

**PROCEDURE FOR MAKING APPLICATION FOR GRANT OF CONNECTIVITY
IN ELECTRICAL SYSTEM (EHV, HV, LV, DISTRIBUTION) OF DISTRIBUTION
LICENSEE (FOR OPEN ACCESS CONSUMERS ONLY)**

1. Outline

- 1.1 This Procedure is in accordance with the various provisions of the “H.P. Electricity Regulatory Commission (Grant of Connectivity, Long-term and Medium-term intra-State Open Access and Related Matters) Regulations, 2010 & H.P. Electricity Regulatory Commission (Grant of Connectivity, Long-term and Medium-term intra-State Open Access and Related Matters) (First Amendment) Regulations, 2012”, here in after referred to as “the Regulations”. All applicants shall abide by the provisions of these Regulations and amendments thereof.
- 1.2 This procedure shall be applicable prospectively w.e.f. 1st April, 2015.
- 1.3 This Procedure shall apply to the Applications made for Grant of Connectivity to the electrical system of Distribution Licensee or associated facilities of the Distribution Licensee for transmission and/or wheeling of electricity with or without interstate transmission system as received by Designated Office of the Distribution Licensee (HPSEBL) on or after 1st April, 2015.
- 1.4 Application for grant of connectivity to the electrical system of Distribution Licensee can be made by:-
 - 1.4.1 A generating station, including a captive generating plant with exportable capacity.
 - 1.4.2 A consumer who intends to avail supply for its own use with contract demand exceeding 1 MVA.
 - 1.4.3 A consumer with contract demand of 1 MVA or less who require power for its use from the renewable energy generating sources located in Himachal Pradesh and has been permitted open access by HPERC.
- 1.5 The applicant (generator/consumer) already connected to grid or state grid or for which connectivity is already granted under the present arrangement, shall not be required to apply for connectivity for the same capacity. In case of extension of capacity of generator or consumer, however, it shall be required to make application for connectivity as per the provisions of these procedures.
- 1.6 The nodal agency for Grant of Connectivity, Long-term access and Medium-term open access to the electrical system of Distribution Licensee shall be Designated Office of Distribution Licensee.
- 1.7 The designated office of nodal agency (Distribution Licensee) for making application for grant of connectivity shall be “The Superintending Engineer (PH&T), O/o Chief Engineer (SP), HPSEBL, Shimla-04”.
The designated office of nodal agency (Distribution Licensee) for grant of Long-term access and Medium-term open access to the electrical system of Distribution Licensee shall be “The Chief Engineer (SP), HPSEBL, Shimla-04”.
- 1.8 Applicant granted “Connectivity” will be required to sign “Connection Agreement” with the designated office of the distribution licensee prior to the

physical inter-connection. The connection agreement shall be signed by the Chief Engineer (SO), HPSEBL, Shimla-04 on behalf of Distribution Licensee. After signing of the Agreement, the designated office of the distribution licensee will provide a copy of the same to the SLDC.

In case the connectivity is granted to the electrical system of other Distribution Licensee or person authorised for laying distribution line by the competent authority, a tripartite agreement shall be signed between applicant, the distribution licensee and such other distribution licensee or person in line with the provisions of Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2013 or the H.P. Electricity Distribution code 2009/ the Grid code, 2008 as applicable and amended from time to time. After signing of the Agreement, Nodal Agency will provide a copy of the same to SLDC.

- 1.9 The scheduling jurisdiction and procedure, metering, energy accounting and accounting of Unscheduled Interchange (UI) charges would be as per the applicable HPERC Regulations /State Grid Code/Indian Electricity Grid Code, as amended from time to time.
- 1.10 The applicant shall have to comply with the provisions of the applicable Regulations, concerned with the MTOA & LTOA framed by HPERC/CERC and amendments issued from time to time.
- 1.11 **Joint Mode Evacuation:** - The Application of IPP's who construct their projects in the same zone can also apply for connectivity jointly. The IPP's have to construct their own pooling station along with dedicated feeder up to the inter-connection points or up to the point allotted by the designated office of the distribution licensee as mutually agreed. The Connection Agreement will be signed with the distribution licensee by the nominated member/authorized person of such IPP's. The other guide lines as per HPERC (Power Procurement from Renewable Sources and Co-generation by distribution Licensee Regulation), 2010/CERC Regulations issued from time to time shall be followed.

2. Information required to be submitted with the application for connectivity by generating station.

- 2.1 In order to assess the preparedness of the applicant making application for connectivity to the electrical system of Distribution Licensee, an applicant is required to submit along with the application, documents in support of having initiated specific actions for project preparatory activities in respect of matters mentioned in (i) to (vi) below:
 - i) **Site identification and land acquisition:** The applicant shall intimate the information with regard to land required for the generation project, along with the extent to which the same has been acquired and taken possession of. The "Requirement" of land would be considered as indicated in the proposal filed with the competent authority for seeking environmental clearances. In case of land to be acquired under the Land Acquisition Act 1894, the applicant shall submit a copy of the notification issued for such land under Section - 4 of the Land

Acquisition Act 1894. In all other cases, the applicant shall furnish documentary evidence in the form of certificate by concerned and competent revenue / registration authority for the acquisition / ownership / vesting of the land.

- ii) **Environmental clearance for the power station:** The applicant shall have to inform the status on submission of requisite proposal, for the environmental clearance, to the concerned administrative authority (first level submission).
- iii) **Forest Clearance (if applicable) of the land for the power station:** The applicant shall have to inform the status on submission of requisite proposal, for the forest clearance, to the concerned administrative authority (first level submission).
- iv) **Fuel Arrangements:** Details on fuel arrangements shall have to be informed for the quantity of fuel required to generate power from the power station for the total installed capacity intended for connectivity.
- v) **Water linkage:** The applicant shall inform the status of approval from the concerned irrigation department or any other relevant authority for the quantity of water required for the power station. These evidences shall be supported by a sworn affidavit by the generation project developer as per the format given at “**FORMAT-CONNECTIVITY-1**”.
- vi) **Other Statutory clearance:** The Applicant shall also provide the necessary approvals from the concerned Departments/local authorities as applicable:
 - 1. Forest clearance form Forest Department
 - 2. TEC clearances from Energy Directorate
 - 3. CEA clearance
 - 4. NOC from local authorities /Panchayat/IPH/B&R Deptt.
 - 5. Govt. Clearance for muck disposal
 - 6. Wild life clearances
 - 7. Aviation clearance
 - 8. Others, if any as applicable or as decided by the Distribution Licensee

Note:- The grant of connectivity will not be withheld for want of fulfilment of such requirements as it is the duty of generator to get all such clearances before commissioning his plant.

3. Submission of Application

- 3.1 The application for Grant of Connectivity to electrical system of Distribution Licensee should be submitted in a sealed envelope with “Application for Grant of Connectivity” clearly marked on the envelope. The application shall be addressed to the designated office as under:

**The Superintending Engineer (PH&T),
O/o Chief Engineer (SP),
HPSEBL, Vidyut Bhawan,
Shimla-171004**

Distt.-Shimla (H.P.)
Fax No. 0177-2657901

- 3.1 The application for Grant of Connectivity to electrical system of Distribution Licensee shall be made as per the application format prescribed for connectivity and shall contain details such as, geographical location of the generation project, unit-wise commissioning schedule, etc. **[FORMAT- CONNECTIVITY -2]**. An application for Grant of Connectivity shall be accompanied by a non-refundable application fee to be paid at the rates notified by HPERC at the time of submission of application by the applicant, in favour of **H. P. State Electricity Board Ltd.** The presently applicable rates are as under:

Sr. No.	Quantum of Power to be injected/off taken into/from the electrical system of State Distribution Licensee	Application Fees (Rs. Lakhs) Non-refundable
1.	Upto 5 MW	2.00
2.	More than 5MW and up to 10 MW	4.00
3.	More than 10 MW	6.00

The existing consumers, who are getting supply of electricity for their own use from the distribution licensee under the standard supply agreements and are eligible for open access to the electrical system of Distribution Licensee, shall be provided connectivity and open access to the electrical system of Distribution Licensee to the extent of their sanctioned contract demand. Such existing consumers shall not be required to pay any application fee for connectivity.

