DRAFT PROCEDURE FOR GRANT OF CONNECTIVITY TO INTRA-STATE TRANSMISSION SYSTEM

1. Outline

1.1 This Procedure is issued in accordance with Regulation 17 of Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulations, 2024. All applicants shall abide by the provisions of the Regulations, as amended from time to time, and the procedures laid down hereunder.

1.2 This Procedure shall apply to the Applications made for Grant of Connectivity to the Intra State transmission system of the STU / Transmission licensee for 33 kV voltage level and above from the date of notification by the Commission. This procedure shall be read with the provisions of these Regulations, Electricity Act, 2003 and prevailing RERC Regulations / Orders.

2. Applicability

This Procedure shall apply to Users connected to State Transmission System (STS) orseeking to establish new or modified arrangement of connection to STS, that includes:

- State owned/Central SectorGenerating Companies
- Independent Power Producers (IPPs)
- Captive Generating Plants
- Energy Storage Systems (PSP & BESS)
- Waste-to-Energy Power Projects
- Wind-Solar Hybrid Power Projects
- Green Hydrogen Projects
- Intra-State/Inter-StateTransmission Licensees
- Distribution Licensees(other than Rajasthan Distribution Companies)
- Renewable Energy (RE) Generators
- RE Park Developers
- Open Access Customers or Bulk Consumers

All applicants whose electrical plants are connected to the grid at voltage levels of 33 kV and above must follow this procedure.

3. Eligibility:

3.1 After coming into force of this Procedure, following shall be required to apply for connectivity in accordance to the provisions of these Procedures:

(i) All Users including generating company, IPP, captive generating plant, Energy Storage Systems (PSP & BESS),Waste-to-Energy Power Projects, Wind-Solar Hybrid Power Projects, Green Hydrogen Projects ,transmission licensee, distribution licensee (other than Rajasthan DISCOMs), RE Generator, RE park developer, open access customer or bulk consumer who desires to seek connectivity with the State Transmission System.

(ii) Existing connected generators or pooling stations or RE park developers who desires to augment the generation capacity.

(iii) Existing bulk consumer(s) who desire(s) to change the voltage level due to increase in their Contract Demand of their existing connectivity at the same GSS.

(iv) Existing connected generators or pooling stations or RE park developers or licensees or bulk consumers who desires to modify arrangement of connection.

3.2 The users, already exist connected to the Intra-STS before coming into force of these Regulations, shall not be required to make fresh application for connectivity for the same capacity and they shall be deemed to have already been granted connectivity(ies). However the connection agreement(s) shall be signed under clause 6 of this procedure if not signed earlier.

Provided that in case of extension or modification of capacity of generating plant/electrical plant or contracted load or augmentation of substation/electric line, as the case may be, such user shall be required to make a fresh application for connectivity according to this procedure.

4. Application for Connectivity

(a) Applications for Connectivity under this Procedure shall be processed in three stages:

- Stage-I – Issuance of intimation for grant of Connectivity.
- Stage-II- Issuance of final permission for interconnection.
- Stage-III- Execution of Connection Agreement.

(b) The application for seeking Stage-I connectivity to STS shall be made to RVPN in prescribed application format (**ANNEXURE-1**or **ANNEXURE-2**)and shall be submitted alongwith documents mentioned in the application format at the address given below:

The Chief Engineer (PP&D)
Rajasthan Rajya Vidyut Prasaran Nigam,
Vidyut Bhawan, Janpath,
Jaipur-302005

(c) The application for Stage-I connectivity shall contain details such as proposed geographical location of the electrical plant, quantum of power to be injected/drawn, name of RVPN's GSS where connectivity is desired, voltage level at which connectivity is desired, expected timeline for completion of the project. The application shall be duly signed by the authorized representative and shall be complete with all the enclosures.

(d) As per RERC (Terms and Conditions for Tariff determination from Renewable Energy Sources) Regulations, 2020', the power injection into the State grid shall be limited to the capacity indicated below:

Sr. No.	**Total Power fed through afeeder (in MW)**					
		11 kV	**33 kV**	**132 kV**	**220 kV**	**400 kV**
1	*ACSR Racoon*	*1 MW*	*2 MW*	-	-	-
2	*ACSR Dog*	*2 MW*	*6 MW*	-	-	-
3	*ACSR Panther*	*Above 2MW & upto 6 MW*	*Above 6MW & upto 15 MW*	*Above 15MW &upto70 MW*	-	-
4	*ACSR Zebra*	-	-	-	*Above 70MW & upto 200 MW*	-
5	*ACSR Single Moose*	-	-	-	*Above 200MW & upto 225 MW*	-
6	*ACSR Twin Moose*	-	-	-	-	*Above 225MW & upto 800 MW*
7	*ACSR Quad Moose*	-	-	-	-	*Above 800MW & upto 1600 MW*
8	*AL 59*	-	-	*Above 70 MW & upto 120MW*	*Above 120 MW & upto 300MW*	*Above 300 MW & upto 1250MW*
9	*HTLS*	-	-	*Above*	*Above*	*Above*

				70 MW & upto 150MW	*150MW & upto 300MW*	*300 MW & upto 1800MW*

(e) In cases where once an application has been filed and thereafter there has been any material change in the location of the applicant or change by more than 10% in the quantum of power to be injected, the applicant shall make a fresh application, which shall be considered in accordance with these procedures.

(f) RE generators shall have to get their projects registered in Rajasthan Renewable Energy Corporation (RREC) in accordance to the provisions of GoR Policies before seeking connectivity to State Transmission System.

(g) Following shall be enclosed with the application:

(i) Non-refundable application fee specified hereunder:

S.No	Quantum of Power to be injected to intra-state Transmission System	Application fee (Rs. in lakh)
1	Up to 30 MW	1
2	More than 30 MW and up to 100 MW	2
3	More than 100 MW and up to 500 MW	3
4	More than 500 MW and up to 1000MW	6
5	More than 1000MW	9

The application fee shall be payable in the name of Sr. Accounts Officer (EA & Cash), RVPNL, Jaipur through demand draft or electronically through RTGS/NEFT as per the details given below or as may be notified by STU from time to time:

(a) Payee:
(b) Name of Bank: SBI Bank
(c) Branch:
(d) IFSC Code:
(e) A/C No.:

The payment slip comprising of applicant name along with UTR Number must be attached with the application. GST number of applicant is mandatory to file the application.

(ii) A copy of the Board resolution or authorization letter in favour of the signatory who submits the application.

(iii) In case of Renewable generators/park developers copy of letter for Registration of project in Rajasthan Renewable Energy Corporation (RREC).

(iv) In case of Conventional / Non-RE generators/ licensee/ open access consumers/bulk consumers, following approval(s)/permission(s)/no objection certificate(s) issued by competent authority under the law shall be enclosed:

a) Site identification and land acquisition details
b) Environmental clearance
c) Forest Clearance
d) Order for supply of plant and machinery or award of EPS Contract
e) Details/agreements for Fuel arrangements.
f) Details/agreements for Water arrangements.
g) Details of agreement(s) for supply of power
h) Commissioning Schedule/Useful life of generating station.

(v) Generators will have to provide machine data in the Format at **ANNEXURE-5**

(vi) Any other relevant information required by STU or to be provided by the applicant.

(h) After scrutiny of the application and carrying out required system studies for ascertaining the capacity and facility available for connectivity, connectivity offer/ intimation for grant of Connectivity shall be issued by CE(PP&D), RVPN in the format prescribed at **ANNEXURE-3** wherein the name of the sub-station or switchyard where connectivity is to be granted alongwith other interconnection details shall be specified. It shall also specify the broad design features of the dedicated transmission line and the timeframe for completion of the dedicated transmission line and bay for interconnection. In case, augmentation/system strengthening is required before grant of connectivity, expected timeline for completion of such augmentation/system strengthening and expected date from which connectivity shall be granted will be specifically mentioned.

(i) The connectivity offer/ intimation for grant of Connectivity shall be conveyed within 60 days from the last day of the month in which application is received by CE(PP&D) RVPN in the prescribed format and complete in all respect.

(j) An application not found in conformity with the formats, appended with this

Procedure, shall be considered incomplete. Shortcoming observed in the application shall be conveyed only once by the STU. Applicant shall have to attend the observations and submit the revised application/ shortfall documents as desired within 30 days. In case shortcomings of the application are not removed within 30 days, such application shall be sent back in original to the applicant by assigning reasons and application fees forfeited

(k) After receiving connectivity offer/ intimation for grant of Connectivity, the application for seeking Stage-II connectivity to STS shall be made to RVPN in prescribed application format (**ANNEXURE-1/2**) and shall be submitted at the address given below:

The Chief Engineer (NPP&RA)
Rajasthan Rajya Vidyut Prasaran Nigam,
Vidyut Bhawan, Janpath,
Jaipur-302005

(l) Following shall be enclosed with the application:

i. Copy of connectivity offer/ intimation for grant of Connectivity issued by CE (PP&D) RVPN
ii. Copy of letter for Registration of project in Rajasthan Renewable Energy Corporation (RREC) in case of Renewable generators/park developers
iii. Copy of final approval issued by RREC as per provisions of prevailing GoR policy for setting up of the project in case of Renewable generators, if applicable.
iv. Copy of Letter of Award (LOA) or Power Purchase Agreement (PPA) or Power Supply Agreement (PSA) in case of generators other than captive generators.

(m) After scrutiny of the application and verification of all the requisite documents, applicant shall be requested to deposit grid connectivity charges and/or Bank Guarantee as per provisions of State policy/ Regulations. In case where augmentation of the STU/Transmission Licensee's sub-station is required for connectivity, the applicant shall also bear the cost for such augmentation.

(n) After deposition of grid connectivity charges and/or cost of augmentation and/or acceptance of Bank Guarantee as applicable, approval for execution of Connection Agreement shall be conveyed by CE (NPP&RA) RVPN.

5. Grid Connectivity Charges and Bank Guarantee

Applicant seeking connectivity with STU shall be required to deposit grid connectivity charges and Bank Guarantee for creation of proper facility for receiving power at the receiving sub-station of RVPN as under:

(i) The applicant shall be required to deposit non-refundable grid connectivity charges of **Rs. 2.5 lakh/MW or actual bay cost whichever is higher** or as finalized by RERC from time to time for which maximum capacity for injection to be considered for various voltage level be as under:

Sr.No.	Voltage level	Capacity
1	33kV	15MW
2	132kV	50MW
3	220kV	132MW
4	400kV	515MW

(ii) The applicant shall also be required to submit a Bank Guarantee equivalent the cost of bay in prescribed format **(ANNEXURE-4)** along with an undertaking to use the system within prescribed period. In case, there is any delay on account of applicant in utilization of system, a penalty @ 12% per annum plus tax for the period of delay on the amount of bank guarantee subject to maximum of BG amount will be levied by STU. The Bank Guarantee shall be returned to the applicant after connectivity on depositing amount of penalty, if any on account of delay in the utilization of the system. In case, even after levy of maximum penalty, the system is not utilized, the approval for connectivity shall be withdrawn after notice of 30 days time period and charges of line bay etc shall be forfeited and BG shall be en-cashed.

6. Connection Agreement

6.1 After issuance of approval for execution of Connection Agreement, Connection Agreement shall be executed between the applicant and State Transmission Utility or state transmission licensee owning the sub-station as identified by STU where connectivity is being granted.

Provided that in case connectivity to an applicant is granted to the State Transmission System of a state transmission licensee other than the State Transmission Utility, a tripartite agreement shall be signed between the applicant, the State Transmission Utility and such state transmission licensee. The stamp duty for the Connection Agreement shall be borne by the applicant.

Provided further that in case connectivity to a RE generator is granted to the State Transmission System through common pooling station, a tripartite agreement shall be

signed between the applicant, the State Transmission Utility and the owner of the pooling station.

6.2 The connection agreement for RE projects shall be in such form and format as provided in format **ANNEXURE-6.**

The format of connection agreement in case of intra-State transmission licensee selected under section 63 of the Act, if not provided in TBCB documents shall be as per **ANNEXURE-7**

The format of connection agreement with Deemed licensee shall be as per **ANNEXURE-8**.

6.3 Any non-material change after signing of connection agreement shall be incorporated on the request of the applicant/STU through an amendment to the connection agreement in such form and manner relevant for compatible absorption of such change in the agreement without altering the intent and basic structure of the connection agreement.

6.4 Notwithstanding any provision made in this procedure, no connectivity with the Intra-STS shall exist physically unless the connection agreement is signed between the parties.

