

Annexe-2

Comments of Stakeholders on Wheeling & Banking Agreement and the Commission's views

1. Para-1

KPTCL:

*This draft Wheeling and Banking Agreement is made at on this day of2008 between**ESCOM** a Company formed and incorporated in India under the Companies Act, 1956, with its registered office located at Karnataka State hereinafter referred to as the "**.....Electricity Supply Company.....**" (which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns) as party of the first part, M/s a Company formed and incorporated under the Companies Act, 1956/proprietary/partnership firm/private limited/public limited Company/Consortium/Co-operative society etc., and having its Registered Office at..... hereinafter referred to as the "**Company**" (which expression shall, unless repugnant to the context or meaning thereof, include its successors, and permitted assigns) as party of the second part.*

BGR:

It should be adequate if the name of the consumer is indicated. There is no need to elaborate whether it is a company or a cooperative or partnership firm.

Commission's Views:

The above para as in draft may be retained as it clearly indicates whether the person seeking OA is a company, co-op society etc. However wherever ESCOM is there, the same shall be substituted by KPTCL/ESCOM so that in case only transmission system is used, the agreement can be between the Generator and KPTCL and in case both transmission & distribution system is used ESCOM & KPTCL shall be the signatories to the agreement. The above para is modified as under:

*This standard Wheeling and Banking Agreement is made at on this day of2008 between **Karnataka Power Transmission Corporation Limited** a Company formed and incorporated in India under the Companies Act, 1956, with its registered office located at Karnataka State hereinafter referred to as the "**Corporation**" (which expression shall, unless repugnant to the context or meaning thereof, include its successors, and permitted assigns) and **The Electricity Supply Companies Limited** the Companies formed and incorporated in India under the Companies Act, 1956, with its registered office located at Karnataka State hereinafter referred to as the "**ESCOM/S**" (which expression shall, unless repugnant to the context or meaning thereof, include its successors, and permitted assigns) **and** M/s a Company formed and incorporated under the Companies Act, 1956/proprietary/partnership firm/private limited/public limited Company/Consortium/Co-operative society etc., and having its Registered Office at..... hereinafter referred to as the "**Company**" (which expression shall, unless repugnant to the context or meaning thereof, include its successors, and permitted assigns) as parties*

2. Clause beginning with 'Whereas'

KPTCL

WHEREAS:

- i) *The Govt. of Karnataka by its order No.dated has accorded its sanction to the proposal of the Company for installation of a wind energy based/mini Hydro electric Power Generating Station ofMW capacity at/near Village in ----- Taluk, ----- District and Company intends to enter into an agreement with ESCOM for Wheeling & Banking of Electric Power generated.*
- ii) *Pursuant to (i) above, the Company plans to develop, design, engineer, procure finance, construct, own, operate and maintain wind energy based/mini hydro Electric Power Generating Station, hereinafter defined as the Project, with a Gross capacity ofMW at/near Village in ----- Taluk, ----- District, Karnataka and desires to use the same for its own / allied purpose utilizing the existing transmission & distribution network of utilities.*
- iii) *Karnataka Power Transmission Corporation Limited (KPTCL)/SLDC being the nodal agency has approved for wheeling and banking of electricity generated by the Company after obtaining consent from KPTCL/ESCOM vide letter No, _____ dated _____.*
- iv) *ESCOM which is at present engaged in Power purchase and retail distribution of electricity has agreed to Wheeling and Banking of Electricity (as hereinafter defined) from the Company to be generated at/nearvillage in _____Taluk_____District_____and shall be utilized for its own/allied purposes using transmission and distribution network subject to the conditions set forth herein.*

BGR

The clause can be made simple generally as. "Whereas ---- is desirous of selling ---- KW to--- - for a period of ---- and KPTCL and -----ESCOM in whose area the purchaser is located has agreed to wheel this quantum of Power, ---- (it need not be of concern whether the seller has obtained the requisite permits and approvals. In case, the seller is unable to spare the power or the purchaser is not able to absorb the power, it need not be of any concern either to the wheeling agencies. The agreement can be deemed as inoperative.

CEA:

It is not clear as to which party will utilize the electricity. Whether ESCOM or the Company? To remove ambiguity from Para (iv), it is recommended that the expression 'and shall be utilized for its own / allied purposes' may be deleted from Para (iv).

Commission's Views:

For the sake of more clarity the recital (I),(II) and (iii) proposed by KPTCL is retained and the recital (iv) is modified as under:

KPTCL at present engaged in transmission of power and ESCOMS at present engaged in Power purchase and retail distribution of electricity has/have agreed to Wheeling and Banking of Electricity (as hereinafter defined) from the Company to be generated at/nearvillage in _____Taluk_____District_____and shall be utilized for its own/allied purposes using transmission and distribution network subject to the conditions set forth herein.

3. Clause 1.1 Definitions

a. Billing Period:

CEA comments:

Any period including Billing Period consists of a starting time and date and ending time and date. In the above definition, this is not clear. The definition could be reworded as follows: 'Billing Period' would (Subject to Article 6 of this Agreement) extend from 00 hours of the first day of the calendar month to 2400 hours of last day of the calendar month. The first Billing Period shall commence with 00 hours of the Commercial Operation Date and end with 2400 hours of last day of the month in which the Commercial Operation Date occurs'.

Commission's Views:

Definition as proposed by CEA is adopted.

b. Metering Date:

CEA:

'Metering Date / Time' means 2400 hours of the last day of the calendar month.

Commission's Views:

CEA definition is adopted, as it is clearer.

c. Injected Energy:

KPTCL

"Injected Energy" means the kilowatt hours of Electricity actually injected and measured by the energy meters at the Injection Point in a Billing Period after deducting there from 115% of the energy supplied by ESCOM to the Project as similarly measured during such Billing Period and shall be computed in accordance with Article 6.

BGR

The definition can be simplified generally " Injected energy is the quantum of energy in KWH injected by the seller at the injection point for any specified period. If energy is pumped into the system of KPTCL or ESCOM as the case may be, at more than one point, then it shall mean the sum of the quantum of energy pumped in at different points. Reference to 115% of the energy supplied by the ESCOM appears redundant.

IWTMA, IWPA & Jindal Aluminium Ltd.

It should be 105% and Not 115%

CCS:

why should the 115% factor appear in the definition?

Commission's Views:

This definition is similar to the provision in the draft PPA approved hence KPTCL definition is retained:

b. Metering Point:-

KPTCL

“Metering Point” for purposes of recording of Injected Energy at the Injection Point and drawal of energy at drawal point and shall include two separate sets of electronic trivector meters (each set having Main meter & Check meter) with ABT features of 0.2 class accuracy. Both Main and Check meters to be installed by the Company on behalf of Utility and both sealed by Utility, having facilities to record both export and import of Electricity to/from the grid.

BGR

There is no need to include in the 'definition' details and conditions about seals, ABT compatibility etc

CCS:

replace the definition as follows: is the equipment installed at the injection point for purposes of recording of injected energy and at the drawal point for recording of drawal energy. It shall include two separate sets of electronic trivector meters (each set having Main meter and check meter) of 0.2 class accuracy. Both main and check meters are to be installed by the Company on behalf of the Utility at both the injection point and the drawal point, the equipment at the injection point having facility to record both export and import of electricity to and from the grid.

IWTMA, IWPA & Jindal Aluminium Ltd.

ABT Meters are not required for the aforesaid reasons.

Commission's Views:

The definition proposed by KPTCL is similar to the one approved in the draft PPA hence retained

c. Drawal Point:-**KPTCL**

“Drawal Point” the drawal point as specified by the Company (indicating the place of HT installation & RR. No. of HT installation).

BGR

The definition can be simplified as the point at which the purchaser draws the energy from the distribution network of the ESCOM.

CCS:

Is it necessary that the exclusive and Partly exclusive consumers draw electricity only at HT?

Commission's Views:

KPTCL definition is more specific about the point of drawal of energy hence retained:

d. System constraint:-**KPTCL**

“System constraint” means a condition or situation including the condition of ‘Emergency’ under which the Utility electrical system is not able to evacuate and transmit the generated energy fully or partly from the project due to unforeseen break down or otherwise.

BGR

Means an extraordinary situation on account of which either KPTCL or ESCOM is unable to transmit the quantum of energy agreed to be wheeled. Normally if there is any constraint, priority ought to be given to the energy to be wheeled.

IWTMA, IWPA & Jindal Aluminium Ltd.

Force Majeure is sufficient to address this aspect. System availability should be only the yardstick and not constraints.

Commission's Views:

The proposed KPTCL recital is same as approved in draft PPA Hence retained:

e. Wheeling**KPTCL**

"Wheeling" means the operation where by the distribution system and associated facility of a transmission and/or distribution licensee as the case may be, are used by the company for the conveyance of electricity on payment of charges to be determined under section 62 of the Act.

BGR

The definition can be simplified as "Energy that is transmitted by KPTCL/ESCOM on its system on behalf of the seller/ purchaser.

CCS:

replace by 'means the operation whereby the network and facilities of the Utilities are used by the company for the conveyance of electricity from the company to its exclusive and partly exclusive customers'.

IWTMA, IWPA & Jindal Aluminium Ltd.

Reference to section 62 maybe omitted. The wheeling Charges and Banking for Wind projects are determined as benign measures for renewable energy sources under Section 86 and NOT under Section 62 wherein Wheeling charges for rest of the conventional users are determined under the Tariff Order.

Commission's Views:

The definition as proposed by KPTCL is in tune with that in EA2003 hence retained.

f. Banking:-**KPTCL**

"Banking" means injecting of electrical energy generated by the company into transmission and distribution system of Corporation/ESCOM for its own use or for wheeling to its "Exclusive" or "Partly Exclusive" Consumers at a later date/month as per terms.

CCS:

Replace by means injecting of electrical energy into the network and facilities of the utilities by the company for use by its exclusive or partly exclusive customers at a later date/month as per terms and conditions.

BEL

This should be revised as "Banking" means the energy utilized at the beginning of the month after wheeling of the previous months generated energy and carried forward to the

next / later months for its own use or for wheeling to its exclusive or partly exclusive consumers at a later date / month as per terms.

Commission's Views:

Keeping in view the Comments of the stakeholders, the definition is modified as under:

"Banking" means residual electrical energy after utilization by the "Exclusive" or "Partly Exclusive" Consumer or "captive consumption" out of the injected energy in a month into the transmission and/or distribution system of Corporation/ESCOMs, which will be utilized for its own use or for wheeling to its "Exclusive" or "Partly Exclusive" Consumers at a later date/month, as per the terms and conditions set forth in this agreement.

g. Electricity Act –

KPTCL

"Electricity Act" shall mean the Electricity Act 2003 and the relevant rules, notifications, and amendments issued thereunder and all other Laws in effect from time to time.

CEA:

The phrase 'and all other Laws in effect from time to time' is too non-specific and should be deleted from the definition of the Electricity Act. These Laws wherever applicable should be separately specified.

CCS:

add regulations after rules.

Commission's Views:

This is modified as under:

"ACT" means the Electricity Act 2003 as amended from time to time.

h. Exclusive consumers –

KPTCL

"Exclusive consumers" Parties / Companies clearly identified by the Company for Wheeling Power and will receive entire quantum of their power requirement from the Company through the Transmission/ Distribution Network.

CEA:

As the 'Exclusive Consumers' would not wheel the power but purchase the power, the definition needs to be modified as follows : 'Exclusive Consumers' Parties / Companies clearly identified by the Company for purchasing the Wheeled Power and will receive entire quantum of their power requirement from the Company through the Transmission / Distribution Network.

CCS:

replace by are consumers of electricity clearly identified by the Company as those who will receive their entire quantum of electricity requirement from the company wheeled through the utility network and facilities. Except that under emergency conditions they would draw their power from the ESCOM.

IWTMA & IWPA & Jindal Aluminium Ltd.

It is virtually impossible to have exclusive usage from the Wind power projects. hence distinguishing between exclusive and partially exclusive consumers may be done away with

Commission's Views:

The KPTCL definition is felt in order hence retained:

i. Installed Capacity:-

KPTCL

"Installed Capacity" means the capacity of the Project at the generating terminal(s) and shall be equal toMW.

