PROFORMA - I

OUTLAY AT A GLANCE (16-17)(OCP+SCSP+NL)

SECTOR:POWERDEPARTMENT:(Rs in Lakhs)Annual Plan 2014-15 Actual Expenditure: 4848.12Annual Plan 2015-16 Approved Outlay: 9440.00Annual Plan 2015-16 Revised Outlay: 5290.00Annual Plan 2016-17 Proposed outlay: 17713.00

SI.		Annual Plan 2014-15	Annual Pla	nn 2015-16	Annual Pla	ın 2016-17
No	Name of the Scheme	Actual Expdr.	Approved Outlay	Approved Revised Outlay	Proposed outlay	Of which Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Erection / Establishment /Upgradation / Providing of 230KV and 110 KV Primary Main Sub-stations and EHT lines in the UT of Puducherry.	1848.89	2988.18	1679.13	3935.00	2568.00
	or raddenerry.		(33.00)	(33.00)	(60.20)	
2	Conversion of HT over head lines into UG cables, Modernisation and Augmentation of existing 11 KV RMS system and Rationalisation and Improvement of distribution in urban areas.		596.78	520.20	866.00	640.00
3	System improvement for reduction of transmission and distribution losses.	536.99	1326.70	1173.36	1336.00	1165.00
4	Extension and Development of power supply to all categories of consumers and	1075.89	1465.24	1253.22	2064.00	1045.00
	Street Lights.		(20.00)	(20.00)	(45.00)	
5	Modernisation of billing methods and development and 'E' Governance initiatives and improvement of communication methods of the Electricity Department Puducherry.	60.22	92.00	32.27	94.00	80.00
6	Establishment of computer based system montioring centre at Pondicherry	352.44	535.00	339.84	611.00	523.00
1 / 1	Research and development setting up of standards laboratory.	104.89	231.56	150.39	388.00	27.00
			(47.00)	(47.00)	(252.80)	
8	Formation of electrical inspectorate and licensing board/ Regulatory Commission Liaison Cell, for Pondicherry.	0.09	1.00	0.11	75.00	75.00
9	Rural electrification /(BNP)	68.07	120.00	41.39	100.00	100.00

						(Rs in Lakhs)
SI.	Name of the Scheme	Annual Plan 2014-15	Annual Plan 2015-16		Annual Pla	n 2016-17
No	Name of the Scheme	Actual Expdr.	Approved Outlay	Revised Outlay	Proposed outlay	Of which Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)
10	Human resources development	3.99	8.00	6.63	15.00	15.00
11	Providing meters for all consumers under 100% metering programme.	59.77	625.54	93.46	929.00	919.00
12	Negotiated Loan(R-APDRP-A+R-APDRP-A- IT+R-APDRP-B+ IPDS) +External Commercial Borrowings					
i)	Renovation and Upgradation of Protection & Control system of Grid Sub Stations in Puducherry(Grant from POSOCO)	0.00	0.00	0.00	950.00	950.00
ii)	Erection / Establishment /Upgradation / Providing of 230KV and 110 KV Primary Main Sub-stations and EHT lines in the UT of Puducherry. (NL)	118.44	0.00	0.00	0.00	0.00
iii)	Modernisation of billing methods and development and 'E' Governance initiatives and improvement of communication methods of the Electricity Department Puducherry.(NL)	278.52	450.00	0.00	5350.00	5350.00
	Erection / Establishment /Upgradation / Providing of 230KV and 110 KV Primary Main Sub-stations and EHT lines in the UT of Puducherry.(External Commercial Borrowings)	0.00	1000.00	0.00	1000.00	1000.00
	TOTAL	4848.12	9440.00	5290.00	17713.00	14457.00
	TOTAL		(100.00)	(100.00)	(358.00)	

NB: Figures in bracket shows Building component.

PROFORMA - I

OUTLAY AT A GLANCE 16-17 (SCSP)

SECTOR:POWERDEPARTMENT:(Rs in Lakhs)Annual Plan 2014-15 Actual Expenditure: 584.94Annual Plan 2015-16 Approved Outlay: 1085.00Annual Plan 2015-16 Revised Outlay: 156.67Annual Plan 2016-17 Proposed outlay: 550.00

SI.		Annual Plan 2014-15	Annual Plan 2015-16		Annual Plan 2016-17	
No	Name of the Scheme	Actual Expdr.	Approved Outlay	Approved Revised Outlay	Proposed outlay	Of which Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Erection / Establishment /Upgradation / Providing of 230KV and 110 KV Primary Main Sub-stations and EHT lines in the UT of Puducherry.	428.27	825.00	100.00	400.00	400.00
2	System improvement for reduction of transmission and distribution losses.	90.11	110.00	43.56	58.00	58.00
3	Extension and Development of power supply to all categories of consumers and Street Lights.	12.49	34.00	2.73	12.00	12.00
4	Rural electrification	54.07	56.00	10.38	20.00	20.00
5	Providing meters for all consumers under 100% metering programme.	0.00	60.00	0.00	60.00	60.00
	TOTAL	584.94	1085.00	156.67	550.00	550.00
	IOIAL					

PROFORMA - I

OUTLAY AT A GLANCE(16-17)

SECTOR: Energy

DEPARTMENT:

Annual Plan 2014-15 Actual Expenditure

Annual Plan 2015-16 Approved Outlay

Annual Plan 2015-16 Revised Outlay

Annual Plan 2016-17 Proposed outlay

ENERGY

(Rs in Lakhs)

52.00

60.00

60.00

60.00

SI.		Annual Plan 2014-15	Annual Plan 2015-16		Annual Plan 2016-17	
No	Name of the Scheme	Actual Expdr.	Approved Outlay	App Revised Outlay	Proposed outlay	Of which Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Development of experimental Non- Conventional Sources of Energy	52.00	60.00	60.00	61.45	61.45
TOTAL		52.00	60.00	60.00	61.45	61.45

PROFORMA-II (1)

Scheme Number: 1 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Erection / Establishment /Up gradation / Providing of 230KV and 110 KV Primary Main Sub-stations and EHT lines in the UT of Puducherry.

2. Objective of the scheme : To establish new Sub Stations, Augmentation of

the existing Sub Stations and erection of its allied 230 / 110KV lines to provide reliable power

supply in the UT of Puducherry.

3. Actual physical achievements made in the Annual Plan 2014 -15:

• Erection and Establishment of new 110/11 KV Vengata Nagar Sub Station:

Work completed and the new Substation was commissioned on 27.06.2014 with the following equipments.

(a)110/ 11KV Vengata Nagar SS:

Power Transformer capacity : 2×31.5 MVA, 110/11KV with 10 nos of 11KV Feeder Bays and 2 nos. of 2.4 MVAR 11KV Capacitor banks.

(b)110KV Marapalam- Vengata Nagar UG Cable Feeder:

Route length-6.556 Kms, size- 4x 630Sqmm XLPE insulated, Copper Cable (one as stand by).

• Establishment of new 230 / 110 KV Auto Sub Station at Karaikal.

Agreement has been signed with M/s. Power Grid Corporation of India Ltd . 10% of estimated cost i.e.Rs. 3.03 Crores has been paid for preliminary commencement of works.

• Establishment of 110 / 22 KV Sub Station in the premises of 230 / 110KV Auto Substation at Thondamanatham:

Agreement has been signed with M/s. Power Grid Corporation of India Ltd . 10% of estimated cost has been paid for preliminary commencement of works.

• Strengthening of 110KV Villianur-Bahour line:

The first phase of work for 6.75 Kms between Bahour and Korkadu 110/22KV Substation has been completed and energised.

Renovation and Modernisation of 110 / 22KV Villianur Sub station:

80% of works completed.

