

**MINUTES OF 9<sup>th</sup> Metering Committee meeting**

**Date** : 09/10/2015 (Friday)  
**Time** : 14:00 hrs  
**Venue** : "Hotel Nandan", Guwahati.

The List of Participants in the Meeting is attached at **Annexure - I**

Sh. P.K. Mishra, Member Secretary, requested Shri B. Lyngkhoi, Director/SE(O) to take up the agenda item of metering after OCC meeting.

SE(O) before proceeding further to the agenda item, requested DGM(MO), NERLDC to highlight various issues relating to metering.

DGM(MO) gave a presentation and he highlighted three important issues.

- a. Time Drift in SEMs across the Region
- b. Weekly readings and delay in receipt from some locations
- c. Maintenance of SEMs/DCDs

DGM(MO), NERLDC stated that large time drift in SEMs is due to the fact that respective utilities in whose premises SEMs are located has not taken action in correcting time whenever needed in spite of repeated reminders in various forums. He stated that time drift was there in POWERGRID locations also and requested for a time bound action plan to address the issue. Time drift has been causing fluctuation in computed pool loss of NER which is not desirable (Two plots of fluctuation shown in **Annexure-II**)

He also highlighted the delay in receipt of weekly SEM readings mainly from locations like Dimapur, Jiribam and Silchar of POWERGRID, NERTS and requested that all readings must reach NERLDC by Tuesday.

**Follow-up items:**

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

DGM (AM), POWERGRID-NERTS stated that 50 nos. SEM (L&T-make) & 10 Nos. DCD have already been received at Misa store & installation plan also prepared.

Materials will be diverted shortly after regularization in SAP. Installation will be completed by 20.10.15.

This will enable replacement of all SEMs with time drift > 5 minutes.

**Deliberation of the sub-Committee**

DGM-AM NERTS informed that the installation will be completed by 22.10.2015.

***The sub-committee noted as above.***

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

As per the status given in the 8<sup>th</sup> Metering Committee meeting, expected date of issuance of LOA would be end of December, 2015. It implies that Meters would not be in place before February, 2016.

With the available stock of SEMs and projected commissioning of new elements in NER, it would not be possible to manage with existing numbers till February, 2016. This has been highlighted by NERLDC on a number of occasions.

**Deliberation of the sub-Committee**

DGM (AM), POWERGRID-NERTS stated that schedule for procurement (250 meters) are as under:

Floating of NIT : 14.10.2015

Opening of Bid Document : 1st week of November, 2015

Issue of LOA : 24.12.2015

Further, DGM (AM), POWERGRID-NERTS stated that regarding purchase of 50 nos. meters from Secure Meters on urgency, the repetitive purchase/order on Single Tender basis is not recommended. However, POWERGRID will send drifted L&T meters of about 25-30 nos to L&T works and get them repaired at the earliest. The same will cater to above requirement of NER till procurement of 250 meters is completed. Target for rectification of drifted SEMs: -15.12.15

***The sub-committee noted as above.***

**3. Metering at Bishwanath Chariali (BNC):**

Power flow in Biswanath Chariali-Agra HVDC commenced on 22.09.2015 and it is settled as exchange between NER and NR. Now NR has become a new Deviation pool member in NER.

Proper metering in BNC is necessary. However, on receipt of meter readings from BNC, many mismatches were observed and accounting became almost impossible. Subsequently accounting had to be done by using reading of Agra end SEMs applying computed losses.