7. Operation & Maintenance Agreement

Transmission Licensee have to sign Operation & Maintenance (O&M) Agreement for maintenance of their bays, wherever the transformers and lines of other Transmission Licensee are getting terminated at RVPN's GSS. Format as per **ANNEXURE-9**

8. Conditions for Connectivity

(a) For connectivity, transmission line and other required system from the applicant's location up to the point of connection of STU/ transmission licensee's substation shall be under the scope of the applicant.

(b) The grant of connectivity 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.

(c) The Power Evacuation approval granted by RVPN as per the grid connectivity procedure, will be utilized by the applicant within 3 years from the date of approval, otherwise power evacuation approval shall be cancelled and may be allocated to other Developer/Power Producers on priority basis.

(d) After grant of connectivity, in case the Power Producer injects amount of power which is more than the approved/contracted power into the Grid, then excess power will not be adjusted/accounted for. Such power plant will be liable to be disconnected from the

intra-State Transmission system after notice of 30 days time period by State Transmission Utility.

(e) Grid connectivity is not transferrable. It is applicable only to the applicant.

(f) Synchro phasor measurement using Phasor Measurement Units along with fiber optic connectivity, Global Positioning System Receiver and communication equipment shall be provided for monitoring the entire interconnected grid on real time basis at substations of 400 kV and above voltage level, switchyard of generating stations at 220 kV and above voltage level, Alternating Current side of converter bays of High Voltage Direct Current stations and pooling point of renewable energy generating stations of fifty mega watt and more and Battery Energy Storage System of fifty mega watt and more, as per Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022.

(g) RE plant shall submit the model and the studies carried out, the RE generator shall take advance action for implementation of the required corrective measures towards compliance with CEA Regulations on Technical Standards for Connectivity to the Grid, before physical interconnection with Grid, failing which physical interconnection may not be permitted, as per the report of the working group in respect of data submission procedure and verification of compliance to CEA regulations on Technical Standards for Connectivity to the Grid by RE generators.

(h) First Time Charging (FTC) documents as per list enclosed **ANNEXURE-10** needed to be furnished at least 10 days in advance to the O/o Superintending Engineer (SOLD) before the schedule date of commissioning of Wind/Solar Generators.

(i) ABT meter need to be integrated with STOMS server at SLDC, Heerapura by each RE developer / Open Access Consumers / EHV Consumer. The detailed procedure / guidelines for Integration of new ABT Meters is available at https://sldc.rajasthan.gov.in/rrvpnl/downloads.

(j) Data Telemetry needs to be provided at SLDC, Heerapura by each RE developer / Open Access Consumers / EHV Consumer. The detailed procedure / guideline for providing telemetry data is available at https://sldc.rajasthan.gov.in/rrvpnl/downloads

9. Modification/Change in arrangement of Connectivity

(a) Wherein an already connected generating station or pooling station desires to increase quantum or connect a new generator to their dedicated transmission infrastructure, then the already connected generator or pooling station with State Transmission

System shall apply for connectivity of the new generator/ increase in quantum of power to be injected.

(b) In case connectivity has been allowed at a particular system voltage (say 33kV), and Power Producer at a later date wants to supply the power on higher voltage (say 132kV), the requisite modification, like addition of line bay on higher voltage, interconnection with main bus etc. shall be done by RVPN as a deposit work on behalf of the Power Producer subject to its feasibility.

(c) In case a Power Producer/Bulk Consumer initially connects its feeder to DISCOM's substation or RVPN's GSS and later on desires to connect the feeder to RVPN's Sub-station or RVPN's alternate GSS, the additional line shall be constructed by Power Producer and the addition of line bay in RVPN substation shall be done by RVPN as deposit work on behalf of Power Producer.

(d) First Time Charging (FTC) documents as per list enclosed **ANNEXURE-10** needed to be furnished at least 10 days in advance to the O/o Superintending Engineer (SOLD) before addition of capacity at existing pooling station.

10. Sharing of Connectivity and Dedicated Transmission line

10.1 The applicant shall develop the Dedicated Transmission Line from its location up to the point of connection of STU/ transmission licensee's substation irrespective of the quantum of Connectivity applied for. In case the applicant is not able to fully utilize the Dedicated Transmission Line and bay(s), it may share the same with other connectivity applicant(s) with a view to ensuring optimum utilization of the transmission system, after consent from STU.

10.2 Any capital expenditure on the augmentation of the pooling station(s) of the Connectivity grantee required for sharing the dedicated transmission infrastructure shall be mutually agreed between the sharing parties. The Connectivity grantee shall provide adequate capacity in the generator pooling station for peak power evacuation of the sharing entity(ies).

10.3 Operation and Maintenance expenses and Transmission Losses from the pooling station of the Connectivity grantee upto the InSTS connection point shall be shared in proportion to the capacity of the renewable projects sharing the transmission infrastructure

11. Dispute Resolution Mechanism

All differences and admitted disputes between the parties arising out of or in connection with this procedure shall be mutually discussed and amicably resolved within 90 days.

In the event that parties are unable to resolve any dispute, controversy or claims relating to arising under this procedure as stated above, the same shall be dealt as per the provisions of Electricity Act 2003 and Hon'ble RERC shall adjudicate such dispute and if required refer the same to arbitration.

12. Relinquishment of connectivity

An applicant or intra-State transmission licensee or users granted connectivity may relinquish his rights and obligations after connectivity. In such a case, the relinquished connectivity will be provided to other applicant.

13. General

13.1 The applicant or intra-state transmission licensee (other than STU) shall abide by the provisions as provided in connection agreement read with RERC Connectivity Procedure for Grant of Connectivity to Intra-STS. Regulations, CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007, other regulations of Central Electricity Authority, REGC /IEGC and other relevant regulations, as amended from time to time.

13.2 In case of any inconsistency in this procedure with RERC Regulations, the latter shall prevail.

13.3 All entries in the relevant formats made under this procedure shall be duly filled up by the applicant. In case, any information is not relevant, the same shall be marked nil or not applicable.

13.4 STU may modify formats made under this procedure as the need be under intimation to the Commission. These formats shall also be kept on web-site.

13.5 The applicant shall keep STU and SLDC indemnified at all times and shall undertake to indemnify, defend and keep STU and SLDC harmless from any and all damages, losses, claims and actions including those relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from such grant of connectivity.

13.6 All costs/expenses/charges associated with the application, including bank draft, bank guarantee etc. shall be borne by the applicant.

ANNEXURE-1

APPLICATIONFORGRANTOFCONNECTIVITY

(APPLICABLE IN CASE OF GRANT OF CONNECTIVITY TO GENERATING STATION)

(to be submitted by the applicant to STU)

Application no. and date	*<self generated by the applicant>*

A. Details of the applicant

1	Name of the applicant	*<name of generating company>*				
2	Address of registered office(ifany)					
3	Address for correspondence					
4	Contact detail(s)					
	(a)Prime contact person					
	Designation					
	Phone no. (with STD code)	Landline		Fax		
	Mobile					
	E-mail					
	(b)Alternate contact person					
	Designation					
	Phone no. (with STD code)	Landline		Fax		
	Mobile					
	E-mail					
5	Status of the applicant	*<generator(other than captive)/captivegenerator>*				

B. Details of connectivity requirement

1	Connection details	
	Capacity(MW) for which connectivity is required	
	Voltage Level (kV) at which connectivity is required	
	Date from which connectivity is required	

2	Nearest765/400/220/132kVGrid sub-station(s)	
	(a)GridSub-station-1	
	Name of sub-station	
	Voltage level(s)available (kV)	
	Name of licensee (Owner)	
	Distance(Km)	
	(b)GridSub-station-2	
	Name of Grid sub-station	
	Voltage level(s)available (kV)	
	Name of licensee (Owner)	
	Distance (Km)	

C. Details of existing connectivity

1	Existing connectivity, if any	
	Date of connectivity	
	Capacity (MW)	
	Name of 765/400/220/132 Grid sub-station	
	Voltage level (kV)	
	Name of licensee (Owner)	
	Distance (Km)	

D. Details of project for which connectivity is sought)

(enclose duly signed supporting documents as considered appropriate)

1	Name of generating station	
2	Whether new or existing generating station	
3	Entity which owns, operates and maintains	
4	Is it an identified project of CEA?	*<yes/no>*
5	Geographical location of generating station	
	Nearest village/town	
	District	
	State	
	Latitude	
	Longitude	
6	Existing unit(s)(if any)	
	Details of units	*<unit-wise break up of installed capacity(MW)>*

	Details of re-rated units	*<unit-wise break up of re-rated capacity(MW)>*
7	Additional unit(s)	
	Details of units	*<unit-wise breakup of installed capacity(MW)>*
	Original date of commercial operation	*<unit-wise breakup>*
	Revise date of commercial operation, if any	*<unit-wise breakup>*
8a	Type of prime mover(fuel base)	*<hydro turbine/steam turbine(coal/lignite/multi fuel)/gas turbine/diesel engine/specify ,if any other>*
8b	Type of RE Generator/Park	*<Wind/Solar/Hybrid/Biomass/WtE/specify, if any other>*
9	Generation voltage(kV)	
10	Step-up voltage (kV)	
11	Existing dedicated transmission line(if any)	
	Single circuit or double circuit	
	Voltage level(kV)	
	Length (km)	
	Conductor	
12	Information specific to captive generating plant	
	Generating unit(s) identified for captive use	
	Generating unit(s) not identified for captive use	
13	Information specific to RE power generating stations	
	Name of pooling station, if any	
	Whether new or existing pooling station	
	Voltage level(s) available(kV)	
	Details of Generators/ Machines/ Units	

E. Status of project related activities

(enclose duly signed supporting documents as per clause 4 (d) of procedure)

1) Site identification and land acquisition
2) Environmental clearance
3) Forest clearance
4) Fuel arrangements
5) Water linkage

6) Order for supply of plant and machinery or award of EPS contract
7) Dedicated transmission line
8) Useful life of generating station
9) Commissioning schedule
10) Commercial arrangement(s) for purchase of electricity
11) Information specific to captive generating plant.
12) Information specific to plant generating Renewable power
13) Other clearances
14) Any other relevant information required by STU or to be provided by the applicant.

In addition to above, the applicant shall also submit concise description of each completed activities with regard to project planning, designing and pre-construction activities (including all licenses, authorizations, permissions and clearances as required from time to time under the law).

F. Details of application fees

1	Non-refundable application fees				
	Name of Bank & branch	Details of instrument(Draft/E-transaction)			Amount(Rs.)
		Type of instrument	Instrument no.	Date	

G. Undertaking(s)

I undertake that all the activities of project planning, designing and pre-construction activities (including all licenses, authorizations, permissions and clearances as required from time to time under the law) are completed. All the details given in support of specific actions taken for project preparatory activities (as given under "E") above) are true and correct and nothing material has been concealed thereof.

I further undertake that the technical standards for connectivity specified by CEA in Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 have been complied with.

