



8. COMPLIANCE TO DIRECTIVES

8.1. Status of PSERC revised directives given in tariff orders for FY 2014-15

8.1.1. The Petitioner submits that the latest position of the PSERC directives given in tariff orders for FY 2013-14 which were reviewed in the tariff order of FY 2014-15 are as given below:

Table 105: Compliance of Directives given in Tariff Order for FY 2013-14

Sr. No.	Issues	PSERC's Comments / Directives for FY 2013-14	PSTCL Reply
1	Boundary metering, Energy Audit and T&D loss Reduction	PSTCL has not been able to implement 100% Boundary metering by its committed date. The Commissioning of the project may be expedited. Commission reiterates its directive to PSTCL to submit the data to the Commission on Actual Transmission losses in PSTCL system on monthly basis.	<p>The Petitioner submits that it placed a work order cum contract agreement on 26th October 2012 with Wallaby Metering System (P) Ltd, now EDMI India Private Limited for implementation of interstate boundary metering cum Transmission Level Energy Audit Scheme. The firm (Supplier cum Integrator) was required to supply, commission and integrate about 700 ABT (Availability Based Meters) with Central Energy Center along with associated communication, equipment/ devices like models, SIMs etc. for calculating overall transmission losses, line losses, transformer losses and availability of power from interstate points for calculating real time drawl from Central Sector generators to control over/ under drawl from the grid. Meters are to be installed at the boundary points with PSPCL/ interstate points. These are the points where the power is given by PSPCL to PSTCL and the points from where PSTCL is supplying power to PSPCL.</p> <p>The firm has supplied and integrated with the Central Data Centre about 721 ABT meters with associated communication equipment/ devices and has established state of the art Central Data Centre. The firm has submitted</p>

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Sr. No.	Issues	PSERC's Comments / Directives for FY 2013-14	PSTCL Reply
			<p>preliminary loss report. Perusal of the report indicates that the transmission losses vary up to 3.94% as per report dated 6th November, 7th November, 8th November depending upon loading conditions of the system and time-period used. The real time data of few (6 numbers) locations was not available due to communication issues and was taken from the other end by installing additional ABT meter at the receiving end. To further correct the losses, the firm has been asked to identify and install meters at the left over points. For communication connectivity wherever GSM signal is not available, the firm is require to install V-SAT at its cost.</p> <p>The firm has also installed 450 conventional energy meters (CEM)) at each and every node in the PSTCL grid where existing energy meters were not available, is also complete as far as putting up of new energy meters is concerned. However old/ existing energy meters (some 600) could not be integrated/ made communicable with the new system which has been setup at Centralized Energy Center, SLDC, Ablowal. As such 600 more CEMs meters are being proposed to be procured, so that all the data for the purpose of energy audit from the all the main meters at all these metering nodes in PSTCL grid is available remotely. The project is expected to be complete by 31-5-2014. The Petitioner shall submit to the Hon'ble Commission the results of the energy audit as soon as the</p>

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Sr. No.	Issues	PSERC's Comments / Directives for FY 2013-14	PSTCL Reply
			same are available.
2 (a)	Employee Cost (Manpower)	PSTCL has not been able to implement the "work study report on manpower" due to the structural changes in the organization and has asked PwC to review its report. The review work of PwC may be got completed in a time bound manner and its implementation may be assured by 31.12.2014. PSTCL shall submit the action taken report to the Commission in first week of January, 2015 on revised PwC report.	PSTCL and PwC could not reach an understanding on the terms and conditions for the study, hence the study was carried out by the Department cadre review committee of PSTCL itself. The final restructuring plan was prepared and submitted to the Competent Authority for approval. As soon as this is approved by the management of the PSTCL it shall be implemented under intimation to the Commission on priority.
2 (b)	Employee Cost (unmanned sub-stations)	PSTCL's move to establish unmanned S/stns. is painfully slow. PSTCL should move in the direction of operating all its switch gear from SLDC as per International Practices. Commission directs PSTCL to submit its action plan to convert all its sub stations as unmanned, after conducting a techno-economic analysis. This action plan be submitted along with ARR of FY 2015-16.	PSTCL has finalized specifications for providing substation system on 5 Nos. 220KV substations and NIT in this regard is being sent for publishing in leading newspapers. It is humbly submitted that this pilot project is a first step being taken by PSTCL in the direction of centralized monitoring and control of substations to make its officials familiar with the technology in power system automation. Providing substation automation on existing old substations is itself a challenge as this requires up-gradation/ replacement/ retrofitting of old equipment with that of SAS compatible equipment. Due to incorporation of these vast technical aspects in the specification, the execution of such an advanced project requires ample amount of

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Sr. No.	Issues	PSERC's Comments / Directives for FY 2013-14	PSTCL Reply
			<p>time and it is anticipated that the project will be executed within a year after the award of contract.</p> <p>For unmanning, commissioning of substation automation system on the substations is the first requirement and PSTCL is in process of this. PSTCL will further look into possible unmanning and techno-economic analysis once SAS is commissioned under this project.</p>
2 (c)	Employee Cost (Training)	Commission reiterates its directions to PSTCL to submit a copy of the training schedule to the Commission and PSTCL must implement the already approved PSEB Training Policy aimed at one week training of all, annually.	The copy of the training schedule is attached herewith as Annex-A. The concerned office of training has submitted its report for setting up the complete infrastructure to facilitate the in-house training facility in line with the training institutes of various other organisations.
2 (b)	Employee Cost (implementation of ERP)	The Commission directs PSTCL to submit the status report of implementation of ERP, to the Commission on bi-annual basis.	Administrative approval has been accorded for implementation of ERP in PSTCL. at an estimated expenditure of Rs 36.95 Cr over a period of 3 years commencing from FY 2015-16, for finalization of various modules and preparation of DPR/ FRS from the consultant such as Financial Accounting and Controlling, Human Resource Management, Procurement and Contracts Management, Maintenance Management and Project Management. The DPR and RfP (Request for Proposal) have been approved.
3	Loading Status of PSTCL transmission	Updated list of overloaded Sub-stations and transmission lines along with action plan for de-	The compliance is being made and action plan is available on PSTCL website.

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Sr. No.	Issues	PSERC's Comments / Directives for FY 2013-14	PSTCL Reply
	n lines and Sub stations.	loading should be easily accessible on PSTCL web-site. The Commission directs PSTCL to submit the progress of de-loading of overloaded lines/substations to the Commission on quarterly basis.	
4	Mtc. of category wise details of fixed asset	The Commission directs PSTCL to submit the status report of Mtc. of category wise details of fixed assets, to the Commission on quarterly basis.	The Fixed Asset Register (FAR) up to 31.03.2012 year-wise, category-wise, location code-wise with value has been prepared by PSTCL. Matter regarding preparation of Fixed Asset Register showing quantitative details of different type of assets has been taken up with the consultants engaged by erstwhile PSEB.
5	Adequacy of existing switchgear and Earthmat at PSTCL sub stations	The Commission directs PSTCL to submit the status report to the Commission on bi-annual basis.	The work of replacement of breakers which completed 25 years of its life have been completed and earthing parameters at all Sub-Stations are within limit except 132 KV Sub-Station Naraingarh which is under progress.

Table 106: Compliance of Directives issued in Tariff Order for FY 2014-15

Sr. No.	Issues	PSERC's Comments / Directives for FY 2014-15	PSTCL Reply
1	Audited Annual Accounts for FY 2012-13 and FY 2013-14	PSTCL is directed to submit Audited Annual Accounts for FY 2012-13 and FY 2013-14 along with the audit report of Statutory Auditors and CAG of India at the time of filing of	The Annual Accounts for FY 2012-13 have been audited and audit report has been given by Statutory auditors. Supplementary Audit has also been conducted by CAG and their report/observations are awaited.