Further, in case of prospective consumers seeking connectivity and long/medium term open access from the distribution licensee for receiving electricity for their own use or the existing consumers seeking increase in the existing sanctioned contract demand, the terms and conditions as applicable to the prospective consumers or the existing consumers, as the case may be, under the Supply Code, the Himachal Pradesh Electricity Regulatory Commission (Recovery of Expenditure of Supply of Electricity) Regulations, 2012 and the Himachal Pradesh Electricity Regulatory Commission (Licensee's Duty for Supply of Electricity on Request) Regulations, 2004 shall be applicable.

- 3.2 Application fees are to be paid through Demand Draft or directly credited to "**H. P. State Electricity Board Ltd.**" account electronically through RTGS (Real-Time Gross Settlement) as per details given below:

- a) Payee: Chief Accounts Officer, HPSEBL, Shimla-04
- b) Name of Bank: State Bank of India
- c) Branch: SBI, Main Branch, Shimla
- d) Branch Code: 0718
- e) IFSC: SBIN0000718
- f) A/c No: 10835924644

Provided that the proof of payment directly credited to the above account of **H. P. State Electricity Board Ltd.** must be attached with the application.

3.3 All applications received during the month shall be treated to have been made concurrently.

3.4 An incomplete Application, and/or an Application not found to be in conformity with these Procedures and the Regulations, shall be rejected.

4 Changes to the Application already made:

4.1 Any material change in the location of the generation project/drawl point or change (by more than 1 MW) in the quantum of power to be interchanged with the electrical system of Distribution Licensee shall require filing of fresh application along with applicable fees and the already filed application shall be considered disposed and application fee shall be forfeited.

4.2 If any applicant has already been granted connectivity but the process of construction by the distribution licensee has not yet started and the applicant subsequently applies afresh with material changes or change by more than 1 MW in the quantum of power to be interchanged as provided above in para 4.1, then the already granted connectivity shall stand cancelled and application fee already deposited shall be forfeited .

4.3 Application for any minor changes, i.e. material change in location or change in installed capacity of 1 MW or less shall have to be submitted in the same application format [**FORMAT-CONNECTIVITY -2: "Application for Grant of Connectivity"**].

5 Grant Of Connectivity

5.1 On receipt of the application, the designated Office of Distribution Licensee shall, in consultation & through coordination with other concerned office of the Distribution Licensee, process the application and carry out, as the case may be the necessary inter-connection study as specified in the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2013 or the H.P. Electricity Distribution code 2009/ the Grid code, 2008 as applicable and amended from time to time.

The designated office of Distribution Licensee within 10 days of receipt of application shall forward the application for seeking comments/NOC from the following offices of Distribution Licensee:

5.1.1 Where interconnection/injection/drawl is at 66 kV & above Voltage level:

The Chief Engineer (ES)/ The Chief Engineer (Generation) owning the sub-station / point of interconnection / injection /drawl

5.1.2 Where interconnection/injection/drawl is at voltage below 66 kV:

The concerned Chief Engineer (Operation) owning the sub-station/point of interconnection/injection/drawl

The above offices of Distribution Licensee shall submit their comments/NOC to the designated office of Distribution Licensee within

30 days after the receipt of application from the office of designated office. These offices shall clearly specify the name of the sub-station or pooling station or switchyard where connectivity is to be granted. In case connectivity is to be granted by looping-in and looping-out of an existing or proposed line, the aforesaid offices shall specify the point of connection and name of the line at which connectivity is to be granted. They will further indicate the broad design features of dedicated transmission/distribution line required to be constructed by the applicant at its cost to the point of connection with the electrical system of Distribution Licensee or associated facilities of the Distribution Licensee.

- 5.2 The designated office of the nodal agency within 60 days from the date of receipt of application complete in all respect and after considering all suggestions and comments received from the other offices of Distribution Licensee involved in the intra-State electrical system of Distribution Licensee, shall:
 - 5.2.1 Either make formal "Connectivity offer to the applicant with a copy to all the concerned offices of Distribution Licensee after considering all suggestions and comments received involving intra-State electrical system of Distribution Licensee.
 - 5.2.2 Reject the application, if technically not feasible. However, before rejecting an application, opportunity of hearing shall be given to the applicant and minutes of the hearing may be recorded in writing.
- 5.3 The intimation for grant of connectivity shall be communicated to the applicant **within 60 days** from last day of the month in which the application has been received as per **FORMAT-CONNECTIVITY-3**.
- 5.4 Applicant given intimation for Connectivity to the grid shall have to furnish additional details to the Distribution Licensee for signing of "Connection Agreement" as per format given at **FORMAT-CONNECTIVITY-4**. These details are to be furnished to Distribution Licensee at least 2 (two) years prior to physical interconnection, unless otherwise indicated by Distribution Licensee. The Applicants are, however advised to furnish such details as early as possible for enabling them have lead time for any type of access.
- 5.5 The designated office of Distribution Licensee will process the above information and will intimate the applicant, the connection details as per format given at **FORMAT-CONNECTIVITY-5**. Pursuant to such Connection details, the applicant shall have to sign "Connection Agreement" with the distribution licensee prior to the physical interconnection as per format given at "**FORMAT-CONNECTIVITY -6**". After signing of the Connection Agreement, the distribution licensee will provide a copy of the same to the SLDC within a week time. Non-signing of connection agreement within stipulated period without seeking extension, the connectivity offer shall stand lapsed and after expiry, the request shall be treated as fresh application and shall be processed accordingly.

- 5.6 In case the connectivity is granted to the electrical system of other Distribution Licensee or person authorised for laying distribution line by the competent authority a tripartite agreement shall be signed between applicant, the distribution licensee and such other distribution licensee or person in line with the provisions of Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2013 or the H.P. Electricity Distribution code 2009/ the Grid code, 2008 as applicable and amended from time to time. After signing of the Agreement, Nodal Agency will provide a copy of the same to SLDC.
- 5.7 The applicant shall be eligible to be connected to the electrical system of Distribution Licensee (HPSEBL) from the date mentioned in the connection agreement.

