

STAKEHOLDER COMMENT

Regulation No. : L-1/8/2022/CERC

Reference No. : 9/2022

Regulation Details

Reference No.	9/2022	CERC File Number	No. L-1/265/2022/CERC
Regulation No.	L-1/8/2022/CERC	Regulation No. Generation Date	14/06/2022

Regulation Type : New Regulation

Regulation Title : Draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2022.

Subject : Draft Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2022.

Comment Details

Type : Stakeholder Comment

Stakeholder Name : western regional power committee (WRPC)

Order Date / Direction of : 31/10/2022

Commission / Compliance Date : 31/10/2022

Brief of :

Comments/Objections/Suggestions

Attachment

Document Type	Description	File Name
Comment	WRPC Comments/suggestions on IEGC 2022	<u>WRPC Comments draft IEGC final.pdf</u>

**Comments/suggestions of WRPC on Draft Central Electricity Regulatory
Commission (Indian Electricity Grid Code) Regulations, 2022**

Clause of IEGC	Statement in draft IEGC	Comments/Suggestions of WRPC
Chapter 1 Preliminary		
2 (2)	For the purpose of these regulations, the Damodar Valley Corporation (DVC) shall be treated as a regional entity and a separate control area. The DVC Load Despatch Centre shall perform functions of a SLDC for the control area of DVC.	It may be modified as “For the purpose of these regulations, the Damodar Valley Corporation (DVC) shall be treated as a regional entity and a separate control area. The DVC Load Despatch Centre shall perform functions of a SLDC for the control area of DVC. <i>Schedule and despatch of Sardar Sarovar Project (SSP) and Pench units shall be done by RLDC in consultation with all the stakeholders of SSP and RPC.</i> ”
<p style="text-align: center;">Comment: SSP and Pench dams are primary for irrigation requirements and therefore these Hydro stations are required to be scheduled as per the requirement of the States having shares in these projects for optimal utilization of generation.</p>		
Chapter 4 Protection Code		
14(1)	RPCs shall undertake review of the protection settings, assess the requirement of revisions in protection settings and revise protection settings in consultation with the stakeholders of the respective region, from time to time and at least once in a year. The necessary studies in this regard shall be carried out by the respective RPC	It may be modified as “RPCs shall undertake review of the protection settings, assess the requirement of revisions in protection settings and revise protection settings in consultation with the stakeholders of the respective region, from time to time and at least once in a year. The necessary studies in this regard shall be carried out by the respective RPC. <i>Whenever changes in the network are anticipated, RLDC/SLDC shall inform the network changes along with the details well in advance (at least 45 days in advance) to respective RPC. The study data dynamic and base case (peak-off peak cases) files required for review of protection settings shall be provided by POSOCO/CTU, along with the above data to respective RPCs.</i> ”
<p style="text-align: center;">Comment : the data dynamic and base case is required to carry out requisite studies for review of protection settings and the same is required to be provided at least 45 days in advance so that the study can be carried out and discussed in the protection settings can be reviewed in the forum of RPCs.</p>		

