

AGENDA ITEMS

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**AGENDA FOPR 8TH MEETING OF ENERGY ACCOUNTING COMMITTEE
HELD ON DATE 1ST MAY-2010 AT SLDC,
GOTRI, VADODARA.**

A 8th meeting of Energy Accounting Committee is held at **Conference Room, SLDC Gotri**, Vadodara on **1st MAY-2010**. In accordance with Amendment order No.3 of 2010 issued by GERC, Intra State ABT is implemented in the State from 00.00 hrs of 5th April'2010. The scheduling and system operation is successfully switchover as per Intra State ABT and all constituents/state entities are participating accordingly. The various coordination meeting has taken place for addressing the various scheduling and operational aspects implemented with effect from Intra State ABT.

The next step is to issue commercial billing in Intra State ABT on weekly basis and monthly basis. While preparing energy accounting, various aspects of prevailing regulations, purchase agreements and commercial mechanism as mentioned in Intra State ABT order. Though all such aspects have been experienced during mock trial period, some of the aspects call for modification.

Therefore, this meeting is called upon to inform all grid members about the implementation of Intra State ABT and various relevant aspects considered by SLDC thereof.

AGENDA 1: FORUMLATION OF ENERGY ACCOUNTING COMMITTEE

In accordance clause 16 of Annexure-I (Page 12 of 44) of the Amendment Order No.3 of 2010 provides the revision in constitution of energy accounting committee. The last amendment took place in the energy accounting committee on date 22nd November'2007. Since considerable time has lapsed, it is felt that committee is required to be updated and accommodate changes suggested in order. Now, Intra State ABT implemented from 00.00 hrs of 5th April'2010 with all its commercial aspects, the frequency of meeting will be increased.

In view of above, the proposed committee for the current Financial Year 2010-11 is as under. The letter issued by SLDC enclosed herewith in **Annexure-1**.

Sr.	Category	Committee Members
1	SLDC	Chief Engineer
2	STU	Chief Engineer
3	Discom	DGVCL
		MGVCL
		UGVCL
		PGVCL
		KPTL
		TPL
		GUVNL
4	Generator	GSECL
		GIPCL
		EPOL
5	Non Conventional	GEDA
6	Captive Plants	WELSPUN
		GACL

The committee will be headed by Chief Engineer of State Load Dispatch Centre. All grid members are requested to confirm the representing entity proposed by SLDC. The proposed entity is requested to submit nomination of member.

AGENDA 2: FORMULATION OF STATE COORDINATION COMMITTEE

Clause 13 (clause no. 11 of Annexure-III) of the Amendment order no.3 of 2010 provides that all outages of generation and transmission system, which may have an effect on the State grid, to be coordinate through State Coordination Committee (SCC) for as per procedures finalized separately by SCC. Similarly, there are various commercial and ancillary services related matter required to be coordinated with intra state users. SLDC is responsible to implement the above said order. In pursuance of the responsibility entrusted to SLDC, State Coordination committee is proposed as under. The scope of the committee is covered in **Annexure-2**.

Sr No	Name Of Coordination Committee
1	System Operation Coordination Committee (SOCC)
2	Commercial , Ancillary and Market Coordination Committee (CAMCC)

All State entities are required to submit their views/comments on the above proposal and submit consent.

AGENDA 3: IMPLEMENTATION OF INTRA STATE ABT ORDER

While implementation of Intra State ABT in as per Amendment Order No.3 of 2010, the various aspects are considered for scheduling and energy accounting treatment as below. **All participants are requested to go through and take necessary action. We would like to discuss.**

3.1 Implementation of Unscheduled Interchange Rate (Clause No. 8 of Amendment Order No. 3 of 2010): This clause provides that basic UI rate for intra-State entities in Gujarat shall be in line with the CERC notifications on the matter as amended from time to time. Present UI rate notified by CERC vide No.L-1(1)/2009-CERC dated 30th March'2010 which is applicable and considered for calculation of unscheduled interchange charges of intra state entities w.e.f. 5th April'2010. The UI rate specified by CERC regulation are as under :

"The charges for Unscheduled Interchange for all the time-blocks when grid frequency is between 50.3 Hz and 49.2 Hz shall be payable for over-drawal by the buyer or the beneficiary and under-injection by the generating station or the seller and receivable for under-drawal by the buyer or the beneficiary and over-injection by the generating station or the seller and shall be worked out on the average frequency of the time-block at the rates given hereunder:-

