

IMPELEMENTATION OF SCADA /DMS IN DISTRIBUTION

Project Description	:	Supervisory Control and Data Acquisition /Data Management System (SCADA /DMS)
Project Aim	:	<ul style="list-style-type: none">- Automation of distribution system- Reduction of Line losses
Scope of the Project	:	<ul style="list-style-type: none">- To install 5 RTUs (remote Terminal Units) and 134 Nos. of FRTUs (Field Remote Terminal units)- To set up a control center to receive data and for remote operation- To set up a Disaster Recovery Center- Maintenance of the system for a period of five years
Approved areas for the implementation of the Smart Grid Pilot Project	:	Area covered under the R-APDRP project (Puducherry Urban limits)
Approved cost	:	Rs. 13.89 Crs.
Project Funding	:	100% loan to be converted to Grant on timely completion of the Project.
Consultants	:	M/s CPRI, Bangalore
Smart Grid Investor cum Contractor	:	M/s Dongfang Electronics Pvt. Ltd.,
Implementing Agency	:	Reforms Project Management cell, Division-I
Date of Award of work	:	31.03.2015
Date of signing of Agreement	:	23.05.2016
Project Completion schedule as per original schedule	:	March 2018
Expected date of completion	:	August 2018
Amount released by MoP as 1 st installment on completion of 1 st mile stone	:	Rs. 4.167 Crores
Expenditure incurred so far on Consultant	:	Rs. 2.670 Crores
Balance amount available	:	Rs. 1.495 Crores
Bills under process	:	Nil

PRESENT STATUS

- **RTU's:** Erection of five nos. of RTU's completed. Commissioning tests for these 5 RTU's are under progress.
- **FRTU's:** Out of 134 nos. as the FRTU's proposed 59 Nos. have been installed at established sites. Commissioning tests for these 50 FRTU's are under progress. Remaining 84 Nos. of FRTUs to be installed after site readiness is completed under R-APDRP Part B project.
- **SCADA/DMS Control Centre:** All Civil and Electrical works completed. Most of the Hardware and Software related to Control Centre have been installed and are being tested. Commissioning tests to be done.
- **DISASTER RECOVERY CENTRE:** Hardware and Software related to DR Centre have been provided at Bahour 230KV S.S. Commissioning tests to be done.

No	Item	start	finish
1	Mobilization	Completed	
1.1	Agreement Signing	Completed	
1.2	Project Kick-off	Completed	
1.3	Establishment site office	Completed	
1.4	Site establishment & Resource Mobilisation	Completed	
2	Field Survey for SCADA/DMS Data	Completed	
2.1	Sub-Station and Remote Location	Completed	
2.1.1	Substation Control Layout details (DCPS/ APS/LDMS)	Completed	
2.1.2	Cable routing & length measurements	Completed	
2.1.3	site survey submission	Completed	
2.1.4	Approval of Site survey	Completed	
2.2	Control Centre & DR Centre	Completed	
2.2.1	Control centre & DR centre layout details(Server/WS/VPS)	Completed	
2.2.2	Cable routing & length measurements	Completed	
2.2.3	site survey submission	Completed	
2.2.4	Site survey approval for CC	Completed	
3	Design & Development	Completed	
3.1	System architecture design documents	Completed	
3.1.1	system development	Completed	
3.1.2	Control centre end system architecture	Completed	
3.1.3	FRTU Design (like GA diagram, Cabling details etc..)	Completed	
3.2	Submission of FDS & Datasheets to utility	Completed	
3.2.1	Hardware components	Completed	
3.2.2	Datasheets & FDS approvals	Completed	
3.2.3	Datasheet & FDS approved	Completed	
4	Control Centre and DR Centre	Completed	
4.1	Control Centre Hardware	Completed	
4.1.1	PR	Completed	
4.1.2	Negotiation & PO	Completed	
4.1.3	Delivery to DFE	Completed	
4.1.4	FAT	Completed	
4.2	System installation and commission	Completed	
4.2.1	Hardware /Software Installation & Configuration (Internal)	Completed	
4.2.2	System Database Configuration	Completed	
4.2.3	System Integration Testing (Internal)	Completed	
4.2.4	CC integration RTU & FRTU	Completed	
4.2.5	CC integration with other system	12.03.2018	15.05.2018
4.2.6	CC system handover	16.05.2018	30.06.2018
5	RTU	Completed	
5.1	RTU Modules and Import components	Completed	
5.1.1	Request for Module to China	Completed	

5.1.2	Module Manufacture	Completed	
5.1.3	Shipment of Module	Completed	
5.1.4	Custom Clearance of Module	Completed	
5.1.5	Delivery of Module to DFE Ware house	Completed	
5.2	Panel for RTUs	Completed	
5.2.1	Panel Integration with Modules	Completed	
5.2.2	FAT	Completed	
5.2.3	Dispatch	Completed	
5.3	Erection & installation (one set)	Completed	
5.3.1	Panel Erection (RTU, UPS, DCPS & batteries)	Completed	
5.3.2	Cable Laying & termination	Completed	
5.3.3	Power UP & LDMS Configuration	Completed	
5.3.4	End to End Test	Completed	
5.4	Erection & installation (four set)	Completed	
5.4.1	Panel Erection (RTU, UPS, DCPS & batteries)	Completed	
5.4.2	Cable Laying & termination	Completed	
5.4.3	Power UP & LDMS Configuration	Completed	
5.4.4	End to End Test	01.04.2018	15.05.2018
6	FRTU (50 sets)	Under Progress	
6.1	FRTU Modules and Import components	Completed	
6.1.1	Request for Module to China	Completed	
6.1.2	Module Manufacture	Completed	
6.1.3	Shipment of Module	Completed	
6.1.4	Custom Clearance of Module	Completed	
6.1.5	Delivery of Module to DFE Ware house	Completed	
6.2	Panel for FRTUs	Completed	
6.2.1	Panel Integration with Modules	Completed	
6.2.2	Dispatch	Completed	
6.2.3	Delivery of FRTU to site	Completed	
6.3	Erection & installation	Completed	
6.3.1	Panel Erection (FRTU, DCPS & batteries)	Completed	
6.3.2	Cable Laying & termination	Completed	
6.3.3	End to End Test	10.04.2018	15.05.2018
7	FRTU (84 sets)	Under Progress	
7.1	FRTU Modules and Import components	Completed	
7.1.1	Request for Module to China	Completed	
7.1.2	Module Manufacture	Completed	
7.1.3	Shipment of Module	Completed	
7.1.4	Custom Clearance of Module	Completed	
7.1.5	Delivery of Module to DFE Ware house	Completed	
7.2	Panel for FRTUs	To be taken up	
7.2.1	Panel Integration with Modules	02.05.2018	22.05.2018
7.2.2	Dispatch	23.05.2018	12.06.2018
7.2.3	Delivery of FRTU to site	13.06.2018	15.06.2018

7.3	Erection & installation	18.06.2018	23.08.2018
7.3.1	Panel Erection (FRTU, DCPS & batteries)	18.06.2018	06.07.2018
7.3.2	Cable Laying & termination	09.07.2018	03.08.2018
7.3.3	End to End Test	06.08.2018	23.08.2018
8	Operational Acceptance by Utility	To be taken up	
8.1	Installation of Fibre Optic Cable & Accessories	01.06.2018	30.06.2018
8.2	System availability test	24.08.2018	30.08.2018
8.2.1	System availability test duration	24.08.2018	29.08.2018
8.2.2	Completion of system availability test	30.08.2018	30.08.2018