14(3)(a)	RPCs shall maintain a centralized database in respect of their respective region containing details of relay settings for grid elements connected to 220 kV and above (132 kV and above in NER)	It may be modified as “RPCs/RLDCs shall maintain a centralized database in respect of their respective region containing details of relay settings for grid elements connected to 220 kV and above (132 kV and above in NER). <i>The changes in the network and protection settings of grid elements connected to 220kV and above shall be informed to RPCs by CTU and STUs</i> ”
<p>Comment : The relay settings shall also be available to RLDCs, since during the real time operations, the Zone-3 reach settings of distance protection are required to be checked against the loading on the lines. This setting in real time decides as to how much the lines should be loaded so that the line does not trip on Load encroachment. The loading of the line is required to be restricted so that the loading does not result in unnecessary tripping of the line in Zone-3. Also, the back up over current earth fault settings should always be available with RLDCs, so that in real time the loadings on the lines/transformers can be kept under check to avoid unnecessary tripping of lines/transformers on over load.</p>		
14 (3)(b)	RPC shall: carry out detailed system studies, twice a year, for protection settings and advise modifications / changes, if any, to the CTU and to all users and STUs of their respective regions.	It may be modified as “carry out detailed system studies, twice a year, for protection settings and advise modifications / changes, if any, to the CTU and to all users and STUs of their respective regions. <i>The dynamic study data files and the base case data files (peak and off peak cases) shall be provided by POSOCO (NLDC/RLDCs) and CTU every quarter.</i> ”
<p>Comment : This is required to ensure that proper dynamics data as well as saved case data is made available to the RPCs for conducting detailed system studies, since this data is available with CTU & POSOCO.</p>		
16(2)	For the operational SPS, RPCs shall perform regular dynamic studies and mock testing for reviewing SPS parameters & functions, at least once in a year	It may be modified to “For the operational SPS, <i>RLDC in consultation with RPC</i> shall perform regular dynamic studies and also carry out mock testing to review SPS parameters & functions, at least once in a year. RLDC to inform any short comings to respective RPC. The dynamic data for such studies shall be provided by CTU annually to RPC/RLDC.”
<p>Comment : This is required to ensure that proper dynamics data as well as saved case data is made available to the RPCs by RLDCs and CTU for conducting such studies.</p>		

17(2)	The disturbance recorders shall have time synchronization and a standard format for recording analogue and digital signals which shall be included in the guidelines issued by the respective RPCs.	It may be modified as “The disturbance recorders (<i>DRs</i>) shall have time synchronization and a standard format for recording analogue and digital signals which shall be included in the guidelines issued by the respective RPCs. <i>The time synchronization of the DRs shall be corroborated with the PMU data/SCADA event loggers etc by the respective RLDCs and the list of DRs which are non-compliant shall be placed before the Protection sub-Committee.</i> ”
Comments : The DRs time synchronization can be verified based on the signatures seen in the PMU data and event loggers of SCADA.		
Chapter 5: COMMISSIONING AND COMMERCIAL OPERATION CODE		
27 (1) (a) & (b)	A generating station or unit thereof or a transmission system or an element thereof or ESS may declare commercial operation as follows and inform CEA, the concerned RLDC, the concerned RPC and its beneficiaries:	It may be modified as “ A generating station or unit thereof or a transmission system or an element thereof or ESS may declare commercial operation as follows and inform CEA, the concerned RLDC, the concerned RPC and its beneficiaries. <i>A onetime revision of the COD shall be made by RPCs in consultation with beneficiaries of the station, if outages are availed by the entity within a period of 3-months or any reasonable time of commissioning (for the purpose of regular maintenance/carry out left over work during commissioning) and the revised COD date will be considered as the date of taking the element back in service after such outage.</i> ”
Comment: The Commercial Operation Date (COD) are usually declared by the entities, and it is seen that the Outages are taken on the units/line after the COD is declared. Such outages, if taken by the generating stations/transmission elements utilities for carrying out the left-over work during commissioning and or routine maintenance within a period of 3 months or within reasonable time of COD means the commissioning work was not carried out by the Utility concerned by observing all the compliance, though they were able to demonstrate the COD requirements. The outages/breakdowns may be due to flawed workmanship. This is to avoid any misdeclaration of the CoD by the generator or the transmission licensee. It may happen that the utilities declare the CoD of the units/elements without carrying out complete commissioning activities and subsequent to declaration of commercial operation takes an outage to attend the incomplete parts.		