Average frequency of time block (Hz) UI Rate

Below	Not below	(Paise per kWh)
----	50.30	0
50.30	50.28	12
50.28	50.26	24
-----	-----	-----
-----	-----	-----
50.04	50.02	168
50.02	50.00	180
50.00	49.98	192
-----	-----	-----
-----	-----	-----
49.52	49.50	480
49.50	49.48	497
49.48	49.46	514
-----	-----	-----
-----	-----	-----
49.24	49.22	718
49.22	49.20	735

(Each 0.02 Hz step is equivalent to 12.0 paise/kWh in the 50.3-49.5 Hz frequency range and to 17.0 paise/kWh in the 49.5-49.2 Hz frequency range)

CERC has further revised Unscheduled Interchange Rate with effect from 3rd May'2010 as per amendment in Unscheduled Interchange Regulation issued on date 28th April'2010. Same will be also be made effective with 00.00 hrs of 3rd May'2010 at Intra State level.

All participants shall note the above.

3.2 Implementation of Additional UI Rate (Clause No. 10 of Amendment

Order): It provides that an Additional Unscheduled Interchange Charge at the rate equivalent to 40% of the UI Rate corresponding to frequency of 49.22 Hz shall be applicable for over-drawal or under-injection of electricity for each time-block when grid frequency is below 49.2 Hz. This will be implemented by identifying the block of under injection and over drawl of intra state entities. Additional UI charges will be calculated addition to basic UI charges. The additional UI charges payable by Gujarat at inter state periphery shall be calculated as per "Unscheduled Interchange and Related Matters Regulations 2009" issued by Central Electricity Regulatory Commission.

The unbalance in pool account after incorporation of aforesaid UI charges will be square-off through adjustment method. In the event of difference exist in additional charges calculated by SLDC and WRLDC; same shall be covered in the computation along with adjustment component of Western Region. Sample format is illustrated as under :

Date	DTPS				
	Schedule	Injection	UI Charges (in Rs.)		
			Basic UI	Additional UI	Adjusted UI
5-Apr-10					
6-Apr-10					
7-Apr-10					
8-Apr-10					
9-Apr-10					
10-Apr-10					
11-Apr-10					
Total					

All participants shall note the above.

3.3 Applicability of UI Rate : In accordance with clause 4 of Annexure-1 of Amendment order No.3 of 2010, Unscheduled Interchange rate applicable to various state entities as under :

The basics UI rate as specified by commission is applied to all distribution licensee (deemed distribution licensee under IE Act'2003 and specified by Hon'ble commission) and state generating stations.

The 95% of the basic UI rates for over-injection and 105% of the basic UI rates for under-injection is applied to Essar IPP (EPOL) and all CPPs injecting power into grid through long term open access, wheeling arrangement or short term transaction.

All distribution licensee of State, generating stations and Captive Power Plants connected with intra state network shall take a note of above.

3.4 Treatment of Wind, Solar Energy Generation (Without commercial arrangement):

In accordance with clause (4) of Amendment Order No.3 of 2010 provides that “the energy injection by renewable energy sources like Wind, Solar energy generation into the grid, which is not covered by any other commercial arrangement, shall be paid for at 85% of the prevailing tariff rate determined by the Commission for such generation from time to time.”

The energy injection by Wind, Solar generation without commercial arrangement i.e. without the purchase agreement where the buyer of purchase of such energy is not fixed in such case. Therefore, the energy injected by such sources is also required to be pool into the pool account as it is consumed by grid users and shall be paid for at 85% of the prevailing tariff rate determined by the Commission for such generation from time to time. Since wind and solar are exempted from scheduling, the energy injection will be calculated directly from meter data and settled through pool account.

In order to implement above provision, it is necessary that energy injected by such generators are required to be measured in 15 minute block and shall be furnished to SLDC on weekly basis. SLDC will further requires name/location of wind, solar generators injecting power without commercial arrangement, point of injection, metering details, CT/PT details etc. Further, the energy of solar, wind energy sources are exempted from scheduling, the such charges will be exempted from adjustment of receivable/payable.

