## CENTRAL ELECTRICITY REGULATORY COMMISSION NEW DELHI

Coram: Shri P.K.Pujari, Chairperson Dr. M.K.Iyer, Member Shri I.S.Jha, Member

#### No. 13/2/7/2015-PM/CERC

Dated: 20th March, 2019

#### In the matter of

Central Electricity Regulatory Commission (Cross Border Trade of Electricity) Regulations, 2019

#### Statement of Reasons

#### 1. Introduction

- 1.1. In accordance with the provisions of Section 178 of the Electricity Act, 2003 read with Section 66 thereof and the Guidelines on Cross Border Trade of Electricity issued by Ministry of Power vide OM No. 14/1/2016 dated 5<sup>th</sup> December, 2016, the Commission had notified the Draft Central Electricity Regulatory Commission (Cross Border Trade of Electricity), Regulations, 2017 (hereinafter referred to as 'Draft Regulations') vide Public Notice No. 13/2/7/2015-PM/CERC dated 16<sup>th</sup> February, 2017 along with the Explanatory Memorandum seeking comments/suggestions from the stakeholders.
- 1.2. In response to the above, 22 organizations including IPPs, Trading Licensees, Cross Border Transmission Company, Discoms, Power exchange, CEA, POSOCO, Powergrid, and User Associations etc. have submitted their comments. Comments were also received from Independent Power Producers Association of Nepal and from representatives of Bangladesh, Bhutan, and Nepal as submitted by them during CII Roundtable on 'Cross Border Electricity Trade' and forwarded to the Commission by CII. Thereafter, the Commission conducted a Public Hearing on the Draft Regulations on 22<sup>nd</sup> March, 2017 during which 11 organizations made their oral submissions/power point presentations. The list of organizations who have given their written comments and or made oral submissions during Public Hearing is provided in Annexure-I and Annexure-II respectively. The detailed comments are also available on the CERC website and can be accessed at http://www.cercind.gov.in/.
- 1.3. Meanwhile, Ministry of Power vide OM No. 14/1/2017-Trans dated 18<sup>th</sup> December, 2018 has issued the 'Guidelines for Import/Export (Cross Border) of Electricity-2018' (hereinafter referred to as ' MoP Guidelines') repealing the earlier MoP Guidelines

issued on 5<sup>th</sup> Dec, 2016. Some of the important changes brought about in the new MoP Guidelines are as follows:

- 1.3.1.Cross border trade of electricity allowed across India through Tripartite Agreement under the overall framework of bilateral agreements signed between Government of India and Government of respective neighbouring countries of the Participating Entities. Participating Entities from the neighbouring countries are required to sign the transmission agreement with CTU for obtaining the transmission corridor access across India. Further, the transmission system in India for transmission of electricity across the territory of India under cross border trade of electricity shall be built after concurrence from Government of India and necessary Regulatory approvals (Clause 3.1 and Clause 8.6 of MoP Guidelines).
- 1.3.2. Approval of Designated Authority for import/export of electricity is not necessary where it is taking place under the Inter Government Agreement (IGA) signed by India and neighbouring country for specific project(s). In case of import/export of electricity through bilateral agreement between two countries the Government of India may designate an entity for import or export of power, as the case may be (Clause 4.5, Clause 5.1(b) and Clause 5.2 (b) of MoP Guidelines).
- 1.3.3.Import/Export of electricity between the entities of India and entities of the neighbouring countries allowed based on mutual agreements under the overall framework of agreements signed between India and neighbouring countries after obtaining the necessary approvals from Designated Authority. Indian entities may import/export electricity directly or through trading licensees after taking necessary approvals from Designated Authority. In such cases the tariff for electricity may also be determined on the basis of mutual agreement (Clause 3.1, Clause 7.1.1 and Clause 7.2.1 of MoP Guidelines).
- 1.3.4.Participating Entities from the neighbouring countries can trade in Indian Power Exchanges through a licensed Indian power trader with the approval of Designated Authority. No restriction has been put in terms of contracts or segments in which the Participating Entities from neighbouring countries can trade, however, the quantum to be traded in the power exchanges shall be specified by the Designated Authority in its approval (Clause 5.3 of the MoP Guidelines).
- 1.4. The Draft Regulations have been finalized after incorporating the changes brought in the MoP Guidelines issued on 18th December, 2018 and detailed analysis & due consideration of the comments/suggestions provided by the stakeholders. The final Cross Border Trade of Electricity Regulations (hereinafter referred to as 'CBTE Regulations') along with the deliberations on the comments/suggestions offered by the stakeholders are provided in the succeeding paragraphs.

# 2. Definition and Interpretation (Regulation 2)

## 2.1. Definition of 'Access Bank Guarantee' [Clause 2(1)(d)]

#### Commission's Proposal:

2.1.1. Definition of Access Bank Guarantee proposed in Clause 2(1)(d) of the Draft Regulations is provided below:

'Access Bank Guarantee' means the bank guarantee which the CBTA customer shall be required to furnish while seeking Long term Access to inter-State transmission system in India.

## Analysis and Decision:

2.1.2. In the Draft Regulations, it was proposed that the applicant located in a neighbouring country seeking long term access to Indian grid shall be required to furnish an Access Bank Guarantee at the time of submitting the application regardless of whether system augmentation is required or not. However, the Commission is of the view that the Access Bank Guarantee at the time of submitting the application may be reduced and in case the transmission system augmentation is required, the Access Bank Guarantee may be revised to cover the cost of such augmentation. Accordingly, the definition of Access Bank Guarantee has been revised incorporating the Access Bank Guarantee required to be furnished in the case of system augmentation as given below:

'Access Bank Guarantee or ABG' means the bank guarantee which an applicant shall be required to furnish while seeking long-term access to Indian grid for cross border trade of electricity and shall also include the bank guarantee required to be furnished by the applicant in case the grant of long-term access requires augmentation of transmission system in India;

## 2.2. Definition of 'Applicant' [Clause 2(1)(e)]

## Commission's Proposal:

2.2.1. Definition of Applicant proposed in Clause 2(1)(e) of the Draft Regulations is provided below:

'Applicant' means:

- (i) For the purpose of grant of connectivity the following entities (located in a neighbouring Country):
  - a) A Hydro Generating station or generating station using renewable source of energy for installed capacity of 50 MW and above or;
  - b) A generating station (not covered under (a) above) with installed capacity of 250 MW and above, including a captive generating plant of exportable capacity of 250MW and

above or;

- c) Hydro Generating stations or generating stations using renewable source of energy individually having less than 50 MW installed capacity, but collectively having an aggregate installed capacity of 50 MW and above, and acting on behalf of all these generating stations, and seeking connection from CTU at a single connection point at the pooling sub-station under CTU, termed as the lead generator, or;
- d) A consumer who intends to avail supply of a minimum load of 100 MW through the inter-State Transmission System of India.
- (ii) For the purpose of grant of long-term access, medium-term open access or short-term open access the following entities located in India or a neighbouring country:
  A generating station including a captive generating plant, a consumer, an inter-State trading licensee, a distribution licensee.

#### **Comments Received:**

2.2.2.  $\mathbf{CEA}^1$  suggested replacing the above definition with the following one:

'Applicant' means an Indian entity who has been recognized as a Participating Entity by the Designated Authority

CEA submitted that as the entities who seek access for cross border trade of electricity need to first get approval of the Designated Authority as 'Participating entities' the definition of Applicant may be accordingly revised.

- 2.2.3. **IEX** suggested for inclusion of Power Exchange in the definition of the 'Applicant' in view of the scheduling of cross border transactions through Exchange in TAM segment.
- 2.2.4. Powergrid suggested replacing the above definition with the following one:

'Applicant' means a generating entity or a distribution entity who has been recognized as a participating entity.

Provided that for the purpose of obtaining Cross Border Transmission Access for Short Term, Applicant may also mean a trading entity who has been recognised as a participating entity.

2.2.5. PTC, APP & OAUA suggested revising the Clause 2(1)(e)(ii) as given below:-

For the purpose of grant of long-term access, medium-term open access or short-term open access the following entities located in India or a neighbouring country:

A generating station including a captive generating plant, a consumer, an inter-State trading licensee, a distribution licensee or a Designated Agency of a neighbouring country

<sup>&</sup>lt;sup>1</sup> List of stakeholders provided in Annexure I & II

Statement of Reasons for CERC (Cross Border Trade in Electricity) Regulations, 2019

PTC submitted that in case of neighbouring countries government nominated agencies viz. Nepal Electricity Authority (NEA) in Nepal, Bangladesh Power Development Board (BPDB) in Bangladesh etc. take care of cross border trade of electricity and hence such agencies may also be included under the definition.

#### Analysis and Decision:

- 2.2.6. The Commission has considered the suggestions provided by different stakeholders with regard to the definition of Applicant. It is observed that the term Applicant is required to be defined aptly also in order to bring clarity in the scope of these Regulations.
- 2.2.7. The Commission is of the view that in order to maintain consistency and avoid overlapping of Regulations (Connectivity and STOA Regulations<sup>2</sup> with CBTE Regulations), it is imperative that the entities located in India seeking Connectivity and or Access to the inter-State Transmission network of India should apply under the provisions of existing CERC Regulations i.e. Connectivity or STOA Regulations; whereas, the entities located in neighbouring countries shall apply under the CBTE Regulations.
- 2.2.8. Further, the Commission observes that it is not required to specify the minimum quantum eligibility conditions for seeking Connectivity under the definition of Applicant proposed in the Draft Regulations, as these are already provided under Connectivity Regulations and shall also be applicable to the Participating Entities applying under CBTE Regulations. In this regard, attention is drawn to Clause (3) of Regulation 8 of CBTE Regulations wherein it has been specified that unless specifically provided for, the provisions contained in Connectivity Regulations and STOA Regulations shall apply mutatis mutandis to the Participating Entities for cross border trade of electricity.
- 2.2.9. In view of the above, the definition of Applicant has been revised as given below:

**'Applicant'** means an entity located in neighbouring country who has been recognized as a Participating Entity as defined in these Regulations [Clause 2(1)(e)]

The above is in line with Powergrid and CEA suggestions for revising the definition of 'Applicant' as an entity recognized as a Participating Entity by the Designated Authority. This also addresses the concerns raised by PTC, APP and

<sup>&</sup>lt;sup>2</sup> Connectivity Regulations means CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009 STOA Regulations means CERC (Open Access in inter-State Transmission) Regulations, 2008

OAUA with regard to inclusion of government nominated agencies of the neighbouring countries.

#### 2.3. Definition of 'Cross Border Trade of Electricity' [Clause 2(1)(r)]

#### Commission's Proposal:

2.3.1. Definition of Cross Border Trade of Electricity proposed in Clause 2(1)(r) of the Draft Regulations is provided below:

**'Cross Border Trade of Electricity'** means trade involving import or export of electricity between India and the neighbouring countries of India [Clause 2(1)(r)]

#### Analysis and Decision:

2.3.2. As per the MoP Guidelines dated 18th December, 2018, the cross border trade of electricity has been allowed across India under tripartite agreements within the overall framework of bilateral agreements signed between Government of India and Government of respective neighbouring country(ies) of the Participating Entity(ies) and the same needs to be incorporated in the CBTE Regulations. Accordingly, the definition of 'Cross Border Trade of Electricity' has been revised as given below:

**'Cross Border Trade of Electricity'** means transactions involving import or export of electricity between India and any of the neighbouring countries and shall also include transactions across India involving neighbouring countries. [Clause 2(1)(f)]

## 2.4. Deletion of the definition 'Cross Border Transmission Access' and other related Terminologies [Clause 2(1)(s), Clause 2(1)(t)], Clause 2(1)(u)]

#### Commission's Proposal:

- 2.4.1. Definitions of Cross Border Transmission Access and other related terminologies proposed in Draft Regulations are provided below:
  - (i) **Cross Border Transmission Access** [Clause 2(1)(s)]

'Cross Border Transmission Access' or 'CBTA' means the access available to an applicant of a neighbouring country to get connected to and use the Indian Grid, and the access available to an applicant of India to get connected to and use the grid of any neighbouring country for cross border trade of electricity under Long term access or medium term open access, as the case may be.

(ii) Cross Border Transmission Agreement Customer [Clause 2(1)(t)]

**'Cross Border Transmission Agreement Customer'** means a person who has been granted CBTA in accordance with these regulations.

(iii) Cross Border Transmission Access Agreement [Clause 2(1)(u)]

**'Cross Border Transmission Access Agreement'** or **'CBTAA'** means an agreement relating to cross border trade of electricity entered into by the Cross Border Transmission Access Applicant with the Central Transmission Utility as per Central Electricity Regulatory Commission (Grant of Connectivity, Long Term and Medium Term Open Access) Regulations, 2009, as amended from time to time.

#### **Comments Received:**

2.4.2. Powergrid suggested revising the definition of CBTA and CBTAA as under:

**'Cross Border Transmission Access'** or **'CBTA'** means the access granted to the Cross Border Transmission Link for Long Term, Medium Term or Short Term as may be specified in the grant intimation by CTU/NLDC, as the case may be.

**'Cross Border Transmission Access Agreement'** or **'CBTAA'** means an agreement relating to cross border trade of electricity entered into by the Transmission Planning Agencies of the respective countries, the CBTA Customer and CTU.

- 2.4.3. **PTC, APP, and OAUA** sought clarification as to whether the CBTAA is different from Long Term Access(LTA) & MTOA(Medium-Term Open Access) Agreements and is required to be signed for cross border trade even in case an Indian entity is selling power to a neighbouring country with Delivery/off-take point as 'Pooling Station on the Indian side of international boundary'.
- 2.4.4. Tata Power & APP suggested revising CBTA definition as under:

**'Cross Border Transmission Access'** or **'CBTA'** means the access available to an applicant to use the Indian Grid, and the access available to an applicant of India to get connected to and use the grid of any neighbouring country for cross border trade of electricity under Long term access or medium term open access or short term open access, as the case may be.'

Tata Power submitted that the Connectivity and LTA/MTOA can be applied separately as per Connectivity, LTA and MTOA Regulations of CERC and accordingly, 'get connected to and' used in the definition may be deleted.

#### Analysis and Decision:

2.4.5. The Commission has reconsidered the definition of Cross Border Transmission Access and other related terminologies namely Cross Border Transmission Access Customer and Cross Border Transmission Access Agreement proposed in the Draft Regulations in light of the suggestions given by different stakeholders.

- 2.4.6. As per the existing regulatory framework, the inter-State Transmission System (ISTS) of India can be accessed through three different ways namely i.e. Long-Term Access, Medium-Term Open Access or Short-Term Open Access depending on the duration for which the access to the ISTS is required. In this backdrop, it is observed that introducing a new kind of access i.e. Cross Border Transmission Access (CBTA) under CBTE Regulations would make these Regulations inconsistent with the existing regulatory framework. As can be perceived from the comments of PTC, APP, and OAUA, Cross Border Transmission Access may conflict with the established notion of LTA, MTOA, and STOA and create confusion amongst the stakeholders.
- 2.4.7. In view of the above, it has been decided to delete CBTA and other related terminologies proposed in the Draft Regulations. It is envisaged that the Participating Entities located in neighbouring countries would access the Indian grid through the established accesses like LTA, MTOA or STOA available under the prevailing regulatory framework.

# 2.5. Definition of 'Cross Border Transmission Link' [Clause 2(1)(v)] & inclusion of definition 'Dedicated Transmission System'

#### Commission's Proposal:

2.5.1. Definition of 'Cross Border Transmission Link[Clause 2(1)(v)]' proposed in the Draft Regulations is provided below:

**'Cross Border Transmission Link'** means the transmission link from the generating station or the pooling station of a neighbouring country to the interconnection point on the Indian Grid, as may be specified by the CTU based on the application for cross border transmission access.

#### **Comments Received:**

- 2.5.2. Adani Power and APP submitted that the definition of Cross Border Transmission Link may also include the case of an independent transmission system allowed for the generating station located in India for supplying power exclusively to the neighbouring country.
- 2.5.3. **Powergrid** suggested revising the above definition as under:

'Cross Border Transmission Link' means the transmission link between pooling stations of India and the neighbouring country as may be specified by CTU based on the recommendation of the Designated Authority.

Powergrid also suggested for deleting of the definition of 'Dedicated Transmission Lines' proposed in the Draft Regulations.

#### Analysis and Decision:

- 2.5.4. The MoP Guidelines have specified that transmission interconnection between India and neighbouring countries shall be jointly planned by the Designated Authority of India and Transmission Planning Agencies of neighbouring countries. It is further specified that the cross border transmission lines may normally be constructed between the pooling stations of India to the pooling stations of other country for secure, safe and controlled operation of the grid.
- 2.5.5. The CBTE Regulations have been framed in accordance with provisions specified under MoP Guidelines. The 'transmission interconnection' envisaged under MoP Guidelines have been referred to as 'Cross Border Transmission Link' between India and the neighbouring country. It is envisaged that the Cross Border Transmission Link shall constitute the transmission link from the pooling station within India till the pooling station in neighbouring country planned by Designated Authority in consultation with Transmission Planning Agencies of the neighbouring countries. In addition to the above, it has also been envisaged that a generating station located in a neighbouring country may carry out cross border transmission system which may further promote the cross border trade of electricity.
- 2.5.6. As regards to suggestions of Adani Power and APP, it is clarified that the generating station located in India supplying electricity exclusively to any particular neighbouring country through independent transmission system shall not come under the scope of these Regulations. Such generating station can build their independent transmission system after obtaining the necessary approvals from the Designated Authority as provided under the MoP Guidelines (Clause 8.9 of MoP Guidelines). In light of this, the suggestion given by Adani Power and APP regarding consideration of independent transmission system as Cross Border Transmission Link may not be required.
- 2.5.7. In view of the above, the definition of Cross Border Transmission Link has been revised incorporating the dedicated transmission system as given below:

'Cross Border Transmission Link' or 'CBTL' means the transmission link from the pooling station within India till the pooling station of a neighbouring country, as may be specified by the Designated Authority in consultation with the Transmission Planning Agency of any of the neighbouring countries and shall include the dedicated transmission line from the generating station located within the territory of a neighbouring country getting connected with the Indian grid [Clause 2(1)(r)];

2.5.8. Further, the definition of Dedicated Transmission System has been included under these Regulations as given below:

**'Dedicated Transmission System'** means the transmission system to be developed by a participating entity for transmitting electricity from generating station located in a neighbouring country to a specified point in the Indian grid [Clause 2(1)(t)];

## 2.6. Definition of Connectivity [Clause 2(1)(o)]

#### Commission's Proposal:

2.6.1. Definitions of Connectivity proposed in Clause 2(1)(o) of the Draft Regulations is provided below:

**'Connectivity'** for a generating station, including a captive generating plant, a bulk consumer or an inter-State Transmission licensee means the state of getting connected to the Inter-State Transmission System of India for the purpose of cross border trade of electricity.

