

Agenda of 6th Meeting on Metering issues in NER

Date: 17.06.2015

Venue: GUWAHATI.

Follow-up items:

1. Urgent procurement of 50 SEMs and 10 DCDs on Single Tender basis as approved in 24th CCM:

On procurement of these meters, meters should be there at all locations as identified by NERLDC. Further, meters should be replaced in all locations where there are errors.

During 4th Metering Meeting (MM), DGM (AM) informed that opening of bids for tender will be held on 24.04.2015 and order for placement for 50 SEMs & 10 DCDs will be made on 08.05.2015 and materials are expected to receive by mid-June, 2015. He stated that maximum efforts have been made by NERTS to deliver the above materials at the earliest.

During 5th MM, Manager (AM) informed that order for 50 SEMs and 10 DCDs would be made on 21.05.15 and meters would be received by Mid-July, 2015.

NERTS may kindly intimate the current status.

2. Procurement of 250 SEMs / 40 Laptops / 20 DCDs : Status:

During 4th MM, DGM (AM) informed that tendering process is in progress and the status will be intimated to NERLDC/NERPC at the earliest. Further, he informed that Technical Specifications (TS) has been sent to different firms and the reply is awaited.

Members stated that the performances of Elster meters are not satisfactory and requested NERTS to avoid procuring from this firm.

DGM (AM) stated that it would not be possible on their part to avoid any firm unless the specific reasons about the erratic behavior of the meter is put in record by the constituents. He requested the Metering Committee to prepare the report about the non-satisfactory performance of ELSTER make meter and based on this report constituents may direct NERTS not to procure these meters.

During 5th MM, DGM (MO), NERLC informed that documentary evidences regarding mal-operation of Elster meters in NTPC Bongaigaon, OTPC and KHEP were placed on record (**Annexure-2**).

All constituents advised NERTS not to procure meters of Elster make. It was also recorded in the 1st Metering Committee meeting where NERTS was advised to procure through Limited Tender from three shortlisted suppliers.

Manager (AM), NERTS mentioned about procedural issues in such case. However, Constituents insisted that Elster meters should not be procured. NERLDC highlighted urgent need of meters and emphasized that procurement should not be delayed. It was agreed that till emergence of some solution, another batch of meters/DCDs would be procured on single tender basis.

Committee may like to discuss.

3. Time drift in meters action taken by Constituents in last one month:

After detailed deliberation in 4th MM, the sub-committee requested NERTS to arrange the seminar/workshop to train the constituent how to correct the time drift at the earliest.

During 5th MM, Manager (AM), NERTS circulated the procedure for time correction of meters during the meeting and advised all agencies in whose premises meters are installed to go for time correction as and when necessary. The procedure is attached at **Annexure - A.3**

The sub-committee requested all the constituents to go through the above procedure and carry out the time drift setting as per procedure of NERTS.

Constituents/NERLDC may kindly intimate the current status.

4. Error in meter reading:

- 132 KV Balipara-Gohpur line : Meter error in Balipara end
- 132 kV Imphal-Ningthoukong (very low reading at Ningthoukong end)
- 132 kV Nirjuli-Gohpur (Low reading at Nirjuli end)
- 220 kV Kathalguri – Tinsukia II (Tinsukia end reading <50%)

During 4th MM, DGM (AM) informed that meter error at Ningthoukhong has already been rectified. Further, he informed that at Nirjuli end there was some connection problem in CVT and the same has been rectified. He requested NERLDC to check the same and intimate them in case problem persists. Regarding other two locations above, he mentioned that they look into the matter and intimate the status to NERLDC/NERPC at the earliest.

During 5th MM, DGM(MO), NERLDC intimated that the problem with Imphal-Ningthoukhong and Kathalguri-Tinsukia-II is still persisting. NERTS was advised to attend these problems. NERTS agreed to look into the matter soon and intimate the status in next meeting.

NERTS may kindly intimate the current status.

5. **AMR scheme was agreed in principle by 24th. Commercial Committee.** It is necessary to expedite the AMR project for smooth collection of SEM reading.

During 4th MM, DGM (AM) informed that NERTS Technical Specifications (TS) has been finalized and Administrative Approval is likely to be obtained on 15.05.2015 and tender will be issued by 31.05.2015. In the meantime TS has been mailed to NERPC and requested them to circulate to all the constituents to give their comment/observations before finalization of tender.

NERPC has already forwarded the TS to all the constituents and a comment was received from NERLDC only.