6 Interchange of Power with the Electrical System of Distribution Licensee:

- 6.1 The grant of connectivity shall not entitle an applicant to interchange any power with the electrical system of Distribution Licensee unless it obtains long-term access, medium-term open access or short-term open access from the concerned nodal agency(ies).
- 6.2 However, with the consent of SLDC/Distribution Licensee, the generating station including captive generating plant, which has been granted connectivity to the electrical system of distribution licensee shall be allowed to undertake interchange of power for commissioning activities and injection of infirm power into the grid during testing including full load testing before being put into commercial operation for a period not exceeding three months, even before availing any type of open access, after obtaining permission of the concerned State Load Dispatch Centre/Distribution Licensee, which shall keep grid security in view while granting such permission and after ensuring that injection of such power is only for the purpose of testing prior to commencing of Commercial Operation of the Generating Station or a unit thereof. The generating company shall pay the wheeling charges for such infirm power at the normal rates as decided by HPERC from time to time. This infirm power from a generating station or a unit thereof, other than those based on non-conventional energy sources, the tariff of which is determined by the State Electricity Regulatory Commission, will be governed by the H.P. State Electricity Regulatory Commission (Terms and Conditions for determination of Transmission Tariff) Regulations, 2007 as amended from time to time. The power injected into the electrical system of Distribution Licensee from such generating stations during testing shall also be charged at UI rates. The Distribution Licensee may also purchase this power from the generating company at mutually agreed rates which shall not be more than the applicable UI rates.
- 6.3 The Generating Station including Captive Generating Station shall submit likely date of synchronization, likely quantum and period of injection of infirm power before being put into commercial operation to the concerned SLDC and the Chief Engineer (SO), HPSEBL at least one month in advance.

7 Construction Of Dedicated System

- 7.1 An applicant may be required by the distribution licensee to construct a dedicated system to the point of Inter-connection to enable connectivity to the electrical system of Distribution Licensee which shall be owned, operated and maintained by the applicant.
- 7.2 The applicant shall pay the cost towards modification/alterations to the infrastructure of Distribution Licensee or Intra-State Distribution Licensee for accommodating the proposed connection as specified in the letter of Distribution Licensee furnishing connection details.
- 7.3 Provided further that if the dedicated system is also used by any other user(s) at a later date, then the cost of assets of dedicated system shall be shared/settled mutually by the owner of the dedicated line with the users.

8 General

- 8.1 The applicant shall keep the STU/Distribution Licensee and HPSLDC (HP Load Despatch Society) indemnified at all times and shall undertake to indemnify, defend and keep the Distribution Licensee 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.
- 8.2 All costs/expenses/charges associated with the application, including bank draft, bank charges etc. shall be borne by the applicant.
- 8.3 The applicant shall abide by the provisions of the Electricity Act, 2003, the HPERC Regulations/Central Electricity Authority Technical standards for connectivity to grid regulation, 2013 or H.P. Electricity Distribution Code, 2009 and Grid Code, 2008/Indian Electricity Grid Code, as applicable and amended from time to time.
- 8.4 This procedure aims at easy and pragmatic disposal of applications made for Connectivity to the electrical system of Distribution Licensee. However, some teething problems may still be experienced. The various implications would be known only after practical experience is gained by way of implementing these procedures. In order to resolve the same, this procedure shall be reviewed or revised by the Distribution Licensee with prior approval of HPERC.
- 8.5 All complaints regarding unfair practices, delays, discrimination, lack of information, supply of wrong information or any other matter related to grant of connectivity to the electrical system of Distribution Licensee shall be directed to HPERC for redressal.

FORMAT-CONNECTIVITY -1

On Non Judicial Stamp paper of Rs. 100

AFFIDAVIT

In the matter of filing application to Distribution Licensee for Grant of Connectivity to the Electrical System of Distribution Licensee under HPERC Regulations, 2010 as amended from time to time.

I.....(Name).....S/o Sh. (Father's name)..... Working as.....(Post)..... in..... (Name of the Company/Firm/Association of persons/Individual)..... having its registered office at.....(Address of the Company/Firm/Association of persons/Individual)..... do solemnly affirm and say as follows:

1. That I am the (Post).....of..... (Name of the Company/Firm/Association of persons/Individual), the representative in the above matter and am duly authorized to file the above application and to make this affidavit.
2. That I submit that M/s.....(Name of the Company/Firm/Association of persons/Individual)..... is a registered Company/Firm/Association of persons/Individual.....(Public Ltd/Pvt. Ltd.)..... registered under Companies Act. Under the Article of Association of the Company and in accordance with the provisions of Electricity Act, 2003/relevant Regulation(s) of HPERC as amended from time to time, the Company/Firm/Association of persons/Individual can file the enclosed application.
3. That I submit that all the details given in the enclosed application for grant of Connectivity along with necessary documents are true and correct and nothing material has been concealed thereof.
4. Further verify that contents of para 1 to 3 of my above affidavit are true and correct to the best of my knowledge and belief. No part and nothing material has been concealed therein.

Verified at Shimladay of 20

DEPONENT

(To be duly attested by Notary)

FORMAT-CONNECTIVITY-2

Application for grant of Connectivity

Sr. No.	Description	Information to be furnished by the applicant
1.	Name of the Applicant	
2.	Addresses for Correspondence	
3.	Contact Details	
	Prime Contact Person	
	Designation	
	Phone No. (Landline)	
	Phone No. (Mobile)	
	Fax: E-Mail	
	Alternate Contact Person	
	Designation	
	Phone No. (Landline)	
	Phone No. (Mobile)	
	Fax: E-Mail	
	4.	Category
Generator (other than captive)		
Captive Generator		
Consumer		
5.	Details for Connectivity	
5a.	Capacity (MW) for which connectivity is required	
5b.	Date from which connectivity is required	
6.	Location of the Generating Station /Consumer (In case of Hydro-Generating Station Separate detail of Basin/Tributary be given)	
	Nearest Village / Town	
	District	
	State	
	Latitude	
	Longitude	
	Note:-In case of Joint Mode of Evacuation separate detail be given	

7.	Installed Capacity of the Generating Station	
	Unit-1	
	Unit-2	
	Unit-3	
	Unit-4	
	Unit-5	
	Unit-6	
	Note:-In case of Joint Mode of Evacuation separate detail be given	
8.	Commissioning Schedule of the Generating Station (new)	
	Unit-1	
	Unit-2	
	Unit-3	
	Unit-4	
	Unit-5	
	Unit-6	
9.	Details of the Generating Station	
	Name of the Power Plant Promoter	
	Fuel	
	Source of Fuel	
	Generation Voltage	
	Step-up Voltage	
	Is it an identified project of CEA	
Base Load / Peaking		
10.	Details of Nearest 11/22/33/66/132/220 kV Sub- Stations	
	<i>Sub-Station-1</i> Voltage levels available Owner Distance (Km)	
	<i>Sub-Station-2</i> Voltage levels available Owner Distance (Km)	
	<i>Sub-Station-3</i> Voltage levels available Owner Distance (Km)	
11.	Details of DD/E-transaction	

	Application Fee) Amount (in Rs.) DD/Transaction No. Date Bank Name Branch Name	
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Note: In case of Hydro Generating Station the following details be also furnished:

- a. Type of Turbine
- b. Governing equipment
- c. Main-inlet Valve (MIV)
- d. Generator
- e. Exciting System
- f. Step up Transformer
- g. Switchgear System
- h. XLPE Cables
- i. Shunt Capacitor
- j. Auxiliary Supply
- k. Tributary/Basin rivers
- l. Any, other information desired by the Distribution Licensee.

Note: In case of Joint Mode Evacuation the following details be also furnished:

- a. Capacity of each Power House
- b. Load flow studies & Fault studies of each P/House
- c. Voltage at which Joint evacuation
- d. Inter-connection point
- e. PPA of each IPPs
- f. Agreement of Sharing of Wheeling charges up interconnection point
- g. Authority to sign the Contract Agreement with the Distribution Licensee
- h. Equipment detail of each IPP
- i. Any, other information desired by the Distribution Licensee.

