.	35.33	24.12	24.60	25.10	25.60	26.11
Supervision Charges	1.49	1.52	1.55	1.58	1.61	1.65
Other Income-Sale of Tender Schedules	0.46	0.46	0.47	0.48	0.49	0.50
Total Non-Taiff Income	174.42	140.99	151.92	160.85	175.46	188.44

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.

4 WHEELING LOSSES

The actual voltage wise losses computed for FY: 2018-19 considering the DISCOM input at 33 kV level as against approved losses is as follows

TSNPDCL Losses for FY 2018-19			ERC
Item	Unit	Value	Approved
Energy Input at Discom Periphery (excl EHT sales)	MU	16,856	
33 kV sales	MU	452	
33 kV loss	MU	603	
33 kV loss	%	3.58%	4.00%
Energy Input at 11 kV	MU	15,801	
11 kV Sales	MU	1,814	
11 kV Loss	MU	620	
11 kV loss	%	3.92%	4.15%
Energy Input at LT	MU	13,367	
LT Sales	MU	12,697	
LT Loss	MU	670	
LT Loss	%	5.01%	5.00%
Total Losses (MU)	MU	1,893	
Total Losses (%)	%	11.23%	

The licensee observes that by considering the actual Agriculture sales, the loss at LT Voltage level is nearer to the loss approved by the Hon'ble Commission. The licensee requests the Hon'ble Commission to consider the actual losses of FY 2018-19 as computed above to arrive at the loss trajectory for the next two control periods, i.e. from FY 2019-20 to FY 2023-24.& FY: 2024-25 to FY: 2028-29.

The licensee has implemented various 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. Further reduction of losses from the present level of distribution losses 11.23% for FY 2018-19 is very difficult, further significant reduction of losses achieved by technology upgradation, which requires huge investments. In view of the above, the licensee humbly requests the Hon'ble Commission to approve the voltage wise loss trajectory for the 4th control period as given in the below table.

Losses	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24
	Actuals	Projection				
LT Loss (%)	5.01%	5.01%	5.00%	5.00%	4.99%	4.99%
11 kV Loss (%)	3.92%	3.92%	3.92%	3.92%	3.92%	3.91%
33 kV Loss (%)	3.58%	3.58%	3.58%	3.57%	3.57%	3.57%

5 PROPOSED WHEELING CHARGES & 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

- Employee Expenses (EE) – Driven by line length, number of substations, number of consumers and DTRs
- Administrative & General Expenses (A&G) – Driven by line length, number of substations, number of consumers and DTRs
- Repairs & Maintenance (R&M) expenses – Driven by assets

2. Depreciation – Driven by assets
3. Interest/ROCE – Driven by assets
4. O&M capitalized – Driven by O&M expenses
5. Other expenses – Driven by assets
6. Non-tariff income – Driven by assets

Allocation of ARR components excluding Employee and Administrative & General expenses, which form a part of O&M expenses, and O&M capitalization have been allocated in proportion to gross fixed assets pertaining to that respective voltage. Employee expense and Administrative & General Expenses have been allocated to number of Substations, lines, DTRs and consumers in the ratio of 49%, 21%, 10% and 20% respectively for the first year and subsequently in the ratio of Employee and A&G cost contributed by each of these elements at respective voltage level. O&M capitalized is allocated in the ratio of O&M expenses each year at respective voltage level.

The steps are as follows:

Step 1: Voltage wise allocation of Gross fixed assets, voltage wise identification of Substations, lines, DTRs and consumers.

Step 2: Determination of voltage wise demand

Step 3: Allocation of ARR components for the respective voltage based on Gross fixed assets (GFA) and Substations, lines, DTRs and consumers.

Step 1: Determination of voltage wise asset base and identification of SS, lines, DTRs and consumers

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 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24
33 kV	551	699	853	1040	1257
11 kV	3770	4667	5633	6788	8037
LT	4514	5458	6669	8097	9592
Total	8834	10824	13154	15924	18886

Voltage wise SS, lines consumers and DTRs are considered as filed in the resource plan

Network Elements					
Components	2019-20	2020-21	2021-22	2022-23	2023-24
Number of Substations (Nos.)	1,432	1,605	1,817	2,160	2,420
Line Length (KM)	274992	291205	308508	328189	348033
LT	171153	176423	181979	187838	194018
11kV	92186.6	101054	110256	119963	130508
33kV	11652.2	13728.2	16272.2	20388.2	23508.2
DTR (Nos.)	299336	316903	335423	354951	375551
LT	299336	316903	335423	354951	375551
Consumer (Nos.)	5980507	6255256	6427633	6600007	6772380
LT	5977573	6252187	6424480	6596769	6769057
11kV	2794	2921	3002	3083	3163
33kV	140	148	151	155	160

Step 2: Determination of voltage wise demand

The Distribution Licensee has captured the historical Contracted Demand of 33 kV and 11kV and LT. Based on the historical contracted demand the demand for fourth control period is projected. Factor of 80% for HT category and 20% for LT category has been considered to take into account diversity factor in connected load. This is the similar approach followed by the then Hon APERC in the MYT order dated 9th May 2014. The same was implemented in the MYT order for the Third control period, dated 27th March 2015.

Determination of Coincident Demand (33kV, 11kV, LT) – MW						
Parameter	Voltage Level	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24
Contracted Load – CD33	33 kV	257	258	259	259	259
Contracted Load – CD11	11 kV	514	532	554	577	599
Coincident Demand – CDLT	LT	1766	1847	1916	1984	2053
Total		2537	2637	2728	2820	2912

The Load at 33 KV contributed from all voltages was computed by adding up the following

- Grossed up 33 kV Coincident Demand with 33 kV losses
- Grossed up 11 kV Coincident Demand with 11 kV losses and further by 33 kV losses
- Grossed up Coincident Demand of LT with LT losses and further by 11kV and then by 33 kV losses

The Load at 11 kV contributed from all the voltages was computed by adding the following

- Grossed up 11 kV Coincident Demand with 11 kV losses
- Grossed up Coincident load of LT with LT losses and further by 11kV

The Load at LT contributed from all the voltages was computed by adding the following

- Grossed up Coincident Demand of LT with LT losses

Voltage Level Losses (%)					
	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24
33 kV	3.58%	3.58%	3.57%	3.57%	3.57%
11 kV	3.92%	3.92%	3.92%	3.92%	3.91%
LT	5.01%	5.00%	5.00%	4.99%	4.99%

The below table lists the Demand after adjusting for the losses

Total Demand contribution at each voltage level after loss adjustment – MW					
	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24
Load at 33 kV	2829	2940	3043	3145	3248
Load at 11 kV	2470	2577	2675	2774	2873
Load at LT	1859	1944	2016	2089	2161

Step 3: Allocation of ARR components for the respective voltage

O&M Expense allocation

The O&M expenses have been segregated into three major components – EE, A&G and R&M.

Revised distribution MYT order of 3rd control period, dated 27th March 2015, attributed the Employee Expenses and Administrative & General expenditure incurred to the number of substations, length of lines, no. of DTRs and no. of consumer in the ratio of 49%, 21%, 10% and 20%. This is close to the actuals. Thus, the licensee has calculated Employee cost and A&G cost for the base year using this ratio. For subsequent years, the ratio used is as per calculated Employee and A&G cost.

Further, for allocation of these expenses to each of the voltages, following method is used:

- Line related cost is allocated on the basis of voltage wise line length adjusted for per unit line cost of 33, 11 and LT.
- Consumer related cost is apportioned on the basis of number of consumers at each voltage level.
- Cost of DTRs is completely allocated to LT network
- Cost of SS is allocated to 11kV and 33kV in the ratio of 90%:10%.

The Distribution licensee has observed that the actual Repairs & Maintenance expenses are a function of asset base. An increase in the asset base leads to a proportional increase in R&M expenses. Hence, Repairs & Maintenance Expenses have allocated based on the gross voltage level asset base. This is in line with the revised distribution MYT order of 3rd control period, dated 27th March 2015

O&M Capitalized expense

O&M capitalized is calculated as a percentage of total O&M charges in any given year. Thus, these are apportioned in the ratio of total O&M cost during each year.

Deprecation/ROCE allocation/Taxes on income/Other expenses

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.

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 19-20	FY 20-	FY 21-22	FY 22-23	FY 23-24
ARR33	33 kV	15.46	18.44	22.02	26.57	31.39
ARR11	11 kV	313.63	379.11	466.87	582.05	705.28
ARRLT	LT	2285.07	2755.84	3336.49	4040.57	4818.68
	Total	2,614.17	3,153.39	3,825.37	4,649.19	5,555.35

Calculation of Voltage wise tariff is based on Coincident demand for 33 kV, 11 kV and LT after adjusting for losses. Cost of utilization of upstream assets is also allocated to downstream voltages - Proportional cost of utilization of 33 kV assets to total cost of 11 kV and LT, and adding the proportional cost of utilization of 11 kV asset base to LT. The LT cost is considered for 100% towards LT.

The voltage level wheeling charges are computed by dividing the total cost so obtained by total demand incident at that voltage level, inclusive of downstream loads.

Voltage Level	Voltage-wise wheeling charges
33kV	ARR33 / CID33
11kV	(ARR11 + 33kV cost) / CID11
LT	(ARRLT + 11kV and 33kV cost) / CIDLT

CID - Coincident demand

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

Wheeling Tariff – Rs./kVA/month					
Voltage Level	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24
33 kV (Rs./kVA/Month)	50.05	59.49	70.93	85.48	100.82
11 kV (Rs./kVA/Month)	508.28	594.07	702.02	841.21	981.19
LT (Rs./kVA/Month)	1,078.42	1,243.51	1,451.42	1,696.73	1,955.64

6 STATUS OF DIRECTIVE COMPLIANCE

The Consolidated compliance report of the directives issued in the Wheeling Tariff Order for 3rd control period.

Directives	Compliance Report
<p><u>Safety Improvement Plan:</u></p> <p>To prepare a safety improvement plans for four years (for FY 2015-16 to FY 2018-19) relating to distribution network with a budget of Rs. 170 Cr. for TSSPDCL and 267 Cr for TSNPDCL and file the same with the Commission for approval by 31st August 2015. Upon approval of such safety improvement plan by the Commission, the Discom may complement the project. Non-compliance of this directive may lead to claw back of the amounts provided with carrying norm apart from disallowing the compensation/ex-gratia amounts paid on account of accidents occurred due to poor network.</p>	<p>As part of the Safety Improvement plan, TSNPDCL has initiated Distribution Network Renovation (DNR) to rectify the defects in the distribution system so as to reduce / avoid electrical accidents.</p> <p>For execution of these works special appropriation amount of Rs. 292 Crores allocated towards the safety measures for 3rd Control period. Further to submit that under Telangana state “power week program” rectification and renovation works in existing distribution system in villages are executed.</p> <p>It is further proposed to complete these works on priority basis.</p>
<p><u>Safety Officer</u></p> <p>To designate an Officer not below the rank of Divisional Engineer at each circle as “Safety Officer” and shall be made responsible for implementing all safety standards as per I.E Rules/Safety standards as specified by CEA. The Safety Officer shall inspect all electrical installation to prepare a detailed proposal to rectify any short comings noticed or brought to his notice to ensure that the electrical accidents do not take place.</p>	<p>DE/ Technical is designated as safety officer in each circle</p>

