

No T-23027/01/15-EC(P)/Com/59

GOVERNMENT OF MIZORAM
OFFICE OF THE ENGINEER-IN-CHIEF : POWER & ELECTRICITY DEPARTMENT
MIZORAM : AIZAWL

Dated Aizawl, the 20th Dec, 2018

Minutes of 11th Coordination Forum of Mizoram Meeting

Date & Time : 20th Nov 2018 at 11:00 AM
Venue : DOCC Hall of E-in-C, P&E Deptt, Kawlpetha.
Chairman : Shri Nangom Sarat Singh, Chairperson, JERC (M&M)
Members present : As appended in the Annexure

With a welcome address from the Chair, the meeting proceeded as follows:

As invited from the Chair, Shri Lalchharliana Pachuau Chief (Engg), JERC (M&M) briefed the agenda. The following Agenda were discussed-

Agenda 1. : Review of 10th Meeting.

The meeting first discussed about initiatives and action taken report on the minutes of 10th Meeting of the Co-ordination Forum of Mizoram previously held on 17th May, 2018. The meeting noted with regret that proper action has not yet been taken by the Department to implement follow-up action for 9th and 10th Meeting minutes. The chairman expressed his displeasure on the inaction of site officers in this regard and mentioned that the future of P&E Department is very much uncertain if the same practice is continued. Chief (Engineering) JERC (M&M) also expressed his displeasure for the same and instruct the Department officers not to repeat the same in future. Despite written instruction in the Meeting Notice, no submission has been made from site offices in this meeting regarding follow-up action taken report on decision of 9th & 10th meeting.

Due to non availability of reliable written submission, conduct of meeting is done with verbal information which cannot be represented completely in the meeting minute. The Department is strongly instructed to be more vigil on proper and timely submission of required information. The previous agenda and decisions are discussed and decided as follows:

(i) Interest Bearing Security Deposit.

Discussion:

The meeting discussed the possibility of mismatching the security amount with the Challan Records. Even though all consumers' challan may not be traced out, possibility has to

be sought to avail maximum records. Submission from few offices are received but not as per the prescribed format except from Mamit Div and Kolasib Div.

Decision:

The Committee reviewed decision of 9th meeting minutes regarding cut-off date for preparation of Security Deposit data of Consumer. The cut-off date already fixed at April 2011 is modified in this meeting and re-fixed at January 2014. As such, collection of Security Deposit of Consumer has to be re-framed as per the new cut-off date. Consumers availing service connection prior to the cut-off date may be considered as having no Security Deposit amount for the time being.

As such is the new decision, all site offices are instructed to submit the information as per the prescribed format circulated earlier vide letter No T.23027/01/15-EC(P)/Com/21 dated 23rd March 2018. Some site offices who have already submitted as per decision of 9th meeting also have to re-submit to cope up with the new decision/cut-off date. Security Deposit Data of Consumer upto December 2018 has to be compiled and made available in the next meeting (tentatively fixed on Feb 2019).

To pursue the above decision, a follow-up action has to be taken up by all revenue dealing offices under the supervision of Chief Engineer (Works), Superintending Engineer (Commercial) and Joint Director of Account; O/o E-in-C.

(ii) Overall and Guaranteed Standard with Compensation Amount:

Discussion:

Poor performance in submission of report is elaborated. Though it was decided in the 10th meeting that data for FY 2017-18 has to be submitted in consolidated form, the same has not yet being done. Submission status received by head office of the Department is as follows:

Year	Name of Office	Status of Submission
2017-2018	Under CE(SO)	NIL
	Under CE(Dist)	Submitted
	SLDC Div	2nd half yearly
2018-2019	Under CE(SO)	1st qtr (incomplete) and 2nd qtr
	Under CE(Dist)	Upto 1st Quarter
	SLDC Div	1st half yearly

Decision:

The meeting noted with displeasure about poor performance of timely submission from the Department particularly from Chief Engineer (SO). He is strongly instructed to do the needful within a week. 2nd qtr data for FY 2018-19 has to be submitted by CE(Dist) also.

(iii) Up-to-date status of installation of energy meters in Mizoram and Programme of installation of Energy Meter with MDI facility. Action taken for payment of up-to-date monthly consumption charge.

