

भारत सरकार Government of India विद्युत मंत्रालुय

Ministry of Power केंद्रीय विद्युत प्राधिकरण Central Electricity Authority

विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग -II Power System Planning & Appraisal Division-II

To,

(All Stakeholders in Power Sector & General Public)

Subject: Draft Conduct of Business Rules (CBR) of the Designated Authority (DA) for facilitating the Cross Border Trade of Electricity (CBTE).

Sir/Madam,

Ministry of Power, Govt. of India has issued the guidelines on Import/Export (Cross Border) of Electricity-2018, vide office Memorandum No. 14/1/2017-Trans dated on 18th December, 2018. Further, MoP, vide office Memorandum No. 14/1/2017-Trans, dated 24th December, 2018, had appointed Member (Power System), CEA as the Designated Authority under Clause 4.2 of the subject Guidelines for facilitating the process of approval and laying down the procedure for import/ export of electricity. The Designated Authority has been mandated to lay down procedure for facilitating approval and other matters related to import/export (cross border) of electricity between India and neighbouring countries. Accordingly, a draft of Designated Authority (Procedure for IECBE), 2019 for facilitating the process of approval, and for import/export (cross border) of Electricity, is uploaded on CEA's website.

In this regard, all stakeholders in Power Sector and general public are hereby requested to kindly send their views/suggestions (if any) on the draft Designated Authority (Procedure for IECBE), 2019 by 15th May 2019 to the address given below, so that same could be appropriately considered while finalizing the Designated Authority (Procedure for IECBE), 2019.

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Yours faithfully,

(Pardeep Jindal) Chief Engineer

Encl: Draft Designated Authority (Procedure for IECBE), 2019

PROCEDURE

FOR

APPROVAL AND FACILITATING IMPORT/EXPORT (CROSS BORDER) OF ELECTRICITY

BY

THE DESIGNATED AUTHORITY

(As per the Guidelines for Import/Export (Cross Border) of Electricity-2018)

Central Electricity Authority

Ministry of Power

Government of India

April 2019



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Central Electricity Authority Office of Member (Power Systems) New Delhi

PROCEDURE FOR APPROVAL AND FACILITATING IMPORT/EXPORT (CROSS BORDER) OF ELECTRICITY BY THE DESIGNATED AUTHORITY

1. General

- 1.1 Ministry of Power, Govt. of India has issued the "Guidelines for Import/Export (Cross Border) of Electricity-2018" on 18th December, 2018.
- 1.2 Further, Ministry of Power, Govt. of India vide its OM dated 24th December, 2018, had appointed Member (Power System), Central Electricity Authority as Designated Authority for carrying out the functions prescribed under the Guidelines.
- 1.3 The Designated Authority has been mandated to lay down procedure for facilitating approval and other matters related to import/export (cross border) of electricity between India and neighbouring countries.
- 1.4 Accordingly, the Designated Authority (Procedure for IECBE), 2019 for facilitating the process of approval, and for import/export (cross border) of Electricity, has been formulated.
- 1.5 This Procedure will come into force from the date of its issue.

2. Definitions and Interpretation

- 2.1 Unless the context otherwise requires, the words and expressions used in this Procedure shall have the same meaning as defined in The Electricity Act 2003 and the Regulations made there under:
 - (i) 'Act' means The Electricity Act, 2003 as notified by the Government of India and as amended from time to time;
 - (ii) 'Authority of Neighbouring Country (ANC)' means respective authority of the neighbouring country for all issues of import/export (cross border) of electricity like planning, monitoring and commissioning of

- transmission lines; the grid security, safety and operation etc. (ref. clause 4.3 of the Guidelines)
- (iii) 'Applicant' means an Entity who has made application to Designated Authority for obtaining approval to participate in Import/Export (Cross Border) of Electricity as participating entity or an Indian Generating Station opting to build dedicated transmission line for connecting to the transmission system of neighbouring country for supplying electricity exclusively to that country
- (iv) 'Approval' means approval for participating in Import/Export (Cross Border) of Electricity with Indian Entity or with entity of neighbouring country and shall not mean availability of cross border transmission for scheduling of power.
- (v) 'Available Transmission Capability' or 'ATC' means the transfer capability, in MW, of the inter-control area transmission system available for scheduling cross-border transactions (through long-term access, medium-term open access and short-term open access) in a specific direction, taking into account the network security. Mathematically ATC is the Total Transfer Capability less Transmission Reliability Margin
- (vi) 'CEA' means Central Electricity Authority referred to in the Act;
- (vii) 'CERC' means the Central Electricity Regulatory Commission referred in the Act;
- (viii) 'Cross Border Transmission Link' means the transmission link between the generating station or the pooling station of India with those of the neighboring country, for cross border trade of electricity,
- (ix) 'CTU' shall mean Central Transmission Utility as defined in Section 38 of the Act;
- (x) "Dedicated transmission line" (ref clause 8.9 of the Guidelines) means the transmission line to be built by the Applicant for supplying electricity from generating station owned by the Applicant, exclusively, to the neighbouring country and connected to a specified point in the grid of the neighbouring country provided that the electricity system owned by the Applicant shall not be electrically or by any other means connected with the Indian grid.

- (xi) 'Designated Authority (DA)' means the Authority, as appointed by Government of India (GoI), in pursuance of the Guidelines. GoI has appointed Member (Power System), CEA as Designated Authority vide its OM dated 24-Dec-2018, under the Guidelines.
- (xii) 'Distribution Licensee' means a Licensee defined under Section 2 (17) of the Electricity Act, 2003;
- (xiii) 'Entity' means a company/ authority/ Board/ autonomous body/ Body Corporate/ juridical person (of India or of neighbouring country) which proposes to participate in Import/Export (Cross Border) of Electricity
- (xiv) 'Financial year' shall mean the year commencing on the first day of April and ends on 31st March.
- (xv) 'Guidelines' shall mean the guidelines on Import/Export (Cross Border) of Electricity issued by Govt. of India on 18th December, 2018
- (xvi) 'Indian Entity' means an Entity formed and registered in India under the Companies Act, 1952 or 2013.
- (xvii) 'Interface Meter' shall have the same meaning as defined in Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 as amended from time to time.
- (xviii) 'Joint Operation Committee (JOC)' means a team comprising members from CEA, CTU, POSOCO from India side and members from neighbouring country to discuss and coordinate grid security, safety and operational issues in respect of cross-border exchange of electricity.
- (xix) 'Joint Technical Team Transmission (JTT-T)' means a team comprising members from CEA, CTU, POSOCO from India side and members from neighbouring country to discuss and coordinate planning/ implementation /monitoring of cross border transmission lines and related matters.
- (xx) 'Joint Steering Committee(JSC)' means a committee jointly constituted by governments of two countries and co-chaired by Secretaries of respected governments for cooperation in the field of electricity among the two countries.
- (xxi) 'Joint Working Group (JWG)' means a group jointly constituted by governments of two countries to assist the JSC.
- (xxii) 'License' means a license granted under section 14 of the Act.

