

Status of Smart Grid Pilots and NSGM Smart Grid Projects

➤ Pilot Projects:

A. Awarded	
<p>1. <u>CESC, Mysore</u></p> <ul style="list-style-type: none"> – Evaluated Project Cost: Rs.32.56 Crs, Gol Support: Rs.16.28 Crs. – Consultant – POWERGRID. – V V Mohalla Division, Mysore (21,824 Consumers). – Adopted Functionalities: AMI-R, AMI-I, OMS, PLM, MG/DG. – Project awarded to M/s Enzen Global Solutions in March 2014 at a cost of Rs.32.56 Crs excl. FMS – 1st & 2nd instalments (Rs.8.14 Crs) of MoP share released to utility. – 18,100 single phase smart meters, 446 DCUs, 158 TMUs, 5 FPIs and 130 HT modems installed. 16,200 smart meters communicating to MDM – 5 RTU/data loggers for SCADA installed in substations. – Testing under progress for 3-phase meters. – Integration of applications under progress. 	<p>2. <u>HPSEB, Himachal Pradesh</u></p> <ul style="list-style-type: none"> – Evaluated Project Cost: Rs.19.45 Crs, Gol Support: Rs.9.73 Crs. – Consultant – POWERGRID. – Kala Amb Industrial Area (1,554 Consumers). – Adopted Functionalities: AMI-I, OMS, PLM. – Project awarded to M/S Alstom T&D in February 2015 at a total cost of Rs.24.99 Crs inclusive of maintenance charges of Rs.6.42 Crs. – First instalment of Rs.2.43 Crores released to the utility from MoP. – 1065 smart meters (885 single phase and 180 three phase) installed. – Control Centre setup (servers, networking) completed. – Type testing of Smart Meters, DTMU and FPI completed – Relays installation under progress. – Integration of MDM (Smart Grid) with existing billing system and approval of revised meter quantity is under progress.
<p>3. <u>UHBVN, Haryana</u></p> <ul style="list-style-type: none"> – Approved Project Cost: Rs.35.94 Crs, Gol Support: Rs.0 Crs. – Panipat City Sub Division (11,000 Consumers). – Adopted Functionalities: AMI-R, AMI-I, PLM, OMS. – Project is being implemented under grant from NEDO (Japan) by M/s Fuji Electric & Co., Japan. – Site survey completed. Engineering for control centre hardware and software completed. – SCADA and AMI at HPTI completed for training purpose – Acceptance testing of 8000 single phase smart meters completed and to be delivered in Apr 2017. – Three phase meters inspection to be taken up 	<p>4. <u>APDCL, Assam</u></p> <ul style="list-style-type: none"> – Evaluated Project Cost: Rs.20.92 Crs, Gol Support: Rs.10.46 Crs. – Consultant – MEDHAJ. – Guwahati distribution region (15,083 Consumers). – Adopted Functionalities: AMI-R, AMI-I, PLM, OMS, PQ, DG – Project awarded to M/s Phoenix IT Solutions in March 2015 at a cost of Rs.29.86 Crs inclusive of FMS and training charges of 1.47 Crs. – First instalment of Rs. 2.61 Crs released to the Utility from MoP. – 7776 single phase (5-30A whole current) and 6453 three phase (10-60A whole current) smart meters delivered. – 703 single phase smart meters installed. – Prototype testing of 3-phase LT CTPT and HT CTPT completed.. – Draft regulations notified by AERC.