CCS:

Why should the MW value appear in the definition?

Commission's Views:

The proposed KPTCL definition is same as approved in draft PPA Hence retained:

j. Partly exclusive consumers:-

KPTCL

"Partly Exclusive Consumers" are regular consumers of a ESCOM and buys energy from the Company in addition to the drawal from the ESCOM system.

CEA:

The language may be structured as follows : 'Partly Exclusive Consumers' are regular consumers of a ESCOM who buy energy from the Company in addition to the drawal from the ESCOM system.

CCS:

replace by 'are regular consumers of an ESCOM who also buy electricity from the company in addition to buying from the ESCOM'.

IWTMA & IWPA & Jindal Aluminium Ltd.

See comments at Sl. No.2

Commission's Views:

KPTCL proposal is retained for more clarity:

k. Wind Year:-

KPTCL

"Wind Year" shall mean "year commencing from April to March of next year"

CCS:

replace by 'year commencing from 1 April to 31 March of the next year'.

Commission's Views:

For more clarity modified as:

“Wind Year” shall mean “year commencing from 1st April to 31st March of next year”

I. “Emergency”

KPTCL

“Emergency” *Conditions or situations which in the reasonable judgment of UTILITY'S affects or will affect the system including voltage/frequency fluctuations or UTILITY'S ability to meet its own obligations to maintain safe adequate electricity service to ESCOM's consumers or presents an imminent threat of damage to life or property.*

REDAK & BCCI

Emergency means a condition or situation affecting either Corporation's/utility's electrical system or the grid system, including without limitation, voltage/frequency variations beyond the Technical limits, which threatens the safe and reliable operation of such system or which is likely to result in disruption of safe, adequate and continuous electric supply by corporation or the Grid system or could endanger life or property.

IWTMA & IWPA & Jindal Aluminium Ltd.

There is no need for a clause on emergency when there is a force majeure clause

Commission's Views:

The proposed KPTCL definition is same as approved in draft PPA Hence retained:

m. “Injection point”

KPTCL

“Injection Point” *shall be the point or points at which Electricity is injected by the Company into the KPTCL/ESCOM sub-station point.*

REDAK & BCCI

“Injection point” shall be the point at which interconnecting transmission line from the project takes off for delivery of electricity at the receiving station of the KPTCL/ESCOM and is after the high voltage side of the step up transformer installed at the project site/pooling station as stipulated in KPTCL evacuation approval.

Commission's Views:

KPTCL definition may be modified as under:

“Injection Point” shall be the point or points at which Electricity is injected at the project site by the Company into the KPTCL/ESCOM network.

n. Utility

KPTCL

“Utility” *means transmission or distribution Utility i.e., KPTCL or ESCOMs as the case may be.*

IWTMA & IWPA & Jindal Aluminium Ltd.

All throughout the Agreement – the responsibility is vaguely cast on the entity called “Utility” which is interchanging and imprecise. Hence all responsibilities should be on the distribution company wherein the consumer is located and all system related responsibilities should vest with the Nodal agency.

Under the Agreement the generator must be interfacing with the Nodal agency for every permission sanction and approval. However in the Agreement there is no role prescribed

for the Nodal agency. From meter calibration to wheeling, the user is made responsible to the utility.

Commission's Views:

The KPTCL definition retained:

4. Clause 1.2 Interpretation

KPTCL

- (a) Unless otherwise stated, all references made in this Agreement to "Articles" and "Schedules" shall refer, respectively, to Articles of and Schedules to this Agreement. The Schedules to this Agreement shall form part of this Agreement and shall be in full force and effect as though they were expressly set out in the body of this Agreement.*

- (b) In this Agreement, unless the context otherwise requires (i) the singular shall include plural and vice versa; (ii) words denoting persons shall include partnership firms, companies and Corporations (iii) the words "include" and "including" are to be construed without limitation and (iv) a reference to any party includes that party's successors and permitted assigns.*

- (c) This pertains to new wind and mini hydel projects only. For existing projects relevant clauses shall apply.*

CCS

This to be replaced by 'This agreement'.

HESCOM

Has considered only wind and Mini hydel projects. Biomass, Captive and Cogeneration projects are not considered. If the generating companies of Biomass, captive and cogeneration projects opt for Wheeling and Banking arrangement whether the draft agreement is also applicable or not.

Commission's Views:

Clause (a) and (b) are retained and clause (c) is modified as under:

- (c) This Agreement pertains to all types of Renewable projects. For existing projects where Agreement has already been signed and in vogue, such Agreement shall continue to apply for the terms specified in those agreements. For such projects this agreement becomes applicable only after the expiry of the term specified in those agreements. This is also not applicable to those agreements which are pending before the courts of law / KEREC.*

5. Clause 2- General comments:

IWTMA & IWPA & Jindal Aluminium Ltd.

All these responsibilities must be carried out by the nodal agency and the utility jointly. Generators has no role in the same.

6. Clause 2.1

KPTCL

The power from the Generating Plant of the Company is evacuated through thekV line constructed and maintain:ed by the Company up to the KVSubstation (Injection Point). Evacuation of power shall be limited to the capacity of transmission/ distribution system.

BGR

This clause appears to be superfluous.

HESCOM

As per the Grid Code 2005 Section 5.6.1 The generating company owns the asset up to the metering point in the station area. The lines and other equipments after the metering becomes the property of the utility. Hence the point of injection is at the metering point or substation end is to be clarified.

Commission’s Views:

KPTCL proposal is retained as it is more specific:

7. Clause 2.2

KPTCL

The Company shall provide suitable relays and protective devices as per prudent practice at injection point.....Sub-station and shall be got calibrated / checked by the Utility after paying necessary charges before the plant is synchronized. The calibration shall also be got done by the Company periodically (once in a quarter) during the operation and synchronization of the plant to ensure proper functioning of the plant. For protection to the equipments of the Utility and the Company, the Company shall install, at its own cost, protection equipments like protection relays, communication system or similar equipment. The Company shall obtain the approval of the Utility for the specification of such equipments and shall furnish the test reports etc., to the Utility.

BGR

The seller shall install metering equipment with accuracy class 0.2 capable of measuring KW,KWH,PF. (Considering the small quantum of energy involved, it may not be necessary to have ABT compatible metering.) It is adequate if it is stipulated that the seller shall install a protective system to take care of faults in the transmission/distribution network of the wheeling agency. (it is not necessary to obtain approval of KPTCL or ESCOM. As Owner of the generating equipment he is sure to take enough precautions to protect his equipment. There is no apprehension about any damage to the larger system)

REDAK & BCCI

The calibration shall also be got done by the company periodically (once in a year). In the first quarter of the water / wind year.

IWTMA & IWPA & Jindal Aluminium Ltd.

Calibration should be a joint responsibility generator Utility and Nodal agency.

Commission’s Views:

KPTCL proposal is retained for sake of clarity:

8. Clause 2.3

KPTCL

The Company shall, get the generating sets and other equipments inspected by MRT Division, of concerned Utility and obtain written approval before they are actually serviced. Further, the Company shall ensure that all statutory approvals like

- a) *Approval of the Electrical inspectorate*
- b) *Synchronization approval from Utility.*
- c) *Written approval / concurrence of ESCOMs for wheeling & banking of injected / generated energy to its exclusive and partly exclusive consumers before Synchronization.*

BGR

This clause is redundant as it is obligatory for the owner to get the requisite approvals. In case he violates the rules and is caught he will stand to lose and no firm will take this risk and it will have no impact on the wheeling agencies.

REDAK & BCCI

The Company shall ensure that all statutory approvals including the following are to be obtained before synchronization:

- a) Approval of electrical inspectorate
- b) pre-commissioning test by MRT
- c) Synchronization approval from KPTCL/Utility.

IWTMA

There should NOT be sub categorization in the Utility responsibilities. Generator should have only one interface with utility and the same should be through nodal agency only.

IWPA & Jindal Aluminium Ltd.

The Company shall ensure that all approvals are obtained including 1) approval from CEIG, 2) pre-commissioning Tests by MRT, 3) Synchronization approval from concerned Utility/KPTCL.

Commission's Views:

This clause proposed is more specific hence retained:

9. Clause 2.4**KPTCL**

The Company shall ensure that the plant be open for inspection by the authorized representative of Utility before being Commissioned and periodically thereafter.

CEA:

The periodicity of inspection may be indicated before hand in the agreement.

BGR

It is not clear why the company should be obliged to keep open its installation for inspection to ESCOM or KPTCL. As the three partners should be deemed to be on equal footing as far this transaction is concerned. The Company gains by selling energy and the utilities by collecting a charge.

Commission's Views:

To ensure safe and coordinated operation the KPTCL proposal is retained:

10. Clause 2.5

KPTCL

The Company shall give fifteen days prior notice to the Utility before the date of trial operation, commercial operation of the generator. The same shall be intimated to the SLDC/ESCOMs, jurisdictional Chief General Manager/Chief Engineer, Electy / General Manager (Ele), Executive Engineer (EI), concerned O & M/TL and SS Division and Executive Engineer MRT Division.

BGR

It is not necessary to make a distinction between trial and commercial operation. These appear to be unnecessary formalities. An intimation to LDC about the commencement of wheeling should be adequate.

REDAK & BCCI

i) The Company shall give fifteen days prior notice to the utility before the date of trial operation / commercial operation of the generator. The synchronization of the generator shall be done in the presence of the executive engineer (TL & SS), Executive engineer O & M and Executive Engineer MRT division.

ii) Within 15 days of commissioning, the same shall be intimated to the SLDC/ESCOMs, jurisdictional Chief General manager/Chief Engineer, electricity/General Manager (E), Executive Engineer (EI), concerned O&M/TL and SS division and Executive Engineer MRT division and other relevant Government agencies.

Commission's Views:

Considering the current operational procedure followed by KPTCL and ESCOMs this clause is retained:

11. Clause 2.6

KPTCL

The Company shall maintain the lines from the generating station up to the point of injection at its own cost.

BGR

This clause can be retained though it is obvious and redundant. who else will maintain the line other than the owner.

Commission's Views:

KPTCL clause is retained for clarity:

12. Clause 2.7

KPTCL

Any line outage between point of generation up-to injection point for any reason what so ever consequent to which the power cannot be pumped into the system, the Utility shall not be responsible for such outages/loss.

BGR

This clause is superfluous. Actually, there should be a condition to cover a situation where KPTCL or ESCOM is unable to wheel the energy because of constraint or fault in the network.

CCS

Replace 'Any' by 'for any'

IWTMA & IWPA & Jindal Aluminium Ltd.

Utility cannot disown its responsibility by this blanket disclaimer. Excepting force majeure, as described below, utility is responsible for every loss

Commission's Views:

The KPTCL clause is retained as it is more specific:

13. Clause 2.8**KPTCL**

The Company shall at its cost establish the installed capacity of the plant by conducting performance test as per the design parameters of the machinery supplied, in presence of and to the satisfaction of concerned officers of the Utility, and then only commercial operation date can be declared.

If the declared capacity is not reached on this day, similar capacity test shall be carried out at its cost under favourable conditions, duly inviting concerned officers of the Utility, failing which the capacity achieved in the test on the date of commercial operation date shall be treated as the installed capacity.

CEA:

It is suggested that the following phrase may be added to Article: 2.8

'While requesting for repeat capacity test for declared capacity, the company should furnish modifications carried out in the plant in order to achieve the declared capacity'.

BGR

There is no need to including all these extraneous conditions. The issue under consideration is that the company requests for wheeling a certain quantum of energy and the ESCOM/KPTCL agree to transfer this energy to the purchaser at a cost. Other conditions stipulated in this clause are irrelevant.

REDAK & BCCI

The Company shall provide the manufacturer's test certificate for the generators installed for the purpose of confirming the installed capacity.

IWTMA & IWPA & Jindal Aluminium Ltd.

These are settled parameters. All Wind turbine capacities are certified at the apex levels. The declared capacity cannot be made dependant on a single test carried out on the COD.

Commission's Views:

This clause needs to be deleted as suggested by BGR. Under OA, the network provider is in no way concerned with the capacity test, as his duty is to reserve the corridor for the contracted capacity and is paid for the same. Hence, this clause is deleted.