• Stringing of Earth Wire of size 7/3.35 from Tower Location No.45 to 57 of 110KV Bahour- Eripakkam Feeder:

Work completed

• De-stringing of existing conductor and stringing of Villianur and Marapalam 110KV feeder-II with Panther Conductor:

100% works completed.

• Construction of 110KV S/C line (Extension) between Villianur and Bahour from location No.104 to location No.6 for a length of 2Km (approx):

Agreement has been signed with M/s. Power Grid Corporation of India Ltd. 10% of estimated cost has been paid for preliminary commencement of works.

• Erection of 1X25MVA, 110/22KV Power Transformer along with associated 110KV bay at 110/22 KV Kurumbapet Sub station:

Agreement has been signed with M/s. Power Grid Corporation of India Ltd. 10% of estimated cost has been paid for preliminary commencement of works.

• Erection of 1X25MVA, 110/22KV Power Transformer along with associated 110KV bay at 110/22 KV Villianur Sub station:

Agreement has been signed with M/s. Power Grid Corporation of India Ltd. 10% of estimated cost has been paid for preliminary commencement of works.

4. Actual Physical achievements for the Annual Plan 15-16:

(i) Renovation & Modernisation of 110/22 KV Villianur Sub Station.

Major Works completed:

Tower Foundations:

- Out of 14 nos of tower foundations, works completed for 12 nos of towers and Cable trench works completed.
- 110KV Equipment foundations: Out of 96 nos, 68 nos have been completed.

- Works on LV-04 with associated bay, R & M works have been completed and commissioned on 20.04.2015.
- The phase 2 works of 110KV Auxillary Bus and LV 01 & LV 02 is programmed to be taken up shortly after arranging requisite shut down.

(ii) Strengthening of Villianur - Bahour line (12.35Kms)

80% of works completed

110KV tower foundations:

• Out of 49 nos. of towers, 42 nos of tower foundations were completed.

Tower erection:

- Out of 49 nos. of towers, erection works completed for 38 nos. of towers.
- Stringing works of 110 KV EHT line completed for 7.5Kms between Korkadu- Bahour section and already energised on 23.01.2014.
- The second phase of stringing of 110KV line between Villianur and Korkadu Section is in progress and expected to be completed by March 2016.

(iii) Establishment of new 230 / 110 KV Auto Sub Station at Karaikal:

• The work has been awarded to M/s. Blue Star, Mumbai by M/s. Power Grid Corporation of India Ltd.

(iv) Stringing of 2nd circuit with Panther conductor in the already available 2nd cross arms of Bahour-Eripakkam feeder:

- First phase of work completed from tower location No. 1 to 20.
- (v) <u>De-stringing of existing conductor and stringing of Villianur and Marapalam 110KV feeder-II with Panther Conductor:</u>
 - 100% of works completed

5. Proposed Physical Targets for the Annual Plan 2016-17:

- Establishment of 110/22KV Thondamanatham Sub Station.
- Erection of 16 MVA 110/22KV Power Transformer at 110KV Vengata Nagar Sub station.
- Erection of 25MVA Power Transformer one each at 110/22KV Kurumbapet Sub station and 110/22KV Villianur Sub station.
- Strengthening of 110KV Villianur-Bahour line.

- Erection of 2nd circuit of 110KV Villianur-Bahour line.
- Renovation and Modernisation of 110KV Villianur Sub Station.
- Establishment of 110 / 11KV Vengata Nagar SS (Balance Payment).
- Establishment of Karaikal 230 /110KV Auto Sub Station.
- Re-Orientation of 11KV feeders at Karaikal Region.
- Strenthening of conductor of 110KV Thondamanatham-Kurumbapet feeder.
- Stringing of 2nd circuit in the already available 2nd cross arm of the existing 110KV Bahour-Eripakkam feeder.
- Stringing of conductor of 110KV Sedarapet -Kurumbapet feeder.
- Erection of bay equipments of 110KV Bahour- Eripakkam feeder.
- Renovation and Modernisation of Villianur and Bahour Auto Sub Station.
- Provision of an additional 16MVA Power Transformer at 110/22KV Bahour Sub station.

6. Object head-wise breakup:

(Rs. in lakhs)

Sl. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme: Erection / Establishment /Up gradation / Providing of 230KV and 110 KV Primary Main Sub-stations and EHT lines in the UT of Puducherry.	1420.62	2130.18	1546.13	3474.49

7. Remarks: Continuing Scheme.

PROFORMA-II (1) EXTERNAL COMMERCIAL BORROWINGS

Scheme Number: 1 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Erection / Establishment /Up gradation / Providing of 230KV and 110 KV Primary Main Sub-stations and EHT lines in the UT of Puducherry.

2. Objective of the scheme : To establish new Sub Stations, Augmentation of

the existing Sub Stations and erection of its allied 230 / 110KV lines to provide reliable power

supply in the UT of Puducherry.

3. Proposed Physical Targets for the Annual Plan 2016-17:

EXTERNAL COMMERCIAL BORROWINGS:

- 110KV UG cable laying from 110KV Vengata Nagar SS to the proposed 110KV Lawspet SS and from Lawspet SS to Kurumbapet SS.
- Provision of additional 80MVA Power Transformer at 230/110KV Bahour Auto Sub station.
- Provision of additional 100MVA Power Transformer at 230/110KV Thondamanatham Auto Sub station .

4. Object head-wise breakup:

(Rs. in lakhs)

S1. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Erection / Establishment /Up gradation / Providing of 230KV and 110 KV Primary Main Sub-stations and EHT lines in the UT of Puducherry. External Commercial Borrowings	0.00	1000.00	0.00	1000.00

PROFORMA-II (1) (Grant from POSOCO)

Scheme Number : 1 Implementing Department : Electricity

Sector : Power

1. Name of the scheme : Renovation and Upgradation of Protection &

Control system of Grid Sub Stations in

Puducherry

2. Objective of the scheme : To renovate and upgrade the existing Sub

Stations and Control system of Grid Sub Stations

in Puducherry

3. Object head-wise breakup : (Rs. in lakhs)

Sl. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Renovation and Upgradation of Protection & Control system of Grid Sub Stations in Puducherry(Grant from POSOCO)	0.00	0.00	0.00	950.00

Scheme Number : 2 Implementing Department : Electricity

Sector : Power

1. Name of the scheme : Conversion of HT over head lines into UG cables,
Modernisation and Augmentation of existing 11
KV RMS system and Rationalisation and
Improvement of distribution in urban areas.

2. Objective of the scheme

To meet the rapidly growing demand for Power in and around Pondicherry, Karaikal, Mahe and Yanam with stabilized system parameter and reduced line losses by providing underground cable distribution system and convert existing overhead lines into under ground cable system in selected urban areas. To provide additional Power supply through 11 KV feeders to the existing Ring Main system and strengthening the same to meet the load growth in urban areas.