Place: (Signature)
Date: Authorized signatory of the applicant
Name:
Designation:
Seal:

Enclosures:

1. Non-refundableapplicationfees(demanddraftorpaymentslipincaseofpaymentthroughRTGS)
2. Documents in support of information mentioned in the format.
3. Documents in support of existing connectivity with Intra-STS (including detailed description of 'electricity systems') along with single line diagrams (if existing user of Intra-STS)
4. If any other

ANNEXURE-2

APPLICATION FOR GRANT OF CONNECTIVITY

(APPLICABLE IN CASE OF GRANT OF CONNECTIVITY TO A LICENSEE (other than Rajasthan DISCOMs) OR AN OPEN ACCESS CONSUMER/ BULK CONSUMER)
(to be submitted by the applicant to STU)

Application no. and date	*<self generated by the applicant>*

A. Details of the applicant

1	Name of the applicant				
2	Address of registered office(if any)				
3	Address for correspondence				
4	Contact detail(s)				
	(a)Prime contact person				
	Designation				
	Phone no.(with STD code)	Landline		Fax	
	Mobile				
	E-mail				
	(b)Alternate contact person				
	Designation				
	Phone no.(with STD code)	Landline		Fax	
	Mobile				
	E-mail				
5	Status of the applicant	*<distribution licensee/ bulk consumer/ open access consumer>*			

B. Details of connectivity requirement

1	Connection details	
	Capacity(MW)for which connectivity is required	
	Voltage level (kV) at which connectivity is required	
	Date from which connectivity is required	
2	Nearest 765/400/220/132kVGrid sub-station(s)	

	(a)GridSub-station-1	
	Name of Grid sub-station	
	Voltage level(s)available (kV)	
	Name of licensee (Owner)	
	Distance(Km)	
	(b)GridSub-station-2	
	Name of sub-station	
	Voltage level(s)available (kV)	
	Name of licensee (Owner)	
	Distance(Km)	

C. Detailsofexistingconnectivity(notapplicabletodistributionlicensee)

1	Existing connectivity, if any	
	Date of connectivity	
	Capacity(MW)	
	Nameof765/400/220/132Gridsub-station	
	Voltage level(kV)	
	Name of licensee(Owner)	
	Distance (Km)	

D. Details of project(for which connectivity is sought)

(enclose duly signed supporting documents as considered appropriate)

	In case applicant is a distribution licensee (in case if applicable)		
1	Name of sub-station		
2	Whether existing or proposed sub-station		
3	Geographical location of sub-station		
	Nearest village/town		
	District		
	Latitude		
	Longitude		
4	Distribution transformation capacity(MVA)		
	Existing, if any	*<voltage ratio-wise break up(kV)->*	
	Additional	*<voltage-wise break up ratio(kV)>*	
5	Electric line for connecting distribution sub-station with Intra-STS	Existing, if any	Proposed
	Name		
	Single circuit or double circuit		

	Voltage level(kV)		
	Length (km)		
	Conductor		
6	Present load of s/s (in case of existing s/s)	*<at33kVfor33kV works >*	
7	Expected growth in load in subsequent five years	*<year wise>*	
8	Otherdistributionsub-station(s)fromwhereloadwillbereleased/transferredtoproposedsub-station		
	Name of s/s		
	Name of licensee(Owner)		
	Capacity(MVA)		
	Present load(Amp)	*<at33kVfor33kV works >*	
	Load transferred to proposed s/s (Amp)	*<on33kVfor33kVworks>*	
9	Existing grid/feeding primary sub-station		
	Name of Grid sub-station		
	Name of licensee(Owner)		
	Transformation capacity(MVA)		
10	Commissioning schedule		
	Date of start of construction		
	Original date of commercial operation		
	Revised date of commercial operation, if any		

Or

	In case applicant is a open access consumer/bulk consumer (in case if applicable)	
1	Extent of use of transmission system	
	Existing demand	
	Additional demand	
	Total demand to be met	
2	Expected growth in demand in subsequent five years	*<year wise>*
3	Maximum quantum (MW)of power assigned from its captive generating plant	
4	Back up supply from distribution licensee of its area	
	Name of distribution licensee	
	Contracted load	
	Date of contract	

5	Commercial arrangement(s) for purchase of electricity from any source other than local discom	
	Name of supplier	
	Contracted load	
	Duration of contract	
6	Geographical location of premises (i.e. industrial establishment)	
	Nearest village/town	
	District	
	Latitude	
	Longitude	

E. Status of project related activities

(enclose duly signed supporting documents as per clause 4(d) of procedure)

1. Site identification and land acquisition
2. Environmental clearance
3. Forest clearance
4. Order for supply of plant and machinery or award of EPS contract
5. Usefullifeofpremises(i.e.commercialorindustrialestablishment)ofcaptiveuseroropenaccess consumer
6. Commissioning schedule
7. Other clearances
8. AnyotherrelevantinformationrequiredbySTUortobeprovidedbytheapplicant

In addition to above, the applicant shall also submit concise description of each completed activities with regard to project planning, designing and pre-construction activities (including all licenses, authorizations, permissions and clearances as required from time to time under the law).

F. Details of application fees

1	Non-refundable application fees				
	Name of Bank & branch	Details of instrument (Draft/E-transaction)			Amount(Rs.)
		Type of instrument	Instrument no.	Date	

G. Undertaking(s)

I undertake that all the activities of project planning, designing and pre-construction activities (including all licenses, authorizations, permissions and clearances as required from time to time under the law) are completed. All the details given in support of specific actions taken for project preparatory activities (as given under "E") above) are true and correct and nothing material has been concealed thereof.

I further undertake that the technical standards for connectivity specified by CEA in Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 have been complied with.

Place: (Signature)
Date: Authorized signatory of the applicant
Name:
Designation:
Seal:
Enclosures:

1. Non-refundable application fees(demand draft or payment slip in case of payment through RTGS)
2. Documents in support of information mentioned in the format.
3. Documents in support of existing connectivity with Intra-STS (including detailed description of 'electricity systems') along with single line diagrams (if existing user of Intra-STS)
4. If any other

ANNEXURE-3

INTIMATION FOR GRANT OF CONNECTIVITY/'CONNECTIVITY OFFER'

(to be issued by STU to the applicant)

1. Intimation no. Date:
2. Ref. application no. Date:
3. Name of the applicant
4. Address for correspondence

5. Nature of the applicant
   (generator/captive/IPP/RE/non-RE)/ distribution licensee/open access consumer/ bulk consumer)
6. Details for connectivity
   (a) Capacity(MW)for which connectivity is granted
   (b) Voltage level(kV)at which connectivity is granted
   (c) Date from which connectivity is granted
   (d) Sub-station at which connectivity is granted
   Name of sub-station
   Name of Licensee (Owner)
7. Details of interconnection facilities

8. Details of transmission system required for connectivity (brought out in specific interconnection study)

9. Security amount (in rupees) for the purpose of bank guarantee
10. Details of the project for which connectivity granted
    (generating station or sub-station of distribution licensee or premises (i.e. industrial or commercial establishment) of open access consumer /bulk consumer)
11. Timelines for completion of various activities

12. Geographical location of the project
    (a) Nearest village/town
    (b) District
    (c) State
13. Commissioning schedule of the project
    Date(s)of commercial operation
14. Anyother information as considered necessary by STU

General information to the applicant:

1. With the issue of this 'connection offer', the in principle approval for connectivity shall be deemed to have been granted to the applicant .
2. The applicant shall apply for Stage 2 connectivity within fifteen (15) days from the date of this intimation letter.
3. STU shall convey applicable grid connectivity charges/Bank Guarantee/ any other required documents within fifteen (15) days.
4. After deposition/submission of applicable grid connectivity charges/Bank Guarantee/ any other required documents, STU shall convey final approval for signing of Connection Agreement.
5. Connection Agreement shall be signed in such form and format as provided in format *[ANNEXURE-5/6/7] as applicable.*

(Signature) Authorized signatory of STU

Name:
Designation: Seal:
Copy to others as considered necessary:

ANNEXURE-4

FORMAT OF BANK GUARANTEE FOR GRID CONNECTIVITY

(On appropriate value of stamp paper as per Rajasthan Stamp Duty Act should be purchased in the name of Bank)

BANK GUARANTEE FOR GRID CONNECTIVITY

To

The Chief Engineer (NPP&RA),
Rajasthan Rajya Vidyut Prasaran Nigam Ltd.,
Vidyut Bhawan, Janpath, Jyoti Nagar,
Jaipur, Rajasthan – 302 005

Guarantee No. _____date_____
Amount_____
Date of validity_____
Date of validity with grace period____

Dear Sir,

In consideration of the Rajasthan Rajya Vidyut Prasaran Nigam Limited, (hereinafter referred to RVPNL which expression shall unless repugnant to the context or meaning thereof include its successors, administrators and assigns) and _____ (Name of Applicant) having applied for Grid Connectivity with its registered/Head office at _____ _____ (hereinafter referred to as the "Applicant" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns).

WHEREAS it has been agreed by the Applicant that in case of delay in utilization of the system constructed by RVPN, RVPNL shall have the right to collect the penalty as prescribed in the----------(Name of policy).

AND WHEREAS as per the ----------(Name of policy), Applicant is required to furnish a Bank Guarantee for a sum of Rs. _____ (Rupees _____) as a security for fulfilling its commitments to RVPNL as stipulated in the ----------(Name of policy).

We _____(Name of the Bank) a banking company incorporated under _____, having their Registered Office at _____ and acting through its Branch office at _____ (hereinafter referred to as the 'Bank', which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the RVPNL on demand any and all monies payable by the Applicant to the extent of Rs. _____ (Rupees _____) as aforesaid any time up to a period of ---------(validity of BG) without any demur, reservation, context, recourse or protest and/ or without any reference to the Applicant.

Any such demand made by the RVPNL on the Bank shall be conclusive and binding notwithstanding any difference between the RVPNL and the User/Applicant or any dispute pending before the Court, Tribunal, Arbitrator or any other authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the RVPNL and further

agrees that the guarantee herein contained shall continue to be enforceable till the Applicant deposits amount of penalty, if any on account of delay in the utilization of the system and until RVPNL discharges this guarantee. However not later than expiry date of this guarantee.
The RVPNL shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee, from time to time to extend the time for performance of the obligations under the said Policy by the Applicant. The RVPNL shall have the fullest liberty, without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Applicant, and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Policy or any other course or remedy or security available to the RVPNL. The Bank shall not be released of its obligations under these presents by any exercise by the RVPNL or its liberty with reference to the matters aforesaid or any of them or by reason of any other act or omission or commission on the part of the RVPNL or any other indulgence shown by the RVPNL or by any other matter or thing whatsoever which under law would, but for this provision have the effect of relieving the Bank.

The Bank also agrees that the RVPNL at its option shall be entitled to enforce the Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Applicant and notwithstanding any security or other guarantee the RVPNL may have in relation to the Developer/Power Producer liabilities.

Notwithstanding anything contained hereinabove our liability under this guarantee is restricted to Rs. _____(Rupees _____) and it shall remain in force upto and including---------- (validity of BG)and shall be extended from time to time for such period, as may be desired by RVPNL on whose behalf this guarantee has been given.

ALL CLAIMS UNDER THE GUARANTEE WILL BE PAYABLE AT JAIPUR.

(1) All disputes arising under the said guarantee, between the Bank and the Nigam or between the Contractor and the Nigam pertaining to this guarantee shall be subject to the jurisdiction of courts, only at Jaipur in Rajasthan alone.
(2) Unless demand or claim in writing is presented on the …….. (mention the branch of the bank situated in Jaipur at which the claim is payable) Bank on or before……(date), the Bank shall be released and discharged from all liabilities thereunder.
(3) The Guarantee here in contained shall not be affected by any change in the constitution of the Contractor or Bank.
(4) The Chief Engineer includes Additional Chief Engineer and any other Officer exercising the powers of Chief Engineer, Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Jaipur.
(5) The Bank further undertake not to revoke this guarantee during its currency except with the previous consent of the Chief Engineer (NPP&RA), Rajasthan Rajya Vidyut Prasaran Nigam Ltd. in writing.

FOR (Name of Bank).

SEAL AND SIGNED BY AUTHORISED SIGNATORIES

ANNEXURE-5

FORMAT FOR MACHINE DATA

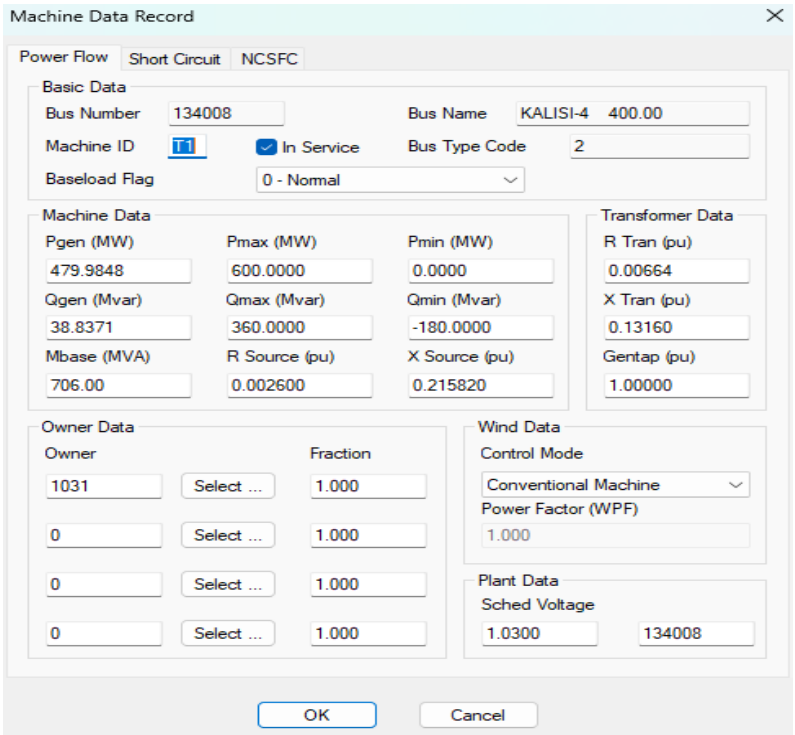
Conventional Machine Data requirement for Modelling in PSSE