Directives	Compliance Report
<p><u>Neutral wire –HVDS areas:</u></p> <p>To run neutral wire from 33/11 KV SS to all single phase transformers both existing and new installations without resorting to use of earth as return conductor. Further the Licensees are directed to strictly implement earthing practices as per 61(1) (a), 67(1A) and 92 of IE Rules , 1956 and provide three earth pits as per the prescribed construction standards. The Licensees shall file half yearly reports by 31st October and 30th April for periods ending 30th September and 31st March respectively</p>	<p>HVDS works are being taken up on agriculture feeder by replacing high capacity distribution transformers with small capacity distribution transformers. Single phase Distribution Transformers are being erected for electrification of hamlets situated at inaccessible areas. TSNPDCL is extending supply by erecting single phase distribution transformers by providing local earthing with 2 nos. CI earth electrodes. Earthing is being done in line with the earthing practices specified in IE rules 1956. The details are as follows:</p> <ul style="list-style-type: none"> • 2 Nos. electrodes of 2 mtrs. long, • 80mm Dia, CI pipes, • 25 X 3 mm GI flat and No.8 GI wire. • Separate earthing is being provided for HV & LV side of distribution transformer. • Interconnection of both earth pits is made with GI flat. <p>Since the hamlets are spread over at distant places, running the neutral wire from 33/11KV Sub-station is very expensive. Further, earthing of neutral at intermediate locations, needs additional expenditure.</p> <p>Hence, it has been decided to provide local ground earthing by maintaining the earth resistance as per REC construction standards.</p>
<p>True –UP</p> <p>The Discoms are directed to file the true up proposals of Distribution Business for both control periods (i.e., 1st Control Period and 2nd Control Period) after segregating the assets and liabilities of Anantapur and Kurnool districts from APCPDCL and seven mandals of APNPDCL in line with AP Re-organization Act, 2014, as per prevailing Regulation.</p>	<p>TSNPDCL has segregated assets and liabilities of 7 mandals of APNPDCL in line with AP Re-organization Act, 2014.</p> <p>The True-up proposals of Distribution business for 1st and 2nd control period are being submitted in due course of time.</p>

7 DISTRIBUTION BUSINESS FILING FORMATS

Company Name	TSNPDCL
Filing Date (dd/mm/yy)	Annual
Multi Year Tariff Period	FY 2020-24
Year	FY 2020
Date Submitted	16-12-2019
No. of Years	5
Type of Data	Filing
Business type	Distribution

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

Form 1.0 - Revenue Requirement

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

Amount in Rs Crores

Particulars	D Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Operation and Maintenance Charges		1840.90	2049.75	2358.28	2718.40	3220.05	3703.71
Depreciation		379.82	417.36	545.28	688.28	871.59	1073.01
Advance Against Depreciation							
Taxes on Income		0.00	15.93	21.88	28.12	35.34	43.05
Other Expenditure		0.00	0.00	0.00	0.00	0.00	0.00
Special Appropriations		23.64	56.87	59.97	60.19	60.41	59.97
Total Expenditure		2244.36	2539.90	2985.40	3494.98	4187.39	4879.74
Less: IDC and expenses capitalized*							
Less: O&M expenses capitalized		67.06	135.12	193.73	202.59	259.52	248.42
Net Expenditure		2177.30	2404.78	2791.67	3292.38	3927.87	4631.32
Add Return on Capital Employed		258.52	350.37	513.64	693.84	896.78	1112.46
Total Distribution ARR		2435.82	2755.15	3305.31	3986.22	4824.65	5743.78
Less: Wheeling Revenue from Third Party/Open Access/NTI (if any)		174.42	140.99	151.92	160.85	175.46	188.44
Revenue Requirement, (Net transferred to Retail Supply Business)		2261.40	2614.17	3153.39	3825.37	4649.19	5555.35

*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
Assets		7030.47	8833.99	10824.05	13154.17	15924.13	18886.45
OCFA Opening Balance		6042.99	7030.47	8833.99	10824.05	13154.17	15924.13
Additions to OCFA		987.48	1803.52	1990.06	2330.12	2769.96	2962.32
Depreciation		3547.27	3964.62	4509.90	5198.18	6069.77	7142.78
Opening Balance		3169.00	3547.27	3964.62	4509.90	5198.18	6069.77
Depreciation during the Year		378.26	417.36	545.28	688.28	871.59	1073.01
Consumer Contributions		1166.90	1225.05	1276.76	1348.90	1474.01	1572.16
Cons Contributions Opening Balance		1017.91	1166.90	1225.05	1276.76	1348.90	1474.01
Additions to Cons Contributions		148.99	58.15	51.71	72.14	125.11	98.15
Working Capital		153.41	170.81	196.52	226.53	268.34	308.64
Change in Rate Base		230.11	664.00	696.54	784.85	886.63	895.58
Regulated Rate Base		2239.60	3151.12	4537.38	6048.77	7762.06	9584.58

Form 1b - Capital Structure

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

In Percentage

Particulars	D Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Capital Structure							
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%
Cost of Funds							
Cost of Debt percent		10.72%	10.16%	10.43%	10.63%	10.74%	10.81%
Return on Equity percent		14.00%	14.00%	14.00%	14.00%	14.00%	14.00%
WACC		11.54%	11.12%	11.32%	11.47%	11.55%	11.61%

Form 1.1(i) - BALANCE SHEET

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
ASSETS													
Gross Fixed Assets		7030.47	8833.99	10824.05	13154.17	15924.13	18886.45						
Less: Accumulated Depreciation		3547.27	3964.62	4509.90	5198.18	6069.77	7142.78						
Net Fixed Assets		3483.21	4869.37	6314.15	7955.99	9854.36	11743.67						
Capital Expenditure-in-progress		850.78	632.01	905.28	948.74	1214.15	1165.45						
Investments		172.82	175.77	179.00	182.51	186.33	190.50						
Current Assets		6804.44	6838.37	6380.22	6350.38	6298.66	6945.71						
Assets not in use		0.00	0.00	0.00	0.00	0.00	0.00						
Miscellaneous Expenditure		0.00	0.00	0.00	0.00	0.00	0.00						
Others		359.08	359.08	359.08	359.08	359.08	359.08						
TOTAL ASSETS		11670.33	12874.60	14137.73	15796.69	17912.58	20404.42						
LIABILITIES													
Equity		5269.20	5315.50	5379.04	5460.67	5563.25	5688.18						
Reserves		32.83	35.79	39.01	42.52	46.35	50.52						
Indian Loans		3957.91	4981.38	6194.78	7493.90	9267.49	11162.73						
Foreign Loans		0.00	0.00	0.00	0.00	0.00	0.00						
Current Liabilities		9781.96	9855.37	9786.62	9989.18	10099.97	10469.31						
Contributions & Grants		1166.90	1225.05	1276.76	1348.90	1474.01	1572.16						
Payment due on Capital Liabilities		0.00	0.00	0.00	0.00	0.00	0.00						
Others		3330.69	3330.69	3330.69	3330.69	3330.69	3330.69						
Surplus/(Deficit)		-11869.17	-11869.17	-11869.17	-11869.17	-11869.17	-11869.17						
TOTAL LIABILITIES		11670.33	12874.60	14137.73	15796.69	17912.58	20404.42						

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		1.75	2.02		3.77	
Buildings		188.63	21.91		210.54	
Intangible Assets		9.26	0.00		9.26	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		0.00	0.00		0.00	
Plant & Machinery		2359.96	440.53	0.00	2800.49	
Plant and Machinery - 33 KV		0.11	0.02		0.13	
Plant and Machinery - 11 KV		850.09	158.68		1008.78	
Plant and Machinery - LT		1509.76	281.82		1791.58	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		271.68	50.14		321.82	
Others		0.00	0.00		0.00	
Line Cable Network		1420.20	449.81	0.00	1870.01	
Line Cable Network - 33KV		187.87	59.50		247.37	
Line Cable Network - 11KV		685.81	217.21		903.02	
Line Cable Network - LT Category		546.52	173.10		719.62	
Others		0.00	0.00		0.00	
Vehicles		0.01	0.00		0.01	
Furniture & Fixtures		1.09	21.65		22.74	Fully depreciated assets(FDA) have
Office Equipment		47.82	1.43		49.25	been reflected in each year in the
Fully Depreciated Fixed Assets		1742.59	0.00		1742.59	Opening balance
Others		0.00	0.00		0.00	
Spare Units/ Service units		0.00	0.00		0.00	
Total		6042.99	987.48	0.00	7030.47	

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		1.75	3.70		5.44	
Buildings		240.04	40.01		280.05	
Intangible Assets		9.26	0.00		9.26	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		0.00	0.00		0.00	
Plant & Machinery		2759.59	804.57	0.00	3564.16	
Plant and Machinery - 33 KV		0.24	0.04		0.28	
Plant and Machinery - 11 KV		1113.20	289.82		1403.02	
Plant and Machinery - LT		1646.14	514.72		2160.86	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		281.40	91.57		372.97	
Others		0.00	0.00		0.00	
Line Cable Network		1769.44	821.53	0.00	2590.96	
Line Cable Network - 33KV		277.06	108.67		385.74	
Line Cable Network - 11KV		839.41	396.71		1236.12	
Line Cable Network - LT Category		652.97	316.14		969.11	
Others		0.00	0.00		0.00	
Vehicles		0.29	0.00		0.29	
Furniture & Fixtures		1.49	39.54		41.03	Fully depreciated assets(FDA) have
Office Equipment		56.78	2.60		59.38	been reflected in each year in the
Fully Depreciated Fixed Assets		1910.46	0.00		1910.46	Opening balance
Others		0.00	0.00		0.00	
Spare Units/ Service units		0.00	0.00		0.00	
Total		7030.47	1803.52	0.00	8833.99	

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		5.44	4.08		9.52	
Buildings		279.91	44.15		324.06	
Intangible Assets		1.06	0.00		1.06	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		0.00	0.00		0.00	
Plant & Machinery		3417.55	887.79	0.00	4305.34	
Plant and Machinery - 33 KV		0.28	0.04		0.32	
Plant and Machinery - 11 KV		1329.70	319.79		1649.49	
Plant and Machinery - LT		2087.57	567.95		2655.53	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		343.08	101.04		444.13	
Others		0.00	0.00		0.00	
Line Cable Network		2479.62	906.50	0.00	3386.12	
Line Cable Network - 33KV		367.30	119.92		487.21	
Line Cable Network - 11KV		1186.73	437.74		1624.48	
Line Cable Network - LT Category		925.59	348.84		1274.43	
Others		0.00	0.00		0.00	
Vehicles		0.28	0.00		0.28	
Furniture & Fixtures		40.67	43.63		84.31	Fully depreciated assets(FDA) have
Office Equipment		56.35	2.87		59.22	been reflected in each year in the
Fully Depreciated Fixed Assets		2210.02	0.00		2210.02	Opening balance
Others		0.00	0.00		0.00	
Spare Units/ Service units		0.00	0.00		0.00	
Total		8833.99	1990.06	0.00	10824.05	

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		9.52	4.78		14.30	
Buildings		322.73	51.69		374.42	
Intangible Assets		1.06	0.00		1.06	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		0.00	0.00		0.00	
Plant & Machinery		4022.13	1039.49	0.00	5061.62	
Plant and Machinery - 33 KV		0.32	0.05		0.36	
Plant and Machinery - 11 KV		1579.25	374.44		1953.69	
Plant and Machinery - LT		2442.55	665.00		3107.56	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		413.47	118.31		531.78	
Others		0.00	0.00		0.00	
Line Cable Network		3180.08	1061.40	0.00	4241.48	
Line Cable Network - 33KV		464.46	140.41		604.87	
Line Cable Network - 11KV		1526.23	512.54		2038.77	
Line Cable Network - LT Category		1189.39	408.45		1597.84	
Others		0.00	0.00		0.00	
Vehicles		0.28	0.00		0.28	
Furniture & Fixtures		84.27	51.09		135.36	Fully depreciated assets[FDA] have
Office Equipment		54.59	3.36		57.95	been reflected in each year in the
Fully Depreciated Fixed Assets		2735.92	0.00		2735.92	Opening balance
Others		0.00	0.00		0.00	
Spare Units/ Service units		0.00	0.00		0.00	
Total		10824.05	2330.12	0.00	13154.17	