3. Actual physical achievements made in the Annual Plan 2014-15:

Sl.No.	Item description	Units	Achievement
1.	HT UG Cable laid	Kms.	1.421
2.	LT UG Cable laid	Kms.	13.203
3.	Conversion of OH service into UG cable system	Nos.	408
4.	Conversion of OH Street lights into UG cable system	Nos.	28
5.	Erection of 11 KV distribution transformers	Nos.	1
6.	Erection of Switch Gears	Nos.	20
7.	Erection of Pillar Box	Nos.	18

4. Actual Physical achievement for the Annual Plan 15-16:

Sl.No.	Item	Units	Achievement
1.	Laying of HT UG cables	Kms.	2.00
2.	Laying of LT UG Cables	Kms.	15.00
3.	Conversion of OH service into UG cable system	Nos.	600
4.	Conversion of OH Street lights into UG cable system	Nos.	50
5.	Erection of 11 KV distribution transformers	Nos.	1
6.	Erection of Switch Gears	Nos.	20
7.	Erection of Pillar Box	Nos.	25

5. Proposed Physical Targets for the Annual Plan 2016-17:

Sl.No.	Item	Units	Proposed Target
1.	Laying of HT cables	Kms	2.00
2.	Laying of LT cables	Kms	15.00
3.	Conversion of OH service into UG cable system	Nos	600
4.	Conversion of OH Street lights into UG cable system	Nos	50
5.	Erection of 11 KV distribution transformers	Nos.	5
6.	Enhancement of 11 KV distribution transformers	Nos.	5
7.	Erection of Switch Gears	Nos.	10
8.	Erection of pillar box	Nos	25
9.	Conversion of existing 22KV Transformers into 11KV Transformers	Nos	6

6. Object head-wise breakup:

(Rs. in lakh)

Sl. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme :	339.92	596.78	520.20	866.35
	Conversion of HT over head lines into UG cables, Modernisation and Augmentation of existing 11 KV RMS system and Rationalisation and Improvement of distribution in urban areas				

7. Remarks: Continuing Scheme.

PROFORMA-II (3)

Scheme Number: 3 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : System improvement for reduction of transmission and distribution losses

2. Objective of the scheme

- : 1. To provide link line with the existing HT feeders and connect up with the existing and new EHV sub-stations to feed additional loads and to reduce the route length of the existing feeders in order to bring down the line losses.
 - 2. To provide additional HT feeders and strengthening the existing HT feeders to feed the additional loads to bring down the voltage regulation within statutory limit and to reduce line losses in the system.

3. Actual physical achievements made in the Annual Plan 2014-15:

Sl.No	Item	Units	Achievement
1.	Transformers energized	Nos.	70
2.	Transformers enhanced	Nos.	33
3.	HT Line laid	Kms.	7.548
4.	LT Line laid	Kms.	25.579
5.	HT Line Strengthened	Kms.	0.5
6.	LT Line Strengthened	Kms.	21.119
7.	HT U.G Cable laid	Kms.	0.452
8.	LT U.G Cable laid	Kms.	1.605

4. Actual physical achievements for the Annual Plan 2015-2016:

Sl.No.	Item	Units	Achievement upto Jan16	
1.	Transformers energised	Nos	62	
2.	Transformers enhanced	Nos	14	
3.	HT Lines energized	Kms	9.922	
4.	LT Lines energized	Kms	22.847	
5.	HT Lines strengthened	Kms	1.0	
6.	LT Lines strengthened	Kms	25.987	
7.	HT U.G Cable laid	Kms	0.54	
8.	LT U.G Cable laid	Kms	0.932	

5. Proposed Physical Targets for the Annual Plan 2016-17:

Sl.No	Item	Units	Proposed Target
1.	Transformers to be energized	Nos	51
2.	Transformers to be enhanced	Nos	25
3.	HT Lines to be erected	Kms	8.2
4.	LT Lines to be erected	Kms	28.25
5.	HT Lines to be strengthened	Kms	3
6.	LT Lines to be strengthened	Kms	13.90

6. Object head-wise breakup:

(Rs. in lakh)

S1. No	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme :	446.88	1216.70	1129.80	1277.87
	System improvement for reduction of transmission and distribution losses				

7. Remarks: Continuing Scheme.

PROFORMA-II (4)

Scheme Number: 4 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Extension and Development of power supply to all categories of consumers and Street Lights.

2. Objective of the scheme

- : 1. To provide adequate and comprehensive infra structure facilities for all categories of consumers, to make use of ground water potential for agricultural purposes, to provide better living conditions to the house/colonies and strengthen the existing distribution system for more stable conditions and to provide additional street lights to ensure better living conditions of the public.
 - 2. To improve the distribution system so as to ensure reliable power supply.

3. Actual physical achievements made in the Annual Plan 2014-15:

Sl.No	Item	Units	Achievement
1.	Transformer energized	Nos	10
2.	Transformer enhanced	Nos	6
3.	HT Line laid	Kms	0.48
4.	LT Line laid	Kms	11.514
5.	LT Line Strengthened	Kms	0.1
6.	HT Industries energized	Nos	21
7.	LT Industries energized	Nos	91
8.	Domestic Services effected	Nos	15470
9.	Commercial Services effected	Nos	1783
10.	Agriculture Services effected	Nos	42
11.	One Hut One Bulb	Nos	2
12.	Street lights	Nos	375

4. Actual physical achievements for the Annual Plan 2015-16:

Sl.No	Item	Units	Achievement upto Jan 16
1.	Transformers energized	Nos	10
2.	Transformers enhanced	Nos	3
3.	HT Line laid	Kms	3.185
4.	LT Line laid	Kms	29.917
5.	LT Line Strengthened	Kms	0.49
6.	HT Industries energized	Nos	15
7.	LT Industries energized	Nos	50
8.	Domestic Services effected	Nos	9216
9.	Commercial Services effected	Nos	1347
10.	Agriculture Services effected	Nos	26
11.	Street lights	Nos	244

5. Proposed Physical Targets for the Annual Plan 2016-17:

Sl.No	Item	Units	Proposed Target
1.	HT Industries energized	Nos	25
2.	LT Industries energized	Nos	100
3.	Domestic Services effected	Nos	15000
4.	Commercial Services effected	Nos	1700
5.	Agriculture Services effected	Nos	40
6.	One Hut One Bulb	Nos	10
7.	Street lights	Nos	10

6. Object head-wise breakup:

(Rs. in lakh)

S1. No	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme: Extension and Development of power supply to all categories of consumers and Street Lights	1063.40	1411.24	1230.49	2007.03

7. Remarks: Continuing Scheme.

PROFORMA-II (5)

Scheme Number: 5 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Modernization of billing methods and development and 'E' Governance initiatives and improvement of communication methods of the Electricity Department Puducherry.

2. Objective of the scheme : To modernize issue of bills for current

consumption charges, payments and other commercial and technical activities by introducing computers and to establish effective communication network among various substations and O&M sections for minimizing power

interruption period.

3. Actual physical achievements made in the Annual Plan 2014-15:

- Introduction of On-line payment of current consumption charges through the payment gateway of State Bank of India.(SBI Collect)
- Procurement of data processing forms and consumables.
- Finalization of Annual maintenance contract for computer systems and UPS units.
- Consumer indexing and Asset mapping works completed for the Project areas covered under R-APDRP Scheme.
- Introduced additional Computerised Bill Collection Centre at Main Office and Mahe Region.
- Procurement of Resin Cast Current Transformer units for Distribution Transformer metering.
- Implementation of Part-A of R-APDRP Scheme in the UT of Puducherry.
- Installation of AMR Compatible Static Meters along with LT Resin Cast Current Transformer units and Test Terminal Blocks in Outdoor type SMC Meter boxes for Distribution Transformer metering arrangement under Part-A of R-APDRP Scheme in Town North O & M Section of Karaikal, Mahe and Yanam Region and O& Ms in Puducherry Region
- Executed Tripartite agreement between the NBSP, ITIA and the Department for setting up of communication back bone under part-A of R-APDRP Scheme.
- Executed Non-Disclosure Agreement between the TPIEA M/s. PGCIL Limited, and the Electricity Department.
- Payment of Spectrum Charges
- Purchase of VHF Batteries (12 Volts)

