POWER

There is no major power Generation in this Union Territory of Pondicherry. However the Pondicherry Power Corporation has established a 32.5 MW Combined Cycle Gas Power Plant at Karaikal and power thus generated is being utilized in Karaikal region only. The Pondicherry Power Corporation Limited has also proposed to expand the plant by 100 MW during Eleventh Plan period.

ACHIEVEMENTS DURING 2007 - 08:

To meet the growing power demand of Puducherry region, establishment of 230/110 KV sub-station at Thondamanatham was entrusted to PGCIL and the firm has completed the site leveling work and compound wall construction work. To improve the working conditions of the 110/22 KV Kurumbapet sub-station, renovation and modernisation of the first phase work has been completed. In order to cater the growing demand of Yanam region, additional 16 MVA power transformers was energized.

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

- 91 numbers of new distribution transformers of various capacities were commissioned and 82 numbers of existing distribution transforms were enhanced into higher capacities.
- 2. 22.000 Kms of new HT lines and 83.892 Kms of new LT lines were energized, while 7.764 Kms of existing HT lines and 32.812 Kms of existing LT lines were strengthened.
- 3. With the erection of new lines and strengthening of existing lines, 6 numbers of new HT Industrial services, 97 numbers of new LT industrial services and 30 numbers of water tank services were energized.
- 4. 10,196 numbers of new domestic services, 1,202 numbers of new commercial services, 63 numbers of new Agricultural services, 892 numbers of new OHOB services were effected.
- 5. 1438 numbers of Street Lights were commissioned.
- 6. 2.357 Kms of HT UG cables and 42.193 Kms of LT UG cables were laid to convert 1471 numbers of OH services and 203 numbers of OH Street lights into UG cable system. Further 4 numbers of 11 KV distribution transformers were also erected under 11 KV UG cable system.

Under Human resources development scheme, 53 Engineers and 60 staff were given internal training and 16 numbers of Engineers and 10 nos. of Staff were also given external training.

Spot billing systems were introduced in parts of Vadhanur and Thiruvandar Koil areas, hand held devices for billing system, UPS units and computer consumables were procured.

Scientific instruments and Trivector meters were tested and calibrated. Periodical testing were conducted in all equipments and panels in EHV sub-stations. Provided check/standby meters in the HT industries. Further electro mechanical meters were converted into static meters in LT CT operated meter services.

An amount of Rs. 130.00 lakhs has been incurred for the Tsunami Rehabilitation Programme. Two Nos. of new distribution transformers, 0.250 Km of HT lines and 6.406 Kms of LT lines were energised and six Nos of existing distribution transformers were enhanced into higher capacities to connect up 476 Nos of new services and 128 Nos of new street lights. Besides, 23.391 Kms of LT UG cables were laid and 11 Nos of pillar boxes were erected to convert 594 Nos of over head services and 93 Nos of over head street lights into under ground cable system.

LIKELY ACHIEVEMENT DURING 2008-09

Under the transmission scheme, the following works have been programmed:

- 1. Second phase Renovation and Modernisation work at Kurumbapet EHV Sub-Station.
- 2. Acquisition of land at Lawspet for establishment of EHV sub-station.
- 3. Energisation of new 33/11 KV Sub-Station at Adavipolam, Yanam along with erection of 33 KV single circuit line from the existing 132/11 KV Mettacur Sub-Station to the new 33/11 KV Sub-Station at Adavipolam in Yanam region for a route length of 10.160 Kms.

Under Sub-transmission schemes, the following have been proposed:

 To energize 109 numbers of new distribution transformers of various capacities and to enhance 80 numbers of existing distribution transformers to higher capacities.

- To erect and commission 25.000 Kms of new HT lines and 113.000 Kms of new LT lines and to strengthen 7.000 Kms of existing HT lines and 48.000 Kms of existing LT lines.
- 3. To energize 15 numbers of new HT industrial services and 150 numbers of new LT industrial services
- To effect 10250 numbers of new domestic services, 1300 numbers of new commercial Services, 50 numbers of new agricultural services and 1000 numbers of new OHOB services.
- 5. To energize 2100 numbers of new Street Lights.
- 6. It is proposed to lay 5.700 Kms of new HT cables and 63.000 Kms of new LT cables to convert 2600 numbers of OH services and 250 numbers of OH street lights into UG cable system. Further it is anticipated to erect 6 Nos of 11 KV distribution transformers and to enhance 5 Nos of distribution transformers into higher capacities under UG cable system.
- 7. To procure additional computer systems and consumables and to upgrade the existing computer systems and to introduce the spot billing systems in Thavalakuppam and Vadamangalam areas. It is also proposed to computerize sub-urban collection centres.
- 8. To impart external training to 7 Nos of Officers and 5 Nos of staff and also to impart internal training to 30 Nos of Officers 20 Nos of staff.
- 9. To erect 6 Nos. of distribution transformers, to enhance 3 Nos. of distribution transformers into higher capacities, to erect 2 kms of HT lines, 5 kms of LT lines, to strengthen 2 kms. of LT lines, to effect 250 Nos. of new service connections and 100 Nos. of new Street lights, to convert 20 Nos. of existing Street lights, to lay 16 kms. of LT UG cables, to convert 4.5 Kms. of over head lines into UG cable system, to erect 10 Nos. of Pillar boxes and to convert 800 Nos. of LT over head services and 100 Nos. of over head Street lights into UG cable system.