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		14.30	5.68		19.97	
Buildings		374.08	61.45		435.53	
Intangible Assets		0.00	0.00		0.00	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		0.00	0.00		0.00	
Plant & Machinery		4978.65	1235.71	0.00	6214.36	
Plant and Machinery - 33 KV		0.36	0.06		0.42	
Plant and Machinery - 11 KV		1910.30	445.12		2355.42	
Plant and Machinery - LT		3067.99	790.53		3858.52	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		494.68	140.64		635.32	
Others		0.00	0.00		0.00	
Line Cable Network		4162.08	1261.75	0.00	5423.83	
Line Cable Network - 33KV		592.07	166.91		758.98	
Line Cable Network - 11KV		2003.72	609.29		2613.02	
Line Cable Network - LT Category		1566.28	485.55		2051.83	
Others		0.00	0.00		0.00	
Vehicles		0.28	0.00		0.28	
Furniture & Fixtures		135.34	60.73		196.07	Fully depreciated assets[FDA] have
Office Equipment		51.87	4.00		55.87	been reflected in each year in the
Fully Depreciated Fixed Assets		2942.90	0.00		2942.90	Opening balance
Others		0.00	0.00		0.00	
Spare Units/ Service units		0.00	0.00		0.00	
Total		13154.17	2769.96	0.00	15924.13	

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		19.97	6.07		26.04	
Buildings		435.20	65.72		500.91	
Intangible Assets		0.00	0.00		0.00	
Hydraulic Works		0.00	0.00		0.00	
Other civil works		0.00	0.00		0.00	
Plant & Machinery		6035.82	1321.53	0.00	7357.34	
Plant and Machinery - 33 KV		0.42	0.06		0.48	
Plant and Machinery - 11 KV		2278.65	476.03		2754.69	
Plant and Machinery - LT		3756.74	845.43		4602.18	
Material Handling Equipments		0.00	0.00		0.00	
Construction Equipments		0.00	0.00		0.00	
Miscellaneous Equipments		601.01	150.41		751.41	
Others		0.00	0.00		0.00	
Line Cable Network		5302.89	1349.38	0.00	6652.27	
Line Cable Network - 33KV		739.75	178.50		918.26	
Line Cable Network - 11KV		2554.72	651.61		3206.33	
Line Cable Network - LT Category		2008.41	519.27		2527.68	
Others					0.00	
Vehicles		0.28	0.00		0.28	
Furniture & Fixtures		196.02	64.95		260.97	Fully depreciated assets[FDA] have
Office Equipment		53.84	4.28		58.11	been reflected in each year in the
Fully Depreciated Fixed Assets		3279.10	0.00		3279.10	Opening balance
Others		0.00	0.00		0.00	
Spare Units/ Service units		0.00	0.00		0.00	
Total		15924.13	2962.32	0.00	18886.45	

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				
Land & land rights	-			-		0.00	0.00		
Buildings	28.02		3.02%	2.28		2.28	30.31		
Intangible Assets	6.55			1.85		1.85	8.40		
Hydraulic Works	-			-		0.00	0.00		
Other civil works	-		3.02%	4.09		4.09	4.09		
Plant & Machinery	854.17	0.00		199.00	0.00	199.00	1052.85	0.00	
Plant and Machinery - 33 KV	0.02		7.84%	0.01		0.01	0.03		
Plant and Machinery - 11 KV	303.44		7.84%	76.96		76.96	380.40		
Plant and Machinery - LT	550.72		7.84%	122.02		122.02	672.43		
Material Handling Equipments	-		12.77%	-		0.00	0.00		
Construction Equipments	-			-		0.00	0.00		
Miscellaneous Equipments	113.66		12.77%	38.67		38.67	151.08		
Others	-			-		-	0.00		
Line Cable Network	581.55	0.00		126.38	0.00	126.38	707.93	0.00	
Line Cable Network - 33KV	69.31		7.84%	17.96		17.96	87.28		
Line Cable Network - 11KV	283.99		7.84%	60.92		60.92	344.91		
Line Cable Network - LT Category	228.25		7.84%	47.49		47.49	275.74		
Others	-			-		0.00	0.00		
Vehicles	0.00		33.40%	0.00		0.00	0.01		
Furniture & Fixtures	0.36		12.77%	0.16		0.16	0.52		
Office Equipment	15.52		12.77%	7.39		7.39	22.91		
Fully Depreciated Fixed Assets	1,569.17			-		0.00	1569.17		Fully depreciated assets[FDA] have
Others	-			-		0.00	0.00		been reflected in each year in the
Spare Units/ Service units	-			-		0.00	0.00		Opening balance
Grand Total	3169.00	0.00		379.82	0.00	379.82	3547.27	0.00	

Year 1

Amount in Rs. Crores

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				
Land & land rights	0.00			-		0.00	0.00		
Buildings	33.77		3.02%	6.75		6.75	40.52		
Intangible Assets	8.40		0.00%	0.44		0.44	8.84		
Hydraulic Works	0.00			-		0.00	0.00		
Other civil works	0.00		3.02%	-		0.00	0.00		
Plant & Machinery	991.84	0.00		222.03	0.00	222.03	1213.86	0.00	
Plant and Machinery - 33 KV	0.03		7.84%	0.01		0.01	0.03		
Plant and Machinery - 11 KV	357.50		7.84%	82.33		82.33	439.84		
Plant and Machinery - LT	634.30		7.84%	139.69		139.69	773.99		
Material Handling Equipments	0.00		12.77%	-		0.00	0.00		
Construction Equipments	0.00		0.00%	-		0.00	0.00		
Miscellaneous Equipments	122.68		12.77%	32.71		32.71	155.38		
Others	0.00		0.00%	-		-	0.00		
Line Cable Network	651.20	0.00		145.69	0.00	145.69	796.88	0.00	
Line Cable Network - 33KV	81.25		7.84%	19.05		19.05	100.30		
Line Cable Network - 11KV	319.10		7.84%	71.56		71.56	390.67		
Line Cable Network - LT Category	250.84		7.84%	55.07		55.07	305.91		
Others	0.00			-		0.00	0.00		
Vehicles	0.01		33.40%	0.00		0.00	0.01		
Furniture & Fixtures	0.47		12.77%	2.67		2.67	3.14		
Office Equipment	18.66		12.77%	7.07		7.07	25.73		
Fully Depreciated Fixed Assets	1720.26			-		0.00	1720.26		Fully depreciated assets[FDA] have
Others	0.00			-		0.00	0.00		been reflected in each year in the
Spare Units/ Service units	0.00			-		0.00	0.00		Opening balance
Grand Total	3547.27	0.00		417.36	0.00	417.36	3964.62	0.00	

Year 2

Amount in Rs. Crores

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				
Land & land rights	0.00			-		0.00	0.00		
Buildings	40.40		3.02%	8.20		8.20	48.60		
Intangible Assets	0.64		0.00%	0.21		0.21	0.85		
Hydraulic Works	0.00			-		0.00	0.00		
Other civil works	0.00		3.02%	-		0.00	0.00		
Plant & Machinery	1081.92	0.00		271.11	0.00	271.11	1353.03	0.00	
Plant and Machinery - 33 KV	0.03		7.84%	0.01		0.01	0.05		
Plant and Machinery - 11 KV	373.85		7.84%	101.60		101.60	475.45		
Plant and Machinery - LT	708.04		7.84%	169.49		169.49	877.53		
Material Handling Equipments	0.00		12.77%	-		0.00	0.00		
Construction Equipments	0.00		0.00%	-		0.00	0.00		
Miscellaneous Equipments	128.49		12.77%	45.04		45.04	173.53		
Others	0.00			-			0.00		
Line Cable Network	696.68	0.00		205.83	0.00	205.83	902.51	0.00	
Line Cable Network - 33KV	83.71		7.84%	27.91		27.91	111.62		
Line Cable Network - 11KV	346.22		7.84%	100.47		100.47	446.69		
Line Cable Network - LT Category	266.74		7.84%	77.46		77.46	344.20		
Others	0.00			-		0.00	0.00		
Vehicles	0.00		33.40%	0.00		0.00	0.01		
Furniture & Fixtures	2.82		12.77%	7.95		7.95	10.77		
Office Equipment	23.00		12.77%	6.93		6.93	29.93		
Fully Depreciated Fixed Assets	1990.68			-		0.00	1990.68		Fully depreciated assets[FDA] have
Others	0.00			-		0.00	0.00		been reflected in each year in the
Spare Units/ Service units	0.00			-		0.00	0.00		Opening balance
Grand Total	3964.62	0.00		545.28	0.00	545.28	4509.90	0.00	

Year 3

Amount in Rs. Crores

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				
Land & land rights	0.00			-		0.00	0.00		
Buildings	47.41		3.02%	9.62		9.62	57.02		
Intangible Assets	0.85		0.00%	0.21		0.21	1.06		
Hydraulic Works	0.00		0.00%	-		0.00	0.00		
Other civil works	0.00		3.02%	-		0.00	0.00		
Plant & Machinery	1098.13	0.00		332.28	0.00	332.28	1430.42	0.00	
Plant and Machinery - 33 KV	0.05		7.84%	0.02		0.02	0.06		
Plant and Machinery - 11 KV	412.24		7.84%	124.43		124.43	536.67		
Plant and Machinery - LT	685.85		7.84%	207.83		207.83	893.68		
Material Handling Equipments	0.00		12.77%	-		0.00	0.00		
Construction Equipments	0.00		0.00%	-		0.00	0.00		
Miscellaneous Equipments	145.94		12.77%	54.99		54.99	200.93		
Others				-		0.00	0.00		
Line Cable Network	717.07	0.00		270.72	0.00	270.72	987.80	0.00	
Line Cable Network - 33KV	91.14		7.84%	36.58		36.58	127.72		
Line Cable Network - 11KV	358.27		7.84%	131.67		131.67	489.93		
Line Cable Network - LT Category	267.67		7.84%	102.48		102.48	370.15		
Others	0.00			-		0.00	0.00		
Vehicles	0.00		33.40%	-		0.00	0.00		
Furniture & Fixtures	10.74		12.77%	13.99		13.99	24.73		
Office Equipment	25.77		12.77%	6.47		6.47	32.23		
Fully Depreciated Fixed Assets	2463.99			-		0.00	2463.99		Fully depreciated assets[FDA] have
Others	0.00			-		0.00	0.00		been reflected in each year in the
Spare Units/ Service units	0.00			-		0.00	0.00		Opening balance
Grand Total	4509.90	0.00		688.28	0.00	688.28	5198.18	0.00	

Year 4

Amount in Rs. Crores

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				
Land & land rights	0.00			-		0.00		0.00	
Buildings	56.71		3.02%	11.32		11.32		68.03	
Intangible Assets	0.00		0.00%	-		0.00		0.00	
Hydraulic Works	0.00		0.00%	-		0.00		0.00	
Other civil works	0.00		3.02%	-		0.00		0.00	
Plant & Machinery	1355.75	0.00		411.75	0.00	411.75	0.00	1767.50	0.00
Plant and Machinery - 33 KV	0.06		7.84%	0.02		0.02		0.08	
Plant and Machinery - 11 KV	497.61		7.84%	151.89		151.89		649.50	
Plant and Machinery - LT	858.07		7.84%	259.84		259.84		1117.91	
Material Handling Equipments	0.00		12.77%	-		0.00		0.00	
Construction Equipments	0.00		0.00%	-		0.00		0.00	
Miscellaneous Equipments	167.54		12.77%	67.12		67.12		234.67	
Others				-		0.00		0.00	
Line Cable Network	916.34	0.00		353.63	0.00	353.63	0.00	1269.97	0.00
Line Cable Network - 33KV	116.20		7.84%	47.26		47.26		163.47	
Line Cable Network - 11KV	458.38		7.84%	171.97		171.97		630.36	
Line Cable Network - LT Category	341.75		7.84%	134.40		134.40		476.15	
Others	0.00			-		0.00		0.00	
Vehicles	0.00		33.40%	-		0.00		0.00	
Furniture & Fixtures	24.71		12.77%	21.13		21.13		45.84	
Office Equipment	26.76		12.77%	6.64		6.64		33.39	
Fully Depreciated Fixed Assets	2650.37			-		0.00		2650.37	Fully depreciated assets[FDA] have
Others	0.00			-		0.00		0.00	been reflected in each year in the
Spare Units/ Service units	0.00			-		0.00		0.00	Opening balance
Grand Total	5198.18	0.00		871.59	0.00	871.59	0.00	6069.77	0.00