27 (1) (c)	The commercial operation date in case of an Inter-State Transmission System or an element thereof shall be the date declared by the transmission licensee on which the Transmission System or an element thereof is in regular service at 0000 hours after successful trial operation for transmitting electricity and communication signal from the sending end to the receiving end as per Regulation 23 and submission of declaration as per Regulation 26(3) of these regulations:	Similar provision can be made as that proposed in 27 (1) (a) & (b)
27 (1) (d)	Communication System Date of commercial operation in relation to a communication system or an element thereof shall mean the date declared by the transmission licensee from 0000 hour of which a communication system or element thereof shall be put into service after completion of site acceptance test including transfer of voice and data to the respective control centres as certified by the respective Regional Load Despatch Centre.	It may be modified as “Communication System Date of commercial operation in relation to a communication system or an element thereof shall mean the date declared by the transmission licensee from 0000 hour of which a communication system or element thereof shall be put into service after completion of site acceptance test including transfer of voice and data to the respective control centres as certified by the respective Regional Load Despatch Centre. <i>The elements of communication system such as RTUs/transducers should be compliant with the accuracy class specified for such elements and the measurands received through SCADA at SLDCs/RLDCs should be within the permissible limit of the accuracy class of such elements. The accuracy class shall be of 0.5 or lower for these equipment’s.</i> ”
<p>Comment: The operational decisions of SLDCs/RLDCs are based on the SCADA data made available to these centers. If the measurement equipment’s are not accurate the decision making by the SLDCs/RLDCs will not be appropriate. It also has financial impact on the DISCOMs if the decisions are made based on inaccurate equipment’s, due to stringent DSM regulatory provisions. Also there is a requirement of keeping these equipment’s within the accuracy limits. The availability certification of the communication system shall also consider these factors.</p>		

Chapter 6 Operating Code		
29 (2) (b)	Each RLDC, in consultation with CTU, the concerned users, SLDCs, STUs, shall prepare a list of important elements in the regional grid, including those in the State grids which are critical for regional grid operation and shall make available the said list to all concerned.	It may be modified as “Each RLDC, in consultation with CTU, the concerned users, RPCs , SLDCs, STUs, shall prepare a list of important elements in the regional grid, including those in the State grids which are critical for regional grid operation and shall make available the said list to all concerned.”
Comment: RPCs are also required to be consulted since the list of all important elements is required for transmission element outage planning.		
29 (2) (c)	An important element of the grid as listed at Clause (b) of this Regulation can be taken out of service only after prior clearance of the concerned RLDC, except under emergency as per the Detailed Operating Procedure(s) of NLDC or RLDC or SLDC, as the case may be. RLDC shall inform opening or removal of any such important element (s) of the regional grid to NLDC and to the concerned regional entities who are likely to be affected, as specified in the Detailed Operating Procedure of NLDC.	The clause may be modified as “An important element of the grid as listed at Clause (b) of this Regulation can be taken out of service only after prior clearance of the concerned RLDC, except under emergency as per the Detailed Operating Procedure(s) of NLDC or RLDC or SLDC, as the case may be. RLDC shall inform opening or removal of any such important element (s) of the regional grid to NLDC and to the RPCs and concerned regional entities who are likely to be affected, as specified in the Detailed Operating Procedure of NLDC.”
Comment: Since the outage planning is being done by RPCs, the intimation of outage should also be informed to RPC.		
29 (6)	All generating units shall have their automatic voltage regulators (AVRs), Power System Stabilizers (PSSs), voltage (reactive power) controllers and any other requirement in operation, as per CEA Technical Standards for Connectivity. If a generating unit with capacity higher than 50 (fifty) MW is required to be operated without its AVR in service, the generating station shall immediately intimate to the concerned RLDC along with the reasons thereof and the likely duration of such operation and obtain its permission.	“All generating units shall have their automatic voltage regulators (AVRs), Power System Stabilizers (PSSs), voltage (reactive power) controllers and any other requirement in operation, as per CEA Technical Standards for Connectivity and the PSS Tuning guidelines as issued by NPC/CEA from time to time. If a generating unit with capacity higher than 50 (fifty) MW is required to be operated without its AVR in service, the generating station shall immediately intimate to the concerned RLDC and RPC along with the reasons thereof and the likely duration of such operation and obtain its permission.”