<p>5. <u>PSPCL, Punjab</u></p> <ul style="list-style-type: none"> – Evaluated Project Cost: Rs.7.16 Crs, Gol Support: Rs.3.58 Crs. – Consultant – POWERGRID. – Tech-II Sub-division, SAS Nagar (2,737 Consumers). – Adopted Functionalities: AMI-R, AMI-I, PLM. – Project awarded to M/s Kalkitech in March 2015 at a cost of Rs.8.17 Crs inclusive of training and AMC charges of 1.32 Crs. – First instalment of Rs.89.5 Lakhs released to the Utility from MoP. – Survey completed. Design documents approved. – FAT call to be raised by SGIA. – UPS and batteries installed at control centre. 	<p>6. <u>WBSEDCL, West Bengal</u></p> <ul style="list-style-type: none"> – Approved Project Cost: Rs.7.03 Crs, Gol Support: Rs.3.52 Crs. – Consultant – POWERGRID. – Siliguri Town in Darjeeling District (5,265 Consumers). – Adopted Functionalities: AMI-R, AMI-I, PLM. – Project awarded to M/s Chemtrols in June 2015 at a cost of Rs.8.10 Crs inclusive of training and maintenance charges of Rs.0.34 Crs. – First instalment of Rs.87.87 Lakhs released to the Utility from MoP – Site survey completed. DRS for Smart Meters and DCUs were approved. – Type testing reports of RF modules of smart meters yet to be received. – Repeat FAT of smart meters to be taken up. – Revised integration architecture documents of Smart Grid applications awaited from SGIA. – Revised DRS for control centre hardware and software under review.
<p>7. <u>TSECL, Tripura</u></p> <ul style="list-style-type: none"> – Approved Project Cost: Rs.63.43 Crs, Gol Support: Rs.31.72 Crs. – Consultant – POWERGRID. – Electrical Division No.1, of Agartala town (45,290 Consumers). – Adopted Functionalities: AMI-R, AMI-I, PLM. – Project awarded to M/s Wipro in September 2015 at a cost of Rs.80.08 Crs inclusive of training and maintenance charges of 16.98 Crs against the MoP approved cost of Rs.63.43 Crs with utility bearing the additional cost. – First instalment of Rs. 7.93 Crs released to the Utility from MoP – Survey completed. Control centre building ready. Type testing of meters completed. – 7317 smart meters (7072 single phase and 245 three phase) and 65 DCUs installed. – Control centre hardware and software installed. – Individual testing of applications (MDM, PLM) completed. – Integrated testing of applications to be taken up. – 2nd instalment claims forwarded to MoP for release. 	<p>8. <u>TSSPDCL, Telangana</u></p> <ul style="list-style-type: none"> – Evaluated Project Cost: Rs.34.93 Crs, Gol Support: 17.47 Crs. – Consultant – CPRI. – Jeedimetla Industrial Area (11,906 Consumers). – Adopted Functionalities: AMI-R, AMI-I, PLM, OMS, PQ. – Project awarded to M/s ECIL, Hyderabad in October 2015 at a cost of Rs.35.86 Crs. – First instalment of Rs.4.37 Crs released to the Utility from MoP. – Field survey completed. PoC on one DTR taken up. – 28 smart meters (20 single phase, 6 three phase and 2 CT) installed for PoC study. – Smart meters submitted to CPRI, Bangalore for type testing on 02.02.2017. Meter testing reports expected in April 2017. – Draft regulations submitted to TSERC on 29.06.2016.

<p>9. <u>PED, Puducherry</u></p> <ul style="list-style-type: none"> – Evaluated Project Cost: Rs.35.53 Crs, Gol Support: Rs.17.76 Crs. – Consultant – POWERGRID. – Division 1 of Puducherry (34,000 Consumers). – Adopted Functionalities: AMI-R, AMI-I. – Project awarded to M/s Dongfang Electronics, China in May 2016 and agreement signed on 06.07.2016 for total project cost of Rs.43.91 Cr. – First instalment of Rs.4.44 Crores released to the Utility from MoP. – Field survey completed. DRS and FDS documents submitted for approval and are under review. – Sample meters submitted to ERTL (Kolkata) for testing & certification. 	<p>10. <u>AVVNL, Ajmer</u></p> <ul style="list-style-type: none"> – Ajmer City (1,000 Consumers) (PoC). – Adopted Functionalities: AMI. – Completed installation of 1000 smart meters (500-Radius and 500-JnJ meters). – Project was successfully completed and made operational. Training for utility personnel conducted on 22.11.2016 at Ajmer. – Evaluation of project and envisaged outcomes under progress.
<p>11. <u>IIT Kanpur – Smart City Pilot</u></p> <ul style="list-style-type: none"> – Approved Project Cost: Rs.12.5 Crs, Gol Support: Rs.6.25 Crs. – Smart City Pilot in IITK Campus. – Rs.4.69 Crores released to IIT Kanpur as initial funding from MoP. – Solar PVs installation for 19 households completed. – Storage batteries & grid connected inverters installed in 4 houses. – Smart meters are installed in 19 houses having rooftop solar PV. – SCADA/EMS installation almost complete. – Control room development is under progress 	<p>12. <u>Smart Grid Knowledge Center, Manesar</u></p> <ul style="list-style-type: none"> – Approved Project Cost: Rs.9.8 Crs, Gol Support: Rs.9.8 Crs – Adopted Functionalities: AMI, OMS, MG/DG, EV with Charging Infra, HEMS, Cyber Security & Training Infra – Building under construction. – Contracts awarded for Home Energy Management System, Workstations/Training Room Hardware and Furniture for Smart Grid Knowledge Centre – FAT to be taken up for OMS and detailed engineering is under process for AMI. – QR evaluation is under process for Microgrid component.
<p>B. Under Award</p>	
<p>13. <u>UGVCL, Gujarat</u></p> <ul style="list-style-type: none"> – Approved Project Cost: Rs.82.70 Crs (Naroda & Deesa), Gol Support: Rs.41.35 Crs. – Naroda of Sabarmati Circle (23,000 Consumers). – Adopted Functionalities: AMI-R, AMI-I, OMS, PLM, PQ. – Scope revised to Naroda area only and fresh tenders floated in May 2016. (Needs approval of Monitoring Committee along with reduced approved cost for Naroda only) – Letter of Intent issued to M/s Genus on 27.03.2017 for Rs.35.47 Crs. – Detailed award shall be placed by end of April 2017. – In-principle approval for implementation of dynamic tariff issued by GERC in January 2013. 	