Discussion:

The meeting discussed the decision of the 10th meeting. Meeting minute is as reproduced below:

It is reported in the meeting that installation of consumer meter with MDI has already been streamlined by E-in-C office to subordinate offices vide letter No T-23037/01/16-EC(P)/Com/32, Dated 17th Sept 2017 (copy enclosed) wherein it is mentioned that all consumer meters under RAPDRP covered towns have to be replaced with MDI meters procured under RAPDRP scheme. Replaced working meters are to be kept at Sub-Divisional and Divisional offices in safe custody with proper Stock Register. The working replaced meters may be utilized for consumer meters outside RAPDRP covered area and for street light metering.

Circular made to this effect has to be followed diligently by all site offices of the Department so as to achieve 100% metering. In case, the present stock is insufficient, the Department may seek fund provision for procurement of additional meters having MDI facility. Replacement of existing consumers meters with MDI meter has to be taken up with immediate effect and to be completed by the end of September 2018.

Non-metered consumers are to be provided with replaced working meters removed from RADRP areas by September, 2018.

It is learnt that the Department is not taking any step towards implementation of the decision made in 10th meeting. Though it is mentioned in the meeting-notice that all site Superintending Engineers should come with proper records and follow-up action taken report in the 11th meeting, no formal report is received in the meeting.

The Chairman seriously viewed the negligence of the senior officers for their failures to control their junior field engineers and for lack of seriousness and non-compliance of the previous decision and strongly instructed the P&E Department to comply with directions of the Commission to improve the operational efficiency and financial health of the Department.

Decision:

As the installation report is not received in the meeting, it is decided that installation status of MDI consumer meter has to be reported by site officers of P&E Department to head office as per the following format with immediate effect for further compilation.

Name of Sub-Division : _____		Data as on Sept 2018
Category of Consumer	TT consumer without MDI meter	TT consumer with damaged meter
KJ		
Domestic LT		
Domestic HT		
Commercial LT		
Commercial HT		
..... so on		

It is decided that Superintending Engineer (W-II) will be nodal officer for 100% consumer metering and must be responsible to see present stock position of MDI meters procured under RAPDRP and prepare estimation for additional requirement.

Further, a detail report on the status of 100% consumer metering giving Division-wise statement must be submitted to the JERC by third week of Jan 2019.

(iv) DT metering and feeder metering-up-to-date status and reliability for computation of Feeder-wise AT&C Loss in each RAPDRP town (9 towns).

Discussion:

10th meeting decided that the selection of 11kV Feeders for case study under RAPDRP town are to be made for the following feeders and energy audit is to be observed diligently with immediate effect:

A) Under Aizawl Power Circle:

Sl No	Name of Town	Name of Sub-Station	Name of 11kV Feeder
i)	Aizawl	33kV Tlangnuam S/S	Mission Veng Feeder
ii)		33kV Chawnpui S/S	AIR-I Feeder
iii)		33kV Mualpui S/S	ITI Feeder
iv)		33kV Indoor S/S	Zarkawt Feeder
v)		33kV Zuangtui Lower S/S	Colony Feeder
vi)		33kV Durtlang S/S	Durtlang 'N' Feeder
vii)		132kV Luangmual S/S	Zonuam Feeder

B) Under Lunglei Power Circle:

SI No	Name of Town	Name of Sub-Station	Name of 11kV Feeder
i)	Saiha	33kV Meisatta S/S	Colleng Veng Feeder
ii)	Lawngtlai	33kV Chawnhu S/S	BRTF
iii)	Lunglei	33kV Lunglei P/H S/S	Colony Feeder
iv)		33kV Sazaikawn S/S	Rahsi Veng Feeder
v)		33kV Theiriat S/S	Theiriat Feeder
vi)		132kV Khawiva S/S	BSF Feeder

C) Under Champhai Power Circle:

SI No	Name of Town	Name of Sub-Station	Name of 11kV Feeder
i)	Champhai	132kV Keifangtlang S/S	Kahrawt Feeder
ii)		33kV Lower S/S	Bethel Feeder
iii)	Khawzawl	33kV Khawzawl S/s	Hermon Feeder

D) Under Transmission Circle:

SI No	Name of Town	Name of Sub-Station	Name of 11kV Feeder
i)	Saitual	132kV Saitual S/S	Keifang Feeder
ii)	Serchhip	132kV Serchhip	Chhiahtlang Feeder

E) Under Project Circle-I:

SI No	Name of Town	Name of Sub-Station	Name of 11kV Feeder
i)	Kolasib	33kV Project Veng	Vengther Feeder

Aizawl Power Circle reported the difficulty being faced to calculate feeder-wise AT&C loss due to lack of proper and consistent consumer indexing. SE (Lunglei Power Circle) and SE (Champhai Power Circle) are absent in the meeting and no proper report is given. Other circles also could not present proper calculation sheet in the meeting for case study of the above selected feeders except Project Circle - I.

Decision:

Due to non availability of reliable consumer indexing in Aizawl Power Circle, SE (APC) proposes after the Meeting to change selected feeders for case study for - 11kV Falkawn feeder at 33kV Aibawk S/S, 11kV Lungleng feeder at 33kV Mualpui S/S and 11kV Sairang Feeder at 33kV Sairang S/S. For other circles, case study has to be conducted again for the same feeders. Report must be made available in the next meeting as per the following format:

1. Aizawl Power Circle:

- a. Aibawk 33kV S/S - Falkawn Fdr.
- b. Mualpui 33kV S/S - Lungleng Fdr.
- c. Sairang 33kV S/S - Sairang Fdr.

2. Lunglei Power Circle - As indicated above

3. Champhai Power Circle: - As indicated above
4. Transmission Circle - As indicated above
5. Project Circle-I - As indicated above

Name of Substation:							
Name of Feeder:							
Particulars	June 2018	July 2018	Aug 2018	Aug 2018	Sept 2018	Oct 2018	Nov 2018
11kV Energy input (A)							
Total energy from all DTs connected in the feeder (B)							
Total Energy Billed (C)							
Total Revenue Billed (D)							
Total Revenue Collected (E)							
T&D Loss 1 (F) = (A-B)/A x 100							
T&D Loss 2 (G) = (A-C)/A x 100							
Billing efficiency (H) = (C/A)x100							
Collection efficiency (I) = (E/D) x 100							
AT&C Loss from 11kV input = (1-H x I)x100							

All site Superintending Engineers should submit the required information and E-in-C will present a consolidated report in next Co-ordination Forum Meeting as per format given above.

(v) Generation

The progress of on-going project reported by SE(PC-I) in the meeting is as under :

1	Tlawva SHP	5 MW	87%, expected to be commissioned by June'19.
2	Kawlhem SHP	4 MW	89%, expected to be commissioned by Sept.'19.
3	Tuiching MHO	100 KW	95%, expected to be commissioned by Dec'18 subject to water availability
4	Tuiriza MHP	100 KW	95%, expected to be commissioned by Dec'18 subject to water availability

(vi) Transmission under NERPSIP (PGCIL):

Record of transmission lines under construction as reported in the 10th meeting is as reproduced below:

Sl. No	Name of Project	Length in km	Upto date Progress
Projects handed over to IPPs/CPSUs:-			
1	132 kV S/C on D/C tower, W.Phaileng to Marpara	59	29km Survey done
2	132 kV S/C on D/C tower, Lungsen to Chawngte	39	25km survey done
3	132 kV S/C on D/C tower, Chawngte to S.Bungtlang	45	35km survey done
On -Going Projects (State Sector)			
1	132 kV S/C Melriat to Khawiva	112	Target March, 2019

(vii) Power Sub-stations taken up by PGCIL

Sl No	Voltage Ratio	Name of S/S	Qty	Upto date Progress
1	132/33kV	Lungsen	1	Site leveling done
2	132/33 kV	Marpara	1	Site leveling done
3	132/33 kV	W.Phaileng	1	Dismantling of SDO quarter and 2 staff quarter done

(viii) Demand side Management-Action taken and programme.

The present approach towards achieving better performance in Demand Side Management is initiated by the Introduction of LED bulb, tube lights and fans. The 10th meeting decided to have more meaningful emphasis to utilize UJALA Scheme to reduce Peak Load demand.