14. Clause 2.9

KPTCL

In case the generating plant is located in one ESCOM and the Exclusive and Partly Exclusive consumers in other ESCOMS, the Company shall obtain concurrence of respective ESCOMS for wheeling of energy and shall pay applicable charges both ESCOMS and shall also comply with all applicable conditions.

BGR

This is a draft agreement. It is clear that at this stage all these concurrences will have been obtained before the firm approaches KPTCL/ESCOM. If more than one ESCOM is involved, all of them will have to be signatories to the agreement.

CCS

Replace by 'in case the generating plant is located in one ESCOM and the exclusive and partly Exclusive consumers are located in the same or other ESCOMS, the company shall obtain the concurrency of the respective ESCOMS for wheeling of energy and shall pay applicable wheeling charges to all the respective ESCOMS as per KERC mandated rates and shall also comply with all the applicable conditions. For purposes of Banking the ESCOM in whose area the Company's generating plant is located will be the concerned ESCOM.

Further, the formula in clause 6.2.4 does not say how the interests of the different ESCOMS are to be taken care of.

REDAK & BCCI

In case the generating plant is located in the ESCOM and the exclusive and partly exclusive consumers in other ESCOMS, wheeling and banking charges as per applicable tariff shall be shared by the ESCOM at injection point, escom at the consumer point and KPTCL.

Graphite India

"In case the generating plant is located in one ESCOM and the exclusive and partly exclusive consumers in other ESCOMS, the company shall obtain concurrence of respective ESCOMS for wheeling of energy and shall pay applicable charges to both ESCOMS and shall also comply with all applicable conditions".

We feel this clause needs further clarification to deal with the case of Generation (pumping in) and withdrawal at 66 KV and hence will be using only Grid for use transmission and not the ESCOM networks; though the work 'applicable' encompasses this condition as well.

HESCOM:

The applicable charges to be paid by the generating company includes the work strengthening charges also.

BEL

The applicable charges are to be specified and should be as approved by the Commission.

IWTMA

Nodal Agency should be responsible for all these functions. Why should company get the permission from two ESCOMS when there is a nodal agency?

IWPA & Jindal Aluminium Ltd.

Nodal Agency should be responsible for all these functions. The Concerned ESCOMs shall share the W & B charges, in case if the generating & consumer locations are different.

Commission's Views:

The suggestions of IWPA, Jindal and IWTMA are in tune with OA regulations. As per OA Regulations the application has to be made to the nodal agency and the nodal agency has to arrange for OA. The nodal agency has to co-ordinate with all the licensees involved. Hence, the clause needs to be modified as under,

2.9 In case the generating plant is located in one ESCOM and the Exclusive and Partly Exclusive consumers in other ESCOMs, the nodal agency shall obtain concurrence of respective ESCOMs/KPTCL for wheeling of energy.

15. Clause 3.1**KPTCL****3.1 Obligations of the Company:**

- (i) *The Company shall have all statutory approvals, clearances permits etc necessary for the Project.*
- (ii) *The Company shall undertake at its own cost construction /upgradation / maintenance of
 - (a) *the Interconnection Facilities and*
 - (b) *the transmission lines up to the injection point (Sub-station) .**
- (iii) *The transmission line so constructed shall remain as dedicated transmission line for the plant for which this agreement is signed.*
- (iv) *The Company shall operate and maintain the Project in accordance with Prudent Utility Practices as long as the Wheeling and Banking arrangement is in force.*
- (v) *The Company shall be responsible for all payments on account of any taxes, cess, duties or levies imposed by the Government or its competent statutory authority on the land, equipment, material or works of the Project and duty on the Electricity generated or consumed by the Project or by itself.*
- (vi) *Necessary Transmission and Distribution, Wheeling and Banking charges are to be paid by the Company to the Utility as per KERC norms from time to time.*
- (vii) *The Utility shall have free access to the premises of the Company at any time without notice for meter reading, inspection, testing etc.*
- (viii) *The data on technical parameters such as quantum of generation, peak power evacuation etc., shall be maintained and the same shall be made available to Utility on real time basis.*

BGR

3.1 (i) The conditions stipulated under this clause need not be part of the agreement, which is required to spell out the obligations after the two systems are interconnected. Quite a few conditions have been covered already (Such as payment as per KERC norms).

IWTMA & IWPA & Jindal Aluminium Ltd.

3.1 (i) All approvals are joint responsibilities.

IWTMA & IWPA & Jindal Aluminium Ltd.

3.1 (ii) Responsibility of the Company should end with the provision of lines up to Company's substation.

S.Govindappa

3.1 (iii) As the energy is measured at the injection point and since the line belongs to the company, there should be no objection by the utility for the company to tap the line any where since the energy is measured at the injection point. Hence the line "without provision for which the agreement is signed" may be deleted.

HESCOM

3.1 (iii) The dedicated transmission line shall remain dedicated only for the subject project and the generating company should not do any Tapings/LILO arrangement for any other projects of its own without the permission of the utility.

IWTMA & IWPA & Jindal Aluminium Ltd.

3.1 (iii) In a wind power project it is impossible to have a dedicated transmission line for W&B Agreement only. All generators whether under PPA or W&B are connected to the same line.

CCS

3 (v) Insert 'from time to time' after 'authority' and before 'on the land'.

IWTMA & IWPA & Jindal Aluminium Ltd.

3 (v) Are redundant. These responsibilities vest with Utility as well but why it is not mentioned in Utility's obligations.

REDAK & BCCI

3(vi) Necessary wheeling and Banking Charges are to be paid by the Company to the Utility as per KERC norms from time to time.

IWTMA & IWPA & Jindal Aluminium Ltd.

3 (vi) Are redundant. These responsibilities vest with Utility as well but why it is not mentioned in Utility's obligations.

IWTMA & IWPA & Jindal Aluminium Ltd.

3.1 (vii) Access should be during office hours with reasonable notice.

IWTMA & IWPA & Jindal Aluminium Ltd.

3.1 (viii) provision on real time basis is not possible. Submission of data should be to Nodal agency and should be on defined time intervals.

HESCOM

3.1 (ix) The Company shall resolve any dispute arising out of billing transaction, payment and other obligations of the agreement with the exclusive consumer on its own without involving utilities arbitration.

SWR:

3.1 the following para may be included: any deviations from the statutory approval is found in the intermediate stage, the Company shall be penalized as per KERC norms.

Commission's Views:

Clause (i), (ii), (iv), (v) and (vii) are retained as proposed by KPTCL. Clause No. (iii) and (viii) are deleted, clause No (vi) is modified as under:

(vi) Necessary charges are to be paid by the Company to the Utility as per Article -5.

In order to achieve financial closure the clause is added similar to the clause in the draft PPA :

The Company shall achieve scheduled date of completion within one and half years from the date of achieving financial closure or two years from the date of signing the agreement whichever is later.

Clause No. (viii) proposed by KPTCL is retained for such projects for which the Intra state ABT is applicable.

16. Clause 3.2

KPTCL

3.2 Obligations of Utility:

- (i) Subject to system constraints to Wheel the Electricity generated by the Company up to the Delivery Point.
- (ii) To accord approval within a reasonable period for the Interconnection Facilities to be constructed by the Company.
- (iii) The Utility's obligation for evacuation and wheeling shall be limited to the available transmission and distribution system.

CEA:

ESCOMs must ensure availability of transmission facility through augmentation where necessary. The utility's obligation must also include ensuring that the committed transmission facility is available at the normative levels specified by KERC at all times for the entire duration of the contract because the proposed generators are long term players and techno-economic viability of the installation of the plants is based upon the availability of transmission facilities in long run.

BGR

(This clause has been wrongly numbered and should have been numbered as 3.2) It is the responsibility of ESCOM/KPTCL to wheel the agreed quantum of electricity once the agreement is entered into and should be liable to pay some compensation if it is unable to do so except under Force majeure condition.

CCS

3.2 Obligations – replace by '3.2 obligations'.

IWTMA & IWPA & Jindal Aluminium Ltd.

3.2 Obligations of the Utility should be to
Accord all permission and sanctions within defined time lines.
Supply start up energy.
Provide wheeling and banking
Payment security mechanism
to obey KERC and Nodal Agency orders and directives.

Make the system available up to 98%. Pay compensation for not making the system available excepting the force majeure event.
Not to levy any charges other than those fixed by KERC expressly through orders.

BEL

3.2 (ii) The reasonable period of approval by utility for interconnection facilities shall be less than 6 days.

CCS

3.2 (iii) Replace by 'The utility's obligation for wheeling and banking shall be limited to the capacity available in the transmission and distribution system at that time'.

HESCOM

3.2 (iv) The Utility may utilize the available margin capacity of the transmission/evacuation lines to evacuate power through the dedicated lines when once the lines have become the property of the utility after taking over.

Commission's Views:

This is modified as under:

- i) Subject to system constraints, the Licensee/s shall Wheel the Electricity generated by the Company up to the Drawal Point..**

Some definite time is to be specified. The clause is modified as under:

- ii. Licensee/s shall accord approval within one month from the date of application for the Interconnection Facilities to be constructed by the Company.**

This clause is modify to ensure the obligation of the utility towards the company modified a under :

- (ii) The KPTCL / ESCOMs shall ensure availability of network through augmentation wherever necessary and ensure that the contracted network capacity under long term open access is made available to the company during the period of contract, at normative levels as specified by the Commission from time to time.**
- (iv) KPTCL ESCOMs shall abide by the State Grid code, Distribution code and other applicable rules, regulations and standards.**

17. Clause 4.1

KPTCL

The operation of the power plant shall not at any time be prejudicial to the interest of the Utility.

BGR

This is clause redundant. Care will have been exercised by KPTCL/ESCOM before agreeing to wheel the energy.

CCS

This wording is too one sided and open. It should be more specific as to what are considered as prejudicial to the interests of the Utility.

IWTMA & IWPA & Jindal Aluminium Ltd.

what is meant by prejudice to interest of the Utility?

Commission's Views:

Clause is slightly modified as under:

The operation of the power plant shall not at any time be in contravention to the applicable laws.

18. Clause 4.2

KPTCL

The Company shall be allowed to operate the power plant as a base load generating station. The Utility shall not impose any restrictions on the above manner of generation except for reasons for safe operation of the grid.

BGR

From the preamble, it is presumed that the quantum wheeled will be a very small portion of the total power handled by the ESCOM. Under these circumstances, this clause is superfluous. At best, there could be condition that the generation of the company shall be regulated as per the instruction of the LDC which has to furnish reasons for seeking alteration in the generation schedule of the Company.

IWTMA & IWPA & Jindal Aluminium Ltd.

It is not possible to operate the plant as base load.

Commission's Views:

KPTCL clause is retained as this is the practice in case of PPA:

19. Clause 4.3

KPTCL

The Company shall ensure that the plant is designed to operate within the voltage and frequency ranges specified below so as ensure grid operation as per Grid Code.

*Voltage range ;}
Frequency range ;} as per Grid code norms*

The Utility will make reasonable efforts to operate the system within these limits. The Company shall provide automatic disconnection facility if the ranges of the electrical characteristics go outside the cut-off limits specified above. For Grid frequency > 50.5 Hz, the Generator gets disconnected and drawal is permitted out of the banked energy only if any. For Grid frequency < 49.0 Hz, drawal of energy is not permitted, but banking is permitted for the injected energy. The Company shall not hold the Utility responsible for any damages to Company's equipment due to variations in Voltage and Frequency in the connected system and Utility shall not be liable to compensate the Company for any damages suffered on account of this.

BGR

The frequency and voltage norms should be applicable to both the parties.

CCS & BCCI

Generation at frequency 50.5 c/s and above – the companies may be allowed to generate and wheel equivalent energy simultaneously at frequency 50.5 c/s and above and with in safe operation of the grid.

S. Govindappa

“for grid frequency > 50.5 HZ the generator gets disconnected” here “company's” generator gets disconnected. The underlined to be added to make it clear.

The clause “the company shall not hold an account of this”. This clause is one sided and the Commission may suitably amend it.

BEL

The wind energy being infirm cutoff limits of grid frequency should not be made applicable to wind power plant.

IWTMA & IWPA & Jindal Aluminium Ltd.