A. Design Parameters

1. Rated MVA
2. Rated MW
3. Min. Tech Limit (MW)
4. As per Capability curve Q(Max)
5. As per Capability curve Q(Min)
6. Generator rated voltage(kV)
7. Maximum generator voltage allowed (kV)
8. Minimum generator voltage allowed (kV)
9. Generator transformer rating (MVA)
10. Generator transformer voltage ratio at nominal tap
11. Generator transformer voltage ratio at maximum tap
12. Generator transformer voltage ratio at minimum tap
13. Generator transformer % impedance at nominal tap
14. Generator transformer no load loss (kW)
15. Generator transformer full load loss (kW)
16. Generator steady state reactance Xd (pu in machine MVA rating)
17. Generator transient reactance (pu in machine MVA rating)
18. Generator sub transient reactance (pu in machine MVA rating)
19. Generator Resistance (pu in machine MVA rating)

B. Operational parameters

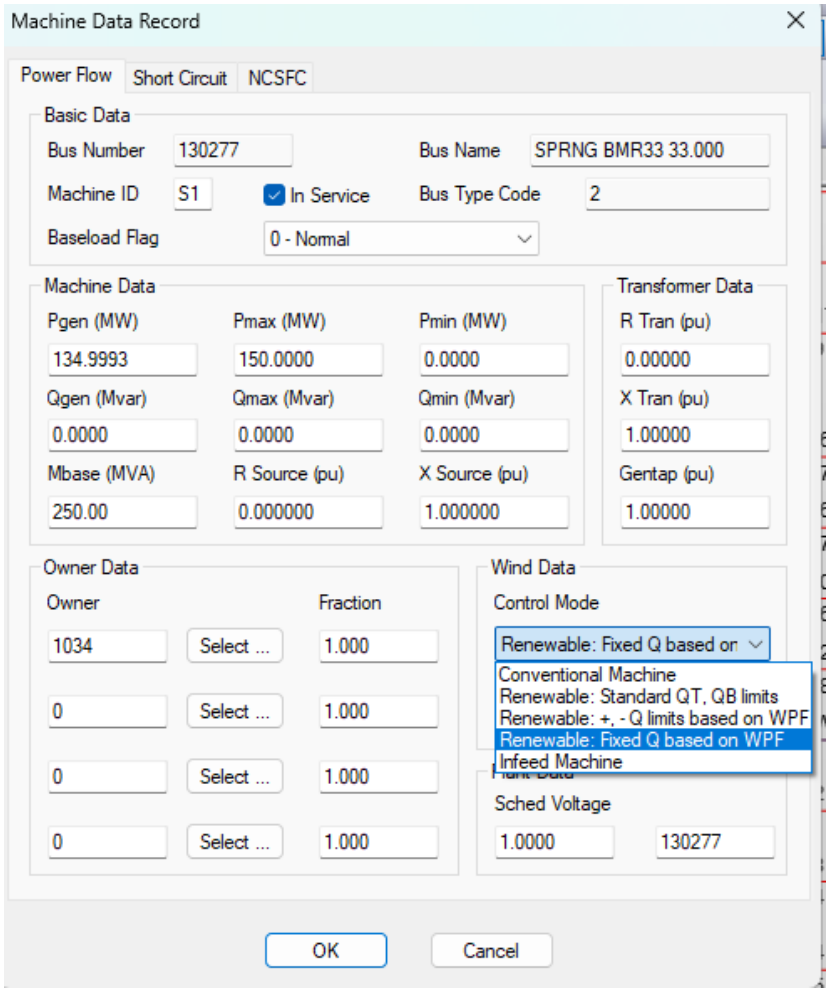
1. Schedule MW
2. Schedule voltage (in PU)
3. Generator transformer tap position



Non Conventional Machine Data requirement for Modelling in PSSE

A. Design Parameters

1. Rated MVA
2. Rated MW
3. Min. Tech Limit (MW)
4. As per Capability curve Q(Max)
5. As per Capability curve Q(Min)
6. rated voltage(kV)
7. Maximum voltage allowed (kV)
8. Minimum voltage allowed (kV)
9. PSS transformer rating (MVA)
10. PSS transformer voltage ratio at nominal tap
11. PSS transformer voltage ratio at maximum tap
12. PSS transformer voltage ratio at minimum tap
13. PSS transformer % impedance at nominal tap
14. PSS transformer no load loss (kW)
15. PSS transformer full load loss (kW)
16. Max Allowed power factor (Lag)
17. Max Allowed power factor (Lag)



ANNEXURE-6

DRAFT CONNECTION AGREEMENT

(APPLICABLE IN CASE OF GRANT OF CONNECTIVITY TO RE projects)

(To be executed for connection of RE generator with the STU (direct or through Pooling Station) on a non-judicial stamp paper of Rs. 500/-

THIS AGREEMENT is made on the

_____ day of _____

BETWEEN :

Rajasthan Rajya Vidyut Prasaran Nigam Limited (RVPN) having its Registered Office at Vidyut Bhawan, Janpath, Jaipur-302005 (Hereinafter called the "STU") which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its successors or permitted assigns and for the purposes of this Connection Agreement the STU shall act through its Addl. Chief Engineer(NPP&RA) RVPN, Vidyut Bhawan, Janpath, Jaipur-302005;

And

(Name and registered address of the applicant company seeking connection of RE generator) (Hereinafter called "the Applicant") which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its successors or permitted assigns;

And (If connection through Pooling Station)

(Name and registered address of the Owner Company of Pooling Station) (Herein after called "the Developer of Pooling Station") which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its successors or permitted assigns;

STU and applicant and Developer of Pooling Station (If applicable) are hereinafter collectively referred to as "Parties" and individually as "Party".

WHEREAS:

(A) The Applicant has applied to the STU for connection of the-----(Name of RE generator with capacity)(herein after referred as 'Power Plant') directly or through Pooling Station of ----- (Developer of Pooling Station) to the STU's Transmission System and use of the STU's Transmission System to transmit electricity to and/or from the Power Plant through the Intra-State Transmission System.

(B) The STU has agreed to the connection of the Power Plant directly or through Pooling Station of ----- (Developer of Pooling Station) (If applicable)to the STU's Transmission System at the Connection Point --------- (mention details of the connection point etc as per

power evacuation approval issued by CE(PP&D), RVPN) using the Transmission System of the STU, to transmit electricity as well as real time data to and/or from the Power Plant through STU's Transmission System.

(C) The Parties requires entering into this connection agreement to record the terms and conditions upon which the Parties will carry out their respective Connection Works, in addition to the estimated cost required to be carried out by the STU for works related to the interconnection, in accordance with the Connection Agreement.

(D) The parties shall take up modalities for implementation of the works as per power evacuation approval issued by CE(PP&D), RVPN.

(E) Further, a signed copy of the agreement along with all the Annexures, and amendments when ever made, shall be submitted to SLDC-Rajasthan(SLDC)

IT IS HEREBY AGREED as follows:

1. General Conditions for Connectivity

1.1 The Parties agree to the following General Conditions :

(a) The parties shall abide by the relevant Policy of Govt. of Rajasthan and relevant RERC regulations with latest amendment and guidelines for integration of new ABT meters of new generators seeking connectivity to RVPN grid with STOMS project at SLDC in respect of procedure of grant of connectivity and other matters. The ABT meter real time data shall be displayed at SLDC, Qualified Coordinating Agency (QCA) and generator.

(b) The applicant and Developer of Pooling Station (If applicable) shall be responsible for planning, design, construction, and safe and reliable operation of its own equipment's in accordance with the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007, Central Electricity Authority (Technical Standards for Construction of electrical plants and electric lines) Regulations, Central Electricity Authority (Grid Standards) Regulations, Indian Electricity Grid Code (IEGC), Rajasthan Electricity Regulatory Commission (Rajasthan Electricity Grid Code) Regulations, 2024 and other statutory provisions with latest amendment.

(c) The applicant and Developer of Pooling Station (If applicable) shall provide necessary facilities for voice & data communication for transfer of following real time data to the SLDC. The frequency of real time data updating shall be 4 second or such other frequency as SLDC may require.

Solar generating plants

1) Solar Generating unit/Invertor wise (MW and MVAR)
2) Voltage at interconnection point(volt)
3) Generator/Invertor status (on/off-line)

4) Global Horizontal Irradiance (GHI)-Watt per meter square
5) Ambient temperature (deg. C)
6) Diffuse Irradiance- Watt per meter square
7) Direct Irradiance- Watt per meter square
8) Sun rise and Sun set timings
9) Cloud cover (Okta)
10) Rainfall (mm)
11) Relative Humidity (%)
12) Performance Ratio

Wind turbine generating plants

1) Turbine Generation (MW/MVAR)
2) Wind Speed (meter/second)
3) Generator Status (on/off-line)-this is required for calculation of availability of the WTG
4) Wind Direction (degree from true north)
5) Voltage (volt)
6) Ambient air temperature (deg. C)
7) Barometric Pressure (Pascal)
8) Relative Humidity (%)
9) Air Density (Kg/m3)

Biomass/ Waste to Energy Generating Plants

1) MW & MVAr of Generator
2) MW & MVAr of associated lines
3) Generator status (On/Off)
4) HV & LV side Bus Voltage
5) Status of Breakers and Isolators
6) Frequency

(d) The applicant and Developer of Pooling Station (If applicable) shall provide Synchrophasor measurement using Phasor Measurement Units along with fibre optic connectivity, Global Positioning System Receiver and communication equipment for monitoring the entire interconnected grid on real time basis at substations of 400 kV and above voltage level, switchyard of generating stations at 220 kV and above voltage level, Alternating Current side of converter bays of High Voltage Direct Current stations and pooling point of renewable energy generating stations of fifty mega watt and more and Battery Energy Storage System of fifty mega watt and more.

1.2 The following documents, which have been initialed by the parties and Annexed herewith shall be deemed to form an integral part of this Agreement in the order of precedence listed below:-

a) Power evacuation approval;
b) Application for seeking connection to the intra-state transmission system;
c) Offer letter of this Agreement attached hereto;

1.3 Availability of Statutory/ Regulatory Approval

Notwithstanding anything in the Agreement to the contrary, the applicant and Developer of Pooling Station (If applicable)shall be responsible for obtaining the statutory clearances/ approval including Transmission license (if required) for carrying out the works requiring connection to the intra-state transmission system. Accordingly, the provisions of the Agreement dealing with the carrying out of the works, either by the applicant or the Developer of pooling station or the STU (unless otherwise agreed mutually) in all respects would be conditional on and subject to the STU being satisfied that the necessary approvals/ clearances are available with the applicant and/or Developer of Pooling Station (If applicable).

1.4 General philosophy and guidelines on Protection :

The grid connected SLD of power plant and pooling station (If applicable) shall be approved by STU. The STU and applicant and Developer of Pooling Station (If applicable)agree and confirm that connection with intra-State Transmission System shall comply with following minimum technical and design criteria with regard to system parameters and protection.

Grid Parameter variations

General

Applicant and Developer of Pooling Station (If applicable)shall ensure that Plant and Apparatus requiring service from or providing service to the Intra-State Transmission System is of such design and construction that satisfactory operation of such Plant and Apparatus will not be prevented by variation in instantaneous values of system frequency and voltage from their nominal values.

Harmonics Variation

The total harmonic distortion for voltage at connection point shall not exceed 5 % with no individual harmonic higher than 3 %.

Protection System

1. Protection System shall be designed to reliably detect faults on various abnormal conditions and provide an appropriate means and location to isolate the equipment or system automatically. The protection system must be able to detect power system faults within the Zone. The protection system should be able to detect abnormal conditions such as equipment failures or open phase conditions.
2. Every Element of the Power System shall be protected by a standard protection system having the required reliability, selectivity, speed, discrimination and sensitivity as per CEA.
3. Notwithstanding the protection systems provided in the grid, the Applicant and Developer of Pooling Station (If applicable) shall provide requisite protections for safeguarding his system from faults originating in the grid.
4. Bus bar Protection and Breaker Fail protection or Local Breaker Back-up Protection shall be provided wherever stipulated in the regulations.
5. The Applicant and Developer of Pooling Station (If applicable) shall develop protection manuals conforming to various standards for the reference and use of its personnel.

Sub-station Equipment

All Extra High Voltage (EHV) sub-station equipment's of both the parties shall comply with Bureau of Indian Standards/ International Electro technical Commission/prevailing Code of practice.

All equipment shall be designed, manufactured and tested and certified in accordance with the quality assurance requirements as per the standards of International Electro technical Commission or the Bureau of Indian Standards.

Each connection between the Power Plant and/or Pooling Station (If applicable) and STU shall be controlled by a circuit breaker capable of interrupting, at the connection point, at least the short circuit current as advised by State Transmission Utility.