The meeting wants to know reduction of peak load for the same period, Date, Time, Month before and after UJALA Scheme for 2 years before and 2 years after the scheme.

It is reported verbally in the meeting that UJALA scheme was introduced in the state in Aug 2016. The peak load of Mizoram at this time is recorded as 75.78 MW. Peak load 2 years before (ie Aug 2014) was 67.162 MW and the peak load 2 years after (ie Aug 2018) was 81.73 MW. From this figure, the growth of peak load within 2 years before introduction of UJALA is 8.618 MW whereas the growth of peak load for the same period after introduction of the scheme is 5.95 MW which is considered to bring down significant decrease in load growth.

The Commission advised E-in-C to prepare a Detail Report and submit to JERC by 3rd week of January 2019.

(ix) Action taken by P&E Dept. under UDAY scheme. Achievement against prescribed loss reduction trajectory thereof.

Though the Department is trying its level best to achieve loss target under UDAY scheme, achievement of targeted T&D loss and AT&C loss under this scheme seems not possible at present.

(x) Programme for implementation of smart metering as per MOP guidelines. – The outcome of DPR may be reported.

Noting of 10th meeting is reproduced below:

The previous DPR to cover three 11kV feeders for introduction of smart meter is rejected by the State Government due to non-availability of enough fund. The DPR has to be re-framed to cover newly selected one feeder ie, Babutlang feeder. Preparation of DPR and submission to State Government for fund provision is yet to be done. The Department has to pursue the present approach in DPR preparation and other necessary actions.

It is reported in this meeting that offers for preparation of DPR for installation of smart meter in Aizawl City is received from RECPDCL and is being under examination and consideration. It is decided that the steps taken may be reported to the Commission within two months.

(xi) Function-wise reorganization of P&E Department

The discussion of 10th meeting as reproduced below:

It is reported in the meeting that proper analysis for segregation of Department has been done into three entities namely Generation, Transmission and Distribution. The concept paper has been submitted to Government Department for obtaining approval. It is reported that this concept paper is lying with DP&AR and the approval is being awaited. The progress of petition in this regard has to be pursued diligently by the Department so that timely segregation may be effectively implemented without unnecessary delay.

The 11th meeting wants to know the progress made so far in this regard. However, it is mentioned that there is no further progress from the above. Action from the state Government is still awaited.

2. Solar Generation.

From Solar parks and Rooftop Solar

The meeting discussed about the status of installation of Solar Rooftop and the number of consumer who have signed PPA with the Department and details of the solar parks taken up by private, ZEDA and the Department.

It is informed that PPA have not been signed so far by the Department with any consumer agency till now. However, proper accounting has to be made regarding generation from solar power plant established either by the Department or ZEDA. ZEDA will submit the details of total solar energy generated so far from the existing installation within two months.

As the detail is not provided in the meeting, further meaningful and thorough discussion could not be made.

Decision:

ZEDA will submit a detailed upto date report on all the Solar Parks, Solar Rooftop installation and their individual generation till Nov, 2018 by the 3rd week of January 2019 to JERC.

3. Circle-wise Energy Input:

The meeting stresses the need to have a healthy competition circle-wise, for achieving better percentage of T&D Loss, AT&C Loss etc. The total Energy input to the circle plays most important role. The input will mean Energy Input from Grid and owned Generation within the Circle minus export from the Circle to the other circles. It is noticed that the Department has invested a sizeable amount for system metering, toward reliable bi-directional energy meter, high accuracy CTs & PTs for better performance of system metering to analyse circle energy input.

The meeting deliberate input points for each circle. It was agreed to accept the previously formulated analysis already circulated from E-in-C office vide No T-24015/01/15-EC(P)/Com/10 dated 10.09.2016. The same is enclosed in [Appendix](#).

4. New transmission lines and Sub-Stations

The meeting wants to know New Transmission lines and Power Substation in the pipe line under the State and to provide Name of lines, Voltage level, Single/Double Ckt, line length, Name of proposed Sub-Station, Voltage ratio, Capacity in MW.

It is noted that no proper submission is made in the meeting for this agenda. It was therefore decided that formal report has to be made in writing to be shown to all members in the next meeting.