It is therefore proposed that GEDA or Injecting Utility shall submit the details of wind and solar generators injecting energy without commercial arrangement and intend to inject at 85% of prevailing tariff rate. The details of metering, CTR/PTR etc. is to be ensured before commencement of injection under this provision. STU has to ensure that meter shall be installed at each location capable to measure energy on 15 minute basis. The generator intend to opt this provision shall register with SLDC prior to commence the injection into the grid.

SLDC would like to freeze the above treatment in energy accounting. All participants shall submit their consent.

3.5 Treatment of Essar Power Ltd: - The commercial arrangement of EPOL (515 MW capacity) is given in Amendment order no.3 of 2010 issued by GERC. Accordingly, EPO has to declared ex-bus power on each 15 minute basis which would be further split up to beneficiaries in the ratio of 300:215 MW. ESL has to requisite power for each 15 minute block (generally constant during a day). Further, GUVNL has reallocated their PPA with EPOL to beneficiaries. Therefore, schedule of EPOL for the purchase agreement of 300 MW capacity of GUVNL, distribution licensee has to requisite power at ex-bus periphery of EPOL. UI rate applicable will be 105% for under injection and 95% for over injection of the basis UI rate specified by commission. The order further provides that the supply / absorption of reactive energy by EPOL will be dealt separately.

While implementing clause 10 of Amendment order No.3 of 2010 in respect of EPOL, the following aspects are considered: -

- Since EPOL is gas based station, the schedule will be revised by applying frequency correction factor as per prevailing regulation issued by GERC. Unscheduled Interchange rate of EPOL is to be calculated on corrected schedule at the rate 105% for under injection and 95% for over injection of the basis UI rate specified by commission.
- Further, in accordance with clause 10 of amendment order no.3 of 2010, EPOL will not compensate for any VAR generation /absorption as full fixed cost of EPOL power station is being borne by the beneficiaries GUVNL & ESL.
- Ex-bus energy of EPOL (net energy sent out after deducting auxiliary consumption) to be calculate which requires the installation of energy meters at Station Transformer-1 & 2. STU(GETCO) is intimated for same. Till the installation of SEM, auxiliary consumption will be considered as 3.0 % (as per PPA).

EPOL, GUVNL and ESL are requested to note and give consent for considering auxiliary consumption of 3.0% which will be used to derived net ex-bus injection of EPOL.

3.6 Treatment of CPP of ESL (BPL) and Essar Steel Ltd: - In accordance with the amendment order no.3 of 2010 issued by GERC, generation of Essar Steel CPP (31MW) and Bhandar Power Ltd. (505 MW) is to be scheduled to ESTL. The order provides the complete treatment in respect of BPL and ESTL CPP. The order further provides that any under drawl so calculated for ESL is to be added in injection of CPP of ESL (BPL) and any variation of CPP of ESL is to be accounted under single entity.

While implementing above treatment in respect of CPP of ESL (BPL), the following aspects are considered:

- Dispatch Schedule will be issued by SLDC which covers capacity of 31 MW (ESL CPP) and 505 MW (BPL).
- Schedule of DGVCL is calculated by incorporating the schedule of Essar Steel by adjustment of pool losses.
- The injection of CPP of ESL(BPL) will be calculated by summation of (i) ex-bus injection of BPL(505 MW) (at tie line), (ii) ex-bus injection of ESL (CPP) (31 MW) and (iii) under injection of ESL.
- Hon'ble commission has not expressed any views on applicability of transmission losses for supply of power from CPP of ESL (BPL) to ESL. Power supplied to ESL is to be scheduled up to notional periphery of DGVCL; the power will be scheduled at par with the other transactions applying estimated pool losses.