FORMAT-CONNECTIVITY -3

Intimation for grant of Connectivity

Sr. No.	Description	Information to be furnished by the Distribution Licensee
1.	Intimation No. & Date	
2.	Ref. Application No. & Date	
3.	Name of the Applicant	
4.	Address for Correspondence	
5.	Nature of the Applicant	
	Generator (other than captive)	
	Captive Generator	
	Consumer	
6.	Details for Connectivity	
6a.	Capacity (MW) for which connectivity is granted	
6b.	Point at which Connectivity is granted	
6c.	Date from which connectivity is granted	
6d.	Electrical system of Distribution Licensee Required for Connectivity	
6e.	Implementing Agency for connectivity to the electrical system of Distribution Licensee	
6f.	Agencies between whom agreement is to be signed for implementation connectivity to the electrical system of Distribution Licensee	
7.	Wheeling Charges Applicable for the dedicated line	
8.	Location of the Generating Station / Consumer	
	Nearest Village / Town	
	District	
	State	
	Latitude	
	Longitude	
9.	Installed Capacity of the Generating Station	
	Unit-1	
	Unit-2	
	Unit-3	
	Unit-4	
	Unit-5	

10.	Commissioning Schedule of the Generating Station (new)	
	Unit-1	
	Unit-2	
	Unit-3	
	Unit-4	
	Unit-5	
	Unit-6	

FORMAT-CONNECTIVITY -4

Additional information to be furnished to distribution licensee for signing of "Connection Agreement" for Connection to the Electrical System of Distribution Licensee

A. Details of Applicant

Sr. No.	Description	Information to be furnished by the applicant
1.	Name of the Applicant Company/ Firm/ Association of persons/Individual:	
2.	Details of Grant of Connectivity	
	(a) Connectivity Intimation No.	
	(b) Date	
3.	Address for Correspondence:	
4.	Contact Person:	
4.1	Prime Contact Person	
	(a) Name	
	(b) Designation	
	(c) Phone No.	
	(d) FAX	
4.2	Alternate Contact Person	
	(a) Name	
	(b) Designation	
	(c) Phone No.	
	(d) FAX	
5.	Status of Applicant Company/Firm/Association of persons/Individual (Please tick the appropriate box):	<input type="checkbox"/> Generating station including captive Generating plant
		<input type="checkbox"/> Consumer
6.	Estimated time for completion of project (Please enclose PERT chart)	

B. Maps and Diagrams

1. Provide necessary survey of India topo sheet clearly marking the location of the proposed site. **Schedule - I.**
2. Provide site plan (both hard and soft copy in AutoCAD 2000 & above version) in appropriate scale. **Schedule-II.** The site plan should indicate following details
 - a. The proposed location of the Inter- connection point
 - b. Generators
 - c. Transformer
 - d. Site building

3. Provide an electrical Single Line Diagram (SLD) of the proposed facility detailing all significant items of plant. The plan is to be submitted in both hard copy and soft copy in AutoCAD 2000 & above version. **Schedule - III.**

C. Details of Connection - Generation Plant

1.	Type of Generation Plant (Hydro, Thermal, Gas, etc.)	
2.	Rating of Generator Units	Schedule - IV
3.	Maximum Export Capacity Required	
4.	Maximum Import Capacity required. This is the amount of import capacity that the site will require during startup (MVA)	
5.	Station house load during normal operating conditions (MW/MVAR)	
6.	Expected running regime e.g. base load, Peaking, etc.	
7.	Generator Data for Fault (Short Circuit Studies)	Schedule - V
8.	Dynamic Simulation Data Generator Excitation Power System Stabilizer	Schedule - VI Schedule - VII Schedule - VIII

D. Details of Connection - Consumer

1.	Type of Load (Industrial/Commercial) including type of industry, i.e. electric furnace, rolling mills, manufacturing, assembly line, etc.	
2.	Peak requirement of load in MVA, MW, and	
3.	Peak import required in MVA, MW and MVAR	
4.	Month-wise Peak import required in MVA, MW and MVAR	
5.	Month-wise Energy requirement in MUs.	
6.	Data for Fault (Short Circuit Studies)	Single phase and three phase Fault level

E. Details of Connection – Data and Voice Communication

1.	Type Data Gateway (Remote Terminal Unit/Substation Automation System Gateway)	(Whether RTU/ Substation Automation System Gateway; and Number of data ports)
2.	Data Communication connectivity Standard followed (As per interface requirement and other guidelines made available by the respective SLDC/ Distribution Licensee).	(Type of Communication Protocol, i.e. 101(serial port) or 104 (Ethernet), etc.)
3.	Write here the communication media, interface and capacity being targeted for connection for Data and voice Communication (compatible with the existing system)	(Communication media: For example: fiber optics, PLCC, etc. Interface : Example RS 232C, G.703) or as per mutual agreement Capacity : 1200 baud, 64 Kbps, 9.6 Kbps, etc as per mutual agreement)

This is to certify that the above data submitted with the application is pertaining to the connection sought for the electrical system of Distribution Licensee. Further, any additional data sought for processing the application shall be furnished.

Authorized Signatory of Applicant

Name :
Designation :
Seal :
Place :
Date :

Schedule-I: Survey of India topo sheet clearly marking the location of the proposed site

Schedule-II: Site plan in appropriate scale.

Schedule-III: Electrical Single Line Diagram (SLD) of the proposed facility detailing all significant items of plant.

Schedule - IV : Rating of Generating Units

(Add additional sheets if number of units are more)

		Unit -1	Unit- 2	Unit -3
	Unit Rating (MVA)			
	Normal Max. Continuous Generation Capacity at Normal operating temperature (MW)			
	Normal Max. Continuous Export Capacity at Normal operating temperature (MW)			
	Maximum (Peaking) generating Capacity at min ambient air temperature (MW)			
	Maximum (Peaking) Export Capacity at min ambient air temperature (MW)			
	Minimum Continuous Generating Capacity (MW)			
	Minimum Export Generating Capacity (MW)			
	Normal Maximum Lagging MVAR at rated MW output			
	Normal Maximum leading MVAR at rated MW output			

Please attach a capability Curve:

Drawing No. of the Capability Diagram attachment

Schedule - V: Generator Data for Fault (Short Circuit Studies)

All data to be provided on pu machine MVA base

1.	Direct Axis Transient Reactance (Unsaturated)	Xd	
2.	Sub-transient Reactance (Unsaturated)	Xd''	
3.	Synchronous Reactance	Xs	
4.	Zero Phase Sequence Reactance	Xo	
4.	Negative Phase Sequence Reactance	X2	

Schedule - VI: Dynamic Simulation Data

Generator Data

All data to be provided on pu machine MVA base

1.	Direct Axis Positive Phase Sequence Xd Synchronous Reactance		
2.	Quadrature Axis Positive Phase Sequence Synchronous Xq Reactance		
3.	Direct Axis Transient Reactance (unsaturated) Xd		
4.	Quadrature Axis Transient Reactance (unsaturated) Xq		
5.	Sub-Transient Reactance (unsaturated) Xd		
5.	Armature Leakage Reactance Xl		
6.	Direct Axis Transient open circuit Time Constant (Secs) Tdo		
7.	Direct Axis Sub transient open circuit Time Constant (Secs) Tdo		
8.	Quadrature Axis Transient open circuit Time Constant (Secs) Tqo		
9.	Quadrature Axis Sub transient open circuit Tqo Time Constant (Secs)		
10.	Inertia of complete turbo generator (MWs/MVA) H		

11.	Please provide open circuit magnetization curve enter drawing number here or mention "assume"		
	<i>if this not available then Distribution Licensee shall assume magnetic saturation characteristics as per the Annexure-a</i>		

Excitation Data

Please submit Laplace domain control block diagram that represents the generator excitation system in accordance with the IEEE standard excitation model or as otherwise agreed with SLDC/ Distribution Licensee. This control block diagram should completely specify all the time constants and gains to fully explain the transfer function from the compensator or generator terminal voltage and field current to generator voltage. A list of acceptable IEEE standard excitation model available with PSS/E simulation package used by SLDC is shown in **Annexure-B**.