Decision:

It was decided that E-in-C will submit the detailed information to JERC by the 3rd week of January 2019.

5. Staff shortage in the Department.

The meeting asked proposal of the Department being taken-up for improvement in shortage of field staff and employees.

Power & Electricity Department has submitted to the Government proposal for filling up various technical vacant posts, and decided to include required financial implication in the next tariff petition.

The Chairperson advised E-in-C that proper manpower should be in place for smooth and efficient operation of the power system at an early date.

6. Pre-paid Metering System

In the 9th and 10th Co-ordination Meeting, it was reported that the Department had proposed introduction of pre-paid metering system at Zarkawt area. The meeting wants to know the outcome of the proposal in this regard. Further, introduction of prepaid meter seems quite inevitable after learning that in some Government quarters, occupant could not pay their energy bills due to huge outstanding accumulated from the previous occupants. And the Department could not work-out the energy bills for each of the previous occupants which ultimately increases bad debt. Also, it may be proposed to introduce pre-paid metering system as start for Government Quarter so that quarter-wise or occupant-wise outstanding will not be accumulated in huge amount. The 11th meeting wants to know the purview of the Department in this regard.

It was reported in the meeting that A/A & E/S for this is already accorded for installation of Smart Metering System at Zarkawt feeder and tender will be floated after election process is over. Progress report for this has to be made available in the next meeting.

It is also decided that scheme for Pre-paid metering for Government quarters in Aizawl shall be prepared during 2019-20.

P&ED should submit follow-up report in detail at least one month before the next forum meeting which may be held in February 2019.



(NGANGOM SARAT SINGH)
Chairperson
State Coordination Forum
For Mizoram
Dated Aizawl, the 20th Dec, 2018

Memo No.T.23027/01/15-EC(P)/Com/59 :
Copy to:
All members and invitees

Engineer-in-Chief, P&E
Cum
Member Convener,

INSTRUCTION TO FOLLOW-UP ACTION FOR 11TH COORDINATION FORUM MEETING

Agenda No	Action to be taken	Action to be taken by	Required Action to be taken	Timeline
1	Review of Previous Minutes			
(i)	Submission of Completed Consumers Security Deposit Amount as on Jan 2014 as per format already circulated.	All Revenue Dealing Offices	Report To be submitted latest by Feb 2019	Immediate
(ii)	Submission of SOP report in consolidated format for FY 2018-19 (w.e.f 2 nd qtr)	All site offices & SE(SLDC)	Report to be submitted regularly	Quarterly and Half Yearly
(iii)	Replacement/ Installation of non- MDI consumer meter with MDI meter procured under RAPDRP. (Report format as per meeting minute)	1. Report to be provided by All Revenue Dealing Offices. 2. SE(Works-II) will monitor it	Installation report as per format to be given	
	Provision of meter to unmetered consumer with replaced working meter			
(iv)	Case study to be conducted on selected 11kV Feeders under RAPDRP towns as per format (Refer meeting minutes)	SE(APC/LPC/CPC/TC/PC-I)	Report to be submitted latest by Feb 2019	To be started with immediate effect
(v)	Generation: Progress report of ongoing projects	All concerned	Upto date detail to be reported immediately	Immediate
(vi)	Transmission under NERSIP (PGCIL)	All concerned		
(vii)	Power Sub-stations taken up by PGCIL	All concerned		
(viii)	Demand side Management: How introduction of UJAALA Scheme reduce peak load of the State?	SE, SLDC	Report on yearly average Peak Load since introduction of UJAALA Scheme	Immediate
(x)	Introduction of Smart Metering	CE(RE), O/o E-in-C	Action taken report to be submitted immediately.	Immediate
(xi)	Re-organisation of P&E			
2	Solar Generation from Park and Rooftop	ZEDA	Detail report to be to be submitted immediately	Immediate
3	Circle-wise Energy Input: To follow previous circular form E-in-C office	All concerned	Monthly submission to be done diligently	Immediate
4	New Transmission lines and SSs: Submission of Detail report to JERC	SE (Planning) O/o E-in-C	Report to be submitted to Commercial Branch	Immediate
5	Staff Shortage in the Department	DDA, O/o E-in-C	Report to be submitted to Commercial Branch	Immediate
6	Prepaid Metering System	CE(RE), O/o E-in-C	Action taken Report to be submitted to Commercial Branch	Immediate