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Sr. No.	Issues	PSERC's Comments / Directives for FY 2014-15	PSTCL Reply
		ARR Petition for FY 2015-16.	Audit of Annual Accounts for FY 2013-14, is under progress.
2	Reactive Compensation for FY 2014-15	PSTCL is directed to carry out system studies to identify requirement of Reactive Compensation in PSTCL system and ensure installation of requisite reactive compensation at its sub-stations during FY 2014-15.	<p>The requirement of reactive compensation is based on a thumb rule/ Guideline evolved in 2007 by erstwhile PSEB and the installation is being done by TS Organisation according to the instructions issued by erstwhile PSEB.</p> <p>As per the directive of the Hon'ble, the Commission, the Planning Organisation has now been entrusted with the work of carrying out system study to identify the requirement of reactive compensation.</p> <p>As regards system study to identify the requirement of Reactive Compensation, it is submitted that the presently available software for system studies with PSTCL does not have provision for Reactive Compensation determination at micro level. However, the issue has been taken up in the right earnest and right now possibilities are being explored to get the requisite study done initially from renowned agencies such as CEA/ CPRI, etc. and in the meantime to get the Operational capacitor placement software for carrying such studies in-house in future.</p>

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Annexure A: Training Schedule

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Annexure A

Training Schedule for AEEs/AEs

S. no	Subject	Content
1	Design and construction of Transmission Lines including modern techniques	<ul style="list-style-type: none"> • Brief History of EHV transmission System In India • Tower types A,B, C, D and Special Towers • Conductors/ earthwire and their accessories, types, configuration, transposition, selection criteria • Insulators and hardware fittings: types, strength, details • Right of way, CEA (Measures relating to safety and electric supply) Regulations, 2010 and acts, statutory clearances from other agencies, compensation etc. • Surveying, route alignment, proofing, tower spotting • Benching and soil classification, soil investigation and soil resistivity measurement • Tower design and testing, quality checks • Tower erection hardware and accessories, fitting procedures, stringing, clearances, commissioning
2	Design and construction of Sub Stations including modern techniques	<ol style="list-style-type: none"> 1. Types: Generation Sub Station, mobile S/s, gas Insulated S/s, HVDC S/s, Indoor-outdoor etc. 2. General arrangement and layout of switchyard, switching schemes, single line diagram 3. Power Transformers and reactors <ol style="list-style-type: none"> a) types: major components, constructional details, functions b) Design and selection, specification and rating c) Bushings, on load Tap Changers (OLTC), Buchholz relay, conservator, breather, thermo Siphon filter, indicators, etc. d) Cooling arrangements- methods of cooling, pumps, fans, radiators, etc. e) Transformer tests f) Introduction to relevant Indian standards.
3	Protection System, System automation schemes	<ol style="list-style-type: none"> 1) Protection System Philosophy: types, design, protection Schemes, tripping schemes, protection of transformers/ reactors, motors, feeders, generator, bus etc. 2) Relays: types, functions, constructional details, selection, ratings/specifications, testing and setting of relays and knowledge of relevant Indian Standard.
4	Sub Stations- Operation & Maintenance	<ol style="list-style-type: none"> a) Need, Philosophy, Types- routine, preventive planned, predictive, break down, emergency maintenance, comparisons, tools and tackles, testing instruments, safety devices, sampling equipments, test kits, visual checks, condition monitoring techniques, on-line maintenance, daily/weekly/monthly/ half/yearly, planning the maintenance activities, preparation of maintenance estimates, budgeting for control, maintenance records, history b) spare parts management c) transformer and reactor maintenance-factors affecting the life of



		Transformer/ reactor, types of faults that can occur, reasons for breakdown, visual checks/ inspection/preliminary testing of various components-oil sampling and testing, oil filtration, Dissolved Gas Analysis (DGA), maintenance schedule, fault rectification, need for major overhaul d) switchgear and Protection Maintenance, Maintenance of CB, isolator, earthswitch, support insulators, CT/CVT, LA, lighting Mast (LM), meters/recorders, PLCC, protective relay Maintenance, protection system Maintenance e) Maintenance of auxiliaries and other systems-battery and charging system, DG set, air conditioning plant, compressed air system, earth resistance testing, cables compensating devices.
5	SCADA System, SLDC	1. Load dispatch centres-Functions, SLDC/RLDC, NLDC, pre-dispatch, during dispatch, post dispatch 2. supervisory control and data Acquisition (SCADA) 3. Energy management System-functions 4. Load Forecasting, generation scheduling load management, load shedding 5. Hydro-thermal scheduling 6. Voltage/ frequency control 7. reactive Power Management 8. Grid Management- problems/ solutions 9. operational Co-operation, import/export of energy, role of tariff in system operation 10. Maintenance, on Line Maintenance 11. Grid disturbances- case studies
6	RTI Act	----
7	Personality Development and Motivation.	----
8	Disaster Management	----
9	Smart Grids	Government perspective, smart grid Forum perspective, regulation, project showcase, transition to AMI, Focus on smart metering, wide area monitoring systems, interoperability in systems demand response, Loss reduction, outage management, asset management.
10	Earthing System	Types of earthing, earth testing and treatment, earth mat design, step potential, touch potentials, transfer potentials, neutral grounding factor.
11	Planning of Transmission System	1. Introduction to power system planning requirements and methods 2. load forecasting and techniques 3. load flow studies for planning 4. preparation of feasibility report (FR), detailed project Report (DPR) 5. Approval/ Clearance of projects
12	Communication System	communication System types- PLCC, microwave, leased lines, fiber optics, satellite, V- SAT Communication, comparison, characteristics, planning criteria, selection criteria, RTUs, modems, baud rate, communication protocols, data exchange, system noise and interference, integrated communication system. O&M of communication system, protocol details,

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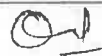
		telemetry, tele-control and tele-protection
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Training Schedule for JE-I /JE-II /SSOs

1.	Electrical Safety- Safety and its requirement	<ol style="list-style-type: none"> 1. General instructions for safety 2. working on live lines & equipment 3. Adjacent to live equipment on lines 4. Earthing, working on deadline and equipment 5. Inspection of equipment on live lines 6. permit system and switching operation <ol style="list-style-type: none"> a) permit to work b) caution notice from E-SC c) Sub station order book d) S/s log sheet, etc. e) knowledge of safety codes f) handling and storage of material and equipment
2.	Disaster Management	<ol style="list-style-type: none"> 1. Treatment of electric shock 2. first aid and 3. Fire fighting measures.
3.	SCADA System	<ol style="list-style-type: none"> 1. Load dispatch centres-Functions, SLDC/RLDC, NLDC, pre-dispatch, during dispatch, post dispatch 2. supervisory control and data Acquisition (SCADA) 3. Energy management System-functions 4. Load Forecasting, generation scheduling load management, load shedding 5. Hydro-thermal scheduling 6. Voltage/ frequency control 7. reactive Power Management 8. Grid Management- problems/ solutions 9. operational Co-operation, import/export of energy, role of tariff in system operation 10. Maintenance, on Line Maintenance 11. Grid disturbances- case studies
4.	Sub- Stations- Construction	Project/ program evaluation and review technique, charts, project monitoring, erection, pre-commissioning checks/ tests, study of circuit diagrams, commissioning and synchronization.
5.	Transmission Line- Construction	----
6.	Personality Development and Body Language	----
7.	Motivation	----