#### **Comments Received:**

- 2.6.2. **CEA** suggested for deleting all reference to the Connectivity from these Regulations as Participating Entities would be already connected to the grid irrespective of whether they want to sell in India or outside.
- 2.6.3. **POSOCO** submitted that Connectivity is always to be obtained by the generator/bulk consumer at the local grid interconnection point and hence, need not be covered under these Regulations.
- 2.6.4. Powergrid also suggested for deletion of the definition of Connectivity

## Analysis and Decision:

- 2.6.5. The Commission concurs with the suggestions given by Powergrid, CEA, and POSOCO i.e. if an applicant is already locally connected to the grid of the neighbouring country and getting connected to the Indian grid through Cross Border Transmission Link, then the applicant shall not be required to again seek Connectivity to the Indian grid. In such cases the applicant is only required to seek Access to the Indian grid (LTA, MTOA or STOA) under the provisions of CBTE Regulations.
- 2.6.6. However, as already discussed in the Clause 2.4.5 above, it is envisaged that a generating station located in neighbouring country eligible to participate in cross border trade of electricity has the option of supplying power to the pooling station within India directly through dedicated transmission system. In such cases

the generator shall be required to seek Connectivity to the Indian grid as per the provisions specified under these Regulations.

2.6.7. In view of the above, the definition of Connectivity has been retained in the CBTE Regulations. However, the definition has been further simplified as given below:

'**Connectivity**' means the state of getting connected to the Indian grid for the purpose of cross border trade of electricity;

Considering that the connectivity can take place to inter-state or intra-state transmission system the 'Inter-State Transmission System' has been replaced with the 'Indian grid'.

#### 2.7. Insertion/Deletion of some of the Definitions proposed in the Draft Regulations

- 2.7.1. Following definitions have been included under CBTE Regulations for the reasons mentioned therein:
  - (1) **Competent Authority** [Clause 2(1)(k)]: Definition of Competent Authority has been included to provide a 'generic reference' to an Authority of neighbouring country vested with the power to accord approvals on matters related to cross border trade of electricity.
  - (2) Connectivity Regulations [Clause 2(1)(n)], DSM Regulations[Clause 2(1)(w)], Sharing Regulations[Clause 2(1)(ss)] and STOA Regulations[Clause 2(1)(uu)]: Definition of Connectivity Regulations, DSM Regulations, Sharing Regulations and STOA Regulations have been included and abbreviated for ease of reference in CBTE Regulations.
  - (3) **Contract Performance Guarantee** [Clause 2(1)(o)]: Definition of Contract Performance Guarantee has been included as this has been referred to in the Clause (5) of Regulation 15 of CBTE Regulations.
  - (4) **Cross Border Customer** [Clause 2(1)(q)]: Definition of Cross Border Customer has been included to differentiate it from the Applicant. Any Applicant who has been successfully granted Connectivity and/or Access to Indian grid shall be known as Cross Border Customer.
  - (5) Definition of some more terminologies viz. Entity [Clause 2(1)(x)], Guidelines [Clause 2(1)(z)], PoC Charges [Clause 2(1)(ll)], Regional Power Committee [Clause 2(1)(00)] etc. have been included as these are referred to in the CBTE Regulations

- 2.7.2. Following definitions proposed in the Draft Regulations have been deleted or reasons mentioned therein:
  - (1) **Appropriate Commission** [Clause 2(1)(f)]: As per the Electricity Act 2003, the Commission has jurisdiction over the inter-state matters.
  - (2) **Black Start Procedure** [Clause 2(1)(h)]: Not referred to in the CBTE Regulations.
  - (3) **Congestion** [Clause 2(1)(m)]: Not referred to in the CBTE Regulations and as such self explanatory in nature.
  - (4) **Connectivity Lines** [Clause 2(1)(p)]: Not referred to in the CBTE Regulations.
  - (5) **Date of Commercial Operation** [Clause 2(1)(x)]: Not referred to in the CBTE Regulations.
  - (6) **Dedicated Transmission Lines** [Clause 2(1)(y)]: Replaced with the definition of Dedicated Transmission System.
  - (7) **Demand** [Clause 2(1)(z)]: Not referred to in the CBTE Regulations and as such self explanatory in nature
  - (8) **Distribution Licensee** [Clause 2(1)(cc)]: Not referred to in the CBTE Regulations
  - (9) Downstream System [Clause 2(1)(dd)]: Not referred to in the CBTE Regulations. Powergrid and POSOCO have also suggested for deleting the definition.
  - (10) **Implementation Agreement** [Clause 2(1)(ff)]:Not referred to in the CBTE Regulations. Powergrid has also suggested for deleting the definition.
  - (11) **Installed Capacity** [Clause 2(1)(hh)]: Not referred to in the CBTE Regulations as such self explanatory in nature.
  - (12) **Lead generator** [Clause 2(1)(ll)]: Not referred to in the CBTE Regulations. Powergrid and POSOCO have also suggested for deleting the definition.
  - (13) **License** [Clause 2(1)(mm)]: Not referred to in the CBTE Regulations. Powergrid has also suggested for deleting the definition.

- (14) **Licensee** [Clause 2(1)(nn)]: Not referred to in the CBTE Regulations. Powergrid has also suggested for deleting the definition.
- (15) **Real time Operation** [Clause 2(1)(xx)]: Not referred to in the CBTE Regulations.
- (16) **Regional Energy Account** [Clause 2(1)(yy)]: Not referred to in the CBTE Regulations.
- (17) Special Energy Meters[Clause 2(1)(fff)]: Defined as a part of Interface Meters provided in Clause 2(1)(aa).
- (18) **State Transmission Utility** [Clause 2(1)(ggg)]: Not referred to in the CBTE Regulations. Powergrid has also suggested for deleting the definition.
- (19) **Transmission Planning Criteria** [Clause 2(1)(mmm): Not referred to in the CBTE Regulations.
- (20) **Upstream System** [Clause 2(1)(000)]: Not referred to in the CBTE Regulations. Powergrid and POSOCO have also suggested for deleting the definition.
- (21) **User** [Clause 2(1)(ppp)]: Not referred to in the CBTE Regulations. In the context of cross border trade of electricity Users are essentially the Participating Entities.
- 2.7.3. Besides the above, some of the other definitions proposed in the Draft Regulations have been revised keeping in view the deliberations made so far and with an objective of making these Regulations simpler and coherent.

## 3. Scope of Regulation (Regulation 3)

## Commission's Proposal:

3.1. Scope of these Regulations proposed in Regulation 3 of the Draft Regulations is provided below:

## 3. Scope

- (1) These regulations shall be applicable to all the participating entities in India and its neighbouring countries which are engaged in cross border trade of electricity.
- (2) The CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in

inter-State Transmission and related matters) Regulations, 2009 and any amendments thereof shall be applicable to the entities located in India who are seeking connectivity for long term and medium term open access to the inter-State transmission system in India in the course of cross border trade of electricity between India and a neighbouring country.

- (3) Any cross border trade in electricity between India and a neighbouring country shall be allowed through bilateral agreements between an Indian entity and an entity of the neighbouring country under the overall framework of agreements signed between the governments of the two countries.
- (4) Notwithstanding anything done or any action taken or purported to have been done or taken for cross border trade of electricity under the Agreements in force, prior to 5<sup>th</sup> December, 2016 (date of issue of Guidelines on Cross Border Trade of Electricity by Ministry of Power) shall be deemed to have been done or taken under the provisions of these regulations and the guidelines issued by Govt. of India till the expiry of such Agreements.
- (5) Wherever there is any reference to any Act, Law, Regulation or Rules, if there is any amendment subsequent to the notification of these Regulations, the amendment shall apply.

#### **Comments Received:**

3.2. Adani Power, OAUA and APP suggested revising Clause 3(1) as given below:

These regulations shall be applicable to all the Participating Entities in India and its neighbouring countries which are engaged in cross border trade of electricity.

Provided that unless expressly stated otherwise, nothing contained in these regulations shall apply or deemed to apply to a Participating Entity incorporated or established in India and selling power exclusively to a neighbouring country through an independent transmission system.

Adani Power et al. submitted that an Indian generating station supplying electricity exclusively to neighbouring countries through an independent transmission system will not be required to apply for open access, connectivity to Indian grid etc. and hence should be excluded from the scope of these regulations.

- 3.3. **APDCL** submitted that the Regulation 3 of the Draft Regulations states that scope of the Regulation are applicable in India and in the neighbouring countries which engage in cross border trade of electricity; however, the Regulations are being made under the provisions of Section 178 read with Section 66 of the E Act 2003 which is only applicable in the territory of India except the state of J&K. APDCL has expressed hope that the Commission shall take care of the legal provisions while finalizing these Regulations.
- 3.4. **GMR and OAUA** suggested removing the words 'located in India' given in Clause 3(2) citing that it should not be restricted to entities located in India only.

- 3.5. **IEX & OAUA** submitted that along with bilateral agreement given under Clause 3(3), cross border trade through Power Exchange may also be incorporated in view of the Cross Border transactions through Exchange in TAM segment
- 3.6. **IPPAI** submitted that CERC does not have the jurisdiction to frame regulations for the neighbouring countries
- 3.7. **POSOCO** submitted that CERC Regulations should cover only the various aspects pertaining to cross-border links and cross-border transactions as once the power crosses the borders and enters India, all existing laws of the land, Regulations and procedures shall be applicable. POSOCO suggested for appropriate cross referencing to the relevant Regulations to avoid duplication or conflict with the existing Regulations especially in cases where the Principal Regulation viz. Connectivity Regulations undergoes an amendment or the Regulations are revised.
- 3.8. **POSOCO** also highlighted that laws and regulations of India are not applicable beyond India's territorial boundary and accordingly Draft Regulations may be suitably modified.
- 3.9. Representatives from Bangladesh, Bhutan and Nepal suggested for tripartite/multilateral energy trade agreements in addition to bilateral agreements during the CII Roundtable on Cross Border Trade of Electricity.

## Analysis and Decisions:

3.10. The Commission has framed these Regulations in accordance with MoP Guidelines and under the provisions of Section 178 read with Section 66 of Electricity Act 2003. While Section 178 & Section 66 of Electricity Act 2003 enables the Commission to frame Regulations for the development of electricity market, MoP Guidelines Guidelines enables the Commission to frame Regulations for facilitating cross border trade of electricity which gives the necessary legal grounding for framing of these Regulations. The relevant Clause of the MoP Guidelines is abstracted below:

'4.1 The import/export of electricity by Indian entities shall be governed by the rules/regulations and policies framed and notified by Government of India/Central Electricity Authority (CEA)/Central Electricity Regulatory Commission (CERC)....

8.5 Transmission Access priority for import/export of electricity in India shall be determined as per the CERC Regulations.'

3.11. While the Draft CBTE Regulations were based on earlier MoP Guidelines which envisaged cross border trade of electricity through bilateral agreements between an Indian entity and an entity of the neighbouring country, the MoP Guidelines issued on 18th December, 2018, in addition to cross border trade through bilateral agreements, has now allowed for cross border trade across India through tripartite agreements. The relevant clause of MoP Guidelines is abstracted below:

'3.1 The import/export of electricity by India and the neighbouring country(ies) may be allowed through mutual agreements between Indian Entity(ies) and Entity(ies) of the neighbouring country(ies) under the overall framework of agreements signed between India and the neighbouring country(ies) consistent with the provisions of the prevailing laws in the respective country(ies), including -

- (a) through bilateral agreement between two countries
- (b) through bidding route; or
- (c) through mutual agreement between entities

Provided that in case of tripartite agreements, the cross border trade of electricity across India shall be allowed under the overall framework of bilateral agreements signed between Government of India and the Government of the respective neighbouring country(ies) of the Participating Entity(ies) '

As per the MoP Guidelines the cross border trade of electricity can take place through bilateral agreement between two countries or through bilding route or through mutual agreements between entities under the overall framework of agreements signed between India and the neighbouring countries. Further, it has been envisaged that cross border trade of electricity can take place across India through tripartite agreements. The same has been incorporated under the scope of CBTE Regulations. This in is line with the suggestions made by the representatives of Bangladesh, Bhutan and Nepal regarding tripartite/multilateral energy trade agreements. The cross border transaction under bilateral and tripartite arrangements is illustrated in the figure below.

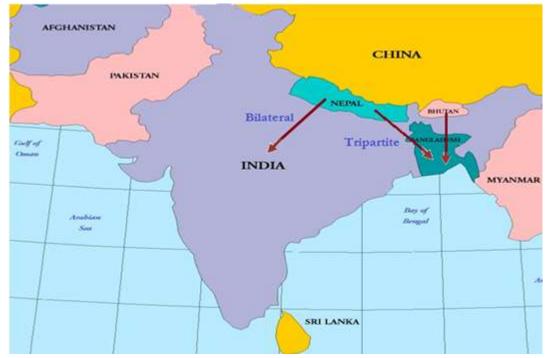


Figure 1: Cross Border Transactions under Bilateral and Tripartite Arrangement

3.12. The Commission concurs with the submissions of Adani Power, APP and OAUA that generating stations located in India supplying electricity exclusively to neighbouring

countries through an independent transmission system should be excluded from the scope of these Regulations. Accordingly, the Commission has decided to delete the Clause 9(4) proposed in the Draft Regulations. Since such generating stations are considered to be excluded from the scope of these Regulations, it is no more required to add the Proviso as suggested by Adani Power, APP and OAUA.

- 3.13. The Commission acknowledges the concerns raised by POSOCO & other stakeholders regarding the applicability of CBTE Regulations on the entities of neighbouring countries. The Commission is conscious that the Rules & Regulations of India shall only be valid and applicable within the territory of India. Accordingly, it has been envisaged that the CBTE Regulations shall be applicable to the Participating Entities from neighbouring countries only pertaining to the issues related to cross border electricity trade with India viz. getting Connectivity or Access to Indian grid, Metering Accounting & Payment for cross border transactions.
- 3.14. As discussed earlier in Para 2.2.7, these Regulations shall be applicable to the Participating Entities located in neighbouring countries whereas the entities located in India shall be applying for Connectivity and or Access to Indian grid under the existing provisions of Connectivity and STOA Regulations. Keeping in view the nature of cross border transactions, CBTE Regulations have specified certain additional provisions viz. Approval from Designated Authority, Access Bank Guarantee etc. for the Participating Entities from neighbouring countries besides invoking the relevant provisions of existing CERC Regulations through cross referencing which is in line with the suggestions provided by POSOCO.
- 3.15. It was proposed in the Draft Regulations that any Agreements entered before 5th December, 2016 shall be deemed to have been done under the provision of these Regulations. The Commission is of the view that instead of the date of 5th December, 2016 when the earlier MoP Guidelines were issued, it should be the date when these Regulations shall come into force. Further, the Commission is of the view that Clause 3(5) of the Draft Regulations is not required as this has been covered under the definitions of respective individual Regulations.
- 3.16. In view of the above, the Scope of these Regulations has been revised incorporating the changes brought by the MoP Guidelines issued on 18th December, 2018 as given below:

## 3. Scope

(1) These regulations shall be applicable to the Participating Entities in India and the neighbouring countries which are engaged in cross border trade of electricity with India.

Provided that the entities located in India who are seeking connectivity or long-term access or medium-term open access or short-term open access to the Indian grid in the course of cross border trade of electricity between India and any of the neighbouring countries shall continue to be governed by Connectivity Regulations and the STOA Regulations.

- (2) Cross border trade of electricity between India and the neighbouring country(ies) shall be allowed through mutual agreements between Indian entity(ies) and entity(ies) of the neighbouring country(ies) under the overall framework of agreements signed between India and the neighbouring country(ies) consistent with the provisions of the prevailing laws in the respective country(ies), including:
  - (i) through bilateral agreement between two countries;
  - (ii) through bidding route; or
  - (iii) through mutual agreements between entities;

Provided that in case of tripartite agreements, the cross border trade of electricity across India shall be allowed under the overall framework of bilateral agreements signed between Government of India and the Governments of the respective neighbouring countries of the Participating Entities.

(3) Notwithstanding the provisions of these regulations, anything done or any action taken or purported to have been done or taken for cross border trade of electricity with neighbouring country(ies) under any Agreement in force prior to the date of coming into force of these Regulations, shall be deemed to have been done or taken under the provisions of these Regulations and shall continue to be in place till the expiry of the said Agreements.

## 4. Institutional Framework (Regulation 4)

#### Commission's Proposal:

4.1. Institutional framework for cross border trade of electricity proposed under Regulation 6 of Draft Regulations is given below:

#### 6. Institutional Framework

- (1) **Designated Authority:** shall be an Authority as designated by Ministry of Power, Government of India, for facilitating the process of approval and laying down the procedure for cross border transaction and trade in electricity. The Designated Authority shall be responsible for coordination with the nodal agency of the neighbouring country for all purposes as stated in the Guidelines on Cross Border Trade of Electricity issued by Ministry of Power.
- (2) There shall be the following Agencies for performing the designated functions under these regulations:
  - (a) **Transmission Planning Agency (TPA) of each neighbouring country** shall be responsible for Transmission System planning in respective neighbouring country for the purpose of facilitating cross border trade of electricity with India. For India, this function shall be discharged by the Designated Authority.

- (b) Settlement Nodal Agency (SNA) shall be responsible for settling all charges pertaining to grid operations including operating charges, charges for deviation and other charges related to transactions with a particular neighbouring country in the course of cross border trade of electricity. The SNA shall be a member of the deviation pool, reactive energy pool and other regulatory pools for payment and settlement of the corresponding charges in the pool accounts of the region having connectivity with any neighbouring country. The neighbouring country may also nominate/authorize an agency for such purpose. Ministry of Power, Government of India shall notify SNAs for each neighbouring country.
- (c) National Load Dispatch Centre (NLDC) shall be responsible for granting and facilitating short-term open access with respect to cross border trade of electricity between India and its neighbouring country. It shall also be responsible for billing, collection and disbursement of the transmission charges for short term open access transactions in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 or any other Regulations in force in that regard.
- (d) **Central Transmission Utility (CTU)** shall be responsible for granting and facilitating long-term access and medium-term open access with respect to cross border trade of electricity between India and its neighbouring countries. It shall also be responsible for billing, collection and disbursement of the transmission charges in accordance with the Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010 or any other Regulations in force in that regard.