4. Actual Physical achievements for the Annual Plan 2015-16:

- Replacement of Personal computers and Printers.
- Procurement of Data processing forms and consumables.
- Finalization of Annual maintenance contract for computer systems, peripherals and UPS units.
- Procurement of Resin Cast Current Transformer units for Distribution Transformer metering.
- Implementation of Part-A of R-APDRP Scheme in the UT of Puducherry.
- Installation of AMR Compatible Static Meters along with LT Resin Cast CurrentTransformer units and Test Terminal Blocks in Outdoor type SMC Meter boxes for Distribution Transformer metering arrangement under Part-A of R-APDRP in other O& Ms
- Procurement of Outdoor type SMC Meter boxes and Test Terminal Blocks for Distribution Transformer metering arrangement under Part-A of R-APDRP Scheme .
- Invitation of Tenders and finalization tender for supply of Man power for Customer Care Cum Call Centre for the Department.
- Setting up of Network Band Width Service Provider (NBSP) for setting up the communication back bone under Part-A of R-APDRP Scheme.
- Payment of Spectrum Charges
- Purchase of VHF batteries(12 volts)

5. Proposed Physical Targets for the Annual Plan 2016-17:

- Upgrading of existing Network and Computer systems.
- Introduction of E-Governance as per Government of India guidelines.
- Development of Internet web pages for the Department.
- Development of Intra Departmental Intranet pages within the Department.
- Establishment of Call Centre for attending Fuse off call complaints round the Clock
- Purchase of Uninterrupted Power supply units for Computers.
- Payment of Spectrum Charges
- Purchase of VHF batteries(12 volts)
- Purchase of Battery charger

Facility to be availed by the consumers of electricity:

- Automatic entry and transfer of meter reading data through meter reading instrument (MRI) and scheduling of billing Decentralized processing, printing of bills and notices
- 24x7 online internet bill payment and establishment of anywhere bill payment counters.
- Online access of power consumption, bill dues, bill payments, service conditions and meter working conditions.
- Online alerts (email & SMS) upon generation of bills and reminder for payment of dues.
- Registration and monitoring of complaints and grievances through 24x7 call centre operation.

6.Object head-wise breakup:

(Rs. in lakh)

S1. No	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme: Modernisation of billing methods and development and 'E' Governance initiatives and improvement of communication methods of the Electricity Department Puducherry.	60.22	92.00	32.27	94.16

7. Remarks: Continuing Scheme.

PROFORMA-II (5) (NL)

Scheme Number: 5 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Modernisation of billing methods and development and 'E' Governance initiatives and improvement of communication methods of the Electricity Department Puducherry.(Negotiated Loan)

2. Objective of the scheme : To modernize issue of bills for current

consumption charges, payments and other commercial and technical activities by introducing computers and to establish effective communication network among various substations and O&M sections for minimizing power

interruption period.

Under R-APDRP, Part- A is to build an IT Infrastructure and SCADA System. Under R-APDRP, Part-B is to strengthen the Power distribution System.

3.Under R-APDRP-PART-A (SCADA AND PART-A-IT)

- Setting up of power supply outage management system in Puducherry urban area. (Eligible only for towns with more than 4 lakhs population)
- Automation of operation and control of feeders and isolators and monitoring of power outflow
- Establishment of localized data centre at Puducherry.
- Setting up of communication facilities with remote terminal units and data centre.

R-APDRP-PART-A (IT)

M/s Power Finance Corporation has sanctioned a total loan amount of Rs.15.01 crores under Part A of R-APDPRP scheme in the Union Territory of Puducherry. Out of the above amount, an amount of Rs. 4.50 Crores has been availed as first tranche during the year 2012-2013. An amount of Rs.4.50 Crores is proposed to be availed during the year 2016-17.

The balance payment is required for :-

- i. Procurement of current transformers
- ii. Payment to ITIA after Installation of Servers and hardware items for Customer care centre in Puducherry, Data centre at Chennai and Data Recovery centre at Madurai.

iii. Installation of systems and peripherals to the Customer care centre, Sub-Divisional Offices and Other Offices. Setting up of communication back bone and Networking arrangement for the above offices to the Data centre.Payment of FMS and Band width charge.Payment of Project Management charges.

R-APDRP-Part-B(SYSTEM IMPROVEMENT)

- Part-B is to strengthen the power distribution system.
- Setting up of new sub-stations and augmentation of capacity of existing sub-stations.
- Renovation and modernization of existing sub-stations
- Establishment of new distribution feeders and strengthening of existing distribution feeders.
- Erection of new distribution transformers and enhancement of capacity of existing distribution transformers
- Replacement of existing defective meters and conversion of existing electromechanical meters with electrostatic meters.

4.Actual physical achievements made in the Annual Plan 2014 -15

• Erection of 315KVA, 22/0.433 KV Distribution
Transformers under System Strengthening works under
R-APDRP part-B scheme:

15 nos of 315KVA Distribution Transformers erected and energized .

5.Actual physical achievements made in the Annual Plan 2015-16

Erection of 22/0.433KV, 315KVA Distribution
Transformers at various O & M sections in Puducherry
Town under R-APDRP part-B scheme:

• 32 nos of 315KVA Distribution Transformers have been erected and energized.

6. PROPOSED TARGETS FOR 2016-17

(I) PART-B System Improvement works

- Provision of 25MVA Power Transformers one each at 110/22KV Kurumbapet and Villianur Sub stations.
- 11KV Cable laying works
- Provision of 11KV RMUs
- Provision of 11KV Sectionalisers
- Provision of 22KV/ 433 volts, 315KVA Distribution Transformers
- Provision of Capacitor banks
- Provision of tamper proof Electronic meters to single phase and three phase consumers
- Provision of APFC panels
- Provision of Wedge connectors for LT/HT cut points/ DP structure locations.

- Replacment of existing Electromechanical O/C and E/F relays at four Sub stations
- Earthing of Distribution Transformers.

(II) Integrated Power Development System(IPDS)

- Procurement of Single phase Energy meter
- Procurement of Three phase Energy meter
- Procurement of 11KV Capacitor Banks for Karaikal, Mahe and Yanam regions
- Procurement of 22KV, 315KVA Distribution Transformer
- Procurement of 11KV, 200KVA Distribution Transformer

7. Object head-wise breakup:

(Rs. in lakh)

S1. No	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme: Modernisation of billing methods and development and 'E' Governance initiatives and improvement of communication methods of the Electricity Department Puducherry.(Negotiated Loan)	278.52	450.00	0.00	5350.00

PROFORMA-II (6)

Scheme Number: 6 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Establishment of Computer based system monitoring centre in Pondicherry.

2. Objective of the scheme : To have control of the 110 KV Sub-stations for

data acquisition and Tele-metering and Tele-

operation.

3. Actual physical achievement during Annual Plan 2014-15:

- An amount of Rs. 7.75 lakhs incurred for upgradation of the existing 20KVA UPS to 40KVA UPS.
- ULDC tariff bill payment to M/s. PGCIL for an amount of Rs.264.64 lakhs.
- LC renewal for ULDC payment for an amount of Rs.0.517 lakhs.
- Microwave AMC charges for an amount of Rs.1.854 lakhs.

4. Actual physical achievement for the Annual Plan 2015-16:

- An amount of Rs. 58.42 lakhs incurred for SCADA upgradation part payment.
- Procurement of 2 nos of PC for SCC.
- An amount of Rs. 203.153 lakhs incurred as ULDC tariff bill payment to M/s. PGCIL.
- An amount of Rs. 12.74 lakhs incurred for RTU and communication equipment Upgradation.
- An amount of Rs. 0.515 lakhs incurred as LC renewal for ULDC payment
- An amount of Rs. 0.618 lakhs incurred as Microwave AMC charges.