Please fill/tick the appropriate box below:

Please assume model

OR

If the excitation data is not available at this stage then SLDC/ Distribution Licensee shall assume exciter model given at **Annexure-C** which represents a typical excitation model.

Assume the model given at **Annexure-C** as our model.

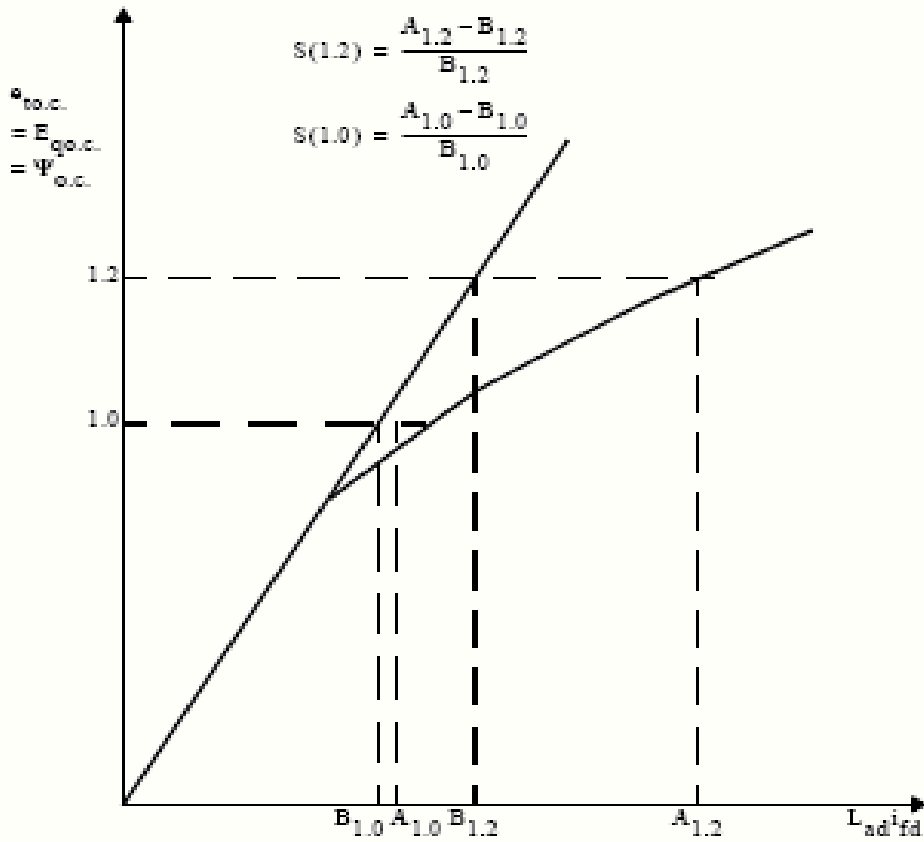
Schedule - VII: Two Winding Transformer Data

1.	Transformer positive sequence resistance (R1%)	
2.	Transformer positive sequence reactance (X1%)	
3.	Transformer zero sequence resistance (R0%)	
4.	Transformer zero sequence reactance (X0%)	
5.	Transformer Vector group	
5.	Nature of Tap Changer (on load/off load)	
6.	Number of steps and step size	

Schedule - VIII: Three Winding Transformer Data

1.	Transformer Vector group	
2.	Positive sequence resistance (R1HL1%) between HV/LV1	
3.	Positive sequence reactance (X1HL1%) between HV/LV1	
4.	zero sequence resistance (R0HL1%) between HV/LV1	
5.	zero sequence reactance (X0HL1%) between HV/LV1	
6.	Positive sequence resistance (R1HL2%) between HV/LV2	
7.	Positive sequence reactance (X1HL2%) between HV/LV2	
8.	Transformer zero sequence resistance (R0HL2%) between HV/LV2	
9.	zero sequence reactance (X0HL2%) between HV/LV2	
10.	Positive sequence resistance (R1L1L2%) between LV1/LV2	
11.	Positive sequence reactance (X1L1L2%) between LV1/LV2	
12.	Zero sequence resistance (R0L1L2%) between LV1/LV2	
13.	Zero sequence reactance (X0L1L2%) between LV1/LV2	
14.	Positive sequence resistance (R1HL1//L2%) between	
15.	Positive sequence reactance (X1HL1//L2%) between HV/(LV1+LV2)	

16.	Zero sequence resistance ($R_{0HL1}/L2\%$) between HV/(LV1+LV2)	
17.	Zero sequence reactance ($X_{0HL1}/L2\%$) between HV/(LV1+LV2)	



Annexure-a (above diagram)

Open Circuit Magnetic Curve

Magnetic saturation data to be assumed

S (1.0) =

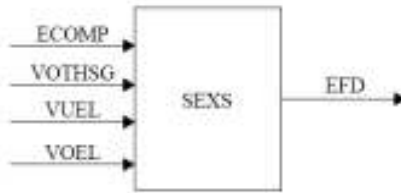
S (1.2) =

Acceptable IEEE standard excitation model available with PSS/E simulation package used by SLDC

Excitation System Models	
ESAC1A	1992 IEEE type AC1A excitation system model
ESAC2A	1992 IEEE type AC2A excitation system model
ESAC3A	1992 IEEE type AC3A excitation system model
ESAC4A	1992 IEEE type AC4A excitation system model
ESAC5A	1992 IEEE type AC5A excitation system model
ESAC6A	1992 IEEE type AC6A excitation system model
ESAC8B	Basler DECS model
ESDC1A	1992 IEEE type DC1A excitation system model
ESDC2A	1992 IEEE type DC2A excitation system model
ESST1A	1992 IEEE type ST1A excitation system model
ESST2A	1992 IEEE type ST2A excitation system model
ESST3A	1992 IEEE type ST3A excitation system model
EXAC1	1981 IEEE type AC1 excitation system model
EXAC1A	Modified type AC1 excitation system model
EXAC2	1981 IEEE type AC2 excitation system model
EXAC3	1981 IEEE type AC3 excitation system model
EXAC4	1981 IEEE type AC4 excitation system model
EXBAS	Basler static voltage regulator feeding dc or ac rotating exciter model
EXDC2	1981 IEEE type DC2 excitation system model
EXELI	Static PI transformer fed excitation system model
EXPIC1	Proportional/integral excitation system model
EXST1	1981 IEEE type ST1 excitation system model
EXST2	1981 IEEE type ST2 excitation system model
EXST2A	Modified 1981 IEEE type ST2 excitation system model
EXST3	1981 IEEE type ST3 excitation system model
IEEET1	1968 IEEE type 1 excitation system model
IEEET2	1968 IEEE type 2 excitation system model
IEEET3	1968 IEEE type 3 excitation system model
IEEET4	1968 IEEE type 4 excitation system model
IEEET5	Modified 1968 IEEE type 4 excitation system model
IEEEX1	1979 IEEE type 1 excitation system model and 1981 IEEE type DC1 model
IEEEX2	1979 IEEE type 2 excitation system model
IEEEX3	1979 IEEE type 3 excitation system model
IEEEX4	1979 IEEE type 4 excitation system, 1981 IEEE type DC3 and 1992 IEEE type DC3A models
IEET1A	Modified 1968 IEEE type 1 excitation system model
IEET1B	Modified 1968 IEEE type 1 excitation system model
IEET5A	Modified 1968 IEEE type 4 excitation system model
IEEX2A	1979 IEEE type 2A excitation system model
SCRX	Bus or solid fed SCR bridge excitation system model
SEXS	Simplified excitation system model