Year 5

Amount in Rs. Crores

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				
Land & land rights	0.00			-		0.00	0.00		
Buildings	67.73			13.23		13.23	80.96		
Intangible Assets	0.00			-		0.00	0.00		
Hydraulic Works	0.00			-		0.00	0.00		
Other civil works	0.00			-		0.00	0.00		
Plant & Machinery	1606.81	0.00		497.97	0.00	497.97	2104.78	0.00	
Plant and Machinery - 33 KV	0.08			0.02		0.02	0.11		
Plant and Machinery - 11 KV	580.41			183.11		183.11	763.52		
Plant and Machinery - LT	1026.31			314.84		314.84	1341.15		
Material Handling Equipments	0.00			-		0.00	0.00		
Construction Equipments	0.00			-		0.00	0.00		
Miscellaneous Equipments	203.79			79.45		79.45	283.24		
Others				-		0.00	0.00		
Line Cable Network	1161.12	0.00		446.84	0.00	446.84	1607.97	0.00	
Line Cable Network - 33KV	146.16			59.97		59.97	206.13		
Line Cable Network - 11KV	577.89			216.61		216.61	794.50		
Line Cable Network - LT Category	437.07			170.26		170.26	607.33		
Others	0.00			-		0.00	0.00		
Vehicles	0.00			-		0.00	0.00		
Furniture & Fixtures	45.80			29.15		29.15	74.94		
Office Equipment	31.57			6.37		6.37	37.94		
Fully Depreciated Fixed Assets	2952.96			-		0.00	2952.96		Fully depreciated assets[FDA] have
Others	0.00			-		0.00	0.00		been reflected in each year in the
Spare Units/ Service units	0.00			-		0.00	0.00		Opening balance
Grand Total	6069.77	0.00		1073.01	0.00	1073.01	7142.78	0.00	

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
Opening balance of CWIP	968.00	850.78	632.01	905.28	948.74	1,214.15						
Add: New Investment*	764.88	1,351.22	1,937.30	2,025.91	2,595.24	2,484.15						
Add: Capitalisation*												
Expenses Capitalised	67.06	135.12	193.73	202.59	259.52	248.42						
Interest During Construction	38.32	98.41	132.30	145.07	180.60	181.06						
Total expenses capitalised	105.37	233.53	326.03	347.66	440.12	429.48						
Less : Investment Capitalised	987.48	1,803.52	1,990.06	2,330.12	2,769.96	2,962.32						
Closing balance of CWIP	850.78	632.01	905.28	948.74	1214.15	1165.45						

*To be filled in consultation with form 1.1 d

Project Details				PLANNED CAPITAL EXPENDITURE					SOURCE OF FINANCING					Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks								
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				Annual			Annual			Annual										
														Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	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	Actual investment in the year (Rs Cr)	IDC Incurred	Other expense incurred	Percentage capitalisation			
R-APDR	AT&C Loss Reduction				157.73	4.26	3.33	0.00	26.40	1.10	194.89	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	1.00	12.60	3.33	1.10	1.00	
IPDS	Strengthening of Distribution Network in				182.29	4.92	7.16	0.00	32.81	12.19	239.38	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	1.00	139.04	7.16	12.19	1.00	
DOUJY	Strengthening of Distribution Network in				100.00	2.70	3.58	0.00	16.00	5.57	129.86	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	1.00	141.84	3.58	5.57	1.00	
SAUBAG	Electricity access to all				22.99	0.62	1.18	0.00	4.14	2.43	31.36	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	1.00	27.75	1.18	2.43	1.00		
SCADA	Technology Upgradation and reliability of				11.39	0.31	0.22	0.00	2.05	0.05	14.02	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	1.00	0.66	0.22	0.05	1.00		
IT - PDS	Technology Upgradation				6.58	0.14	0.26	0.00	0.91	0.54	6.93	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	1.00	
P-SI	Sub AT&C loss reduction				158.74	4.29	5.23	0.00	29.57	4.37	201.21	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	1.00	49.86	5.23	4.37	1.00		
Convers	Reliability of Supply				52.48	1.42	1.97	0.00	9.45	1.78	67.09	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	1.00	61.98	1.97	1.78	1.00		
SPA-PE	Agri pumpset energisation				661.65	17.86	31.50	0.00	119.10	33.63	863.73	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	1.00	377.59	31.50	33.63	1.00		
SMART	Technology Upgradation: AT&C Loss Red				10.77	0.29	0.55	0.00	1.94	1.14	14.69	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	1.00	0.00	0.00	0.00	1.00		
HVDS	AT&C Loss Reduction				1420.78	38.36	##	0.00	255.74	171.45	2007.78	0.00	0.00	321.96	11.00%	3 Years	10 Years	REC	342.98	25.18	34.30	0.60	342.98	25.18	34.30	0.60	1371.90	96.23	137.19	0.60	0.72			
SMART	Technology Upgradation: AT&C Loss Red				296.97	8.02	25.70	0.00	53.45	35.84	419.98	0.00	0.00	42.47	11.00%	3 Years	10 Years	PFC	45.02	3.56	4.50	0.60	45.02	3.56	4.50	0.60	377.92	22.26	31.13	0.60	0.82			
IE-Disini	Agri pumpset energisation				143.55	3.89	11.94	0.00	25.96	17.34	202.86	0.00	0.00	54.16	11.00%	3 Years	10 Years	REC	57.75	4.20	5.78	0.60	57.75	4.20	5.78	0.60	112.75	7.52	11.29	0.60	0.54			
Release	New Consumer Capex				0.00	3.87	0.21	0.00	25.83	17.23	190.65	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	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	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	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	
Civil Infra	Administrative support				151.67	4.10	12.71	0.00	27.30	18.18	219.96	0.00	0.00	36.56	11.00%	3 Years	10 Years	REC	39.01	2.78	3.90	0.60	39.01	2.78	3.90	0.60	136.83	8.41	13.57	0.60	0.66			
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
P-SI	Bus System improvement, Load growth & Ne				2550.67	141.77	##	0.00	945.12	630.51	7409.07	0.00	0.00	1697.31	11.00%	3 Years	10 Years	REC	1771.63	122.84	177.16	0.60	1771.63	122.84	177.16	0.60	1771.63	122.84	177.16	0.60	0.63			
Technical	Technology Upgradation				151.69	4.10	12.69	0.00	27.30	17.96	213.74	0.00	0.00	39.67	11.00%	3 Years	10 Years	REC	31.61	2.32	3.16	0.60	31.61	2.32	3.16	0.60	31.61	2.32	3.16	0.60	0.75			
AT & C	LIAT & C Loss Reduction				153.72	4.15	12.82	0.00	27.67	18.18	216.51	0.00	0.00	29.03	11.00%	3 Years	10 Years	REC	30.97	2.22	3.10	0.60	30.97	2.22	3.10	0.60	30.97	2.22	3.10	0.60	0.75			
Reliability	Reliability Improvement				971.16	26.22	82.30	0.00	174.81	116.91	1371.40	0.00	0.00	226.58	11.00%	3 Years	10 Years	REC	241.56	17.51	24.16	0.60	241.56	17.51	24.16	0.60	907.09	63.15	90.40	0.60	0.69			
##	##				##	271.27	##	0.00	##	1106.44	14008.91	0.00	0.00	2397.75				2595.24	180.60	259.52	16.60	2595.24	180.60	259.52		5586.80	380.14	531.59						

Project Details				PLANNED CAPITAL EXPENDITURE					SOURCE OF FINANCING					Investments proposed for the year				Investments incurred in the year				Cumulative progress (Year on year)				Remarks						
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				Annual			Annual			Annual								
														Loan Amount	Interest Rate	Moratorium Period	Repayment Period	Loan Source	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	Actual investment in the year (Rs Cr)	IDC Incurred	Other expense incurred	Percentage capitalisation	
R-APDR	AT&C Loss Reduction				157.73	4.26	3.33	0.00	26.40	1.10	194.89	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	1.00	12.60	3.33	1.10	1.00	
IPDS	Strengthening of Distribution Network in				182.29	4.92	7.16	0.00	32.81	12.19	239.38	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	1.00	139.04	7.16	12.19	1.00	
DOUJY	Strengthening of Distribution Network in				100.00	2.70	3.58	0.00	16.00	5.57	129.86	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	1.00	141.84	3.58	5.57	1.00	
SAUBAG	Electricity access to all				22.99	0.62	1.18	0.00	4.14	2.43	31.36	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	1.00	27.75	1.18	2.43	1.00		
SCADA	Technology Upgradation and reliability of				11.39	0.31	0.22	0.00	2.05	0.05	14.02	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	1.00	0.66	0.22	0.05	1.00		
IT - PDS	Technology Upgradation				6.58	0.14	0.26	0.00	0.91	0.54	6.93	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	1.00
P-SI	Sub AT&C loss reduction				158.74	4.29	5.23	0.00	29.57	4.37	201.21	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	1.00	49.86	5.23	4.37	1.00	
Convers	Reliability of Supply				52.48	1.42	1.97	0.00	9.45	1.78	67.09	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	1.00	61.98	1.97	1.78	1.00		
SPA-PE	Agri pumpset energisation				661.65	17.86	31.50	0.00	119.10	33.63	863.73	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	1.00	377.59	31.50	33.63	1.00	
SMART	Technology Upgradation: AT&C Loss Red				10.77	0.29	0.55	0.00	1.94	1.14	14.69	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	1.00	0.00	0.00	0.00	1.00	
HVDS	AT&C Loss Reduction				1420.78	38.36	##	0.00	255.74	171.45	2007.78	0.00	0.00	321.96	11.00%	3 Years	10 Years	REC	342.98	25.18	34.30	0.60	342.98	25.18	34.30	0.60	1371.90	96.23	137.19	0.60	0.92	
SMART	Technology Upgradation: AT&C Loss Red				296.97	8.02	25.70	0.00	53.45	35.84	419.98	0.00	0.00	44.22	11.00%	3 Years	10 Years	PFC	47.13	3.44	4											

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
Gross Fixed Assets		7030.473	8833.992	10824.05	13154.17	15924.13	18886.45						
33 kV		430.46	550.6313	698.505	852.5614	1039.503	1257.407						
11 kV		3031.071	3769.628	4667.172	5632.556	6788.017	8037.235						
LT		3568.943	4513.732	5458.376	6669.053	8096.606	9591.809						
Accumulated Depreciation		3547.268	3964.624	4509.899	5198.179	6069.768	7142.779						
33 kV		175.4801	186.676	226.5554	266.0013	320.6977	416.7706						
11 kV		1460.779	1605.086	1914.319	2187.172	2540.04	2995.716						
LT		1911.009	2172.862	2369.025	2745.005	3209.031	3730.293						
Net Fixed Assets		3483.205	4869.368	6314.154	7955.992	9854.357	11743.67						
33 kV		254.9802	363.9553	471.9496	586.5601	718.8057	840.6366						
11 kV		1570.292	2164.543	2752.853	3445.384	4247.977	5041.519						
LT		1657.933	2340.869	3089.352	3924.048	4887.575	5861.516						