During 5th Metering Meeting, Manager (AM), NERTS intimated that they had received corrections in TS suggested by NERLDC. NERTS was advised to go ahead with the modified TS for implementation of AMR at the earliest.

In the meantime, NERTS has furnished the detailed cost break-up and its TS and the same is enclosed at **Annexure – 5**.

Committee may like to discuss.

6. 132 KV Agia-Nangalbibra line: Meter reading less than half at Nangalbibra end.

NERLDC informed that Meter at Palatana end (NP-7581-A, L&T make) of 400 KV Silchar line -2 faulty since 7th April'15. Meter went dead after giving time synchronisation command.

Also the Time Drift observed even in newly installed meters. New Meter at Bongaigaon end (NP-8574-A) of 400 KV Siliguri line -4 installed on 15th March'2015 has drift of more than 15 minutes.

The Sub-committee advised NERTS to furnish installation report of SEMs giving details of Meter Time Drift also. Meter with time drift of more than 1 minute may not be installed at all.

DGM (AM) informed that they he will look into the matter and the status will be intimated to NERLDC/NERPC at the earliest.

Regarding meter problem in 132 KV Agia-Nangalbibra line, the 5th MM Sub-committee decided to avail the services of AEGCL metering experts. Shri Karuna Sharma (9435013532), Asstt. GM- AEGCL may be contacted by Me. ECL for joint checking and rectification.

NERTS was advised to attend the problems of Palatana and Bongaigaon at the earliest.

Meghalaya/NERTS may kindly intimate the status.

7. 132 kV Doyang- Mokokchung line: Meter reading not available from Mokokchung end:

During 5th MM, NEEPCO representative highlighted the metering problem on above line. It was felt that the issue would have to be taken-up with Nagaland as collection and transmittal of reading would be their responsibility, thereafter, NERTS would be advised to install meter and hand over DCD to Nagaland representative. Nagaland was advised to identify nodal officer for the activity.

Nagaland/NERTS may kindly intimate the status.

ANNEXURE-3

Procedure for time and date drift correction in ELSTER Energy meters.

A). Procedure for time and date correction in DCD/CMRI:-

1. Switch on CMRI/DCD. Main Menu will appear in display.
2. Press “2 nd” and “S” button simultaneously in DCD/ CMRI Keypad. System Setup menu will appear in Display.
3. Press “D” button in DCD/ CMRI Keypad for Scrolling down to Time option.
4. Press “E” to increase or press “A” to decrease Hour value (if hour value is required to be adjusted).
5. Press “D” to select minute value. Press “E” to increase or press “A” to decrease minute value (if minute value is required to be adjusted).
6. Press “D” to select second value. Press “E” to increase or press “A” to decrease second value (if second value is required to be adjusted).
7. Press “D” button in DCD/ CMRI Keypad for Scrolling down to Date option.
8. Follow the same steps to increase or decrease date.
9. Press “C” button in DCD/CMRI for exit to main menu.

B) Procedure for uploading time synchronizing programme “SetDateI” into DCD/CMRI.

1. Connect the DCD/CMRI to PC using COM PORT 1.
2. Switch On the DCD/CMRI. Main menu will display.
3. Press “9” and Enter. A:\> will appear in Display.
4. Type “b:” and then press Enter. B:\> will appear in display.
5. Type “cd abb” (cd space abb) and then press Enter. B:\ABB> will appear in display.
6. Type “pcom” in B:\ABB>
7. Run pearl reporting programme. Main screen will be opened in subsequent screen.
8. Click on Reports menu and select the “Call MRI File transfer programme” submenu. A separate window will be opened in the subsequent screen.
9. Select “PC to MRI” as task. Select com port 1.
10. By default PC end path will appear as C:\ABB*.*. If the “SetDateI” folder has been saved in C drive then modify the PC end path as C:\SetDateI*.* Keep the MRI end path as it is.
- 11 Press “Enter” in DCD then Click on Transfer button. A separate DOS window will opened and files transfer will be started.
- 12 Both the files in “SetDateI” folder viz. BPLSETP.SSS and SETDATEI will be transferred to CMRI.
13. Once all the files has been transferred to CMRI, it prompts the message for confirmation.

After correction of DCD/ CMRI time/ date and uploading ofSetDateIprogramme into CMRI go for time synchronizing of energy meters.

C) Procedure for time Synchronizing of energy meters with DCD/CMRI.