SEXS – Simplified Excitation System Model

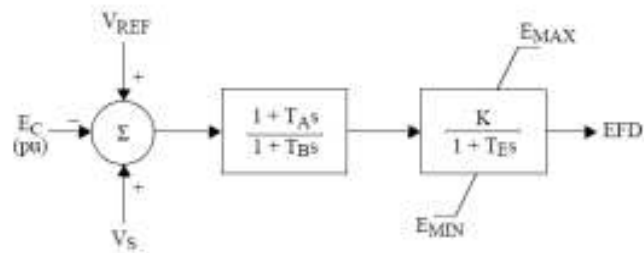
This model is located at system bus # _____ IBUS,
 machine # _____ I.
 This model uses CONs starting with # _____ J,
 and STATEs starting with # _____ K.



CONs	#	Value	Description
J			T_A/T_B
J+1			$T_B (>0)$ (sec)
J+2			K
J+3			T_E (sec)
J+4			E_{MIN} (pu on EFD base)
J+5			E_{MAX} (pu on EFD base)

STATEs	#	Description
K		First integrator
K+1		Second integrator

IBUS, 'SEXS', I, T_A/T_B , T_B , K, T_E , E_{MIN} , E_{MAX}



$$V_S = VOTHSG + VUEL + VOEL$$

Annexure-C (above model)

SEXS Simplified Excitation System Model

FORMAT-CONNECTIVITY-5

Draft Letter furnishing Connection Details for Connection to the Electrical System of Distribution Licensee by Designated Offices of Distribution Licensee

[Name]

[Address of the party]

Subject: Connection Details for connection to the Electrical System of Distribution Licensee.

Dear Sir,

This is with reference to your application No. _____ dated _____ seeking connectivity to the Electrical System of Distribution Licensee. We have examined your proposal and you are here by permitted connectivity to the grid as per the details given below:

1.	Name of the Link (sub-station/line) at which connectivity is granted	
2.	Voltage level	11/22/33/ 66/132/220 kV
3.	Type of Link	
4.	Reactive compensation to be provided	[Specify rating of Line Reactor/ Bus Reactor /Series compensation if any]
5.	Maximum Import Capacity through the Link	
6.	Maximum Export Capacity through the Link	
7.	Expected date of commercial operation	
8.	Bay allocated in the switchyard of connectivity.	Bay No [Refer enclosed single line diagram at Annexure-I]
9.	Equipment to be provided by applicant in the allocated bay meeting the requirement of Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2013 as amended from time to time which shall be compatible with the equipment installed at other end.	[refer Annexure-II]
10.	Protection Equipment to be provided by Applicant shall be meeting the requirements of Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2013 as amended from time to time and shall be compatible & matching with the equipment installed at other end.	[refer Annexure-II]

11.	System recording & SCADA Equipment shall be meeting the technical standards as per Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2013 as amended from time to time and shall be compatible to facilitate exchange of data with the existing System installed in the electrical system of Distribution Licensee.	[refer Annexure-III]
12.	Details of the modification/alteration to existing facilities for accommodating proposed connection and its estimated cost to be borne by the applicant.	[refer Annexure-IV]
13.	Name of communication link for data and voice communication	From (name of switch yard/ Sub-station) to (name of switch yard/ Sub-station)
14.	Communication equipment details upto SLDC Data Collection Point	[refer Annexure-V]
15.	Site responsibility schedule	(as marked in the attached GA diagram at annexure -VI)

It may be noted by the applicant that all the equipments and systems to be provided by applicant, shall have to conform to the technical standards as specified in the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2013 or the H.P. Electricity Distribution code 2009/ the Grid code, 2008 as applicable and amended from time to time. The applicant will establish, test, commission and demonstrate the voice and data communication facilities with concerned SLDC before test charging.

At the Inter-connection point to the electrical system of Distribution Licensee, all works associated with bay extension shall be taken- up by the Distribution Licensee on deposit of cost for the same by the applicant. However, these equipments shall be owned by the applicant.

Thanking You,

Yours faithfully,

Annexure - II

Equipments to be provided by the applicant in the allocated bay, meeting the technical standards as per Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2013 as amended from time to time.

Sr. No.	Name of Equipments	Nos.	Ratings
1.	Circuit Breaker		
2.	Isolators		
3.	Earth Switches		
4.	CT		
5.	CVT		
6.	Wave Trap		
7.	Etc.		
8.			
9.			

Annexure-III

System recording & SCADA Equipment to be provided by the applicant

Sr. No.	Name of Equipments	Nos.	Ratings
1.	Event Logger		
2.	Disturbance recorder/ Fault locator		
3.	Data Acquisition System		
4.	Communication equipment		
5.	Etc.		
6.			
7.			

Annexure-IV

Details of the modification/alteration to existing facilities for accommodating proposed connection and its estimated cost.

Annexure-V

Communication equipment details up to SLDC Data Collection Point.

Site Responsibility Schedule

A. Principle & Procedure:

The responsibility of control, operation, maintenance & all matters pertaining to safety of equipments and apparatus at the connection point shall lie with the owner of equipment. For ease of day-to-day operation as a general practice, O&M is carried out by the owner of the substation in whose premises the proposed bay is located for which a separate O&M contract is to be entered into, based on mutually agreed terms and conditions.

B. List of equipment and their ownership at the connection point :

Sr. No.	Name of Equipment	Ownership
1.		
2.		
3.		
4.		
5.		
6.		
7.		
C		

C. Site common Drawings:

- a. Site layout
- b. Electrical layout (SLD)
- c. General Arrangement Drawings (GA)
- d. Details of protection
- e. Common services drawing

Equipment detail to the above Annexure in Brief

- (a) All EHV sub-station equipments shall comply with Bureau of Indian Standards (BIS)/IEC/prevaling Code of practice;
- (b) All equipment shall be designed, manufactured, tested and certified in accordance with the quality assurance requirements as per IEC/BIS standards;
- (c) Each connection between a user and electrical system of Distribution Licensee (HPSEBL) shall be controlled by a circuit breaker capable of interrupting, at the connection point, the short circuit current as advised by Distribution Licensee (HPSEBL).

Fault Clearance Times

- (a) Fault clearance time when all equipments operate correctly, for a three phase fault (close to the bus-bars) on user's equipment directly connected to electrical system of Distribution Licensee (HPSEBL) and for a three phase fault (close to the bus-bars) on electrical system of Distribution Licensee (HPSEBL) connected to agency's equipment, shall be as per HPEGC.
- (b) 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. If a generating unit is connected to the electrical system of Distribution Licensee directly, it shall withstand, until clearing of the fault by back-up protection on the electrical system of Distribution Licensee.

Protection

Protection systems are required to be provided by all users connected to the electrical system of Distribution Licensee in co-ordination with Distribution Licensee. In case of installation of any device, which necessitates modification/replacement of existing protection relays/ scheme in the network, owner of respective part of network shall carry out such modification/ replacement.