GOVERNMENT OF MIZORAM
OFFICE OF THE ENGINEER-IN-CHIEF:POWER & ELECTRICITY DEPARTMENT
MIZORAM: AIZAWL

C I R C U L A R

Dated Aizawl the 10th August 2016

No.T-24015/01/15-EC(P)/Com/15: August 2, 2016 (Tuesday) nia E-in-C, P&E Deptt chairman-na hnuaiia Circlewise Energy Accounting chungchanga meeting chuan, a hnuaiia tarlan ang hian thutlukna a siam a. He thurel bawhzui tur hian concerned officers leh staffs zawng zawng te kan in hriattir a ni.

1. Circlewise Energy Accounting chungchangah meter reading lak dan tur leh lak hun tur te, metering points chungchang te hetiang hian siam ani.
 - a) Circlewise Energy Accounting atana Reading lakna tur meter thlan bikte chu Annexure-I a tarlan ang hian list siam ani a. Primary/Main metering points leh Secondary/Check metering points ah then ani. Primary Metering points ami te hi Export/Import lak theihna a ni a, Secondary metering points ah hi chuan Export chauh emaw Import chauh emaw lak tur a ni.
 - b) Meter thlan bikte reading lak dan tur chu Annexure-II ami ang hian format siam ani a. He format ang hian reading lak tur a ni.
 - c) Meter Reading hi thlatin, thla tawp ni hnuhnung ber chhun dar 12:00 ah zel lak tur a ni.
 - d) **Meter Reading hi concerned SDO chin chunglam in lak thin tur a ni.** Zinbo leh remchanlohna/harsatna a awm chuan JE chin in an la thei ang.
 - e) Reading te hi thla tin ni 10 aia tlai lo ah SLDC Division ah thawn tur a ni a, a copy chu E-in-C ah thehluh thin tur a ni.
 - f) Meter chhia emaw, rinhlelhawm nia lang chu MRT/SLDC Division ah a rang thei ang bera report tur a ni.
2. 132kV Sub-Station tin ten Energy Input leh Output a inmil leh inmil loh mahni in enfiah thin tur a ni a. Energy Input zawng zawng meter reading leh Energy Output zawng zawng energy meter reading a inmil em tih thlatin enfiah vek thin tur a ni. Hemi atan hian **Balance Energy Flow Statement** Annexure-III a tarlan ang hian siamin SLDC Div ah theluh a, a copy dang chu E-in-C office ah thehluh thin bawk tur ani.

Sd/-
(LIANGHINGLOVA PACHUAU)
Engineer-in-Chief, P&E Deptt

Memo No: T-24015/01/15-EC(P)/Com/15

Dated Aizawl the 10th August 2016

Copy to:

1. The Chief Engineer (SO) for information and necessary action.
2. The Chief Engineer (Distribution) for information and necessary action.
3. The Superintending Engineers: SLDC/APC/LPC/CPC/TC/PC-I for information and necessary actions.
4. The Executive Engineers: MRT/ SLDC /Generation/ Revenue /PMD-I/ PMD-II/ Champhai/ Khawzawl/ Serchhip/ N.Vanlaiphai/ Kolasib/ Construction/ Mamit/ Saiha for information and necessary actions.
5. The Sub-Divisional Officers: Generation /Luangmual /Zuangtui / Rural Azl /Serchhip /Khawiva /Kolasib /N.Vanlaiphai /Champhai /Champhai Rural /E.Lungdar /W.Phaileng /Saitual / Khawzawl /Hnahthial /Bairabi /Tuipang for information and strict compliance to observe the healthiness condition of meters and to take timely meter readings within their jurisdiction.