STRATEGIES PROPOSED AND POLICY FOCUSED FOR 2009- 10

- In order to maintain reliable power supply in Puducherry region, it has been envisaged to commission the new 230 KV line between the proposed 400 KV sub-station and the existing Villianur 230 KV sub-station and Bahour 230 KV sub-substation, to facilitate drawal of power from the proposed 400 KV sub-station.
- 2. To meet the growing power demand of Puducherry region, it is proposed to establish 230/110 KV Sub-station at Thondamanatham.
- 3. It is proposed to energise 22/11 KV Sub-Station near Anandha Inn.
- 4. Providing of relays in the 110 KV feeders in all the EHV Sub-Stations.
- 5. Acquisition of land at Lawspet, Thavalakuppam, Thirubuanaipalayam and Kurumbapet.
- 6. Proposed to energise 108 numbers of new distribution transformers of various capacities and enhance the capacity of 85 numbers of existing distribution transformers.
- 7. To erect 25.000 Kms of new HT lines and 113.000 Kms of new LT lines and also strengthen 7.000 Kms of existing HT lines and 48.000 Kms of existing LT lines.
- 8. 2100 numbers of new Street lights were also proposed to be energized during this period.
- 9. It is also proposed to lay and energize 8 kms of new HT cables and 57 kms of new LT cables, to energise 5 Nos. of 11 KV distribution transformers, to enhance 5 Nos. of distribution transformers under 11 KV distribution network. Besides, it is proposed to erect 20 Nos. of 11 KV Switch gears, 45 Nos. of Pillar boxes and to convert 2600 numbers of OH services and 250 numbers of OH Street light into U.G. cable system.
- 10. Establishment of call centres for attending Fuse off call complaints round the clock.
- 11. Setting up of Total end-to-end solutions for the computerization activities of the department.
- 12. Development of Intra Departmental Intra net pages within the department.
- 13. Providing of metering arrangements in distribution transformers and street light services.

- 14. Providing of remote access facilities for down loading datas from the meters installed in sub-stations, EHT/HT consumers.
- 15. To maintain reliability of the supply and to meet growing demand of power and domestic and commercial consumers in the urban areas of Puducherry, the existing 11 KV Ring Main System has been proposed to be modernized with the installation of Compact Sub-station and replace the existing oil Switch gars with compact VCBs.
- 16. To erect 5 Nos. of distribution transformers, to enhance 3 Nos. of distribution transformers into higher capacities, to erect 2 Kms of HT lines, 5 kms of LT lines, to strengthen 2 kms. of LT lines, to effect 500 Nos. of new service connections and 100 Nos. of new Street lights, to convert 20 Nos. of existing Street lights, to lay 10 kms. of LT UG cables, to erect 5 Nos. of Pillar boxes and to convert 300 Nos. of LT over head services and 50 Nos. of over head Street lights into UG cable system.

TRANSMISSION AND DISTRIBUTION LOSSES

- 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.
- 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.

OUTLAY AT A GLANCE

Sector: POWER No. of Schemes: 24

Department: ELECTRICITY

(Rs. in lakh)

Eleventh Five Year Plan 2007-12 Approved Outlay : 52607.12

Annual Plan 2007-08 Actual Expenditure : 4385.70

Annual Plan 2008-09 Approved Outlay : 3808.22

Annual Plan 2008-09 Revised Outlay : 3808.22

Annual Plan 2009-10 Proposed Outlay : 7900.00

(Rs. in lakh)

| Sl. No. | Name of the Scheme | Eleventh Five Year Plan 2007-12 | Annual Plan Plan 2007-08 Annual Plan 2008-09 | | | Annual Plan 2009-10 |
|------------|---|--|---|--------------------|-------------------|---------------------------|
| | | Approved Outlay | Actual Expdr. | Approved Outlay | Revised Outlay | Proposed Outlay |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 1. | Erection of 230/110 KV Sub-station with 2x80 MVA auto transformer at Bahour | 365.00 | 42.53 | 46.00 | 62.00 | 77.00 |
| 2. | Providing additional primary main substation & EHT lines in the UT of Pondicherry. | 2350.00 | 318.16 | 366.00 | 366.00 | 592.00 |
| 3. | Rationalisation and improvement of distribution in urban areas. | 1950.00 | 144.99 | 161.00 | 161.00 | 335.00 |
| 4. | Conversion of HT overhead lines into UG cable system and formation of 11 KV RMS in Pondicherry. | 538.12 | 128.58 | 179.00 | 179.00 | 354.00 |