➤ **Under NSGM:**

<p>14. <u>CED, Chandigarh</u></p> <ul style="list-style-type: none"> – Approved Project Cost: Rs.28.58 Crs, Gol Support: Rs.8.6 Crs (@30%). – Smart Grid Project at Sub Division 5 of Chandigarh (29,433 Consumers). – Adopted Functionalities: AMI, DT monitoring, S/S Automation, Rooftop Solar PV, IT infra. – Project was approved by Empowered Committee of NSGM on 29.03.2016 for a cost of Rs.28.58 Crores. – Sanction letter to CED was issued on 22.04.2016. – Smart Grid cell and SLPMU formed. – RECPDCL appointed as Project Management Agency. – RECPDCL issued tenders for AMI, DTMS & SCADA on 10.03.2017. – Bipartite agreement signed between CED & NSGM on 14.03.2017. – First instalment of NSGM grant sanctioned by MoP for Rs.85.74 Lakhs. 	<p>15. <u>Amravati, MSEDCL, Maharashtra</u></p> <ul style="list-style-type: none"> – Approved Project Cost: Rs.90.05 Crs, Gol Support: Rs.27.02 Crs (@30%). – Smart Grid Project at Amravati Town of Maharashtra (1.48 Lakh Consumers). – Adopted Functionalities: AMI, OMS, DR. – Project was approved by Empowered Committee of NSGM on 29.03.2016 for a cost of Rs.90.05 Crores. – Sanction letter to MSEDCL was issued on 22.04.2016. – Tender floated on 22.12.2016. Last date for bid submission date extended up to 15.04.2017. – Tripartite agreement signed between Maharashtra Government, MSEDCL and NSGM on 28.03.2017. – First instalment of NSGM grant sanctioned by MoP for Rs.1.82 Crs.
<p>16. <u>Congress Nagar, MSEDCL, Maharashtra</u></p> <ul style="list-style-type: none"> – Approved Project Cost: Rs.139.15 Crs, Gol Support: Rs.41.74 Crs (@30%). – Smart Grid Project at Congress Nagar Division of Nagpur (1.25 Lakh Consumers). – Adopted Functionalities: AMI, SCADA, OMS, DR. – Project was approved by Empowered Committee of NSGM on 27.10.2016 for a cost of 139.15 Crores. – Sanction letter to MSEDCL was issued on 29.07.2016. – Empowered Committee in its second meeting on 27.10.2016 approved the project. – Tender floated on 22.12.2016. Last date for bid submission date extended up to 20.04.2017. – Tripartite agreement signed between Maharashtra Government, MSEDCL and NSGM on 28.03.2017. – First instalment claims of NSGM grant forwarded to MoP. 	<p>17. <u>KESCO, Kanpur</u></p> <ul style="list-style-type: none"> – Approved Project Cost: Rs.319.57 Crs, Gol Support: Rs.95.87 Crs (@30%). – Smart Grid Project at Kanpur City (5.39 Lakh Consumers). – Adopted Functionalities: AMI, PLM, DT Monitoring, DG. – Project was approved by Empowered Committee of NSGM on 27.10.2016 for a cost of Rs.319.57 Crores. – Sanction letter to KESCO was issued on 17.11.2016 with recommendations of Empowered Committee. – Acceptance of sanction letter awaited.