LVRT and HVRT Capability

The generator shall fulfil all the requirements including LVRT and HVRT capabilities as per CEA (Technical Standards for Connectivity to the Grid) Regulations 2007 with latest amendment.

Further, the generator shall submit detailed report with relevant studies including HVRT and LVRT before final test and commissioning of the plant.

Fault Clearance Times

The fault clearance time for primary protection schemes, for a three phase fault (close to the bus-bars) on the equipment directly connected to intra-State Transmission System shall not be more than :

(a) 100 milli seconds for 132 kV and above as per RVPN practice

(b) As per decision of Protection Co-ordination Committee for 33 kV

Back up protection shall be provided for required isolation/ protection in the event of failure of the primary protection systems provided to meet the above fault clearance time requirements.

2. Agreement to Pay Charges and Costs

2.1 Agreement to pay Monthly Transmission Tariff

The applicant declares that it shall pay the Monthly Transmission Tariff including SLDC charges, income tax or other taxes, cess, duties, incentive, LPS etc as per RERC tariff regulations for use of Intra-State Transmission System, as and when Long term open access, Medium term open access or Short term open access is availed by the applicant, in accordance with the relevant regulations of RERC in this regard.

2.2 Agreement to pay additional costs

The applicant and/or Developer of Pooling Station declares that it shall pay the cost towards modification/alterations to the infrastructure of the STU for accommodating the proposed connection as specified in the offer letter.

2.3 Agreement to Pay Damages

The applicant and/or Developer of Pooling Station declares that it shall pay/make good damages, if any, caused to the property of the STU within reasonable time of its occurrence, during the course of control, operation and maintenance of the equipment.

2.4 Agreement to Pay Grid Connectivity Charges

The applicant and/or Developer of Pooling Station declares that it shall pay grid connectivity charges as per Policy of Govt. of Rajasthan and relevant RERC Regulations for creation of proper facility for receiving power.

2.5 The applicant and/or Developer of Pooling Station declares that it shall submit time frame for construction of their plant along with Bank Guarantee equivalent to the cost of bay with an undertaking to use the system within prescribed period. In case there is any delay in utilization of system, a penalty @ 12% per annum for the period of delay on the amount of bank guarantee will be levied by RVPN. The Bank Guarantee shall be returned after commissioning of the project on depositing amount of penalty, if any on account of delay in the utilization of the system.

2.6 Agreement to Pay Reactive Energy Charges

The applicant and/or Developer of Pooling Station declares that it shall pay for drawl/supply of reactive power as RERC regulations, as amended from time to time.

In case of wind plant, the Applicant shall have the facility to curtail its VArdrawal/injection in case the security of grid or safety of any equipment or personnel is endangered as directed by SLDC.

3. Conditions Precedent to the implementation of the Commissioning Instructions

The Applicant and Developer of Pooling Station (If applicable)shall have to get appropriate "Commissioning Instruction" prior to actually first charging of the equipment through the grid. The charging instruction shall be issued only after fulfillment of following technical requirement and their confirmation by circle officer and approval of the committee (if constituted):

(a) The Connection Works have been completed.
(b) The Applicant and Developer of Pooling Station (If applicable)has complied with all its obligations as set out in the offer letter for this Agreement;
(c) The Applicant and Developer of Pooling Station (If applicable)has demonstrated the voice & data communication facilities to SLDC;
(d) The Applicant and Developer of Pooling Station (If applicable)has obtained necessary approvals like approval u/s 68 of Electricity Act 2003 for laying over head lines, Permission of Electrical Inspector for energisation of line and electrical equipments including power plant meeting safety requirements, PTCC, etc. from competent authority.
(e) The supporting documents of protection scheme complying with the CEA (Technical standards for the connectivity to the grid) Regulation 2007 with latest amendment and the information as per Part-III "Resource Planning Code" and Part-IV "Connection Code" of Rajasthan Electricity Grid Code ,2024 are furnished.
(f) The metering arrangement should comply with CEA (Installation & Operation of Meters) Regulation, 2006 as well as RERC Metering Regulations, 2007 with latest amendment.

(g) Circuit breakers at the plant have protection scheme and break time such that fault is cleared within critical fault clearing time and does not result in tripping of RVPN system in case of fault in their plant. It should be as per CEA (Grid Standards) Regulations 2006 with latest amendment or as per directions of RVPN's protection wing.

(h) The negative sequence relay on generator will have to be so wired that the same shall, in conjunction with directional over current relay looking towards RVPN sub-station, open their main breaker within critical fault clearing time.

(i) Line isolator at the point of connection at RVPN shall have earthing switch towards generator side for safety of RVPN maintenance staff and during maintenance of RVPN's sub-station, the same will be closed. The generator shall ensure no injection of power during maintenance.

(j) Adequate protection shall be provided on interconnecting transformers for isolation of fault.

(k) Check synchronizing relays shall be provided.

(l) Necessary arrangements shall be provided to check any injection of harmonics in the power system of RVPN.

(m) Furnished a brief write up on the intended synchronization operation i.e. furnish the complete sequence of operation of breakers etc. when synchronizing the system for grid connectivity.

(n) No volt relay shall be provided so as to ensure line breaker to close only at RVPN end on dead line condition. No volt relays shall have to be installed in the metering box installed in the yard of RVPN GSS and shall be connected to metering PT/CVT core. The contacts of these relays shall be wired in closing circuit of the line breaker to power plant for this interlocking.

(o) The complete protection scheme of line and various operating timings shall be got checked and verified by the Protection Wing of RVPN before synchronization operation.

(p) An undertaking on Non judicial stamp of Rs. 100/- that applicant and Developer of Pooling Station (If applicable) shall be responsible for any damage that may be caused to their generating plant at any time or stage due to synchronization operation.

(q) The Applicant and Developer of Pooling Station (If applicable)will submit the schematic diagram of the RVPN/Discoms network showing the location of the protection system and energy meters installed in the system. The applicant and Developer of Pooling Station (If applicable) will ensure that the C&R panel on sending ends (Generator end and receiving station(RVPN end)) of respective voltage levels should be as per specification of RVPN. The Protection Wing of RVPN will witness the commissioning of these panels. The developer will provide two sets of manuals of protection relays and meters and other instruments used in C&R panel for GSS & Protection Wing.

(r) The applicant and Developer of Pooling Station (If applicable) will ensure healthiness of the relays and breakers at their ends.

(s) The energy meters installed at pooling station/ receiving station shall be tested once in a year jointly by the nominated officer of SE(M&P) of concerned Discom and the concerned SE(Protection) RVPN as per RERC metering Regulations, 2007.

(t) Communication of data of meters installed at pooling station as well as receiving station are to be communicated to the SLDC .

(u) The nominated officer of SE(MPT&S) RVPN shall witness the testing and commissioning of the metering equipments as well as line protection panel after installation of meters and protection panel for new and addition in existing capacity (metering and protection scheme).

(v) The Applicant and Developer of Pooling Station (If applicable) has complied with its obligations under the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 and Rajasthan Electricity Grid Code, 2024.

4.1 Site Access

Being restricted area the STU may give permission or allow access to the employees and/ or agents and/ or subcontractors and/or invitees of the applicant/ Developer of Pooling Station (If applicable) in the it's premises to carry out preliminary site investigation works, the Connection Works, modification works, inspections, etc. based on a written request made by the applicant/ Developer of Pooling Station (If applicable)giving reasonable advance notice. All such actions are to be carried out under the strict supervision of the STU's authorized representatives to safeguard the safety and security requirements of STU's installations and safety of the representatives of the applicant/ Developer of Pooling Station (If applicable).

Similarly the applicant/ Developer of Pooling Station (If applicable)may also allow, on prior permission, site access to the STU's employees and/or agents and/ or invitees to carry out preliminary site investigation works, inspections, etc. in the connection site of the applicant/ Developer of Pooling Station (If applicable), provided that a written request has been made giving reasonable advance notice.

4.2 Conditions of Access

Site access for the STU or applicant/ Developer of Pooling Station (If applicable)shall include the right to bring such vehicles, plant, machinery and construction materials as shall be reasonably necessary to carry out the functions in respect of which the permission of access is granted. Being a restricted area, any individual to whom access is given under the Agreement shall comply with all reasonable directions given by the applicant/ Developer of Pooling Station (If applicable) / STU and its duly authorized employees and agents to safe guard the interest of safety and security requirements of personnel and equipment. All such access shall be exercisable without payment of any kind.

5 Notice

All notices required or referred to under this Agreement shall be in writing and signed by the respective authorized signatories of the parties mentioned herein, otherwise Notified. Each such notice shall be deemed to have been duly given if delivered or served by registered mail/ speed post of the Department of Post with an acknowledgement due to other party(ies) as per authorization by parties.

The authorities of the parties who shall issue/ receive notices etc. in connection with this Agreement shall be informed in advance.

6 Settlement of Disputes And Arbitration

All differences and/ or disputes between the parties arising out of or in connection with these presents shall at first instance be settled through amicable settlement at the level of CMD, RVPN.

In the event of unresolved disputes or differences as covered under the statutory arbitration provided under The Electricity Act, 2003, the same shall be resolved accordingly.

The place of arbitration shall be Jaipur; the language of arbitration shall be English. Notwithstanding the existence of any disputes and differences referred to arbitration, the parties herein shall continue to perform their respective obligations under this Agreement.

7 Force Majeure

Force Majeure herein is defined as any cause which is beyond the control of the STU or the applicant and Developer of Pooling Station (If applicable)as the case may be, which could not be foreseen or with a reasonable amount of diligence could not have been foreseen and which substantially affects the performance of the Agreement. Force Majeure events would include:

- Natural phenomenon including but not limited to floods, droughts, earthquake and epidemics;
- war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy in each case involving or directly affecting India, revolution, riot, insurrection or other civil commotion, act of terrorism or sabotage in each case within India;
- nuclear explosion, radioactive or chemical contamination or ionizing radiation directly affecting the generating station, captive generating plant or Bulk consumer, Intra-State Transmission System of the STU or any facility or system that is integral to and substantial for the performance of this Agreement.
- any event or circumstances of a nature analogous to any events set forth above within India.

Provided either party shall within fifteen (15) days from the occurrence of such a Force Majeure event notify the other in writing of such cause(s).

Neither of the parties shall be liable for delays in performing obligations on account of any force majeure causes as referred to and/ or defined above.

8 Confidentiality

The parties shall keep in confidence any information obtained under this Connection Agreement and shall not divulge the same to any third party without the prior written consent of the other party, unless such information is

a) In the public domain.

b) Already in the possession of the receiving party.
c) Required by the Govt. Ministries/ Agencies/ Court of competent jurisdiction.

The information exchanged herein between the parties shall be used only for the purpose of, and in accordance with, this Agreement and for the purpose stated herein. This clause shall remain in force even after termination of Connection Agreement.

9 Governing Laws and Jurisdiction

This Agreement shall be governed by Indian Laws and Rules made there under.

10 Amendments To The Connection Agreement

In case of Modification to point of connection like re-allocation of bays, up gradation of voltage level etc. by either of the parties, if mutually agreed, an amendment to the Connection Agreement shall be executed between the parties within 30 days of implementing such modification.

11 The grant of connectivity shall not entitle the applicant to interchange any power with the grid unless it obtains open access under RERC (Terms and Conditions of Open Access) Regulations 2016.

12 Default and Disconnection

In the event of default in payment of transmission charges and other charges for use of intra-state transmission system and/or default to comply any of the provisions of RERC/CERC/CEA Regulations and/or default to comply any of the provisions of this agreement, STU shall serve a notice to remedy the default. And in case of failure to remedy the default within 15 days from the date of issue of the notice, STU shall disconnect the interconnection of the power plant from the grid.

IN WITNESS WHEREOF the STU and the applicant/ Developer of Pooling Station (If applicable)have caused this Agreement to be executed by duly authorized representative on the date above first herein written.

Signed for and on behalf of STU	Signed for and on behalf of Applicant	Signed for and on behalf of Developer of Pooling Station

ANNEXURE-7

DRAFT CONNECTION AGREEMENT

(APPLICABLE IN CASE OF GRANT OF CONNECTIVITY TO INTRA-STATE TRANSMISSION LICENSEE SELECTED UNDER SECTION 63 OF THE ACT, (IF NOT PROVIDED IN TBCB DOCUMENTS)

(To be executed on a non-judicial stamp paper of Rs. 500/-)

THIS AGREEMENT is made on the

_____ day of _____

BETWEEN :

Rajasthan Rajya Vidyut Prasaran Nigam Limited (RVPN) having its Registered Office at Vidyut Bhawan, Janpath, Jaipur-302005 (Hereinafter called the "STU") which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its successors or permitted assigns and for the purposes of this Connection Agreement the STU shall act through its Director(Technical) RVPN, Vidyut Bhawan, Janpath, Jaipur-302005;

And

(Name and registered address of the Intra-State transmission licensee selected under section 63 of the Act seeking connection) (Hereinafter called "the Intra State Transmission Licensee") which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its successors or permitted assigns;

STU and Intra-State Transmission Licensee/Inter-State Transmission Licensee are hereinafter collectively referred to as 'Parties' and individually as 'Party'.