For providing automatic disconnection –company should be paid a charge. KERC should provide for a compensation for over voltage and over frequency. Utility should compensate for over voltage and over frequency as per directions of KERC.

SWR

the flowing para may be included: if ESCOM property is put to loss or damage by any means by the company, the same shall be replaced immediately.

SPML

Stipulates that the generator be disconnected when grid frequency is >50.5 Hz. Clause 6.2.6 further stipulates that energy injected into the grid at frequency >50.5 Hz will not be allowed for wheeling & banking. It is suggested that mini hydel and wind energy based projects be exempted from this clause. Instead the Utilities may be advised to back down other power plants (e.g. fossil fuel fired plants) under such circumstances.

Commission's Views:

The clause is simplified as follows:

The Company shall ensure that the plant is designed to operate within the voltage and frequency as specified in the Grid Code

20. Clause 4.4

KPTCL

The Company shall evolve suitable operating instructions in consultation with the jurisdictional Chief Engineer (Electy) for maintenance of system network, issue of line clear, persons to be contacted for operations/emergencies, etc. The operation of the power plant shall be suitably co-ordinated as per the instructions of State/Area Load Despatch Centre whenever so requisitioned.

BGR

As mentioned earlier, LDC can have some control over the plant and hence only the last sentence can be retained.

IWTMA & IWPA & Jindal Aluminium Ltd.

Operation of the plant should be as per SLDC alone. No jurisdictional Engineers have any role in the same.

Commission's views:

KPTCL clause is retained for practicability:

21. Clause 4.5

KPTCL

The Company shall ensure that reactive power corresponding to active power generation is pumped into the system network corresponding to a power factor of 0.85 based on the design parameters.

BGR

This clause can be revised as "The company shall ensure that the power pumped into the grid at any time shall be at a PF of not more than 0.85 lagging". There should be a clause for imposing a charge if the PF is low.

REDAK & BCCI

To be deleted

IWTMA & IWPA & Jindal Aluminium Ltd.

For providing these design parameters, a separate charge may be allowed to be paid by Utility to the generators.

Commission's Views

This Clause is deleted as the same is taken care in 5.4:

22. Clause 4.6**KPTCL**

The Company shall provide real time MW/MVAr generated/pumped into the grid and monthly energy injected into the Grid to State/Area Load Dispatch Centre and Zonal Chief Engineer Electy.

During emergency in the system, the Utility reserves the right to shutdown the line and will be under no obligation to evacuate the power. The Company shall suitably back down their generation and has no right for any compensation in such an event. The Utility will make all reasonable efforts to bring back normalcy at the earliest.

BGR

The first para does not convey any meaning and can be deleted. It is the ESCOM/KPTCL which has to prepare the bill based on the power transferred. As indicated earlier, the ESCOM does not comply with the condition of the agreement, it should be liable to pay some compensation to the company.

CCS

Replace by 'The company shall provide real-time MW/MVAR as well as MWH/MVARH generated and injected into the grid to the State/Area LDCs and to the Zonal chief Engineer (Electricity)'.

IWTMA & IWPA & Jindal Aluminium Ltd.

It is illegal to provide for such clauses. Only force majeure should be the condition existing for such measures.

Commission's Views:

Keeping in view the suggestions of stakeholders, the clause is modified as under:

During emergency in the system, the Utility reserves the right to shutdown the line and will be under no obligation to evacuate the power. The Company shall suitably back down their generation and has no right for any compensation in such an event. The Utility will make all reasonable efforts to bring back normalcy at the earliest.

24. Clause 5.1

KPTCL

The Company to pay all the monthly charges to Utilities for using their network as per KERC regulations for Wheeling and Banking from time to time before the due date failing which payment default occurs.

BGR

This is in order.

CCS

The entire question of charges to be paid by the company and its exclusive and partly exclusive consumers appears confusing.

For a perusal of Article 5 and Article 6, we come to the following conclusions:

The company has to pay the following charges:

- A fixed one-time charges for providing reactive support at the rate of Rs. 37,000/- per MW of installed capacity – is this to be paid even if the company generates enough MVAR to ensure 0.85 pf at the injection point? It is said that the KVARH drawn by the company shall be charged at Rs. 0.4 per KVARH if the power factor of 0.85 is not adhered to – why then should there be a fixed one-time charges for providing reactive support?
- A grid support charge (or for the present equal to the demand charge, since KERC does not appear to have fixed the grid support charge as yet). This charge is also the same as the monthly charges for using the network of the Utility – This is to be confirmed.
- A wheeling and banking charge as mentioned in Para 6.2.4 and amounting to 0.02 of energy injected for Banking and 0.05 of the energy injected for wheeling – It is not clear why both should be charged since the energy will be wheeled or banked. The quantum of the wheeled and banked energy will be known at the end of the month. But the 0.02 and the 0.05 factor is applied to the energy injected and not the energy banked or wheeled. In fact it is not clear why there are two factors 0.02 and 0.05 since ultimately the banked power also will go to the consumers like the wheeled power but at a different period in time. Is there an advantage to the Utility because of this and hence the multiplying factor is lower for banked power? This charge presumably takes care of the losses etc which are incurred in wheeling and banking.

The Exclusive and Partly exclusive consumers have to pay

- A grid support charge (or equal to demand charge till KERC fixes the grid support charge).
- An energy charge by the Partly exclusive consumers – the method of computation is to be made clear.
- An energy charge at a penal rate by the Exclusive consumers.

From the forgoing it seems that the company and its Consumers are paying the grid support or demand charges many times over – the grid being used is one and the same.

IWTMA & IWPA & Jindal Aluminium Ltd.

What is the remedial mechanism when default occurs because of BESCOM wherein it uses the energy free of cost without giving the necessary credit to company viz., Madras Cements case?

Commission's Views:

Keeping in view the comments of stakeholders, the Clause is modified as under:

The Company to pay all the monthly charges to Utilities for using their network as per KERC orders dated 09.06.2005 and 11.07.2008 for Wheeling and Banking of energy expect the UI charges for wind and Mini hydel and below 25 MW projects of other renewable sources for which ABT mechanism is not applicable as per KERC order dated 20.06.2006.

T

25. Clause 5.2

KPTCL

UI and any other Charges are payable by the generating Company to ESCOMS as per KERC/ CERC norms from time to time.

BGR

This is in order

CCS

Is it not possible to foresee what charges are to be paid and be explicit about it? Since the Company is a generating entity and no power purchase is involved there should not be any case of UI charges.

IWTMA

CERC has not fixed any UI Charges in respect of Wheeling and Banking for wind. The charges fixed by CERC in respect of scheduled generators under the ISGS regime wherein more than 2 beneficiary states are involved. Hence no UI charges are payable.

IWPA

CERC has not fixed any UI Charges in respect of Wheeling and Banking for wind. The charges fixed by CERC in respect of scheduled generators under the ISGS regime wherein more than 2 beneficiary states are involved. Hence no UI charges and payable.

Also since wind does not fall under UI ambit the same shall be exempted.

Commission's Views:

As the modified clause 5.1 above clearly indicates that all charges determined by the Commission have to be paid by the Company, this clause is deleted.

The charges related to UI are separately stated in 6.3

26. Clause 5.3

KPTCL

Surcharge as fixed by KERC from time to time shall be payable by the Company to ESCOM (in whose jurisdiction the power utilization takes place to compensate the revenue loss to that ESCOM) where the wheeling of energy is other than for captive consumption.

BGR

This is in order except that the explanation in the brackets and the qualification that the surcharge is not payable in respect of captive consumption could be deleted.

IWTMA & IWPA & Jindal Aluminium Ltd.

Collection and payment of surcharge is against the provision of the Electricity Act, 2003. There is no enabling provision or mechanism which sanctifies the payment of surcharge. According to a catena of Supreme court of India rulings no charges can be levied by statutory authorities in contravention of a statute. Hence this Hon'ble commission may be please to exempt the levy of surcharge.

Commission's Views:

As the modified clause 5.1 above clearly indicates that all charges determined by the Commission have to be paid by the Company, this clause is deleted.

27. Clause 5.4**KPTCL**

The COMPANY shall agree to pay to the ESCOM, on or before signing of this Agreement, at the rate of Rs. 37,000/- [Rupees Thirty Seven Thousand only] per MW of Installed Capacity as fixed by KERC from time to time and for fractions thereof on a pro-rata basis as a one time lump-sum payment for the sole purpose of providing the required MVAr capacity at the sub-station of the Utility to which the Project is interconnected to supply the requisite reactive power to the Grid system. Utility to use these funds in providing adequate capacitor/reactor compensation at appropriate points by conducting system studies at the earliest.

BGR

Once the payment is regulated as per KERC regulations, there is no need to elaborate further. It is presumed that the regulations cover a situation where stipulated MVAR is not supplied into the grid.

CCS

Vide clause 4.5 it is specified that the Company should generate enough KVARs to maintain the output of the generating station at the injection point at a power factor of 0.85. the conditions under which the Utility will be providing reactive power capacity at the injection point are to be spelt out.

IWTMA & IWPA & Jindal Aluminium Ltd.

The above principles apply to the levy of Rs. 37,000/- also. Furthermore, the Utility (BESCOM & KPTCL) have not sought any sanction for collection of the same from the consumers in any of their ARRs, nor the same is approved as a Tariff or Non tariff charge by Hon'ble KERC.

Commission's Views:

KPTCL views are retained and since 5.2 and 5.3 are deleted 5.4 will be renumbered as 5.2.

28. Clause 5.5**KPTCL**

COMPANY shall be permitted to use power upto 10% of the installed capacity for startup and energy wise it shall be limited to 10% of energy at Annual PLF of (i.e. Minihydel – 30 % and Wind Mills- 26.5% as considered for Tariff computation by KERC) or actual consumption of the plant, whichever is lower for the billing period. 115% of such energy provided by the ESCOM for startup purposes shall be deducted from the energy pumped into the ESCOM by the COMPANY for determining the net energy pumped into the ESCOM. If energy drawn is more than the above-specified limit for start up, the excess energy drawn will be billed at Two times the tariff applicable to HT 2A including demand charges .

For other than start up period, the actual consumption would be charged at HT 2A tariff including demand charges.

CEA:

As per the stipulation, when the Company's power station is under shut down and it is consuming power for maintenance of units, it will pay for such energy at HT 2A tariff. After the maintenance is over, the Company would utilize the power being drawn for start-up purpose, which would be chargeable at other tariff(s). However, the time, from which the energy being drawn by the Company would be treated as Start-up power,, is not clear in the Article. This needs to be clarified as otherwise, it would be difficult to determine the accurate quantity of electricity used in excess of the stipulated limit for start-up purposes.

BGR

This clause relating to auxiliary consumption or annual LF does not seem to be relevant. Hence this clause can be deleted.

CCS

Vide this clause it is specified that the power drawn by the Company from the Utility for starting purposes will be multiplied by a factor of 1.15 to compute the net interchange of power with the utility. Therefore including this factor in the 'Definitions' is not required.

IWTMA & IWPA & Jindal Aluminium Ltd.

Excess energy drawn should not be billed at two times the tariff applicable to HT 2A including demand charges. There is no express sanction for the same in any orders of the Hon'ble KERC. All categories of consumers can avail Wheeling and Banking. hence there is no justification for levying HT 2 A charges.

Commission's Views:

KPTCL proposal is retained.

29. Clause 5.6

KPTCL

Violation of Article 4.5 may result in reactive energy drawal by the Company from the grid & this reactive energy drawn shall be paid by the Company at Rs. 0. 40/ kVArh drawn (or as per KERC regulations from time to time).

BGR

This clause also appears redundant.

REDAK & BCCI

To be deleted

IWTMA & IWPA & Jindal Aluminium Ltd.

See the above comments on express authority on collection of charges.

Commission's Views:

KPTCL clause is retained.

30. Clause 6.1

Clause 6.1.1

KPTCL

Company shall submit a list of "Exclusive Consumers" and "Partly Exclusive consumers" to whom it proposes to wheel power using the Utility transmission and distribution network atleast 30 days in advance. The Utility shall subject to availability of transmission and distribution network approve the same. Any addition / deletion to the list or change in allocation shall be got approved by the Utility. An agreement shall be entered into between Company and consumers agreeing to all the relevant conditions of this agreement and shall be made available to the Utility before commencement of wheeling.