1. Connect the DCD/CMRI to meter through optical port of meter. Use com port 2 of DCD/CMRI.
2. Switch On the DCD/CMRI. Main menu will display.
3. Press “9” and Enter. A:\> will appear in Display.
4. Type “b:” and then press Enter. B:\> will appear in display.
5. Type “cd abb”(cd space abb) and then press Enter. B:\ABB> will appear in display.
6. Type “setdatei” and then press Enter. The “setdatei” programme will run in DCD and time synchronization will be done. Successful completion of time synchronization message will display in DCD.

By

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Supply, installation, testing, commissioning with comprehensive AMC for four years after warranty towards implementation of automatic meter data reading (AMR) system at various locations of North Eastern Region

(Price Break-up of Ex-Works Price and applicable taxes and duties)

PRICE BREAK-UP for supply part of the tender for Supply, installation, testing, commissioning with comprehensive AMC for four years after warranty towards implementation of automatic meter data reading (AMR) system at various locations of North Eastern region

Sl. No.	Item	Unit	Qty. to be supplied as per delivery destination	Unit Ex-works price	Unit freight & insurance charges	Unit FOR destination price (5+6)	Total Ex-works price (4 x 5)	Total freight & insurance charges (4 x 6)	Total FOR destination price (4 X 7)	Taxes & Duties			Total FOR destination price including tax (10 + 16)
										Excise duty	Sales Tax / VAT		
1	2	3	4	5	6	7	8	9	10	11	12	13	17
A For Substations or Generating station with meter located at Control Room (Approx 92 Locations)													
1	Supply of all required hardware along with accessories i.e. Meter Interface Unit / Protocol Converter/ Optical probe / Connector / Converter / cable for data transfer between meter and Data Concentrator etc.	Per SEM	260	514	41.12	555.12	133640	10691.2	144331.2				
2	Data Concentrator unit / Data Accumulator unit	Nos.	67	44638	3571.04	48209.04	2990746	239259.68	3230005.68				
3	GPRS/GSM/CDMA modem including all required accessories for communication	Nos.	67	inclusive	inclusive	inclusive	inclusive	inclusive	inclusive				
4	Data Converter Unit for Meter having only optical port	Nos.	13	2679	214.32	2893.32	34827	2786.16	37613.16				
B For Central Location at NERLDC Shillong													
1	Central Server including required OS & RDBMS	Nos.	2	1357725	108618	1466343	2715450	217236	2932686				
2	GPRS/GSM/CDMA modem including all required accessories for communication	Nos.	2	3354	268.32	3622.32	6708	536.64	7244.64				
C Common for Total Scheme													
1	Meter Data Acquisition & Analysis software for all Data Concentrator / Accumulator unit (Approx 92 nos.) and Central Server at NERLDC (2 Nos.). The charges for software shall be paid once only and after that it shall be POWERGRID property. Hence no extra charges for this shall be paid for additional locations in future.	LS	1	562880	45030.4	607910.4	562880	45030.4	607910.4				
TOTAL									6,959,791.08				
(IN WORDS)				Rupees Sixty Nine Lakh Fifty Nine Thousand and Seven Hundred Ninety One and Eight Paise only									

(Delivery destination shall be as per Schedule-8)

Note:- 1. For adding any new meter into AMR system at existing location as well as at new location during the warranty/AMC period, charges for the required equipments supply and installation shall be paid as per unit rate of initial LOA and same has to be considered under the scope of AMC. AMC charges for the additional meter shall also be paid as per LOA unit rate.

Rate & amount of taxes duties & levies payable on the transaction between the Contractor and the Owner and octroi/entry tax as applicable for destination site/state on all items of supply including bought-out finished items (to be identified in the Contract), which shall be dispatched directly from the sub-vendor's works to the Owner's site (sale-in-transit), only. Other taxes, duties & levies for all the bought-out items are to be included in the Ex-works Price (Col. No. 5 & 8).