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8	Communication Systems	communication System types- PLCC, microwave, leased lines, fiber optics, satellite, V- SAT Communication, comparison, characteristics, planning criteria, selection criteria, RTUs, modems, baud rate, communication protocols, data exchange, system noise and interference, integrated communication system. O&M of communication system, protocol details, telemetry, tele-control and tele-protection
9	Sub- Stations- Operation, Maintenance & upkeep	<p>a) Need, Philosophy, Types- routine, preventive planned, predictive, break down, emergency maintenance, comparisons, tools and tackles, testing instruments, safety devices, sampling equipments, test kits, visual checks, condition monitoring techniques, on-line maintenance, daily/weekly/monthly/ half/yearly, planning the maintenance activities, preparation of maintenance estimates, budgeting for control, maintenance records, history</p> <p>b) spare parts management</p> <p>c) transformer and reactor maintenance-factors affecting the life of Transformer/ reactor, types of faults that can occur, reasons for breakdown, visual checks/ inspection/preliminary testing of various components-oil sampling and testing, oil filtration, Dissolved Gas Analysis (DGA), maintenance schedule, fault rectification, need for major overhaul</p> <p>d) switchgear and Protection Maintenance, Maintenance of CB, isolator, earthswitch, support insulators, CT/CVT, LA, lighting Mast (LM), meters/recorders, PLCC, protective relay Maintenance, protection system Maintenance</p> <p>Maintenance of auxiliaries and other systems-battery and charging system, DG set, air conditioning plant, compressed air system, earth resistance testing, cables compensating devices.</p>
10	Protection System	<p>a) Protection System Philosophy: types, design, protection Schemes, tripping schemes, protection of transformers/ reactors, motors, feeders, generator, bus etc.</p> <p>Relays: types, functions, constructional details, selection, ratings/specifications, testing and setting of relays and knowledge of relevant Indian Standard.</p>
11	Oil and diagnostic testing of electrical equipment	Types of OILs, Break down voltage, Testing procedure and equipments etc.
12	RTI Act	----
13	Thinking and Analytical Skills.	----
14	Earthing System	Types of earthing, earth testing and treatment, earth mat design, step potential, touch potentials, transfer potentials, neutral grounding factor.
15	Cables	Types , parts and functions, laying of cable and faults



Training Schedule for Lineman/ ALM

S. no	Subject	Content
1	Electrical Safety- Safety, safety tools and fire fighting	<ol style="list-style-type: none"> 1. General instructions for safety 2. working on live lines & equipment 3. Adjacent to live equipment on lines 4. Earthing, working on deadline and equipment 5. Inspection of equipment on live lines 6. permit system and switching operation <ol style="list-style-type: none"> a) permit to work b) caution notice from E-SC c) Substation order book d) S/s log sheet, etc. 7. knowledge of safety codes 8. handling and storage of material and equipment
2	Disaster Management	<ol style="list-style-type: none"> 1. treatment of electric shock 2. first aid and 3. Fire fighting measures.
3	Sub- Stations- Types, Maintenance	<ol style="list-style-type: none"> 1. Types: Generation Sub Station, mobile S/s, gas Insulated S/s, HVDC S/s, Indoor-outdoor etc. 2. Maintenance of auxiliaries and other systems-battery and charging system, DG set, air conditioning plant, compressed air system, earth resistance testing, cables compensating devices.
4	Transformers- Types, Maintenance	<ol style="list-style-type: none"> a) Types: major components, constructional details, functions. b) Bushings, on load Tap Changers (OLTC), Buchholz relay, conservator, breather, thermo siphon filter, indicators etc. c) Cooling arrangements: methods of cooling, pumps, fans, radiators etc. d) Transformer tests.
5	Transmission Lines- Maintenance and upkeep	Line patrolling, routine checks, filling log books, T&P, thermo-vision scanning, fault failure analysis, hot line maintenance, case studies.

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6	Accident Prevention & Safe Procedures.	<ol style="list-style-type: none"> 1. Safety devices and their use 2. Use of rubber Gloves, gauntlets and other devices 3. Testing of rubber gloves 4. Storage of rubber protective devices 5. Leather protective gloves 6. Periodical inspection of safety devices 7. Responsibility in using safety devices 8. Use of goggles and eye-shields 9. Ladders 10. Hand tools 11. Earthing devices for electric supply lines 12. Linesmen's clothing 13. Linesmen's safety belts 14. Operating rods 15. Torch lights
7	First Aid Lecture and Demo.	General First Aid instructions, external bleeding, internal bleeding, physical shock, fainting, heat stroke, heat exhaustion, fractures, Animal bites, snake bites, burns etc.
8	Cables	Types , parts and functions, laying of cable and faults
9	Detailed Knowledge of construction of Lines	<ol style="list-style-type: none"> a) Erection of poles b) Fitting of line accessories c) Layout of conductor d) Sag of Conductor e) Different joints of Conductors f) Earthing g) Testing on lines
10	Transmission lines	Need, Types, material required, Stub setting of Transmission tower.

Training Schedule for SSAs

S. no	Subject	Content
1	Electrical Safety- Safety and its requirement	<ol style="list-style-type: none"> 1. General instructions for safety 2. working on live lines & equipment 3. Adjacent to live equipment on lines 4. Earthing, working on deadline and equipment 5. Inspection of equipment on live lines 6. permit system and switching operation <ol style="list-style-type: none"> a) permit to work b) caution notice from E-SC c) Sub station order book d) S/s log sheet, etc. 7. knowledge of safety codes 8. handling and storage of material and equipment
2	Disaster Management	<ol style="list-style-type: none"> 1. treatment of electric shock 2. first aid and 3. fire fighting measures.
3	Personality Development and Body Language	---
4	Motivation	---
5	RTI Act	---

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6	Communication Systems	communication System types- PLCC, microwave, leased lines, fiber optics, satellite, V- SAT Communication, comparison, characteristics, planning criteria, selection criteria, RTUs, modems, baud rate, communication protocols, data exchange, system noise and interference, integrated communication system. O&M of communication system, protocol details, telemetry, tele-control and tele-protection
7	Sub- Stations- Operation, Maintenance and automization	<p>e) Need, Philosophy, Types- routine, preventive planned, predictive, break down, emergency maintenance, comparisons, tools and tackles, testing instruments, safety devices, sampling equipments, test kits, visual checks, condition monitoring techniques, on-line maintenance, daily/weekly/monthly/ half/yearly, planning the maintenance activities, preparation of maintenance estimates, budgeting for control, maintenance records, history</p> <p>f) spare parts management</p> <p>g) transformer and reactor maintenance-factors affecting the life of Transformer/ reactor, types of faults that can occur, reasons for breakdown, visual checks/ inspection/preliminary testing of various components-oil sampling and testing, oil filtration, Dissolved Gas Analysis (DGA), maintenance schedule, fault rectification, need for major overhaul</p> <p>h) switchgear and Protection Maintenance, Maintenance of CB, isolator, earthswitch, support insulators, CT/CVT, LA, lighting Mast (LM), meters/recorders, PLCC, protective relay Maintenance, protection system Maintenance</p> <p>Maintenance of auxiliaries and other systems-battery and charging system, DG set, air conditioning plant, compressed air system, earth resistance testing, cables compensating devices.</p>
8	Protection System	a) Protection System Philosophy: types, design, protection Schemes, tripping schemes, protection of transformers/ reactors, motors, feeders, generator, bus etc.
9	Accident Prevention & Safe Procedures.	<ol style="list-style-type: none"> 1. Safety devices and their use 2. Use of rubber Gloves, gauntlets and other devices 3. Testing of rubber gloves 4. Storage of rubber protective devices 5. Leather protective gloves 6. Periodical inspection of safety devices 7. Responsibility in using safety devices 8. Use of goggles and eye-shields 9. Ladders 10. Hand tools 11. Earthing devices for electric supply lines 12. Linesmen's clothing 13. Linesmen's safety belts 14. Operating rods 15. Torch lights
10	First Aid Lecture and Demo.	General First Aid instructions, external bleeding, internal bleeding, physical shock, fainting, heat stroke, heat exhaustion, fractures, Animal bites, snake bites, burns etc.
11	Functions and analysis of different relays.	Relays: types, functions, constructional details, selection, ratings/specifications, testing and setting of relays and knowledge of relevant Indian Standard

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12	Cables	Types , parts and functions, laying of cable and faults
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Training Schedule for UDC (G) / LDC