- (xxiii) 'Licensee' means a person who has been granted a license under section 14 of the Electricity Act, 2003.
- (xxiv) 'Market splitting' is a mechanism adopted by Power Exchange whereby to manage transmission congestion, electricity market is split into zones, for clearing the quantity of power (MW) and price of electricity separately for each split zone;
- (xxv) 'Month' means a Calendar Month;
- (xxvi) 'National Load Dispatch Centre (NLDC)' means the Centre established under sub-section (1) of section 26 of the Electricity Act, 2003.
- (xxvii) 'Nodal Officer' means an officer of the rank of Chief Engineer in Central Electricity Authority as designated by the Designated Authority.
- (xxviii) 'Participating Entity' means the Entity who has been granted approval by the Designated Authority to participate in import/export (cross border) of electricity, or the Entity who has been allowed by Government of India to participate in import/export of electricity through bilateral agreement between India and the neighbouring country.
- (xxix) 'Power Exchange' is the institution for trading electricity, registered under the Central Electricity Regulatory Commission (Power Market) Regulations, 2010;
- (xxx) 'Procedure' means Designated Authority (Procedure for IECBE), 2019for facilitating the process of approval, and procedure for Import/Export(Cross Border) of Electricity
- (xxxi) 'Quarter' shall mean a period of three months commencing on the first day of April, July, October and January in a Financial Year.
- (xxxii) 'System Operator' means an entity responsible for system operations, Scheduling and dispatch of electricity in the respective country. National Load Despatch Center (NLDC) shall act as System Operator from Indian Side.
- (xxxiii) 'Transmission Access (LTA / MTOA / STOA)' shall have the same meaning a defined in relevant Regulations of CERC. (LTA: Long-term Access, MTOA: Medium-term Open Access, and STOA: Short-term Open Access)

- (xxxiv) Transmission Planning Agency (TPA)' means agency responsible for Transmission System planning, coordination, monitoring and O&M in neighboring country for facilitating cross border trade of electricity with India.
- (xxxv) 'Transmission Reliability Margin (TRM)' means the amount of margin kept in the total transfer capability necessary to ensure that the interconnected transmission network is secure under a reasonable range of uncertainties in system conditions.
- (xxxvi) 'Tariff Policy' means tariff policy issued by Govt. of India and as amended from time to time.
- (xxxvii) 'Total Transfer Capability' or 'TTC' means the amount of electric power that can be transferred reliably over the inter-control area transmission systems of India and neighbouring country under a given set of operating conditions considering the effect of occurrence of the worst credible contingency.

3. Objective

- 3.1 The objectives of this Procedure are:
- 3.1.1 To facilitate grant of approval to eligible entities to participate in Import/Export (Cross Border) of Electricity.
- 3.1.2 To facilitate coordination with nodal agencies/authority of neighboring countries (ANC) for transmission system planning, joint system studies, surveys, preparation of feasibility study reports, system development, construction, erection, monitoring, testing, commissioning, operation and maintenance of transmission system for Import/Export (Cross Border) of Electricity in transparent manner, etc.
- 3.1.3 To lay down procedure for safety, security and coordinated operation of the interconnected national grids.
- 3.1.4 To lay down procedure for grant of approval to an Indian generating station, supplying electricity exclusively to neighboring country for building a dedicated transmission line for connecting to the transmission system of neighboring country.

4. Development of cross border transmission links

- 4.1 Joint Technical Tram Transmission (JTT-T)
- 4.1.1 For performing works related to development of cross-border links, the DA shall be assisted by Indian side of JTT-T.
- 4.1.2 Indian side of JTT-T shall comprise of Nodal Officer of DA as team leader and members from CTU and POSOCO. Representative from CTU shall be convener of the team from Indian side. DA may recommend names of other experts for this team. Broad functions of JTT-T would inter-alia include:
 - (i) To plan cross-border transmission system
 - (ii) Coordinate commissioning / monitoring of planned transmission system,
 - (iii) Prepare feasibility report of cross-border transmission links.
 - (iv) Facilitate development of cross-border exchange of electricity, including preparation of master plans, etc.

4.2 Planning of cross-border link

- 4.2.1 Based on the decision in JSC/JWG or proposals received by the Designated Authority seeking approval for import/export (cross border) of electricity, the Designated Authority may request JTT-T to examine the requirement of new cross border links.
- 4.2.2 The authority of the neighboring country (ANC) may also approach to the Designated Authority for the planning and development of a cross-border link. The planning and development of a cross-border link may also involve the interconnection or strengthening of national grids of respective countries. It is an exercise requiring sharing of power system data and joint power system studies for ensuring smooth, secure & integrated grid operation. Therefore, it is desirable that the proposal by the ANC is submitted after the in-principle approval of the national governments of the concerned country.
- 4.2.3 Except for the, no other entity such as prospective seller, buyer, generation plant developer, electricity trader of the neighboring country, would be eligible for approaching the Designated Authority for planning and development of a cross-border transmission link.
- 4.2.4 The proposal of the ANC shall contain the following minimum information:

- (i) Quantum of power to be traded between countries and proposed timelines for commissioning of the transmission system for import/export (cross border) of electricity;
- (ii) Whether power is to be traded from a specific existing generation plant or from the electricity grid of neighbourig country or from a new generation plant to be set up, and their timelines. Current status and adequate evidence of materialization of the new generation plant as per timelines, status of financing arrangement, statutory approvals, possession of land etc. so that suitable transmission system with timelines and downstream/upstream transmission could be planned and stranding of transmission assets or of generation capacity could be avoided;
- (iii) Details of the existing cross-border link and proposal for any additional feasible cross border links.
- (iv) The proposal shall also contain the following information:
 - a) Information about the type of terrain, forest and wildlife sanctuary, if any;
 - b) Right of way constraints;
 - c) Preferred voltage level, type and configuration of conductor
- 4.2.5 After receipt of the request, it would be examined by the Designated Authority in consultation with CTU and clarifications or any other information, if required, would be sought and thereafter, the matter will be referred to JTT-T for identifying system strengthening/augmentation of cross border link.
- 4.2.6 The cross-border transmission link and associated system in India shall be planned implemented considering the Grid Standards, Connectivity standards, Safety Regulations, and the Transmission Planning Criteria of Central Electricity Authority.
- 4.2.7 The findings of JTT-T would be forwarded by DA to Gol for taking up in JSC/JWG for discussion.
- 4.2.8 CEA and CTU shall also carry out system study to assess system strengthening requirement of inter-state as well as intra-state transmission system in India, and discuss with other stakeholder in India.
- 4.2.9 The Designated Authority/CEA will take up the planned system of cross border link (s) as well as associated strengthening required for transmission system

- in India, for discussion in the respective Regional Standing Committee on Transmission (RSCT).
- 4.2.10 After discussion of the cross-border transmission plan in JSC/JWG, a feasibility report (FR) may be prepared by JTT-T, as directed by JWG/JSC. The FR may include basic scheme, salient technical parameters and design features, equipment list, layout of substations, land requirement, tentative location, and line routing and cost estimates shall be included in the feasibility study report.
- 4.3 <u>Implementation, Monitoring & Coordination of Cross Border Transmission Link:</u>
- 4.3.1 As normal practice, countries participating in import/export (cross-border) of electricity will be responsible for implementing the cross-border transmission infrastructure in respective territory unless otherwise agreed.
- 4.3.2 The finalized Cross Border Transmission link in Indian Territory and the associated transmission system under the inter-state transmission system in the Indian grid shall be implemented as per the provisions of the Tariff Policy, as decided by Gol.
- 4.3.3 Designated Authority and Authority of the neighbouring country (ANC) shall monitor the progress of Cross Border Transmission links in the respective country so that the transmission system in India and neighbouring country is commissioned in a matching time frame by the respective implementing agency for smooth transaction/trade of electricity.
- 4.3.4 CEA shall monitor the progress of the associated transmission work in Indian grid, on monthly basis. The Designated Authority may review the progress on quarterly basis.
- 4.3.5 Any delay in commissioning of the cross-border link and associated transmission system strengthening work in respective countries shall be taken up by the Designated Authority for resolution, failing which, the matter would be escalated at the government level.
- 4.3.6 It will be the responsibility of the respective governments to ensure security and safety during construction, supervision and operation & maintenance of the cross-border transmission link.
- 4.3.7 It will be the responsibility of the respective implementing agency(ies) of respective country to obtain all statutory approvals, licenses or permits in its

- respective country and factor the same in the mutually agreed implementation schedule.
- 4.3.8 The implementing agencies of respective country shall cooperate in exchanging information, holding review meetings during the construction phase, joint testing and coordinating for the purpose of commissioning, protection coordination, and establishing reliable communication system.

4.4 Commissioning of Cross Border Transmission Link:

- 4.4.1 Prior to charging with electric potential, the cross-border link in the territory of respective country shall be approved by their agency responsible for safety of their electrical installation.
- 4.4.2 CTU and transmission implementing agency (TPA) of the neighboring countries shall carry out joint inspection and validate reports of precommissioning tests of each other's facilities and submit a joint report on the inspection to their respective national load dispatch centers that the link is ready for energization.
- 4.4.3 CTU and NLDC shall ensure that necessary protection system, data and voice communication system etc. has been commissioned before energization.
- 4.4.4 The cross-border transmission link and associated equipment would be declared commissioned after successful and continuous energization for 24 hours and power flow across the link.
- 4.4.5 Before flow of electricity on the transmission line, system operators of both the countries shall confirm the availability of Interface Meters to System Operator of respective country.
- 4.4.6 CTU and NLDC shall inform about starting and completion of the commissioning process to DA.
- 4.4.7 The intra-country transmission lines forming part of the cross-border power transfer scheme shall be declared commissioned as per rules, regulations and contractual conditions of the respective country.

5. Grid security, safety and coordination between the cross-border grid operators

5.1 Joint Operation Committee (JOC)

- 5.1.1 For discharging the function of coordination with neighbouring country related to grid security, safety and operation; DA shall be assisted by Indian side of a Joint Operation Committee (JOC) would be constituted. Indian side of the JOC shall comprise of Nodal Officer of DA as team leader and members from POSOCO and CTU. Representative from POSOCO shall be convener of the team from Indian side. JOC will have its counterpart in neighbouring country. Broad functions of JOC would inter-alia include:
 - (i) Providing power system model for joint operational studies.
 - (ii) Setting up common operation philosophy, recovery procedure, information exchange between system operators
 - (iii) Protection coordination including planning and setting of SPS, under frequency relays and df/dt, etc
 - (iv) Coordinate requirement of frequency response and balancing reserves
 - (v) Annual maintenance outage plan
 - (vi) Methodology and assumptions for calculation of TTC/ATC/TRM for cross border exchange under STOA

5.2 Operating Philosophy

5.2.1 The System Operators of the respective countries shall be jointly responsible for integrated, reliable, secure and stable operation of the cross-border interconnections.

5.3 System Security Aspects

- 5.3.1 No part of the cross border interconnection shall be deliberately isolated from the rest of the system, except,
 - under an emergency, and conditions in which such isolation would prevent a total grid collapse and / or would enable early restoration of power supply,
 - for safety of human life,
 - when serious damage to a costly equipment is imminent and such isolation would prevent it, and

- when such isolation is specifically instructed after mutual agreement of the System Operators of the two Countries through specific messages exchanged to this effect.
- 5.3.2 Restoration of the cross border interconnection shall be carried out as soon as the conditions again permit it. The restoration process shall be supervised by respective System Operator, in co-ordination with System Operator of the other country.
- 5.3.3 Any tripping, either manual or automatic, shall be communicated immediately by the System Operator detecting such event to their counterpart in the other country.
- 5.3.4 Information on above event(s) may be submitted to DA by NLDC within 48 hours.

