

**ELECTRICITY DEPARTMENT
PUDUCHERRY**

**STATUS UPDATE OF IMPLEMENTATION OF CENTRAL SECTOR SCHEMES IN THE UT OF
PUDUCHERRY AS ON JANUARY 2019:**

The Government of India has launched several schemes to strengthen the Transmission and Distribution system, improving the metering system etc. with an aim to ease out the financial burden of the Discoms. The Electricity Department, Puducherry is implementing the following Central Schemes:

1. Restructured Accelerated Power Development and Reforms Programme (RAPDRP) comprising of Part A (IT), Part A (SCADA) and Part B.
2. Integrated Power Development Scheme (IPDS)
3. Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY)
4. Power System Development Fund (PSDF)
5. Smart Grid Pilot Project.

The details and progress of the above schemes are as follows:

I. Restructured Accelerated Power Development and Reforms Programme (RAPDRP):

Programme that aims to strengthen the power distribution system in the urban area of the country to reduce the AT&C losses.

Funded and implemented by Ministry of Power in two parts viz. Part A and Part-B through M/s Power Finance Corporation, New Delhi.

I (a): Part-A (IT) is to build an IT infrastructure at an approved cost of Rs. 15.01 Crores. The department has so far availed Rs.4.50 Crores.

Expenditure incurred so far: Out of Rs.4.50 Crores loan availed from the GOI, expenditure for an amount of Rs.3.38 Crores had been incurred so far.

Time line for completion of project: 31st December 2018.

Present Status:

Survey of consumer indexing, Preparation of Design document for installation of hardware and peripherals, Finalisation of Network Service Provider, Supply of Hardware had been completed.

The ITIA could not install the File servers in the Data Centre (DC), Disaster Recovery centre (DRC) and Customer care due to delay in according permission by TANGEDCO as there are certain legal issues between the ITIA and TANGEDCO and arbitration matter is still pending before the Hon'ble High Court, Chennai.

An integrated demo on the software applications under Part - A (IT) was conducted on 25/04/2017. The department has sought further customization, which the ITIA is yet to complete.

The Department had requested the ITIA to complete the project by hosting the applications through an alternate location in the State Data Centre, Puducherry.

M/s ITI Limited, Chennai had initially furnished a financial proposal for Rs 24.795 Crores on 18/01/2018 and subsequently revised it to Rs 20.00 Crores exclusive of GST on 24/03/2018, for hosting the core applications / modules under Part A (IT) of R-APDRP scheme in the State Data Centre, Puducherry.

The proposal was sent to Executive Director, M/s Power Finance Corporation, New Delhi on 09/04/2018, seeking extension of project completion time upto 31/03/2019 and additional funds of Rs 11.15 Crores over and above the already sanctioned amount to host the core applications / modules under Part A (IT) of R-APDRP scheme in the State Data Centre, Puducherry.

M/s Power Finance Corporation (PFC), New Delhi had replied on 18/04/2018 that additional fund under RAPDRP scheme at this stage may not be feasible, since no new sanction can be given under RAPDRP as per IPDS guidelines. Hence, any additional expenditure towards hosting of IT Applications in the State Data center may be borne by Utility / UT of Puducherry.

Based on the reply, the ITIA has been requested to confirm whether the project could be implemented as suggested by the funding agency, M/s Power Finance

Corporation, New Delhi. The ITIA is yet to furnish the details. Reminder to ITIA had been sent on 21.03.2018 and 12.06.2018.

In the meanwhile, M/s Power Finance Corporation, New Delhi has been requested to issue a concurrence for payment of the software development charges in respect of the core Metering, billing and collection modules through M/s National Informatics Centre, Puducherry.

Presently, the project implementation works had been completely stopped by the ITIA.

As the project has been stalled due to litigation between ITIA and TANGEDCO, the matter has been taken up with PFC on 9-7-2018, for no decision is being taken, the Billing software of the Electricity Department, Puducherry needs immediate improvement. The Electricity Department experiences much difficulty in furnishing the data related to the billing and collection information. KIND ATTENTION OF THE MINISTRY OF POWER IS REQUIRED URGENTLY. PLEASE PFC MAY KINDLY BE GIVEN ADEQUATE DIRECTIONS TO ENSURE THE IMPASSE IS CLEARED.