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)	Remarks
Secured Loans			all						3957.91	1239.89	216.43	4981.38	454.06	454.06			
Bonds			all						853.03	0.00	0.00	853.03	92.06	92.06			
		Bonds to TSGENCO							340.90	0.00	0.00	340.90	33.41	33.41			
		Bonds to TSTRANSCO							90.83	0.00	0.00	90.83	8.85	8.85			
		Bonds to TSNPCL Trust							31.40	0.00	0.00	31.40	2.98	2.98			
		Bonds to Andhra Bank (As per FRP)							231.24	0.00	0.00	231.24	27.31	27.31			
		Bonds to Syndicate Bank (As per FRP)							158.67	0.00	0.00	158.67	19.51	19.51			
		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			
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						10.62	0.00	3.70	6.92	0.11	0.11			
		Govt. Loans							10.62	0.00	3.70	6.92	0.11	0.11			
Other Secured Loans			all						3094.26	1239.89	212.72	4121.43	361.88	361.88			
		REC Direct and Medium Term Loans							2679.82	0.00	197.86	2481.96	276.69	276.69			
		PFC							160.33	0.00	7.86	152.47	8.39	8.39			
		PTC/ISL							70.00	0.00	7.00	63.00	7.53	7.53			
		JICA							164.11	0.00	0.00	164.11	1.08	1.08			
		New Loans							0.00	1239.89	0.00	1239.89	68.19	68.19			
		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			
Unsecured Loans			all						0.00	0.00	0.00	0.00	0.00	0.00			
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						0.00	0.00	0.00	0.00	0.00	0.00			
TOTAL			all						3957.91	1239.89	216.43	4981.38	454.06	454.06			

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)	Remarks
Secured Loans			all						4981.38	1782.79	569.30	6194.78	582.66	582.66			
Bonds			all						853.03	0.00	0.00	853.03	92.06	92.06			
		Bonds to TSGENCO							340.90	0.00	0.00	340.90	33.41	33.41			
		Bonds to TSTRANSCO							90.83	0.00	0.00	90.83	8.85	8.85			
		Bonds to TSNPDCL Trust							31.40	0.00	0.00	31.40	2.98	2.98			
		Bonds to Andhra Bank (As per FRP)							231.24	0.00	0.00	231.24	27.31	27.31			
		Bonds to Syndicate Bank (As per FRP)							158.67	0.00	0.00	158.67	19.51	19.51			
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						6.92	0.00	3.70	3.21	0.07	0.07			
		Govt. Loans							6.92	0.00	3.70	3.21	0.07	0.07			
Other Secured Loans			all						4121.43	1782.79	565.60	5338.53	490.53	490.53			
		REC Direct and Medium Term Loans							2481.96	0.00	550.82	1931.14	240.61	240.61			
		PFC							152.47	0.00	7.86	144.61	7.62	7.62			
		PTC/ISL							63.00	0.00	7.00	56.00	6.77	6.77			
		JICA							184.11	0.00	0.00	184.11	1.08	1.08			
		New Loans							1239.89	1782.79	0.00	3022.68	234.44	234.44			
		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			
Unsecured Loans			all						0.00	0.00	0.00	0.00	0.00	0.00			
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			
Govt. Loan																	
Other Unsecured Loans			all						0.00	0.00	0.00	0.00	0.00	0.00			
ICICI																	
AB																	
FlBanks																	
TOTAL			all						4981.38	1782.79	569.30	6194.78	582.66	582.66			

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)	Remarks
Secured Loans			all						6191.56	1869.65	567.31	7493.90	727.22	727.22			
Bonds			all						853.03	0.00	0.00	853.03	92.06	92.06			
Vidyt Bonds		Bonds to TSGENCO							340.90	0.00	0.00	340.90	33.41	33.41			
		Bonds to TSTRANSCO							90.83	0.00	0.00	90.83	8.85	8.85			
		Bonds to TSNPCL Trust							31.40	0.00	0.00	31.40	2.98	2.98			
		Bonds to Andhra Bank (As per FRP)							231.24	0.00	0.00	231.24	27.31	27.31			
		Bonds to Syndicate Bank (As per FRP)							158.67	0.00	0.00	158.67	19.51	19.51			
		0.00							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			
									0.00	0.00	0.00	0.00	0.00	0.00			
Other Secured Loans			all						5338.53	1869.65	567.31	6640.87	635.16	635.16			
		REC Direct and Medium Term Loans							1931.14	0.00	551.48	1379.66	185.94	185.94			
		PFC							144.81	0.00	8.83	135.77	6.79	6.79			
		PTC/ISL							56.00	0.00	7.00	49.00	6.02	6.02			
		JICA							184.11	0.00	0.00	184.11	1.08	1.08			
		New Loans							3022.68	1869.65	0.00	4892.33	435.33	435.33			
		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			
Unsecured Loans			all						0.00	0.00	0.00	0.00	0.00	0.00			
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						0.00	0.00	0.00	0.00	0.00	0.00			
TOTAL			all						6191.56	1869.65	567.31	7493.90	727.22	727.22			

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)	Remarks
Secured Loans			all						7493.90	2397.75	624.16	9267.40	899.91	899.91			
Bonds			all						853.03	0.00	0.00	853.03	92.06	92.06			
Vidyt Bonds		Bonds to TSGENCO							340.90	0.00	0.00	340.90	33.41	33.41			
		Bonds to TSTRANSCO							90.83	0.00	0.00	90.83	8.85	8.85			
		Bonds to TSNPCL Trust							31.40	0.00	0.00	31.40	2.98	2.98			
		Bonds to Andhra Bank (As per FRP)							231.24	0.00	0.00	231.24	27.31	27.31			
		Bonds to Syndicate Bank (As per FRP)							158.67	0.00	0.00	158.67	19.51	19.51			
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			
		0.00							0.00	0.00	0.00	0.00	0.00	0.00			
Other Secured Loans			all						6640.87	2397.75	624.16	8414.46	807.85	807.85			
		REC Direct and Medium Term Loans							1379.66	0.00	484.33	895.33	132.37	132.37			
		PFC							135.77	0.00	8.83	126.94	5.91	5.91			
		PTOIFSL							49.00	0.00	7.00	42.00	5.27	5.27			
		JICA							184.11	0.00	0.00	184.11	1.08	1.08			
		New Loans							4892.33	2397.75	123.99	7166.09	663.21	663.21			
		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			
Unsecured Loans			all						0.00	0.00	0.00	0.00	0.00	0.00			
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 Govt. Loan			all						0.00	0.00	0.00	0.00	0.00	0.00			
Other Unsecured Loans			all						0.00	0.00	0.00	0.00	0.00	0.00			
TOTAL			all						7493.90	2397.75	624.16	9267.40	899.91	899.91			

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)	Remarks
Secured Loans			all						9267.49	2298.93	403.60	11162.73	1104.16	1104.16			
Bonds			all						853.03	0.00	0.00	853.03	92.06	92.06			
Vidyt Bonds		Bonds to TSGENCO							340.90	0.00	0.00	340.90	33.41	33.41			
		Bonds to TSTRANSCO							90.83	0.00	0.00	90.83	8.85	8.85			
		Bonds to TSNPCL Trust							31.40	0.00	0.00	31.40	2.98	2.98			
		Bonds to Andhra Bank (As per FRP)							231.24	0.00	0.00	231.24	27.31	27.31			
		Bonds to Syndicate Bank (As per FRP)							158.67	0.00	0.00	158.67	19.51	19.51			
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			
			0.00						0.00	0.00	0.00	0.00	0.00	0.00			
Other Secured Loans			all						8414.46	2298.93	403.60	10309.71	1012.00	1012.00			
		REC Direct and Medium Term Loans							895.33	0.00	85.58	809.74	104.46	104.46			
		PFC							126.84	0.00	8.83	118.11	5.03	5.03			
		PTCIFSLS							42.80	0.00	7.00	35.80	0.00	0.00			
		JICA							184.11	0.00	0.00	184.11	4.52	4.52			
		New Loans							7166.09	2298.93	302.27	9162.75	898.09	898.09			
			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			
Unsecured Loans			all						0.00	0.00	0.00	0.00	0.00	0.81			
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 Govt. Loan			all						0.00	0.00	0.00	0.00	0.00	0.81			
														0.81			
Other Unsecured Loans			all						0.00	0.00	0.00	0.00	0.00	0.00			
ICICI																	
AB																	
FlBanks																	
TOTAL			all						9267.49	2298.93	403.60	11162.73	1104.16	1104.97			

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		166.22	166.22	166.22	166.22	166.22	166.22	
SUNDRY DEBTORS		3278.18	3784.31	4020.64	4410.08	4735.88	5107.35	
CASH AND BANK		361.08	-111.12	-805.60	-1224.88	-1602.40	-1326.82	
LOANS AND ADVANCES		37.20	37.20	37.20	37.20	37.20	37.20	
OTHER CURRENT ASSETS		2961.75	2961.75	2961.75	2961.75	2961.75	2961.75	
GRAND TOTAL		6804.44	6838.37	6380.22	6350.38	6298.66	6945.71	

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	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks					
								Base	Year 1	Year 2	Year 3	Year 4	Year 5
LIABILITIES FOR PURCHASE OF POWER		6627.42	5831.83	5452.33	5072.83	4754.58	4633.00						
LIABILITIES FOR CAPITAL WORKS		243.34	243.34	243.34	243.34	243.34	243.34						
LIABILITY FOR O&M SUPPLIES		0.00	0.00	0.00	0.00	0.00	0.00						
STAFF RELATED LIABILITIES		149.71	149.71	149.71	149.71	149.71	149.71						
OTHER LIABILITIES AND PROVISIONS		1125.65	1125.65	1125.65	1125.65	1125.65	1125.65						
DEPOSITS FOR ELECTRIFICATION/SERVICE CONNECTIONS ETC.		69.82	69.82	69.82	69.82	69.82	69.82						
CONSUMPTION DEPOSITS FROM CONSUMERS		931.55	1800.55	2111.30	2693.35	3122.40	3613.31						
Deposits and retentions from suppliers and contractors		634.47	634.47	634.47	634.47	634.47	634.47						
GRAND TOTAL		9781.96	9855.37	9786.62	9989.18	10099.97	10469.31						

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		1166.90	1225.05	1276.76	1348.90	1474.01	1572.16						
General Reserve		-11869.17	-11869.17	-11869.17	-11869.17	-11869.17	-11869.17						
Contingency Reserve		32.83	35.79	39.01	42.52	46.35	50.52						
Others													
GRAND TOTAL		-10669.44	-10608.33	-10553.40	-10477.75	-10348.82	-10246.50						

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		29.73	62.22	85.43	109.74	137.91	167.98							
Adjustments for depreciation		379.82	417.36	545.28	688.28	871.59	1073.01							
Adjustments for foreign exchange loss / (gain)														
Provision for diminution in value of investments														
Interest expense (income)		362.55	454.06	582.66	727.22	899.91	1104.16							
Adjustment for employee terminal benefits														
Operating income before working capital charges		772.11	933.63	1213.37	1525.25	1909.41	2345.15							
Decrease / (increase) in trade and other receivables		-1279.60	-506.13	-236.33	-389.44	-325.80	-371.47							
Decrease / (increase) in inventories														
Decrease / (increase) in miscellaneous expenditure not written off														
Interest to consumers on security deposit														
Increase/(Decrease) in trade payables		3247.88	73.41	-68.75	202.56	110.79	369.34							
Cash generated from operations		2740.39	500.91	908.29	1338.36	1694.40	2343.02							
Interest paid		362.55	454.06	582.66	727.22	899.91	1104.16							
Provision for Income Tax		0.00	15.93	21.88	28.12	35.34	43.05							
Extraordinary gain / (loss)														
Net cash from generated from operating activities		2377.84	30.93	303.75	583.02	759.15	1195.81							
Cash Flows from Investing Activities														
Acquisition of subsidiary		0.00	0.00	0.00	0.00	0.00	0.00							
Purchase of Fixed Assets (Including Interest capitalised)		870.26	1584.75	2263.33	2373.57	3035.37	2913.63							
Reserves in Government Bonds		0.00	0.00	0.00	0.00	0.00	0.00							
Interest received		0.00	0.00	0.00	0.00	0.00	0.00							
Dividends received		0.00	0.00	0.00	0.00	0.00	0.00							
Purchase of Other Investment Activities		0.00	0.00	0.00	0.00	0.00	0.00							
Sale of Other Investment Activities		0.00	0.00	0.00	0.00	0.00	0.00							
Increase /(Decrease) in liability for Capital works		0.00	0.00	0.00	0.00	0.00	0.00							
Accumulated interest on investments through contingency reserve		0.00	0.00	0.00	0.00	0.00	0.00							
Net cash used in (from) investment activities		870.26	1584.75	2263.33	2373.57	3035.37	2913.63							
Cash Flows from Financing Activities														
Proceeds from issuance of share capital		0.00	0.00	0.00	0.00	0.00	0.00							
Proceeds from Long Term Debt		0.00	1239.89	1782.79	1869.65	2397.75	2298.93							
Repayment of long term debt		0.00	216.43	569.39	570.53	624.16	403.69							
Proceeds from Govt. Subsidies and Grants		148.99	58.15	51.71	72.14	125.11	98.15							
Payment of financial lease liabilities		0.00	0.00	0.00	0.00	0.00	0.00							
Interest Paid		0.00	0.00	0.00	0.00	0.00	0.00							
Dividends paid		0.00	0.00	0.00	0.00	0.00	0.00							
Net cash from (used in) financing activities		148.99	1081.62	1265.11	1371.26	1898.70	1993.39							
Net Change in Cash Equivalents		1656.58	-472.20	-694.48	-419.28	-377.52	275.58							
Cash and Cash Equivalents at Beginning of Year		340.11	1996.68	1524.48	830.01	410.72	33.20							
Cash and Cash Equivalents at End of Year		1996.68	1524.48	830.01	410.72	33.20	308.78							