5.4 Protection Coordination

- 5.4.1 Provision of protection and relay settings shall be coordinated periodically by the System Operators of the respective countries. These settings are to be periodically reviewed as and when network configuration changes at either end of the cross-border link, by JOC. If necessary, the respective countries may also put into place Special Protection Schemes (SPS) to take care of any contingencies.
- 5.4.2 A periodic verification and validation of protection settings / systems shall be undertaken, by the respective countries. Protocol for compliance of the verification shall also be set up.

5.5 Manpower Requirements

5.5.1 System Operators (Control Centers) and the Substation Control Rooms at either end of the cross-border interconnection shall be manned/staffed by adequate and trained manpower at all times to facilitate round the clock operation of the cross border interconnections. If necessary, in abnormal times, additional trained manpower may also to be made available by the participating countries at their respective ends.

5.6 Operational Liaison

- 5.6.1 A well-defined protocol for information exchange between the System Operators of India and of neighboring country pertaining to what has happened (like details of fault events etc.) and what is likely to happen (like prior operation protocol messages etc.) needs to be developed. Before any operation is carried out, which is likely to impact the power flow across the cross border interconnection, the details of the operation to be carried out is to be shared between both the participating countries through the respective System Operators.
- 5.6.2 A dedicated voice communication facility and exchange of data telemetry between Load Dispatch Centers of participating countries needs to provided.
- 5.6.3 A copy of the Protocol shall be submitted by NLDC to the Designated Authority.

5.7 Operating Instructions

- 5.7.1 A system of exchanging 'operational codes' to be evolved and used for exchanging any operating instructions between the System Operators of the participating countries. These are to be backed up by messages in writing.
- 5.7.2 A copy of the Codes shall be submitted by NLDC to the Designated Authority.

5.8 Reactive Power Compensation

5.8.1 Reactive Power compensation and/or other facilities shall be provided by respective countries at the point of interconnection as far as possible, including the low/high voltage systems close to the interconnection points thereby avoiding the need for exchange of Reactive Power and to maintain interconnection node voltages within the specified range.

5.9 Outage Planning

- 5.9.1 An outage plan (preferably on annual basis) for scheduled maintenance activities shall be prepared in advance through mutual consultation and agreement between System Operators of respective country. As far as system conditions permit, planned outages for maintenance are to be allowed by both the countries.
- 5.9.2 In case, due to system constraints, the planned outage has to be postponed, the same may be permitted at the first available opportunity on mutually agreed

schedule. Such instances may be reported by NLDC to DA and respective RPC within 48 hours.

5.10 Recovery Procedures

5.10.1 Detailed plans and procedures for restoration after outage of the cross border link to be finalized by the concerned System Operator in its area of jurisdiction. The procedure to be reviewed, confirmed and/or revised once every year. Mock trial runs shall be carried out at least once every six months under intimation to both the System Operators. Constraints, if any shall be detailed in advance.

5.11 Event Information

- 5.11.1 Any of the following events require reporting by the concerned System Operator to its counterpart in the other country:
 - Violation of Power System Security Standards
 - System islanding, system splits
 - Complete / partial blackout
 - Protection operations, including failure alarms
 - Power System instability
 - Tripping of elements impacting the power flow across the cross border links
 - Changes in total transfer capability over the cross border links
- 5.11.2 A written communication shall be exchanged covering the date and time of the event, location, plant/equipment affected and any other relevant detail (for example, may include Flags, facia, disturbance recorder and sequence of events recorder output etc.) as may be necessary.
- 5.11.3 Weekly report on such events shall be submitted by NLDC to DA.

5.12 Assessment of Available Margins in cross border interconnections

5.12.1 The Total Transfer Capability (TTC), Transmission Reliability Margins (TRM) and Available Transfer Capability (ATC) for the international interconnection shall be assessed by the System Operators of the participating countries and

to be exchanged by the System Operators. The TTC / TRM assessed by the System Operators are to be reviewed periodically as and when considered necessary and the revised limits are to be communicated to the counterpart immediately.

5.12.2 System Operator of India shall intimate the Capability/margins to the Designated Authority for every month and whenever revision takes place.

5.13 <u>Assistance in Emergency</u>

- 5.13.1 In case of emergency/contingency conditions, the NLDC may extend assistance, including energy assistance depending upon grid conditions. NLDC may also seek similar assistance from neighbouring country from Indian side.
- 5.13.2 Such emergency exchange of energy may be settled under a suitable commercial mechanism which is pre-agreed through regulatory mechanism, or between the two Governments.

5.14 Record of transmitted energy

5.14.1 NLDC shall submit a report to DA on monthly basis, containing information on quantum of energy flow (both bidirectional and net) through each cross-border link, maximum power flow (on 15-minute block basis) through the link, voltage profile at cross-border nodes, transmission losses (wherever possible), etc.

6. Approval to participate in Import/Export (Cross Border) of Electricity

- Any Entity proposing to import or export electricity may do so after taking approval of the Designated Authority.
- 6.2 Approval of the Designated Authority will, however, not be necessary where the import/ export is taking place under the Inter Government Agreement signed by India and neighbouring country for specific project(s). However, such participating entities would need to apply for transmission access as per CERC Regulations.

6.3 Eligibility of Applicant for Import of electricity by Indian Entities

(i) Indian entities may import electricity from the generation projects located in neighbouring country(ies) directly or through Government or

- a Government Company or a licensed trader of that country after taking approval of the Designated Authority
- (ii) The generation project(s) of the neighbouring country should have the permission to export power to India from the respective Government of the neighbouring country.
- (iii) The Applicant shall submit a copy of Power Purchase Agreement (PPA)/ or of Letter of Intent (LOI) from generator of neighbouring country, for import of such power.
- (iv) The Applicant shall submit the application to the Nodal Officer in the format enclosed at **Annex-I**.
- (v) The person making the application shall submit an affidavit stating that he/she is the authorized person to make an application on behalf of the entity and approval from his board need to be submitted.
- (vi) The Applicant shall submit an undertaking on affidavit that any change in the equity pattern (after the date of approval by the Designated Authority) of the generating company/trading licensee of the neighbouring country from where electricity to be imported, shall be intimated to the Designated Authority, within thirty (30) days of such change.