WHEREAS:

(A) The Intra-State transmission licensee has applied to the STU for connection of the its transmission facility to the STU's Transmission System and use of the STU's Transmission System to transmit electricity to and/or from the Facility through the Intra-State Transmission System.

(B) The STU has agreed to the connection of the Intra-State transmission licensee Facility to the STU's Transmission and Communication System (via the intra-State transmission licensee's Site-Related Connection Equipment) at the Connection Point (as detailed in Annexure-1) using the Transmission and Communication System of the STU, to transmit electricity as well as real time data to and or from the Facility through STU's Transmission and Communication System.

(C) The Parties requires entering into this connection agreement to record the terms and conditions upon which the Parties will carry out their respective Connection Works, in addition to the estimated cost required to be carried out by the STU for works related to the interconnection, in accordance with the Connection Agreement.

(D) The parties shall separately take up modalities for implementation of the works on mutually agreed terms and conditions. The scope of works and time schedule for completion of works will be as defined in the Transmission Service Agreement and shall form the basis for evaluating if the works by the parties is being executed in time.

(E) Further, a signed copy of the agreement along with all the Annexures, and amendments when ever made, shall be submitted to SLDC.

IT IS HEREBY AGREED as follows:

1. General Conditions for Connectivity

1.1 The Parties agree to the following General Conditions :

(a) The parties shall abide by the RERC in respect of procedure of grant of connectivity and other matters.

(b) The Intra-State transmission licensee shall be responsible for planning, design, construction, and safe and reliable operation of its own equipment's in accordance with the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007, Central Electricity Authority (Technical Standards for Construction of electrical plants and electric lines) Regulations, Central Electricity Authority (Grid Standards) Regulations, Indian Electricity Grid Code (IEGC), State Grid Code and other statutory provisions.

(c) The intra-State transmission licensee shall provide necessary facilities for voice data communication for transfer of real time operational data such as voltage, frequency, real and reactive power flow, energy, and status of circuit breaker a isolators positions, transformer taps and other parameters from their station to Data Collection Point (DCP) of STU i.e. SLDC- Heerapura, Jaipur for Intra-State transmission licensee's GSS as per IEGC. STU may provide access to applicant's data transfer through communication network (PLCC) in case spare channels are available on mutually agreed terms. The location of DCP of STU shall be the nearest station connected electricity where wide band communication capacity of STU is available. Additional communication system from DCP to the concerned SLDC shall be the responsibility of STU.

1.2 This agreement along with the schedules which have been initiated by the parties and Annexed herewith shall be deemed to form an integral part of this Agreement.

1.3 Availability of Statutory/ Regulatory Approval

Not with standing anything in the Agreement to the contrary, the intra-State transmission Licensee shall be responsible for obtaining the statutory clearances/ approval including Transmission license (if required) for carrying out the works requiring connection to the ISTS. Accordingly, the provisions of the Agreement dealing with the carrying out of the Works, either by the intra-State transmission licensee or the STU (unless otherwise agreed mutually) in all respects would be conditional on and subject to the STU being

satisfied that the necessary approvals/ clearances are available with the intra-State transmission licensee.

1.4 General philosophy and guidelines on Protection:

The STU and the intra-State Transmission Licensee agree and confirm that connection with intra-State Transmission System shall comply with following minimum technical and design criteria with regard to System parameters and protection.

Grid Parameter variations

General
Intra-State Transmission Licensees and Users shalt ensure that Plant and Apparatus requiring service from or providing service to the Intra-State Transmission System is of such design and construction that satisfactory operation of such Plant and Apparatus will not be prevented by variation in instantaneous values of system frequency and voltage from their nominal values.

Frequency Variation

Rated frequency of the system shall be 50.0 Hz and connected equipment must be capable of operating within the limits specified in the State Grid Code Regulation, 2024 and Central Electricity Authority (Grid Standards) Regulations, 2006 and as amended from time to time.

Target (CEA Grid Standards Regulation	Variation (%)	Value (Hz)
Upper Limit	+1%	50.5 Hz
Lower Limit	-2%	49.0 Hz

Voltage Variation

The variations of voltage may not be more than the voltage range specified in the regulations as per the State Grid Code Regulation.

Protection System

1. Protection System shall be designed to reliably detect faults on various abnormal conditions and provide an appropriate means and location to isolate the equipment or system automatically. The protection system must be able to detect power system faults within the Zone. The protection system should be able to detect abnormal conditions such as equipment failures or open phase conditions.

2. Every Element of the Power System shall be protected by a standard protection system having the required reliability, selectivity, speed, discrimination and sensitivity. Where failure of a protective relay in the User's system has substantial impact on the grid, the

User shall connect an additional protection as back up protection besides the Main protection.

3. Notwithstanding the protection systems provided in the grid, the User shall provide requisite protections for safeguarding his system from faults originating in the grid.

4. Bus bar Protection and Breaker Fail protection or Local Breaker Back-up Protection shall be provided wherever stipulated in the regulations.

5. The User shall develop protection manuals conforming to various standards for the reference and use of its personnel.

Sub-station Equipment

All Extra High Voltage (EHV) sub-station equipment's of both the parties shall comply with Bureau of Indian Standards/ International Electro technical Commission/prevailing Code of practice.

All equipment shall be designed, manufactured and tested and certified in accordance with the quality assurance requirements as per the standards of International Electro technical Commission or the Bureau of Indian Standards.

Each connection between a User and Transmission Licensee shall be controlled by a circuit breaker capable of interrupting, at the connection point, at least the short circuit current as advised by State Transmission Utility.

Fault Clearance Times

The fault clearance time for primary protection schemes, for a three phase fault (close to the bus-bars) on Users' equipment directly connected to intra-State Transmission System connected to Users' equipment, shall not be more than :

(a) 100 milli seconds for 800 kV class & 900 kV
(b) 160 milli second for 220 kV & 132 kV
(c) As per decision of Protection Co-ordination Committee for 33 Kv

Back up protection shall be provided for required isolation/ protection in the event of failure of the primary protection systems provided to meet the above fault clearance time requirements.

2. Agreement to Pay for Additional Capital Expenditure

If applicable

3. Conditions Precedent to the implementation of the Commissioning Instructions

The intra-State transmission licensee shall have to get appropriate “Commissioning Instruction" prior to actually first charging of the equipment through the grid. The charging instruction shall be issued only when the STU is satisfied (by acting reasonably) that:

a. The Connection Works have been completed.
b. The intra-State transmission licensee has complied with all its obligations as set out in the TSA;
c. The intra-State transmission licensee has demonstrated the voice a data communication facilities to concerned SLDC;
d. The intra-State transmission licensee has obtained necessary approvals like PTCC, Electrical Inspectorate of CEA etc. from competent authority.
e. The intra-State transmission licensee has complied with its obligations under the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007.

4.1 Site Access

Being restricted area the STU may give permission or allow access to the employees and/ or agents and/ or subcontractors and/or invitees of the intra-State transmission licensee in the it's premises to carry out preliminary site investigation works, the Connection Works, modification works, inspections, etc. based on a written request made by the intra-State transmission licensee giving reasonable advance notice. All such actions are to be carried out under the strict supervision of the STIJ's authorized representatives to safeguard the safety and security requirements of STD's installations and safety of the representatives of the intra-State transmission licensee.

Similarly the intra-State transmission licensee may also allow, on prior permission, site access to the STU's employees and/or agents and/ or invitees to carry out preliminary site investigation works, inspections, etc. in the connection site of the intra-State transmission licensee, provided that a written request has been made giving reasonable advance notice.

4.2 Conditions of Access

Site access for the STU or intra-State transmission licensee shall include the right to bring such vehicles, plant, machinery and construction materials as shall be reasonably necessary to carry out the functions in respect of which the permission of access is granted. Being a restricted area, any individual to whom access is given under the Agreement shall comply with all reasonable directions given by the intra-State transmission licensee / STU and its duly authorized employees and agents to safe guard the interest of safety and security requirements of personnel and equipment. All such access shall be exercisable without payment of any kind.

5 Notice

All notices required or referred to under this Agreement shall be in writing and signed by the respective authorized signatories of the parties mentioned herein, otherwise Notified. Each such notice shall be deemed to have been duly given if delivered or served by registered mail/ speed post of the Department of Post with an acknowledgement due to other party(ies) as per authorization by parties.

The authorities of the parties who shall issue/ receive notices etc. in connection with this Agreement shall be informed in advance.

6 Settlement of Disputes And Arbitration

All differences and/ or disputes between the parties arising out of or in connection with these presents shall at first instance be settled through amicable settlement at the level of CMD, RVPN.

In the event of unresolved disputes or differences as covered under the statutory arbitration provided under The Electricity Act, 2003, the same shall be resolved accordingly.

The place of arbitration shall be Jaipur; the language of arbitration shall be English. Notwithstanding the existence of any disputes and differences referred to arbitration, the parties herein shall continue to perform their respective obligations under this Agreement.

7 Force Majeure

Force Majeure herein is defined as any cause which is beyond the control of the STU or the intra-State transmission licensee as the case may be, which could not be foreseen or with a reasonable amount of diligence could not have been foreseen and which substantially affects the performance of the Agreement. Force Majeure events would include:

- Natural phenomenon including but not limited to floods, droughts, earthquake and epidemics;
- war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy in each case involving or directly affecting India, revolution, riot, insurrection or other civil commotion, act of terrorism or sabotage in each case within India;
- nuclear explosion, radioactive or chemical contamination or ionizing radiation directly affecting the generating station, captive generating plant or Bulk consumer, Intra- State Transmission System of the Stu or intra-State transmission licensee other than the STU, or any facility or system that is integral to and substantial for the performance of this Agreement.
- any event or circumstances of a nature analogous to any events set forth above within India.

Provided either party shall within fifteen (15) days from the occurrence of such a Force Majeure event notify the other in writing of such cause(s).

Neither of the parties shall be liable for delays in performing obligations on account of any force majeure causes as referred to and/ or defined above.

8 Confidentiality

The parties shall keep in confidence any information obtained under this Connection Agreement and shall not divulge the same to any third party without the prior written consent of the other party, unless such information is

a) In the public domain.
b) Already in the possession of the receiving-party.
c) Required by the Govt. Ministries/ Agencies/ Court of competent jurisdiction

The information exchanged herein between the parties shall be used only for the purpose of, and in accordance with, this Agreement and for the purpose stated herein. This clause shall remain in force even after termination of Connection Agreement.

9 Governing Laws and Jurisdiction

This Agreement shall be governed by Indian Laws and Rules made there under.

10 Amendments To The Connection Agreement

In case of Modification to point of connection like re-allocation of bays, up gradation of voltage level etc. by either of the parties, if mutually agreed, an amendment to the Connection Agreement shall be executed between the parties within 30 days of implementing such modification.

11 Tenure

The tenure of this Agreement shall be Twenty five years subject to the tenure of license of the intra-State transmission Licensee.

12 Termination

This agreement shall automatically stand terminated upon the termination of the Transmission Service Agreement.

IN WITNESS WHEREOF the STU and the intra-State transmission licensee have caused this Agreement to be executed by duly authorized representative on the date above first herein written.

Signed for and on behalf of: RRVPNL	Signed for and on behalf of: Intra-State transmission licensee
Witness from RRVPNL licensee 1.	Witness for Intra-State transmission 1.
2.	2.

Annexure-1

S. No.	Connection Points	Connection Points
1.	Transmission Lines:	
2.	Sub-stations:	

ANNEXURE-8

DRAFT CONNECTION AGREEMENT

(APPLICABLE IN CASE OF GRANT OF CONNECTIVITY TO DEEMED LICENSEE)

(To be executed on a non-judicial stamp paper of Rs. 500/-)

This Agreement has been entered into between RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED (hereinafter referred to as RVPN or STU) and DEEMED LICENSEE on this _____ day of …….. .