(LIANGHINGLOVA PACHUAU)
Engineer-in-Chief, P&E Deptt

METERING POINTS :

Circle		Primary/Main Metering Points	Secondary/Check Metering Points
Aizawl Power Circle	1	At 132 kV S/S Luangmual	
		a) 132kV Incoming-I	
	2	At 132 kV S/S Zuangtui	
		a) 132kV Incoming at Zuangtui	
		b) 132kV Outgoing to Serchhip	132 kV Bukpui Incoming at Bukpui
		c) 132kV Outgoing to Saitual	132kV Saitual Incoming at Saitual
	3	At 33kV S/S Zuangtui	
		33kV Outgoing to W. Phaileng	33kV W. Phaileng Incoming
	4	At Serlui 'A' SHP	
		11kV Outgoing	
5	At 132kV Bukpui S/S		
	33kV Outgoing to Sialsuk	33kV Incoming at Sialsuk	
Lunglei Power Circle	1	At 132 kV S/S Bukpui	
		a) 132kV Outgoing to Khawiva	132kV Incoming at Khawiva
		b) 33kV Outgoing to Hnahthial	33kV Incoming at Hnahthial
	2	At Khawiva SHP	
		11kV Outgoing to 132kV Khawiva S/S	
	3	At 33 kV S/S Tuipang 'L'	
33kV Incoming from Tuipang SHP		33kV Outgoing at Tuipang SHP	
Champhai Power Circle	1	At 132 kV S/S Saitual	
		132kV Outgoing to Khawzawl	132kV Saitual Incoming at Khawzawl
	2	At 132 kV S/S Khawzawl	
		33kV Outgoing to E. Lungdar	33kV Outgoing to Khawzawl at E Lungdar
	3	At Lamsial SHP	
		11kV Outgoing to Farkawn	
	4	At Tuipui SHP	
		11kV Outgoing to Lower Champhai	
Transmission Circle	1	At 132 kV S/S Zuangtui	
		a) 132kV Outgoing to Serchhip	132kV Incoming at Bukpui
		b) 132kV Outgoing to Saitual	132kV Saitual Incoming
	2	At 132 kV S/S Bukpui	
		a) 132kV Outgoing to Khawiva	132kV Khawiva Incoming
		b) 33kV Outgoing to Hnahthial	33kV Hnahthial Incoming
		c) 33kV Outgoing to Sialsuk	33kV Sialsuk Incoming
	3	At 132 kV S/S Saitual	
		132kV Outgoing to Khawzawl	132kV Khawzawl Incoming
	4	At 132 kV S/S Khawzawl	

		33kV Outgoing to E.Lungdar	33kV Outgoing to Khawzawl at E Lungdar
	5	At 33 kV S/S Maicham-I SHP	
		Outgoing to N. Vanlaiphai	
	6	At 33 kV S/S Maicham-II SHP	
		Outgoing to N. Vanlaiphai	
	7	At 33 kV S/S Thenhlum	
		33kV Incoming from Kau SHP	
Project Circle-I	1	At 132 kV S/S Bawktlang	
		a) HV side of 132/33kV Transformer	
		b) HV Side of 132/66kV Transformer	
		c) 33kV Incoming-I from Serlui 'B'	
		d) 33kV Incoming-II from Serlui 'B'	
	2	At 132kV Thermal SS Bairabi	
		33kV Outgoing to 33kB Bairabi SS	132kV Outgoing to Bairabi at Bawktlang
	3	At 33kV Sub-Station Zuangtui	
		33kV Outgoing to W. Phaileng	33kV W. Phaileng Incoming
	4	At 33kV S/S W. Phaileng	
	33kV Incoming from Teirei SHP	33kV Outgoing to W. Phaileng from Teirei	

[NB: Solar generation (if any) to be included in the above metering point]

Meter Reading for Circlewise Energy Accounting

Name of Sub-Division : **For the month of** _____
Name of Division :
Name of Circle :

Name of Feeder :						Meter SI No:				
Name of Sub-Station:						Date of Reading :				
Readings	Import Energy (kWh)	Export Energy (kWh)	Current (A)			Voltage (kV)			Power Factor (overall)	Load at the time of reading (MW)
			R	Y	B	RY	YB	BR		
Previous Reading										
Present Reading										

Signature of SDO

Monthly Balance Energy Flow Statement

Name of Sub-Division : **For the month of** _____
Name of Division :
Name of Circle :

Name of 132kV Sub-Station:		
Month:		
Total Energy Input (from grid + from hydel)	Total Energy Outflow at 132kV level + 33kV level	Total Energy Outflow at 11kV level

Signature of SDO