6.4 Eligibility of Applicant for Export of electricity by Indian Entities

- (i) As per clause 5.2(a) of the Guidelines, Generating Companies/
 Distribution Companies of India may export electricity generated by coal
 or renewable energy or hydropower, to Entities of neighbouring
 country(ies) directly or through trading licensee(s) of India, after taking
 approval of the Designated Authority.
- (ii) In case of electricity generated from coal based generating plants, export of electricity from India by a generating company/ distribution licensee directly or through trading licensee shall be allowed only where such electricity is generated utilizing imported coal or spot e-auction coal or coal obtained from commercial mining.
- (iii) In case of coal based generation plants, the Applicant shall submit a declaration that the electricity for export will be generated utilizing imported coal or spot e-auction coal or coal obtained from commercial mining.

- (iv) The Applicant shall submit a copy of Power Purchase Agreement (PPA)/ or of Letter of Intent (LOI) from entity of neighbouring country, for export of such power, except for those who intend to sell in other products of Indian Power Exchange(s) (i.e. other than Day Ahead Market), where establishment of one-to-one transaction is possible.
- (v) The Applicant shall submit the application to the Nodal Officer in the format enclosed as **Annex-II**.

6.5 Eligibility of Applicant for Trading in Indian Power Exchange(s)

- (i) Indian Entity(ies) trading in Day Ahead Market (DAM) in Power Exchanges will not require any approval from Designated Authority.
 - Provided that any Indian power trader, on behalf of any Entity of neighbouring country, may trade in Indian Power Exchanges, after obtaining approval from the Designated Authority, for specified quantum (MW) and duration
- (ii) Indian Entity(ies) who intend to sell in other products (i.e. other than DAM) of Indian Power Exchanges, where establishment of one-to-one transactions are possible, would be required to obtain approval from the Designated Authority as per para 6.3.3 of this Procedure.
 - Therefore, in such cases, Indian Power Exchange may ensure that the buyer from neighbouring country is able to buy only from approved exporters of India.
- (iii) Applicant should clearly mention the quantum of electricity (in MW) intended to be traded in Indian Power Exchanges and time period for which approval is required.
- (iv) Applicant should furnish PPA/LoI with the entity of neighbouring country for trade in Indian Power Exchange(s).
- (v) The application should also have consent of respective government of the neighbouring country for allowing trade of power.
- (vi) The Applicant shall submit the application to the Nodal Officer in the format enclosed as **Annex-III**.

6.6 Process for Grant of Approval

- (i) The application for approval of participating Entity(ies) shall be considered only after the receipt of the equity pattern of ownership of the said generators along with other details as may be prescribed by the Designated Authority.
- (ii) After receipt of the application, the proposal shall be examined from technical, strategic, national and economic point of view, including the generation capacity (as available) and the demand. Imports may normally be permitted only when the demand exceeds generation capacity (as available) in the country; and Exports may normally be permitted in case of generation capacity (as available) being in excess of the demand.
- (iii) In case of trading in Indian power exchanges, maximum time period of one year will allowed.
- (iv) Designated Authority will obtain concurrence from Govt. of India.
- (v) In case, there is a change in the equity pattern, the participating Entity shall intimate the Designated Authority within thirty (30) days from such change in equity pattern for continuation of the approval.
- (vi) The Designated Authority, may seek the comments from RPCs, CTU, POSOCO etc.
- (vii) The Applicant may be asked to present its case before the Designated Authority.
- (viii) The Designated Authority will send the proposal for concurrence of Govt. of India (GoI), within 60 days from the date of receipt of the final application complete in all respects.
- (ix) The approval or otherwise of DA shall be communicated to the Applicant within 15 days from final communication received from Gol.
- (x) After approval of the Designated Authority, the participating entity shall approach concerned authorities in respective country for transmission access.
- (xi) The Participating Entity granted approval by DA for a period of more than one year shall need to apply for LTA/MTOA within six(6) months of approval by DA.
- (xii) The Participating Entity granted approval by DA for a period of less than or equal to one year shall need to apply for MTOA/STOA within three(3) months of such approval by DA.

- 6.7 Obligation to Comply with Applicable Laws
- 6.7.1 Govt. of India reserves the right to import/ export electricity from/ to neighbouring countries for reason of larger policy interests.
- 6.7.2 The grant of approval for participation in Import/Export (Cross Border) of Electricity by the Designated Authority shall not entitle the applicant any rights or privileges with regard to applicable laws, rules and regulations of India.
- 6.7.3 The Participating Entity shall submit a copy of PPA to DA, within 15 days of its of signing.
- 6.7.4 The Regulations framed by Central Electricity Regulatory Commission (CERC) of India shall be binding on all the Participating entities.

7. Approval for building dedicated transmission line for connecting to the transmission system of neighbouring country

- 7.1 Eligibility Criteria & Submission of Application
- 7.1.1 A Lol / PPA should have been signed between the Applicant and importing entity of neighbouring country for supplying electricity through dedicated transmission line under the overall framework of agreements signed between India and the neighbouring country(ies).
- 7.1.2 The generating station of the Applicant from which the Dedicated Transmission Line is proposed to be built, should not be connected to any part of intra-state or inter-state grid of India.
- 7.1.3 Applicant shall submit the application to the Nodal Officer in the format enclosed as **Annex-IV**.

7.2 Process of Grant of Approval

- 7.2.1 After receipt of the application, the proposal shall be examined from technical and strategic point of view.
- 7.2.2 The Designated Authority, if required, may seek the comments of the State from where the dedicated transmission line of the Applicant is proposed to traverse.

- 7.2.3 The Applicant may be asked to present its case before the Designated Authority.
- 7.2.4 The Designated Authority will send the proposal for concurrence of Govt. of India, within 45 days from the date of receipt of the final application complete in all respects for building dedicated transmission line.
- 7.2.5 The approval or otherwise of DA shall be communicated to the Applicant within 15 days from final communication received from Gol.