5. Proposed Physical Target for the Annual Plan 2016-17:

- ULDC tariff bill payment for Rs. 306 lakhs
- Communication equipment maintenance and up gradation for Rs. 20 lakhs.
- Remote tripping facility for ADMS scheme for Rs. 10 lakhs
- SCC building and extension work for Rs. 50 lakhs.
- Fibre Optic AMC charges for Rs. 2 lakhs.
- Remote tripping and SCADA DMS infrastructure work facility for ADMS scheme for Rs. 10 lakhs.
- Balance payment of the ULDC upgradation project.
- Provision of Video conferencing facility at SCC.
- Annual maintenance charges towards the SCADA systems, Software and UPS.
- Maintenance works at SCC.

6.Object head-wise breakup:

(Rs. in lakh)

S1. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme: Establishment of Computer based system monitoring centre in Pondicherry.	352.44	535.00	339.84	610.55

7. Remarks: Continuing Scheme.

PROFORMA-II (7)

Scheme Number: 7 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Research and Development, setting up of standards lab.

2. Objective of the scheme :

- : 1. To set up a standard accredited lab to test the Static Energy Meters as per CEA Metering Regulation 2006, inclusive of building alteration and provision of Air Conditioners.
 - 2. Procurement of Scientific Instruments to test the Sub –station equipments based on the latest technology.

3. Actual Physical Achievements in the Annual Plan 2014-15

• Tested and calibrated Instruments such as Standard Reference Meters and protective testing equipments in various standard laboratories.

4. Actual Physical Achievements in the Annual Plan 2015-16

- Tested and calibrated Instruments such as Standard Reference Meters and protective testing equipments in various standard laboratories.
- Procurement of 5 nos of Digital Multimeter and 5 nos of Digital Clamp Meter for LTM,HTM and APTS wing.

5. Proposed Physical Targets for the Annual Plan 2016-17

- Testing and calibration of Instruments such as Standard Reference Meters and protective testing equipments in various standard laboratories.
- Procurement of testing instruments for protection wing .
- Procurement of Scientific Equipment and standard CT PT for HTM wing.
- Procurement of Scientific Equipment, Tools and Plants for LTM & LAB.

6.Object head-wise breakup:

(Rs. in lakh)

Sl. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme :	104.89	184.56	103.39	134.99
	Research and Development, setting up of standards lab.				

PROFORMA-II (8)

Scheme Number: 8 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Formation of Electrical Inspectorate and licensing board for Pondicherry.

2. Objective of the scheme : 1. Electrical Inspectorate for inspection of the electrical installation in the Union Territory

of Pondicherry.

2. Licensing board to issue different grades of supervisory permits and contractor licenses to all qualified persons / firms to enable them to undertake electrical installation / maintenance work in the Union Territory of Pondicherry.

3. Actual physical achievement during Annual Plan 2014-15:

• Renewal of 800 nos of different grades of Supervisory permits and contractors licenses and procured Stationery items for Licensing Board.

4. Actual physical achievement for the Annual Plan 2015-16:

- Renewal of 800 nos of different grades of Wireman Supervisory permits and Contractor Licenses.
- Procurement of Stationery items for smooth functioning of the Licensing Board.
- Government of Puducherry issued, The Puducherry Electrical Inspectorate (Appointment of Chief Electrical Inspector and Electrical Inspectors) Rules, 2015

5. Proposed physical Target for Annual Plan 2016-17:

- Renewal of exisiting 800 nos of different grades of Supervisory permits and contractors licenses.
- Constitution of Electrical Inspectorate in the U.T.of Puducherry
- Creation of Chief Electrical Inspector, Electrical Inspectors & Complementary Staff
- Reconstitution of Licensing Board
- Issuance different grades of Supervisory permits & Contractor licenses.

6.Object head-wise breakup:

(Rs. in lakh)

S1. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 15-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme: Formation of Electrical Inspectorate and licensing board for Pondicherry.	0.09	1.00	1.00	75.00

7. Remarks: Continuing Scheme.

PROFORMA-II (9)

Scheme Number: 9 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Rural Electrification

2. Objective of the scheme : To electrify the villages and Harijan basties. To

strengthen the existing LT distribution system by enhancing the existing transformers capacities and strengthening of the LT lines in rural areas.

3. Actual physical achievements made in the Annual Plan 2014-15:

Sl.No	Item	Units	Achievement
1.	Transformers energised	Nos	1
2.	Transformer enhanced	Nos	2
3.	HT lines	Kms	0.35
4.	LT lines	Kms	2.26
5.	Strengthening of LT lines	Kms.	0.31

4 Actual Physical achievement for the Annual Plan 15-16:

Sl.No	No Item		Achievement
511110	100111	Units	upto Jan 16
1.	Energisation of Transformers	Nos	5
2.	New HT Lines	Kms.	1.44
3.	New LT lines	Kms	8.64
4.	Strengthening of LT lines	Kms.	1.767

5. Proposed Physical Targets for the Annual Plan 2016-17:

S1.No	Sl.No Item		
1.	1. Energisation of Transformers		18
2.	Enhancement of Transformers	Nos.	12
3.	HT Lines	Kms.	3
4.	LT lines	Kms	9.7
5.	Strengthening of LT lines	Kms.	4.4

6.Object head-wise breakup:

(Rs. in lakh)

Sl. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme	14.00	64.00	31.01	80.00
	Rural Electrification				

7. Remarks: Continuing Scheme.

PROFORMA-II (10)

Scheme Number: 10 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Human Resources and Development

2. Objective of the scheme : The objective of the scheme is to upgrade the

knowledge of the officers/staff in Technical/other important sectors like reforms through agencies

like NPTI,PSTI etc.

3. Actual physical achievements made in the Annual Plan 2014-15:

Sl.No	Item	Units	Achievement
1.	Imparting Internal training to Officers	Nos.	75
2.	Imparting Internal training to Staff	Nos.	90
3.	Imparting External training to Officers	Nos.	22

4. Actual physical achievements for the Annual Plan 15-16:

S1.No	Item		Achievement
1.	Imparting Internal training to Officers	Nos	125
2.	Imparting Internal training to Staff	Nos	90
3.	Imparting External training to Officers	Nos	24

5. Proposed Physical Targets for the Annual Plan 2016-17:

Sl.No	Item	Units	Proposed Target
1.	Imparting Internal training to Officers	Nos	45
2.	Imparting Internal training to Staff	Nos	90
3.	Imparting External training to Officers	Nos	20
4.	Imparting External training to Staff	Nos	5

6. Object head-wise breakup: (Rs. in lakh

S1. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme:	3.99	8.00	6.63	15.00
	Human Resources and Development				

PROFORMA-II (11)

Scheme Number: 11 Implementing Department: Electricity

Sector : Power

1. Name of the scheme : Providing meters for all categories of consumers under 100% metering Programme.

2. Objective of the scheme : The objective of the scheme is to provide meters

in the distribution system upto 11 / 22 KV

feeders and for all categories of consumers.

3. Actual physical achievements made in the Annual Plan 2014-15

• Converted Existing Electromechanical meter by Static meter in the L.T. services.

4. Actual physical achievements in the Annual Plan 2015-16

• Converted Existing Electromechanical meter by Static meter in the L.T. services.

5. Proposed Physical targets for the Annual Plan 2016-17

• Provision of static meters in existing Electromechanical meter in the L.T. services .

6. Object head-wise breakup:

(Rs. in lakh)

S1. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Power Sector				
2.	Name of the Scheme: Providing meters for all categories of consumers under 100% metering Programme	59.77	565.54	93.46	869.10

7. Remarks: Continuing Scheme.

PROFORMA - II

Scheme Number: 1 Implementing Department: Electricity

Sector : Energy

1. Name of the scheme : Development of Non-Conventional sources of energy.

2. Objective of the scheme : The objective of the scheme is to promote the use

of new and renewable sources of energy and to conduct research and development on renewable sources of energy. Setting up of solar pond for

production of thermal and electrical energy.