GRAND TOTAL(including SUPPLY, INSTALLN & AMC-4yr)

(One Crore Seventy One Lakh Twenty Four Thousand and 17,124,319.08 Three Hundred and Nineteen only)

SCHEDULE - 3B

Supply, installation, testing, commissioning with comprehensive AMC for four years after warranty towards implementation of automatic meter data reading (AMR) system at various locations of North Eastern region

PRICE BREAK-UP for erection testing & commssioning part of the tender for Supply, installation, testing, commissioning with comprehensive AMC for four years after warranty towards implementation of automatic meter data reading (AMR) system at various locations of North Eastern region

Sl.No.	Item Description	Unit	Qauntity	Rate in Rs	Amount in Rs
1	Installation, Testing & Commissioning including Integration with NERLDC / customization cost for works of Implementation of Automatic Meter Reading (AMR) for SEM in North Eastern Region as per Technical Specification complete in all respect.	Per SEM	260	5604	1457040
2	Installation, Testing & Commissioning/Customization of 02 numbers servers along with all required software at NERLDC as per technical specification in all respect including integration with SEMs.	Lot	1	5122868	5122868
Total Amount					6579908

NOTE:- ALL THE ABOVE RATES SHOULD BE INCLUSIVE OF SERVICE TAX.

Supply, installation, testing, commissioning with comprehensive AMC for four years after warranty towards implementation of automatic meter data reading (AMR) system at various locations of NORTH EASTERN region

PRICE BREAK-UP for Post warranty comprehensive AMC part of the tender for Supply, installation, testing, commissioning with comprehensive AMC for four years after warranty towards implementation of automatic meter data reading (AMR) system at various location of North Eastern region.

Sl.No.	Item Description	Unit	Qauntity	Rate in Rs	Amount in Rs
1	Comprehensive AMC for all hardware/software/equipments installed under this project for 1 st Year after Warranty	Per SEM	260	3257	846820
2	Comprehensive AMC for all hardware/software/equipments installed under this project for 2 nd Year after Warranty	Per SEM	260	3377	878020
3	Comprehensive AMC for all hardware/software/equipments installed under this project for 3 rd Year after Warranty	Per SEM	260	3506	911560
4	Comprehensive AMC for all hardware/software/equipments installed under this project for 4 th Year after Warranty	Per SEM	260	3647	948220
Total Amount					3584620

NOTE:-(1) ALL THE ABOVE RATES SHOULD BE INCLUSIVE OF SERVICE TAX.

(2) For adding any new meter into AMR system at existing location as well as at new location during the warranty/AMC period, charges for the required equipments supply and installation shall be paid as per unit rate of initial LOA and same has to be considered under the scope of AMC. AMC charges for the additional meter shall also be paid as per LOA unit rate.

Bidder's Scope

The scope of work in complete conformity with subsequent sections of the specification shall include site survey, planning, design, manufacturing/integration, testing, supply, transportation & insurance, delivery at site, storage, installation, commissioning, demonstration for acceptance, training and documentation of AMR system including:

- Design Document for complete AMR System. Software Requirements Specifications for CDCS and DCU.
- Server System and Central Data Collection System (CDCS) .Data Concentrator Unit (DCU) with Built-in GPRS/CDMA modem
- Connection and interfacing of meters with DCU..Interface Converter Unit wherever required.
- Communication channels between each DCU and CDCS for non OPGW locations. All cabling, wiring, terminations and interconnections of the equipments.Database development, Displays and Reports as per requirement of NERTS/LDC. Standard database (RDMS) for storage of data.
- Normalized structure of database. Meter data processing and configuration of energy accounting reports as per requirement of NERLDC.
- Training of NERLDC personnel .Warranty for one year after issue of TOC by NERTS/LDC. Support and Maintenance during 4 years
- extended period under AMC after expiry of warranty period.

Exclusions from Bidder's Scope of Work

Followings are not included in the scope of the bidder and shall be provided by NERTS/LDC without any extra cost to bidder:-

- Auxiliary Power Supply for DCU at each location and for server system/CDCS at single point at each location. Further distribution system
- from this single point is to be provided by bidder.
- Provision of static IP and internet connection at NERLDC
- Building, air conditioning systems and other infrastructures.
- PC required for data downloading at each location with connector against local requirement by site. Local site shall arrange for the same.

Facilities to be provided by NERTS/LDC for Project Implementation

NERLDC will be responsible for providing the following facilities as may be reasonably required for project implementation:

- Arranging necessary shutdowns and work permits at all locations.
- Obtaining requisite statutory clearances and/or approvals as required to be taken for scope of work of AMR.
- Providing power supply outlets for construction work.
- Providing storage space at sites free of cost wherever is available.

Manufacturer specific Protocol Details for meter communication. However, Supplier shall have to sign agreement for not sharing the protocol / code of the meter required for AMR.

The end equipment responsibility after AMC will in scope of owner and communication during AMC or beyond will be done to party directly by owner of station