## **Comments Received:**

- 4.2. **APDCL** submitted that one comprehensive regulation may be framed by the CEA (Designated Authority) under section 177(g) of the EA 2003 which will facilitate to overcome various technical and administrative issues of the cross border trading of electricity.
- 4.3. **APDCL** further submitted that from the consumer's perspective the trader may not be appointed on a nomination basis rather the Commission or CEA may select the trader for cross border trading through a transparent bidding system and recommend it for selection as a trader to the Government of India.
- 4.4. **GMR and OAUA** suggested replacing 'nodal agency of the neighbouring country' with the 'authority designated by the neighbouring country' in the Clause 4(1). GMR et al. submitted that it is better left to the neighbouring country to designate a nodal agency separately or to authorize any existing govt. department for this purpose.
- 4.5. **NVVN** suggested that nomenclature of 'Settlement Nodal Agency' may be changed to 'Nodal Agency' as the scope of the nodal agency is much wider than the settlement of charges. NVVN cited its own example how besides settlement of charges it is also

performing activities viz. application processing, scheduling, revision etc. for cross border trade of electricity with Nepal and Bangladesh.

4.6. **POSOCO** suggested that instead of multiple SNA's, only a single agency may be designated as SNA for one country for the sake of clarity.

#### Analysis and Decision:

- 4.7. Keeping in view of the comments received, the words 'nodal agency of the neighbouring country' have been replaced with 'any authority designated by the concerned neighbouring country' in Clause 4(1). The definition of Transmission Planning Agency (TPA) and Settlement Nodal Agency (SNA) has also been revised along similar lines.
- 4.8. As regards to suggestion of APDCL and POSOCO with respect to selection of SNAs, it is clarified that the Commission has framed its Regulations in accordance with the MoP Guidelines which has specified that the Ministry of Power shall notify nodal agency for each neighbouring country. The relevant Clause of MoP Guidelines is reproduced below:

'8.8 Ministry of Power shall notify Indian Nodal agency for each neighbouring country which shall be responsible for settlement of grid operation related charges as per CERC regulations.'

- 4.9. As regards to suggestion made by NVVN with respect to the change in nomenclature of SNA, the Commission is of the view that the nomenclature of Settlement Nodal Agency is appropriate as it provides an indication of the primary functions being carried out by the nodal agencies i.e. settling of all charges pertaining to grid operations including operating charges, charges for deviation and other charges related to transactions with a particular neighbouring country in the course of cross border trade of electricity.
- 4.10. In view of the above, the Regulation on Institutional Framework has been revised as given below:

#### 4. Institutional Framework

- (1) Designated Authority appointed by the Ministry of Power, Government of India shall be responsible for facilitating the process of approval and laying down the procedure for import and export of electricity. The Designated Authority shall coordinate with any authority designated by the concerned neighbouring country for all purposes stated in the Guidelines.
- (2) Transmission Planning Agency shall be responsible for planning of transmission system for the purpose of facilitating cross border trade of electricity and may coordinate with the Transmission Planning Agency of the concerned neighbouring country, wherever necessary. For India, this function shall be discharged by the Designated Authority.

- (3) Settlement Nodal Agency shall be responsible for settling all charges pertaining to grid operations including operating charges, charges for deviation and other charges related to transactions with a particular neighbouring country in the course of cross border trade of electricity. The Settlement Nodal Agency shall be a member of the deviation pool, reactive energy pool and other regulatory pools for payment and settlement of the corresponding charges in the pool accounts of the region having connectivity with any neighbouring country.
- (4) National Load Dispatch Centre shall act as the System Operator for cross border trade of electricity between India and the neighbouring countries and shall be responsible for granting short-term open access and for billing, collection and disbursement of the transmission charges for short-term open access transactions in accordance with the Sharing Regulations.
- (5) Central Transmission Utility shall be responsible for granting long-term access and medium-term open access with respect to cross border trade of electricity between India and the neighbouring countries and for billing, collection and disbursement of the transmission charges in accordance with the Sharing Regulations.

## 5. Tariff Determination (Regulation 5)

#### **Commission's Proposal:**

5.1. Tariff mechanism proposed under Regulation 4 of the Draft Regulations is provided below:

#### 4. Tariff Determination

(1) Cross border trade of electricity through Government to Government negotiations:

Where import/ export of electricity is agreed between the Government of India and the Government of any neighbouring country involving the participating entities of the two countries, the tariff for such transactions shall be determined through Government to Government negotiations, which shall be adopted by the Appropriate Commission.

Provided that in Agreements referred to in Clause 3(4) of the Regulations, the tariff so determined shall be deemed to have been adopted by the Appropriate Commission.

- (2) Cross border trade of electricity through arrangements other than through Government to Government negotiations:
  - (a) Tariff for import of electricity by Indian entities (directly or through trading licensees) from the generating stations located outside India shall be determined under long term/ medium term/ short term agreement, through a process of competitive bidding, which shall be adopted by the Appropriate Commission under Section 63 of the Electricity Act, 2003.

Provided that in case of hydro generation projects, the tariff shall be determined by the Central Commission as per the Tariff Regulations notified from time to time, if approached by the generator through the Government of the neighbouring country and agreed by the Indian entities, including Public Utilities/ Discom(s).

- (b) Tariff for export of electricity to entities of a neighbouring country by Indian entities through long term/ medium term/ short term agreements may be as mutually agreed or discovered through competitive bidding, subject to payment of the charges as applicable for transmission/wheeling of electricity through the Indian grid.
- (3) The tariff for the cross border transmission link from pooling station within India till the Indian border shall be determined as per CERC (Tariff Regulations), 2014 as amended from time to time.
- (4) The tariff for transmission system within India shall be as per the prevailing laws under Section 62 or Section 63 of the Act.

#### **Comments Received:**

- 5.2. **APDCL** submitted that while finalizing the Regulations suitable care may be taken to safeguard the consumer's interest in accordance with Section 61 of the Electricity Act 2003.
- 5.3. **APP and OAUA** submitted that these Regulations have to be in line and consistent with the Electricity Act 2003. The Act does not provide for any tariff fixation through negotiation and lays down only two processes tariff determination under Section 62 and adoption of tariff discovered through competitive bidding under Section 63. In order to avoid any discretionary selection of generators for negotiated tariff, the tariff for Government to Government transactions may also be determined through a clear cut and transparent process of competitive bidding.
- 5.4. **CEA** suggested revising Clause 4(3) as given below:

'The tariff for the cross border transmission link from pooling station within India till the Indian border shall be determined as provision of Section 62 or 63 of Electricity Act, as applicable.'

CEA submitted that it is not specified under MoP Guidelines that only CTU can make these transmission lines; these transmission lines can be built under competitive bidding also.

5.5. **FICCI** suggested revising the Clause 4(3) & 4(4) as given below:

'The tariff for the cross border transmission link from pooling station within India, till the Indian border and for transmission system within India shall be as per the prevailing laws under Section 63 of the Act and Tariff Policy 2016 as amended time to time'

- 5.6. **GMR** submitted that Proviso to Clause 4(2) (a) requires the generator to apply through Government of neighbouring country for tariff determination which seems to be out of place and may not bode well with the Government. GMR Energy suggested that the Generator and Indian Entity should apply jointly for the tariff determination within the frame work of overall trade agreement between the countries.
- 5.7. **GMR** further suggested for incorporating provisions for tariff determination in international currency terms. It has reasoned that the funding for projects would be done by multi-lateral organization or international agencies in foreign currency hence it is pertinent that the tariff is calculated accordingly. It has highlighted that in local currency, hedging may not be possible.
- 5.8. **GMR** also submitted that no time limit has been prescribed for CERC to determine the Tariff. A timeline will help the parties plan and chalk out their project schedule with certainty.
- 5.9. **IEX** suggested incorporating the price determined for import/export at Power Exchange for clarity.
- 5.10. **NVVN** submitted in reference to Proviso to Clause 4(2) (a), that the projects which are approved by neighbouring countries for export of electricity may not require to approach through the Government of neighbouring country for tariff petition to CERC since generator is already having relevant sanctions with the Government of neighbouring country.
- 5.11. **NTPC** suggested adding a Proviso under Clause 4(1) as given below:

Provided that the tariff applicable for cross border customers shall not be less than the CERC determined tariff.

5.12. **Powergrid** suggested revising the Regulation 4 on Tariff Determination as given below:

"Tariff Determination & Payment of Charges

- (1) The tariff for import/export of electricity shall be in accordance with the principles laid down in the Para 6.1 and 6.2 of Guidelines on Cross Border Trade in Electricity issued by Ministry of Power.
- (2) In case of cross border trade of electricity through Government to Government negotiations, the tariff for the portion of the Cross Border Transmission Links within India shall be determined through Government to Government negotiations, which shall be adopted by the Appropriate Commission.

Provided that in Agreements referred to in Clause 3(4) of the Regulations, the tariff so determined shall be deemed to have been adopted by the Appropriate Commission.

Provided further that the transmission tariff determination shall be such that the total capital cost of the Indian portion of the cross border transmission link is made recoverable in the time frame for which the cross border trade in electricity has been agreed for under the Government to Government negotiation.

(3) In case of cross border trade of electricity through arrangements other than Government to Government negotiations, the transmission tariff for the portion of the Cross Border Transmission Links within India shall be determined by CERC as per the principles of CERC (Tariff Regulations), 2014 as amended from time to time or any subsequent enactment thereof and shall be payable by the CBTA customer.

Provided that the transmission tariff determination shall be such that recovery of the total capital cost of the Indian portion of the cross border transmission link is made over the period for which CBTA for long term has been granted.

Provided further that the transmission tariff shall be charged even in case of non-availability of the matching transmission line from the Indian border till the pooling station of neighbouring country or non availability of generating station(s). The detailed modalities for the same shall be specified in the Detailed Procedure to be notified by the Designated Authority.

- (4) The CBTA customer shall be required to pay
  - (a) Transmission charges for the Cross Border Transmission Link;
  - (b) PoC charges for accessing the Indian ISTS in terms of CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010. The sharing of transmission charges and losses by all the CBTA customers shall be governed by the principles of the CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010

Provided that the CERC may notify an addendum to the present Regulations prescribing the modalities of sharing and offsetting of transmission charges for the usage of Cross Border Transmission Links.

- (5) The tariff for transmission system within India shall be as per the prevailing laws under Section 61, Section 62 or Section 63 of the Act.'
- 5.13. **Representatives from Bangladesh, Bhutan and Nepal** advocated for tariff determination through market mechanism rather than based on Government to Government negotiations.

## 5.14. Tata Power and APP submitted the following:

- (1) Indian entities should have option to purchase power from cross border hydro projects at a tariff which may be lower than that determined by Central Commission
- (2) Hydro generator may be permitted to approach CERC through Indian trading licensee, engaged by a Cross border generator as an intermediary
- (3) Open access consumers should be permitted to buy power from cross border projects through trading licensees on a mutually negotiated tariff.

- (4) Competitive bidding documents should be revised to incorporate clause related to cross border trade, for example Force Majeure, Change in law etc.
- (5) Cross border generation projects should be permitted to participate along with Indian generators in tenders called by Discoms.
- (6) Tariff Regulations being referred to in Clause 4 (2) (a) and the Regulations for Cross Border Trade of Electricity, should be issued simultaneously.

#### Analysis and Discussion:

5.15. The MoP Guidelines issued on 18th December, 2018 have brought certain changes to the Tariff mechanism provided under the earlier MoP Guidelines. Apart from providing for determination of tariff for import or export of electricity through a process of competitive bidding it has also allowed for tariff determination through mutual agreement

Further, it is specified that if the tariff is already determined through Government to Government negotiations under Inter Government Agreement, then it shall continue to be determined through Government to Government negotiations till the expiry of the agreement or as may be decided by the countries including determination of tariff through competitive bidding process. On expiry of the agreement if it is not extended further, the tariff may be determined through competitive bidding process or mutual agreement or Government to Government negotiations

The above has been incorporated in the CBTE Regulations. The concerns raised by different stakeholders' viz. tariff determination through competitive bidding process, participation of cross border generation projects in tenders invited by Discoms, purchase of power through mutually negotiated tariff etc. have been adequately addressed through the above changes.

- 5.16. Some of the other suggestions viz. tariff should be determined based on competitive bidding rather than Government to Government negotiations, hydro generating stations may not approach the Commission through Government of neighbouring country, cross border tariff should not be less than CERC determined tariff etc., are not in line with the tariff mechanism specified under the MoP Guidelines hence have not been considered by he Commission. As far as the framing of the CBTE Regulations is concerned the Commission has been guided by the MoP Guidelines issued by Ministry of Power.
- 5.17. The Commission had proposed determination of tariff for Cross Border Transmission Link from pooling station within India to the Indian border on a cost plus basis to be determined in accordance with CERC Tariff Regulations. However, the stakeholders viz. CEA, NVVN, and FICCI etc. have suggested for determination of tariff through competitive bidding basis under Section 63 of the Electricity Act, whereas, Powergrid has suggested that the tariff for Cross Border Transmission Link may be determined on the basis of Government to Government negotiations. Based on the suggestions

received from different stakeholders and considering the strategic nature of Cross Border Transmission Link, the Commission is of the view that the tariff for the Cross Border Transmission Link may be allowed to be determined through a process of competitive bidding or through Government to Government negotiations which is in line with what has been envisaged for electricity tariff under MoP Guidelines. In case the tariff is not determined through Government to Government negotiations or competitive bidding process, then the Commission may determine the tariff for Cross Border Transmission Link on a cost plus basis as per the parameters specified under prevailing CERC Tariff Regulations.

5.18. Based on the above discussion, the Regulation on 'Tariff Determination' has been revised as given below:

## 5. Tariff Determination

(1) Tariff for import of electricity by the Indian Entity(ies) shall be determined through a process of competitive bidding as per the Tariff Policy notified from time to time under Section 3 of the Act or through mutual agreement between the buying Indian entity and the selling entity of the respective neighbouring country under the overall framework of agreements signed between India and the neighbouring country(ies) subject to payment of the applicable charges for transmission or wheeling of electricity through the Indian grid.

Provided that in case of import of electricity from the hydro generation projects located in any of the neighbouring countries, the tariff thereof shall be determined by the Commission as per the parameters specified in the Tariff Regulations notified from time to time, only if the hydro generator approaches the Commission through the Government of the neighbouring country and is agreed to by the buying Indian entity(ies).

- (2) Tariff for export of electricity to entities of a neighbouring country by the Indian entities through long-term or medium-term or short-term agreements may be either mutually agreed under the overall framework of agreements signed between India and the neighbouring country(ies) or discovered through competitive bidding, subject to payment of the applicable charges for transmission or wheeling of electricity through the Indian grid.
- (3) Where the tariff for import or export of electricity is mutually agreed between the Government of India and the Government of any neighbouring country involving the participating entities of the two countries, the same shall be final.

Provided that the tariff for import or export of electricity already determined through Government to Government negotiations including under Inter Government Agreements (IGA) shall continue to be determined through Government to Government negotiations till the expiry of the Agreement or as may be decided by the two countries including determination of tariff through competitive bidding.

Provided further that on expiry of the Agreement, if not extended further, the tariff may be determined through the process of competitive bidding or mutual agreements or Government to Government negotiations.

(4) The tariff for the Cross Border Transmission Link from the pooling station within India till the Indian border may be determined through a process of competitive bidding or by the Commission or through Government to Government negotiations.

# 6. Trade through Indian Power Exchanges (Regulation 6)

## Commission's Proposal:

6.1. Cross border trade of electricity through Indian power exchange proposed under Regulation 8 of the Draft Regulations is provided below:

## 8. Trade Through Indian Power Exchanges:

- (1) A Participating entity as specified in Regulation 7(1), with approval of the Designated Authority, after complying with the relevant regulations of the Commission, shall be eligible for cross border trade of electricity through Indian Power Exchange(s) under the categories of Term Ahead Contracts, Intra Day Contracts and Contingency Contracts as defined in the CERC (Power Market) Regulations, 2010.
- (2) Any other Participating Entity as specified in Regulation 7(2) shall be eligible to participate in the Indian Power Exchange(s) through the trading licensees in accordance with the CERC (Power Market) Regulations, 2010.
- (3) The quantum of electricity that can be traded under cross border trade of electricity in Indian Power Exchange(s) shall be as prescribed from time to time by the Designated Authority.

## **Comments Received:**

- 6.2. **APP** sought clarification on whether the ceiling on quantum of electricity permitted to be traded in Indian Power Exchange(s) provided under Clause 8(3) will be on an overall basis or on generator/buyer basis. APP submitted that in case the ceiling is on an overall basis, and it is observed that the quantum of bids on any given day/time is higher than this prescribed ceiling, then the power may be distributed on a pro-rata basis.
- 6.3. **IEX** submitted that the selling entities from the neighbouring countries should be allowed in the existing TAM segment, whereas for the buying entities a separate export TAM segment may be introduced which would ensure that the cross border transactions taking place through the exchange platform shall only be bilateral in nature.
- 6.4. IEX suggested revising Regulation 8(2) as below:

Any other Participating Entity from **neighbouring country** as specified in Regulation 7(2) shall be eligible to participate in the Indian Power Exchange(s) through the trading licensees in accordance with the CERC (Power Market) Regulations, 2010.

- 6.5. **IEX** further submitted that the words 'country wise' may be added before 'quantum of electricity' in Clause 8(3) for better clarity. IEX also submitted that the NLDC may be assigned the responsibility to ensure that the quantum prescribed by Designated Authority is not breached at the time of approval of application for scheduling, since in the multiple TAM market scenario it would not be feasible for Exchange to check the breach of prescribed quantum by Designated Authority.
- 6.6. **IPPAI** has raised concerns over allowing cross border trade in electricity through the Power Exchanges on account of lack of transparency, complex algorithm etc. IPPAI has suggested using the e-Bidding & e-Reverse Auction portal namely DEEP for cross border transactions.
- 6.7. **IRADe** submitted that the manner in which the Term Ahead Market is operated at present, it is possible that trades between two neighbouring countries may also get cleared with the power being wheeled through the Indian grid. IRADe suggested for creating a separate TAM platform for cross border trade of electricity where only the eligible entities may participate and it can be ensured that the bids from cross border are cleared against the bids of eligible Indian buyers and sellers only.
- 6.8. **IRADe** further submitted that a provision may be suitably included so that the Indian participant seller is not allowed to decrease the rate and buyer not allowed to increase the rate while trading in the TAM where cross border power is being traded. This provision will ensure that the power sold by Indian entities in the domestic market is not costlier than power sold in the cross border market by the same entity. The reverse will be true in case of buying entity.
- 6.9. **Powergrid** suggested revising the definition as follows:
  - (1) A participating entity which has obtained an approval of the Designated Authority under Para 5.2.1 under the guidelines on Cross Border Trade of Electricity shall be eligible for cross border trade of electricity through Indian Power Exchange(s) under the categories of Term Ahead Contracts, Intra Day Contracts and Contingency Contracts as defined in the CERC (Power Market) Regulations, 2010.