3. Proposed Target for the Annual Plan 2016-17:

An outlay of Rs. 48.00 lakhs is proposed for the Year 2016-17 for payment of Grant-in aid Salary under "Plan Scheme for the existing Staff as most of the staff working in the Solar Pond Power Project Society are already absorbed in different related departments and hence the Society officials are to be paid from the Project only through salary component as Grant in aid.

4. Object head-wise breakup:

(Rs. in Lakh)

S1. No.	Name of the Department / Sector	Actual Expenditure 2014-15	B.E. 2015-16	R.E 2015-16	Proposed Outlay 2016-17
(1)	(2)	(3)	(4)	(5)	(6)
1	Electricity Department / Energy Sector				
2.	Name of the Scheme :	52.00	60.00	60.00	61.45
	Development of Non-Conventional sources of energy.				

PROFORMA-III

SECTORAL WRITE-UP (GENERAL)

Power Sector

Power Position

The Union Territory of Puducherry consists of four regions, geographically located in three different States. There is no major power generation in the Union Territory of Puducherry. The requirement of power for the Puducherry region is met from the allocation of power from the Central Generating Stations and partly from the TANGEDCO. The power requirement of Karaikal region is met from the Puducherry Power Corporation Limited and from the TANGEDCO. While the requirement of power in Yanam region is met from central generating stations, the power requirement of Mahe region is fulfilled by availing power from Kerala State Electricity Board. The total power allocation from CGS is 445 MW, the power availed from TANGEDCO is 86 MW. 32.5 MW of power is availed from PPCL and around 6 MW of power is availed from Kerala State Electricity Board. Additional Power has also been received by the Electricity Department, Puducherry to an extent of 34MW from Kudankulam Nuclear Power Plant.

It is proposed to avail additional Power from the proposed Ramagundam Super Thermal Power Station(RSTPS Stage-IV) for the Union Territory of Puducherry.

In order to meet the future increasing demand of power in the Union Territory of Puducherry, this department has successfully signed a Power Purchase Agreement with Central Generating Station ie. Neyveli Lignite Corporation (NLC) for the power to be availed from Thermal Station –II(2^{nd} Expansion) (2×500 MW).

II. POWER INFRASTRUCTURE

Power to Puducherry region is fed through three numbers of 230/ 110 KV auto Sub-Stations with total installed capacity of 560 MVA. Ten 110/22-11 KV Sub-Stations with a total installed capacity of 415 MVA and One number of the 110/11 KV Sub-Station with installed capacity of 63 MVA are connected to the above auto Sub-stations.

Power to Karaikal region is fed through two numbers of the 110/11 KV Sub-Stations with installed capacity of 80 MVA owned by EDP and one number of the 110/11 KV Sub-Station owned by PPCL with installed capacity of 30 MVA owned by Puducherry Power Corporation Limited.

In Mahe region, there is one 110/11 KV Sub-station of capacity 20 MVA and in Yanam region, there are two numbers of 132/33-11 KV Sub-stations of capacity 36 MVA and one 33/11 KV Sub-station of capacity 10 MVA.

Achievement for the Annual Plan 2014-15:

An amount of Rs 4900.11 lakhs has been incurred for the development schemes of this department out of which an amount of Rs. 585 lakhs has been incurred for SCSP works. The following are the major physical achievements made in Transmission schemes:

3. Erection and Establishment of new 110/11 KV Vengata Nagar Sub Station.

Work completed and the new Substation was commissioned on 27.06.2014 with the following equipments.

(a)110/ 11KV Vengata Nagar SS:

Power Transformer capacity: 2 x 31.5MVA, 110/11KV with 10 nos of 11KV Feeder Bays and 2 nos. of 2.4 MVAR 11KV Capacitor banks.

(b)110KV Marapalam- Vengata Nagar UG Cable Feeder:

Route length-6.556 Kms, size- 4x 630Sqmm XLPE, insulated Copper Cable (one as stand by).

4. Establishment of new 230 / 110 KV Auto Sub Station at Karaikal.

Agreement has been signed with M/s. Power Grid Corporation of India Ltd . 10% of estimated cost i.e.Rs. 3.03 Crores has been paid for preliminary commencement of works.

5. Establishment of 110 / 22 KV Sub Station in the premises of 230/110KV Auto Substation at Thondamanatham:

Agreement has been signed with M/s. Power Grid Corporation of India Ltd . 10% of estimated cost has been paid for preliminary commencement of works.

6. Strengthening of 110KV Villianur-Bahour line:

The first phase of work for 6.75 Kms between Bahour and Korkadu 110/22KV Substation has been completed and energised.

7. Renovation and Modernisation of 110 / 22KV Villianur Sub station:

80% of works completed.

8. Stringing of Earth Wire of size 7/3.35 from Tower Location No.45 to 57 of 110KV Bahour- Eripakkam Feeder:

Work completed

9. <u>De-stringing of existing conductor and stringing of Villianur and Marapalam</u> 110KV feeder-II with Panther Conductor:

100% works completed.

10. Construction of 110KV S/C line (Extension) between Villianur and Bahour from location No.104 to location No.6 for a length of 2Km (approx):

Agreement has been signed with M/s. Power Grid Corporation of India Ltd . 10% of estimated cost has been paid for preliminary commencement of works.

11. Erection of 1X25MVA, 110/22KV Power Transformer along with associated 110KV bay at 110/22 KV Kurumbapet Sub station:

Agreement has been signed with M/s. Power Grid Corporation of India Ltd. 10% of estimated cost has been paid for preliminary commencement of works.

12. Erection of 1X25MVA, 110/22KV Power Transformer along with associated 110KV bay at 110/22 KV Villianur Sub station:

Agreement has been signed with M/s. Power Grid Corporation of India Ltd . 10% of estimated cost has been paid for preliminary commencement of works.

Under Sub-transmission schemes, the following achievements have been made:

- 84 numbers of new distribution transformers of various capacities were commissioned and 42 numbers of existing distribution transforms were enhanced into higher capacities.
- 10.974 Kms of new HT lines and 40.278 Kms of new LT lines were energized, while 0.5 Kms of existing HT lines and 22.922Kms of existing LT lines were strengthened.

- With the erection of new lines and strengthening of existing lines, 20 numbers of new HT Industrial services and 85 numbers of new LT industrial services were energized.
- In addition, 14,297 numbers of new domestic services, 1627 numbers of new commercial services, 39 numbers of new Agricultural services.
- 369 numbers of Street Lights were also commissioned during this year.
- Apart from the above, 1.146 Kms of HT UG cables and 11.27Kms of LT UG cables were laid to convert 408 numbers of OH services and 49 numbers of OH Street lights into UG cable system. Further 12 Nos of 11 KV distribution transformers were erected, under UG cable system
- To carry on the computerization activity, computer consumables were also procured.
- Under Human resources development scheme, 90 staffs were given internal training and 75 nos of Officers and 22 nos of Officers were given External Training.

Transmission achievements for 2015-16:

An outlay of Rs. 5250.00 Lakhs is proposed for development schemes during RE 2015-16, out of which Rs. 156.67 lakhs was proposed for SCP. Under the transmission schemes, the following works have been programmed:

Renovation & Modernisation of 110/22 KV Villianur Sub Station.