BGR

Separate clauses are necessary for exclusive consumers and partly exclusive consumers. Incidentally, the use of the word "partly exclusive consumer" does not seem appropriate. He is a regular consumer of the ESCOM and he is only meeting part of his requirement from another source because it works out to be more economical. The difference between the two is that working out the charges becomes a little more complicated in the case of a Consumer of ESCOM.. If the company is selling to more than one consumer each transaction has to be dealt with individually redrafting of the clause is required.

REDAK & BCCI

- a) Companies should be permitted to submit the list of consumers 15 days in advance instead of 30 days in advance.
- b) For exclusive consumers modus operandies of wheeling to be worked out.

IWTMA & IWPA & Jindal Aluminium Ltd.

Firstly, categorization of exclusive & non exclusive customers is not according to the KERC categorization of consumers. Furthermore the list and agreement/s can at best be furnished to the Nodal agency and NOT the utility. Company can be made to furnish the supply details in MW terms, without requiring submitting the entire set of agreement copies executed with its consumers. Further the same has no relevance in case of captive usage.

Commission's Views:

6.1.1. The clause suggest by KPTCL has been retained with relevant change, which is as follows :

Company shall submit a list of "Exclusive Consumers" and "Partly Exclusive consumers" to whom it proposes to wheel power using the Utility transmission and distribution network at least 15 days in advance. The Utility shall subject to availability of transmission and distribution network approve the same. Any addition / deletion to the list or change in allocation shall be got approved by the Utility. An agreement shall be entered into between Company and consumers agreeing to all the relevant conditions of this agreement and shall be made available to the Utility before commencement of wheeling.

Clause 6.1.2

KPTCL

*The Company should wheel power to those stipulated HT consumers only who are having no arrears with the utilities and are not availing power from ESCOMs under any special incentive scheme. In case of "Partly Exclusive Consumers", who avail power both from the Company and the ESCOM, **the first charge shall be the power supplied by the Company.***

CEA:

This contraction needs to be eliminated.

BGR

The clause could be redrafted some what on these lines. The ESCOM reserves the right not to wheel the energy in case the consumer has not paid the dues to the ESCOM. In case of exclusive consumers this contingency does not arise. Whether the company should pay the fixed charge under such a circumstances needs to be discussed.

CCS:

Is there a condition that the consumers have to be HT only? It is not clear as to how the Utility will distinguish between power supplied by the utility and power supplied by the Company to the Partly exclusive consumers. At the end of the month the total amount of power injected by the company has to be compared with the total power consumed by both the exclusive and partly exclusive consumers. If the injected power is more than the sum of the consumed powers then that power is banked.

If less and after setting off any banked power from the previous month/s this must be considered as energy supplied by the utility to the partly exclusive consumers. If it is considerably less – i.e. even less than the power consumed by the Exclusive Consumers then it must be taken as an Emergency situation where even the Exclusive Consumers are supplied with power by the Utility.

A separate formula/arrangement is required to assign this Utility supplied power to the different Partly exclusive consumers – assuming that there will be more than one. This clause implies that the power supplied by the utility will be paid for first – how will this be implemented in practice since the tariff and the method of payment by Exclusive and Partly exclusive consumers is not part of this agreement?

REDAK & BCCI

The Company should wheel power to all HT consumers who are drawing energy from the utilities, irrespective of having arrears with utilities or availing power from ESCOMS under any special incentive scheme. In case of "Partly exclusive consumers" who avail power both from the company and ESCOM, the first charge shall be the power supplied by the company.

IWTMA & IWPA & Jindal Aluminium Ltd.

Restrictions to HT consumers are unjustified and not according to the scheme the Electricity Act, 2003.

Restriction imposed on supply to consumers not availing power from ESCOMS under any special incentive scheme is against the Electricity Act, 2003.

SWR

The following sub paras are mentioned:

6.1.2: In case of "Party Exclusive consumer who avail power from both company and the ESCOM, the first charge shall be the power supplied by the company.

6.3.2 (2) : In case of "Party Exclusive consumer who avail power from both company and the EZCOM, the first charge shall be the Power supplied by the utility.

The above two paras contradicting each other. The same may please be clarified.

SPML

Directs the Company to wheel power to only those HT consumers who are not having any arrears with the utilities. it is suggested that a distinction be made between consumers

having arrears, and the consumers who are serious defaulters liable to disconnection by the utilities. wheeling to such serious defaulters only may be barred.

MESCOM

In case of "Party exclusive consumers", who avail power both from the company and the ESCOM, the first charge shall be the power supplied by the Company.

Whereas in clause 6.3.2 (2) reads as:

Partly exclusive consumers: In case of "Partly exclusive consumers", who avail power both from the Company and the ESCOM, the first charge shall be the power supplied by the utility.

This should have been the first charge shall be the power supplied by the company.

Commission's Views:

Considering that the interest of the company are required to be protected the clause suggested by KPTCL is retained.

Clause 6.1.3

KPTCL

*the Company nor its Exclusive consumers are entitled to any rebate / remission or reduction in demand charges and **shall pay the demand charges to ESCOM** as per the Applicable Tariff till such time KERC notify the prescribed grid support charges.*

In respect of Energy Wheeled to these "Exclusive Consumers" payments for energy Wheeled shall be made by these consumers directly to the Company. However, ESCOM to prepare bill for demand charges only to Exclusive Consumers who has to pay the same accordingly to ESCOM.

In respect of "Partly Exclusive Consumers" the bills for quantum of energy drawn from the ESCOMs account will be prepared and sent to the consumer and these Consumers shall pay both Energy and Demand charges directly to ESCOM.

BGR

There is no justification to pay any charge in case no power is wheeled to the exclusive consumer for any reason as the ESCOM will not have incurred any extra expenditure to wheel this power. However if the system has been strengthened for the purpose of wheeling, in all probability the extra cost will have been collected from either the company or the consumer. In the case of the regular consumer, the manner in which the bills have to be prepared taking into account the quantum of input, the maximum demand recorded and the contract demand with ESCOM is a little complex and has to be finalized with care.

CCS

By demand charges presumably is meant the fixed part of the two-part tariff for such consumers? Does this mean that Exclusive and partly exclusive consumers will have to pay the fixed charges and that only the energy charges will not need to be paid? As commented earlier the method of computation of power supplied by the utility to the Partly exclusive consumers need to be spelt out clearly – this does not appear to have been done .

IWTMA & IWPA & Jindal Aluminium Ltd.

There is no justification for levy of demand charges in full. The 'deemed demand' formulation adopted in Tamil Nadu can at best be adopted. Notwithstanding, when utility insists on payment of demand charges there is no justification for payment of UI charges etc.,

All consumers sourcing from Wind Projects are consumers of ESCOMs. Hence this artificial categorization based on exclusivity is meaningless. Notwithstanding, there is no period stipulated for preparation of energy accountings by Utility (which ideally should be done by the Nodal agency). It is suggested that all bills should be prepared within 5 days from the end of the billing month. Only then the credit for the energy produced and to be set off against can be effectively implemented.

Commission's Views

Till such time the Commission determines the grid support charges the clause proposed by KPTCL is retained.

Clause 6.1.4

KPTCL

"Exclusive Consumers" shall not have any "Energy cut", if applied to the ESCOMs Consumers. Consumers who draw power both from the ESCOM and the Company, the conditions in the existing agreement which ESCOM is having with these consumers and other conditions will continue and shall be binding on these partly exclusive consumers.

BGR

This clause is redundant. There is no question of imposing a cut on a firm which only makes use of the grid for wheeling. At best the clause could be "the ESCOM shall not impose any restriction on the wheeling of power to the exclusive consumer in case of any restriction on the consumers of the ESCOM.

IWTMA & IWPA & Jindal Aluminium Ltd.

No clear comprehension of the term "energy cut" is possible, which may be explained.

Commission's Views:

The KPTCL clause is retained in order to create parity between all the consumers.

Clause 6.1.5

KPTCL

The Utility reserves the right to withdraw the facility of banking and wheeling either wholly or partly in case of force majeure conditions. In such an event, Utility shall not be liable for any compensation or damages to the Company.

IWTMA & IWPA & Jindal Aluminium Ltd.

This clause is onerous and is against the provisions of the Electricity Act, 2003.

Commission's Views:

The KPTCL proposal is retained to make it more clear that utilities are not liable under any force majeure conditions.

Clause 6.1.6

KPTCL

The Company reserves the right to draw energy directly from their generating station for any of their Industrial units/ through their own transmission lines after obtaining necessary approvals, etc. Where such energy is drawn directly using Company owned Transmission and Distribution System, without usage of Utility Grid facilities, no Banking and wheeling Charges are payable to the Utility. However grid support charges are to be paid by the Company to ESCOM equivalent to demand charges of similar category installations of ESCOM till KERC notify prescribed Grid support charges.

BGR

This is in order

REDAK & BCCI

To be deleted

IWTMA & IWPA & Jindal Aluminium Ltd.

In case of dedicated wheeling there is no charge contemplated as per the scheme of the Electricity Act, 2003. No grid support charges are contemplated by Hon'ble KERC. The term bonafide use is open ended.

Commission's Views:

As suggested by IWTMA & IWPA & Jindal Aluminium Ltd., if the Company is supplying power through dedicated system to its consumers and is not connected to grid, the Company is not liable to pay any charges to the Licensees. The clause is redundant and is deleted.

Clause 6.1.7

KPTCL

The Company shall furnish the proof for bonafide use of energy in respect of Exclusive consumers and Partly Exclusive consumers.

BGR:

There is no justification for this clause. It is not clear what is meant by bona fide use.

HESCOM

The Company also shall furnish the details to the utility whenever there is a change in name of the consumer/company or any equipment.

Commission's Views:

As suggested by BGR, this clause has no meaning and is one-sided. Therefore, is deleted.

31. Clause 6.2 [Applicable to wind & Hydro only]

Clause 6.2.1

KPTCL

The Company shall be permitted to "Bank" the energy generated in the plant, with Utility, for its own use at a later months or for Wheeling to its Exclusive Consumers and Partly Exclusive Consumers in accordance with the norms prescribed by the KERC from time to time

BGR

This is in order

Commission's Views:

No modification is required.

Clause 6.2.2

KPTCL

Energy generated at the plant shall be banked on Water/Wind year basis and will be permitted to be carried forward from month to month within the same water/wind year. No carry forward of Banked energy is permitted from Water/Wind year to Water/Wind year.

BGR

It is not advisable to permit drawing of power during summer months as it imposes a strain on the system because of increased demand from the IP sets and reduction in availability from seasonal hydro stations.

Commission's Views:

The clause suggested by KPTCL is retained as per the definition of the Water Year and Wind Year.

Clause 6.2.3

KPTCL

Banked energy will become ZERO at the commencement of next Water/Wind year and utilities are not liable to pay any amount for the energy lapsed on account of expiry of the year.

BGR

No comments

REDAK & BCCI

Banked energy will become ZERO at the commencement of next water / wind year and utilities are not liable to pay any amount / energy lapsed on account of expiry of the year.

To make the energy zero, the company is permitted to file supplementary list of consumers (Form-c) for the month of June in case of hydel and in the month of March in case of wind after receiving the meter reading for June and March respectively.

Commission's Views:

KPTCL Proposal is retained.

Clause 6.2.4

KPTCL

The energy banked at the end of the month shall be calculated as follows:

E_g = Generated energy exported/input/injected to the grid at the point of injection in the month.

E_i = Energy import/drawn from the grid @ the injection point of the Company.

B = Banking charges in kind = 0.02 E_g.

C = Wheeling charges in kind = 0.05 E_g.

A = Net energy drawn from the grid (Start-up energy is obtained after adding 15% to the energy drawn from the grid by the Company to compensate the transmission losses). = 1.15 E_i.

$$E_w = E_g - A - B - C$$

$$E_b = E_w - E_t$$

Where

E_b = Energy Banked during the month

E_w = Net energy available for wheeling.

E_t = Actual energy wheeled (Total energy wheeled to the Exclusive consumers and Partly Exclusive consumers).