	Comment: NPC of CEA may develop a common procedure for tuning these devices so that there is uniformity of procedures in all India grid. Such activities are being undertaken by NPC CEA	
29(9)	Provisions of protection and relay settings shall be coordinated periodically throughout the regional grid, as per plan finalized by the respective RPC in accordance with the Protection, Testing and Commissioning Code of these regulations.	It may be modified as “Provisions of protection and relay settings shall be coordinated periodically throughout the regional grid, as per plan finalized by the respective RPC in accordance with the Protection, Testing and Commissioning Code of these regulations. <i>RPCs for this purpose can form working group/s in the region involving protection and study engineers of the utilities in the region. The nominations for such working group/s shall be provided by the utilities concerned without fail</i> ”
	Comment : This being a voluminous work, it can be done by forming working group/s. Utilities are reluctant to provide nominations and spare manpower for these type of activities and therefore RPCs are required to be empowered to create such groups within the regions.	
29(10)	RPCs shall prepare the islanding schemes in accordance with Central Electricity Authority (Grid Standards) Regulations, 2010 for identified generating stations, cities and locations and ensure its implementation. The islanding schemes shall be reviewed and augmented depending on assessment of critical loads at least once in 3 (three) years.	It may be modified as “RPCs shall prepare the islanding schemes in accordance with Central Electricity Authority (Grid Standards) Regulations, 2010 for identified generating stations, cities and locations and ensure its implementation. The islanding schemes shall be reviewed and augmented depending on assessment of critical loads at least once in 3 (three) years. <i>RLDCs and SLDCs shall be the nodal agencies for monitoring the network configuration/Load/generation changes that take place within or around the Island jurisdictions. Such changes in network configuration/Load/generation be brought to the notice of the RPCs by the respective SLDCs/RLDC.</i> ”
	Comment : The changes in network configuration/Load/generation within or around the Island jurisdictions are being monitored by SLDCs/RLDCs and therefore any changes in and around Island jurisdiction is required to brought to the notice of RPCs for reviewing it.	

29 (12)	<p>All distribution licensees, STUs and bulk consumers shall provide automatic underfrequency relays (UFR) and df/dt relays for load shedding in their respective systems to arrest frequency decline that could result in grid failure as per the plan given by the RPCs from time to time. The default UFR settings shall be as specified in Table-2 below:</p>	<p>It may be modified as “All distribution licensees, STUs and bulk consumers shall provide automatic underfrequency relays (UFR) and df/dt relays for load shedding in their respective systems to arrest frequency decline that could result in grid failure as per the plan given by the RPCs from time to time. The default UFR settings shall be as specified in Table-2 below: The UFR settings and region wise load shedding quantum shall be decided by NPC in consultation with the stakeholders”</p>
<p>Comment: The UFR schemes are defense mechanism of the grid. The UFRs should be used as a defense mechanism and not for frequency regulation. There are enough mechanisms for frequency regulation and therefore the defense mechanism is required to call for operation under emergency situation of frequency control. The UFR relay trigger frequency settings are required to be decided by considering various factors such as islanding schemes trigger settings, the governor response, load frequency dependance factor and other technical requirements emerging out of system studies. Therefore, NPC in consultation with all the stake holders shall decide the trigger frequency settings and region wise quantum of load shedding requirement for all India grid. The default settings specified in Table 2 should be decided by NPC CEA.</p>		
29(12)	<p>Mock drill of the islanding schemes shall be carried out annually by the respective RLDCs in coordination with the concerned SLDCs and other users involved in the islanding scheme.</p>	<p>The clause may be modified as “Mock drill of the islanding schemes SPS shall be carried out annually by the respective RLDCs in coordination with the concerned SLDCs and other users involved in the islanding scheme. The healthiness of the frequency relays/load shedding schemes/generation pickup/backdown can be tested individually by the utility concerned annually and the certification of healthiness of these equipment’s may be submitted through respective SLDCs/RLDCs to RPCs.”</p>
<p>Comment : It is not possible to carry out Mock drill of islanding scheme, since the system frequency cannot be lowered to the trigger frequency set for Islanding schemes. However, the healthiness of the frequency relays/load shedding schemes/generation pickup/backdown can be tested individually and the certification of healthiness of these equipment’s may be submitted to RPCs once in a year.</p>		