Protection systems are required to isolate the faulty equipments and protect other components against all types of faults, internal/ external to them, within the specified fault clearance time with reliability, selectivity and sensitivity. All agencies connected to the electrical system of Distribution Licensee shall provide protection systems and metering systems. Relay setting coordination shall be done at State level by the Protection Co-ordination Committee of the Distribution Licensee and at the Regional level by the Northern Regional Power Committee.

GENERATING UNITS AND POWER STATIONS

- (a) a generating unit shall be capable of continuously supplying its normal rated active /reactive output within the system frequency and voltage variation range subject to the design limitations specified by the manufacturer.
- (b) a generating unit shall be provided with an AVR, protective and safety devices, as set out in Connection Agreements.
- (c) each generating unit shall be fitted with a turbine speed governor having an overall droop characteristic within the range of 3% to 6% subject to design limitations specified by the manufacturer, which shall always be in service.
- (d) each generating unit shall be capable of instantaneously increasing output by 5% when the frequency falls, limited to 105% MCR, ramping back to the previous MW level (in case the increased output level cannot be sustained) shall not be faster than 1% per minute.
- (e) the equipment for data transmission and communications shall be owned and maintained by the respective generator.

REACTIVE POWER COMPENSATION

- (a) Reactive power compensation and/or other facilities should be provided by transmission licensee and distribution licensees as far as possible in the low voltage Systems close to the load points thereby avoiding the need for exchange of reactive power to/from electrical system of Distribution Licensee and to maintain transmission system voltage within the specified range.
- (b) Line reactors may be provided to control temporary overvoltage within the limits as set out in Connection Agreements.
- (c) The additional reactive compensation to be provided by the user shall be indicated by Distribution Licensee in the Connection Agreement for implementation.
- (d) Users shall endeavour to minimize the reactive power drawal at an interchange point when the voltage at that point is below 95% of rated voltage, and shall not inject reactive power when the voltage is above 105% of rated voltage. Interconnecting transformer taps at the respective drawal points may be changed to control the reactive power interchange as per user's request to the SLDC/ALDC, but only at reasonable intervals.
- (e) Switching in/out of all 220 kV bus and line reactors throughout the grid shall be carried out as per instructions of SLDC/ALDC. Tap changing on all 220/132 kV interconnecting transformers shall also be done as per the instructions of SLDC/ALDC.

DATA COMMUNICATION FACILITIES

Reliable and efficient speech and data communication systems shall be provided to facilitate necessary communication and data exchange, and supervision/control of the grid by the SLDC and ALDC, under normal and abnormal conditions. All agencies including CGSs who are allowed open access shall provide systems to telemeter power system parameter such as flow, voltage and status of switches/ transformer taps etc. in line with interface requirements and other guidelines made available to SLDC and ALDC. The associated communication system to facilitate data flow up to SLDC and ALDC, as the case may be, shall also be established by the concerned agency as agreed by Distribution Licensee in the Connection Agreement. All agencies in coordination with Distribution Licensee shall provide the required facilities at their respective ends and at SLDC and ALDC as agreed in the Connection Agreement.

SYSTEM RECORDING INSTRUMENTS

Recording instruments such as Data Acquisition System / Disturbance Recorder/ Event Logger /Fault Locator (including time synchronization equipment) shall be provided in the electrical system of Distribution Licensee for recording of dynamic performance of the system. Users shall provide all the requisite recording instruments as stated in the Connection Agreement according to the agreed time schedule.

CONNECTION STANDARD

The applicable technical standards for construction of electrical plants, electric lines and connectivity to the electrical system of Distribution Licensee shall be the standards notified by the Authority under clause (b) of section 73 of the Act.

SAFETY STANDARD

The applicable safety requirements for construction, operation and maintenance of electrical Plants and electric lines shall be as per the standards notified by the Authority under clause (c) of section 73 of the Act.

RESPONSIBILITIES FOR OPERATIONAL SAFETY

Site Responsibility Schedule

Distribution Licensee / transmission licensee and other users concerned shall be responsible for safety as indicated in Site Responsibility Schedules for each connection point.

- (a) For every connection to the electrical system of Distribution Licensee for which a Connection Agreement is required, a schedule of equipment shall be prepared by the Distribution Licensee with information supplied by the respective users. This schedule, called a Site Responsibility Schedule, shall state the following for each item of equipment installed at the connection site:-
 - (i) the ownership of plant/apparatus;
 - (ii) the responsibility for operation of plant/apparatus;
 - (iii) the responsibility for maintenance of plant/apparatus;
 - (iv) the responsibility for control of plant/apparatus;
 - (iv) the manager of the site;
 - (vi) the responsibility for all matters relating to safety of persons at site;
- (b) All agencies connected to or planning to connect to electrical system of Distribution Licensee would ensure providing of RTUs and other communication equipment, as specified by SLDC/ALDC, for sending real-time data to SLDC and ALDC before the date of commercial operation of the generating stations or sub-station/line being connected to electrical system of Distribution Licensee.

Single Line Diagrams

- (a) Single line diagram shall include all high tension connected equipment and the connection to all external circuits and incorporate numbering, nomenclature and labelling;
- (b) Single line diagram shall be furnished for each connection point by the connected users to SLDC and ALDC. These diagrams shall include all HV/EHV connected equipment and connections to all external circuits and incorporate numbering, nomenclature and labelling, etc. The diagram is intended to provide an accurate record of the layout and circuit connections, rating, numbering and nomenclature of HV/EHV apparatus and related plant;
- (c) Whenever any equipment has been proposed to be changed, then concerned user shall intimate the necessary changes to Distribution Licensee and to all concerned. When the changes are implemented, changed single line diagram shall be circulated by the user to SLDC / STU / transmission licensee / Distribution Licensee / ALDC.

Site Common Drawings

- (a) Site Common Drawing will be prepared for each connection point and will include site layout, electrical layout, details of protection/control and common services drawings. Necessary details shall be provided by the user to Distribution Licensee / transmission

- licensee;
- (b) Detailed drawing shall be prepared by transmission licensee and user in respect of their System/facility at each connection point and copies of the same shall be made available to concerned user and Distribution Licensee respectively;
 - (c) In case any change in the site common drawings that are found necessary by Distribution Licensee or user in respect of their system/facility at the connection point, the details of such changes shall be furnished to the other party as soon as possible.

DRAFT
Connection Agreement

**THIS AGREEMENT is made the day of 20.....
BETWEEN:**

[Name and registered address of the distribution Licensee] (Herein after called the "Distribution Licensee" 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 Distribution Licensee shall act through its _____ [Address of the State head quarter where connection shall be located] Unit;

and

[Name and registered address of the Applicant Company/Firm/Association of persons/Individual] (herein after called "Applicant ") which expression shall unless repugnant to the context or the Applicant meaning thereof be deemed to mean and include its successors or permitted assigns;

WHEREAS:

- (A) The Applicant has applied to the Distribution Licensee for connection of the [mention generating station including a captive generating plant or Consumer as appropriate] facility to the Electrical System of Distribution Licensee and use of Electrical System of Distribution Licensee to wheel electricity to and/or from the buyer/seller of power of the applicant.
- (B) The Distribution Licensee has agreed to the connection of the [mention generating station including a captive generating plant or consumer as appropriate] facility to the Distribution Licensee's Electrical System (via the applicant's Site-Related Connection Equipment) at the Connection Point (..... Mention details of the connection point, the name of sub-station, name of line which is to be made LILO, etc.....) using the (wave length) distribution and Communication System of the Distribution Licensee /SLDC to wheel electricity as well as real time data to and / or from the Facility through the electrical system of Distribution Licensee.
- (C) The Parties shall enter into this connection agreement to record the terms and conditions upon which the Parties will carry out their respective Connection Works, the estimated cost to be borne by the applicant for the modification/alterations to the infrastructure of Distribution Licensee or Intra-State Distribution Licensee for accommodating the proposed connection.
- (D) The parties shall separately take up modalities for implementation of the works on mutually agreed terms and conditions. The scope of works, time schedule for completion of works, including the timelines for the various milestones to be reached for completion of works (PERT chart), shall form an appendix to this agreement, and shall form the basis for evaluating the works being executed by the parties. Penalties for non-completion of works in time by one party resulting in financial loss to the other party may be appropriately priced as per mutual agreement, for indemnification of each other against losses incurred in this regard, and form a part of this Agreement. Similarly, for the regular O&M of the connection equipments owned by the applicant and located in the Distribution Licensee's premises/switchyard, the parties shall separately take up the O&M agreement on mutually agreed terms and conditions.