Provided that any other participating Entity shall be eligible to participate in the Indian Power Exchange(S) through the trading Licensees in accordance with the CERC (Power Market) Regulations, 2010.

Provided further that cross border trade of electricity can be extended to the other categories of contracts based on notification of Ministry of Power from time to time.

- 6.10. **Powergrid** suggested that the words 'for a given neighbouring country' should be added before 'from time to time by the Designated Authority' in the Clause 8(3).
- 6.11. PTC and OAUA suggested revising Regulation 8 (1) & 8(2) as given below:

A Participating entity as specified in Regulation 7(1), with approval of the Designated Authority, after complying with the relevant regulations of the Commission, shall be eligible for cross border trade of electricity through Indian Power Exchange(s) **directly or through Category - 1 trading licensee** under the categories of Term Ahead Contracts, Intra Day Contracts and Contingency Contracts as defined in the CERC (Power Market) Regulations, 2010.

Any other Participating Entity as specified in Regulation 7(2) shall be eligible to participate in the Indian Power Exchange(s) through the **Category - 1** trading licensees in accordance with the CERC (Power Market) Regulations, 2010.

- 6.12. **Representatives from Bhutan, Nepal and Bangladesh** suggested for allowing them full access to all categories of India's electricity markets including the Day Ahead Market segment in the Power Exchanges.
- 6.13. Tata Power and APP suggested the following:
  - (1) Participating entity should be permitted to access Power Exchange through trading licensees.
  - (2) No separate approval may be required for trade through Power Exchanges.
  - (3) Allow participating in Collective transactions as the proposed Term Ahead, Intraday and Contingency Contracts have very low trading volume.
  - (4) Clarify whether the ceiling on quantum of electricity permitted to be traded under Clause 8(3) is on overall basis or on generator/buyer basis.
  - (5) In case quantum on any given day/time the quantum of bids in Power Exchange is higher than the ceiling prescribed by Designated Authority, the process of distribution of power among the participants should be defined in advance.

## Analysis and Decision:

6.14. The MoP Guidelines issued on 18th December, 2018 have brought a change in the way trading through India power exchanges was provided under the earlier MoP Guidelines. The earlier MoP Guidelines allowed the Participating Entities from the neighbouring countries to trade in Indian Power Exchanges under the categories of Term Ahead Contracts, Intra Day Contracts or Contingency Contracts. However, as per the new MoP Guidelines the Participating Entities from the neighbouring countries can participate across different contracts/market segments in the Indian Power Exchanges including the collective transactions in Day Ahead Market. Further, it is specified that the Participating Entities can trade in the Indian Power Exchanges through a Indian trading licensee and with the approval of Designated Authority with the quantum being specified by the Designated Authority in the approval. The relevant clause of MoP Guidelines regarding cross border trade in Indian Power Exchanges is abstracted below:

'5.3 Any Indian power trader may, after obtaining approval from the Designated Authority, trade in Indian Power Exchanges on behalf of any Entity of neighbouring country, for specified quantum as provided in the Approval and complying with CERC Regulations.'

The above changes brought in through new MoP Guidelines have been incorporated in the CBTE Regulations. This has addressed the concerns raised by different stakeholders' viz. Tata Power, APP, representatives from Bhutan, Nepal and Bangladesh etc. regarding the participation of the entities from the neighbouring countries in contracts other than TAM as provided under the earlier MoP Guidelines.

- 6.15. As regards the queries/suggestions raised by the stakeholders regarding the ceiling on the quantum of electricity to be traded in the Indian Power exchange, the MoP Guidelines has mandated the Designated Authority to specify the quantum of electricity to be traded by the Participating Entities from the neighbouring countries in the Indian Power Exchanges. Accordingly, the modalities for the same shall be as decided by the Designated Authority.
- 6.16. After the notification of these Regulations, the Commission shall consider the necessary amendments required in other related Regulations viz. Power Market Regulations, STOA Regulations etc. to create an enabling regulatory framework for cross border trade through the Indian Power Exchanges. While approving the Business Rules of the Power exchanges, the concerns raised by different stakeholders' regarding utilization of resources, price discovery mechanism, separate market segments for cross border trade of electricity etc. shall be examined in detail. Wherever required, the stakeholders shall also be involved in the process.
- 6.17. Based on the above discussion, the Regulation on 'Trade through Power Exchange' has been revised incorporating the changes brought by the MoP Guidelines as given below:

## 6. Trade Through Indian Power Exchanges:

Any electricity trading licensee of India may, after obtaining approval from the Designated Authority, trade in the Indian Power Exchanges on behalf of any Participating Entity of neighbouring country, for the specified quantum as provided in the Approval subject to compliance with the applicable Regulations of the Commission.

# 7. Eligibility criteria for participating Applicant

## Commission's Proposal:

7.1. Eligibility criteria for Participating Entity proposed under Regulation 7 of the Draft Regulations is provided below:

## 7. Eligibility criteria for participating Applicant

- (1) Considering that cross border trade of electricity shall involve issues of strategic, economic and national importance, only the participating entities of India and the neighbouring countries who comply with the following conditions shall be eligible to participate in cross border trade of electricity after obtaining one-time approval from the Designated Authority:
  - (a) Import of electricity by Indian entities from Generation projects located in a neighbouring country and owned or funded by Government of India or by Indian Public Sector Undertakings or by private companies with ownership of 51% or more by Indian entity (ies);
  - (b) Import of electricity by Indian entities from projects located in a neighbouring country having 100% equity participation by an Indian entity or the Government of a neighbouring country or companies owned and controlled by the Government of the neighbouring country or Joint Venture Company of Indian entity, Government of neighbouring country or company owned or controlled by the Govt. of neighbouring country.
  - (c) Import of electricity by Indian entities from approved licensed traders of neighbouring countries having ownership of more than 51% by Indian entity (ies), from the sources as indicated in Para (a) and (b) above.
  - (d) Export of electricity by the distribution licensees / Public Sector Undertakings (PSUs) in India, if surplus capacity is available and certified by the concerned distribution licensee or the PSU, as the case may be.
- (2) Any other participating entity shall be eligible to participate in cross border trade of electricity after obtaining approval of the Designated Authority on case to case basis.
- (3) Any change in the equity pattern of the participating entities after the date of approval shall be duly intimated to the Designated Authority and fresh approval shall be obtained by the participating entities under Clauses (1) and (2) above.
- (4) Any coal based thermal power projects in India other than those owned and operated by Public Sector Undertakings shall be eligible for export of electricity to any of the neighbouring countries only if surplus capacity is certified by the Designated Authority.

(5) Ministry of Power, Govt. of India may also identify the sources from which power can be exported to any of the neighbouring countries of India.

## **Comments Received:**

7.2. Adani Power and OAUA suggested revising Clause 7(2) of the Draft Regulations as under:

**Except as provided in sub-regulation (4) any other Participating Entity** shall be eligible to participate in cross border trade of electricity after obtaining approval of the Designated Authority on case to case basis.'

7.3. Adani Power and APP suggested revising the Clause 7(4) of the Draft Regulations as under:

'Any Indian power projects (whether conventional or non-conventional) other than those owned and operated by Public Sector Undertakings shall be eligible for export of electricity to any of the neighbouring countries only if surplus capacity is certified by the Designated Authority.

Provided that an Indian generating station established for supply of electricity exclusively to a neighbouring country shall not require such certificate of surplus capacity by the Designated Authority.'

7.4. **CEA** submitted that as until the entity is recognized as a participating entity it cannot transact power with neighbouring country, the Regulation 7 may be replaced with the following:

**Regulation 7** 'Eligibility criteria for Applicant" The Indian Entity recognized as Participating Entity is eligible under these regulations.

- 7.5. **GMR and OAUA** submitted that change in equity pattern vis-à-vis more than 51 % should not require fresh approvals rather intimation should suffice as this would enable the ease of doing business.
- 7.6. **IEX** submitted that the Clause on 'Eligibility criteria for participating Applicant' should include the conditions for participation in cross border trade through Exchange TAM Market. IEX submitted that separate provisions will be required to be incorporated since anonymous bidding and matching of bids cannot be controlled in the TAM segment.
- 7.7. **IEX** further submitted that Regulation 7 (2) of the Draft Regulations provides for any other entity to participate in cross border trade of electricity after obtaining approval of Designated Authority on a case to case basis however, there is no mention of frequency of such approval as mentioned in Regulation 7 (1) as 'one-time'. IEX suggested that in

case of Regulation 7 (2) there should be 'one time approval' of Designated Authority for participation of any other entity in cross border transactions.

- 7.8. **IPPAI** submitted that Regulation 7 (1) (c) of the Draft Regulations approves the import of Electricity by an Indian Entity from licensed traders of neighbouring countries whereas licensed Indian power traders are not explicitly mentioned.
- 7.9. **IPPAN** submitted that based on Power Trading Agreement between Nepal and India and SAARC Framework for Energy Cooperation non-discriminatory access should be provided to the generation projects/traders for carrying out electricity trading with India with no differential treatment between Government owned and non-government owned entities.
- 7.10. **IPPAN** in reference to Clause 7(2) of the Draft Regulations has sought clarification on what 'case to case' approval means and how that will be implemented so as to avoid perceived regulatory risk by power sector investors in Nepal
- 7.11. **IRADe** submitted that the Indian participants whose trade is not cleared in the Domestic Day Ahead Market be allowed to trade cross border in the Term Ahead .Market automatically without any separate approval. IRADe has reasoned that the domestic DAM is practically the last opportunity for an Indian entity to trade in the domestic market. If the trades do not get cleared then it can be offered to the neighbouring countries. The criterion for surplus and approval of participants can be fulfilled in line with the spirit of the Guidelines.
- 7.12. **IRADe** further submitted that in case of export to neighbouring countries, a situation may arise while in certain dispatch periods, there may not be any power availability in the domestic market. This may be a cause of concern for the balancing and domestic intraday markets. The volumes in these markets are significantly lower but these trades play an important role in ensuring grid stability and also to cater to any eventuality in the domestic power market. Accordingly, a suitable quantum of power from the Indian sellers may be reserved for the balancing and the Term Ahead Market within India. How this quantum may be fixed needs more analysis but will depend upon the quantum of power traded in the domestic Term Ahead Market during the last few days.
- 7.13. **NTPC** submitted that 'Surplus Power' needs to be defined clearly. It may include the following power available to be sold to any entity of the neighbouring country.
  - a) The Un-Requisitioned Surplus power available with the generating companies on real-time basis
  - b) The surrendered capacity by beneficiary/beneficiaries from a plant which has been tied up on a long term basis.
  - c) Any merchant capacity for which no long term PPAs has been signed.

- 7.14. **NVVN** submitted that to make the Regulations more transparent surplus capacity of electricity may be defined/elaborated. Further, it has sought clarification on whether merchant plant can have surplus capacity without having coal linkage/coal allocation.
- 7.15. **Powergrid** suggested for deletion of Clause 7 of the Draft Regulations.
- 7.16. PTC and APP suggested for revision of Clause 7 (1) (d) of the Draft Regulations as under:

'Export of electricity by the distribution licensees / Public Sector Undertakings (PSUs) / **CPSUs'** promoted Company in India, if surplus capacity is available and certified by the concerned distribution licensee or the PSU or **CPSU's promoted Company**, as the case may be.'

7.17. **PTC, OAUA and Adani Power** suggested for revision of Clause 7 (4) of the Draft Regulations as under:

'Any coal based thermal power projects/ **Hydro Electric Project** in India other than those owned and operated by Public Sector Undertakings shall be eligible for export of electricity to any of the neighbouring countries only if surplus capacity is certified by the Designated Authority.'

- 7.18. **Representatives from Bangladesh, Bhutan and Nepal** have raised concerns over the requirement of 51% Indian ownership in the projects to be eligible for participating in the cross border trade of electricity.
- 7.19. **Statkraft** submitted that Trading Licensees operating in India in accordance with the CERC Power Market Regulations, 2010 with ownership of less than 51% by Indian entities should be treated at par with Indian entities and allowed to participate in cross border trade of electricity after obtaining one-time approval from DA/CEA. Statkraft has further requested to at least allow Category-I trading licensees to be considered as eligible participating applicant for one time approval.
- 7.20. **Tata Power and APP** suggested that the approval should be granted for a longer period instead of approval on a case to case basis for each transaction. Tata Power reasoned that in case of sale through short term tenders/power exchange, the process will become cumbersome if approval is required for each transaction.

#### Analysis and Decision:

7.21. The MoP Guidelines issued on 18th December, 2018 has done away with the eligibility conditions specified for entities to participate in cross border trade of electricity provided under Clauses 5.2.1 and 5.2.2 of the earlier MoP Guidelines. The new MoP Guidelines under Clauses 4.4 and 4.5 have now specified that any entity proposing to import or export electricity may do so only after taking approval of the Designated Authority. Further, it has been provided that the approval of the Designated Authority

is not necessary where the import or export of electricity is taking place under the Inter Government Agreement signed by India and neighbouring country(ies).

7.22. In the above backdrop, it is not required to specify the eligibility criteria for participating entities under CBTE Regulations. As the new MoP Guidelines has mandated the Designated Authority or Government of India in case of Inter Government Agreement to grant approval to the entities for participating in cross border trade of electricity, anyone who is accorded approval by the Designated Authority or Government of India in case of Inter Government of India in case of Inter Government Agreement, as the case may be, shall be considered as eligible to participate in the cross border trade of electricity. Accordingly, the section on 'Eligibility Criteria for Participating Entities' has been deleted and the definition of 'Applicant' and Participating Entity' revised. The changes made are in line with the suggestions given by Powergrid and CEA.

## 8. Compliance of Laws and Regulations

#### Commission's Proposal:

- 8.1. 'Compliance of Laws and Regulations' proposed under Regulation 5 of the Draft Regulations is provided below:
  - 5. Compliance of Laws and Regulations
    - (1) Unless repugnant to the context specified herein, the participants of cross border trade of electricity shall adhere to and comply with all applicable regulations.
    - (2) All entities of the neighbouring countries participating in the cross-border electricity trade with the entities in India shall abide by the Policies, Laws, Rules and Regulations prevailing in their respective countries which shall be clearly enumerated in the Agreements.

Provided that in case of any ambiguity or conflict between the laws, rules and regulations of the neighbouring countries and that of India, the Indian laws, rules and regulations will take precedence for the purpose of cross border trade of electricity with India.

#### **Comments Received:**

8.2. Adani Power suggested for revision of the above Regulation as under:

Provided that in case of any ambiguity or conflict between the laws, rules and regulations of the neighbouring countries and that of India, the Indian laws, rules and regulations will take precedence for the purpose of cross border trade of electricity **through Cross Border Transmission Link** with India.

8.3. CEA suggested for revision of Clause 5(1) of the Draft Regulations as under:

Unless repugnant to the context specified herein, the participants of cross border trade of electricity shall adhere to and comply with all applicable laws, and ,Rules and regulations made there under.

CEA submitted that the Clause 5(1) of the Draft Regulations should cover the applicable laws, the Indian laws or rules in addition to the Regulations.

- 8.4. **GMR** submitted that Para 5 of Draft Regulations as such is not required alternatively, mutual agreements and understandings shall also have to be compiled with having force of law. GMR has reasoned that the compliance of law is, in any case, required to be adhered to by all the parties. Even otherwise such situation is standard clause for all the PPAs
- 8.5. **IPPAI** in reference to Clause 5(1) of the Draft Regulations, submitted that it shall be impossible for any participant to comply with all applicable Regulations since the participants shall be governed by the laws and regulations of their respective countries and there cannot be a sweeping clause to apply and embed a regulations that shall fall outside the territory of India
- 8.6. **IPPAI** in reference to Clause 5(2) of the Draft Regulations, submitted that this is an apparent flaw in the Regulation as Indian Laws, Rules and Regulations have been given precedence in case of conflict or ambiguity this cannot be imposed on a participant that is situated outside India
- 8.7. **Tata Power, APP and OAUA** in reference to Clause 5(2) of the Draft Regulations have sought clarification on how would this enumeration be done and whether a reference to relevant regulations/acts would suffice?
- 8.8. **Tata Power** further submitted that it may not be possible that Indian laws take precedence in neighbouring countries; therefore suggested revision of the above Regulation as under:

Provided that in case of any ambiguity or conflict between the laws, rules and regulations of the neighbouring countries and that of India, the Indian laws, rules and regulations will take precedence, <u>within the territory of India</u>, for the purpose of cross border trade of electricity with India.'

#### Analysis and Decision:

8.9. The Commission is of the view that Clause 5(1) of the Draft Regulations is redundant as the compliance of law is, in any case, required to be adhered to by all the parties. It is also not required to specify that the entities from neighbouring countries should abide by the Policies, Laws, Rules and Regulations prevailing in their respective countries. As suggested by different stakeholders, the Commission concurs that it is also not possible to enumerate all the applicable Rules and Regulations in the Agreement.

8.10. In view of the above, it has been decided to delete the 'Regulation on Compliance of Laws and Regulations' proposed in the Draft Regulations.

# 9. Planning and Implementation of Cross Border Transmission Link (Regulation 7)

#### Commission's Proposal:

9.1. Transmission Planning and Implementation of Cross Border Transmission Link for cross border trade of electricity proposed under Regulation 9 & 15 of Draft Regulations are provided below:

# 9. Transmission Planning

- (1) The transmission interconnection between India and a neighbouring country shall be planned jointly by transmission planning agencies of the two countries with the approval of their respective Governments.
- (2) The cross border transmission lines may be constructed between the pooling station(s) of India and the pooling station(s) of any of the neighbouring countries for secure, safe and controlled operation of the grid.
- (3) The mode of interconnection between a neighbouring country and India will preferably be through DC links.
- (4) Generating Stations located in India and supplying electricity exclusively to neighbouring countries may be allowed to build independent transmission systems for connecting to the neighbouring country's transmission systems keeping the technical and strategic considerations in view and with the approval of the Government of India at the cost inbuilt in the agreement signed between Indian entity and the entity of the neighbouring country. Such approval will be under applicable section(s) of the Electricity Act, 2003, subject to complying with the technical and safety standards notified under various section of the Electricity Act, 2003.

#### 15. Implementation of Cross Border Transmission Link

- (1) The cross border transmission link shall consist of transmission line and associated system from the pooling station within India till the Indian border and transmission line from Indian border till the pooling station of the neighbouring country.
- (2) The CTU shall be responsible for the implementation of cross border transmission link between the pooling stations within India till the Indian border. Beyond the Indian border the responsibility of the implementation shall be that of the Applicant(s) or the TPA of the neighbouring country.