If $E_t > \{E_b \text{ (previous month)} + E_w \text{ (present month)}\}$ then the Company will be billed for the excess energy drawn during the month at Twice the HT 2A tariff.

BGR

No comments

CCS

The energy available for wheeling $E(W)$ is derived by deducting from $E(g)$ as Wheeling Charges. Since the energy injected will be either wheeled or Banked, but not both, it appears that this formula is erroneous. Presumably this formula is subject to the approval of KERC. In case the company and its consumers are located in different ESCOM areas it needs to be confirmed that the charges as mentioned in this clause will not change and the Escom in whose area the Company is located will share the wheeling and banking charges with the other Escoms suitably. And that the Company does not have to pay any additional charge.

S Govindappa

The formula $E_w = E_g - A - B - C$ appears to be defective, as it leads to an absurd result regarding the 'Ew' taking the same formula viz., $E_w = E_g - A - B - C$

$$= E_g - 1.5 E_i - 0.02 E_g - 0.05 E_g \text{ by substitution}$$

$$= E_g - 0.07 E_g - 1.15 E_i$$

$$= E_g (1 - 0.07) - 1.15 E_i$$

$$= 0.93 E_g - 1.15 E_i$$

$$= 0.93 \text{ (Energy injected into the Grid at the Injection Point)}$$

$$= - 1.15 \text{ (Energy injected into the grid at the injection point)}$$

$$= -0.22 \text{ (Energy injected into the Grid)}$$

Energy wheeling E_w has become - ve

This anomaly can be overcome by clearly defining as follows:-

Wheeled energy $E_w = 95\%$ of injected energy = since 5% is in kind

Banked energy = energy injected - energy wheeled

Banking charge = 2% of Banked energy.

The above definitions is very clear and gives a better meaning because as the electricity is generated and injected into the grid is also utilized on the grid at a different point simultaneously by exclusive customer or partly exclusive customer.

Another point is that banking in real sense should not get depreciated (viz., reduced). Therefore charging for banking in times of energy deficit times is not reasonable.

But, wheeling charges is very reasonable as the generator uses the grid. These points may please be examined by the staff and if required I will be available to explain in person to the staff if required.

Wheeled energy = $100 - 5 = 95$... 5 wheeling charge

If utilized energy at U is 80, then subtracting 2% from $(95 - 80) = 15$ gives $15 - 0.3 = 14.7$ as the banked energy

To be banked / 2% of 15 = 0.3

Therefore Banked energy = 14.7

BEL

In the formula $E_w = E_g - A - B - C$, the Banking charges (B) for the unutilized portion of the energy in the current month should only to be considered and not the input/injected energy to the grid by the Generators.

IWTMA & IWPA & Jindal Aluminium Ltd.

Detailed technical submission will be made at the time of public hearing on 6.2 as a whole and the formulation provided therein at 6.2.4. The leave may kindly be granted by this Hon'ble Commission for the same.

SPML

Stipulates that the over drawal of energy by consumers will be billed to the company at twice that HT 2A rates. It is suggested that due to the natural conditions under which the mini hydel and wind energy based projects operate, imposition of such penal charges may be avoided and these charges may be reduced to normal HT consumer rates.

similarly, it is suggested that carry forward of banked energy from one year to the next may be allowed for mini hydel and wind energy based power projects. Clauses 6.2.2 and 6.2.3 may be suitable amended to incorporate this changes.

MESCOM

As per clause 6.2.4, if $E_t > E() + E(W)$ i.e., if actual energy wheeled is more than energy banked plus net energy available for wheeling, then the company will be billed for the excess energy drawn during the month at twice the HT2A tariff.

Whereas, in clause 6.3.2, in the case of both exclusive and partly exclusive consumers, when drawal is more then injection plus banked energy the difference will be charged at applicable UI rates on the basis of average monthly frequency". Method of charging for excess drawal has to be clearly specified.

Kalkitech

The formulae prescribed to calculate Energy banked during the month is not accounting for Transmission loss, during Wheeling of Power to Exclusive and partly exclusive consumers. This will result in huge loss to ESCOMs.

Illustration:

Let

$$E_g = 1000 \text{ MWH}$$

$$E_i = 100 \text{ MWH}$$

$$B = 0.02 * E_g = 20 \text{ MWH}$$

$$C = 0.05 * E_g = 50 \text{ MWH}$$

$$A = 1.15 E_i = 115 \text{ MWH (The 15 \% Transmission loss component accounts only for the Energy drawn by the company from the Grid).}$$

$$E_w = E_g - A - B - C$$

$$= 1000 - 115 - 20 - 50$$

$$= 815 \text{ MWH}$$

say,

$$E_t = 500 \text{ MWH}$$

Then,

$$\begin{aligned}
 \mathbf{E_b} &= \mathbf{E_w - E_t} \\
 &= \mathbf{815 - 500} \\
 &= \mathbf{315 \text{ MWH}}
 \end{aligned}$$

but actually transmission loss (Eloss) in transmitting energy from injection point (IF point of company) to drawal point (IF point of Consumer) is

$$\begin{aligned}
 \mathbf{E_{loss}} &= \mathbf{\text{Transmission Loss}\% * \text{Transmitted Energy}} \\
 &= \mathbf{0.15 * 500} \\
 &= \mathbf{75 \text{ MWH}}
 \end{aligned}$$

Hence the actual banked energy will be 315-75 = 240 MWH only.

On using the present formulae the Utility has to give back more power(315 MWH) than it has actually banked(240 MWH) and will result in huge loss(75 MWH) for the utility and hence the retail consumer/ public in the end.

The present formulae will be correct only when Actual energy wheeled is zero.

Suggestion:

The correct formulae shall be

$$\mathbf{E_b = E_w - (1 + \text{TransmissionLoss \%}) E_t}$$

Illustration:

For the previous example data,

$$\begin{aligned}
 \mathbf{E_b} &= \mathbf{E_w - (1 + \text{TransmissionLoss \%}) E_t} \\
 &= 815 - (1 + \mathbf{0.15})500 \\
 &= \mathbf{240 \text{ MWH}}
 \end{aligned}$$

Commission's Views:

The KPTCL's proposal for calculating the banked energy is retained as a similar practice already exists.

Clause 6.2.5

KPTCL

The Banking charges specified are subject to changes from time to time as notified by KERC.

BGR

This is redundant

CCS

The frequency related penalty appears to be unduly harsh. if the system is operating at a frequency of 50.5 Hz or above this would not be due to any fault of the company but shows the poor scheduling and dispatching on the part of the utility and the LDC. Under these conditions it is unfair or perhaps illegal to deprive the Company of its capacity to earn revenue – particularly since it is a renewable generator who can generate only when weather or other natural conditions re favourable. Also this tantamounts to forcing the

Exclusive and Partly exclusive consumers to buy energy from the Utility at rates that could be penal rates.

Commission's Views:

The KPTCL's clause is retained and applicable charges are defined under Article 5.1

Clause 6.2.6

KPTCL

Violation of Article 4.3, i.e. when the frequency is above 50.5 C/s, energy injected into the grid by the Company will not be allowed for both Wheeling & Banking.

BGR

The clause could possibly be reworded as Banking is not permitted when the grid frequency is above 50.5 Hz.

CCS

Replace 'injected ' by 'injection'. There should be also a sentence welcoming energy injection into the grid when the grid frequency is below 50 Hz and in particular when the frequency is below 49 Hz.

REDAK & BCCI

Generation at frequency 50.5 c/s and above – the companies may be allowed to generate and wheel equivalent energy simultaneously at frequency 50.5 c/s and above and with in safe operation of the grid.

IWTMA & IWPA & Jindal Aluminium Ltd.

Linking the wheeling and banking to the frequency is untenable and is against th regulations and the legal provisions. hence 4.3 and 6.2.6 may be deleted. C/s is not a defined term in the agreement or any Act.

Kalkitech

This section needs more clarity.

The sentence frame means that

a) **Energy injected** into the grid by the company when the frequency is above 50.5 C/s will not be considered for calculating Wheeling & Banking and hence no charges shall be payable by the utility to company.

Or

b) Company will **not be allowed to inject energy** into the grid when the frequency is above 50.5 C/s.

Both the cases have different meaning. The first means the section will be applicable after the action (injection) has taken place and the second one means the section is a preventive one in nature.

Hence this section shall be clarified further, whether it is preventive or corrective in nature.

Commission's Views:

The KPTCL proposal is deleted as all renewables do not come under merit order dispatch.

32. Clause 6.3

Clause 6.3.1

KPTCL

The equipment required for monitoring the instantaneous energy generated atMW power plant situated at District bearing R.R.No. and also at the injection point (substation) as well as exclusive/partly exclusive consumer end at bearing R.R.No....., shall be provided by the Company at its cost including special meters with ABT feature and metering equipments and the cost of modifying the software at SLDC/ALDC, as approved by the Commission shall also be paid by the Company. This will be an addition to any other requirements of KERC.

BGR

Normally the UI charge should not arise. The ESCOM is required to wheel to power as per agreement. In case, the company pumps in more power than agreed to, the ESCOM should have the right to refuse wheeling of power.

CCS

It is not clear why ABT compliant metering is being specified when there is no proposal to purchase power from the Company and there is no proposal to include the Company's plant in the 'scheduling' process of the Utility. The applicability of UI rates is also not clear. Both the Exclusive and Partly exclusive customers are 'customers' and not wholesale buyers of power for resale and therefore are not providing any 'schedule', which is the purpose of the UI (Unschedule Interchange) tariff.

Commission's Views:

The clause proposed by KPTCL has been retained since the proposal depends on metering and communication for intra state ABT is yet to be stabilized. Further, if any modification is thought necessary parties can approach the Commission.

Clause 6.3.2

KPTCL

charges are payable by the Company as per KERC/CERC norms prescribed from time to time.

a) **Exclusive consumers:**

- i) ***When drawal is more than injection plus banked energy:*** *The exclusive consumers are entitled for drawal equal to the injected energy and banked energy. The difference if any will be charged at applicable UI rates as prescribed by KERC*

Continuous overdrawal of power from the grid by exclusive consumers continuously for more than 8 days shall disqualify the consumers from wheeling and banking facility. However the consumer may avail power either permanently or temporarily from respective ESCOMs subject to availability and terms and conditions applicable to similar class of HT consumers.

- ii) ***When drawal is less than injection plus banked energy:*** *No UI charges are payable by ESCOM. The excess/balance energy will be treated as banked energy.*

b) **Partly exclusive consumers:** In case of "Partly Exclusive Consumers", who avail power both from the Company and the ESCOM, **the first charge shall be the power supplied by the Utility.**

i) **When drawal is more than injection plus banked energy:** The difference will be charged at applicable UI rates on the basis of average monthly frequency.

ii) **When drawal is less than injection plus banked energy:** No UI charges payable by ESCOM. The excess/ balance energy will be treated as banked energy.

i) **Both Exclusive consumers and Partly exclusive consumers:** Both exclusive consumers and partly exclusive consumers are permitted to draw banked energy subject to payment of difference of UI charges between a time of injection and time of drawal of power by the Company to ESCOM (on differential average monthly banked frequency rates).

CEA:

The assessment of UI rate based on monthly average frequency, through simple approach, may sometimes result in excess billing of consumers, who have inadvertently overdrawn occasionally. Keeping in view the fact that Special Energy Meters are to be used for metering the energy which can record energy in each 15 minute time-block and in order to avoid excess billing to the consumers it is suggested that UI charges be applied to the overdrawn energy depending on the 15 minute time-slots, when overdrawal has taken place. However, if the approach proposed in the draft agreement is acceptable to the stakeholders, it may be adopted.

BGR

6.32. (i) The consumer can not have the facility to bank the energy

REDAK & BCCI

Clauses pertaining to UI charges to be deleted.

6.3.2 (i) To be dropped

6.3.2 (2) The first charge shall be the power supplied by the Company.