Whereas **Deemed Licensee** has approached RVPN for connectivity of its new traction substation (TSS) at …….. with state transmission system for …….. MVA (Maximum demand) at RVPN's GSS …….. as deemed licensee.
WHEREAS, technical feasibility for above interconnection has been approved vide their letter no. **……..**

AND WHEREAS, RVPN has agreed to grant permission for connectivity/interconnection of …….. TSS for …….. MVA (Maximum Demand) at RVPN's GSS …….. to …….. as deemed licensee on following conditions-

1. The above permission is limited to grant of connectivity and shall not entitle **Deemed licensee** to interchange any power with the grid unless it obtains open access.
2. **Deemed licensee** shall install the telemetering/communication and transfer of online operational data facility as specified by RVPN/SLDC prior to actual physical interconnection to the grid.
3. **Deemed licensee** shall provide ABT metering as per RERC Metering Regulations, 2007 and CEA Metering Regulations, 2006 prior to actual physical interconnection to the grid.
4. **Deemed licensee** shall provide integration of ABT meters with RVPN's STOMS Centre as per Guidelines circulated vide letter no. RVPN/CE(LD)/STOM implementation/F.127/D252 dated 07-06-2018 of CE(LD) RVPN.
5. The protection relay system and setting shall be adjusted as per RVPN's/SLDC directives from time to time for safety of the system.
6. **Deemed licensee** shall pay the cost towards modifications/alterations to the infrastructure of RVPN, if any for accommodating to this connection.
7. Any other charges, if found applicable for this connection shall be borne/payable by **Deemed licensee**.
8. If maximum demand is increased in future then **Deemed licensee** shall get prior approval from RVPN for the same failing which the TSS shall be liable to disconnection from RVPN's grid.
9. **Deemed licensee** shall take state measures to guard against any damages that may occurs to their equipments and plants due to connectivity with state transmission system and RVPN shall not be responsible for consequent unintended damages, if any.
10. During the connectivity with the grid, if reactive power is drawn from grid or injection in the grid, irrespective of active energy drawn or injected, **Deemed licensee** shall abide the

Rules/Regulations/Norms of RERC/RVPN in regard to reactive power flow control and compensation/penalty.

11. For any power flow through RVPN grid, **Deemed licensee** shall pay transmission charges, open access charges and all other charges and losses as decided by RERC from time to time.
12. **Deemed licensee** shall match/upgrade/modify the protection and metering system, if required in future for smooth and safe operation with RVPN's system.
13. **Deemed licensee** shall provide and maintain the necessary protection for connectivity of transformers/equipments installed at their TSS.
14. **Deemed licensee** shall indemnify RVPN against any damages to RVPN's system/equipments occurs due to this connection.
15. The equipment to be provided/provided shall be meeting the requirement of CEA (Technical standard for connectivity to Grid) Regulations, 2007)/ REGC, 2024.
16. **Deemed licensee** shall be abide by CEA (Technical standard for connectivity to Grid) Regulations, 2007/ REGC, 2024/RERC (Terms and Conditions for Open Access) Regulations, 2016.
17. **Deemed licensee** shall adhere to CEA (Technical standard for connectivity to Grid) Regulations, 2007/REGC, 2024 and shall also furnish the information as per applicable chapter/part of the CEA (Technical standard for connectivity to Grid) Regulations, 2007/RERC (Rajasthan Electricity Grid Code) Regulation, 2024.
18. **Deemed licensee** shall furnish data/information as and when desired by RVPN/SLDC.
19. In future, **Deemed licensee** shall upgrade their equipment's/system as and when required by RVPN/SLDC.
20. Any changes in this connectivity or physical interconnection shall be subject to prior approval of RVPN/ SLDC.
21. The connection shall be governed by Indian laws and rules made there under.
22. **Deemed licensee** TSS will adhere to and observe good industry practice.
23. **Deemed licensee** shall abide by Regulations/Rules/Guidelines of RERC/RVPN/SLDC for connection/protection/smooth operation of grid.
24. If any connectivity standards for grant of connectivity to **Deemed Licensee** traction load(s) are issued by Central Electricity Authority in future, then all expenditure for modification of the system shall be borne by **Deemed Licensee**.
25. **Deemed Licensee** shall provide interlocking arrangement in the feeder isolators at **Deemed Licensee** TSS between the two circuits or there should be two separate feeder bays for termination of double circuit lines along with complete protection at the TSS.
26. **Deemed licensee** shall deposit dues towards the deposit works, if any found after the connectivity.

    Breach of any of above conditions would entitle RVPN to withdraw the permission given to **Deemed licensee** for interconnection/connectivity.

    This interconnection does not means the right to transfer of power through state transmission system and does not absolve **Deemed licensee** from obtaining approvals from any other Statutory Authority & Regulatory Commission as may be required under any of the Law in force.

Deemed licensee shall bear the stamp duty of this agreement.

For Rajasthan Rajya Vidyut Prasaran Nigam Limited

(……..)
Addl. Chief Engineer (NPP&RA)
RVPN

For **Deemed Licensee**

(……..)
…… (Desgn.)
Deemed Licensee

Witness
1._____ 2._____

ANNEXURE-9

OPERATION & MAINTENANCE AGREEMENT

AGREEMENT BETWEEN
……(NAME OF THE COMPANY)
AND
RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED
FOR
……

THIS AGREEMENT entered into on the _____ day of_____ month of 2023 between RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED, a company incorporated under the Companies Act, 1956, having its registered office at Vidyut Bhawan, Jyoti Nagar, Jaipur (Rajasthan) (hereinafter called 'RVPN' which expression shall unless repugnant to the context of meaning thereof include its successors and assigns) as party of the first part and ……..(NAME OF COMPANY), having its registered office ……..(ADDRESS) witnessed as follows.

WHEREAS RVPN is a State Transmission Utility (STU) under the Electricity (Supply) Act, 2003 as amended and is operating a number of transmission lines & sub-stations in the state of Rajasthan.

WHEREAS as per RFP and TSA documents O&M of bays shall be carried out by RVPN as per prevailing agreement on the same price and terms and conditions, wherein minor maintenance is on the part of RVPN and major works such as replacement of equipment / upgradation of equipment shall be on the part of TSP.

NOW, THEREFORE, IN CONSIDERATION of the mutual agreements and covenants set forth herein, it is hereby agreed by both the parties as follows:

1. PREAMBLE

1.1. Terminal bay equipments of following _____kV bays at _____GSS of RVPN owned by ……..(NAME OF COMPANY) :

1.0	Type of Bays	No. of Bays	Name of Bay
A			
B			
	Total		

1.1. Maintenance of the lines will be carried out by ……..(NAME OF COMPANY). However, the complete Operation & Maintenance of terminal Bay equipments at _____GSS of RVPN is proposed to be carried out by RVPN. The terminal point for the purpose of the scope of work covered under this agreement will be upto the terminal gantry at _____ RVPN switchyard GSS.

1.2. This agreement comes into effect from ……for the O&M of _____ Nos. bays, owned by _____(NAME OF COMPANY),at RVPN _____ GSS.

2. OPERATION AND MAINTENANCE OF LINE BAY:

(A) <u>ROLE OF RVPN</u>

2.1. RVPN shall carry out, on behalf of ……(NAME OF COMPANY), normal operation and maintenance of the bay equipment during the validity period of this agreement.

2.2. Co-ordination with NRLDC/SLDC/NLDC/RTAMC for shut downs for AMP/Emergency Maintenance, however, necessary approvals of NRLDC / NLDC shall be arranged by ……..(NAME OF COMPANY).

2.3. Consumables, paper rolls etc. for various recording instruments i.e. disturbance, voltage and frequency recorders and for event logger as applicable shall be provided by RVPN at their own cost.

2.4. Small spares for maintenance, such as member of structures, nuts and bolts, terminal blocks, ferrules, wire fuses, indicating lamps, auxiliary relays, contactors, control switches etc. and spares of similar nature required for the maintenance shall be provided by RVPN at their own cost.

2.5. All labour & T&P etc. required for normal O&M of all indoor as well as outdoor equipment of ……(NAME OF COMPANY) bays shall be provided by RVPN at their own cost.

2.6. Maintenance of common services and common bays including O&M, repairs spares & other consumables shall be arranged by RVPN at their own cost.

2.7. Spares required as mentioned at Clause 2.3 to 2.6 shall be provided by RVPN at their own cost.

2.8. RVPN shall carry out periodic maintenance, operation and testing as per RVPN practices and procedures. Wherever ……(NAME OF COMPANY) maintenance schedule indicates some additional activities not covered in RVPN norms, these will be mutually discussed between RVPN and ……..(NAME OF COMPANY)for finalization and inclusion in the schedule of maintenance.

2.9. RVPN shall maintain record of operation & maintenance carried out by them. The program of periodical testing the equipment shall be informed by RVPN to ……(NAME OF COMPANY), so desires of witnessing the testing.

2.10. Quarterly reports of maintenance and testing carried out by RVPN shall be furnished as per ……..(NAME OF COMPANY) / RVPN norms and formats to the extent possible.

2.11. …….(NAME OF COMPANY)'s authorized representative shall be permitted to visit control rooms and switchyards for inspection and shall also be permitted to go through maintenance records pertaining to the equipment belonging to ……(NAME OF COMPANY).

(B) <u>ROLE OF ……(NAME OF COMPANY)</u>

2.1. **Major Overhauling / Replacement**

In case of any major overhauling of _____(NAME OF COMPANY) equipment needs calling of supplier's representative or services of any external agency, cost of the same will be borne by _____(NAME OF COMPANY)**.**

2.2. **Replacement**

In case the equipment(s) is required to be replaced with a new one or warranted to be changed for up-gradation purpose the same will be got done by RVPN & cost of the same will be borne by _____(NAME OF COMPANY) will be responsible for providing new / upgrading of existing system / schemes required, if any.

2.3. **Spares:-**

All spares for _____kV GIS bays and _____kV AIS bay shall be provided by the _____(NAME OF COMPANY). In case RVPN provides spares of replacement for said bays the cost of the same can be billed to _____(NAME OF COMPANY) without any extra charges for such additional spare.

3. O&M CHARGES :-

3.1. The details of _____ (NAME OF COMPANY) bays at _____GSS (RVPN) along with DOCO is enclosed at Annexure-I.

3.2. The O&M charges for the relevant year shall be calculated as per @ 25% of the normative operation and maintenance expenses of relevant year for _____kV AIS and GIS bays as per Tariff Notification issued by CERC from time to time. The normative operation and maintenance expenditures as per CERC tariff notification issued for the year _____ vide No._____dated _____ are as under.

Particulars	**2019-2020**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Norms for sub-stations (In Rs. Lakh per bay)					
_____KV					

3.3 Accordingly the operation and maintenance charges shall be as under:-

O&M charges for bays (in Rs. Lakh per bay)	**2019-20**	**2020-21**	**2021-22**	**2022-23**	**2023-24**	
___ kV GIS						
___ kV AIS						

GST will be extra as per applicable tax rules and regulations.

3.4 As the O&M Charges derived from Tariff Notification issued by CERC, which is issued from time to time for 5 years block, therefore, it will prudent to link this MOU with notification of CERC Tariff Regulation, so that there is no need to revise the MOU every time, if both the parties do agree to the same.

3.5 Bills shall be raised once in a notification year in the month of April and _____(NAME OF COMPANY) shall make payment of these charges immediately.

3.6 GST shall be payable on total annual O&M charges as per prevailing rates applicable. The GST Number and GST ID are as under:-

Name	**RRVPNL**	**(NAME OF COMPANY)**
PAN	AABCR8312A	*To be provided by (NAME OF COMPANY)*
ARN	08AA080217002782F	*To be provided by (NAME OF COMPANY)*
GST ID	08AABCR8312A1ZT	*To be provided by (NAME OF COMPANY)*

4. **SECURITY CLAUSE**

Payment of O&M charges bill shall be made by _____(NAME OF COMPANY) within the stipulated period i.e. on due date. The O&M charges if not paid on time, non-payment may attract interest / late payment surcharge similar to that as per mutually agreed rates/ penalty as applicable.

5. INSURANCE

RVPN would take all necessary care and precautions while handling the equipment for maintenance purposes. _____(NAME OF COMPANY) will be responsible for taking appropriate insurance cover (fire / erection) for the equipment at their cost and lodging claims and processing them with the insurance company for recovery.

6. DISPUTES

1. In the event of any dispute of differences relating to the interpretation and application of the provision of the contracts / MOUs, firstly the parties shall try as far as practicable to solve the dispute amicably by mutual consultation.