Major Works completed:

Tower Foundations:

- Out of 14 nos of tower foundations, works completed for 12 nos of towers and Cable trench works completed.
- 110KV Equipment foundations: Out of 96 nos, 68 nos have been completed.
- Works on LV-04 with associated bay, R & M works have been completed and commissioned on 20.04.2015.
- The phase 2 works of 110KV Auxillary Bus and LV 01 & LV 02 is programmed to be taken up shortly after arranging requisite shut down.

(ii) Strengthening of Villianur - Bahour line (12.35Kms)

80% of works completed.

110KV tower foundations:

• Out of 49 nos. of towers, 42 nos of tower foundations were completed.

Tower erection:

- Out of 49 nos. of towers, erection works completed for 38 nos. of towers
- Stringing works of 110 KV EHT line completed for 7.5Kms between Korkadu-Bahour section and energised on 23.01.2014.
- The second phase of stringing of 110KV line between Villianur and Korkadu Section is in progress and expected to be completed by March 2016.

(iii) Establishment of new 230 / 110 KV Auto Sub Station at Karaikal:

• The work has been awarded to M/s. Blue Star, Mumbai by M/s. Power Grid Corporation of India Ltd.

(iv) Stringing of 2nd circuit with Panther conductor in the already available 2nd cross arms of Bahour-Eripakkam feeder:

• First phase of work completed from tower location No. 1 to 20.

iii. De-stringing of existing conductor and stringing of Villianur and Marapalam 110KV feeder-II with Panther Conductor:

• 100% of works completed

Under Sub-transmission schemes, during the year 2015-16, the following have been achieved upto January 2016 against the target for 2015-16 (Actual/Target)

- To energize 91/100 numbers of new distribution transformers of various capacities and to enhance 21/50 numbers of existing distribution transformers to higher capacities.
- To erect and commission 16.442Kms/15.00 Kms of new HT lines and 64.919Kms/50 Kms of new LT lines and to strengthen 1.0Km / 3.00 Kms of existing HT lines and 32.729Kms/25 Kms of existing LT lines.
- To energize 15/25 numbers of new HT industrial services and 50/100 numbers of new LT industrial services.
- To effect 9216 /15000 numbers of new domestic services, 1347/1700 numbers of new commercial Services, 26/40 numbers of new agricultural services and 244 numbers of new Street Lights.

- In addition, it is also proposed to lay 3.723Kms/2.200 Kms of new HT cables and 13.303Kms/17.987 Kms of new LT cables to convert 572/700 numbers of OH services and 10/75 numbers of OH street lights into UG cable system. Further to erect 4 / 5 numbers of new 11 KV distribution transformers and to enhance 5 Nos of distribution transformers into higher capacities under UG cable system.
- External training was given to 24 Nos of Officers and also internal training was given to 125 nos of Officers and 90 Nos of staff.

Proposed physical targets for 2016-17:

An outlay of Rs. 17,416.00 lakhs has been proposed for the development schemes of this department. Out of which an amount of Rs. 550.00 lakhs is proposed for SCSP schemes. The following major transmission works planned during 2016-17:-

- Establishment of 110/22KV Thondamanatham Sub Station.
- Erection of 16 MVA 110/22KV Power Transformer at 110KV Vengata Nagar Sub station.
- Erection of 25MVA Power Transformer one each at 110/22KV Kurumbapet Sub station and 110/22KV Villianur Sub station.
- Strengthening of 110KV Villianur-Bahour line.
- Erection of 2nd circuit of 110KV Villianur-Bahour line.
- Renovation and Modernisation of 110KV Villianur Sub Station.
- Establishment of 110 / 11KV Vengata Nagar SS (Balance Payment).
- Establishment of Karaikal 230 /110KV Auto Sub Station.
- Re-Orientation of 11KV feeders at Karaikal Region.
- Strenthening of conductor of 110KV Thondamanatham-Kurumbapet feeder.
- Stringing of 2nd circuit in the already available 2nd cross arm of the existing 110KV Bahour-Eripakkam feeder.
- Stringing of conductor of 110KV Sedarapet -Kurumbapet feeder.
- Erection of bay equipments of 110KV Bahour- Eripakkam feeder.
- Renovation and Modernisation of Villianur and Bahour Auto Sub Station.
- Provision of an additional 16MVA Power Transformer at 110/22KV Bahour Sub station.
- Communication equipment maintenance and up gradation.
- Remote tripping facility for ADMS scheme
- SCC building and extension work.
- Fibre Optic AMC charges.
- Remote tripping and SCADA DMS infrastructure work facility for ADMS scheme.

Under normal development schemes, the following programmes are proposed during 2016-17

- It is proposed to commission 100 numbers of new distribution transformers of various capacities and to enhance the capacity of 50 numbers of existing distribution transformers.
- To erect 15.000 Kms of new HT lines and 50.000 Kms of new LT lines and also strengthen 3.000 Kms of existing HT lines and 25.000 Kms of existing LT lines.
- With the completion of the above, it is proposed to connect 15000 numbers of domestic services, 1700 numbers of commercial services, 40 numbers of agricultural services, 25 numbers of HT Industrial services, 100 numbers of LT Industrial Services and 20 numbers of OHOB services.
- 20 numbers of new Street lights were also proposed to be energized during this period.
- It is also proposed to lay and energize 2.200 Kms of new HT cables and 17.987 Kms of new LT cables to convert 700 numbers of OH services and 75 numbers of OH Street light into U.G. cable system.
- It is proposed to give internal training to 45 officers and 90 staffs and to give external training to 20 officers and 5 staffs respectively.****
- It is also proposed to upgrade the existing computer systems network, procure additional computer systems and system software packages.

PROFORMA-IV

Sector : Power

Implementing Department : Electricity

Region- wise Financial and Physical Achievements and Outlay

(a) Financial Achievements and Outlay

		Annual Plan 2014-15	Annual Plan 2015-16		Annual Plan 2016-17	
Sl.No	Name of the Scheme	Actual Expdr.	Approved Outlay	Revised Outlay	Proposed outlay	Of which Capital Content
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Puducherry	4128.66	8255.51	4298.42	15750.86	13430.00
2	Karaikal	531.43	801.04	659.21	1030.64	616.00
3	Mahe	64.61	116.10	88.39	325.83	254.00
4	Yanam	175.41	227.35	203.98	308.66	156.48
	Total	4900.11	9400.00	5250.00	17415.99	14456.48

(b) Region wise Physical performance in bullet points :

(Puducherry/ Karaikal/ Mahe/ Yanam)

I. Actual physical achievements made during 2014-15:

1. Puducherry region:-

- 58 numbers of new distribution transformers of various capacities were commissioned and 26 numbers of existing distribution transformers were enhanced into higher capacities.
- 7.099 Kms of new HT lines and 37.558 Kms of new LT lines were energized,
 0.5 Kms of existing HT lines and 12.237 Kms of existing LT lines were strengthened.
- With the erection of new lines and strengthening of existing lines, 11,901 nos of Domestic Services, 1411 nos of Commercial Services, 19 nos of HT industrial Services, 73nos of LT industrial Services, 39 nos of Agriculture Services and 2 numbers of OHOB services and 343 nos of street light services were effected.

2.Karaikal region:-

- 17 numbers of new distribution transformers of various capacities were commissioned and 18 number of existing distribution transformers were enhanced into higher capacities.
- 3.429 Kms of new HT lines and 2.68 Kms of new LT lines were energized and 7.987 Kms of existing LT lines were strengthened.
- 2776 nos of Domestic Services, 354 nos of Commercial Services, 2 nos of HT industrial Services, 5 nos of LT industrial Services, 2 nos of Agriculture Services.

3.Mahe region:-

- 1 number of new distribution transformer was commissioned and 1 number of existing distribution transformer was enhanced into higher capacity. 0.62 Kms of new HT lines were energized and 0.13 Kms of new LT lines were energized.
- 236 nos of Domestic Services,80 nos of Commercial Services, 3 nos of LT industrial Services.