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

1. General Conditions for Connectivity

1.1 The Parties agree to the following General Conditions:

- (a) The parties shall abide by the Himachal Pradesh Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in intra-state Transmission and related matters) Regulations, 2010, as amended from time to time, in respect of procedure of grant of connectivity and other matters.
- (b) The applicant or Distribution Licensee, as the case may be, shall be responsible for planning, design, construction, and safe & reliable operation of its own equipments in accordance with the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2013, 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) and other statutory provisions as applicable and as amended from time to time.
- (c) The applicant or Distribution 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 & isolators positions, transformer taps and other parameters from their station to Data Collection Point (DCP) of SLDC/ALDC as per HPEGC/IEGC. SLDC/ALDC shall provide access to applicant's data transfer through communication network in case spare channels are available on mutually agreed terms. The location of DCP of SLDC/ALDC shall be the nearest station connected electrically where wideband communication capacity of SLDC/ALDC is available. The responsibility of data transfer shall be that of the applicant.

1.2 The following documents and their schedules which have been initialled 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) Application for seeking connection to the electrical system of Distribution Licensee.
- (b) Intimation for Grant of Connectivity
- (c) Additional information for signing Connection Agreement
- (d) Connection Offer Letter
- (e) This Agreement

1.3 Availability of Statutory/Regulatory Approval

Notwithstanding anything in the Agreement to the contrary, the applicant shall be responsible for obtaining the statutory clearances/approval for carrying out the works requiring connection to the electrical system of Distribution Licensee. Accordingly, the provisions of the Agreement dealing with the carrying out of the Works, either by the applicant or the Distribution Licensee (unless otherwise agreed mutually) in all respects would be conditional on and subject to the Distribution Licensee being satisfied that the necessary approvals/clearances are available with the applicant.

2. Agreement to Pay Charges and Costs

2.1 Agreement to Monthly Wheeling Tariff

The applicant declares that it shall pay the applicable charges as notified by the appropriate Commission for use of electrical system of Distribution Licensee and transmission system of State Transmission Utility as and when Long term access,

Medium-term open access or short-term open access is availed by the applicant, in accordance with the relevant regulations of HPERC in this regard.

2.2 Agreement to additional costs

The applicant declares that it shall pay the cost towards modification/alterations to the infrastructure of Distribution Licensee or Intra-State Distribution Licensee for accommodating the proposed connection as specified in the letter of Distribution Licensee furnishing connection details.

2.3 Agreement to pay for damages

The applicant declares that it shall pay/ make good damages, if any, caused by the applicant to the property/electrical system of Distribution Licensee during the course of control, operation and maintenance of the equipment, within reasonable time of its occurrence.

2.4 Agreement to pay Charges for construction of Bays

The applicant will execute an agreement with the Distribution Licensee for the erection of equipment of applicant in the substation premises of the Distribution Licensee for construction of bays, if required. For this purpose the applicant shall pay charges to the Distribution Licensee on mutually agreed terms.

2.5 Agreement to pay O & M charges

The applicant shall pay O&M charges to the Distribution Licensee on mutually agreed terms for the bay equipment of the applicant to be operated & maintained by the Distribution Licensee in its substation. These O&M charges will be governed time to time as per the mutually agreed terms.

3. Conditions Precedent to the implementation of the Commissioning Instructions

The applicant 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 Distribution Licensee is satisfied (by acting reasonably) that:

- (a) The Connection Works have been completed.
- (b) The applicant has complied with its all obligations as set out in the Offer Letter.
- (c) The applicant has demonstrated the voice & data Communication facilities to concerned SLDC/ALDC.
- (d) The applicant has obtained necessary approvals like PTCC, H.P. Govt. Electrical Inspectorate/CEA etc. from competent authority.
- (e) The applicant has complied with its obligations under the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2013 or the H.P. Electricity Distribution code 2009/ the Grid code, 2008 as applicable and amended from time to time.

4. Metering

Interface Energy Meters shall be installed and maintained by the distribution licensee in accordance with the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2007, HPEGC and IEGC as amended from time to time, at the cost of the applicant.

5. Site Access

Being restricted area, the Distribution Licensee may give permission or allow access to the employees and/or agents and/or subcontractors and/or invitees of the applicant in its premises to carry out preliminary site investigation works, the Connection Works, modification works, inspections, etc, based on a written request by the applicant giving reasonable advance notice. All such actions are to be carried out under the strict supervision of the Distribution Licensee's authorized

representative to safeguard the safety and security requirements of Distribution Licensee's installations and safety of the representatives of the applicant. Similarly the applicant may also allow, on prior permission, site access to the Distribution Licensee's employees and/or agents and/or invitees to carry out preliminary site investigation works, inspections, etc in the connection site of the applicant, provided that a written request has been made giving reasonable advance notice.

6. Conditions of access

Site access for the Distribution Licensee/applicant 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 or Distribution Licensee 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.

7. Transfer Assignment and Pledge

The applicant shall not transfer, assign or pledge its rights and obligations under this connection agreement to any other person.

8. Notice

All correspondence/notices required or referred to under this Agreement shall be in writing and signed by the respective authorized signatories of the parties mentioned herein, unless 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 acknowledgment due to other party (ies) as per authorization by parties. The authorities of the parties who shall responsible for the correspondence notices etc. in connection with this agreement shall be informed in advance.

9. 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 MD/CMD.

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.

Notwithstanding the existence of any disputes and differences referred to arbitration, the parties herein shall continue to perform their respective obligations under this Agreement.

10. Force Majeure

Force Majeure herein is defined as any cause which is beyond the control of the Distribution Licensee or the applicant 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, revaluation, 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 generation station, captive generating plant or consumer, electrical system of Distribution Licensee, or any facility or system that is integral to and substantial for the performance of this agreement.
- Any event or circumstances of 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.

11. 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.

12. Governing Laws and Jurisdiction

The agreement shall be governed by Indian Laws and Rules made there under.

13. Amendments to the Connection Agreement

In case of modification of 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.

IN WITNESS WHEREOF THE Distribution Licensee and the applicant has caused this agreement to be executed is duly authorized representative on date above first herein written.

Signed for and on behalf of:-
[Distribution Licensee Details]

Signed for and on behalf of:-
[Applicant Details]

Witness:

- 1)
- 2)
- 3)

Appendix

Time schedule for completion of works of generator/consumer, including the timelines for the various milestones to be reached for completion of works (PERT chart)