S. no	Subject	Content
1	Office procedure	Receipt, its marking, distribution-dak, diary, registers, processing of files
2	File Maintenance	Material for file record register, allotting number of files, paging & referencing.
3	Record Management	Indexing, recording, preservation, weeding out & retention of record
4	Recruitment:	<ul style="list-style-type: none"> • Methods- direct, promotion, deputation, transfer, absorption. • Probation • Confirmation • Appointment Adhoc • temporary, regular, substantive, work-charged, daily wages, contract
5	Promotion:	<ul style="list-style-type: none"> • Regular • Adhoc • Officiating • Additional charge • Procedures
6	Retirements	<ul style="list-style-type: none"> • Superannuation • Pre-mature • Compulsory • Voluntary • Repercussions
7	Measures to check litigations and handling of court cases	---
8	RTI Act	---
9	GPF, GIS and Deputation	---
10	Cash book, pay, TA and medical bills	---
11	Transfer policy	---
12	Reservation in services	---
13	Income tax collection and TDs, filling of return as responsibilities of DDOs	----
14	Punishment & Appeal rules-1970	----
15	Conduct rules	----

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ARR FORMATS

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9. ARR FORMATS

S.No	Form Reference	Details of Form
1	ARR Summary	ARR Summary of Transmission and SLDC Business
Forms related to STU		
2	Form F1	Employee Expenses
3	Form F4	Repair & Maintenance Expenses
4	Form F5	Administration & General Expenses
5	Form F8	Expenses Capitalised
6	Form F9	Depreciation
7	Form F11	Provision for Bad & Doubtful Debts
8	Form F12	Income from Investments and Non-Tariff Income
9	Form F14	Consumer Contribution
10	Form F15	Equity
11	Form F16	Return on Equity
12	Form F17	Line Length (ckt-km)
13	Form F18	Capital Expenditure Details
14	Form F19	Number of Sub-Stations
15	Form F20	Interest on Working Capital
16	Form F21	Interest & Finance Charges
17	Form F22	Transmission Availability (%)
18	Form F23	Transmission Loss (%)
19	Form F24	Revenue
Forms related to SLDC		
20	Form F1	Employee Expenses
21	Form F4	Repair & Maintenance Expenses
22	Form F5	Administration & General Expenses
23	Form F9	Depreciation
24	Form F12	Income from Investments and Non-Tariff Income
25	Form F18	Capital Expenditure Details
26	Form F20	Interest on Working Capital
27	Form F21	Interest & Finance Charges
28	Form	ULDC charges
29	Form F24	Revenue

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ARR Summary

S. No	Particulars	Transmission Business						SLDC Business						Transmission & SLDC Business					
		FY 2014-15		FY 2015-16		FY 2014-15		FY 2015-16		FY 2014-15		FY 2015-16		FY 2014-15		FY 2015-16			
		Actuals	Estimate	Actuals	Estimate	Actuals	Estimate	Actuals	Estimate	Actuals	Estimate	Actuals	Estimate	Actuals	Estimate	Actuals	Estimate		
1	Net Employee cost	21.12	21.12	21.12	21.12	21.12	21.12	21.12	21.12	21.12	21.12	21.12	21.12	21.12	21.12	21.12	21.12		
2	Net R&M expenses	68.89	68.89	68.89	68.89	68.89	68.89	68.89	68.89	68.89	68.89	68.89	68.89	68.89	68.89	68.89	68.89		
3	Net A&G expenses	13.79	13.79	13.79	13.79	13.79	13.79	13.79	13.79	13.79	13.79	13.79	13.79	13.79	13.79	13.79	13.79		
4	Depreciations-ADD	147.90	147.90	147.90	147.90	147.90	147.90	147.90	147.90	147.90	147.90	147.90	147.90	147.90	147.90	147.90	147.90		
5	Interest charges	344.85	344.85	344.85	344.85	344.85	344.85	344.85	344.85	344.85	344.85	344.85	344.85	344.85	344.85	344.85	344.85		
6	Interest on Working Capital	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15		
7	T/D.C. Charges	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01		
8	Return on Equity	30.97	30.97	30.97	30.97	30.97	30.97	30.97	30.97	30.97	30.97	30.97	30.97	30.97	30.97	30.97	30.97		
9	Provision for bad debts & Other Debts																		
10	Tax paid by TSTCL																		
11	Provisioned amount of carrying cost from Gap																		
12	Total revenue requirement	765.82	765.82	765.82	765.82	765.82	765.82	765.82	765.82	765.82	765.82	765.82	765.82	765.82	765.82	765.82	765.82		
13	Less: Non Tax/ Income	36.38	36.38	36.38	36.38	36.38	36.38	36.38	36.38	36.38	36.38	36.38	36.38	36.38	36.38	36.38	36.38		
14	Less: Charges from STOA																		
15	Add: Additional Tax	18.57	18.57	18.57	18.57	18.57	18.57	18.57	18.57	18.57	18.57	18.57	18.57	18.57	18.57	18.57	18.57		
16	Aggregate Revenue Requirement	725.65	725.65	725.65	725.65	725.65	725.65	725.65	725.65	725.65	725.65	725.65	725.65	725.65	725.65	725.65	725.65		
17	Income	8.92	8.92	8.92	8.92	8.92	8.92	8.92	8.92	8.92	8.92	8.92	8.92	8.92	8.92	8.92	8.92		
18	Gross ARR	734.57	734.57	734.57	734.57	734.57	734.57	734.57	734.57	734.57	734.57	734.57	734.57	734.57	734.57	734.57	734.57		
19	Revenue gap carry-forward (with carrying cost)																		
20	Carrying cost for revenue gap	4.63	4.63	4.63	4.63	4.63	4.63	4.63	4.63	4.63	4.63	4.63	4.63	4.63	4.63	4.63	4.63		
21	Cumulative Revenue Requirement	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44		
22	Revenue from Tariff	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44	801.44		
23	Revenue Gap	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80	-54.80		

Out



9.1. ARR Formats for STU
Form-F1: Employee Expenses for STU

S. No	Particulars	Form - F1 Employee Expenses for STU						Current Year (FY 2014-15)		Easing Year (FY 2015-16)	
		Previous Year (FY 2012-13)		Actuals		Last Year Petition		Order		Revised Estimate*	
		Revised Estimates	Order	Actuals	Order	1	2	3	4	5	6
1	Salaries	1	2	3	4	5	6	7	8	9	10
2	Overtime										
3	Dearness Allowance										
4	Other Allowances										
5	Bonus										
6	Sub-Total										
7	Medical Expenses reimbursement										
8	Leave Travel Assistance/Concession										
9	Payment under Workmen										
10	Sub-Total										
11	Electricity Concession to PSTCL Employees										
12	Suath Welfare Expenses										
13	Sub-Total										
14	Less : Establishment cost recoverable on execution of 66KV works										
15	Total Salary and Other Employee	185.41	111.46	140.62	147.58	109.73	171.83	183.58			
16	Less: Employee costs capitalized	12.87	12.87				1.83	0.50			
17	Net Salary and Other Employee										
18	Arrears										
19	Prorated Adjustments										
20	Impact of pay revision										
21	Employee cost for new installations	198.28	19.00	4.97	147.58	109.73	1.68	6.44			
22	Grand Total	198.28	169.43	160.99	147.58	109.73	175.53	190.53			
Terminal Benefits											
S. No	Particulars	Previous Year (FY 2012-13)		Actuals		Last Year Petition		Current Year (FY 2014-15)		Easing Year (FY 2015-16)	
		Last Year Petition	Order	Actuals	Order	Last Year Petition	Order	Actuals for H1	Estimate for H2	Revised Estimate*	Projected
	Column Reference	1	2	3	4	5	6	7	8	9	10
	Terminal Benefits	170.00	170.00	167.10	188.93	188.93	188.93			221.32	236.55

OK

Form-F4: R&M Expenses for STU

Form - F4 Repair and Maintenance Expenses for STU												
S. No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)				Ensting Year (FY 2015-16)			
		Revised Estimates	Order	Actuals*	Last Year Petition	Order	Actuals for H1	Estimate for H2	Revised Estimate*	Projected		
	Column Reference	1	2	3	1	2	3	4	5	1		
1	Plant & machinery											
2	Building including renovation											
3	Hydraulic works & civil works											
4	Line cable & network											
5	Vehicles											
6	Furniture & fixtures											
7	Office equipments											
8	Total	54.58	71.45	64.39	61.33	46.45	61.33	46.45	89.01	118.82		
9	Less: Expenses Capitalised	0.17										
10	Net expenses	54.41	71.45	64.39	61.33	46.45	61.33	46.45	89.01	118.82		
11	Add Prior period adjustments											
12	R&M for Assets Addition during the year	14.98	17.15	3.61						4.76		
13	Total expenses charged to revenue	69.39	88.60	68.00	61.33	46.45	61.33	46.45	101.19	123.58		