On other way this department has taken a step for upgradation of the very old billing software was emphasized. In accordance with the directions of Hon'ble LG, the work has been entrusted to M/s National Informatics Centre, Puducherry after obtaining sanction from the Govt. It was proposed to execute the Collection part of the mechanism initially, so that the consumer will be able to pay their bills as soon as they receive the bills and manual entry of the meter readings in the Billing data base is avoided. The software development works are under progress. The department has extended all the support to NIC and is closely co-ordinating the software development works with NIC. It is expected that the Collection Part of the software will be completed by Feb 2019.

I (b): Part-A (SCADA) is to set up a SCADA DMS system at an approved cost of Rs.13.89 Crores. Funds so far availed under the scheme are Rs.4.167 Crores.

Expenditure incurred so far: The first instalment of Rs.4.167 Crores from the Govt. of India, had been fully incurred and the Utilisation certificate submitted to M/S.PFC. Proposal to avail second instalment of Rs.4.167 had been sent to the Government on 11.09.2018 and the approval is awaited.

Time line for completion of project: 31st March 2019.

Present Status:

- a. Regarding installation of Hardware and Software at Control Centre established in Vengata Nagar Sub Station, most of the hardware installation were completed. DLP (Digital Light Display) installed at CC. RVDU (Remote Visual Display Units) installed at 7 locations.
- b. Data Recovery Centre at Bahour 230 KV Substation is commissioned.
- c. Installation and end to end testing of RTU's in five sub stations were completed.
- d. Installation of 73 nos of FRTU's were completed and end to end testing of 50 FRTU's were also completed.
- e. Fiber Optic communication cables received at site.

II. RAPDRP (Part-B) project:

Objective: Renovation and modernization of Distribution system in Puducherry town

Approved by MOP, GOI on 08th March 2013 for an approved cost of Rs.84.78 Crores.

Total amount of Loan so far availed under the scheme:

Rs.35.827 Crores. (GOI Loan amount of Rs 12.717 crores received in two tranches on 28thMarch 2014 and 08th May 2014. Counter Part Loan amount of Rs 23.11 crores received from PFC in two Tranches on 31st March 2017 and 31st March 2018)

Expenditure incurred so far:

The amount of Rs. 35.827 Crores availed from theGOI had been fully incurred as on 21-01-2019.

Electricity Department, Puducherry has so far given Utilisation certificate to PFC for an expenditure of Rs 29.217 crores. UC for balance amount of Rs. 6.61 crore is being issued to PFC by Feb'2019 so as to avail the next tranche of loan amount.

Extension of time upto 31stMarch 2019,has been accorded to Puducherry in order to complete the works as per the decision taken in the 12thmeeting of Monitoring

committee of GOI on 07-06-2018. M/s PFC has also communicated time line vide letter 02:10:R-APDRP(P-B):2018:PED/57532 Dated 03-07-2018.

All works to be completed by 31-03-2019.

Present Status:

- a. Erection of two nos. of 25 MVA Power Transformer at Villianur and Kurumbapet 110/22 KV Substations. – **All works Completed during April & May'2017**
- b. SCADA compatible Ring Main Unit (RMU) panels had been erected in 40 locations in Puducherry Boulevard area.- **All works Completed during 2017**
- c. As on Jan' 2019 erection of 91 nos. of 315 KVA Distribution transformers have been **completed**. Erection of balance 1 no.of 315 KVA Distribution transformer is under progress – **Will be completed by Feb' 2019.**
- d. Replacement of 35 nos. of Electro mechanical relays into Numeral Relays in Marapalam, Kurumbapet and Kalapet Sub stations – **Completed during 2016-17.**
- e. 30,000 nos. of single phase and 12,500 nos. of three phase Electronic Energy Meters were procured for replacement of existing Electro mechanical meters /defective meters –**Completed during May 2017.**
- f. Renovation of 2100 nos. of earthing system in Distribution Transformers at various locations - **Completed during May 2018.**
- g. Provision of 11 nos. of 11KV, 315 KVA and 630 KVA Distribution Transformers. - **Completed during 2017-18.**
- h. Provision of **23170** nos. of Wedge connectors out of 36000 nos. in the LT and HT distribution systems of Puducherry are completed as on 05-02-2019 and the remaining provisions are under progress - **To be completed by March 2019.**
- i. Provision of 8 sets of 2.4 MVAR Capacitors banks at various 110/22 KV substations – **Work commenced in July 2018 and under progress. To be completed by March 2019.**
- j. Provision of 500 nos. of Distribution Pillar boxes in Puducherry. Supply Order issued on 15-03-2018. 350 nos. Pillar boxes received during Nov'2018 and balance received by Jan'2019– Preparation of Tender documents for erection works is under process -**To be completed by March 2019.**