7.3 Terms of The Approval

- 7.3.1 The construction of the line shall be commenced only after:
 - a) Prior approval under Section 68 of the Electricity Act 2003
 - b) Obtaining any other approval required under any other law prevailing in India.
 - c) Signing of PPA between the Applicant and importing entity of neighboring country
- 7.3.2 Applicant shall submit a copy of PPA signed between the Applicant and entity of neighboring country clearly mentioning that the cost of transmission system is inbuilt in the contract to the Nodal Officer of Designated Authority before commencement of construction of the line.
- 7.3.3 The electricity system owned by the Applicant shall not be electrically or by any other means connected with the Indian grid.
- 7.3.4 Applicant shall comply with applicable sections of the Electricity Act 2003, Regulations made thereunder and other applicable laws.
- 7.3.5 Applicant shall send monthly progress report to the Nodal Officer of Designated Authority.
- 7.3.6 Applicant shall commence construction of the Dedicated Transmission Line within three years from the date of approval of the Designated Authority, unless this term is extended by the Designated Authority.
- 7.3.7 The Applicant shall be required to obtain approval from the Designated Authority for participation in import/export (cross border) of electricity under Clause 5.0 of the Guidelines.

8. Transaction of electricity through Indian Grid under tripartite agreement

8.1 Transaction of electricity through Indian Grid is allowed as per Clause 3(i) and 8.6 of the Guidelines. The Proviso under Clause 3(i) says as follows:

"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 respective neighbouring country(ies) of the participating Entity(ies)".

The Clause 8.6 provides following:

"Where tripartite agreement is signed for transaction across India, the participating entities shall sign transmission agreement with Central Transmission Utility of India for obtaining the transmission corridor access. 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".

- 8.2 Such transactions can be allowed provided the Entity seeking such transactions has obtained either STOA/MTOA/LTA from appropriate agencies in India as per CERC regulations.
- 8.3 Procedure for Approval of DA for transaction through Indian Grid
- 8.3.1 The Indian trading licensees may apply to DA (in format given at Annex-V) giving details of intended transaction through Indian Grid such as details of selling & buying entities, copy of tripartite PPA/ PSA (Power Purchase Agreement/ Power Sale Agreement), quantum & duration of intended transaction of Electricity, or any other related information as sought by DA.
- 8.3.2 The Designated Authority will send the proposal for concurrence of Govt. of India, within 45 days from the date of receipt of the final application complete in all respects.
- 8.3.3 The approval or otherwise of DA shall be communicated to the Applicant within 15 days from final communication received from GoI.
- 8.4 <u>For transactions requiring Short Term Open Access (STOA), following</u> procedure shall apply:

- 8.4.1 The trading licensees of India can apply for STOA to NLDC for facilitating transfer of power from one neighbouring country to other neighbouring country through Indian Grid, provided it has approval from the DA (or Government of India) for such quantum of power during the period.
- 8.4.2 The grant of such transmission access shall be governed by relevant regulations of CERC.
- 8.4.3 NLDC shall inform DA regarding such transactions, on monthly basis.
- 8.5 <u>For transactions requiring Medium Term Open Access (MTOA), following procedure shall apply:</u>
- 8.5.1 The trading licensees of India can apply for MTOA to CTU for facilitating transfer of power from one neighbouring country to other neighbouring country through Indian Grid, provided it has approval from the DA (or Government of India) for such quantum of power during the period.
- 8.5.2 The grant of such transmission access shall be governed by relevant regulations of CERC.
- 8.5.3 CTU shall inform DA within seven days of grant of such transmission access.
- 8.6 For transactions requiring Long Term Access (LTA), following procedure shall apply:
- 8.6.1 The trading licensees of India can apply for LTA to CTU for facilitating transfer of power from one neighbouring country to other neighbouring country through Indian Grid, provided it has approval from the DA (or Government of India) for such quantum of power during the period.
- 8.6.2 The grant of such transmission access shall be governed by relevant regulations of CERC, and the transmission planning process of CEA which is based on Regional Standing Committees notified by GOI/CEA.
- 8.6.3 CTU shall inform DA within seven days of grant of such transmission access.

9. Office of the Designated Authority

9.1 The office of the Designated Authority shall be same as the office of Member (Power System), Central Electricity. Accordingly, address of the office would be as under:

Member (Power System)

Central Electricity Authority

3rd floor, Sewa Bhawan (North)

West Block, R.K. Puram

New Delhi – 110066, India

Ph: +91 11 26732301

Email: da-cb@gov.in

- 9.2 The office of the Designated Authority shall be open daily except on Saturdays, Sundays and Central Government holidays notified by the Government of India for Delhi offices.
- 9.3 Where the last day for doing of any action falls on a day on which the office of the Designated Authority is closed and by reason thereof the act cannot be done on that day, it may be done on the next day on which the office is open.
- 9.4 The Designated Authority may designate officers of Central Electricity Authority to assist in smooth functioning of the office. The officers of CEA will not be entitled for additional remuneration.
- 9.5 One officer of the rank of Chief Engineer of Central Electricity Authority shall be designated as Nodal officer. Unless or otherwise reviewed by the Designated Authority, Chief Engineer (PSPA-II) will be Nodal officer for the Designated Authority.
- 9.6 The address for correspondence with the Nodal officer will be as under:

Chief Engineer (PSPA-II)

Central Electricity Authority

3rd floor, Sewa Bhawan (North)

West Block, R.K. Puram

New Delhi – 110066. India

Ph: +91 11 26732325

Email: nodal-cb@gov.in

- 9.7 The Nodal officer shall carry out the following functions on behalf of Designated Authority:
- 9.7.1 shall have custody of the records the Designated Authority;
- 9.7.2 shall receive or cause to receive all applications or references pertaining to the Designated Authority and acknowledge them
- 9.7.3 make correspondence on behalf of Designated Authority
- 9.7.4 shall assist the Designated Authority in exercising delegated power by the Designated Authority;
- 9.8 In the absence of the Nodal Officer, Designated Authority may designate any other officer of Central Electricity Authority for exercising the functions of the Nodal Officer.
- 9.9 The Designated Authority may take services of such other persons and such other facilities as it may deem fit, in consultation with Ministry of Power.