*Numbers given are on normative basis hence itemised numbers have not been entered for FY 2012-13 and H1 and H2 of FY 2014-15

OT



Form-F5: A&G Expenses for STU

Form - F5 Administration and General Expenses for STU										
S. No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)			Ensuing Year (FY 2015-16)		
		Revised Estimates	Order	Actuals*	Last Year Petition	Order	Actuals for H1	Estimate for H2	Revised Estimate*	Projected
		1	2	3	1	2	3	4	5	1
	Column Reference									
1	Rent, Rates & Taxes									
2	Insurance									
3	Telephone, Postage, Telegramme and Telex									
4	Legal Charges									
5	Consultancy/Technical Charges									
6	Conveyance & Travel Charges									
7	Fees & Subscription									
8	Books & Periodicals									
9	Printing & Stationery									
10	Advertisement/Publicity expenses									
11	Electricity/Water Charges									
12	Expenses on Training									
13	Hospitality									
14	Contingent Expenses									
15	Miscellaneous/Contingency Expenses									
16	Mobile set purchase expenses									
17	Other Expenses									
18	Freight									
19	Other Purchase related expenses									
20	A&G expenses recoverable on execution of 66KV works									
21	Sub Total	16.70	16.45	14.46					19.99	26.68
22	Audit Charges	0.07		0.32					0.28	0.28
23	Payment to outsourced	9.44								
24	Add: Expenses on account of asset addition during the year	6.91	3.97	0.81					2.74	1.07
25	Add: License Fee	0.25	0.50	0.50					0.50	0.50
26	Add: Tariff Filing Fee	0.25								
27	Less: Administration & General capitalized	1.88								
29	Net A&G Expenses									
30	Add: Prior Period Expenses/Losses	0.05								
31	Other Debits/Staff Outsourcing Expense + Audit Fee									
32	Grand Total	32.09	20.92	16.09	30.59	21.56	21.56		23.50	28.53

07

*Numbers given are on normative basis hence itemised numbers have not been entered for FY 2012-13 and H1 and H2 of FY 2014-15

Form F8: Expenses Capitalized for STU

Form - F8 Expenses Capitalized for STU											(Rs in Crore)
S.No	Particulars	Previous Year' (FY 2012-13)			Current Year (FY 2014-15)				Ensuing Year (FY 2015-16)		
		Revised Estimates	Order	Actuals*	Last Year Petition	Order	Actuals for H1	Estimated for H2	Revised Estimate*	Projected	
	Column Reference	1	2	3	1	2	3	4	3	1	
1	Interest & Finance charges Capitalized			133.82					120.00	39.92	
2	Other expenses capitalized:										
	a. Employee expenses	24.00			55.54						
	b. R&M Expenses	0.17									
	c. A&G Expenses	1.58									
	Total										
	Grand Total	25.75		133.82	55.54				120.00	39.92	

*Other expenses capitalised are on normative which are net off capitalised amount hence numbers have not been entered for FY 2012-13 and H1 and H2 of FY 2014-15

On

Form-F9: Depreciation Charges for STU

Form - F9 Depreciation Charges for STU											
S.No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)			Ensuing Year (FY 2015-16)			
		Revised Estimates	Order	Actuals	Last Years' Petition	Order	Estimated	Projected	(Rs in Crore)		
	Column Reference	1	2	3	1	2	3	3			
1	Depreciation (excluding prior period adjustments)	188.60	147.9	108.28	239.44	186.00	193.87		232.96		
2	Opening GFA (Net of Land & Land Rights)			2338.71			3626.75		4619.81		
3	Assets additions during the Year			590.96			1794.48		669.46		
4	Assets replacement/ retirement										
5	Closing GFA (Net of Land & Land Rights)			2929.67			4619.81		5289.27		
6	Depreciation as % of Opening and Closing GFA			4.11%			4.70%		4.70%		

On

Form-F12: Income from investments and other non-tariff income for STU

S.No	Particulars	Form - F12 Income from investments and other non-tariff income for STU						(Rs. In Crore)	
		Previous Year (FY 2012-13)		Current Year (FY 2014-15)		Ensuing Year (FY 2015-16)		Revised Estimate	Projected
		Revised Estimates	Order	Actuals	Last Year Petition	Order	Revised Estimate		
	Column Reference	1	2	3	1	2	3		
1	Meter/metering equipment/service line rentals								
2	Service charges								
3	Customer charges								
4	Revenue from late payment surcharge								
5	Miscellaneous receipts								
6	Incentives from CGS's								
7	Miscellaneous charges (except PLEC charges)								
8	Interest on staff loans and advances								
9	Interest on advances to suppliers								
10	Income from trading								
11	Income from staff welfare activities								
12	Rental charges for staff quarters, water charges, Hospital ward, guest house etc.								
13	Sale of Tender forms								
14	Excess found on physical verification								
15	Interest on investments, fixed and call deposits and bank balances								
16	Net recovery from penalty on coal liaison agents								
17	Other Non Tariff Income including prior period								
18	Income from open access charges i.e. application fee, cross subsidy surcharge, additional surcharge, transmission and/or wheeling charges, scheduling charges etc.								
	Total	5.76	61.21	14.98	8.05	10.72	7.16		5.00

On

Form-F14: Contributions, Grants and Subsidies towards Cost of Capital Assets for STU

Form - F14										
Contributions, Grants and subsidies towards Cost of Capital Assets for STU										
S.No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)				Ensuing Year (FY 2015-16)	
		Revised Estimates	Order	Actuals	Last Year Petition	Order	Actuals (H1)	Estimated (H2)	Total (H1+H2)	Projected
	Column Reference	1	2	3	1	2	3	4	5=3+4	6
1	Consumer Contribution Towards Cost Of Capital Assets									
2	Subsidies Towards Cost Of Capital Asset									
3	Grant Towards Cost Of Capital Assets									
4	Revenue subsidies & grants									
	Total	NA	NA	NA	NA	NA	NA	NA	NA	NA

Out

Form-F15: Equity for STU

Form - F15									
Equity for STU									
S.No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)			Ensuing Year (FY 2015-16)	
		Revised Estimates	Order	Actuals	Last Year Petition	Order	Estimate	Projected	(Rs. In Crore)
	Column Reference	1	2	3	1	2	3		
1	Opening Balance of Equity	328.50	605.88	605.88	605.88	605.88	685.78	685.78	
2	Equity Addition during the Year	0.00	0.00	79.90	0.00	0.00	0.00	0.00	
3	Deduction in Equity on account of retirement of assets							0.00	
4	Closing balance of Equity	328.50	605.88	685.78	605.88	605.88	685.78	685.78	

Or

Form-F16: RoE for STU

Form - F16									
Return on Equity for STU									
S.No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)			Ensuing Year (FY 2015-16)	
		Revised Estimates	Order	Actuals	Last Years' Petition	Order	Estimate	Projected	
	Column Reference	1	2	3	1	2	3	1	
1	Opening Balance-Equity Capital	328.50		605.88	605.88	605.88	685.78	685.78	
2	Equity addition during the year through Internal Accruals	0.00		79.90	0.00	0.00	0.00	0.00	
3	Closing balance-Equity Capital	328.50		685.78	605.88	605.88	685.78	685.78	
4	Return on Equity	75.38	93.90	112.47	93.91	93.91	106.30	106.30	
5	ROE rate (%)	22.95%		19.61%	15.50%	15.50%	15.50%	15.50%	

01

Form-F17: Description for Transmission Function - Line Length (ckt-km)