Date	Time	MW	MW	MW	MW	LOSS	%	MW
		<b>BNC-BLP-1 E</b>	<b>Agra NR-01 F</b>	<b>BNC ICT G</b>	<b>(E+G)</b>			
25-09-2015	15:45	-0.9	0.0	<b>1.164</b>	<b>0.3</b>	0.3	100%	0.0
25-09-2015	16:00	-145.5	-76.2	<b>1.745</b>	<b>-143.7</b>	-67.5	47%	48.9
25-09-2015	16:15	-300.2	-253.1	<b>1.745</b>	<b>-298.5</b>	-45.4	15%	103.0
25-09-2015	16:30	-302.5	-288.0	<b>1.455</b>	<b>-301.1</b>	-13.1	4%	104.1
25-09-2015	16:45	-302.5	-285.7	<b>1.455</b>	<b>-301.1</b>	-15.4	5%	104.1
25-09-2015	17:00	-302.5	-286.8	<b>1.455</b>	<b>-301.1</b>	-14.3	5%	103.6
25-09-2015	17:15	-302.8	-285.7	<b>1.745</b>	<b>-301.1</b>	-15.4	5%	104.1
25-09-2015	17:30	-301.1	-285.1	<b>1.455</b>	<b>-299.6</b>	-14.5	5%	103.0
25-09-2015	17:45	-302.3	-283.9	<b>1.745</b>	<b>-300.5</b>	-16.6	6%	103.0
25-09-2015	18:00	-301.7	-283.3	<b>1.745</b>	<b>-299.9</b>	-16.6	6%	103.6
25-09-2015	18:15	-302.5	-281.6	<b>1.455</b>	<b>-301.1</b>	-19.5	6%	104.1
25-09-2015	18:30	-383.4	-314.2	<b>1.745</b>	<b>-381.7</b>	-67.5	18%	130.3
25-09-2015	18:45	-453.2	-427.6	<b>1.745</b>	<b>-451.5</b>	-23.9	5%	154.8
25-09-2015	19:00	-451.8	-431.7	<b>1.745</b>	<b>-450.0</b>	-18.3	4%	153.0
25-09-2015	19:15	-452.9	-430.5	<b>1.745</b>	<b>-451.2</b>	-20.7	5%	154.8
25-09-2015	19:30	-409.6	-431.7	<b>1.745</b>	<b>-407.9</b>	23.9	-6%	139.6
25-09-2015	19:45	-203.3	-253.1	<b>2.036</b>	<b>-201.3</b>	51.8	-26%	71.6
25-09-2015	20:00	-25.0	-62.3	<b>1.455</b>	<b>-23.6</b>	38.7	-164%	9.3
25-09-2015	20:15	0.0	0.0	<b>1.455</b>	<b>1.5</b>	1.5	100%	0.0
25-09-2015	20:30	0.0	0.0	<b>1.164</b>	<b>1.2</b>	1.2	100%	0.0
25-09-2015	20:45	0.0	0.0	<b>1.455</b>	<b>1.5</b>	1.5	100%	0.0
25-09-2015	21:00	0.0	0.0	<b>1.164</b>	<b>1.2</b>	1.2	100%	0.0
25-09-2015	21:15	0.0	0.0	<b>1.455</b>	<b>1.5</b>	1.5	100%	0.0
25-09-2015	21:30	0.0	0.0	<b>1.455</b>	<b>1.5</b>	1.5	100%	0.0

In this regard, following are observed:

1. Converter transformer reading 1/3<sup>rd</sup> of actual. BNC ICT (aux consumption) power flow exists even when no import from Balipara-BNC.
2. CTU is not carrying out pre-commissioning checks like polarity, meter time etc in line with 18(a)(1) of CEA Metering Regulations.

3. This is causing error resulting in serious problems which happened in case of 400 KV Binaguri-Bongaigaon III/IV and has been repeated in BNC-Agra
4. CTU is not sending meter installation report to NERLDC specifying Element name, Meter No., CTR, PTR.
5. Repeated requests are required to be made from NERLDC to obtain such information.
6. This is resulting in inability to carry out data processing, computation.
7. Large mismatch/error in SEM readings
8. Such errors have financial implication on utilities

**Deliberation of the sub-Committee**

DGM(MO), NERLDC informed that the error has been rectified at BNC by NERTS. Further, he stressed that NERTS should carry out all pre-commissioning checks and furnish installation report with full details to NERLDC. NERTS agreed.

***The sub-committee noted as above.***

**4. Installation, operation and maintenance of SEMs and accessories:**

Recently, the DCD at Umtru of Meghalaya turned faulty. NERTS was requested to do the needful.

***NERTS suggested the following:***

*One person from MePTCL may kindly be deputed to Misa to collect one DCD(L&T supplied new) & procedural acquaintance. At Shillong, we don't have any healthy DCD.*

*Further, during discussion I was intimated that only charger is not working. So I suggested repair/replacement of charger with same O/P volt/Curr rating from a local market and submit the bill to NERTS for reimbursement.*

Relevant provisions in IEGC and CEA Metering Regulations are as below:

**IEGC**

6.4.21. The CTU shall install special energy meters on all inter connections between the regional entities and other identified points for recording of actual net MWh interchanges and MVarh drawals. The installation, operation and maintenance of special energy meters shall be in accordance with Central

**Electricity Authority (Installation and Operation of Meters) Regulations, 2006.**

All concerned entities (in whose premises the special energy meters are installed) shall take weekly meter readings and transmit them to the RLDC by Tuesday noon. The SLDC must ensure that the meter data from all installations within their control area are transmitted to the RLDC within the above schedule.