10. Language for communication

- 10.1 The language for correspondence with the Designated Authority shall be English.
- 10.2 No documents or other material contained in any language other than English shall be accepted by the Designated Authority, unless the same is accompanied by a translation thereof in English.

11. Indemnification

11.1 The Designated Authority shall, in any form, not be made party to any loss, damage, disputes or problems arising out with respect to an entity approved by the Designated Authority for carrying out cross-border trade in electricity, for and against any claim, demand, liability, action, proceedings, cost or expense in favour of participating entities or any other third entity.

12. Removal of Difficulties

12.1 Should any difficulty arise in giving effect to the provisions of this CBR, the Designated Authority may relax the provisions as may appear to be necessary

for removing the difficulty so far it is not inconsistent with the provisions of the Electricity Act 2003 or Rules and Regulations framed thereunder or the Guidelines.



Annex-I

Application format for approval of Designated Authority for import of electricity by Indian Entities

- Name of Applicant
- 2) Type of entity (Trading licensee/Distribution licensee)
- 3) Validity of the trading/distribution license (Enclose a copy of license)
- 4) Corporate Identification Number (CIN) of the Applicant
- 5) Date of registration in India (Enclose Certificate of incorporation)
- 6) Address for Correspondence:
- 7) Contact Details

Name of Authorized Person:

Designation:

Phone No. (Landline):

Phone No. (Mobile):

Fax:

E-Mail:

- 8) Nature and Tenure of transaction (application period)
 - a. Nature of transaction (directly/through Government /though a Government Company /through a licensed trader of the neighbouring country)
 - b. Quantum in MW:
 - c. Time period (from date to date) :
 - d. Drawal Point in India
- 9) Details of Generating Station located outside India from where electricity is to be imported to India
 - (i) Name of Generating Company (Enclose Certificate of incorporation)
 - (ii) Authorized & paid up capital and share holding pattern of the company (Enclose Articles and Memorandum of Association of the generating company or any other document as material evidence to show compliance with the ownership condition stipulated in para 6.2 of the Guidelines)

- (iii) Name of Generating Station and Type of Generation (Hydro / coal based/ Gas Based / Renewable sources of generation)
- (iv)Location
 - a) Village/City:
 - b) State /Province/Region:
 - c) ZIP/Postal Code
 - d) Country
 - e) Longitude:
 - f) Latitude:
- (v) Capacity of the Generating Station
 - (a) Total Installed Capacity (MW):
 - (b) Number of Generating Units:
 - (c) Capacity of each unit (MW)

Unit-1 : Unit-2 :

.

- (vi) Whether the generating station is under construction? If yes. Provide present status of the generation project along with the following information supported by documentary evidence:
 - a) Commissioning Schedule of the Each Generating Unit

Unit-1:

Unit-2:

.....

- statutory approvals/ permits/ licenses/ clearances of the host country;
- c) financing plan;
- d) debt-equity ratio;
- e) status of possession of land
- f) proposed timeline for achieving project milestones.
- (vii) Cost of generation (Indian Rupees/kWh)
- 10)Whether the generating station has the permission to export power to India from the respective Government of the neighbouring country (enclose documentary proof)
- 11)Copy of PPA/LoI with the entity of neighbouring country

12)An affidavit from Distribution licensee importing power (directly of through trader), stating that demand of distribution licensee in its area exceeds the generation capacity (as available with him) during the period of import. An analysis in support of this affidavit needs to be submitted.

(Signature of authorized person)

Note: The person making the application shall submit an affidavit stating that he/she is the authorized person to make an application on behalf of the entity.



Annex-II

Application format for One-time approval of Designated Authority for Export of electricity by Indian Entities

1) Name of Applicant

2)	Type of Indian entity [Generating company/Distribution licensee/Trading				
	licensee] :				
3)	If Distribution/Trading licensee, Validity of the license (Enclose a copy of				
	license)				
4)	Corporate Identification Number (CIN) of the Applicant				
5)	Date of registration in India (Enclose Certificate of incorporation)				
6)	Address for Correspondence :				
7)	Contact Details				
	Name of Authorized Person :				
	Designation :				
Phone No. (Landline) :					
	Phone No. (Mobile):				
	Fax:				
	E-Mail:				
8)	Nature and Tenure of export (application period):				
	a. Quantum (MW)				
	b. Time Period (from date – to date)				
	c. Injection Point				
9)	Copy of PPA/LoI for with entity of neighbouring country for the power to be				
	exported				
10)In case of electricity to be exported from Generating Station located in India					

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coal/coal obtained from common mining etc.)

directly or through trading licensee or distribution licensee :

(ii) Type of Generation (Hydro / coal based/ Renewable

(iii) Type and source of fuel (Linkage coal/Imported coal/spot-eAuctioned

(i) Name of Generating Station:

sources/Other(specify))

(iv)Location

a)	Village/Town/City:				
b)	State :				
c)	Postal Code				
d)	Longitude :				
e)	Latitude :				
Capacity of the General					

- (v) nerating Station
 - (a) Total Installed Capacity (MW):
 - (b) Number of Generating Units:
 - (c) Capacity of each unit (MW)

Unit-1: Unit-2:

(vi) whether the generating station is under construction? If yes. Provide present status of the generation project along with the following information supported by documentary evidence:

Commissioning Schedule of the Each Generating Unit

Unit-1: Unit-2:

.....

- statutory approvals/ permits/ licenses/ clearances of the host country;
- financing plan;
- debt/equity ratio
- status of possession of land e)
- f) proposed timeline for achieving project milestones.
- (vii) Details of connections with grid:
 - a. Whether connected to ISTS/STU network
 - b. Point of interconnection with the grid
 - c. Voltage level of connectivity lines
 - d. If transmission system is under construction, commissioning schedule of transmission elements

- (viii) In case of embedded generating station in a state, submit no objection certificate (NOC) from Discoms/STU of the state
- (ix) Details of all the Power Purchase Agreements mentioning duration, quantum, buyer etc with copies.
- (x) An affidavit stating that power intended to be exported is available with them and not under dispute

11)In case of DISCOMS:

- a. Maximum Demand of power in MW during application period, month wise
- b. Availability of power in MW (own generation + PPA+ Allocations+ other contracts) during application period (Enclose relevant documents)
- c. Enclose Monthly Power supply position of recent one year
- d. An affidavit stating that DISCOM has surplus capacity during application period

(Signature of authorized person)

Note: The person making the application shall submit an affidavit stating that he/she is the authorized person to make an application on behalf of the entity.