6.3.2 (2) (i) When drawal is more than the injection and banked energy then the difference is to be charged **at UI rates as per clause 6.3.2 (2) (i) or twice the rate of HT2A tariff as per clause 6.2.4 whichever is lower.**

BEL

This should not be made applicable to wind energy projects in view of the following:

- The wind being infirm power and unpredictable in nature, the merit order dispatch & scheduling is not applicable as per KERC order.
- UI mechanism has been specifically framed by CERC/KERC as part of ABT for interstate transfer of power and will not be made applicable for renewable energy like wind etc.
- The UI rates will not be made applicable for wheeling & Banking of renewable energy projects in Karnataka also and if made applicable the viability of the projects will get affected. This is in line with the practice in other states. Even in PPA UI Charges are not applicable
- It is mentioned at 6.3.2 (b) i, that when drawal is more than injection plus banked energy, the difference will be charged at UI rates on the basis of average monthly frequency. UI Charges should not be levied in this case since all the wind energy generated is utilized.

The draft agreement is not clear about how the UI energy will be downloaded, billed and accounted. This needs to be made clear with typical examples.

- In view of the above we urge that the UI charge should not be made applicable to the wind energy projects.

IWTMA & IWPA & Jindal Aluminium Ltd.

a. There is no justification for payment of cost of modifying the software at SLDC/ALDC, as approved by the Commission shall also be paid by the Company. What is this software, why, how and at what cost the same is to be modified is unclear from the draft of the Agreement? Hence the same may be put to rigorous technical and fiscal scrutiny before acceptance.

Reckoning the injected energy and banked energy and levy of UI charges thereon is not within the scheme of the Orders of the Hon'ble KERC.

There is no justification for either the Exclusive or non exclusive consumers to pay the charge as stipulated.

b. Basis of average monthly frequency is untenable and unworkable and non comprehensible besides being highly technical. Neither CERC nor KERC have allowed for computation of the charges on this basis.

Stipulation that when drawal is less than injection plus banked energy: No UI charges payable by ESCOM, is against the principles of law and equity. As per the CERC guidelines, UI charges are reciprocal obligations to be payable by all entities in the UI pool. Partially and selectively applying the same leads to distortion of the principles embedded in the UI and ABT mechanism.

6.3.2 (i) Differential average monthly banked frequency rates for both category of users is against the orders of KERC and CERC. No UI settlements occur at monthly intervals and UI is a measure of the deviation from scheduled dispatch in case of conventional thermal based power projects. Hence selectively and inappropriately applying the principles to the wind is not tenable.

Kalkitech

1. What is the billing period for calculating UI charges?
2. It is given,

Consumer Entitlement = Injected Energy + Banked Energy

Here,

Injected energy = Injected Energy in that billing period

Banked Energy = ?

Is the Banked Energy equal to Total banked energy in that billing period? **Or**

Banked Energy equal to Total banked energy available (including previous month/billing period banked energy also)

Commission's Views:

These clauses are retained for the projects for which intra state ABT is applicable. If any modification is necessary during the implementation the parties can approach the commission.

33. Clause 7.0

KPTCL

- 7.1** Joint meter readings of the Import and Export meters at the Power Plant/injection point will be taken by Jurisdictional Executive Engineer (Elec), O & M or authorized representative of ESCOM and Representative of the Company on first of every month. The Joint meter reading will be furnished by the Jurisdictional Officer along with the demand raised to the Billing section/commercial wing, who will maintain the whole wheeling & Banking transactions.
- 7.2** Joint meter readings of Exclusive Consumers and other Consumers will be taken by Jurisdictional Engineer ESCOMs on the first of every month (if necessary after changing meter reading dates to first of every month) and raise the bills only for demand charges in respect of "Exclusive Consumers" and for both energy supplied by ESCOMs and demand charges in respect of "Partly Exclusive Consumers". The Company shall pay the Wheeling/Network charges to utilities as fixed by KERC from time to time.
- 7.3** The Jurisdictional Engineers, ESCOMs shall then send the details of energy Consumption of Exclusive and Partly Exclusive Consumers to the Billing section before 5th of every month. Billing section shall prepare the monthly statement showing the opening Balance of Energy Banked with corresponding monthly average frequency, Energy Banked during the month with monthly average frequency, Wheeled and Closing Balance of energy and send the same to the Company, the Jurisdictional Chief Engineer Electy., Superintending Engineer (Ele), and Executive Engineer (Ele), ESCOM where the Power Plant is located. The Company shall bill directly the Exclusive and Partly Exclusive Consumers for the energy Wheeled and shall make their own arrangement for collection of such bills.
- 7.4** The Company and ESCOM billing Section shall develop the suitable format for the monthly energy transactions, billing, etc.
- 7.5** The Exclusive consumer's monthly meter readings shall be taken by ESCOM staff at Company's cost at Rs. 1000/- per installation.

CEA:

Clause 7.5: It is presumed that this cost is annual charge. This may be confirmed and clarified in the document.

BGR

No comments. These are matters of detail.

CCS

7.2 If the exclusive and partly exclusive consumers and the company are located in different ESCOMS, it is necessary to spell out clearly as to whom the demand (or Network Usage) Charges are to be paid – presumably to the respective ESCOMS where the respective parties are located. In respect of the Wheeling and Banking charges there is no payment involved and only payment in kind is involved. The only beneficiary of such a kind payment is the ESCOM where the Company is located since both E(W) and E(b) are subtracted from E(g) at source itself and payment if any between the ESCOMS is not part of this agreement and can be entered into separately with the approval of KERC.

- 7.5** Meter readings at the Exclusive and Partly Exclusive consumers are taken for the benefit of both company and the utilities. And demand charges are being taken from both these consumers. Under the circumstances it does not appear fair that there is a charge for taking meter readings.

IWTMA & IWPA & Jindal Aluminium Ltd.

7.1 Metering is said to be done by ESCOM. It is not clear as to which ESCOM (Drawal or Injection location). Hence one nodal agency may be constituted and made responsible for the metering. In case of interstate open access also the SLDC of the drawal location is often responsible for the metering.

7.3 No penalty is prescribed in the Agreement for contravention of the time is contemplated in 7.3 by Utility

7.5 There is no express authorization in law for collection of meter reading charges.

Commission's Views:

As per the present practice of billing procedure the clauses are retained as proposed by KPTCL.

34. Clause 8

8.1 **Metering:** Both the injected Energy and drawal energy shall be metered at the receiving sub-station point and at the drawal point of the Company (to be specified clearly by the Company) respectively.

Clause 8.2

KPTCL

Metering equipment: The special ABT feature metering equipment shall be electronic Trivector meters of accuracy class 0.2 required to record export and import of energy (both main and check meters). The Main meter and Check meter shall be installed and owned by the Company. Dedicated core of both CT's and PT's of required accuracy shall be made available by the Company to the concerned Utility. The metering equipment shall be installed and maintained in accordance with electricity standards by the company at its cost. Such equipment shall have the capability of recording every 15 minutes and monthly readings. The Company shall provide such metering results to ESCOM/SLDC. The meters installed shall be capable of recording and storing quarter hourly readings of all the electrical parameters for minimum of 35 days with digital output.

BGR

It may not be reasonable to insist on installation of ABT compatible metering for transactions which are small, say 20 MW.

CCS

we have already commented on the ABT metering.

S. Govindappa

Dedicated cores are provided in C.T's only and not in P.T. one core in the P.T serves the secondary potential and it is tapped in parallel for potential circuits. Hence 'P.T.' mentioned in clause may be omitted.

BEL

The KPTCL/ESCOM should collect/download data of ABT meters every month at the time of meter reading.

IWTMA & IWPA & Jindal Aluminium Ltd.

why the cost of the meter is to be borne by company is not clear. The cost is legally to be borne by Utility. When the consumer at the draw location wants to install the pre paid meters? The issue needs to be sufficiently addressed.

Requirement for meters installations capable of recording & storing quarter hourly readings of all the electrical parameters for minimum 35 days with digital output is not contemplated in law.

- 8.2 **Meter Readings:** The monthly meter readings of both export and import energy meters i.e. of both main and check meters, shall be taken jointly by the Parties on the first day of the following month. At the conclusion of each meter reading an appointed representative of ESCOM and the Company shall sign a document indicating the number of kilowatt-hours indicated by the meter.
- 8.3 **Inspection of Energy Meters:** All the main and check energy meters (export and import) and all associated instruments, transformers installed shall be of 0.2 accuracy class. Each meter shall be jointly inspected and sealed by ESCOM on behalf of the Parties and shall not be interfered with by either Party except in the presence of the other Party or its accredited representatives.

Clause 8.5

KPTCL

Meter Test Checking: All the main and check meters shall be tested for accuracy every calendar quarter with reference to a portable standard meter which shall be of an accuracy class of 0.1. The portable standard meter shall be owned by ESCOM/KPTCL at its own cost and expense and tested and certified at least once every year against an accepted laboratory standard meter in accordance with electricity standards. The meters shall be deemed to be working satisfactorily if the errors are within specifications for meters of 0.2 accuracy class. The cost of such test checking shall be born by the Company at the rates specified by ESCOM/ KPTCL from time to time. The consumption registered by the main meters alone will hold good for the purpose of billing as long as the error in the main meter is within the permissible limits.

- (i) If during the quarterly tests, the main meter is found to be within the permissible limit of error and the corresponding check meter is beyond the permissible limits, then billing will be as per the main meter as usual. The check meter shall, however, be replaced immediately.
- (ii) If during the quarterly tests, the main meter is found to be beyond permissible limits of error, but the corresponding check meter is found to be within permissible limits of error, then the billing for the month upto the date and time of such test shall be as per the check meter. There will be a revision in the bills for the period from the previous test date upto the current test based on the readings of the check meter. The main meter shall be replaced immediately and billing for the period thereafter till the next monthly meter reading shall be as per the replaced main meter.
- (iii) If during the quarterly tests, both the main meter and the corresponding check meter are found to be beyond the permissible limits of error, both the meters shall be immediately replaced and the correction applied to the reading registered by the main meter to arrive at the correct reading of energy supplied for billing purposes for the period from the last month's meter reading upto the current test.

Billing for the period thereafter till the next monthly meter reading shall be as per the replaced main meter.

- (iv) *If during any of the monthly meter readings, the variation between the main meter and the check meter is more than that permissible for meters of 0.2 accuracy class, all the meters shall be re-tested for its accuracy immediately.*

BGR

It has been mentioned earlier that metering of accuracy 0.2 ought to be used. see (definitions). There is scope to simplify this section and the inconsistency removed.

BEL

Meter test checking to be half yearly instead of quarterly by KPTCL/ESCOM.

Clause 8.7

KPTCL

Communication Facilities: *The Company shall install and maintain at its cost Special communication network facilities including separate PSTN line, modem, converter etc., / RTU with e-mail, fax facilities etc to the Generating Station/Injection Point as well as drawal points for remote meter data acquisition at SLDC and ALDC on day to day basis.*

BEL

This should not be made applicable to partly exclusive consumers.

IWTMA & IWPA & Jindal Aluminium Ltd.

Levy on cost of communication facilities and their maintenance Viz., special communication network facilities including separate PSTN line, modem, converter etc., / RTU with e-mail, fax facilities etc., to the generating station injection point as well as drawal points for remote meter data acquisition at SLDC and ALDC on day to day basis on a small wind power project is highly onerous and against the spirit of the Regulations of the Hon'ble Commission and the Electricity Act, 2003.

Clause 8.8

KPTCL

If tampering of metering cubicle or energy meters at Exclusive Consumers /Partly Exclusive Consumers premises or at the Company's power generating plant or violation of any of the aforesaid terms and conditions are detected or observed, the Utility has the right to withdraw the Wheeling & Banking facilities without any notice and also take action as per Electricity Act, Electricity Supply Act & Electricity Supply Regulations.

IWTMA & IWPA & Jindal Aluminium Ltd.

Tampering of metering cubicle or energy meters at exclusive consumers / partly exclusive consumers premises, should be put to legal and regulatory scrutiny. This cannot be made only the subjective discretion of the Utilities. Only upon jurisdictional authority holding company guilty of the conduct alleged, the wheeling and banking can be withdrawal, subject to settlement of the past dues by the Utilities. In the entire agreement utility can unilaterally withdrawn the facility without needing to comply with energy accounting and settlement, which is onerous.

Commission's Views:

Keeping in view the past established practice followed in PPA's the clauses stated by KPTCL are retained in line with the clauses approved by the Commission for PPAs.