Form - F17											
Line Length (ckt-km)											
S.No	Particulars	As on 31.03.2012		As on 31.03.2013		As on 31.03.2014		As on 31.03.2015		As on 31.03.2016	
		Actuals	Actuals	Actuals	Actuals	Actuals	Actuals	Estimated	Projected		
1	400 KV	0.00	0.00	367.75	1460.22	1460.22					
2	220 KV	5,035.32	5,146.46	5,520.77	5,885.48	5,885.48					
3	132 KV	3,111.10	3,087.20	3,112.20	3,132.20	3,132.20					
4	Total	8146.42	8233.66	9000.72	10477.90	10477.90					11067.90

OK

Form-F18: Capital Investment Details

Form - F18										
Capital Expenditure Details - STU										
S.No	Particulars	Current Year (FY 2014-15)					Ensuing Year (FY 2015-16)			(Rs. In Crore)
		Opening CWIP for FY 2014-15 HI	Capex in FY 2014-15 HI	Estimated Capex FY 2014-15 H2	Capitalisation during FY 2014-15	Closing CWIP for FY 2014-15	Capex	Capitalisation		
	Column Reference	1	2	3	4	5	1	2		
1	400 kV Transmission Works	961.81	67.09	103.00	1106.28	25.62	119.00	142.63		
2	220 kV and 132 kV Transmission Works	719.92	154.12	180.35	668.21	386.18	358.46	511.84		
3	ERP	0.00	0.00	0.15	0.00	0.15	6.41	0.00		
4	Training	0.00	0.00	0.00	0.00	0.00	4.50	0.00		
5	Others	0.00	0.00	20.00	20.00	0.00	15.00	15.00		
6	Total	1681.73	221.21	303.50	1794.49	411.96	503.37	669.46		

Out



Form-F19: Description of Transmission Function-No. of Substations

Form - F19											
Number of Sub-Stations for Transmission Function											
S.No	Particulars	As on 31.03.2012		As on 31.03.2013		As on 31.03.2014		As on 31.03.2015		As on 31.03.2016	
		Actuals		Actuals		Actuals		Estimated		Projected	
1	400 KV	0	1	2	4	5					
2	220 KV	62	70	83	89	95					
3	132 KV	77	78	76	74	74					
4	Total	139	149	161	167	174					

04

Form-F20: Normative Interest on Working Capital

Form - F20											
Normative Interest on Working Capital-STU											
S.No	Particulars	Previous Year' (FY 2012-13)			Current Year (FY 2014-15)			Ensuing Year (FY 2015-16)			
		Revised Estimates		Actuals*	Order		Last Years' Petition	Order	Estimated	Projected	
		1	2	3	1	2	3	1	2	3	
1	Column Reference										
	Receivables equivalent to two months of fixed cost.	133.55	134.95	141.22	226.26	163.90	214.29				242.38
2	Maintenance spares @ 15% of Operation and Maintenance expenses	50.09	67.35	61.83	81.82	55.00	78.20				86.88
3	Operation and Maintenance expenses for one month.	31.98	37.41	34.35	45.45	30.56	43.45				48.27
4	Total Working Capital	290.78	239.71	237.40	353.54	249.46	335.94				377.52
5	Rate of Interest applied	14.75%	10.93%	14.75%	14.45%	11.53%	14.75%				14.75%
6	Interest on Working Capital	42.89	26.20	35.02	51.09	28.76	49.55				55.68

*Numbers given are on normative basis

01



Form-F21: Interest & Finance Charges for STU

Form - F21												(Rs. In Crore)
Interest & Finance Charges for STU												
S.No	Particulars	FY 2012-13			Actuals	Last Years' Petition	Order	Current Year (FY 2014-15)			Total	Ensnung Year (FY 2015-16) Projected
		Revised Estimates	Order	Actuals				Actuals (H1)	Estimated (H2)			
1	Opening Balance	1,623.23	1623.23	2640.59				3717.22	3805.70	3717.22	3925.09	
2	Loan addition during FY	1,060.13	790.44	922.39				243.56	281.15	524.71	503.37	
3	Loan Repayment during FY	145.70	145.7	246.31				155.08	161.76	316.84	405.24	
4	Closing Balance	2,537.67	2267.97	3317.44				3805.70	3925.09	3925.09	4023.22	
5	Interest	241.36	228.70	341.26	469.41	310.62		205.59	247.49	453.08	470.03	
6	Interest Capitalised	40.00	24.13	133.82	50.00	8.16			120.00	120.00	39.92	
7	Interest disallowed on account of diversion of funds	0.00										
8	Net Interest	201.36	180.18		419.41	302.46		205.59	127.49	333.08	430.10	
9	Rate of Interest	12.50%										
10	Guarantee Charges	4.00			16.31	16.31			1.20	1.20		
11	Add: Prior Period Adjustments			0.22								
12	Interest & Finance Charges	205.36	180.18	207.66	435.72	318.77		205.59	128.69	334.28	430.10	

Out

Form-F21 (Detailed): Interest Cost for STU

Interest Cost for STU							
Form - F 21 Detailed							
2012-13 (Actuals)							(Rs in Crore)
Sr. No.	Particulars (Source)	Opening balance	Rate of interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest
1	Commercial Banks	261.55		0.00	68.32	193.23	26.00
2	LIC	220.47		0.00	40.92	179.55	21.55
3	REC	1140.93		827.57	37.07	1931.42	189.18
4	PSPCL	715.86		77.06		792.92	85.62
5	GPF	201.79		17.76		219.55	17.52
	Total	2540.59		922.39	146.31	3316.67	339.87
	Add: other interest & finance charges						1.62
	Less: captilization						133.82
	Net Interest						207.67
2014-15 (H1-Actuals)							(Rs in Crore)
Sr. No.	Particulars (Source)	Opening balance	Rate of interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest
1	Commercial Banks	122.31		0.00	19.65	102.66	6.92
2	LIC	138.63		0.00	31.17	107.46	4.45
3	REC	2564.88		243.56	43.74	2764.70	154.31
4	PSPCL	693.81		0.00	49.55	644.26	39.91
5	GPF	197.59		0.00	10.97	186.62	0.00
	Total	3717.22		243.56	155.08	3805.70	205.59
	Less: capitalisation						0.00
	Net Interest						205.59
2014-15 (H2-Projections)							(Rs in Crore)
Sr. No.	Particulars (Source)	Opening balance	Rate of interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest
1	Commercial Banks	102.66		60.00	19.86	142.80	8.67
2	LIC	107.46		0.00	9.75	97.71	8.15
3	REC	2764.70		201.15	71.61	2894.24	176.74
4	PSPCL	644.26		0.00	49.56	594.70	37.03
5	GPF	186.62		0.00	10.98	175.64	16.31
6	Nabard	0.00		20.00	0.00	20.00	0.60
	Total	3805.70		281.15	161.76	3925.09	247.49
	Less: capitalisation						120.00
	Less: Guarantee Charges Payable to GoP						1.20
	Net Interest						128.69
FY 2015-16 (Estimated)							(Rs in Crore)
Sr. No.	Particulars (Source)	Opening balance	Rate of interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest
1	Commercial Banks	142.80		0.00	43.26	99.54	14.57
2	LIC	97.71		0.00	40.92	56.79	8.11
3	REC	2894.24		473.37	200.00	3167.61	363.77
4	PSPCL	594.70		0.00	99.11	495.59	65.33
5	GPF	175.64		0.00	21.95	153.69	14.40
6	Nabard	20.00		30.00	0.00	50.00	3.85
	Total	3925.09		503.37	405.24	4023.22	470.03
	Less: capitalisation						39.92
	Net Interest						430.10

oy

Form-F22: Transmission Availability (%)

Form - F22					
Transmission Availability (%)					
S. No	Months	FY 2012-13 (Availability during Previous Year)	FY 2013-14 (Availability during Previous Year)	FY 2014-15 (Availability during Current Year)	FY 2015-16
1	April	99.92%	99.90%	99.95%	
2	May	99.92%	99.94%	99.93%	
3	June	99.86%	99.90%	99.94%	
4	July	99.90%	99.85%	99.95%	
5	August	99.97%	99.54%	99.97%	
6	September	99.96%	99.91%	99.94%	
7	October	99.96%	99.94%		
8	November	99.92%	99.96%		
9	December	99.96%	99.79%		
10	January	99.86%	99.83%		
11	February	99.90%	99.93%		
12	March	99.97%	99.89%		
	Average	99.93%	99.86%	99.95%	