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	Remarks							
								Base Year	Year 1	Year 2	Year 3	Year 4	Year 5		
Operation & Maintenance Expenses		1840.90	2049.75	2358.28	2718.40	3220.05	3703.71								
Employee Cost		1681.84	1859.41	2129.82	2446.89	2894.21	3318.83								
Administrative & General Expenses		87.07	96.27	110.27	126.68	149.84	171.83								
Repair & Maintenance Expenses		71.98	94.07	118.20	144.82	176.00	213.06								
Technical Details															
Total No of consumers		5705258.00	5980563.00	6255315.00	6427694.00	6600069.00	6772444.00								
LT consumers		5702405.00	5977573.00	6252187.00	6424480.00	6596769.00	6769057.00								
HT consumers		2853.00	2990.00	3128.00	3214.00	3300.00	3387.00								
HT 11kV Consumers		2665.00	2794.00	2921.00	3002.00	3083.00	3163.00								
HT 33 kV consumers		134.00	140.00	148.00	151.00	155.00	160.00								
HT132 kV consumers		54.00	56.00	59.00	61.00	62.00	64.00								
Numer of Substations		1368.00	1432.00	1605.00	1817.00	2160.00	2420.00								
Capacity of Substations (kVA)		11917500.00	12189500.00	12809500.00	13638500.00	15173500.00	16087500.00								
Peak Demand (MW)		3823.00	4688.00	5793.00	6141.00	6447.00	6637.00								
Total Length (ckt-km)		262120.17	103838.74	114781.79	126528.55	140351.03	154015.81								
LT Line Length		166152.26													
11 kV Line Length		85083.76	92186.58	101053.63	110256.39	119962.87	130507.65								
33 kV Line Length		10884.16	11652.16	13728.16	16272.16	20388.16	23508.16								
Energy Input (MU)		19080.53	22403.71	35098.20	43497.64	44777.48	46157.62								
Total Sales (MU)		17194.67	20399.65	32983.31	41205.75	42359.08	43604.51								
LT Sales		12696.66	13450.52	14218.21	15157.10	15959.38	16809.98								
HT Sales		4498.01	6949.12	18765.10	26048.65	26399.71	26794.54								
11 kV Sales		1633.58	1885.92	1992.36	2525.39	2758.91	3020.27								
33 kV Sales		632.42	536.85	516.52	743.68	757.87	772.99								
132 kV Sales		2232.02	4526.35	16256.22	22779.58	22882.93	23001.28								

Circle wise Details

Circle 1 (Please enter the circle name below)

Joint Warangal (Wgl-U,Wgl-R, BPL,M-Bad&JNG)

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks						
								Year 1	Year 2	Year 3	Year 4	Year 5		
Operation & Maintenance Expenses		501.69	558.61	642.69	740.83	877.54	1009.35							
Employee Cost		458.36	506.76	580.45	666.87	788.78	904.50							
Administrative & General Expenses		23.71	26.21	30.02	34.49	40.79	46.78							
Repair & Maintenance Expenses		19.62	25.64	32.22	39.48	47.97	58.08							
Technical Details														
Total No of consumers		1552723.00	1627651.00	1702424.00	1749340.00	1796249.00	1843167.00							
LT consumers		1552109.00	1627007.00	1701752.00	1748648.00	1795541.00	1842436.00							
HT consumers		614.00	644.00	672.00	692.00	708.00	731.00							
HT 11kV Consumers		576.00	606.00	631.00	650.00	666.00	685.00							
HT 33 kV consumers		26.00	26.00	29.00	29.00	29.00	31.00							
HT132 kV consumers		12.00	12.00	12.00	13.00	13.00	15.00							
Numer of Substations		339.00	368.00	429.00	501.00	610.00	687.00							
Capacity of Substations (kVA)		3244650.00	3363650.00	3591650.00	3860650.00	4306650.00	4597650.00							
Peak Demand (MW)		0.00	0.00	0.00	0.00	0.00	0.00							
Total Length (ckt-km)		65357.57	69194.12	73968.29	79152.46	85058.51	90638.90							
LT Line Length		40701.58	42128.09	43629.03	45208.38	46870.41	48619.57							
11 kV Line Length		21299.51	23361.53	25902.77	28643.58	31579.61	34486.84							
33 kV Line Length		3356.49	3704.49	4436.49	5300.49	6608.49	7532.49							
Energy Input (MU)		5175.74	6275.23	8295.44	8189.60	8453.14	8735.89							
Total Sales (MU)		4664.18	5713.90	7795.58	7758.09	7996.59	8252.69							
LT Sales		3593.06	3806.40	4023.65	3930.96	4137.48	4355.52							
HT Sales		1071.13	1907.50	3771.94	3827.13	3859.12	3897.17							
11 kV Sales		185.86	214.57	226.68	265.22	293.74	328.21							
33 kV Sales		110.28	93.61	90.07	92.52	93.96	95.47							
132 kV Sales		774.99	1599.32	3455.19	3469.39	3471.42	3473.49							

Circle 2 (Please enter the circle name below)

Karimnagar

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks				
								Year 1	Year 2	Year 3	Year 4	Year 5
Operation & Maintenance Expenses		234.29	260.87	300.15	345.99	409.84	471.40					
Employee Cost		214.01	236.61	271.02	311.36	368.28	422.32					
Administrative & General Expenses		11.07	12.24	14.02	16.11	19.06	21.85					
Repair & Maintenance Expenses		9.20	12.02	15.11	18.51	22.50	27.23					
Technical Details												
Total No of consumers		480342.00	503522.00	526652.00	541167.00	555681.00	570192.00					
LT consumers		479803.00	502956.00	526062.00	540559.00	555055.00	569551.00					
HT consumers		539.00	566.00	590.00	608.00	626.00	641.00					
HT 11kV Consumers		507.00	531.00	555.00	571.00	587.00	602.00					
HT 33 kV consumers		27.00	30.00	30.00	31.00	33.00	33.00					
HT132 kV consumers		5.00	5.00	5.00	6.00	6.00	6.00					
Numer of Substations		147.00	156.00	176.00	194.00	221.00	246.00					
Capacity of Substations (kVA)		1405200.00	1433200.00	1481200.00	1542200.00	1649200.00	1718200.00					
Peak Demand (MW)		0.00	0.00	0.00	0.00	0.00	0.00					
Total Length (ckt-km)		16621.24	17251.95	18160.45	19021.07	19991.14	21039.02					
LT Line Length		11948.71	12132.02	12319.94	12512.64	12710.24	12912.90					
11 kV Line Length		3946.69	4286.10	4766.67	5218.59	5667.06	6212.28					
33 kV Line Length		725.84	833.84	1073.84	1289.84	1613.84	1913.84					
Energy Input (MU)		2458.69	3266.17	5976.64	10045.16	10279.31	10536.02					
Total Sales (MU)		2215.68	2974.01	5616.51	9515.88	9724.14	9953.24					
LT Sales		907.83	961.73	1016.63	1133.37	1165.05	1197.77					
HT Sales		1307.85	2012.27	4599.89	8382.51	8559.09	8755.47					
11 kV Sales		908.38	1048.69	1107.88	1543.99	1712.91	1901.28					
33 kV Sales		204.46	173.56	166.99	111.49	111.70	111.93					
132 kV Sales		195.02	790.02	3325.02	6727.04	6734.48	6742.27					

Circle 3 (Please enter the circle name below)

Jagitial

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks				
								Year 1	Year 2	Year 3	Year 4	Year 5
Operation & Maintenance Expenses		85.40	95.08	109.39	126.10	149.37	171.80					
Employee Cost		78.01	86.25	98.79	113.50	134.25	153.95					
Administrative & General Expenses		4.05	4.48	5.13	5.90	6.97	8.00					
Repair & Maintenance Expenses		3.33	4.35	5.47	6.70	8.14	9.86					
Technical Details												
Total No of consumers		449903.00	471613.00	493279.00	506872.00	520466.00	534058.00					
LT consumers		449819.00	471525.00	493187.00	506778.00	520369.00	533959.00					
HT consumers		84.00	88.00	92.00	94.00	97.00	99.00					
HT 11kV Consumers		82.00	86.00	90.00	92.00	95.00	97.00					
HT 33 kV consumers		2.00	2.00	2.00	2.00	2.00	2.00					
HT132 kV consumers		0.00	0.00	0.00	0.00	0.00	0.00					
Numer of Substations		110.00	112.00	119.00	133.00	158.00	181.00					
Capacity of Substations (kVA)		925750.00	930750.00	960750.00	1005750.00	1124750.00	1195750.00					
Peak Demand (MW)		0.00	0.00	0.00	0.00	0.00	0.00					
Total Length (ckt-km)		18989.72	19974.69	21077.11	22408.43	23874.25	25496.29					
LT Line Length		13054.64	13457.91	13881.52	14326.52	14794.01	15285.17					
11 kV Line Length		5308.00	5865.70	6460.51	7178.84	7877.16	8732.04					
33 kV Line Length		627.08	651.08	735.08	903.08	1203.08	1479.08					
Energy Input (MU)		881.60	1018.26	1319.29	1746.67	1811.90	1880.63					
Total Sales (MU)		794.47	927.17	1239.80	1654.64	1714.05	1776.61					
LT Sales		771.79	817.61	864.28	1171.50	1230.39	1292.41					
HT Sales		22.68	109.56	375.52	483.14	483.66	484.20					
11 kV Sales		17.36	20.04	21.17	12.76	13.27	13.82					
33 kV Sales		5.32	4.51	4.34	14.11	14.11	14.11					
132 kV Sales		0.00	85.00	350.00	456.27	456.27	456.27					

Circle 4 (Please enter the circle name below)