- (3) The tariff for the cross border transmission link from the pooling station within India to the Indian border shall be payable by the Applicant(s). The tariff shall be charged even in case of non availability of the matching transmission line from the Indian border till the pooling station of neighbouring country or non availability of generating station(s). The detailed modalities for the same shall be specified by the DA in the separate procedure to be notified by DA.
- (4) The TPAs of India and neighbouring country shall regularly monitor the progress of implementation of cross border transmission link and shall endeavour that the line from the pooling station within India till the Indian border and line from Indian border till the pooling station of the neighbouring country are constructed in matching time frame.
- (5) Construction and maintenance of the transmission line shall be in accordance with the Indian technical standards specified by CEA from time to time.

### **Comments Received:**

9.2. Adani Power and APP suggested for revision of Clause 9(4) of Draft Regulations as under:

Generating Stations located in India and supplying electricity exclusively to neighbouring countries may be allowed to build independent transmission systems for connecting to the neighbouring country's transmission systems keeping the technical and strategic considerations in view and with the approval of the Government of India at the cost inbuilt in the agreement signed between Indian entity and the entity of the neighbouring country. Such approval will be under applicable section(s) of the Electricity Act, 2003, subject to complying with the technical and safety standards notified under various section of the Electricity Act, 2003. Other than the aforesaid approvals for building the independent transmission system, an Indian generating station may freely export electricity to a neighbouring country through such independent transmission system notwithstanding anything to the contrary contained in these regulations.

9.3. CBPTCL suggested for revision of Clause 15 (2) of Draft Regulations as under:

The **CTU/Government of India nominated company shall be** responsible for the implementation of cross border transmission link between the pooling stations within India till the Indian border. Beyond the Indian border the responsibility of the implementation shall be that of the Applicant(s) or the TPA of the neighbouring country.

- 9.4. **CEA** suggested for deletion of the Clause 9(3 of the Draft Regulations). CEA submitted that the transmission system required for cross border of electricity shall be planned as part of integrated planning in consultation with neighbouring countries.
- 9.5. **CEA** further submitted that Clause 15(2) needs to be modified as per Tariff Policy of Government of India which has specified that all the transmission schemes are to be implemented through competitive bidding. In the Guidelines for Cross Border Trade of Electricity neither it is mentioned that only CTU can make these lines nor it is

mentioned that these lines will be through cost plus system only. The role of CTU in cross border transmission is for planning and providing access to eligible entity.

9.6. FICCI suggested for the revision of Clause 15(2) of the Draft Regulations as under:

'The CTU shall be responsible for the implementation through **Tariff based Competitive Bidding** process of cross border transmission link between the pooling station within India till the Indian border.'

- 9.7. **GMR, OAUA and FICCI** submitted that the mode of interconnection between a neighbouring country and India shall be such that it is technically feasible. The link shall be as per system of the neighbouring country and could vary depending upon the system requirement.
- 9.8. GMR suggested for the revision of Clause 9(4) of Draft Regulations as under:

Generating stations located in India or outside India and supplying or importing electricity exclusively to/ from neighbouring countries may be allowed to build independent transmission systems for connecting to the neighbouring country's transmission systems keeping the technical and strategic considerations in view and with the approval of the Government of India at the cost inbuilt in the agreement signed between Indian entity and the entity of the neighbouring country. Such approval will be under applicable section(s) of the Electricity Act, 2003 subject to complying with the technical and safety standards notified under various section of the Electricity Act, 2003

- 9.9. **GMR** submitted that as per Clause 15(2), the CTU has been stated to be responsible for the implementation of Cross Border Transmission Link, however, it would be appropriate if the CTU is replaced by 'nominated/notified by the Central Govt.', which seems to be legally correct. Further, the responsibility of the implementation has been stated to be that of the Applicant or the TPA of the neighbouring country, however, it is better left to the neighbouring country to designate the authority in its own wisdom.
- 9.10. IL&FS suggested for the revision of Clause 15 (2) of the Draft Regulations as under:

The responsibility for the implementation of the Cross Border Transmission link between the pooling stations within India till the Indian border **shall vest with Govt of India nominated company**. Beyond the Indian border the responsibility of the implementation shall be that of the Applicant(s) or the TPA of the neighbouring country.

IL&FS cited the example of Indo-Nepal Cross Border 400 kV D/C Muzzafarpur-Dhalkebar transmission line which has been successfully implemented by a joint venture company namely Cross Border Transmission Company Ltd identified as the developer of the line by the Govt. of India.

- 9.11. **NVVN** submitted that the testing/commissioning of cross border transmission link requires power flow (import/export) for commissioning of transmission link, accordingly, the procurement of power for commissioning, grant of open access and settlement procedure may be incorporated in the Regulation.
- 9.12. Powergrid suggested for deletion of the clause 9(3) & 9(4) of the Draft Regulations.
- 9.13. Powergrid suggested for revision of the above Regulations as under:
  - (1) The CTU shall be responsible for the implementation of cross border transmission link between the pooling stations within India till the Indian border. Beyond the Indian border the responsibility of the implementation shall be that of the TPA of the neighbouring country who in turn may entrust this task to the Applicants on mutually agreed terms and conditions.
  - (2) The Cross Border Transmission Link shall consist of transmission lines and associated system from the pooling station within India till the Indian border and transmission line from Indian border till the pooling station of the neighbouring country.
  - (3) The implementation of Cross Border Transmission link within India shall be undertaken by CTU after fulfilment of all the following conditions.
    - (a) Execution of the Cross Border Transmission Access Agreement;
    - (b) Furnishing of additional Access Bank Guarantee (if Applicable)in terms of Regulation 14(1);
    - (c) Signing of the Long Term PPA for at least fifty (50) percent of the installed capacity of the generating station (minus auxiliary consumption) by the Applicant for the sale of electricity; and (50% of installed capacity or 50% of the intended PPA)
    - (d) The generating company has already made the advance payment for the main plant packages i.e. Turbine island and steam generator island or the EPC contract in case of thermal generating station and major civil work packages or the EPC contract in case of hydro generating stations, subject to a minimum of 10% of the sum of such contract values.

Provided that the Cross Border Transmission Links to be implemented for trade of electricity under Para 6.1 of the Guidelines on Cross Border Trade of Electricity issued by the Ministry of Power, shall be undertaken by CTU on the formal recommendation of Designated Authority.

# Analysis and Decision:

9.14. The MoP Guidelines have specified that transmission interconnection between India and neighbouring countries shall be jointly planned by the Designated Authority of India and Transmission Planning Agencies of neighbouring countries. It is further specified that the cross border transmission lines may be constructed between the pooling stations of India to the pooling stations of other country for secure, safe and controlled operation of the grid. The 'transmission interconnection' envisaged under MoP Guidelines has been referred to as 'Cross Border Transmission Link' between India and the neighbouring country and accordingly provided for it under CBTE Regulations.

- 9.15. It is envisaged that the Cross Border Transmission Link shall be strategically planned by the Designated Authority of India and Transmission Planning Agencies of neighbouring keeping in view the future need for electricity trade between India and neighbouring countries.
- 9.16. It was proposed in the Draft Regulations that the mode of interconnection between India and neighbouring country would preferably be DC Links; however, stakeholders viz. CEA, Powergrid, and GMR etc. have suggested that the mode of interconnection would depend on the system of the neighbouring country and could vary from case to case. Accordingly, the Clause 9(3) of the Draft Regulations has been deleted.
- 9.17. As discussed in Para 2.4.6, the generating stations located in India and supplying power exclusively to the neighbouring country through independent transmission system are not required to be covered under the scope of these Regulations. Such generating stations shall not require Connectivity and or Access to the Indian grid and can develop their independent transmission lines after obtaining the necessary approvals from Designated Authority as provided under the MoP Guidelines (Clause 8.9 of MoP Guidelines). Accordingly, the Clause 9(4) of the Draft Regulations has been deleted.
- 9.18. Stakeholders viz. Cross Border Transmission Company and IL&FS etc. have submitted that instead of CTU, provision should be there for the Government to nominate the agency for implementing the Cross Border Transmission Link. In this regard, IL&FS has highlighted the successful implementation of the Indian portion of Muzaffarpur-Dhalkebar Cross Border Transmission Lines between India and Nepal by a Joint Venture company identified as the developer of the line by the Government of India. While some other stakeholders viz. CEA, FICCI, and GMR etc. have suggested that Cross Border Transmission Link should be developed based on competitive bidding process in accordance with the Tariff Policy. Based on the suggestions received from the stakeholders and considering the strategic nature of Cross Border Transmission Link, the Commission is of the view that it is appropriate that the manner of implementation of Cross Border Transmission Link from the pooling station within India to the Indian border along with the implementing agency shall be decided by the Government of India.
- 9.19. As discussed in Para 2.5.5, it is envisaged that a generating station located in neighbouring country eligible to participate in cross border trade of electricity can supply power to a pooling station within India through implementation of dedicated transmission system at its own cost with the necessary approvals from respective countries and grant of Connectivity from the CTU of India. The same is illustrated in the diagram below:

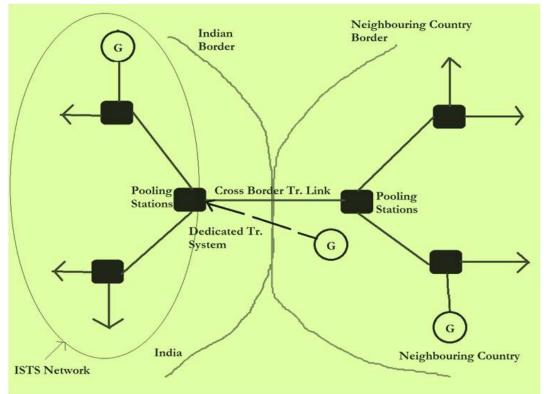


Figure 2: Illustration of Cross Border Transmission Link

- 9.20. It is envisaged that the Designated Authority of India and Transmission Planning Agencies of the neighbouring countries shall also plan for the utilization of Cross Border Transmission Link by the Applicants. Accordingly, the Designated Authority of India in consultation with the Competent Authority of neighbouring country shall give approval to the Participating Entities for using the Cross Border Transmission Link for cross border trade of electricity.
- 9.21. The Commission is of the view that the cost associated with implementation of CBTL should not be loaded onto the users of Indian ISTS network. Accordingly, the Commission has decided not to consider Cross Border Transmission Link as the part of basic ISTS network on the basis of which the PoC charges are computed in India. It is envisaged that the tariff determined for Cross Border Transmission Link through either competitive bidding process or through Government to Government negotiations or by the Commission shall be payable by the applicant(s) of the Cross Border Transmission Links.
- 9.22. Based on the above discussion, the Regulation 9 & Regulation 15 have been revised (combined) as given below:

#### 7. Planning and Implementation of Cross Border Transmission Link

(1) The Cross Border Transmission Link between India and any neighbouring country shall be planned jointly by Transmission Planning Agencies of the two countries with the approval of the

respective Governments keeping in view the future need for electricity trade between India and the neighbouring country.

(2) The manner of implementation of Cross Border Transmission Link between the pooling station within India till the Indian border and the implementing agency shall be decided by Government of India.

Provided that a participating entity having a generating station located in a neighbouring country may develop, operate and maintain the dedicated transmission system from the generating station to the pooling station within India at its own cost after obtaining all the necessary approvals from respective countries.

- (3) The Transmission Planning Agency of India in consultation with the Transmission Planning Agency of neighbouring country shall grant access to the Participating Entities to use Cross Border Transmission Link for cross border trade of electricity.
- (4) The Cross Border Transmission Link shall not form part of the basic ISTS network for the determination of PoC charges under the Sharing Regulations.
- (5) The tariff for the Cross Border Transmission Link(s) from the pooling station within India to the Indian border as determined in terms of Clause (4) of Regulation 5 shall be payable by the Applicant(s).

# 10. General provisions for Connectivity, Long Term Access, Medium-Term Open Access and Short-Term Open Access (Regulation 8)

#### Commission's Proposal:

- 10.1. General provisions for Connectivity, Long Term Access, Medium-Term Open Access and Short-Term Open Access to the India grid proposed under Regulation 10 of the Draft Regulations are provided below.
  - 10. General provisions for Connectivity, Long term Access, medium term open access and short term open access
    - (1) Any entity eligible to participate in cross border trade of electricity shall be required to seek connectivity and/or long term access or medium term open access or short term open access, as the case may be.
    - (2) Applications for grant of connectivity and/or long-term access or medium-term open access shall be made to CTU as per CERC (Grant of Connectivity, Long Term & Medium Term Access) Regulations, 2009 as amended from time to time.
    - (3) Applications for grant of short term open access shall be made to NLDC as per CERC (Open Access in inter-state Transmission) Regulations, 2008 as amended from time to time.

(4) Except where specifically provided in these Regulations, the provisions contained in the Central Electricity Regulatory Commission (Open Access in inter-state Transmission) Regulations, 2008, Central Electricity Regulatory Commission (Grant of Connectivity, Long Term & Medium Term Access)Regulations, 2009 shall apply mutatis mutandis to the entities eligible to participate in cross border trade of electricity.

#### **Comments Received:**

10.2. Adani Power and APP suggested for adding the following proviso:

Provided that an application for connectivity is not required to be made by any Indian generating station supplying electricity exclusively to a neighbouring country through an independent transmission system.

- 10.3. CEA suggested for deletion of the provision related to Connectivity
- 10.4. **Powergrid** suggested for changing the title of the section as *Cross Border Transmission* Access for Long Term, Medium Term or Short Term and through Indian Grid. Powergrid also submitted enabling provisions for seeking Cross Border Transmission Access in the Cross Border Transmission Link.

### Analysis and Decision:

- 10.5. Participating Entities located in neighbouring countries shall have to seek connectivity or long-term access or medium-term-open access or short-term open access depending upon their requirements before being able to undertake cross border transactions with India. Applications for grant of Connectivity or long-term access or medium-term access shall be made to CTU whereas for grant of short-term open access applications shall be made to NLDC as per the provisions of CBTE Regulations.
- 10.6. CBTE Regulations have specified few additional provisions viz. approval from Designated Authority, Authorization to use Cross Border Transmission Link, Access Bank Guarantee etc. keeping in view the specific requirements associated with cross border trade of electricity. These conditions are specified over and above the provisions existing under Connectivity and STOA Regulations. The Commission reiterates that unless it is specifically provided for under CBTE Regulations, the provisions contained in Connectivity Regulations and STOA Regulations shall apply mutatis mutandis to the Participating Entities for cross border trade of electricity.
- 10.7. Powergrid has suggested for including provisions related to Cross Border Transmission Access, however as discussed earlier, in order to avoid inconsistencies across different Regulations the Commission has decided to do away with Cross Border Transmission Access. Further, the Commission is of the view that as the Cross Border Transmission Link shall be jointly planned between Designated Authority and Transmission Planning

Agencies of the neighbouring countries and given the strategic nature of Cross Border Transmission Link; the manner in which the Cross Border Transmission Link shall be used by the Applicants may also be determined by Designated Authority. Accordingly, the approval to use or access the Cross Border Transmission Link shall be provided by Designated Authority in consultation with Transmission Planning Agencies or any other Competent Authority of the neighbouring countries. In this backdrop, the suggestions given by Powergrid regarding provisioning for Cross Border Transmission Access to Cross Border Transmission Link may not be considered.

10.8. Based on the above discussion, the Regulation for General Provision for Connectivity, Long term Access, medium term open access and short term open access apart from has been revised as given below:

# 8. General provisions for Connectivity, Long term Access, medium term open access and short term open access

- (1) A Participating entity located in neighbouring country shall be required to seek connectivity or long-term access or medium-term open access or short-term open access, as the case may be through separate applications.
- (2) Applications for grant of connectivity or long-term access or medium-term open access shall be made to CTU and Applications for grant of short-term open access shall be made to NLDC under these Regulations.
- (3) Except where specifically provided in these Regulations, the provisions contained in the STOA Regulations and Connectivity Regulations shall apply mutatis mutandis to the participating entities for cross border trade of electricity.

# 11. Application Fees (Regulation 9)

# Commission's Proposal:

11.1. Application fees proposed for Connectivity, Long-Term Access and Medium-Term Open Access under Regulation 11 of the Draft Regulations are provided below:

	Quantum of Power to be	Application fee(Rs. in Lakh)		
S.NO.	injected/off taken into/from	For Connectivity	Medium-term	
	ISTS	/Long term Access	open access	
1.	Up to 100MW	4	1	
2.	More than 100 MW and up to	6	2	
	500 MW	6		
3.	More than 500 MW and up to	12	3	
	1000 MW	12	5	
4.	More than 1000 MW	18	4	

11.2. It was also proposed that no application bank guarantee shall be required to be submitted along with the application for Connectivity or medium term open access. Only one bank guarantee, i.e. Access Bank Guarantee shall be deposited along with the application for long term access.

# **Comments Received:**

- 11.3. **GMR and OAUA** submitted that application fee and other charges stipulated in the Regulations are on higher side as compared to those payable by domestic entities and should be reduced for the benefit of international trade of electricity.
- 11.4. Powergrid suggested for revising the application fees as given below

The applications fee for Cross Border Transmission Access shall be accompanied by a non-refundable application fee in Indian Rupees as provided below, payable in the name and in the manner prescribed in the CBTA Application Procedure:

Sr.	Quantum of Power	Application fee (Indian Rupees in Lakhs)		
No		CBTA -	CBTA -	CBTA -
		Long Term	Medium	Short
			Term	Term
1	Up to 100 MW	8	4	0.10
2	More than 100 MW and	16	8	
	up to 500 MW			
3	More than 500 MW and	24	12	
	up to 1000 MW			
4	More than 1000 MW	36	16	

# Analysis and Decision:

- 11.5. The application fees for Connectivity, Long Term Access and Medium Term Open Access were fixed during the year 2009. It is observed that the application fees have remained constant although the operating expenses have gone up over the years. The Commission has accordingly proposed an increase in the application fees in the Draft GNA Regulations published on 14<sup>th</sup> November, 2017.
- 11.6. Further, the Commission observes that apart from the increased expenses, CTU may also have to consult and coordinate with Designated Authority of India and Transmission Planning Agencies of neighbouring countries to process the application and carry out the necessary inter-connection study required for granting Connectivity/Long term access to the applicants. Besides the application bank guarantee provided under Connectivity Regulations for domestic entities has also been dispensed with. In this backdrop, the Commission is of the view that the application

fees proposed in Draft Regulations are appropriate and should be retained as proposed.