**CEA Metering Regulations**

**6. Ownership of meters. -**

**(1) Interface meters**

- (a) All interface meters installed at the points of interconnection with Inter-State Transmission System (ISTS) for the purpose of electricity accounting and billing shall be owned by CTU.

**18. Calibration and periodical testing of meters. -**

**(1) Interface meter**

(a) **At the time of commissioning, each interface meter shall be tested by the owner at site** for accuracy using standard reference meter of better accuracy class than the meter under test.

- (b) All interface meters shall be tested at least once in five years. These meters shall also be tested whenever the energy and other quantities recorded by the meter are abnormal or inconsistent with electrically adjacent meters. Whenever there is unreasonable difference between the quantity recorded by interface meter and the corresponding value monitored at the billing center via communication network, the communication system and terminal equipment shall be tested and rectified. The meters may be tested using NABL accredited mobile laboratory or at any accredited laboratory and recalibrated if required at manufacturer's works.

- (c) **Testing and calibration of interface meters may be carried out in the presence of the representatives of the supplier and buyer. The owner of the meter shall send advance notice** to the other party regarding the date of testing.

**10. Operation, Testing and Maintenance of meters. -**

The operation, testing and maintenance of all types of meters shall be carried out by the generating company or the licensee, as the case may be.

**Deliberation of the sub-Committee**

The Sub-Committee requested NERTS to help the constituents regarding O&M of SEM and DCD as far as possible. DGM-AM, NERTS requested for convening a

special meeting at NERLDC involving NERTS, NERPC and Constituents where these issues can be discussed in detail to arrive at an agreed modality.

It was agreed to convene a meeting in November, 2015.

***The sub-committee noted as above.***

**5. Time Drift in Meters & action required:**

During 6<sup>th</sup> MM, it was agreed that NERTS would prepare a video on time correction of SEMs and same will be played in next OCC / Metering Committee meeting. It would also be sent to the Meter data collection locations for their ready reference.

It is once again requested that all utilities in whose premises SEMs are located should ensure time correction whenever there is a drift of more than one minute. This should be done without waiting for any advice from RLDC or CTU. Now the meters with large time drift are being replaced and if regular action is not taken by utilities, we shall be back to the situation with mismatches.

**Deliberation of the sub-Committee**

Members requested NERPC to upload time drift correction procedure on its website for future reference. The Sub-Committee also requested NERTS to engage some agency for check of time drift of SEMs at site locations and provide detailed report in tabular format (format to be supplied by NERLDC) to **NERLDC** as early as possible.

It was agreed that the issue of time drift and action plan to address it in time bound manner will be discussed in the special meeting scheduled in Nov'15.

***The sub-committee noted as above.***

**6. AMR scheme was agreed in principle by 24<sup>th</sup> Commercial Committee.**

It is necessary to expedite the AMR project for smooth collection of SEM reading.

During 8<sup>th</sup> MM meeting, DGM (AM), POWERGRID-NERTS stated that purchase process was being initiated after the approval in the 15<sup>th</sup> NERPC meeting and the schedule is given below:

Floating of NIT : 30.10.2015  
Opening of Bid Document : 30.11.2015  
Issue of LOA : End December, 2015

**Deliberation of the sub-Committee**

DGM (AM), NERTS informed the forum that the scheme is progressing as per schedule.

***The sub-committee noted as above.***

**Date and Venue of next MM**

It is proposed to hold the 10th Metering meeting of NERPC in the third week of November, 2015. The exact venue will be intimated in due course.