OT

Form-F23: Transmission Loss (%)

Form - F23										
Transmission Loss (%)										
S.No	Particulars	Previous to Previous Year (FY 2012-13)		Current Year (FY 2014-15)		Enacting Year (FY 2015-16)				
		Last Years' Petition	Order	Actuals	Last Year Petition	Order	Revised Estimate	Projected		
1	Transmission Loss%	1	2	3	1	2	3	4.00%	2.50%	4.00%
		4.50%	2.50%		4.50%	2.50%	4.00%			4.00%

Out

Form-F24: Revenue from Transmission Tariff

Form - F24									
Revenue from Transmission Tariff									
S.No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)			Ensuing Year (FY 2015-16)	
		Revised Estimates	Order	Actuals	Last Year Petition	Order	Revised Estimate		
	Column Reference	1	2	3	1	2	3	1	
1	Revenue from Transmission Tariffs	904.51	801.44	856.23	1240.54	983.39	1285.74	1454.27	
2	Revenue on account of Transmission from Open Access								
	Total	904.51	801.44	856.23	1,240.54	983.39	1,285.74	1,454.27	

On



9.2. ARR Formats for SLDC

Form F1: Employee Expenses for SLDC

S. No	Particulars	Employee Expenses for SLDC						Ensnring Year (FY 2015-16)			
		Previous Year (FY 2012-13)		Current Year (FY 2014-15)		Ensnring Year (FY 2015-16)					
		Revised Estimate	Order	Actuals*	Last Year Petition		Order		Actuals Estimate for H1 d for H2	Revised Estimate*	
	Column Reference	1	2	3	1	2	3	4	5	6	7
	Salaries										
	Overtime										
	Dearness Allowance										
	Other Allowances										
	Bonus										
	Sub Total										
	Medical Expenses reimbursement										
	Leave Travel Assistance/Concession										
	Payment under Workmen										
	Sub Total										
	Electricity Concession to PSTCL Employees										
	Staff Welfare Expenses										
	Sub Total										
	Less : Establishment cost recoverable on execution of 66KV works										
	Total Salary and Other Employee										
	Less: Employee costs capitalized	6.91	2.95	3.35	8.52	6.80				3.72	4.06
	Arrears	0.65	0.65								
	Prior Period Adjustments			0.55						0.02	0.02
	Impact of pay revision									0.08	0.11
	Employees cover for new installations									3.81	4.19
	Grand Total	7.56	3.60	3.90	8.52	6.80					
	Terminal Benefits										
	Particulars										
	Column Reference	1	2	3	1	2	3	4	5	6	7
	Terminal Benefits	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Terminal Benefits	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*Numbers given are on normative basis hence itemised numbers have not been entered for FY 2012-13 and H1 and H2 of FY 2014-15

Or



Form F-4: R&M Expenses for SLDC

Form - F4 Repair and Maintenance Expenses for SLDC											
S. No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)			Ensnung Year (FY 2015-16)			
		Revised Estimates	Order	Actuals*	Last Year Petition	Order	Actuals for H1	Estimate for H2	Revised Estimate*	Projected	
	Column Reference	1	2	3	1	2	3	4	5	1	
1	Plant & machinery										
2	Building including renovation										
3	Hydraulic works & civil works										
4	Line cable & network										
5	Vehicles										
6	Furniture & fixtures										
7	Office equipments										
9	Total										
	Less: Expenses Capitalised										
11	Net expenses	2.32	0.19	2.51	5.15	4.04			2.93	13.31	
	Add Prior period adjustments										
12	R&M for Assets Addition during the year	1.76	0.04	0.06						0.17	
13	Total expenses charged to revenue	4.08	0.23	2.57	5.15	4.04			7.82	13.48	

*Numbers given are on normative basis hence itemised numbers have not been entered for FY 2012-13 and H1 and H2 of FY 2014-15



Form-F5: A&G Expenses for SLDC

Form - F5 Administration and General Expenses for SLDC										
S. No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)			Estimating Year (FY 2015-16)		
		Revised Estimates	Order	Actuals*	Last Year Petition	Order	Actuals for H1	Estimated for H2	Revised Estimate*	Projected
	Column Reference	1	2	3	1	2	3	4	5	1
1	Rent, Rates & Taxes									
2	Insurance									
3	Telephone, Postage, Telegramme and Telex									
4	Legal Charges									
5	Audit Charges									
6	Consultancy/Technical Charges									
7	Conveyance & Travel Charges									
8	Fees & Subscription									
9	Books & Periodicals									
10	Printing & Stationery									
11	Advertisement/Publicity expenses									
12	Electricity/Water Charges									
13	Expenses on Training									
14	Hospitality									
15	Conferences Expenses									
16	Miscellaneous/Contingency Expenses									
17	Mobile set purchase expenses									
18	Payment to outsourced									
19	Other Expenses:									
20	Freight									
21	Other Purchase related expenses									
22	Sub Total	0.990	0.04	0.93	2.60	1.17	1.08	1.08	4.20	
23	Add: Expenses on account of asset addition during the year	0.760	0.01	0.02			1.80	1.80	0.06	
24	Add: License Fee									
25	Add: Tariff Filing Fee									
26	Total	1.75	0.05	0.95	2.60	1.17	2.88	2.88	4.96	
27	A&G expenses recoverable on execution of 66KV works									
28	Administration & General capitalized									
29	Total									
30	Net A&G Expenses	1.75	0.05	0.95	2.60	1.17	2.88	2.88	4.96	
31	ARL/PRR Period Expenses/Losses									
32	Staff Miscellaneous Expense									
33	Grand Total	1.75	0.05	0.95	2.60	1.17	2.88	2.88	4.96	

*Numbers given are an illustrative basis, hence, rounded numbers have not been entered for FY 2012-13 and H1 and H2 of FY 2014-15

Form-F9: Depreciation Charges for SLDC

Form - F9										
Depreciation Charges for SLDC										
S.No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)			Ensuing Year (FY 2015-16)		
		Revised Estimates	Order	Actuals	Last Years' Petition	Order	Estimated	Projected		
	Column Reference	1	2	3	1	2	3			
1	Depreciation (excluding prior period adjustments)	0.63	0.40	0.49	1.86	1.45	0.74	1.60		
2	Opening GFA			5.51			5.78	25.03		
3	Assets additions during the Year			0.25			19.25	17.00		
4	Assets replacement/ retirement									
5	Closing GFA			5.76			25.03	42.03		
6	Depreciation as % of Opening and Closing GFA			8.78%			4.79%	4.77%		

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Form-F12: Income from investments and other non-tariff income for SLDC

S.No	Particulars	Form - F12 Income from investments and other non-tariff income for SLDC						Ensnung Year (FY 2015-16) Projected
		Previous Year ¹ (FY 2012-13)		Current Year (FY 2014-15)		Revised Estimate		
		Revised Estimates	Order	Actuals	Last Year Petition		Order	
Column Reference	1	2	3	1	2	3		
1	Meter/metering equipment/service line rentals							
2	Service charges							
3	Customer charges							
4	Revenue from late payment surcharge							
5	Miscellaneous receipts							
6	Incentives from CGS's							
7	Miscellaneous charges (except PLEC charges)							
8	Interest on staff loans and advances							
9	Interest on advances to suppliers							
10	Income from trading							
11	Income from staff welfare activities							
12	Rental charges for staff quarters, water charges, Hospital ward, guest house etc.							
13	Sale of Tender forms							
14	Excess found on physical verification							
15	Interest on investments, fixed and current deposits and bank balances							
16	Net recovery from penalty on coal liaison agents							
17	Other Non-Tariff Income including prior period							
18	Income from open access charges i.e. application fee, cross subsidy surcharge, additional surcharge, transmission and/or wheeling charges, scheduling charges etc.							
Total		5.85	5.85	3.37	0.05	3.32	1.90	1.50