- k. Provision of Fault Passage Indicators in HT feeders. - **Work completed by January 2019.**
- l. Erection of 27 nos. of 630KVA Distribution Transformers – Supply Order for supply of DTs issued on 28-08-2018 – Distribution Transformers received during Nov’2018. Work awarded for erection of 13 nos. of DTs and allied works on 28-12-2018. Work under progress. Tender floated for erection of balance 14 nos. of DTs. Due –date extended upto 05-02-2019 -**To be completed by March 2019.**
- m. Provision of 70 nos. of 200 KVA Distribution Transformers –Supply order issued on 02-11-2018 – DTs expected by Feb’2019 – Tender to be floated for erection works – **To be completed by March 2019.**
- n. Tender finalized for replacement of non-SCADA RMUs by new SCADA Ready RMUs . Original proposal seeking approval of Govt. for award of work to the L1 bidder for an amount of Rs. 7.449 cr. wassent on 10-12-2018 and again re-submitted after attending the remarks of Finance Department on 01-02-2019 - **After accord of sanction by G.O.P, the work to be taken up and completed by March 2019.**
- o. Provision of Sectionalisersin 22KV Feeders- Already floated for 3 times and cancelled. Reasons stated below:

	Date of Tender Floated	Reason for cancellation
1	19-02-2016	Due to major change in technical specification, tender cancelled
2	09-06-2016	Only one bid was technically qualified. As no competitive bid, tender cancelled
3	18-09-2017	After opening of Financial offer, L1 could not establish the genuiness of the bid document. Hence tender cancelled

- **In spite of tendering thrice the provision of 22kv Sectionalisers could not be finalised due to inadequate manufactures meeting the requirement, in view of meagre 22kv distribution system available in the Indian Utilities. Hence, work not proposed to be taken up.**
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- p. Provision of Automatic Power Factor Controllers (APFC) in Distribution systems. Already floated for 3 times and cancelled. Reasons stated below:

	Date of Tender Floated	Reason for cancellation
1	28-05-2014	L1 quoted rate was 70% more than the approved estimated cost. Hence, tender cancelled
2	06-03-2017	Due to major change in technical specification, tender cancelled
3	15-05-2017	Due to non receipt of sufficient bids, tender cancelled.

- *Re-tendered for 4th time on 03-09-2018. As none of the bids were qualified, the tender was cancelled. Hence, work not proposed to be taken up.*

- q. **Establishment of new 110/22KV Sub-station at Lawspet.** Acquisition of part land through HRI was completed during 2011. Acquisition of balance land pertaining to temple /Private party being carried out through Deputy Collector Revenue(North) since 2011. Stay obtained by the Temple authorities for acquiring land. Hence, work could not be taken up further.

III. INTEGRATED POWER DEVELOPMENT SCHEME (IPDS):

Under Integrated Power Development Scheme (IPDS), the Electricity Department has planned to implement replacement of 35,000 electro mechanical meters with electronic Meters, Installations of 50 nos of distribution transformers, Construction of new 11 KV underground cable feeders, and over head feeders, erection of Capacitor Banks, High Voltage Distribution System, and installation of 240Kwp Roof Top Solar panels in six statutory towns.,in UT of Puducherry at a cost of Rs. 21.63 Crores. Out of the total project cost of Rs.21.63 Crores, 60% of project cost will be received as grant from the Govt. of India and the 10% of amount will be met from the State Plan Funds which is to be availed as loan from PFC and the balance 30% of the amount which is counterpart will be funded by PFC. Out of the 30%, 50% will be converted into grant on completion of the project/AT&C losses. By implementation of the scheme, the Aggregate Technical and Commercial losses will be reduced and the quality of power supply will also

be enhanced. The administrative approval and expenditure sanction of the Government has been accorded on 31.3.2018. so far Rs.3.92 crs has been received from PFC.

Thereafter the department has proposed the following works to be executed under this scheme at a Project cost Rs.21.63 Crores

1. Stringing/Bi-furication of HT Over Head lines.
2. Provision of feeder bay equipments at Karaikal and Yanam EHV SS.
3. Providing of Indoor type VCB at Mahe SS.
4. Erection of new 11 KV RMUs along with UG cable at Karaikal, Mahe and Yanam region.
5. Providing of LT aerial bunched cable at Mahe and Yanam.
6. Installation of new Distribution transformers in the U.T of Puducherry.
7. Metering, Erection of capacitor banks in the U.T of Puducherry.
8. Erection of 63 KVA Distribution transformers under High Voltage Distribution System.
9. Providing of Roof Top Solar Panels (240 KWp) in various Government Buildings.