- CPP of ESL(BPL) have executed agreement with ESL and GUVNL for sale of their entire generation by recovering entire fixed cost, supply/absorption of reactive energy under ABT shall not get any payment for VAr Generation/ absorption.
- ESL is not pool member; therefore, the energy supplied by DGVCL to ESL will continue to be governed as per present consumer tariff. DGVCL shall have to decide computation of energy for charging against consumer tariff.
- Meters are to be installed at EHV feeder of ESL by STU in accordance with Amendment order no. 3 of 2010 issued by GERC so as to arrive under drawl or over drawl by ESL. Meters are not installed by STU so far, the computation of drawl by ESL is to be decided by SLDC. SLDC has intimated STU to submit compliance (**Enclosure-1**)

3.7 Reallocation of PPA by GUVNL

Gujarat Urja Vikas Nigam Ltd. (short as ,GUVNL“) has pooled the power through purchase agreement with Inter State Generating Stations and State Generating Station and supplied to distribution licensee (MGVCL, PGVCL, UGVCL, DGVCL & KPTL) of the State (erstwhile GEB companies), through long term purchase agreement. In the process of pooling entire generation by GUVNL and redistributing back to distribution licensee, it does not identify the generating stations from where distribution licensee is purchasing power.

Whereas, open access of transmission network and its operationalization within transmission network calls for the identification of supplying entity (injecting point), purchasing entity (receiving point). GUVNL has therefore reallocated capacity purchased by them under long term contract where injecting (generating station) and receiving entity is identified. Therefore, we consider that GUVNL is empowered to allocate power as per their agreement with generating station and distribution licensee. In accordance with this reallocation of capacity, it is detrimental for distribution licensee for purchasing power from generating station identified by GUVNL. Therefore, distribution licensee has become deemed purchaser from generating station and responsible to settle the capacity charges, energy charges and incentive charges with generating station as per scheduling and energy accounting carried out by SLDC (on the basis of capacity allocation by GUVNL).

The concerned distribution licensee, generating stations who has executed long term agreement through GUVNL shall take note of above and have to settle the capacity charges, energy charges and incentive accordingly.

3.8 Treatment of Transmission Losses :

In accordance with Clause 18 of Annexure-1 (of order o.3 of 2010) provides that “ *the summation of station-wise ex-bus dispatch schedules from each generating station and any bilaterally agreed interchanges of each beneficiary shall be adjusted for pooled transmission losses estimated by SLDC on weekly basis.*”

The losses are to be made applicable at the respective periphery of state beneficiaries or generating station as applicable. The treatment of estimation of losses is also supported by Tariff Order of respective distribution licensee approved by GERC.

Clause No.7.1 (Row 10 of Pae 133 of Case No. 995/2010)

“7.1. Transmission Charges

Energy loss in kind at 4.20%

The Current transmission loss shall be effective until Intra State ABT is operational. Post which it shall be as specified under Intra State ABT.”

SLDC is therefore responsible to estimate pooled transmission losses of state transmission network. The estimation of transmission losses depends on the demarcation of distribution licensee and transmission network within the State. The transmission network is demarcated by notional periphery of four distribution licensee (erstwhile GEB companies) covering major part of network. Whereas other distribution licensee like KPTL, TPL-Ahemedabad and TPL-Surat are demarcated by their actual periphery. Subsequently, Torrent Energy Ltd (short as “TEL”) and Mundra Port SEZ Ltd (short as “MPSEZ”) distribution licensee is added in network which is also demarcated by actual periphery. In accordance with the demarcation of transmission network, the estimation of transmission losses and its applicability will be carried out as under:

- (i) The transmission losses of entire transmission network up to the actual periphery of distribution licensee (i.e. up to 33/11KV interface point) will be estimated on the basis of monthly energy computation to be carried out by SLDC called as “ **estimated transmission losses**”. It is generally fixed for month. This losses will be applicable to licensee using transmission network and receiving power at their actual periphery i.e. TPL-Ahemedabad, TPL-Surat, TEL and MPSEZ.
- (ii) The transmission losses of common transmission network up to the notional periphery of remaining distribution licensee (i.e. up to 400/220/132/66 KV interface point) will be estimated on weekly basis named as “**pool transmission losses**”. This losses will be applied to distribution licensee demarcated by notional periphery i.e. DGVCL, UGVCL, PGVCL and MGVCL.

The energy charges, capacity charges are settled at ex-bus periphery of respective generating station, pool losses treatment as above will not affect the settlement of such charges and hence it is acceptable mechanism agreed in intra state ABT mechanism. If any open access user entering in transmission network, the estimated transmission losses will be applicable.

All participants shall take note of above.