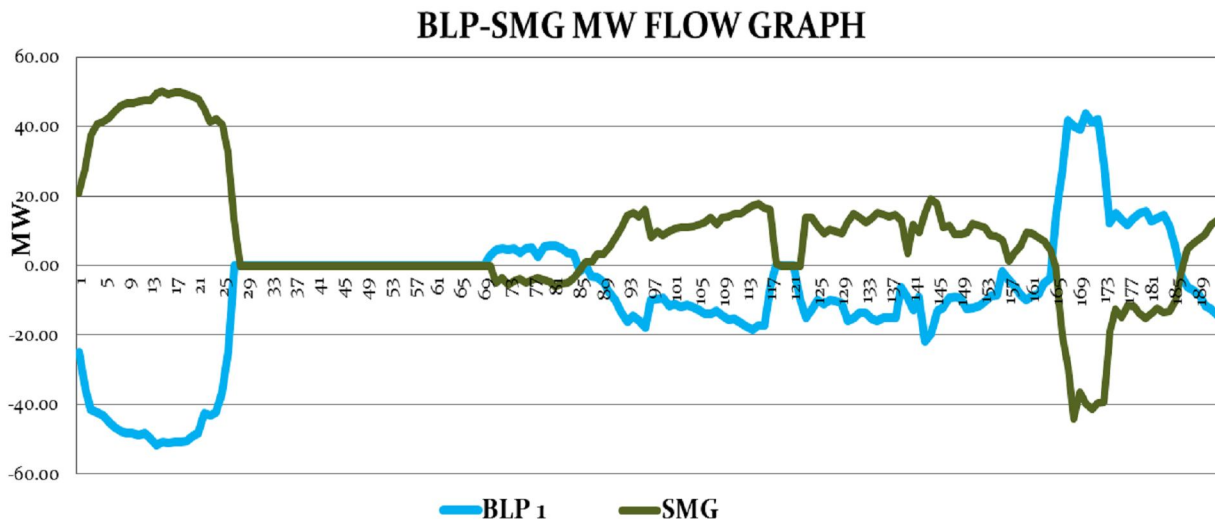
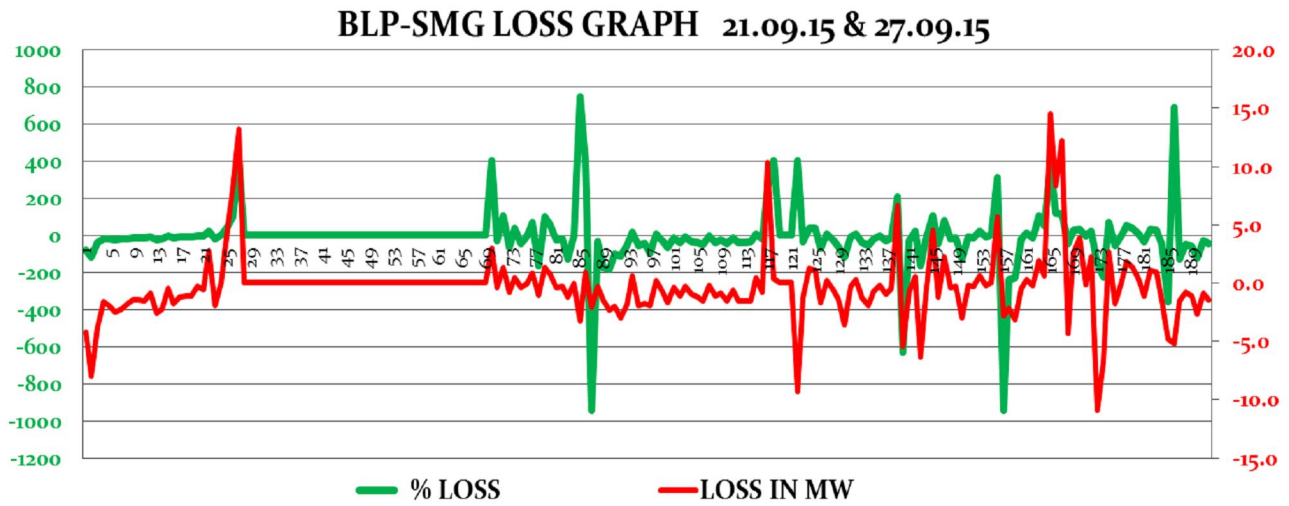
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**Annexure-I**