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Form F18: Capital Investment Details for SLDC

Form - F18 Capital Expenditure Details - SLDC									
S.No	Particulars	Current Year (FY 2014-15)			Ensuing Year (FY 2015-16)			(Rs. In Crore)	
		Opening CWIP 1	Capex 2	Capitalisation 3	Closing CWIP 4	Capex 1	Capitalisation 2	Closing CWIP 3	
1	Procurement of 47 RTUs for SCADA Scheme	2.04	4.47	6.51	0.00	0.00	0.00	0.00	0.00
2	Procurement of 118 RTUs for remaining/upcoming/ for future substations of PSTCL	0.00	0.00	0.00	0.00	14.50	14.50	0.00	0.00
3	Equipment including voice recording and Islanding scheme in Purjab	5.47	0.44	0.00	5.91	2.50	2.50	5.91	5.91
4	Interstate boundary meters	0.74	12.00	12.74	0.00	0.00	0.00	0.00	0.00
	Total	8.25	16.91	19.25	5.91	17.00	17.00	5.91	5.91

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Form F20: Interest on Working Capital for SLDC

Form - F20									
Normative Interest on Working Capital for SLDC									
S.No	Particulars	Previous Year' (FY 2012-13)			Current Year' (FY 2014-15)			Ensuing Year (FY 2015-16)	
		(Rs. In Crore)							
		Revised Estimates	Order	Actuals	Last Year Petition	Order	Estimated	Projected	Projected
	Column Reference	1	2	3	1	2	3		
1	Receivables equivalent to two months of fixed cost.	4.76	1.97	1.64	6.72	4.95	3.55		6.07
2	Maintenance spares @ 15% of Operation and Maintenance expenses	2.23	0.58	1.12	2.44	1.8	2.18		3.39
3	Operation and Maintenance expenses for one month.	1.24	0.32	0.62	1.36	1	1.21		1.89
4	Total Working Capital	8.23	2.87	3.37	10.51	7.75	6.93		11.35
5	Rate of interest applied	14.75%	10.93%	14.75%	14.15%	6.77%	14.75%		14.75%
6	Interest on Working Capital	1.21	0.31	0.50	1.52	0.52	1.02		1.67

*Numbers given are on normative basis

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Form-F21: Interest & Finance Charges for SLDC

Form - F21											
Interest & Finance Charges for SLDC											
(Rs. In Crore)											
S.No	Particulars	FY 2012-13			Current Year (FY 2014-15)			Ensuing Year (FY 2015-16)			
		Revised Estimates	Order	Actuals	Last Years /Petition	Order	Actuals (H1)	Projected (H2)	Revised Estimate	Projected	
1	Opening Balance	0.00	0.00	0.00			0.77	1.43	0.77	17.68	
2	Loan addition during FY	11.38	1.00	0.77			0.66	16.25	16.91	17.00	
3	Loan Repayment during FY	0.00	0.00	0.00			0.00	0.00	0.00	0.00	
4	Closing Balance	11.38	1.00	0.77			1.43	17.68	17.68	34.68	
5	Interest	0.71	0.06	0.017	3.12	1.91	0.08	0.90	0.98	4.01	
6	Interest Capitalised	0.00				0.51					
7	Interest disallowed on account of diversion of funds	0.00									
8	Net Interest	0.71	0.06	0.017	3.12	1.40	0.08	0.90	0.98	4.01	
9	Rate of Interest	0.13									
10	Guarantee Charges	0.00									
11	Add: Prior Period Adjustments										
12	Interest & Finance Charges	0.71	0.06	0.017	3.12	1.40	0.08	0.90	0.98	4.01	

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Form-F21 Detailed: Interest Cost for SLDC

Interest Cost for SLDC Form - F 21 Detailed							
2012-13 (Actuals)							(Rs in Crore)
Sr. No.	Particulars (Source)	Opening balance	Rate of interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest
1	Commercial Banks						
2	LIC						
3	REC						
4	PSPCL						
5	GPF						
	Total	0.00		0.77	0.00	0.77	0.02
	Add: other interest & finance charges						
	Less: capitalization						
	Net Interest						0.02
2014-15 (H1-Actuals)							(Rs in Crore)
Sr. No.	Particulars (Source)	Opening balance	Rate of interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest
1	Commercial Banks						
2	LIC						
3	REC	0.77		0.66	0.00	1.43	0.08
4	PSPCL						
5	GPF						
6	Working Capital						
	Total	0.77		0.66	0.00	1.43	0.08
	Less: capitalization						0.00
	Net Interest						0.08
2014-15 (H2-Projections)							(Rs in Crore)
Sr. No.	Particulars (Source)	Opening balance	Rate of interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest
1	Commercial Banks						
2	LIC						
3	REC	1.43		16.25		17.68	0.90
4	PSPCL						
5	GPF						
6	Nabard						
7	WCL						
	Total	1.43		16.25	0.00	17.68	0.90
	Less: capitalization						0.00
	Net Interest						0.90
FY 2015-16 (Estimated)							(Rs in Crore)
Sr. No.	Particulars (Source)	Opening balance	Rate of interest	Addition during the year	Repayment during the year	Closing balance	Amount of interest
1	Commercial Banks						
2	LIC						
3	REC	17.68		17.00		34.68	4.01
4	PSPCL						
5	GPF						
6	Nabard						
7	WCL						
	Total	17.68		17.00	0.00	34.68	4.01
	Less: capitalization						0.00
	Net Interest						4.01

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Form: ULDC charges for SLDC

S.No	Particulars	FY 2012-13			Current Year (FY 2014-15)			Ensnung Year (FY 2015-16)		
		Revised Estimates	Order	Actuals	Last Years' Petition	Order	Actuals (H1)	Estimated (H2)	Revised Estima	Projected
1	ULDC charge	17.30	13.30	13.91	17.61	17.61	2.61	5.39	8.00	9.00

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Form-F24: Revenue for SLDC

Form - F24 Revenue for SLDC									
S.No	Particulars	Previous Year (FY 2012-13)			Current Year (FY 2014-15)			(Rs. In Crore)	
		Revised Estimates	Order	Actuals	Last Year Petition	Order	Revised Estimate	Ensiung Year (FY 2015-16)	
	Column Reference	1	2	3	1	2	3		
1	SLDC Charges from PSPCL	28.86	28.57	9.81	40.33	29.67	21.29		36.41
2	Operating charges from open access customers								
	Total		28.57	9.81		29.67	21.29		36.41

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Summary of Capital Investment Plan

All figures in Rs lakhs

Sr. No	Scheme Code	FY 2014-15				FY 2015-16			
		Opening CWIP as on 31.3.2014	Investment made during H1	Investment made during H2	Transfer to asset	Net Closing CWIP	Investment made during the year	Transferred to asset during the year	Net WIP as on 31.3.16
1	2	3	4	5	6	7	8	9	10
1	400KV	96181.91	6708.52	10300.00	110627.75	2562.68	11900.00	14262.68	200.00
2	220KV	68402.23	14092.12	16551.00	60821.02	38224.32	35761.45	50704.68	23281.09
3	132KV	3589.96	1319.95	1484.46	6000.52	393.84	85.00	478.84	0.00
	Total	168174.09	22120.59	28335.46	177449.29	41180.85	47746.45	65446.20	23481.10
Other Activities									
1	ERP	0.00	0.00	15.00	0.00	15.00	641.00	0.00	656.00
2	Others	0.00	0.00	2000.00	2000.00	0.00	1500.00	1500.00	0.00
3	Training Cell	0.00	0.00	0.00	0.00	0.00	450.00	0.00	450.00
	Subtotal	0.00	0.00	2015.00	2000.00	15.00	2591.00	1500.00	1106.00
	Grand Total	168174.09	22120.59	30350.46	179449.29	41195.85	50337.45	66946.20	24587.10

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