3.9 Wind Farm Treatment :

Clause 23 of Annexure-1 of order no.3 of 2010 provides the treatment of energy injected by wind energy generators for the interim period till installation of ABT compliant meters on each WEGs as under :

“SLDC shall work out suitable methodology for the determination of allocation of power (injected into the grid) to each distribution licensee, in each 15 minute base slot. GEDA shall provide a weekly energy injected by each WEGs to SLDC indicating allocation to respective distribution licensee, SLDC shall work out proportionate allocation to each distribution licensee. The energy set off to each distribution licensee thereafter be derived in 15 minute basis by applying allocation on data furnished from ABT meter installed at polling station.”

In order to give treatment of wind farm, GEDA has to furnish the weekly energy injected by each WEGs to SLDC indicating allocation before Saturday of week terminating on previous Sunday. SLDC has intimated

GEDA to comply above order (**Enclosure-2**). SLDC will provide allocation (in percentage) for every week along with weekly UI bills. The energy setoff to distribution licensee will be carried out by correcting schedule of respective distribution licensee at their periphery after adjustment of applicable losses. The energy setoff of wind generation to consumer is to be given by respective distribution licensee as per the monthly statement issued by GEDA.

SLDC also desires that GEDA shall nominate responsible Nodal Officer for coordinating data communication and timely receiving of such data to SLDC.

GEDA shall submit data in accordance with GERC order. GEDA shall also nominate Nodal Officer for furnishing data timely to SLDC. All participants shall take note of above treatment.

3.10 Gaming Treatment :

In accordance with Clause 12 of Order No.3 of 2006 and subsequently amended vide order o.3 of 2010, the gaming treatment will be applicable as under:

“12. Gaming

a. Generating Stations under Intra State ABT (as per para 8) generating up to 105% of the declared capacity in any time block of 15 minutes and averaging up to 101% of the average declared capacity over a day shall not be construed as gaming, and the generator shall be entitled to UI charges for such excess generation above the scheduled generation (SG).

b. However, for any generation beyond the prescribed limits as cited in para 12 (a) above, the State Load Despatch Centre shall investigate so as to ensure that there is no gaming, and if gaming is found by the State Load Despatch Centre, the corresponding UI charges due to the generating station on account of such extra generation shall be reduced to zero and the amount shall be adjusted in UI account of beneficiaries in the ratio of their capacity share in the generating station.”

Therefore, it is evident that gaming provision shall be applicable to state generating stations who have contracted to supply their generation to various beneficiaries or distribution licensee. The captive power plant having capacity of more than 15 MW injecting their generation for wheeling. The remaining generation injecting their generation CPP having capacity below 15 MW, hydro generating stations and generator having total capacity not less than 5 MW and up to 15 MW opting for injection under UI shall not be covered under gaming.

State Generating Station:

The generating station injecting power into grid and scheduled through availability declaration, such injection will be monitored by SLDC for identifying violation of ceiling limit and subsequently investigated for declaring as gaming. The declaration of gaming will be done on case to case basis and cannot be generalized. However, some basis approach which will be followed for implementing this provision of order no. 3 of 2006 is as under:

- For any generation from the generating stations other than hydro generating stations beyond the specified limits, the SLDC shall investigate so as to ensure that there is no gaming. Generating stations shall be entitled to recover the Unscheduled Interchange charges only if the investigation establishes that there is no gaming. If gaming is found by the SLDC, the corresponding Unscheduled Interchange charges payable to the generating station on account of such extra generation shall be reduced to zero and the amount shall be adjusted in UI pool account of the beneficiaries in the ratio of their capacity share in the generating station.
- The block will be identify for gaming if the generating station is consistently injecting their generation beyond specified limit of 105% for more than six blocks and/or repeatedly happening during a day without any technical/operation constraints specified by generating station in advance. While deciding it, the other parameters like frequency, system constraints, technical constraints, operational constraints will also be considered. In the event of increasing generation, the generating station may have to revise availability declaration, but if generating station will not take action to revise declaration and even inject power under unscheduled interchange charges more than declaration, such declaration of generating station shall be considered as deliberate under declaration. If generating station fail to submit convincing reason along with sufficient proof and if in opinion of SIC (Shift Charge Engineer) or CE (Chief Engineer or Operational Head) of SLDC after investigation confirm it, such energy injection by generating station will be construed as gaming.