Peddapally

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks				
								Year 1	Year 2	Year 3	Year 4	Year 5
Operation & Maintenance Expenses		148.31	165.14	190.00	219.01	259.43	298.39					
Employee Cost		135.49	149.80	171.58	197.12	233.16	267.37					
Administrative & General Expenses		7.02	7.76	8.89	10.22	12.08	13.86					
Repair & Maintenance Expenses		5.80	7.58	9.52	11.67	14.18	17.17					
Technical Details												
Total No of consumers		316412.00	331681.00	346919.00	356478.00	366038.00	375598.00					
LT consumers		316221.00	331481.00	346709.00	356263.00	365817.00	375371.00					
HT consumers		191.00	200.00	210.00	215.00	221.00	227.00					
HT 11kV Consumers		175.00	183.00	192.00	197.00	202.00	208.00					
HT 33 kV consumers		6.00	6.00	7.00	7.00	7.00	7.00					
HT132 kV consumers		10.00	11.00	11.00	11.00	12.00	12.00					
Numer of Substations		65.00	66.00	71.00	78.00	94.00	104.00					
Capacity of Substations (kVA)		606600.00	606600.00	629600.00	667600.00	762600.00	798600.00					
Peak Demand (MW)		0.00	0.00	0.00	0.00	0.00	0.00					
Total Length (ckt-km)		17124.92	17737.27	18440.65	19167.47	20028.20	20924.42					
LT Line Length		10728.87	10973.31	11229.75	11498.82	11781.13	12077.37					
11 kV Line Length		5623.23	5979.14	6366.08	6739.83	7126.25	7606.23					
33 kV Line Length		772.82	784.82	844.82	928.82	1120.82	1240.82					
Energy Input (MU)		1587.01	2117.80	6591.97	8723.02	8865.17	9024.56					
Total Sales (MU)		1430.15	1928.36	6194.76	8263.40	8386.36	8525.38					
LT Sales		712.09	754.37	797.43	800.82	838.03	877.06					
HT Sales		718.06	1173.98	5397.33	7462.58	7548.34	7648.32					
11 kV Sales		64.69	74.68	78.89	81.57	87.57	94.06					
33 kV Sales		26.93	22.86	21.99	59.50	60.29	61.12					
132 kV Sales		626.44	1076.44	5296.44	7321.51	7400.48	7493.14					

Circle 5 (Please enter the circle name below)

Khammam & Bhadradi Kothagudem

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks				
								Year 1	Year 2	Year 3	Year 4	Year 5
Operation & Maintenance Expenses		255.02	283.94	326.68	376.57	446.06	513.06					
Employee Cost		233.01	257.61	295.07	339.00	400.97	459.80					
Administrative & General Expenses		12.05	13.32	15.26	17.53	20.74	23.78					
Repair & Maintenance Expenses		9.96	13.02	16.36	20.04	24.35	29.48					
Technical Details												
Total No of consumers		950150.00	996000.00	1041758.00	1070464.00	1099173.00	1127878.00					
LT consumers		949416.00	995229.00	1040952.00	1069637.00	1098323.00	1127007.00					
HT consumers		734.00	771.00	806.00	827.00	850.00	871.00					
HT 11kV Consumers		694.00	728.00	761.00	782.00	803.00	824.00					
HT 33 kV consumers		28.00	30.00	31.00	31.00	33.00	33.00					
HT132 kV consumers		12.00	13.00	14.00	14.00	14.00	14.00					
Numer of Substations		176.00	188.00	214.00	248.00	303.00	344.00					
Capacity of Substations (kVA)		1394800.00	1458800.00	1582800.00	1723800.00	1967800.00	2134800.00					
Peak Demand (MW)		0.00	0.00	0.00	0.00	0.00	0.00					
Total Length (ckt-km)		64140.63	66060.03	68378.06	70998.56	74068.79	76990.40					
LT Line Length		44794.72	45521.32	46288.90	47099.98	47957.22	48863.48					
11 kV Line Length		17856.56	18905.36	20143.80	21545.24	23098.22	24621.57					
33 kV Line Length		1489.35	1633.35	1945.35	2353.35	3013.35	3505.35					
Energy Input (MU)		2624.91	2803.97	4868.37	6166.39	6344.09	6533.15					
Total Sales (MU)		2365.47	2553.15	4575.02	5841.48	6001.45	6171.78					
LT Sales		1769.46	1874.52	1981.51	2334.61	2469.20	2612.46					
HT Sales		596.01	678.63	2593.51	3506.87	3532.24	3559.32					
11 kV Sales		221.06	255.21	269.61	302.63	318.77	336.08					
33 kV Sales		109.42	92.88	89.37	194.17	200.31	206.90					
132 kV Sales		265.53	330.53	2234.53	3010.07	3013.16	3016.34					

Circle 6 (Please enter the circle name below)

Nizamabad & Kamareddy

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks				
								Year 1	Year 2	Year 3	Year 4	Year 5
Operation & Maintenance Expenses		393.88	438.56	504.57	581.62	688.96	792.44					
Employee Cost		359.83	397.83	455.68	523.52	619.22	710.07					
Administrative & General Expenses		18.64	20.61	23.61	27.12	32.08	36.79					
Repair & Maintenance Expenses		15.40	20.13	25.29	30.98	37.65	45.58					
Technical Details												
Total No of consumers		1058066.00	1109121.00	1160076.00	1192045.00	1224012.00	1255980.00					
LT consumers		1057725.00	1108764.00	1159702.00	1191661.00	1223618.00	1255575.00					
HT consumers		341.00	357.00	374.00	384.00	394.00	405.00					
HT 11kV Consumers		319.00	334.00	350.00	359.00	369.00	378.00					
HT 33 kV consumers		17.00	18.00	18.00	19.00	19.00	21.00					
HT132 kV consumers		5.00	5.00	6.00	6.00	6.00	6.00					
Numer of Substations		325.00	334.00	374.00	423.00	498.00	551.00					
Capacity of Substations (kVA)		2803450.00	2846450.00	2965450.00	3148450.00	3488450.00	3663450.00					
Peak Demand (MW)		0.00	0.00	0.00	0.00	0.00	0.00					
Total Length (ckt-km)		41306.10	44589.66	48884.44	53407.30	58348.89	63395.75					
LT Line length		23916.06	25259.87	26678.35	28176.14	29758.26	31430.05					
11 kV Line Length		15420.33	17252.08	19648.38	22085.44	24544.92	27283.99					
33 kV Line Length		1969.71	2077.71	2557.71	3145.71	4045.71	4681.71					
Energy Input (MU)		4021.60	4484.27	5487.80	5900.53	6142.10	6398.32					
Total Sales (MU)		3624.12	4083.14	5157.12	5589.63	5810.37	6044.41					
LT Sales		3331.01	3528.79	3730.19	3887.92	4098.70	4322.23					
HT Sales		293.11	554.36	1426.93	1701.71	1711.67	1722.18					
11 kV Sales		160.51	185.30	195.76	190.73	198.99	207.72					
33 kV Sales		89.66	76.11	73.23	105.46	107.15	108.93					
132 kV Sales		42.95	292.95	1157.95	1405.53	1405.53	1405.53					

Circle 7 (Please enter the circle name below)

Adilabad

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks				
								Year 1	Year 2	Year 3	Year 4	Year 5
Operation & Maintenance Expenses		39.70	44.20	50.85	58.61	69.43	79.85					
Employee Cost		36.27	40.10	45.93	52.77	62.41	71.57					
Administrative & General Expenses		1.89	2.09	2.39	2.75	3.25	3.72					
Repair & Maintenance Expenses		1.54	2.01	2.53	3.10	3.77	4.56					
Technical Details												
Total No of consumers		218512.00	229056.00	239578.00	246181.00	252783.00	259385.00					
LT consumers		218410.00	228949.00	239467.00	246066.00	252665.00	259264.00					
HT consumers		102.00	107.00	111.00	115.00	118.00	121.00					
HT 11kV Consumers		97.00	102.00	106.00	109.00	112.00	115.00					
HT 33 kV consumers		4.00	4.00	4.00	5.00	5.00	5.00					
HT132 kV consumers		1.00	1.00	1.00	1.00	1.00	1.00					
Numer of Substations		47.00	47.00	48.00	51.00	57.00	63.00					
Capacity of Substations (kVA)		294600.00	294600.00	299600.00	317600.00	356600.00	374600.00					
Peak Demand (MW)		0.00	0.00	0.00	0.00	0.00	0.00					
Total Length (ckt-km)		9132.71	3451.86	3662.76	3887.13	4177.51	4548.47					
LT Line Length		5850.79	5974.49	6104.92	6242.45	6387.48	6540.45					
11 kV Line Length		2785.51	2955.44	3154.34	3342.71	3561.09	3860.05					
33 kV Line Length		496.42	496.42	508.42	544.42	616.42	688.42					
Energy Input (MU)		402.82	443.69	540.08	684.09	712.57	742.67					
Total Sales (MU)		363.01	404.00	507.54	648.05	674.09	701.59					
LT Sales		299.09	316.85	334.94	398.32	420.21	443.37					
HT Sales		63.91	87.15	172.60	249.73	253.88	258.22					
11 kV Sales		25.64	29.61	31.28	47.58	49.54	51.59					
33 kV Sales		37.90	32.17	30.95	48.10	50.27	52.54					
132 kV Sales		0.37	25.37	110.37	154.05	154.07	154.10					

Circle 8 (Please enter the circle name below)

Nirmal

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks						
								Year 1	Year 2	Year 3	Year 4	Year 5		
Operation & Maintenance Expenses		69.77	77.69	89.38	103.03	122.04	140.37							
Employee Cost		63.76	70.49	80.74	92.76	109.72	125.82							
Administrative & General Expenses		3.29	3.64	4.17	4.79	5.66	6.50							
Repair & Maintenance Expenses		2.72	3.55	4.47	5.47	6.65	8.05							
Technical Details														
Total No of consumers		267387.00	280289.00	293166.00	301245.00	309324.00	317402.00							
LT consumers		267287.00	280185.00	293056.00	301132.00	309208.00	317284.00							
HT consumers		100.00	104.00	110.00	113.00	116.00	118.00							
HT 11kV Consumers		93.00	97.00	102.00	105.00	108.00	110.00							
HT 33 kV consumers		7.00	7.00	8.00	8.00	8.00	8.00							
HT132 kV consumers		0.00	0.00	0.00	0.00	0.00	0.00							
Numer of Substations		77.00	77.00	80.00	85.00	97.00	105.00							
Capacity of Substations (kVA)		640200.00	640200.00	650200.00	675200.00	733200.00	766200.00							
Peak Demand (MW)		0.00	0.00	0.00	0.00	0.00	0.00							
Total Length (ckt-km)		10176.19	10794.96	11586.00	12333.91	13225.38	14120.18							
LT Line Length		5336.63	5599.68	5876.12	6166.66	6472.00	6792.91							
11 kV Line Length		4344.27	4700.00	5178.59	5575.97	6018.10	6495.98							
33 kV Line Length		495.29	495.29	531.29	591.29	735.29	831.29							
		0.00	0.00	0.00	0.00	0.00	0.00							
Energy Input (MU)		738.39	771.12	787.97	807.43	847.45	889.65							
Total Sales (MU)		665.41	702.14	740.49	764.89	801.68	840.45							
LT Sales		626.56	663.76	701.64	677.20	712.44	749.57							
HT Sales		38.86	38.38	38.85	87.69	89.24	90.87							
11 kV Sales		17.65	20.38	21.53	31.17	32.30	33.49							
33 kV Sales		21.21	18.00	17.32	56.52	56.93	57.38							
132 kV Sales		0.00	0.00	0.00	0.00	0.00	0.00							

Circle 9 (Please enter the circle name below)