35. Clause 9

KPTCL

9.1 *At times of Power Cut, the energy delivered by the Company to Partly Exclusive Consumers at their HT Terminal will be over and above the energy entitlement fixed by the ESCOM to the said consumer at the relevant time. The energy quota to the Partly Exclusive Consumers will be fixed on the energy actually drawn by them from ESCOM's system excluding Wheeled Energy.*

9.2 *There shall be no power -cut for Exclusive consumers.*

CEA:

The energy quota system needs to be elucidated with some mathematical equations to provide clarity.

BGR

This aspect has already been covered earlier. Repetitions ought to be avoided as far as possible.

CCS

9.1 While fixing the energy entitlement for partly exclusive consumers it needs to be spelt out whether the utilities will consider the energy drawn by such consumers during the previous periods.

9.2 What happens if the company is not generating power during the period that a power cut is imposed – will the exclusive consumers still get power without power cut?

HESCOM

9.2 There is an exception to the power cut under system constraints conditions.

Commission's Views:

At the time of power cuts the ESCOMs cannot differentiate between its consumers and partly exclusive consumers. Hence, the clauses proposed by KPTCL are retained.

36. Clause 10

KPTCL

10.1 *In the event of Force Majeure conditions like war, mutiny, riot, Earthquake, Hurricane, strike, tempest, accident to machinery, Utility has no obligation to Bank and Wheel the energy as per this agreement. However it make all reasonable efforts to restore normalcy and if the same is not possible , this agreement is to be treated as temporarily suspended. ESCOM will also make efforts to supply power to "Exclusive Consumers" of the Company from its own source subject to availability and payment as applicable to its HT consumers.*

10.2 *In the event of Force Majeure conditions, Utility shall not be liable to pay any compensation or damage or any claims whatsoever for any of the direct or indirect loss that may be suffered by the Company on account of non wheeling and Banking of Electricity.*

BGR

A reference has been made earlier to Fore Majeure situation. Repetition is not desirable.

IWTMA & IWPA & Jindal Aluminium Ltd.

10.1 As per force majeure clause "Escom will also make efforts to supply power to 'Exclusive Consumers' of the Company from its own source subject to availability and payment as applicable to its HT consumers". why the partially exclusive consumers are left out is not clear.

10.2 In case of breakdown of machinery due to the fault of the utility, the Utility should be made responsible to pay compensation. Further in case of non Force Majeure events, the utility should be made to pay compensations besides excluding the company from payment of demand charges and minimum energy charges.

Commission's Views:

10.1 Force majeure condition as proposed by KPTCL are retained.

37. Clause 11

KPTCL

11.1 Term of the Agreement: *This Agreement shall become effective upon the execution and delivery thereof by the Parties hereto and unless terminated pursuant to other provisions of the Agreement, shall continue to be in force for such time until the completion of a period of five (5) years from the date execution and may be renewed for further period on the terms and conditions as may be mutually agreed upon between the Parties and as approved by Commission.*

11.2 Events of Default:

Company's Default: The occurrence of any of the following events at any time during the Term of this Agreement shall constitute an Event of Default by Company:

- a. If the COMPANY does not generate and wheel energy continuously for period of 8 months in a water/wind year*
- b. Failure or refusal by COMPANY to perform its material obligations under this Agreement.*
- c. If the Company draws energy over and above the injection in any month other than zero injection.*
- d. Continuous overdrawal of power from the grid by exclusive consumers for more than 8 days.*
- e. Company indulges in any malpractice.*

11.3 Termination:

Termination for Company's Default:

- i. Upon the occurrence of an event of default as set out in sub-clause 11.2 above, ESCOM may deliver a Default Notice to the COMPANY in writing, which shall specify in reasonable detail the Event of Default giving rise to the default notice. And calling upon the COMPANY to remedy the same within a month, failing which the present agreement gets terminated automatically.*
- ii. In case of breach of any of the terms of this agreement the party not in default may terminate this agreement after giving 3 months notice in writing. However, termination shall not affect the rights that have already accrued to the other party to the date of termination.*

- iii. Upon termination of this agreement, ESCOM shall stand discharged of its entire obligation. However, the Company shall meet all payment obligations as per Article 5 prior to the date of termination.

CEA:

Clause 11.2

- (i) The continuous overdrawn period of 8 days needs to be correlated with the likely period of planned maintenance of the plant to be installed by the company.
- (ii) The events of default on the part of utility may also be provided and consequently termination of account of the utility in the event of default may also be indicated.

BGR

No comments

REDAK & BCCI

11.1 The period of agreement shall be for a period of not less than **15 years** from the commercial operation date.

11.2.a If the company does not generate and wheel energy continuously for a period of 8 months in a water / wind year **without any valid reason**.

11.2. d To be deleted

HESCOM

11.2 f. If the company fail to provide necessary technical information and cooperate with the utility in observing the grid discipline.

11.3 I The installation will be de-synchronized from the Grid.

BEL

11.1 The term of the agreement should be for a minimum of period of 10 years instead of the proposed 5 years.

IWTMA & IWPA & Jindal Aluminium Ltd.

11.1 Term of the Agreement should be 20 years with charges remaining firm for the entire period. Else, no prudent investment decision can be made.

11.2 Events of default be made subject to proof and regulatory scrutiny, in the present form they are onerous.

Event of default "If the Company draws energy over and above the injection in any month other than Zero injection" is not comprehensible and needs explanation.

On "Continuous overdrawal of power from the grid by exclusive consumers for more than 8 days" it is submitted that there is no category such as exclusive consumers, be that as it may, when overdrawals by Utilities for 8 days do not attract such penal measures from CERC or Power Grid, why should the same be made applicable to consumers?

Malpractice is a very general and open ended, needs explanation.

Default events by utility should be defined, in case of default by utility, there must be a reciprocal obligation to pay penalty besides restoring of W&B.

11.2 There is no absolute termination permissible under law since open access provision is fundamentally enshrined as a right in the Electricity Act, 2003 read with regulations of Hon'ble KERC. Even during partial terminations, the supply and payment obligations of ESCOM should be continued.

Commission's Views:

KPTCL views are retained to take care of the legal requirements.

38. Clause 12

KPTCL

- 12.1 *All disputes or differences between the Parties arising out of or in connection with this Agreement shall be first tried to be settled through mutual negotiation.*
- 12.2 *The Parties hereby agree to attempt to resolve all disputes arising hereunder promptly, equitably and in good faith.*
- 12.3 *Each Party shall designate in writing and communicate to the other Party its own representative who shall be authorized to resolve any dispute arising under this Agreement in an equitable manner and, unless otherwise expressly provided herein, to exercise the authority of the Parties hereto to make decisions by mutual agreement.*
- 12.4 *If the designated representatives are unable to resolve a dispute under this Agreement within thirty days after such dispute arises, such dispute shall be referred to higher authorities designated by the Parties for resolution of the dispute.*
- 12.5 *In the event that such differences or disputes between the Parties are not settled through mutual negotiations within, ninety (90) days after such dispute arises, then it shall be referred to the Commission for dispute resolution in accordance with the provision of Electricity Act 2003.*

BGR

No comments

IWTMA & IWPA & Jindal Aluminium Ltd.

Even during the dispute resolution period the obligation of the utility to provide W&B should be intact.

Commission's Views:

No modification required.

39. Clause 13 as modified

13.1 Governing Law: *This Agreement shall be interpreted, construed and governed by the Laws of India including Electricity Act 2003 and the Rules/ Regulations framed thereunder*

13.1.1 Waivers: *Any failure on the part of a Party to exercise, and any delay in exercising, exceeding three years, any right hereunder shall operate as a waiver thereof. No waiver by a Party of any right hereunder with respect to any matter or default arising in connection with this Agreement shall be considered a waiver with respect to any subsequent matter or default.*

13.1.2 Limitation Remedies and Damages: *Neither Party shall be liable to the other for any consequential, indirect or special damages to persons or property whether arising*

in tort, contract or otherwise, by reason of this Agreement or any services performed or undertaken to be performed hereunder.

13.2 Notices: Any notice, communication, demand, or request required or authorized by this Agreement shall be in writing and shall be deemed properly given upon date of receipt if delivered by hand or sent by courier, if mailed by registered or certified mail at the time of posting, if sent by fax when dispatched (provided if the sender's transmission report shows the entire fax to have been received by the recipient and only if the transmission was received in legible form), to: -

(i) In case of the Company :

M/s.
.....
.....
.....
Telephone No.....
Fax No.
E- mail:

(ii) In case of ..KPTCL/ESCOM:

The General Manager (Technical)
Corporate Office, KPTCL/ESCOM
Karnataka State.
Telephone:
Fax :

13.3 Severability: Any provision of this Agreement, which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof and without affecting the validity, enforceability or legality of such provision in any other jurisdiction.

13.4 Amendments: This Agreement shall not be amended, changed, altered, or modified except by a written instrument duly executed by an authorized representative of both Parties and approved by the Commission . However, the Commission shall be entitled to modify/alter the conditions of this contact at the instance of either of the parties after giving an opportunity of hearing to both the parties.

13.5 Assignment:

Neither Party shall assign this Agreement or any portion hereof without the prior written consent of the other Party, provided further that any assignee shall expressly assume the assignor's obligations thereafter arising under this Agreement pursuant to documentation satisfactory to such other Party.

13.6 Entire Agreement, Appendices: This Agreement constitutes the entire agreement between Licensee and the COMPANY, concerning the subject matter hereof. All previous documents, undertakings, and agreements, whether oral, written, or otherwise, between the Parties concerning the subject matter hereof are hereby cancelled and shall be of no further force or effect and shall not affect or modify any of the terms or obligations set forth in this Agreement, except as the same may be made part of this Agreement in accordance with its terms, including the terms of any of the appendices, attachments or exhibits. The appendices,

attachments and exhibits are hereby made an integral part of this Agreement and shall be fully binding upon the Parties.

In the event of any inconsistency between the text of the Articles of this Agreement and the appendices, attachments or exhibits hereto or in the event of any inconsistency between the provisions and particulars of one appendix, attachment or exhibit and those of any other appendix, attachment or exhibit, ESCOM and the COMPANY shall consult to resolve the inconsistency. Such inconsistencies shall be brought to the notice of the Commission and any changes proposed to overcome the inconsistencies shall be approved by the Commission.

13.7 Further Acts and Assurances: Each of the Parties after convincing itself agrees to execute and deliver all such further agreements, documents and instruments, and to do and perform all such further acts and things, as shall be necessary or convenient to carry out the provisions of this Agreement and to consummate the transactions contemplated hereby.

BGR

No Comments

IWTMA & IWPA & Jindal Aluminium Ltd.

13.7 Company should be permitted to assign to financial institutions with notice.

Commission's Views:

These clauses are already adopted by the Commission in PPAs and hence, KPTCL's clauses are retained.

Schedule-1

KPTCL

PERMITS, CLEARANCES AND APPROVALS

1. G O for Establishment of Generating Plant.
2. Evacuation approval for evacuation of power from the generating plant to the substation of Transmission Utility/ESCOM.
3. Synchronization approval and Commissioning report from Transmission Utility/ESCOM.
4. Wheeling and Banking approval by the nodal agency/SLDC
5. Approval of the Electrical Inspectorate, Government of Karnataka for Commissioning of the transmission line for evacuation of power from the project to the injection point/ substation.

HESCOM

As per the EA – 2003, no G.O/License is required for setting up of a generating station.

Commission's views:

The above schedule is retained.

Schedule 3(1)

KPTCL:

The Generation voltage from the Renewable energy based Electric Power Plant of M/s ----- is at ----kV. It comprises generators, generator transformer and unit transformer.

Commission's views:

The above schedule is retained

Schedule 3 (3)

KPTCL

The injection point is atreceiving station at.....kV.

REDAK & BCCI

The injection point is at atKV

Provision for carrying forward the unused wheeled energy by the consumers.

Since the ESCOMs, generating stations and wheeling customers are located at different places and most of the companies Head quarters are located in Bangalore, like KPTCL, SLDC, a single window agency at Bangalore representing all ESCOMs will help the companies.

Commission's Views:

The KPTCL schedule is retained:

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