- In the event of exceeding generation beyond the 101% over a day, SLDC will forthwith checks all blocks of higher injection and identify several blocks for examining records. The SLDC will then identify the actions taken by generating stations in such identify blocks in accordance with other parameters like system condition, frequency etc. If generating stations have taken adequate actions to revise availability declaration during a day and restricted injection, such cases may be considered suitably. Further, if generation is increased in identify blocks without any technical/operational constraints, and if generating station has not taken steps to revised declaration and subsequently fail to submit adequate reason thereof to SLDC and if in opinion of SIC (Shift Charge Engineer) or CE (Chief Engineer or Operational Head) of SLDC after investigation process confirm under declaration, such energy injection by generating station will be construed as gaming.
- While giving treatment of 101% and 105%, if violation of ceiling limit occurs simultaneously, the treatment of 101% over a day will supersede the treatment of 105%. UI charges accrued due to such excess generation to the particular block will be reduced to zero. While deciding the verification of records, the log record of Shift In Charge (SIC) Engineer of SLDC will be crucial for making decision. If in the opinion of SIC (Shift Charge Engineer) or CE (Chief Engineer or Operational Head) of SLDC confirmed violation of ceiling norms as 'gaming', Such injection will be construed as gaming and unscheduled interchange charges due to such excess generation more than declaration capacity shall be reduced to zero for the entire 96 blocks and/or part of day, partially and/or fully will be done on the basis of opinion of shift charge engineer or chief engineer of SLDC.
- In the event of declaring as gaming, the corresponding UI charges due to the generating station on account of such extra generation shall be reduced to zero and the amount shall be adjusted in UI account of beneficiaries in the ratio of their capacity share in the generating station." In the case of short term open access, there is no share allocation as the open access users scheduled as per their requirement only.

The approach described hereunder for deciding gaming is generalized and may not be applicable in all cases. The approach may change on case to case basis. It provides the information to all generating stations and beneficiaries to understand the approach followed by SLDC for implementing provision of gaming stipulated in order no. 3 of 2010. All participants is requested to take note of above.

3.11 Reactive Energy Charges:

For State Beneficiaries :

In accordance with Clause no. 6 of Annexure-III of Order No. 3 of 2010 provides the methodology of reactive energy accounting in intra state transmission network. Accordingly, the reactive energy accounting will be prepared by SLDC as under:

- The reactive energy exchanges will be measure at periphery between intra state transmission network and distribution licensee and reactive charges will be calculated as per sub-clause (1) of clause 6 of said order. The distribution licensee will be a part of pool member.
- The generators shall change generator transformer tap to generate/absorb the reactive power, however, no payment shall be made to the generating stations. Hence, generating stations are kept out of pool member of reactive energy account.
- SLDC will prepare a pool account of reactive energy charges among distribution licensee/beneficiaries of intra state transmission network and pool account will be settled on weekly basis. In accordance with the order, reactive charges among inter state transaction is not required to pool into intra state pool account therefore, SLDC on behalf Gujarat state transmission network will settled such charges directly between SLDC and WRLDC on weekly basis.

SLDC will periodically reconciled the reactive charge account with inter state transmission network (WRLDC/DD/DNH) and any payment required to be made to WRLDC for such period will be apportioned to all state beneficiaries in proportion to average allocation.

All distribution licensees (beneficiaries) of State transmission network shall take note of above.

For Wind Energy Generators and Captive Power Plants :

Clause no. 11 of Amendment order no.3 of 2010 provides that wind energy generators and CPPs governed by above said GETCO order, shall be excluded from member of reactive pool account and dealt separately. While implementing above provision, following aspects are considered.

- The reactive energy exchanges of wind farm and captive power plants are presently being dealt as per GETCO order. The wind farms and CPPs are connected with state transmission network and hence the any reactive exchange with transmission network has to settle reactive charges for such drawl/injection of VAR.

- Since in accordance with the said amendment order, the reactive energy charges received so shall have to be utilized as specified by commission, therefore, it is required to be received by SLDC and shall be kept in separate fund other than pool account.
- GETCO is therefore requested to continue to compute reactive exchanges of wind farm and Captive Power Plants and submit statement to SLDC for issuing statement to wind farm and CPPs. SLDC will issue reactive statement along with monthly account.

All participants are requested to take note of above. GETCO, Wind Farms and CPPs are requested to continue present computation methods. GETCO shall submit statement of reactive energy charges received and transfer to SLDC account.