Annex-III

Application format for approval of Designated Authority for participation in Indian Power exchanges

- Name of Trader Applicant
- 2) Validity of the trading license (Enclose a copy of license)
- 3) Corporate Identification Number (CIN) of the Applicant
- 4) Date of registration in India (Enclose Certificate of incorporation)
- 5) Address for Correspondence:
- 6) Contact Details

Name of Authorized Person:

Designation:

Phone No. (Landline):

Phone No. (Mobile):

Fax:

E-Mail:

- 7) For export of electricity to India from neighbouring country through Indian Trading licensee in Indian Power exchange(s)
 - (i) Injection point Country
 - (ii) Quantum in MW:
 - (iii) Time period (from date to date)
 - (iv) Name of Generating Company (Enclose Certificate of incorporation)
 - (v) Authorized & paid up capital and share holding pattern of the company (Enclose Articles and Memorandum of Association of the generating company or any other document as material evidence to show compliance with the ownership condition stipulated in para 6.2 of the Guidelines)
 - (vi)Name of Generating Station and Type of Generation (Hydro / coal based/ Gas Based / Renewable sources of generation)
 - (vii) Location
 - g) Village/City:
 - h) State /Province/Region:
 - i) ZIP/Postal Code
 - j) Country

	,	Latitude :	
(viii)	Capacity of the Generating Static	n
	(a)	Total Installed Capacity (MW):	
	(b)	Number of Generating Units :	
	(c)	Capacity of each unit (MW)	
		Unit-1:	
		Unit-2:	

- (ix) Whether the generating station is under construction? If yes. Provide present status of the generation project along with the following information supported by documentary evidence:
 - g) Commissioning Schedule of the Each Generating Unit

Unit-1 : Unit-2 :

.....

- h) statutory approvals/ permits/ licenses/ clearances of the host country;
- i) financing plan;
- j) debt-equity ratio;
- k) status of possession of land
- I) proposed timeline for achieving project milestones.
- (x) Cost of generation (Indian Rupees/kWh)
- (xi) Whether the generating station has the permission to export power to India from the respective Government of the neighbouring country (enclose documentary proof)
- (xii) Copy of PPA/LoI with the entity of neighbouring country
- 8) For import of electricity from India through Indian Trading licensee in Indian Power exchange(s)
 - a. Copy of PPA/LoI with the entity of neighbouring country
 - b. Drawal point Country
 - c. Quantum in MW:

d. Time period (from date – to date)

(Signature of authorized person)

Note: The person making the application shall submit an affidavit stating that he/she is the authorized person to make an application on behalf of the entity.



Annex-IV

Approval for building dedicated transmission line for connecting to the transmission system of neighbouring country

l.	Name the Applicant	:
II.	Name of Power Plant	:
III.	Address for Correspondence	:
IV.	Contact Details	
	(a) Prime Contact Person	
	Designation	
	Phone No. (Landline)	
	Phone No. (Mobile)	:
	Fax	:
	E-Mail	
	(b) Alternate Contact Person	:
	Designation	
	Phone No. (Landline)	:
	Phone No. (Mobile)	:
	Fax	
	E-Mail	:
V.	Details of Generating Station	
	(i) Location	
	(a) Village/Town :	
	(b) District :	
	(c) State :	
	(d) Longitude :	
	(e) Latitude :	
	(ii) Capacity of the Generating Station	
	(a) Total Installed Capacity (MW)	:
	(b) Number of Generating Units	:
	(c) Capacity of each unit (MW)	
	Unit-1 :	
	Unit-2 :	

(d) Generation Voltage :	
(e) Step-up Voltage :	
VI. Source of Fuel & type :	
VII. Commissioning Schedule of the Each Gene	erating Unit
Unit-1 :	
Unit-2 :	
VIII. Source of Power for pre-commissioning act	ivities :
IX. Details of Dedicated Transmission Line with	nin Indian Territory
(a) Type of Transmission Link	

- Over head / under ground/ combination of both i. AC/HVDC
- (b) Voltage level

ii.

- (c) Point of connection with the neighbouring country grid
- (d) Line length in km (upto Indian border):
- (e) Total line length in km (from generating station to point of connection with the neighbouring country grid)
- (f) Coordinates of crossing point at the Indian Border:
- (g) In case of Over head Transmission System,
 - i. No. of circuits
 - ii. Conductor configuration
 - iii. Type of Conductor
 - ίV. Type of transmission tower:
- (h) Tentative route up to Indian Border
- (i) Commissioning Schedule of the Dedicated Transmission Line
- X. Reasons for opting Dedicated Transmission Line:
- XI. Copies of Lol / PPA signed between the Applicant and importing entity of neighboring country
- XII. An affidavit stating that this generating station of the applicant is not connected with any point of Indian intra-state/inter-state grid.

(Signature of authorized person)

Note: The person making the application shall submit an affidavit stating that he/she is the authorized person to make an application on behalf of the entity.

Annex-V

Application format for approval of Designated Authority for transaction of electricity through Indian Grid under tripartite agreement

- 1) Name of Trader Applicant
- 2) Validity of the trading license (Enclose a copy of license)
- 3) Corporate Identification Number (CIN) of the Applicant
- 4) Date of registration in India (Enclose Certificate of incorporation)
- 5) Address for Correspondence:
- 6) Contact Details

Name of Authorised Person:

Designation:

Phone No. (Landline):

Phone No. (Mobile):

Fax:

E-Mail:

- 7) Details of intended transaction
 - (i) Selling entity with Country
 - (ii) Injection point in Indian grid
 - (iii) Buying entity with country:
 - (iv) Drawal point in Indian grid
 - (v) Quantum in MW
 - (vi) Duration of transaction (from date to date)
 - (vii) Enclose copy of tripartite PPA/PSA
- 8) Any other relevant information

(Signature of authorized person)

Note: The person making the application shall submit an affidavit stating that he/she is the authorized person to make an application on behalf of the entity.