### 12. Application for Grant of Connectivity (Regulation 10)

#### Commission's Proposal:

12.1. 'Application for Grant of Connectivity' proposed in Regulation 13 of the Draft Regulations is provided below:

#### 13. Application for Grant of Connectivity

- (1) On receipt of the application, the CTU shall, in consultation and coordination with other Transmission Planning Agencies process the application and carry out the necessary interconnection study as specified in the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007.
- (2) The Generator or a bulk consumer already connected to inter-state transmission network of India or transmission network of the neighbouring country or for which Connectivity is already granted or planned, shall not be allowed to apply for additional connectivity for the same capacity. However, in case of expansion of capacity of generator or load of the bulk consumer, it shall be required to make application for Connectivity as per the provisions of the Regulations.
- (3) The grant of Connectivity alone shall not entitle an applicant to interchange any power with the grid unless it obtains long-term access, medium-term open access or short-term open access.

The grant of connectivity shall be considered as provisional till the cross border long term access application for a minimum of 50% of Installed capacity (minus auxiliary consumption) is filed by the Applicant. Under no circumstances, applicant shall be allowed physical connection with the grid before filing the application for cross border long term access and furnishing Access Bank Guarantee thereof.

(4) Such application seeking long term access has to be filed within 2 years of date of grant of Connectivity failing which Connectivity granted shall be withdrawn and application fees shall be forfeited.

# **Comments Received:**

12.2. **APP** submitted that most of the cross border generators are connected to their country's network and the country's network is in turn connected to Indian grid. Such generators should not be required to apply for Connectivity. APP further submitted that it may be expressly clarified whether connectivity by a generator of neighbouring country will be required only if it is directly connected to the Point of Interconnection in Indian Territory.

- 12.3. **GMR** submitted that Para 13 (5) which stipulates a period of 2 years from the date of grant of connectivity, for filing of application seeking long term access may be considered for removal from the Regulations as such stipulation is not there for domestic entities and may be termed as discriminatory.
- 12.4. Powergrid suggested for deleting the Clause on Connectivity.
- 12.5. **PTC** submitted that since all new generators may not export 50% of their installed capacity to a neighbouring country, the provision of clause 13 (4) & (14) may be therefore re-examined. PTC further submitted that at the time of conceptualization of the project it is difficult to confirm the power sale avenues. PTC highlighted that Clause 13 (4) is a prohibitive clause and hence may not be required.
- 12.6. **Tata Power** submitted that Connectivity by a generator of a neighbouring country will be required only if it is directly connected to the Point of Interconnection in Indian Territory. Further, a generator of neighbouring country which is only connected to the transmission system of that country need not take Connectivity from CTU of India even in case of expansion of capacity.
- 12.7. **Tata Power and APP** submitted that the condition related to tying up 50% of power on long term basis may be considered for relaxation

Tata Power and APP further submitted that this is contrary to the prevailing regulations for Connectivity, LTA and MTOA of CERC, the Guidelines and the Draft Regulations which allow for application only for MTOA and Cross Border trade in medium and short term also. Further, many cross border projects are being constructed for exporting only surplus power to India. In such cases, the surplus itself may be less than 50% of the installed capacity. Therefore, it is suggested that the condition related to tying up 50% of power on long term basis may be considered for relaxation.

# Analysis and Decision:

- 12.8. As discussed in Para 2.1.7, the Participating Entities located in neighbouring countries can access the Indian grid either through Cross Border Transmission Link or through a Dedicated Transmission System. Further, as per MoP Guidelines the Participating Entities can seek Connectivity to the Indian grid for cross border trade of electricity with India or across India under tripartite arrangement.
- 12.9. Participating entities getting connected to the Indian grid through Cross Border Transmission Link shall either be already connected or will get connected to the grid of a neighbouring country and through Cross Border Transmission Link to the Indian grid, hence shall not be required to again seek Connectivity to the Indian grid. However, generating stations supplying power to Indian grid through Dedicated

Transmission System shall be required to seek Connectivity to the Indian grid under the provisions of CBTE Regulations. This is line with the suggestions given by Tata Power and APP.

- 12.10. In the Draft Regulations the minimum quantum eligible for getting Connectivity to Indian grid were provided under the definition of Applicant. However, as discussed in the section related to the definition of 'Applicant', these conditions have been removed from these Regulations to keep the definition generic and simple. Notwithstanding the same it is clarified that minimum quantum eligible for getting Connectivity to Indian grid shall be as provided under the Connectivity Regulations.
- 12.11. It is envisaged that the Participating Entity shall be making an application to CTU for the grant of Connectivity to the Indian grid. In addition to the requirements specified under Connectivity Regulations for grant of Connectivity to the Indian grid, the Applicant shall be required to furnish approval from Designated Authority with regard to its eligibility to participate in cross border trade of electricity provided under Clause 4.4 of the MoP guidelines. In case the import or export of electricity is taking place under Inter Government Agreement, the approval of Designated Authority may not be necessary; instead a copy of the IGA may be submitted. Further, as the Participating Entity would be delivering power to pooling station within India through a Dedicated Transmission System it shall also be required to furnish the necessary approvals from Competent Authority from India and the concerned neighbouring country for implementing such Dedicated Transmission System.
- 12.12. Some of the stakeholders viz. Tata Power, PTC, and APP etc. have raised concerns regarding the requirement of tying up of power for 50% of the installed capacity on long term basis advocating that the generating stations may not have that much of surplus power left for cross border trading purpose. As regards the requirement of having long term access for getting Connectivity to the Indian grid, the Commission is of the view that this requirement may impede cross border trade of electricity. In order to promote cross border trade of electricity the condition of obtaining 'long term access for at least 50% of installed capacity for grant of connectivity' proposed under the Draft Regulations has been removed. Consequently, the Participating Entities from the neighbouring country will have the flexibility to trade on long term or medium term or short term basis depending on their requirement and accordingly seek the Access to the Indian grid.
- 12.13. Upon grant of Connectivity, the cross border customer shall sign a Connection Agreement with the CTU. In case the connectivity is with an inter-State Transmission licensee other than the CTU, then the applicant shall enter into an agreement with inter-State Transmission Licensee and CTU provided under CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007.
- 12.14. Based on the above discussion, the Regulation on 'Application for Grant of Connectivity' has been revised as given below:

#### 11. Application for Grant of Connectivity

- (1) A Participating Entity located in neighbouring country and getting connected to the Indian grid through dedicated transmission systems for cross border trade of electricity within or across India shall be required to apply for Connectivity to the Indian grid.
- (2) The Participating Entity as specified under Clause (1) above shall make an application to CTU for the grant of Connectivity to the Indian grid. In addition to the requirements specified under Connectivity Regulations, the Applicant shall furnish the following:
  - a) Approval from Designated Authority with regard to eligibility of the Participating Entity for cross border trade of electricity or copy of the Inter Government Agreement (IGA) wherever available; and
  - b) Necessary Approvals for implementing the dedicated transmission system.
- (3) On receipt of the application, the CTU shall process the application and grant Connectivity as per the Detailed Procedure made under Connectivity Regulations. CTU may consult and coordinate with Transmission Planning Agency(ies) of neighbouring countries while processing the application and carry out the necessary inter-connection study as specified in the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007.
- (4) Upon grant of Connectivity, the Applicant shall sign a Connection Agreement with the CTU.

Provided that in case Connectivity is granted to the inter-State transmission system of an inter-State transmission licensee other than the CTU, an agreement as provided in the Central Electricity Authority (Technical Standards for Connectivity to the Grid), Regulations, 2007 shall be signed between the Applicant, CTU and such inter-State transmission licensee.

- (5) Grant of Connectivity shall not entitle an applicant to interchange any power with the Indian grid unless it obtains long-term access or medium-term open access or short-term open access for cross border trade of electricity.
- (6) A Participating Entity located in the neighbouring country and getting connected to the Indian grid through Cross Border Transmission Link shall not be required to apply for Connectivity to the Indian grid.

# 13. Application for Short-Term Open Access (Regulation 11)

- 13.1. Provisions for Short Term Open Access not provided in the Draft Regulations have now been included in the CBTE Regulations. It is envisaged that the applicant seeking short term open access to Indian grid shall be applying to NLDC for grant of the same. NLDC shall process the application and grant short term open access as per the provisions of the Detailed Procedure made under STOA Regulations.
- 13.2. In addition to the requirements specified under STOA Regulations for grant short-term open access to the Indian grid, the applicant shall have to furnish approval from

Designated Authority with regard to its eligibility to participate in cross border trade of electricity provided under Clause 4.4 of the MoP guidelines. In case the import or export of electricity is taking place under Inter Government Agreement the approval of Designated Authority may not be necessary; instead a copy of the IGA may be submitted. Further, in case the applicant is getting connected to the Indian grid through Cross Border Transmission Link then it shall be required to produce the Approval letter from Designated Authority of India and the Competent Authority of the concerned neighbouring country to use the Cross Border Transmission Link. It is also clarified that an entity located in India and seeking access to a neighbouring country under Connectivity Regulations shall have to submit the approval from Designated Authority and Competent Authority of the concerned neighbouring country to use the Cross Border Transmission Link. Wherever cross border transactions is to take place across India involving two neighbouring countries with multiple Cross Border Transmission Links then the applicant shall be required to produce the Approval letters from the Designated Authority of India and the Competent Authority of the exporting and importing neighbouring countries to use their respective Cross Border Transmission Links. The cross border transactions across India is illustrated in the Figure 3

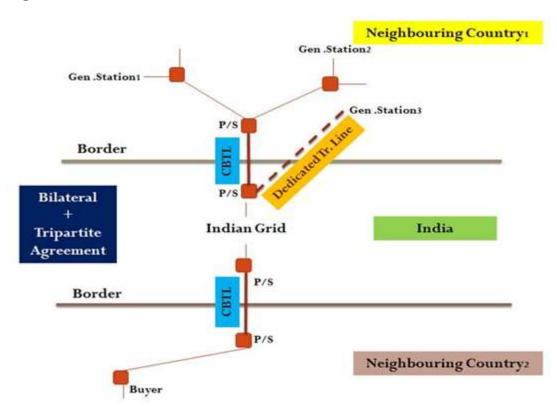


Figure 3: Illustration of Cross Border Transactions across India

It can be observed from the figure above that during the cross border transactions across India with seller and buyer in different neighbouring countries two CBTLs shall be used i.e. one from the exporting neighbouring country to India and another from India to the importing neighbouring country. In such a situation the applicant shall be required to submit the approvals for use of both the CBTLs while seeking access to the Indian grid. 13.3. Based on the above discussion, the Regulation on Short-Term Open Access has been incorporated as given below:

### 11. Application for Short-Term Open Access

- (1) The Application for short-term open access to the Indian grid and across the Indian grid for cross border trade of electricity shall be made to NLDC under these Regulations.
- (2) In addition to the requirements specified under STOA Regulations for grant short-term open access to the Indian grid, the Applicant shall furnish the following:
  - a) Approval from Designated Authority with regard to eligibility of the Participating Entity for cross border trade of electricity or copy of the Inter Government Agreement (IGA) wherever available; and
  - b) Approval from Designated Authority in India and Competent Authority in neighbouring country(ies) to use Cross Border Transmission Link(s) (excluding connectivity through dedicated transmission lines).
- (3) NLDC shall process the Application and grant short-term open access in accordance with the Procedure made under STOA Regulations.

# 14. Application for Long Term Access and Medium-Term Open Access (Regulation 12)

#### Commission's Proposal:

14.1. Application for Long Term Cross Border Transmission Access proposed under Regulation 14 of the Draft Regulations is provided below:

#### 14. Application for Long-Term Cross-border Transmission Access

(1) The application shall be made as per the provisions contained in CERC (Grant of Connectivity, Long Term & Medium Term Access) Regulations, 2009, as amended from time to time.

Provided that if the quantum of electricity has not been firmed up in respect of the person to whom electricity is to be supplied or the source from which electricity is to be procured, the applicant shall indicate the quantum of electricity along with name of the Target Region(s) in which this electricity is proposed to be interchanged using the inter-State transmission system.

Provided that in case such an application is made by an Indian entity, then the neighbouring country as a whole may be treated as a target region for the purposes of Cross Border Transmission Access.

Provided that the implementation of the transmission system augmentation, if any, for grant of Cross Border Transmission Access shall be undertaken only after the signing of the Long Term PPA for at least fifty(50) percent of the installed capacity of the generating station by the applicant for the sale of electricity.

# **Comments Received:**

14.2. WBSEDCL submitted that Para (2) may be clarified that in case of limited corridor space, person(s) with valid PPA with target region would get priority over the person(s) who has no valid PPA with target region if both are applied for LTOA or MTOA irrespective of the application submission time stamping. Otherwise the interest of domestic consumer will suffer.

# Analysis and Decision:

- 14.3. As discussed in Para 2.4.7, it has been decided to do away with Cross Border Transmission Access proposed in the Draft Regulations. It is envisaged that the Participating Entities located in neighbouring countries would access the Indian grid through the established approach of LTA, MTOA or STOA available under the existing regulatory framework. Accordingly, the nomenclature of the Regulation has been changed from 'Application for Long-Term Cross Border Transmission Access' to 'Application for Long Term Access and Medium-Term Open Access'. The discussion related to application for short-term open access has already been provided in Section 13 of this note.
- 14.4. It is envisaged that the Participating Entities shall be making the applications for longterm access and medium-term open access to the CTU as per the provisions specified under these Regulations. In addition to the requirements specified under Connectivity Regulations for grant of long-term access or medium-term open access to the Indian grid, the applicant has to furnish the approval from Designated Authority with regard to its eligibility to participate in cross border trade of electricity provided under Clause 4.4 of the MoP guidelines. In case the import or export of electricity is taking place under Inter Government Agreement, the approval of Designated Authority may not be necessary; instead, a copy of the IGA shall have to be submitted. Further, in case the applicant is getting connected to the Indian grid through Cross Border Transmission Link then it shall be required to produce the Approval letter from Designated Authority of India and the Competent Authority of the neighbouring country to use the Cross Border Transmission Link. Wherever cross border transactions is to take place across India involving two neighbouring countries with multiple Cross Border Transmission Links then the applicant shall be required to produce the Approval letters from the Designated Authority of India and the Competent Authority of the exporting and importing neighbouring countries to use their respective Cross Border Transmission Links. For long term access, the applicant shall also be required to furnish an Access Bank Guarantee in terms of Regulation 15 at the time of making application.

14.5. In the Draft Regulations it was proposed that in case the grant of long-term cross border transmission access requires transmission system augmentation then implementation of such augmentation shall be undertaken only after signing of the Long Term PPA for at least fifty (50) percent of the installed capacity of the generating station by the applicant for sale of electricity. Further, it was also proposed that an applicant seeking long term-access to the Indian grid shall be required to furnish an Access Bank Guarantee for an amount of Rs. 1 Crore/MW corresponding to the quantum of long-term access sought regardless of whether the augmentation of transmission system has to be taken up or not..

In the above regard, many of the stakeholders' viz. NVVN, PTC, GMR, APP etc. have stated that an Access Bank Guarantee of Rs. 1 Cr/MW is on the higher side and should be reduced to Rs. 5 lakh/MW in alignment with the provisions of Connectivity Regulations in order to promote cross border trade of electricity. Besides, it is observed that there are possibilities that some of these applications may be accommodated in the existing transmission facilities without requiring any such system augmentation or upfront investments. The Commission has reconsidered the above provisions in light of the suggestions given by the stakeholders and the prevailing technical circumstances. The Commission is of the view that while Access Bank Guarantee should not be prohibitive, it is also equally important that any transmission system augmentation carried out for the applicants for cross border transactions should be utilized and costs are recovered. Accordingly, it has been decided that at the time of submitting of the application, the applicant shall be required to furnish an Access Bank Guarantee for an amount of Rs. 5 lakh/MW instead of Rs. 1 Cr/MW proposed in the Draft Regulations. This will ensure that the applicants for whom transmission system augmentation is not required shall not be burdened with a higher Access Bank Guarantee. However, in case the grant of longterm access requires augmentation of transmission system, the applicant shall be required to furnish a revised Access Bank Guarantee for an amount covering the cost of such augmentation. With this risk mitigation measure in place, the Commission is of the view that there is no need for the applicants to provide long term PPA for the implementation of any transmission system augmentation as proposed in the Draft Regulations. Accordingly, the third proviso of above Regulation requiring the applicant to sign long term PPA for at least 50% of their installed capacity for implementation of the transmission system augmentation has been deleted.

14.6. The MoP Guidelines in Clause 8.6 has specified that where tripartite agreement is signed for transaction across India, the participating entities shall sign transmission agreement with CTU of India for obtaining the transmission corridor access. Further any transmission system in India for transmission of electricity across the territory of India under cross border trade of electricity, if required, shall be built after concurrence from Government of India and necessary Regulatory approvals. The same has been incorporated in the CBTE Regulations.

- 14.7. CTU shall process the application and grant long term access or medium term open access as per the detailed procedure notified under Connectivity Regulations except for the provisions specified under CBTE Regulations. Upon grant of long term access or medium term open access the applicant shall sign the corresponding Transmission Access Agreement with CTU. In case the access is provided to inter-State Transmission licensee other than CTU then an Agreement shall be signed between the applicant, inter-State Transmission Licensee and CTU as per the detailed procedure under Connectivity Regulations. The Transmission Access Agreement shall provide the details viz. quantum of access, point of injection, point of drawl, date of commencement of long term access etc. While grant of long term access can be provided based on the target region and fulfilling of the conditions specified under CBTE Regulations, any scheduling thereof will take place only after signing of the long-term PPA.
- 14.8. As regards the suggestion of WBSEDCL with respect to giving priority to the applications with valid PPA, the same could not be considered as the provisions of Connectivity Regulations currently do not provide for any such prioritization.
- 14.9. As discussed in Para 2.1.7, the Applicant under CBTE Regulations shall be the Participating Entities located in neighbouring countries only. Accordingly, the second proviso of the above Regulation wherein it has been specified that the neighbouring country as a whole may be treated as a target region for Indian applicants has been deleted.
- 14.10. Based on the above discussion, the Regulation on Long Term Access and Medium-Term Open Access has been revised as given below:

#### 12. Application for Long-Term Access and Medium Term Open Access

- (1) The application for long-term access or medium-term open access to Indian grid and across Indian grid for cross border trade of electricity shall be made to CTU.
- (2) In addition to the requirements specified under Connectivity Regulations for grant of long-term access or medium-term open access to the Indian grid, the Applicant shall furnish the following:
  - (a) Approval from Designated Authority with regard to eligibility of the Participating Entity for cross border trade of electricity or copy of the Inter Government Agreement (IGA) wherever available; and
  - (b) Approval from Designated Authority in India and Competent Authority in neighbouring country(ies) to use Cross Border Transmission Link(s) in case connectivity is not through dedicated transmission lines; and
  - (c) Access Bank Guarantee as specified under Regulation 15 for long-term access.
- (3) CTU shall process the application and grant long-term access or medium-term open access to the Indian grid or across the Indian grid, as the case may be, in accordance with the detailed procedure notified under Connectivity Regulations except for the provisions specified herein.