3.12 UI Charge of Generator having capacity of 5 MW - 15 MW Opt to Inject :

In accordance with clause no. 9(b) of Order no.3 of 2006 provides that all generators having total capacity not less than 5 MW and up to 15 MW can inject power into the grid for sale through Unscheduled Interchanges (UI) rate.

While implementing above provision, it is necessary to ensure by either SLDC/Discom that connectivity, metering and energy accounting scheme should be in place before allowing injection under above option. Metering and accounting scheme depends on the voltage level of connection point. Accordingly, this option is to be implemented in two separate parts:

- Generator (having capacity of 5MW-15MW) opt to inject under UI and it is connected with transmission network (66KV & above), the connectivity, metering is to be ensured by STU. The such generator will be pool member of UI account prepared by SLDC and settled accordingly.
- Generator (having capacity of 5MW-15MW) opt to inject under UI and it is connected with distribution network (33KV & below), the connectivity, metering is to be ensured by STU. The such generator will not be pool member of UI account prepared by SLDC. Respective distribution licensee has to settle UI charges.

Generating station falling in this category required to apply with SLDC for opting of 5MW -15W power. SLDC will ensure the connectivity, metering and energy accounting arrangement before issuing approval.

All participants note above.

3.13 Bank Guarantee or Letter of Credit :

Clause 16(j) of Order No.3 of 2003 provides that SLDC/STU may insist on appropriate payment security mechanism by way of Bank Guarantee or Bank Draft equal to seven days billing for scheduled energy either receivable or payable. This bank guarantee is required for settlement of SLDC charges Unscheduled Interchange Charge, Reactive Energy Charges and SLDC fees and charges.

In this regard, SLDC has prepared a format of bank guarantee and the amount of seven days billing for scheduled energy either receivable or payable will be calculated as under subjected to maximum limit of Rs. 25 Crore.

Amount of Bank Guarantee

$$= 7 \times (\text{Scheduled Energy}) \times (\text{Average UI Rate}) \times 24$$

The all participants shall give consent of above and have to execute bank guarantee. The format of bank guarantee will be circulated by SLDC.

3.14 Filing Agreement with SLDC :

Sub-Clause no. 12 of Clause No.4 of Annexure-III of amendment order no.3 of 2010 provides that all constituents shall have to file agreements with SLDC for being considered in scheduling and State Energy Accounting. It further provides that any bilateral agreements between constituents for scheduled interchanges on long-term/short-term basis shall also specify the interchange schedule, which shall be duly filed in advance.

The agreements have been executed through trading agency or any other agency, it is required by SLDC for scheduling and energy accounting of generating station as well as constituents/beneficiaries. SLDC has already intimated all state entities to furnish the agreements with SLDC (**Enclosure-3**), however we have not received such documents except SLPP.

It is therefore requested that distribution licensee shall filed the agreement executed by them with them supplier and transmission company (in three copies). The generating station shall filed the agreements executed with beneficiaries/buyers (in three copies). The copies filed should be certified or true copy of original.

3.15 Scheduling of wheeling transaction :

The scheduling of wheeling transaction covered under Intra State ABT as per Para 8 of order No. 3 of 2006 and subsequent amendment thereof, the dispatch instruction to generator or supplied connected with transmission network will be issued by SLDC. Whereas the schedule of receiving entity will be carried out through respective distribution licensee where such entity is located. Further, the energy accounting of receiving entity is to be carried out by respective distribution licensee.

While implementing above scheduling treatment of receiving entity, it is requested to follow the procedure outlined as under for smooth scheduling procedure:

- SLDC is receiving declaration schedule directly from generating station and entitlement to beneficiaries as per share allocation will be added into respective distribution licensee. It is noted that SLDC is not issuing entitlement directly to receiving entity. The respective distribution licensee has to further communicate it to receiving entity.
- The receiving entity shall submit their requisition to the respective distribution licensee and distribution licensee shall include such requisition in their consolidated requisition submitted with SLDC.
- When any new wheeling transaction is commenced, respective distribution licensee has to submit consent to SLDC ensuring the metering and energy accounting of receiving entity.

All distribution licensees shall take necessary action to implement above and coordinate with receiving entity to follow above procedure.