| Sl. No. | Name of the Scheme | Eleventh Five Year Plan 2007-12 Annual Plan 2008-09 | | | Annual Plan 2009-10 | |
|------------|--|--|---------------|-----------------|---------------------------|--------------------|
| | | Approved Outlay | Actual Expdr. | Approved Outlay | Revised Outlay | Proposed Outlay |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 5. | System improvement for reduction of transmission and distribution losses | 2250.00 | 280.48 | 535.00 | 535.00 | 1108.00 |
| 6. | Extension and development of power supply to industries | 1725.00 | 142.38 | 273.00 | 273.00 | 588.00 |
| 7. | Extension and development of power supply to Agricultural Domestic, Commercial and Services. | 1075.00 | 228.57 | 300.00 | 300.00 | 739.60 |
| 8. | Extension and development of power supply to EWS and street lights. | 1865.00 | 255.29 | 291.00 | 291.00 | 589.00 |
| 9. | Upgradation of existing primary Main SS and providing new primary main SS and EHT lines in the UT of Pondicherry | 12386.00 | 706.28 | 592.02 | 594.02 | 1000.00 |
| 10. | Modernization of billing methods development and e- governance initiatives | 471.00 | 48.59 | 50.00 | 40.00 | 95.00 |
| 11. | Providing communication network for the Electricity Department | 25.00 | 3.71 | 5.00 | 5.00 | 5.00 |

| | | F1 41 | | <u> </u> | | |
|-----|---|-----------------------|---------|----------|---------|-----------------|
| | | Eleventh Five Year | Annual | Annua | ıl Plan | Annual |
| Sl. | | Plan | Plan | 2008 | | Plan 2009-10 |
| No. | Name of the Scheme | 2007-12 | 2007-08 | | 2000 07 | |
| | | Approved | Actual | Approved | Revised | Proposed |
| (4) | | Outlay | Expdr. | Outlay | Outlay | Outlay |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 12. | Establishment of computer based system monitoring centre at Pondicherry. | 3300.00 | 526.98 | 529.00 | 529.00 | 577.00 |
| 13. | Research and development - setting up of standard laboratory. | 325.00 | 56.87 | 124.00 | 116.00 | 199.00 |
| 14. | Formation of Electrical inspectorate and licensing board for Pondicherry. | 1.00 | 0.10 | 0.10 | 0.10 | 0.10 |
| 15. | Rural Electrification (BNP) | 275.00 | 54.00 | 55.00 | 55.00 | 55.00 |
| 16. | Human Resources and Development | 30.00 | 3.29 | 4.00 | 4.00 | 5.00 |
| 17. | Providing meters for all consumers under 100% metering programme. | 894.00 | 13.18 | 39.50 | 39.50 | 101.00 |
| 18. | Establishment of third 230 KV Sub-station at Pondicherry. | 3102.00 | 754.00 | 83.30 | 83.30 | 616.00 |
| 19. | Erection of 230 KV lines from Villianur 230 KV sub-station to the proposed 230 KV sub-station | 1688.00 | 547.72 | 175.00 | 175.00 | 600.00 |
| 20. | Creation of infrastructural facilities in Tsunami affected areas | 300.00 | 130.00 | | | 164.00 |

| Sl. No. | Name of the Scheme | Eleventh Five Year Plan 2007-12 | Annual Plan 2007-08 | Annual Plan 2008-09 | | Annual Plan 2009-10 |
|------------|---|--|---------------------------|------------------------|---------|---------------------------|
| | | Approved | Actual | Approved | Revised | Proposed |
| | | Outlay | Expdr. | Outlay | Outlay | Outlay |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 21. | Modernization and augmentation of 11 KV Ring Main System in Urban areas of Puducherry | 2400.00 | | | | 100.00 |
| 22. | Establishment of 230 KV S.S. at Karaikal | 3710.00 | | 0.10 | 0.10 | 0.10 |
| 23. | Erection 230 KV lines for the proposed 230 KV SS at Karaikal | 4000.00 | | 0.10 | 0.10 | 0.10 |
| 24. | Establishment of Gas Power Plant at Yanam | 7582.00 | | 0.10 | 0.10 | 0.10 |
| | Total | 52607.12 | 4385.70 | 3808.22 | 3808.22 | 7900.00 |