(4) Upon grant of long-term access or medium-term open access for cross border trade of electricity, the Applicant shall sign the Long Term Access Agreement or Medium Term Open Access Agreement, as the case may be, with CTU which shall contain the date of commencement of long-term access or medium-term open access, as the case may be, the point of injection of power into the Indian grid and point of drawal from the Indian grid.

Provided that in case long-term access or medium-term open access is granted to the inter-State transmission system of an inter-State transmission licensee other than the CTU, the agreement shall be signed between the Applicant, CTU and such inter-State transmission licensee.

- (5) Implementation of the transmission system augmentation, if any, for grant of long-term access shall be undertaken only after the applicant has submitted the Access Bank Guarantee specified under Clause (2) of Regulation 15.
- (6) Where tripartite agreement is signed for transaction across India involving two neighbouring countries, the transmission system augmentation in India for transmission of electricity across the territory of India shall be undertaken only after obtaining approval from Government of India and the Commission. and the Access Bank Guarantee as specified under Clause (2) of Regulation 15 is submitted by the Applicant.

# 15. Time-frame for processing Long-Term Access and Medium-Term Open Access Application (Regulation 13)

#### Commission's Proposal:

15.1. In the Draft Regulations it was proposed that the CTU shall process the long term access applications requiring augmentation of transmission system in Indian grid within 90 days and in case the augmentation is not required, the applications shall be processed within 60 days. It was further proposed that the CTU shall process the medium term open access applications within 30 days.

#### **Comments Received:**

- 15.2. **GMR and OAUA** submitted that time frame for processing Short Term access has not been mentioned; the same should also be included
- 15.3. **NVVN** submitted that priority has been given to CBTA Applicant as application from CBTA applicant will be processed earlier than the intra country application. NVVN has suggested that the time frame for processing the application should be same as that of LTA for intra country i.e. 120 days where augmentation is required and 180 days where augmentation is not required instead of 60 days and 90 days.

# Analysis and Decision:

- 15.4. As regards the comment from NVVN with respect to the priority being given to CBTA Applicant, the Commission is of the view that the applications from the participating entities of neighbouring countries would be comparatively lesser in number, therefore, can be processed in a shorter timeframe. However, considering the activities to be undertaken viz. system studies etc. for processing the applications, the timelines have been enhanced to 120, 90, and 40 days from 90, 60 and 30 days for the processing of applications for long-term access requiring augmentation of transmission system, long-term access where augmentation of transmission system is not required and medium-term open access, respectively.
- 15.5. Applications for short term open access can be scheduled based on different options available for bilateral and collective transactions namely advanced scheduling, first come fist serve, day ahead bilateral transactions, bilateral transactions in a contingency, and collective transactions depending on the need of the applicant and in accordance with the Detailed Procedure for scheduling of bilateral and collective transactions made under STOA Regulations.

# 16. Treatment of delay in Transmission System and Generation Projects (Regulation 14)

# Commission's Proposal:

16.1. Provision for treatment of delay in Transmission System and Generation projects proposed under Regulation 16 of the Draft Regulations is provided below:

# 16. Treatment of delay in Transmission system /Generation projects

- (1) In order to review the progress of generating units along with its direct evacuation lines and the common transmission system, CTU shall convene a Joint co-ordination meeting with each developer, and TPA of neighbouring country at regular interval at least once in a quarter.
- (2) The generating company and owner of the transmission system shall endeavour to commission the generating station and the transmission system simultaneously as far as practicable and shall ensure the same through appropriate Implementation Agreement. A copy of same shall be furnished by the Applicant to CTU.
- (3) In case of expected delay of individual generating unit(s) as per the timelines agreed in the CBTAA, as assessed during joint coordination meetings or the generator seeks deferment of start of long term access, CTU shall endeavour to replan the system to the extent possible. In case the augmentation of the transmission system has already been awarded, the generator shall be liable to pay full transmission charges from the date of operationalisation

of long term access.

- (4) In the event of delay in commissioning of concerned transmission system from its scheduled date, CTU shall endeavour to make alternate arrangement for dispatch of power at the cost of the transmission licensee.
- (5) In case such alternative arrangement cannot be provided by the CTU while the generator is ready, the transmission licensee shall pay transmission charges to

### Analysis and Decision:

- 16.2. Although there are no specific comments/suggestions on the above Regulations, the Commission has reconsidered the above provision to bring further clarity on treatment of delays.
- 16.3. It is envisaged that the Designated Authority, instead of CTU as proposed in the Draft Regulations, shall monitor the progress of generating station located in neighbouring country along with the transmission system for evacuation of power in consultation and co-ordination with the generating station, Transmission Planning Agencies of the neighbouring countries and the CTU of India. It should be endeavoured to commission the generating station located in a neighbouring country, Cross Border Transmission Link and the transmission system within India in a matching time frame. Notwithstanding the above, the delay may still happen on account of delay in either commission system to be implemented by the transmission licensees within India and accordingly, the treatment of delay has been considered as discussed below.
- 16.4. In case the delay takes place on account of delay in commissioning of generating station or the associated dedicated transmission system beyond the timelines agreed in Long Term Transmission Access Agreement, the responsibility will lie with the generator and accordingly, it shall be liable to pay the full transmission charges with respect to expenditure incurred towards associated transmission system from the date of operationalization of long term access to the Indian grid till the commissioning of the generating station.
- 16.5. It is envisaged that the Cross Border Transmission Link shall be planned by Designated Authority in consultation with Transmission Planning Agencies of neighbouring countries with the approval of Government of India and Government of neighbouring countries. Further, the manner of implementation of Cross Border Transmission Link within the Indian Territory and the Implementing Agency shall be decided by the Government of India. Accordingly, if delay happens on account of delay in implementation of Cross Border Transmission Link then the compensation, if any, shall be decided by the Government of the respective countries.

- 16.6. In case the delay happens on account of delay in development of transmission system in India, then CTU shall make an endeavour to provide alternative arrangement. In case alternate arrangement cannot be provided, then the transmission licensee has to compensate the generating companies by paying transmission charges proportionate to commissioned generating capacity. In case of non-payment of transmission charges by the transmission licensee, it shall be recovered from the Contract Performance Guarantee of the transmission licensee deposited with CTU, wherever available.
- 16.7. Based on the above discussion, the Regulation on Short-Term Open Access has been revised as given below:

#### 14. Treatment of delay in Transmission system and Generation projects

- (1) Designated Authority shall monitor the progress of generating station including units thereof in neighbouring country along with transmission system for evacuation of power for cross border trade of electricity in consultation and co-ordination with CTU of India, Transmission Planning Agency(ies) of neighbouring country(ies) and the developer of the generating station, at regular interval.
- (2) The generating company located in the neighbouring country, implementing agency(ies) and the transmission licensee(s)shall endeavour to commission the generating station, Cross Border Transmission Link(s) and the transmission system within India respectively in matching time-frame as far as practicable.
- (3) In case of delay in commissioning of generating station or unit(s) thereof in the neighbouring country beyond the scheduled date agreed in the Long Term Transmission Access Agreement, the generator shall be liable to pay full transmission charges from the date of operationalisation of long-term access.
- (4) In case of delay in commissioning of Cross Border Transmission Link, compensation if any to the generating company or transmission licensee or both, as the case may be, shall be as decided by the respective Governments.
- (5) In the event of delay by the transmission licensee in commissioning of transmission system within India beyond its scheduled date and the generating company is ready with its generating station or unit(s), the transmission licensee shall pay transmission charges to generating company proportionate to commissioned generation capacity in case no alternative arrangement is made by the CTU.
- (6) Provided that in case of non-payment of transmission charges by the transmission licensee to the generating company, such charges shall be recovered by the CTU from the Contract Performance Guarantee furnished by the transmission licensee and paid to the generating company.

# 17. Access Bank Guarantee (Regulation 15)

#### Commission's Proposal:

17.1. Provision related to Access Bank Guarantee proposed under Regulation 17 of the Draft Regulations is provided below:

#### 17. Access Bank Guarantee

- (1) The CBTA applicant applying for long term access shall be required to furnish to the CTU, an Access Bank Guarantee, along with application, for an amount of INR 1 Crore/ per Mega Watt corresponding to the quantum of long-term CBTA sought.
- (2) The CBTA customer may approach CTU and seek permission to exit prior to the award of contract for execution of Transmission System by the transmission licensee. All such requests shall be considered and decision communicated to the CBTA customer not later than thirty (30) days.
- (3) In case, such permission for exit is accorded by the CTU, the CTU may encash Rs. 20 lakhs from the Access Bank Guarantee and return the balance amount to the CBTA customer.
- (4) In case, any of the developers fails to construct the generating station / dedicated transmission system by the timelines agreed in the CBTAA, CTU shall have the right to encash the Access Bank Guarantee in accordance with Regulation 29 of these regulations
- (5) If CBTA Customer makes an exit from Cross Border Transmission Access under these Regulations, or relinquishes Cross Border Transmission Access at any stage after the augmentation of the transmission system has been awarded, the Access Bank Guarantee shall be encashed.
- (6) The quantum of Access Bank Guarantee shall be progressively reduced each year after operationalisation of Long term Access corresponding to one fifth of its total value. Each year, one fifth of the value of Access bank guarantee shall be returned to the Applicant such that the entire access bank guarantee shall be discharged in 5 years from date of operationalisation of long term access.

#### **Comments Received:**

17.2. GMR submitted that the Access Bank Guarantee stipulated for an amount of Rs. 1 Crore/per MW seems to be on a very high side. GMR further highlighted that it may be termed as discriminatory as for the domestic entities the bank guarantee required is Rs. 5 lakh/MW. GMR suggested that this amount should be less than the domestic Bank Guarantee so as to incentivise the cross border trade.

- 17.3. **GMR** submitted the following with reference to Clause 17(4):
  - (i) Giving of discretion to CTU for encashment of BG is prone to misuse.
  - (ii) There may be genuine delays not attributable to the developer like Force Majeure.
  - (iii) The project may be nearing completion but missed the deadline by a whisker.
  - (iv) What if the project is completed with a little delay of few months?
  - (v) The transmission line shall remain stranded.
  - (vi) The forfeiture amount shall not be available to the Transmission Licensee as compensation.
  - (vii) Even otherwise the developer is bound to pay the transmission charges, even if he is not able to use the Transmission lines as per time lines of CBTAA.
  - (viii) Though BG is being allowed to be encashed but there are no mitigation provisions for the developer or the Transmission Licensee.
  - (ix) Long Stop Date for treating the project abandoned

GMR submitted that the time lines under CBTAA may be allowed to be extended for genuine reasons and penalty may be imposed for the delay but not the encashment of Access Bank Guarantee.

- 17.4. **GMR** with reference to Clause 17(5), submitted that once the payment security mechanism/LC is put in place after operationalization of Long Term Access, there remains no need to have this Bank Guarantee separately.
- 17.5. **NVVN** submitted that Rs. 1 Cr/MW is very high for CBTA Applicant and may be reviewed by the Commission.
- 17.6. **OAUA** has suggested that the Access Bank Guarantee can be fixed at Rs. 5 lakh/MW.
- 17.7. **Powergrid** suggested replacing the above Regulation on Access Bank Guarantee as given below:
  - (1) The Access Bank Guarantee shall be kept valid for a period upto three month beyond the period for which the CBTA for Long Term has been granted after the operationalization of CBTA for Long Term.
  - (2) The Access Bank Guarantee submitted by the Applicant shall be adjustable in accordance with the DPR Cost approved by the Designated Authority for the CBT Link with which the CBTA for Long Term has been granted.

Provided that in case where LTA is granted with implementation of CBT Link, CTU shall specify the Detailed Project Report (DPR) cost of the portion of CBT Link within India after due approval of the Designated Authority within a period of ninety days from the grant of CBTA.

Provided further that if the value of the Access Bank Guarantee falls short of the DPR cost of the portion of CBT Link within India, the Applicant shall be required to furnish within thirty days of the notice in that regard from CTU, an additional Access Bank Guarantee of the balance amount with validity for a period upto three month beyond the period for which the CBTA for Long Term has been granted after the operationalization of CBTA for Long Term.

Provided further that if the value of the Access Bank Guarantee exceeds the DPR cost of the portion of CBT Link within India, the excess value of the Access Bank Guarantee shall be accordingly reducible.

(3) The aggregate amount of Access bank Guarantees to be maintained for the portion of CBT Link within India shall not be lesser then the total DPR cost required for the implementation of the said CBT Link.

Provided that CERC may notify an addendum to the present Regulations prescribing the modalities for sharing of amount of Access bank Guarantees in case of multiple grant of CBTA for Long Term on a particular Cross Border Transmission Link.

- (4) The CBTA customer may approach CTU and seek permission to exit prior to the award of contract for execution of Transmission System by the Transmission licensee. All such requests shall be considered and decision communicated to the CBTA customer not later than thirty (30) days. In case, such permission for exit is accorded by the CTU, the CTU shall encash Indian Rupees 20 lakhs from the Access Bank Guarantee as processing charge and return the balance amount to the CBTA customer.
- (5) In case, any of the developers fails to construct the generating station / dedicated transmission system by the timelines agreed in the CBTAA, CTU shall have the right to encash the Access Bank Guarantee in accordance with Regulation 29 of these regulations
- (6) The quantum of Access Bank Guarantee shall be progressively reduced each year after operationalization of CBTA for Long Term corresponding to the proportion of capital cost recovered during the year such that 100% reduction is permitted over the period 90% of the capital cost is recovered through tariff.
- 17.8. PTC suggested for an amount of Rs. 10,000 per MW Access Bank Guarantee for the CBTA applicant. PTC submitted that it would be prudent that the stringent fee of Rs. 1 Cr/MW should be relaxed to promote export of power. PTC further submitted that the value of Access Bank Guarantee is exorbitantly high putting financial burden on utilities/IPPs willing to export power and may discourage the cross border trade. PTC suggested that the value of Access Bank Guarantee may be aligned with the Bank Guarantee submitted to CTU by LTOA Applicants as per the present Regulations.
- 17.9. **PTC** suggested for deleting the Clause 17(4) of the Draft Regulations. PTC submitted that in other provision it has been specified the applicant has the liability to pay the transmission charges in case he fails to start the power supply by the timelines. PTC

suggested that in case the applicant is paying the transmission charges, his Access Bank Guarantee need not be encashed hence the provisions may be deleted.

- 17.10. **Tata Power and APP** submitted that the amount of bank guarantee could be considered to be reduced to Rs. 5 lakh/MW aligning it with CERC (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations. Tata Power further submitted that such high bank guarantees will result in increase of project cost and in turn will lead to higher cost of power.
- 17.11. **Tata Power APP and OAUA** submitted in reference to 17(4) that in case of delay in construction of generating station the penalty shall be limited to transmission charges payable for the period of delay, provided the power evacuation system has been completed and also that adequate notice of a possible delay in completion of generating project was not made available to the agency executing the power evacuation system.

Tata Power submitted that the construction in project may be delayed for reasons which are beyond the control of the generator. Further, this would mean that even for small delay of 1 month the whole guarantee of Rs. 1 cr/MW is forfeited.

17.12. Tata Power and APP suggested that the Access Bank Guarantee may not be encashed in case relinquishment is due to any Force Majeure event affecting the generator/buyer.

# Analysis and Decision:

- 17.13. The purpose of Access Bank Guarantee is to safeguard recovery of costs associated with transmission system which is already under execution for an generator and in case the generating plant fails to get commissioned or relinquishes its LTA rights, the charges for transmission unutilized / underutilized due to its exit should not be passed on to other beneficiaries of the grid. The main issue here is to determine the amount of Access Bank Guarantee which could be considered as sufficient bank guarantee to safeguard against the above mentioned risks.
- 17.14. In the Draft Regulations, it was proposed that an applicant seeking long term-access to the Indian grid shall be required to furnish an Access Bank Guarantee for an amount of Rs. 1 Crore/MW corresponding to the quantum of long-term access sought regardless of whether the augmentation of transmission system has to be taken up or not. In this regard, many stakeholders viz. GMR, PTC, NVVN, Tata Power and APP etc. have stated that the Access Bank Guarantee of Rs 1 Cr/MW is on the higher side and should be reduced to Rs. 5 lakh/MW in alignment with Connectivity Regulations in order to promote cross border trade of electricity. Further, it is observed that transmission augmentation may not be required in each of the cases. The Commission has reconsidered the above provisions in light of the suggestions

given by the stakeholders and the prevailing circumstances. The Commission is of the view that while Access Bank Guarantee should not be prohibitive, it is also equally important that any transmission system augmentation carried out for the applicants for cross border transactions should be utilized and costs are recovered. Accordingly, the Commission has decided that at the time of submitting of the application the applicant shall be required to furnish an Access Bank Guarantee for an amount of Rs. 5 lakh/MW instead of Rs. 1 Cr/MW as proposed in the Draft Regulations. This will ensure that the applicants for whom transmission system augmentation is not required shall not be burdened with a higher Access Bank Guarantee. However, in case the grant of long-term access requires augmentation of transmission system the applicant shall be required to furnish a revised Access Bank Guarantee for an amount covering the costs of such augmentation. The CTU shall intimate about the cost of such augmentation to the Applicant within 90 days from the date of application and the applicant shall furnish a fresh Access Bank Guarantee with a validity of 5 years for the revised amount to the CTU within 1 month of the intimation. Upon furnishing of the revised Access Bank Guarantee the CTU shall return the earlier Access Bank Guarantee of Rs. 5 lakh/MW furnished by the applicant at the time of making the initial application.

- 17.15. In the Draft Regulations it was proposed that the quantum of Access bank Guarantee shall be progressively reduced each year after operationalization of long term access. Each year one fifth of the value of Access Bank Guarantee would be returned to the Applicant such that the entire Access Bank Guarantee gets discharged in 5 years from the date of operationalization of long term access. In this regard, the Commission is of the view that while an amount equivalent to 1/5<sup>th</sup> of the Access Bank Guarantee should be returned till the 4th year from the date of operationalization of long term access the remaining amount equivalent to 1/5<sup>th</sup> of Access Bank Guarantee should be kept subsisting till the end of 12th year as a security towards relinquishment charges. The same approach was also proposed in the Draft GNA Regulations notified on 14<sup>th</sup> November, 2017.
- 17.16. In the Clause 17(4) of Draft Regulations it was proposed that in case a generator fails to construct the generating stations/dedicated transmission system as per the timelines agreed under Transmission Access Agreement, CTU could encash the Access Bank Guarantee. GMR has raised concerns against this provision citing that a little delay might lead to encashment of the Access Bank Guarantee. Tata Power and PTC have suggested that the penalty for the delay should be limited to the transmission charges. The Commission concurs with the suggestions given by different stakeholders. Accordingly, it has been provided that in case the generator fails to construct the generating stations and the associated dedicated transmission system within the timelines agreed in the Long Term Transmission Access Agreement and is also not paying the transmission charges after operationalization of long term access as specified under Clause (3) of Regulation 13, then CTU may recover the amount by encashing the Access Bank Guarantee.