30(4)	There shall be reserves as under: (a) Primary, Secondary and Tertiary reserves: (i) Primary, Secondary and Tertiary reserves shall be deployed for the purpose of frequency control, reducing area control error and relieving congestion. (ii) The response under Primary reserve shall be provided as per these regulations.	It may be modified as “There shall be reserves as under: (a) Primary, Secondary and Tertiary reserves: (i) Primary, Secondary and Tertiary reserves shall be deployed for the purpose of frequency control, reducing area control error and relieving congestion. (ii) The response under Primary reserve shall be provided as per these regulations. <i>RLDC/NLDC shall maintain adequate primary reserves keeping in view the first stage of AUFLs trigger frequency settings.</i>
	Comment : Adequate primary reserves will lift the frequency if it falls and remains above the first stage trigger setting of AUFLS.	
30(10)(h)	All generating stations mentioned in Table-4 (under clause (g) of this Regulation) shall have the capability of instantaneously picking up to a minimum 105% of their operating level and up to 105% or 110% of their MCR, as the case maybe, when the frequency falls suddenly and shall provide primary response. Any generating station not complying with the above requirements shall be kept in operation (synchronized with the regional grid) only after obtaining the permission of the concerned RLDC.	It may be modified as “All generating stations mentioned in Table-4 (under clause (g) of this Regulation) shall have the capability of instantaneously picking up to a minimum 105% of their operating level as <i>per the droop characteristics of the Unit and the operating point setting of the governor</i> and up to 105% or 110% of their MCR, as the case maybe, when the frequency falls suddenly and shall provide primary response. Any generating station not complying with the above requirements shall be kept in operation (synchronized with the regional grid) only after obtaining the permission of the concerned RLDC.
	Comment : The generating unit is required to respond as per the droop characteristics of the unit and should provide primary response for the available spare capacity of the unit w.r.t. their operating point settings.	
30.(10).(o)	NLDC, RLDCs and SLDCs shall grade the median Frequency Response Performance annually, considering at least 10 reportable events. In case the median Frequency Response Performance is less than 0.75 as calculated as per Annexure-2, NLDC, RLDCs, SLDCs, as the case may be, after analyzing the FRP shall direct the concerned entities to take corrective action.	A line may be added at the end of this clause..” <i>All such cases may be reported to RPCs for its review.</i> ”

30.13.(v)	The control area wise performance of SRAS and TRAS shall be evaluated in accordance with the Detailed Procedure prepared by NLDC.	A line may be added ..” <i>A SRAS and TRAS report containing all the incidents and reason where SRAS and TRAS was used, to be submitted by NLDC/RLDC to the concerned RPC every month for its review.</i> ”
33 (6)	Operational planning study shall be done to assess whether the planned operations shall result in deviations from any of the system operational limits defined under these regulations and applicable CEA Standards.	It may be modified as “Operational planning study shall be done to assess whether the planned operations shall result in deviations from any of the system operational limits defined under these regulations and applicable CEA Standards. <i>The deviations if any may be put up by RLDC to RPC in the monthly Operation sub-Committee meeting of the RPCs for its review. RPC may propose actions against the Utilities who are Persistently deviating and shall inform the deviations to CERC.</i> ” Comment: The clause should be modified such that the deviations from the operational limits should be intimated to RPCs during the monthly operation meeting of the RPC for its review.
37 (1) (b)	Such analysis shall be disclosed on their respective website in formats issued by NLDC.	The clause may be modified as “Such analysis shall be disclosed on their respective website in formats issued by NLDC. <i>Also, the same shall be submitted to the RPC every month for review in Operation sub-Committee meeting of the RPC.</i> ”
	Comments: The analysis would be reviewed in the Operation Committee meeting of RPCs every month so that effective planning and its implementation can be ensured.	
37 (2) (h)	Any additional data such as single line diagram (SLD) of station, protection relay settings, HVDC transient fault record, switchyard equipment and any other relevant station data required for carrying out analysis of an event by RPC, NLDC, RLDC and SLDC shall be furnished by the users including RLDC and SLDC, as the case may be, within forty- eight (48) hours of the request. All users shall also furnish high-resolution analog data from various instruments including power electronic devices like HVDC, FACTS, renewable generation on the request of RPCs, NLDC, RLDCs or	A line may be added...”RLDC shall submit the PMU data to RPCs for analysis of the event by RPC”