Present Status:

- a. 30 nos.of 11 KV 200 KVA Distribution transformers have been received. Out of which, 9 nos Distribution transformers have been erected at Karaikal region and 20 nos of 22 KV 315 KVA Distribution transformers have been received and 6 nos .of Distribution transformers will be erected in Urban O&M of Puducherry.
- b. 14 Kms of 11 KV cable received and work order has been placed for erection of 14 Kms of 11 KV cable. Out of which 2.528 KMs of cable had been laid in Town North,Karaikal.
- c. Work Order has been erection of 240 Kwp solar plant at Puducherry, Mahe, Karaikal and Yanam regions.
- d. Supply order has been placed for Procurement of 19 Kms of RACOON conductors.
- e. Provisional work order has been placed for 564 mts of re-orientation of NH 22 KV feeders in Villainur substation..
- f. Supply order has been placed for 30000 nos of single phase and 5000 nos of three phase LPRF meters.

- g. Provisional work Order has been placed for laying 3.1 Kms UG cable at Murungapakkam feeder at Karaikal
- h. Provisional Supply order issued for 15 nos of 63 KVA Distribution transformers.

IV. DEENDAYAL UPADHYAYA GRAM JYOTI YOJANA (DDUGJY):

In order to meet the consistent increase in electricity demand, particularly in rural areas, the Government of India has launched a programme viz. Deena Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) with aim of strengthening of Sub-transmission & Distribution network & Metering in rural areas. It is proposed to implement the DDUGJY scheme in the Union Territory of Puducherry at a total project cost of Rs. 20.15 Crores covering Puducherry and Karaikal regions. Out of the total project cost, 60% of project cost will be received as grant from the Govt. of India and the 10% of amount will be met from the State Plan Funds which is to be availed as loan from REC and the balance 30% of the amount which is counterpart will be funded by REC. Out of the 30%, 50% will be converted into grant on completion of the project. An amount of Rs.15.05 Crores had been approved for providing feeder metering, DTR metering and consumer metering. An amount of Rs.5.00 Crores had been approved for the system strengthening and Access to Rural Households. An amount of Rs. 1.20 Crores has been received by the Department from Govt. of India as first installment which is the Grant portion.

Under the above scheme, it is proposed to erect 21 nos of new 22KV Distribution Transformers and associated, 8.56 Kms of new 22KV spur lines, 12.95 Kms of LT overhead lines in Puducherry region, 10 kms and 29.50 kms of laying of new 22 and 11KV feeders in Puducherry and Karaikal regions respectively for system strengthening, installation of 50,570 nos and 25,039 nos of meters in the rural areas of Puducherry and Karaikal regions and provision of meters for 1250 nos of distribution transformers metering.

Project cost: Rs.20.05 Crores. An amount of Rs.1.203 Crs has been received from REC.

Present Status:

- The administrative approval of the Government of Puducherry has been obtained on 12.6.2018 and the expenditure sanction of the Government had been issued vide GO.Rt.No.30/Dated.11-08-2018.

- a) Supply order has been placed for 21 nos of distribution transformers and final inspection completed materials yet to be supplied.
- b) Supply order has been placed 1250 distribution transformer metering. Inspection is to be carried out.
- c) Supply order has been placed 63087 nos of AC single phase consumer meters and 12522 nos of Three phase consumer meters.. Inspection on testing to be offered.
- d) Supply order has been placed 79 Kms ACSR RACCOON conductor. Inspection on testing to be offered.
- e) Sanction of the Government had been obtained for procurement of 5000 Nos of Current transformer for distribution transformer metering. Provisional order to be issued.
- f) Supply order has been placed for 1250 SMC Distribution Transformer Metering Box.
- g) Provisional work order have been issued to the following 11 KV feeders at Karaikal region
 - Erection of 4.65 Kms of Andoor feeder from 110/11 KV Sorakudy Substation at Karaikal.
 - Erection of 7.865 Kms of Mandakapathu feeder from 110/11 KV P.T Vasal Substation at Karaikal.
 - Erection of 10.38 Kms of Ambagarathur feeder from 110/11 KV Sorakudy Substation at Karaikal.
- h) Regular work orders have been issued for erection of 9.86 Kms of Sivaranthagam feeder from Korkadu Substation in Puducherry
- i) Provisional work orders have been issued to the following distribution transformer at Puducherry.
Erection of 4 nos of 22 KV 200 KVA distribution transformers in the subdivision of AE/Thirubuvani.