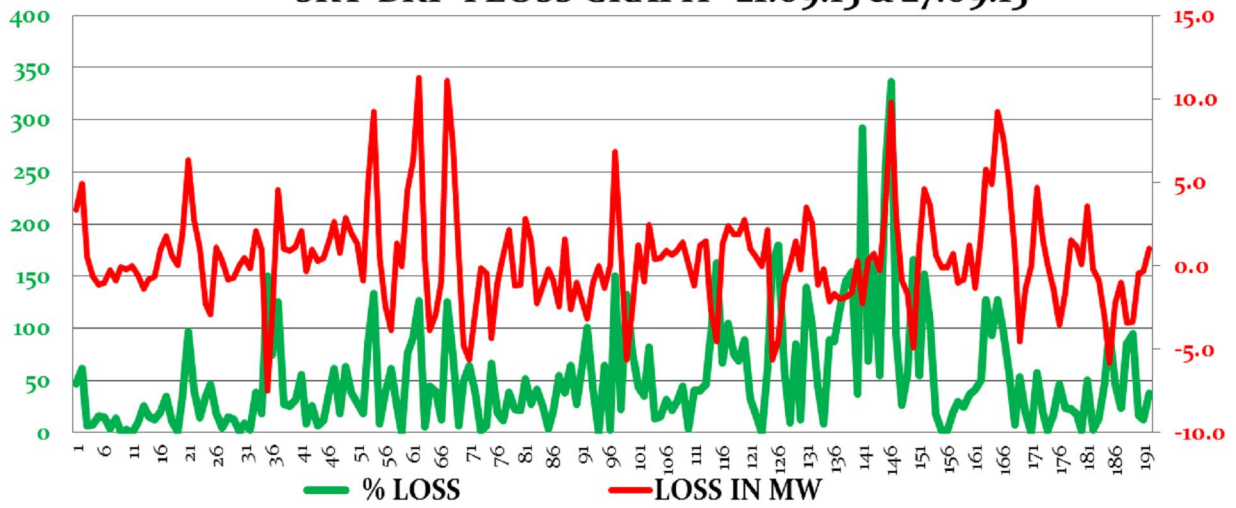
**List of Participants in the 9<sup>th</sup> Metering Meeting held on 09/10/2015**

<b>SN</b>	<b>Name &amp; Designation</b>	<b>Organization</b>	<b>Contact No.</b>
1.	Sh. Nangkong Perme, EE, SLDC	Ar. Pradesh	09436288643
2.	Sh. T.N. Sarma, DGM, SLDC	Assam	09435007369
3.	Sh. J.K. Baishya, AGM	Assam	09435041494
4.	Sh. K. Goswami, DGM (Com.)	Assam	09864020019
5.	Sh. J.P. Choudhury, AGM	Assam	09954055295
6.	Ms. Laishram Ritu, Manager, SLDC	Manipur	09612882984
7.	Ms. Jayela Wahengbam, Asst. Mgr., SLDC	Manipur	09856875084
8.	Sh. T. Gidon, EE, SLDC	Meghalaya	09774479956
9.	Sh. Alokesh Koch, SLDC	Meghalaya	09862630607
	<b>No Representative</b>	<b>Mizoram</b>	
	<b>No Representative</b>	<b>Nagaland</b>	
10.	Sh. Mrinal Paul, Manager	Tripura	09436137022
11.	Sh. D. Pal, Sr. Manager	Tripura	09436500244
12.	Sh. N.R. Paul, DGM	NERLDC	09436302723
13.	Sh. Abraham Varghese, AGM	NERLDC	09436302725
14.	Sh. Anupam Kumar, Sr. Engineer	NERLDC	09436335379
15.	Sh. R. Sutradhar, DGM	NERLDC	09436302714
16.	Sh. Joypal Roy, Sr. Manager (E/M)	NEEPCO	09435577726
17.	Sh. B.K. Chakraborty, DGM (E)	NEEPCO	09436309730
18.	Sh. A.K. Das, DGM (E/M)	NEEPCO	09435339758
19.	Sh. P. Kanungo, DGM (AM)	PGCIL	09436302823
20.	Sh. S. Chakraborty, Manager	NTPC	09435322591
21.	Sh. Atanu Nath, Associate Manager	ENICL	09547808241
22.	Sh. R.C. Singh, Manager	NHPC	09436894889
23.	Sh. Narendra Kumar Gupta, Mgr. (O)	OTPC	09774233426
24.	Sh. P.K. Mishra, MS	NERPC	
25.	Sh. B. Lyngkhai, Director/S.E (O)	NERPC	09436163419
26.	Sh. S. Mukherjee, AD-I/AEE	NERPC	08794277306
27.	Sh. Shaishav Ranjan, AD-II/A.E	NERPC	08794276168

**Annexure-II**



**SKT-BRP-I LOSS GRAPH 21.09.15 & 27.09.15**



**SKT-BRP-I MW FLOW GRAPH**