3.16 Master Frequency Meter for Computation of UI Charges :

Master Frequency Meter is identified meter whose recorded frequency (in each 15 minute block) is considered for computing UI charges. SLDC has identified two such meters in State transmission network, 440KV Kasor S/S and 220KV Jambuva S/s.

However, it is observed that master frequency meter considered by WRLDC for inter State UI charge computation are different sometimes. This difference exists in either side, at WRLDC and SLDC end. The difference is negligible but as soon as average frequency crosses steps of 0.02 Hz, the UI rate will get changed which leads. This causes difference in UI charges calculated by WRLDC and SLDC for common transaction.

The negligible difference in frequency shall not be accounted for operational purpose but it leads to change in UI rate. In view of this consideration, the all three regions connected through synchronous system have considered common meter of Korba Power Station.

In order to maintain the common average frequency & unscheduled interchange charges between RLDC and SLDC. It is proposed that SLDC will consider same meter of Korba Station (Meter No. 2564) for the computation of UI Charges.

All participants shall take note above.

3.17 Metering , Scheduling and Energy Accounting of TPL-Sugen and its associated beneficiaries :

SLDC has devised the methodology for Metering, Scheduling and Energy Accounting of TPL-Sugen and its associated beneficiaries vide SLDC letter no. GETCO/SLDC/3600 dated 11th June'2009. The above methodology was decided and implemented during interim period till intra state ABT implemented. The relevant stipulation of letter are reproduced are as under :

"Para 9.B Scheduling and Accounting Arrangement

*Intra State ABT has effective mechanism to share such UI charges. Hence proposed mechanism of quasi pool account is prepared in line with Intra State ABT **as intermediate arrangement**"*

Now, Intra State ABT is implemented from 5th April'2010, the interim methodology for metering, scheduling and energy accounting of TPL-Sugen and its associated beneficiaries is changed w.e.f. 5th April'2010 and same shall be treated at par with other transactions of same category.

TPL-Sugen, TPL-Ahemedabad and TPL-Surat shall take note of above.

3.18 Metering , Scheduling and Energy Accounting of Short Term Open Access Transaction :

The scheduling and energy accounting procedure followed for short term open access transaction which comprises intra state bilateral and/or inter state collective/bilateral, during interim period till intra state ABT is not implemented, shall be replaced by Intra State ABT procedure w.e.f. 5th April'2010.

All short term open access users are requested to take note of above.

3.19 Transmission Loss Treatment to KPTL :

KPTL is distribution licensee purchasing power from State Generating Station through reallocation of PPA by GUVNL. KPTL is using entire transmission network unlike to other distribution companies like MGVCL/UGVCL PGVCL/DGVCL. Therefore, the estimated losses pf entire transmission network (i.e. up to 66KV level) is applicable to KPTL. However, scheduling prepared for KPTL has applied only pool losses (2.34%) instead of estimated transmission losses (4.08%).

It is not possible to change the schedule with losses 4.08% as it is treated at par with other distribution licensee. Till the modification in treatment of losses in scheduling of KPTL, we have applied the differential losses (4.08 – 2.34) % on drawl of KPTL to arrive the correct unscheduled interchange charges.

KPTL shall take note of above.

AGENDA4: METERING, SCHEDULING AND ENERGY ACCOUNTING SCHEME

SLDC has prepared the metering, scheduling and energy accounting scheme of various state entities. The scheme stipulated hereunder is considered for the purpose of commercial implementation of Intra State ABT. This document provides the actual procedure followed by SLDC for implementing provision of Intra State ABT order. This will be reviewed and updated time to time.

All participants are requested to go through and update any changes takes place in respect of actual network and power purchase agreement. CE(SLDC) would like to discuss.

AGENDA 5: WEEKLY ENERGY ACCOUNTING FROM 5TH APRIL '2010 TO 11TH APRIL '2010

SLDC has started issuing commercial based energy accounting w.e.f.5th April'2010. The SLDC will discuss the outcome of energy accounting for the week from 5th April'10 to 11th April'10 through interactive presentation.

All pool members shall take note of above.

AGENDA 6 : INFORMATION SYSTEM

SLDC will issue weekly implemented schedule, energy accounting, computation and meter data through website for the purpose of various state entities. This will provide transparency in energy accounting system.

All pool members shall take note of above

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