	SLDCs.	
	Comment: The PMU population has increased in the grid. The relevant PMU data will be useful for corroboration with the DRs etc. to establish the sequence and analysis of events.	
Chapter 7 Scheduling and Despatch Code		
45.(8) (b)	The regional entity generating stations may be required to demonstrate the declared capacity of their generating stations as and when directed by the concerned RLDC. For this purpose, RLDC, in coordination with SLDC and the beneficiaries, shall schedule the regional entity generating station upto its declared capacity as declared on day ahead basis at time of first declaration. RLDC shall ask each generating station, at least once in a year, to demonstrate the declared capacity.	The clause may be modified as “The regional entity generating stations may be required to demonstrate the declared capacity of their generating stations as and when directed by the concerned RLDC. For this purpose, RLDC, in coordination with SLDC and the beneficiary/ <i>ies</i> , shall schedule the regional entity generating station upto its declared capacity as declared on day ahead basis at time of first declaration. RLDC shall ask each generating station, at least once in a year, to demonstrate the declared capacity. <i>In case of annual demonstration of declared capability, all the beneficiaries of the station may be Suo-moto scheduled by RLDC in proportion to the share of the beneficiary in the station so that the station is scheduled to check its declared capability. The annual checking of the declared capability preferably shall be carried out during the lean period or the period during the generating station is scheduled by the beneficiary with low or no schedule. In case beneficiary/ies desires demonstration of capability of any generating station. The demonstration of the declared capability of the generating station under such situation is scheduled below the declared capability, the scheduling for this purpose shall be done by RLDC in such a way that the surplus URS shall be scheduled to the beneficiary(ies) who desires to check the declared capacity. RLDC shall ensure that the demonstration of the capability be done in the blocks where the schedule to the station by beneficiaries is highest”</i>
	Comment : The beneficiary who seeks the check on the faithful declaration shall bear the financial implications. In case of annual checking, it is observed that mis declaration occurs generally during the lean period and therefore this check should be performed during the lean period. For checking mis declaration, the station has to	

	be scheduled up to the declared capability. RLDCs needs to be empowered to raise the schedule during such checking and therefore the beneficiaries are required to be allocated the schedule to fulfill this requirement.	
47.(3) (d)	Whenever RLDC revises final schedules due to reasons of grid security or contingency, brief reasons shall be informed immediately to the concerned entity followed by a detailed explanation to be posted on RLDC website within 24 hours.	The clause may be modified as “Whenever RLDC revises final schedules due to reasons of grid security or contingency, brief reasons shall be informed immediately to the concerned entity and RPC followed by a detailed explanation to be posted on RLDC website within 24 hours.”
	Comment : The information be provided to RPC for accounting and review of the real time actions.	
47.(7)	Provided further that SLDC or RLDC as the case may be, shall inform the revised schedule to the seller and the buyer.	The clause may be modified as “Provided further that SLDC or RLDC as the case may be, shall inform the revised schedule to the seller and the buyer and provide the revised schedule data to respective RPC for accounting ”
	Comment : The information be provided to RPC for accounting.	
47 (9) (a)	The CTU shall be responsible for installation, operation and periodic calibration of Interface Energy Meters (IEMs) covering all the ISTS interface points, points of connections between the regional entities, cross border entities and other identified points for recording of actual active and reactive energy interchanged in each time-block through those points.	It may be modified as “ <i>The CTU shall be responsible for framing the requirement and procurement of Interface Energy Meters (IEMs) covering all the interface points, points of connections between the regional entities, cross border entities and other identified points for recording of actual active and reactive energy interchanged in each time-block through those points. Also, CTU shall identify the agencies eligible for calibration of the IEMs for every region and the procedure for calibration of the IEMs, in consultation with RPCs/RLDCs. CTU shall chalk out the plan of calibration of all the IEMs in each region in consultation with RLDC/RPC. The Utility which is responsible for maintaining bay equipment’s shall be responsible for installation, operation and periodic calibration of Interface Energy Meters (IEMs) as per the procedure laid out by CTU in consultation with RLDCs/RPCs. CTU shall also be responsible for procuring of the meters for replacement of faulty meters and maintaining adequate spare meters with a designated Utility as</i>