Erection of 6 nos of 22 KV 200 KVA distribution transformers in the subdivision of AEE/Rural South.

Erection of 5 nos of 22 KV 200 KVA distribution transformer in the subdivision of AE/Bahour.

Provisional Supply order has been placed for 1100 V Single cored Unarmoured PVC insulated UG cable at various sizes.

The target date for completion of award of work will be 31/12/2018 and the works will be completed by 31st March 2019.

V. POWER SYSTEM DEVELOPMENT FUND (PSDF):

Project - I

Renovation and Modernisation of indoor and outdoor equipments in Villianur and Bahour 230/110KV Auto Sub Stations at an estimated cost of Rs. 10.56 Crores is being executed under Power System Development Fund of Government of India.

Date of Sanction by GOI - 04-08-2015.

Date of signing agreement - 26-02-2016.

Timely completion of the project: 31st June 2019.

Fund released:

Out of the total project cost of Rs.10.56 Crores, Rs.9.50 Crores is grant from the Government of India and the balance amount will be met from the Puducherry State Plan Funds. The Government of India has released an amount of Rs. 95 Lakhs on 18th May 2017.

Out of Rs. 95 lakhs, an expenditure of only Rs. 23.72 lakhs has been incurred and Utilization certificate is to be given after incurring the entire amount of Rs. 95 lakhs.

Present Status:

- a. The Battery Bank in the sub-station have been ***installed during 2017-18.***
- b. Tenders for erection of indoor equipments for an amount of Rs.4.474 Crores had been finalized. Sanction of the Govt. received on 30-07-2018- Work order issued during Oct' 2018- ***Work under progress and to be completed during 2019-20.***
- c. Proposal for erection of outdoor equipments at 230KV Villianur Auto SS for an estimated cost of Rs.5.67 Crores for the DPR quantity of equipments/ work has been sent seeking sanction of Govt. of Puducherry originally on 23-10-2018 and re-submitted again on 28-11-2018 - ***After accord of sanction by G.O.P, the work to be taken up and completed by 2019-2020.***

- d. Tender floated during July'2018 for erection of outdoor equipments at 230KV Bahour Auto SS has been cancelled, due to non available of qualified bids. Re-tender floated on 17-12-2018 has been opened on 28-01-2019 and evaluation under progress - **Work to be completed during 2019-2020.**

Project- II

Overhead Power Ground Wire (OPGW) based Reliable Communication & Data Acquisition system upto 132KV Sub-stations in the Electricity Department, Puducherry, is proposed to be executed under Power System Development Fund of Government of India.

- DPR submitted to the Appraisal Committee of NLDC for a Project cost of Rs. 7.38 crores
- 50% of the project cost i.e. 3.69 crore will be received as grant from the Govt. of India and the balance amount will be met out from the State Plan fund.
- Approval of NLDC issued during July'2018.
- Proposal is being sent to Govt. seeking approval and expenditure sanction to execute the work under PSDF.

VI.SMART GRID PILOT PROJECT:

The Electricity Department, Puducherry is one of the 14 selected city under the National Smart Grid Mission and approval of the Ministry of Power had also been accorded to implement the pilot project with Installation of 33,400 nos of Smart Meters in the Boulevard area of the Puducherry in the town limits and all the LT CT operated services at a cost of Rs. 33.83 crores with 50% contribution by the Government of India. The consumer shall get the following benefits.

- Consumer Engagement & empowerment with greater control over their energy use and bill.
- Improved quality & reliability of power supply
- Increased life of appliances and gadgets due to improved power quality
- Rooftop renewable generations with facility to feed excess power into the grid as the metering were net metering option.
- Improvement in overall consumer satisfaction.
- **Expenditure incurred so far:** The first and second instalment of Grant amounting to Rs 8.88 Crores availed from the Govt. of India, has been fully utilized and the Utilisation Certificate (UC) has been submitted to Ministry of Power. Accordingly, an amount of Rs 5.32 Crores has been sanctioned by the Government of India as the third instalment.

- The work has been awarded to M/s Dong Fang, China and the Site Acceptance Test has been completed on 24.12.2018. The Project was declared Go-Live on 28.12.2018. So far, 27500 Nos. of Smart Meters had been installed in the consumers premises in town area and the Smart Grid Control Centre is functioning.