17.17. Based on the discussion above, the Regulation on Access Bank Guarantee has been revised as given below:

### 15. Access Bank Guarantee

- (1) An Applicant seeking long-term access for cross border trade of electricity shall be required to furnish to the CTU, along with the application, an Access Bank Guarantee valid for five (5) years from the date of operationalization of long term access, for an amount of Rs. Five (5) Lakhs/MW corresponding to the quantum of long-term access sought.
- (2) In case the grant of long-term access requires augmentation of transmission system in India, the CTU shall intimate the cost of augmentation within ninety (90) days from the date of the month in which the application is made and the Applicant shall furnish a fresh Access Bank Guarantee valid for five (5) years for an amount equivalent to the cost of such augmentation within one (1) month of intimation of the cost of augmentation by CTU.

Provided that on receipt of the Access Bank Guarantee in pursuance to above, CTU shall return the Access Bank Guarantee submitted in terms of Clause (1).

(3) The Cross Border Customer who has been granted long-term access may approach CTU and seek permission to exit prior to the award of contract for execution of transmission system by the transmission licensee. All such requests shall be considered and decision communicated to the applicant not later than thirty (30) days from the date of the request.

Provided that where exit is permitted, the CTU may encashRs. 20 lakhs from the Access Bank Guarantee submitted in terms of Clause (1) or Clause (2), as the case may be, and return the balance amount to the Cross Border Customer.

- (4) If a Cross Border Customer relinquishes Transmission Access granted under these Regulations after the award of the contract for execution of transmission system and before operationalization of long-term access, Access Bank Guarantee shall be encashed by the CTU.
- (5) In case there is delay in commissioning of the generating station and associated dedicated transmission system beyond the timelines agreed in the Long Term Transmission Access Agreement, and long-term access has been operationalized, the transmission charges if not paid by the generator as provided in Clause (3) of Regulation 14, shall be recovered by CTU by encashing the Access Bank Guarantee submitted in terms of Clause (1) or Clause (2), as the case may be.
- (6) If a Cross Border Customer relinquishes Transmission Access granted under these Regulations after operationalization of long term access, Access Bank Guarantee submitted in terms of

Clause (1) or Clause (2), as the case may be, shall be encashed by the CTU subject to Clause (7) of this Regulation.

(7) The quantum of Access Bank Guaranteesubmitted in terms of Clause (1) or Clause (2), as the case may be, shall be progressively reduced each year after the generating company begins to avail long term access corresponding to one fifth of its total value. On completion of each year, one fifth of the value of Access Bank Guarantee shall be returned to the Applicant each year up to fourth year and one-fifth of the Access Bank Guarantee shall be retained up to twelfth year of the long term access as a security towards relinquishment charges. The Applicant shall submit revised Access Bank Guarantee accordingly.

# 18. Firming up of Drawl or Injection by LTA Customers

### Commission's Proposal:

18.1. Provisions related to firming up of drawl or injection by LTA customers proposed under Regulation 19 in the Draft Regulations is provided below:

### 19. Firming up of Drawl or Injection by LTA Customers

- (1) The CBTA customers who have signed the Long Term Access Agreement and have submitted the Access Bank Guarantee, but were granted cross border long term access for target drawl or injection, shall upon firming up through signing of long term PPA(s), be required to notify the CTU and TPA of neighbouring country within one month from the date of signing of the PPA along with a copy of PPA. The scheduling under such PPA shall start only after 1 month of furnishing the copy of PPA to CTU subject to availability of end links.
- (2) (a) In case PPA is signed for a duration of less than 7 years but more than 1 year with any entity in the target region sought in LTA application, there is no need to apply for MTOA separately. On furnishing PPA to CTU, energy shall be scheduled under Long term access as per provisions of PPAs but not earlier than 1 month after receipt of PPA.

(b) In case PPA is signed for a duration of less than 1 year – Applicant shall have to seek STOA separately and energy shall be scheduled under short term open access as specified in CERC (Open Access in inter-State Transmission) Regulations 2008.

- (3) In case PPA is signed for a duration of less than 7 years with an entity located in a region other than target region sought in LTA application, applicant shall have to apply for MTOA as specified in these Regulations and shall be considered as a medium term customer for the purpose of these Regulations.
- (4) If the drawl/ injection is firmed up in the same region as that of the original Target Region, then the same shall be operationalized subject to availability of end links as may be

determined by the CTU on case to case basis.

#### Analysis and Decision:

- 18.2. The Commission had proposed the above Regulation on 'Firming up of Drawl or Injection by LTA Customers' for enabling the LTA customer schedule its power after PPA is firmed up with the beneficiaries. This was proposed as this particular provision was not there in the Connectivity Regulations at the time of notification of the Draft Regulations.
- 18.3. However, the above provision i.e. 'Firming up of Drawl or Injection by LTA Customers' has been subsequently incorporated under Regulation 15B in Connectivity Regulations through sixth amendments notified on 17th February, 2017. The Commission is of the view that as this has already become a part of the Connectivity Regulations it is not required to further specify it under CBTE Regulations. Accordingly, the provision on 'Firming up of Drawl or Injection by LTA Customers has been deleted.

# 19. Metering Arrangements (Regulation 17)

#### Commission's Proposal:

19.1. Metering arrangement for cross border trade of electricity proposed under Regulation 20 in the Draft Regulations is as given below

#### 20. Metering Arrangements

- (1) Special Energy Meters (Main Meter, Check Meter and Standby Meter)shall be installed at both the ends of the cross border transmission link as per Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and amendments thereof.
- (2) Meters shall be installed at Generating stations located outside India as per Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and amendments thereof.
- (3) Before flow of electricity on the transmission line, TPAs of both the countries shall confirm the availability of Main Meter, Check Meter and Standby Meter to System Operator of respective country.
- (4) Special Energy Meters shall be open for inspection by any person authorized by the TPAs or System Operators of the respective countries.

#### **Comments Received:**

- 19.2. **CEA** suggested replacing the Special Energy Meters with Interface Meters.
- 19.3. **IPPAI** submitted that CERC Regulations cannot be applicable on installation of meters in generating stations located outside India
- 19.4. Powergrid suggested deleting the clause 20 (2).

#### Analysis and Decision:

- 19.5. The Commission concurs with the suggestion given by CEA and has accordingly replaced the Special Energy Meters with Interface Meters. Appropriate revisions have also been made in the definition of Special Energy Meters and Interface Meters proposed in the Draft Regulations.
- 19.6. The Commission concurs with the suggestions given by Powergrid and IPPAI regarding the applicability of Clause 20(2). Accordingly, the Clause 20(2) of the Draft Regulations has been deleted.
- 19.7. Based on above discussion, the Regulation on Metering Arrangements has been revised as given below:

#### 17. Metering Arrangements

- (1) Interface Meters (Main Meter, Check Meter and Standby Meter) shall be installed at both the ends of the Cross Border Transmission Link in accordance with Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 and amendments thereof.
- (2) Before flow of electricity on the Cross Border Transmission Link, Transmission Planning Agencies of both the countries shall confirm the availability of Main Meter, Check Meter and Standby Meter to System Operator of respective country.
- (3) Interface Meters as specified in Clause (1) above, shall be open for inspection by any person authorized by the Transmission Planning Agencies or System Operators of the respective countries.

# 20. Scheduling (Regulation 24)

#### Commission's Proposal:

20.1. Provision related to scheduling of cross border transactions proposed under Regulation 20 in the Draft Regulations is provided below:

### 27. Scheduling

- (1) The selling entity/ buying entity shall inform their requisitions to the Settlement Nodal Agency in accordance with the procedure specified as per Part 6 on Scheduling and Despatch Code of Grid Code.
- (2) Settlement Nodal Agency shall co-ordinate with System Operators of respective countries for scheduling of cross border transactions and revisions during the day of operation

### **Comments Received:**

#### 20.2. PTC, OAUA and APP suggested revising Clause 27(1) as given below:

'The selling entity/ buying entity shall inform their requisitions to the **NLDC** in accordance with the procedure specified as per Part - 6 on Scheduling and Despatch Code of Grid Code.'

**PTC OAUA and APP** submitted that by including Settlement Nodal Agency for scheduling an additional layer will be created as eventually the Settlement Nodal Agency will also have to coordinate with the NLDC. This will lead to unnecessary delays in the process. PTC et al. suggested that scheduling part may be directly handled by the NLDC while the Settlement Nodal Agency may look after settlement part only.

#### Analysis and Decision:

20.3. The Commission is of the view that as the Settlement Nodal Agency shall be responsible for settlement of grid operating charges, it is appropriate that information related to scheduling should be routed through it. This is also as per the existing practice being followed for the cross border transactions between India and Bangladesh or India and Nepal.

# 21. Payment Security Mechanism

# Commission's Proposal:

21.1. As a part of Payment Security Mechanism it was proposed that the cross border customer shall provide a revolving Letter of Credit each in favour of CTU and SNA equivalent to 2.5 times of the average Bill amount for transmission and grid related charges respectively. Relevant clause 40(2) proposed in the Draft Regulations is provided below:

# 40. Payment Security Mechanism

(2) Cross Border Transmission Access Customer shall establish payment security towards

transmission charges at least ninety (90) days prior to the intimated date of commencement of Cross Border Transmission Access which inter-alia shall include the following for availing Long term access and medium term open access:

- (a) A irrevocable, unconditional and revolving Letter of Credit in favour of the CTU through a bank as specified in Regulation 44 equivalent to two point five (2.5) times the average Bill amount towards transmission charge for 3 months of the Application Period with a validity of 1 year;
- (b) A irrevocable, unconditional and revolving Letter of Credit in favour of the SNA of India through bank as specified in Regulation 44 equivalent to two point five (2.5) times the average Bill amount towards grid related charge for 3 months with a validity of 1 year as informed by SNA of India.

### **Comments Received:**

- 21.2. **GMR** submitted that in Para 40(2) (a) & (b) LC has been proposed in favour of CTU/SNA which can at the best be Standby LC and not revolving LC. While for domestic entities and PSUs, the requirement is 2.1 times and 1.05 times of monthly billing, respectively, seeking it at 2.5 times for cross border trade/transmission may be seen as discriminatory. Pegging at a lower rate would incentivize cross-border trade/transmission.
- 21.3. **NTPC** submitted that the Payment Security Mechanism described in the Draft Regulations covers the transmission charges and other grid related charges. It should also cover the cost of electricity to be transacted i.e. Generator's bills. Accordingly, it has suggested to include the following provisions to cover the costs of the electricity transacted:
  - a) There should be requirement of LC covering at **least 2 months supply of electricity**, based on the estimated average monthly billing.
  - b) Due date of payment will be 30 days from the date of billing.
  - c) Rebate may be offered similar to the Rebate prescribed in the CERC Tariff Regulations, as amended from time to time
  - d) Late Payment Surcharge may be applicable similar to that prescribed in CERC Tariff Regulations as amended from time to time
- 21.4. PTC and APP suggested revising Regulation 40 (2) (a) & (b) as follows:

Cross Border Transmission Access Customer shall establish payment security towards transmission charges at least ninety (90) days prior to the intimated date of commencement of Cross Border Transmission Access which inter-alia shall include the following for availing Long term access and medium term open access:

- (a) A irrevocable, unconditional and revolving Letter of Credit in favour of the CTU through a bank as specified in Regulation 44 equivalent to two point one (2.1) times the average monthly Bill amount towards transmission charge with a validity of 1 year;
- (b) A irrevocable, unconditional and revolving Letter of Credit in favour of the SNA of India through bank as specified in Regulation 44 equivalent to point one (2.1) times the average monthly Bill amount towards grid related charge with a validity of 1 year informed by SNA in India

#### Analysis and Decision:

- 21.5. The Commission concurs with the suggestions given by PTC APP and GMR regarding reduction in the LC amount. Accordingly it has been decided to reduce the LC amount from 2.5 times to 2.1 time the average Bill amount.
- 21.6. The Commission is of the view that the payment security mechanism related to electricity tariff as suggested by NTPC should be covered in the Power Purchase Agreements between buying and selling entities and need not be incorporated under these Regulations.
- 21.7. Based on the above discussion, the Regulation on Payment Security Mechanism has been revised as given below:

#### 36. Payment Security Mechanism for Transmission Charges

- (1) The Cross Border Customer shall be liable to establish payment security mechanism for payment of transmission charges and various grid related charges.
- (2) The Cross Border Customer shall establish payment security towards transmission charges and grid related charges at least ninety (90) days prior to the intimated date of commencement of Transmission Access which shall include the following for availing long-term access and medium-term open access:
  - (a) An irrevocable, unconditional and revolving Letter of Credit in favour of the Central Transmission Utility through a bank as specified in Regulation 35 equivalent to two point one(2.1) times the average monthly bill amount towards transmission charges with a validity of 1 year.
  - (b) An irrevocable, unconditional and revolving Letter of Credit in favour of the Settlement Nodal Agency of India through bank as specified in Regulation 35 equivalent to two point one (2.1) times the average monthly bill amount towards grid related charges with a validity of 1 year.

(3) In case of default of payment of Transmission Charges and other Grid related charges, the

Cross Border Customer shall be denied access to the Indian Grid till discharge of its dues.

# 22. Dispute Settlement and Resolution Mechanism (Regulation 37)

22.1. As a part of Dispute Settlement and Resolution Mechanism it was proposed that in case of Government to Government negotiation, if a dispute remain unresolved for more than 60 days it shall be escalated to Secretary level discussion. Relevant Clause 41 proposed in the Draft Regulations is provided below:

#### 41. Dispute Settlement and Resolution mechanism

- (1) The disputes in relation to the cross border trade of electricity occurring within Indian Territory shall be settled as per the provisions of Electricity Act, 2003.
- (2) Either Party shall be entitled to raise any claim, dispute or difference of whatever nature arising under as per their mutual Agreement
- (3) In case the dispute remains unresolved even after sixty (60) days from the date of raising of the dispute, the same shall be attempted to be mutually resolved at the Government level.
- (4) In case the dispute still remains unresolved, it shall be referred for arbitration in accordance with the Rules of Arbitration of Singapore International Arbitration Centre ("SIAC Rules").

#### Analysis and Decision:

22.2. The Commission has reconsidered the Clause 41 proposed in the Draft Regulations. and has rationalized the provisions as under:

#### 37. Dispute Settlement and Resolution mechanism

- (1) The disputes in relation to the cross border trade of electricity within the Indian territory shall be settled as per the provisions of Electricity Act, 2003.
- (2) Disputes involving entities of separate countries may be resolved mutually by the participating entities within a period of 60 days from the date of raising of the dispute.
- (3) In case the dispute remains unresolved even after sixty (60) days from the date of raising of the dispute, the same shall be attempted to be mutually resolved at the Government level.
- (4) In case the dispute still remains unresolved, it shall be settled through the International Arbitration Centre as may be mutually acceptable to the parties to the dispute.

# 23. Cross Referencing with Other Regulations

23.1. An elaborate regulatory framework has evolved over the time governing different aspects of power sector viz. tariff determination, market development, system operations etc. The CBTE Regulations apart from specifying few additional conditions for cross border trade of electricity has invoked relevant provisions from the existing Regulations through cross referencing. The list of Regulations copiously referred to in these Regulations are enumerated below:

# **CERC Regulations**

- a. Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009
- b. Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010
- c. Central Electricity Regulatory Commission (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010
- d. Central Electricity Regulatory Commission (Open Access in inter-State Transmission)
- e. Central Electricity Regulatory Commission (Power Market Regulations), 2010
- f. Central Electricity Regulatory Commission (Tariff Regulations), 2014

# **CEA Regulations**

- (1) Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006
- (2) Central Electricity Authority (Technical Standards for connectivity to the Grid) Regulations, 2007
- (3) Central Electricity Authority (Safety Requirements for construction, operation and maintenance of electrical and electric lines) Regulations, 2008
- 23.2. Stakeholders are advised that while going through the CBTE Regulations they may also read with the referred provisions from the Principal Regulations for better understanding of the Regulations. Stakeholders may also refer to the Statement of Reasons of the concerned Principal Regulations to understand the rationale behind a particular provision.

Sd/-	Sd/-	Sd/-
(I.S.Jha)	(Dr. M.K.Iyer)	(P.K.Pujari)
Member	Member	Chairperson

#### Annexure-I

#### List of stakeholders who submitted written comments/suggestions on Draft Regulations

- 1. Adani Power Ltd.
- 2. Assam Power Distribution Company Ltd. (APDCL)
- 3. Association of Power Producers (APP)
- 4. Central Electricity Authority (CEA)
- 5. Confederation of Indian Industry (CII)
- 6. Cross Border Power Transmission Company Limited
- 7. Federation of Indian Chambers of Commerce and Industry (FICCI)
- 8. GMR Energy (GMR)
- 9. Indian Energy Exchange ltd. (IEX)
- 10. IL&FS Energy Development Company limited
- 11. Independent Power Producers Associate of India(IPPAI)
- 12. Independent Power Producers Association Nepal (IPPAI Nepal)
- 13. Integrated Research and Action for Development (IRADe)
- 14. NTPC Limited
- 15. NTPC Vidyut Vyapar Nigam Ltd. (NVVN)
- 16. Open Access Users Association (OAUA)
- 17. Power Grid Corporation of India Limited (Powergrid)
- 18. Power System Operation Corporation Limited (POSOCO)
- 19. PTC India Limited (PTC)
- 20. Statkraft Markets Private Limited (Statkraft)
- 21. Tata Power
- 22. West Bengal State Electricity Distribution Company Ltd. (WBSEDCL)

# Annexure-II

# List of stakeholders who made oral submission/presentation during Public Hearing held on 22.3.2017 on Draft Regulations

- 1. Assam Power Distribution Company Ltd.(APDCL)
- 2. Indian Energy Exchange ltd. (IEX)
- 3. Indian Sugar Mills Association
- 4. Independent Power Producers Association of India. (IPPAI)
- 5. Integrated Research and Action for Development (IRADe)
- 6. NTPC Vidyut Vyapar Nigam Ltd. (NVVN)
- 7. Power Exchange of India Limited (PXIL)
- 8. Power Grid Corporation of India Limited (Powergrid)
- 9. Power System Operation Corporation Limited (POSOCO)
- 10. PTC India Limited (PTC)
- 11. Statkraft Markets Private Limited (Statkraft)