		<p><i>per their MoU with that Utility. The requirement of faulty meters and spare meters shall be intimated by RLDCs to CTU. CTU on receipt of requirement for replacement of IEMs from the Utility, shall arrange the IEMs to the Utility. The Utility responsible for maintain the bay equipment's shall make arrangement to collect the IEMs from CTU and replace the faulty IEMs without any delay. If there exist a technical feasibility, the IEM data can be streamed online to SLDCs and RLDCs for taking operational decisions."</i></p>
	<p>Comment: The responsibilities are required to be fixed for the proper maintenance of the IEMs. As far as CTU is concerned they may not be in position to installation, operation and periodic calibration of IEMs in the field. Therefore, the utility responsible for maintain the bay equipment's shall be responsible for installation, operation and periodic calibration of IEMs in the field. The Utilities responsible for maintain the IEMs do not take it seriously, since it does not affect them. However, it affects the DISCOMs due to improper accounting. The IEMs are the most accurate measurement equipment's in the system and data, if technically feasible, can be streamed online to SLDCs and RLDCs for taking operational decisions.</p>	
47 (9) (f)	<p>Entities in whose premises the IEMs are installed shall be responsible for (i) monitoring the healthiness of the CT and PT inputs to the meters, (ii) taking weekly meter readings for the seven day period ending on the preceding Sunday 2400 hrs and transmitting them to the RLDC by Tuesday noon, in case such readings have not been transmitted through automatic remote meter reading (AMR) facility (iii) monitoring and ensuring that the time drift of IEM is within the limits as specified in CEA Metering Regulations 2006 and (iv) promptly intimating the changes in CT and PT ratio to RLDC.</p>	<p>clause (v) & (vi) may be added as "(v) The Utility responsible for maintain the bay equipment's shall be responsible for attending the time drift of the meters and maintenance of the meters and should promptly replace the faulty meters so that accounting is not affected. The availability of the bay or associated element should be deemed to be unavailable till the time drift and faulty meter is not replaced within reasonable time, for availability certification purpose".</p> <p>(vi) The failure to ensure the above (i) to (v) will be intimated to the RPC and if the provisions are not adhered too within a reasonable time, the availability of the bay or associated element should be deemed to be unavailable for availability certification purpose."</p> <p>Comment: The Utilities responsible for maintain the IEMs do not do it seriously, since it does not affect them. However, it affects the DISCOMs due to improper accounting. Therefore, a penalty may be imposed on such utilities if they fail to maintain the IEMs.</p>

47.(9)(j)	RLDC shall forward the IEM readings and the implemented schedule to the concerned RPC on a weekly basis by each Friday for the preceding seven days period ending on the preceding Sunday mid-night, to enable the latter to prepare and issue the various accounts such as Deviation Settlement Mechanism (DSM), reactive charges, congestion charges, ancillary services, SCED, heat rate compensation charges and regional transmission deviation in accordance with relevant regulations.	The clause may be modified as “ RLDC shall forward the IEM readings and the implemented schedule to the concerned RPC on a weekly basis by each Friday Thursday for the preceding seven days period ending on the preceding Sunday mid-night, to enable the latter to prepare and issue the various accounts such as Deviation Settlement Mechanism (DSM), reactive charges, congestion charges, ancillary services, AGC , SCED, heat rate compensation charges and regional transmission deviation in accordance with relevant regulations.”
Comment : If the data is received by Thursday, the accounts can be prepared, checked and issued by the following Tuesday by RPCs. RPCs should be given sufficient time since the number of accounts to be issued weekly have increased and it is a voluminous work of issuing weekly accounts for RPCs.		
Annexure-4		
1.(1)	(a) The regional entity pays for VAr drawal when voltage is below 97%	(a) The regional entity/ generating station pays for VAr drawal when voltage is below 97%
	(b) The regional entity gets paid for VAr return when voltage is below 97%.	(b) The regional entity/ generating station gets paid for VAr return when voltage is below 97%.
	(c) The regional entity gets paid for VAr drawal when voltage is above 103%	(c) The regional entity/ generating station gets paid for VAr drawal when voltage is above 103%
	(d) The regional entity pays for VAr return when voltage is above 103%.	(d) The regional entity/ generating station pays for VAr return when voltage is above 103%.
Comment : generators also needs to be incentivize/disincentivize for control the Var for voltage regulation.		