4. Yanam region:-

- 7 numbers of new distribution transformers were commissioned . 0.54 Kms of new HT lines were energized,1.76 Kms of new LT lines were energized and 1.605 Kms of existing LT lines were strengthened.
- 475 nos of Domestic Services, 37 nos of Commercial Services, 1 no of HT Industrial Service and 3nos of LT industrial Services.

II) Actual physical achievements during 2015-16:

1. Puducherry region:-

(i) Renovation & Modernisation of 110/22 KV Villianur Sub Station.

Major Works completed:

Tower Foundations:

- Out of 14 nos of tower foundations, works completed for 12 nos of towers and Cable trench works completed.
- 110KV Equipment foundations: Out of 96 nos, 68 nos have been completed.
- Works on LV-04 with associated bay, R & M works have been completed and commissioned on 20.04.2015.
- The phase 2 works of 110KV Auxillary Bus and LV 01& LV 02 is programmed to be taken up shortly after arranging requisite shut down.

(ii) Strengthening of Villianur - Bahour line (12.35Kms)

80% of works completed

110KV tower foundations:

• Out of 49 nos. of towers, 42 nos of tower foundations were completed.

Tower erection:

- Out of 49 nos. of towers, erection works completed for 38 nos. of towers
- Stringing works of 110 KV EHT line completed for 7.5Kms between Korkadu- Bahour section and energised on 23.01.2014.
- The second phase of stringing of 110KV line between Villianur and Korkadu Section is in progress and expected to be completed by March 2016.

(iii) Stringing of 2nd circuit with Panther conductor in the already available 2nd cross arms of Bahour-Eripakkam feeder:

• First phase of work completed from tower location No. 1 to 20.

(iv) De-stringing of existing conductor and stringing of Villianur and Marapalam 110KV feeder-II with Panther Conductor:

• 100% of works completed

- 33 numbers of new distribution transformers of various capacities are commissioned and 12 numbers of existing distribution transformers are enhanced into higher capacities.
- 9.555 Km of new HT lines and 47.80 Km of new LT lines are energized.
- 1Km of new HT line and 19.843Kms of LT lines are strengthened.
- 7393 nos of Domestic Services,994 nos of Commercial Services,13 nos of HT industrial Services,40 nos of LT industrial Services, 19 nos of Agriculture Services and 238 numbers of Street lights were effected.

2. Karaikal region:-

Establishment of new 230 / 110 KV Auto Sub Station at Karaikal:

- The work has been awarded to M/s. Blue Star, Mumbai by M/s. Power Grid Corporation of India Ltd.
- 18 numbers of new distribution transformers of various capacities are commissioned and 4 numbers of existing distribution transformers are enhanced into higher capacities.
- 6.362 Km of new HT lines and 9.649 Km of new LT lines are energized.
- 1205 nos of Domestic Services, 223 nos of Commercial Services, 08nos of LT industrial Services, 5 nos of Agriculture Services.
- Replacement of 456 nos of Electromechanical into Static Energy Meters are to be carried out under the 100% metering scheme.
- Replacement of Oil in Power Transformer –I is to be completed in the 110/11KV Surakudy Sub station. The replacement of 110KV H.V-I breaker with SF-6 (ABB breaker) make has been completed. The Overhauling of 3 nos of 110KV breakers at the above sub station have also been completed.

3. Mahe region:-

- 1 number of new distribution transformer was commissioned and 1 number of existing distribution transformer was enhanced into higher capacity.
- 1.5 Km of new LT lines are energized and 2.15Km of LT lines are strengthened.
- 202 nos of Domestic Services, 98 nos of Commercial Services, 1nos of LT industrial Service.

4. Yanam region:-

- 5 numbers of new distribution transformers were commissioned and 1 number of existing distribution transformer was enhanced into higher capacity.
- 0.57 Km of new HT lines and 4.94 Km of new LT lines were energized. 1.0Km of HT line and 1.5Kms of LT lines were strengthened.

 416 nos of Domestic Services,32 nos of Commercial Services,2nos of HT industrial Services, 1no of LT industrial Service & 2 nos of Agriculture Services.

III. Proposed Physical Targets for the Annual Plan 2016-17

1. Puducherry region:-

- Establishment of 110/22KV Thondamanatham Sub Station.
- Erection of 16 MVA 110/22KV Power Transformer at 110KV Vengata Nagar Sub station.
- Erection of 25MVA Power Transformer one each at 110/22KV Kurumbapet Sub station and 110/22KV Villianur Sub station.
- Strengthening of 110KV Villianur-Bahour line.
- Erection of 2nd circuit of 110KV Villianur-Bahour line.
- Renovation and Modernisation of 110KV Villianur Sub Station.
- Establishment of 110 / 11KV Vengata Nagar SS (Balance Payment).
- Establishment of Karaikal 230 /110KV Auto Sub Station.
- Re-Orientation of 11KV feeders at Karaikal Region.
- Strengthening of conductor of 110KV Thondamanatham-Kurumbapet feeder.
- Stringing of 2nd circuit in the already available 2nd cross arm of the existing 110KV Bahour-Eripakkam feeder.
- Stringing of conductor of 110KV Sedarapet -Kurumampet feeder.
- Bay equipment of 110KV Bahour- Eripakkam feeder.
- Renovation and Modernisation of Villianur and Bahour Auto Sub Station.
- Provision of an additional 16MVA Power Transformer at 110/22KV Bahour Sub station.
- Communication equipment maintenance and up gradation.
- Remote tripping facility for ADMS scheme
- SCC building and extension work.
- Fibre Optic AMC charges.
- Remote tripping and SCADA DMS infrastructure work facility for ADMS scheme.
- 70 numbers of new distribution transformers of various capacities are proposed to be commissioned and 32 numbers of existing distribution transforms are proposed to be enhanced into higher capacities.
- 8.4 Kms of new HT lines and 34 Km of new LT lines are proposed to be energized.

• 11000 nos of Domestic Services,1250 nos of Commercial Services,20 nos of HT industrial Services,82nos of LT industrial Services, 33 nos of Agriculture Services and 14 numbers of OHOB services were effected. Further it is proposed to energise 17 Nos. of Street lights.

• Karaikal region:-

- 22 numbers of new distribution transformers of various capacities are proposed to be commissioned and 15 numbers of existing distribution transformers are proposed to be enhanced into higher capacities.
- 3.5 Kms of new HT lines and 11.00 Km of new LT lines are proposed to be energized.
- 3000 nos of Domestic Services,350 nos of Commercial Services,3 nos of HT industrial Services,10nos of LT industrial Services, 4 nos of Agriculture Services.
- Work of erection of additional 11KV feeder in U.G.Cable(Town-III) from 110/11KV P.T. Vasal to Perumal Koil street will be completed.

• Mahe region:-

- 2 numbers of new distribution transformers of various capacities are proposed to be commissioned and 2 numbers of existing distribution transforms are proposed to be enhanced into higher capacities.
- 0.5 Kms of new HT lines and 3.00 Km of new LT lines are proposed to be energized.
- 250 nos of Domestic Services,60 nos of Commercial Services, 3nos of LT industrial Services.

Yanam region:-

- 6 numbers of new distribution transformers of various capacities are proposed to be commissioned and 1 number of existing distribution transforms is proposed to be enhanced into higher capacity.
- 0.5 Kms of new HT lines and 2.00 Km of new LT lines are proposed to be energized.
- 750 nos of Domestic Services, 40 nos of Commercial Services, 2nos of HT industrial Services and 5nos of LT industrial Services.