Mancherial

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks				
								Year 1	Year 2	Year 3	Year 4	Year 5
Operation & Maintenance Expenses		86.11	95.89	110.32	127.16	150.63	173.26					
Employee Cost		78.67	86.97	99.62	114.45	135.37	155.23					
Administrative & General Expenses		4.08	4.51	5.17	5.93	7.02	8.05					
Repair & Maintenance Expenses		3.37	4.40	5.53	6.78	8.24	9.98					
Technical Details												
Total No of consumers		275772.00	289078.00	302361.00	310692.00	319023.00	327356.00					
LT consumers		275684.00	288987.00	302264.00	310593.00	318922.00	327252.00					
HT consumers		88.00	91.00	97.00	99.00	101.00	104.00					
HT 11kV Consumers		72.00	75.00	79.00	81.00	83.00	85.00					
HT 33 kV consumers		9.00	9.00	10.00	10.00	10.00	11.00					
HT132 kV consumers		7.00	7.00	8.00	8.00	8.00	8.00					
Numer of Substations		51.00	53.00	62.00	70.00	84.00	100.00					
Capacity of Substations (kVA)		424150.00	437150.00	465150.00	501150.00	565150.00	614150.00					
Peak Demand (MW)		0.00	0.00	0.00	0.00	0.00	0.00					
Total Length (ckt-km)		12995.01	13554.85	14371.95	15139.47	16070.99	17193.60					
LT Line Length		7546.90	7776.54	8024.73	8293.24	8584.03	8899.30					
11 kV Line Length		4909.16	5215.35	5676.27	6079.28	6552.00	7167.36					
33 kV Line Length		538.95	562.95	670.95	766.95	934.95	1126.95					
Energy Input (MU)		913.27	937.76	942.39	914.05	984.02	1060.68					
Total Sales (MU)		823.01	853.87	885.61	865.89	930.88	1002.01					
LT Sales		514.77	545.33	576.46	617.04	669.42	727.03					
HT Sales		308.24	308.54	309.15	248.85	261.46	274.98					
11 kV Sales		16.89	19.49	20.59	17.01	17.87	18.78					
33 kV Sales		15.27	12.96	12.47	38.05	39.04	40.11					
132 kV Sales		276.08	276.08	276.08	193.79	204.55	216.09					

Circle 10 (Please enter the circle name below)

Asifabad

Particulars	D-Link	Base Year	Year 1	Year 2	Year 3	Year 4	Year 5	Remarks				
								Year 1	Year 2	Year 3	Year 4	Year 5
Operation & Maintenance Expenses		26.74	29.77	34.25	39.48	46.77	53.79					
Employee Cost		24.43	27.01	30.93	35.54	42.04	48.20					
Administrative & General Expenses		1.27	1.40	1.61	1.85	2.19	2.51					
Repair & Maintenance Expenses		1.04	1.36	1.71	2.09	2.54	3.08					
Technical Details												
Total No of consumers		135991.00	142552.00	149102.00	153210.00	157320.00	161428.00					
LT consumers		135931.00	142490.00	149036.00	153143.00	157251.00	161358.00					
HT consumers		60.00	62.00	66.00	67.00	69.00	70.00					
HT 11kV Consumers		50.00	52.00	55.00	56.00	58.00	59.00					
HT 33 kV consumers		8.00	8.00	9.00	9.00	9.00	9.00					
HT132 kV consumers		2.00	2.00	2.00	2.00	2.00	2.00					
Numer of Substations		31.00	31.00	32.00	34.00	38.00	39.00					
Capacity of Substations (kVA)		178100.00	178100.00	183100.00	196100.00	219100.00	224100.00					
Peak Demand (MW)		0.00	0.00	0.00	0.00	0.00	0.00					
Total Length (ckt-km)		6276.09	6407.98	6570.56	6749.55	6957.73	7146.00					
LT Line Length		2273.36	2329.89	2390.13	2454.41	2523.07	2596.47					
11 kV Line Length		3590.51	3665.88	3756.21	3846.92	3938.45	4041.32					
33 kV Line Length		412.22	412.22	424.22	448.22	496.22	508.22					
Energy Input (MU)		276.50	285.45	288.25	320.68	337.73	356.05					
Total Sales (MU)		249.17	259.91	270.88	303.79	319.49	336.35					
LT Sales		171.00	181.16	191.50	205.35	218.46	232.56					
HT Sales		78.17	78.76	79.39	98.43	101.02	103.79					
11 kV Sales		15.55	17.95	18.96	32.75	33.94	35.24					
33 kV Sales		11.98	10.17	9.78	23.76	24.10	24.49					
132 kV Sales		50.64	50.64	50.64	41.92	42.98	44.06					

Form 1.3(i) - WORKING CAPITAL

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
O&M expenses		1840.90	2049.75	2358.28	2718.40	3220.05	3703.71						
R&M expenses		71.98	94.07	118.20	144.82	176.00	213.06						
A&G expenses		87.07	96.27	110.27	126.68	149.84	171.83						
Employee expenses		1681.84	1859.41	2129.82	2446.89	2894.21	3318.83						
O&M Stores													
Working Capital Requirement (1/12th of total O&M Expenses+ O&M Stores)		153.41	170.81	196.52	226.53	268.34	308.64						

Form 1.3i - Other Expenses

Particulars	D-Link	Amount in Rs. Crore						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
Other Mis. Charges		0.00	0.00	0.00	0.00	0.00	0.00						
TOTAL OTHER EXPENSES		0.00	0.00	0.00	0.00	0.00	0.00						

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
I. Losses in 33 KV System and Connected Equipment								
(i)	Total Energy delivered/required into 33 KV Distribution System from EHT SSS	A	16856.05	17877.03	18841.63	20717.68	21894.15	23156.34
(ii)	Energy delivered/required by all other Generating Stations at 33kV	B	0.00	0.00	0.00	0.00	0.00	0.00
(iii)	Energy consumed by HT consumers at 33KV (Sales + Third Party)	X	451.77	536.85	516.52	743.68	757.87	772.99
(iv)	Energy delivered/required into 11 KV and LT System from 33/11 KV SS	C	15800.96	16700.64	17651.40	19233.58	20354.21	21556.61
	Losses (33 kV System)	(A + B) - (C + X)	603.31	639.54	673.71	740.42	782.07	826.74
	% Losses (33 kV System)	$\frac{100 \times [(A+B) - (C+X)]}{(A+B)}$	3.58	3.58	3.58	3.57	3.57	3.57
II. Losses in 11 KV System and Connected Equipment								
(i)	Energy delivered/required into 11 KV system from 33/11kV SSS	C	15800.96	16700.64	17651.40	19233.58	20354.21	21556.61
(ii)	Energy delivered/required into 11 KV Distribution System from EHT SSS	D	0.00	0.00	0.00	0.00	0.00	0.00
(iii)	Energy delivered/required at 11kV from all other Generating Stations	E	0.00	0.00	0.00	0.00	0.00	0.00
(iv)	Total Energy delivered/required into 11 KV and LT Distribution System	C+D+E	15800.96	16700.64	17651.40	19233.58	20354.21	21556.61
(v)	Energy consumed by HT consumers at 11KV (Sales + Third Party)	Y	1814.12	1885.92	1992.36	2525.39	2758.91	3020.27
(vi)	Total Output from 11kV to LT	F	13366.92	14159.83	14967.21	15954.72	16798.33	17692.72
	Losses (11kV System)	(C + D + E) - (Y + F)	619.92	654.89	691.83	753.47	796.97	843.62
	% Losses (11kV System)	$\frac{[(C+D+E) - (Y+F)] \times 100}{(C+D+E)}$	3.92	3.92	3.92	3.92	3.92	3.91
III. Losses in LT system and connected equipment								
(i)	Energy delivered/required to LT system from 11/400 V DTRs	F	13366.92	14159.83	14967.21	15954.72	16798.33	17692.72
(ii)	Energy sold to metered categories	Z	4496.12	4884.41	5223.79	5430.44	5763.67	6122.16
(iii)	Energy sold to un-metered categories	N	8200.54	8566.12	8994.42	9726.66	10195.70	10687.82
	Losses (LT System)	F - (Z + N)	670.26	709.31	749.00	797.62	838.95	882.74
	% Losses (LT System)	$\frac{[F - (Z + N)] \times 100}{F}$	5.01	5.01	5.00	5.00	4.99	4.99
IV. Total losses in the Distribution System								
(i)	Total Input to the distribution system	A + B + D + E	16856.05	17877.03	18841.63	20717.68	21894.15	23156.34
(ii)	Total Output from the Distribution System	X + Y + Z + N	14962.55	15873.29	16727.09	18426.18	19476.16	20603.24
(iii)	EHT Sales	G	2232.02	4526.35	16256.22	22779.58	22882.93	23001.28
	Distribution System Losses	(A + B + D + E) - (X + Y + Z + N)	1893.49	2003.74	2114.54	2291.50	2417.99	2553.11
	% Distribution System Losses (Excluding EHT Sales)	$\frac{[(A+B+D+E) - (X+Y+Z+N)] \times 100}{(A+B+D+E)}$	11.23	11.21	11.22	11.06	11.04	11.03
	% Distribution System Losses (Including EHT Sales)	$\frac{[(A+B+D+E) - (X+Y+Z+N)] \times 100}{(A+B+D+E + G)}$	9.92	8.94	6.02	5.27	5.40	5.53

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		1017.91	260.62	111.63	1166.90	
Grants		0.00	0.00	0.00	0.00	
Total		1017.91	260.62	111.63	1166.90	

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		1166.90	147.11	88.96	1225.05	
Grants		0.00	0.00	0.00	0.00	
Total		1166.90	147.11	88.96	1225.05	

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		1225.05	150.56	98.85	1276.76	
Grants		0.00	0.00	0.00	0.00	
Total		1225.05	150.56	98.85	1276.76	

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		1276.76	178.85	106.72	1348.90	
Grants		0.00	0.00	0.00	0.00	
Total		1276.76	178.85	106.72	1348.90	

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		1348.90	245.35	120.24	1474.01	
Grants		0.00	0.00	0.00	0.00	
Total		1348.90	245.35	120.24	1474.01	

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		1474.01	230.26	132.11	1572.16	
Grants		0.00	0.00	0.00	0.00	
Total		1474.01	230.26	132.11	1572.16	

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	Remarks					
								Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Aggregate Revenue Requirement (Rs. Crs.)		2261.40	2614.17	3153.39	3825.37	4649.19	5555.35						
Wheeling revenue from current tariffs (Rs. Cr)*		2435.82	2755.15	3305.31	3986.22	4824.65	5743.78						
Non Tariff Income (Rs. Cr)		174.42	140.99	151.92	160.85	175.46	188.44						
Revenue Surplus / (deficit) at current tariffs (Rs Cr)		0.00	0.00	0.00	0.00	0.00	0.00						

* 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	Remarks					
								Base Year	Year 1	Year 2	Year 3	Year 4	Year 5
Aggregate Revenue Requirement (Rs. Crs.)		2261.40	2614.17	3153.39	3825.37	4649.19	5555.35						
Wheeling revenue from proposed tariffs (Rs. Cr)*		2435.82	2755.15	3305.31	3986.22	4824.65	5743.78						
Non Tariff Income (Rs. Cr)		174.42	140.99	151.92	160.85	175.46	188.44						
Revenue Surplus / (deficit) at proposed tariffs (Rs Cr)		0.00	0.00	0.00	0.00	0.00	0.00						

* 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						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
Amortisation of dep on CC assets		111.63	88.96	98.85	106.72	120.24	132.11	Depreciated	Depreciated	Depreciated	Depreciated	Depreciated	Depreciation on CC&G Assets
Interest on Staff Loans and Advances		4.29	4.38	4.47	4.56	4.65	4.74						
Income from Investments		20.09	20.50	20.91	21.32	21.75	22.18						
Income from Trading - Sale of Scrap / Stores		0.53	0.54	0.55	0.56	0.57	0.58						
Excess found on Physical Verification of Stores		0.18	0.18	0.18	0.19	0.19	0.19						
Registration Fees		0.33	0.34	0.34	0.35	0.36	0.37						
Discounts received from vendors		0.00	0.00	0.00	0.00	0.00	0.00						
Fines/Penalties from Contractors		0.00	0.00	0.00	0.00	0.00	0.00						
Fines/Penalties from Suppliers/Mat Cust.		35.33	24.12	24.60	25.10	25.60	26.11						
Supervision Charges		1.49	1.52	1.55	1.58	1.61	1.65						
Other Income-Sale of Tender Schedules		0.46	0.46	0.47	0.48	0.49	0.50						
Other Mis.Income		0.10	0.00	0.00	0.00	0.00	0.00						
TOTAL Non Tariff Income		174.42	140.99	151.92	160.85	175.46	188.44						