2. If the same is not settled amicably by mutual consultation between the parties, the same shall be settled by Permanent Machinery of Arbitration as per the guidelines of Department of Public Enterprises dated 11.04.2017 having ref. no.F.No. 4(1)/2013-DPE (PMA)/FTS-1835 i.e. such dispute of difference shall be referred by either party for Arbitration to the sole Arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in charge of the Department of Public Enterprises. The Arbitration and Conciliation Act 1996 and the Arbitration and Conciliation (Amendment) Act,2015 shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make a further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law secretary or the Special secretary/Additional Secretary, when so authorized by the Law Secretary, whose decision shall bind the Parties finally and conclusively. The parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.

3. All disputes arising between the parties shall be subjected to the jurisdiction of the Courts in Jaipur only and in no other courts.

7. FORCE MAJEURE

The parties shall ensure due compliance with the terms of this agreement. However, no party shall be liable for any loss or damage whatsoever arising out of failure to carry out the terms of the agreement to the extent that such a failure is due to force majeure events such as war, rebellion, mutiny, civil commotion, riots, strike, lockout, forces of nature, Act of God and any other reason beyond the control of concerned party. But any party claiming the benefit of this clause shall satisfy the other party of the existence of such an event and given written notice within 16 days on occurrence of any of the above event to the other party to this effect.

8. CO-ORDINATION

From _____ (NAME OF COMPANY) side _____ or his authorized representative will co-ordinate, from RVPN side Chief Engineer (PPD), Jaipur or their authorized representative will co-ordinate.

9. IMPLEMENTATION OF THE AGREEMENT

All discretions to be exercised and direction, approvals, consents and notices to be given and action to be taken under these present unless otherwise expressly provided herein, shall be exercised and given by the signatories to this agreement or by the authorized representative(s) that each party may nominate in this behalf and notify in writing to the other party by registered post. Any other nomination of authorized representative (s) shall be informed likewise in writing by the parties within one month of signing of agreement.

10. NOTICE

All notices required or referred to under this agreement shall be in writing and signed by the respective authorized signatories of the parties mentioned herein below, unless otherwise notified. Each such notice shall be deemed to have been duly given, if delivered or served by registered mail / speed post of department of post with an acknowledgement due to the other party as follows:

1. RVPN a) Director (T), RVPN, Jaipur.
   b) Chief Engineer (PPD), Jaipur.
2. (NAME OF COMPANY) a)_____

11. VALIDITY OF AGREEMENT

This agreement would be valid initially for ten years from the date of signing provided that this agreement may be mutually extended, renewed or placed by another agreement on such terms and for such further period as the parties may mutually agree. Even after expiry of this agreement without further renewal or formal extension thereof, all the provisions of this agreement shall continue to operate till this agreement is formally renewed, extended or replaced.

In WITNESS WHEREOF the parties have executed these presents through here authorized representatives at Jaipur on the ____ day of ……., 20__

Signed by _____	Signed by _____
(for and on behalf of RAJASTHAN RAJYA VIDYUT PRASARAN NIGAM LIMITED)	(for and on behalf of Name of Company)
WITNESS:	WITNESS:
1.	1.
2.	2.

Annexure-1

S.No.	Name of Bay	RVPN Sub-stations	Date of Commercial Operation	O&M charges with effect from
1.				
2.				
3.				

ANNEXURE-10

FIRST TIME CHARGING DOCUMENTS

Documents required for Solar and Wind generator connectivity permission from SLDC

A. General Documents:-

	Required Document	Page No.
1.	Registration of RE generator/Developer	
2.	Approval of SLSE	
3.	Power Purchase Agreement (PPA)	
4.	Power Sale Agreement (PSA)	
5.	Connectivity Agreement	
6.	CEIG-Approved Single Line Diagram (plant + Switch yard)	
7.	Power evacuation document-CE (PP&D)	
8.	Schedule Date of commissioning +Extension letter (if any)	
9.	Bay Allocation letter and A&FS for construction of bay	
10.	Details of QCA (Appointment letter & Acceptance letter of QCA)	

B. Power evacuation Line charging permission :-

1.	Format A1 to A5 duly signed by circle officer of RVPN	
2.	Format B1 to B5 duly signed by circle officer of RVPN	
3.	Technical requirements to be fulfilled by Solar Power Developer (As per clause No. 3(a) to 3(v) of connectivity agreement) along with supporting documents and confirmed by the circle officer of RVPN	
4.	Single Line Diagram of RVPN Grid Substation	
5.	Forest Approval letter transmission line with NOC	
6.	Letter regarding PTCC route approval	
7.	Ownership of line & Line construction permission letter issued by Govt. (if line is constructed by SPD) under section 68 along with under section 164 regarding ROW approval	
8.	Electrical inspector Clarence certificate for bay / Line at RVPN Grid Substation	
9.	Electrical inspector Clarence certificate for line / Bays at PSS, other equipments installed at PSS & Solar power inverters	
10.	Protection certificate issued by the SE (MPTS), RVPN	
11.	STOMS meter Integration certificate issued by the SE (EA), RVPN, Jaipur	
12.	SCADA Integration for transfer of real time data to SLDC Telemetry certificate issued by the SE (SSDA-SLDC), RVPN,	

	Jaipur	

C. Documents / Information from Developer/Plant side

1.	Synchronization Committee formation letter issued by RUVNL	
2.	Letter issued by RUVNL regarding Takeoff power (if Commissioning is before scheduling)	
3.	Equipment Details of total plant Equipment including inverters	
4.	Installation of PMU at PSS of renewable energy generating stations of fifty megawatt and more per clause no. 48(6)(a) of Technical standards for construction of Electrical Plants and Electrical lines Regulations, 2022 of CEA	
5.	Equipments installed for Dynamic Reactive power support in compliance of Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations by RE Developers dated 12.05.2023	
6.	Demonstration of PSSE study for LVRT & HVRT compliance and Dynamic reactor power compensation	
7.	Static data as per format Annexure-I, Annexure-I(A) / Annexure-I(B)	
8.	Dynamic model data of inverters as per Annexure-I(C) /Annexure-I(D) and compliance of CEA connectivity regulation amendment issued on 12.5.23	
9.	Simulation Report as per enclosed Annexure-I (E)	
10.	Inverters LVRT & HVRT certificate and third party test report	
11.	Certificate and third party test report of Harmonics	
12.	Notarized undertaking on compliance of CEA regarding LVRT, HVRT and Harmonics(As per format- A)	
13.	Inverter Environment clearance certificate	
14.	Inverter efficiency certificate	
15.	Inverter islanding certificate	
16.	Test report of Inverters	
17.	Annexure- VII(B) / VII(D)	

Format - A

(To be notarized on a Rs 100 non-judicial stamp paper)

Affidavit

I _____, Son/Daughter/Wife of _____, aged about _____ years, residing at_____ do hereby solemnly affirm and sincerely state as follows:

1. That I am the _____(Designation) of the _____ (Company Name). I have been authorized by the _____(*company name)* vide Board Resolution / Power of Attorney / Authorization Letter dated ……..to sign this affidavit on behalf of the company.

2. The ___ MW Solar / Wind power plant _____(*Plant Name*) situated at Village: _____, Taluka: _____, District _____ has been awarded via competitive bidding conducted by _____ vide Letter of Intent _____ dated _____.

3. The above Solar / Wind Power Plant is scheduled to be commissioned by……(dd.mm.yyyy) *(ref. PPA dated ……).*

4. The date of Commercial operation (COD) will be intimated by_____(*Name of WPD/SPD*) to SLDC, Rajasthan prior to commencement of scheduling of power.

5. I state that _____*(WPD/SPD Name)* undertakes to ensure compliance to following regulations and guidelines as amended from time to time:

   a. Central Electricity Authority (Technical Standards for Connectivity to the Grid)Regulations, 2007 and any subsequent amendments thereof including but not limited to the norms for Low Voltage Ride Through (LVRT) and High Voltage Ride Through Capabilities (HVRT) as specified under standard B2 of the CEA (Technical Standards for Connectivity (Amendment) Regulations 2019.

   b. Central Electricity Regulatory Commission (CERC) (Grant of Connectivity, Long Term Access in Inter-State Transmission and related matters) regulation, 2009 and subsequent amendments thereof.

6. I undertake to submit the test report and Statement of Compliance (SoC)/ Conformity Statement (CS) as stipulated in MNRE guidelines demonstrating the compliance of applicable CEA Technical standards for Connectivity to the Grid (as amended from time to time) including LVRT/HVRT and harmonics.

DEPONENT

Verification: -

Verified at _____, this the _____ day of _____ 20__,that the contents in the above affidavit is true and correct to the best of knowledge and belief. No part of this affidavit is wrong and nothing material has been concealed there from.

DEPONENT

Solemnly Affirmed at ……..

On this……day of…… ..20___

And signed his/her name in my presence Deponent signed before me.

Technical requirements to be fulfilled by Solar Power Developer and confirmed by the circle officer

(Requirement of connection agreement clause No. 3 "Conditions Precedent to the implementation of the Commissioning Instructions")

S. No.	Technical requirement	Comments / Status
(a)	The Connection Works have been completed.	
(b)	The Applicant has complied with all its obligations as set out in the offer letter for this Agreement	
(c)	The Applicant has demonstrated the voice & data communication facilities to SLDC	
(d)	The Applicant has obtained necessary approvals like approval u/s 68 of Electricity Act 2003 for laying over head lines, Permission of Electrical Inspector for energisation of line and electrical equipments including power plant meeting safety requirements, PTCC, etc. from competent authority	
(e)	The supporting documents of protection scheme complying with the CEA (Technical standards for the connectivity to the grid) Regulation 2007 with latest amendment and the information as per Section-4 "System Planning" and Section-5 "Connection Condition" of Rajasthan Electricity Grid Code Part-1 are furnished	
(f)	The metering arrangement should comply with CEA (Installation & Operation of Meters) Regulation, 2006 as well as RERC Metering Regulations, 2007 with latest amendment	
(g)	Circuit breakers at the plant have protection scheme and break time such that fault is cleared within critical fault clearing time and does not result in tripping of RVPN system in case of fault in their plant. It should be as per CEA (Grid Standards) Regulations 2006 with latest amendment or as per directions of RVPN's protection wing	
(h)	The negative sequence relay on generator will have to be so wired that the same shall, in conjunction with directional over current relay looking towards RVPN sub-station, open their main breaker within critical fault clearing time	
(i)	Line isolator at the point of connection at RVPN shall have earthing switch towards generator side for safety of RVPN maintenance staff and during maintenance of RVPN's sub-station, the same will be closed. The generator shall ensure no injection of power during maintenance	
(j)	Adequate protection shall be provided on	

	interconnecting transformers for isolation of fault	
(k)	Check synchronizing relays shall be provided	
(l)	Necessary arrangements shall be provided to check any injection of harmonics in the power system of RVPN	
(m)	Furnished a brief write up on the intended synchronization operation i.e. furnish the complete sequence of operation of breakers etc. when synchronizing the system for grid connectivity	
(n)	No volt relay shall be provided so as to ensure line breaker to close only at RVPN end on dead line condition. No volt relays shall have to be installed in the metering box installed in the yard of RVPN GSS and shall be connected to metering PT/CVT core. The contacts of these relays shall be wired in closing circuit of the line breaker to power plant for this interlocking	
(o)	The complete protection scheme of line and various operating timings shall be got checked and verified by the Protection Wing of RVPN before synchronization operation	
(p)	An undertaking on Non judicial stamp of Rs. 100/- that applicant shall be responsible for any damage that may be caused to their generating plant at any time or stage due to synchronization operation	
(q)	The Applicant will submit the schematic diagram of the RVPN/Discoms network showing the location of the protection system and energy meters installed in the system. The applicant will ensure that the C&R panel on sending ends (Generator end and receiving station (RVPN end)) of respective voltage levels should be as per specification of RVPN. The Protection Wing of RVPN will witness the commissioning of these panels. The developer will provide two sets of manuals of protection relays and meters and other instruments used in C&R panel for GSS & Protection Wing	
(r)	The applicant will ensure healthiness of the relays and breakers at their ends	
(s)	The energy meters installed at polling station/ receiving station shall be tested once in a year jointly by the nominated officer of SE(M&P) of concerned Discom and the concerned SE(Protection) RVPN as per RERC metering Regulations, 2007	
(t)	Communication of data of meters installed at polling station as well as receiving station are to be communicated to the SLDC	
(u)	The nominated officer of SE(MPT&S) RVPN shall witness the testing and commissioning of the	

	metering equipments as well as line protection panel after installation of meters and protection panel for new and addition in existing capacity (metering and protection scheme).	
(v)	The Applicant has complied with its obligations under the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 and Rajasthan Electricity Grid Code, 2008	

Note :- Please attach supporting documents in confirmation of fulfillment of above requirements.

Name and signature of the circle officer