

TANGEDCO LTD

Application format for grid connectivity of Fossil fuel based Generators/Captive Generating Plants/Waste heat recovery based Co-gen plants at voltage 33 KV and below

Sl. No.	DETAILS REQUIRED	PARTICULARS	
1	Details of the Applicant		
	A	Full Name of the Applicant	
	B	Full Address of the Applicant	Please furnish addresses of Head Office, Registered Office, Site Office, Local Office etc
	C	Name and Designation of Authorized person(s) with Contact Telephone Numbers, Cell Phone numbers, Fax Nos, E-mail ID etc..	(i) For the purpose of signing correspondences; (ii) For signing of documents such as agreements etc.
	D	Name and Designation of Contact person with Contact Telephone Numbers, Cell Phone numbers, Fax Nos, E-mail ID etc..	
2	Details of Ownership		
	A	The power plant is set up by (Please clearly specify)	A person / Association of persons / Co-Operative society / others
	B	Incorporation of the company	Date of incorporation / Registration / Place of incorporation / Registration No. / Date of commencement of business

Sl. No.	DETAILS REQUIRED	PARTICULARS	
3	Details of the Generating Plant		
	A	Physical Location of the Generating Plant	SF No. / Village / Town, Taluk, District (furnish a topo map showing the location of the Generating Plant's site.
	B	Details of nearby Substations	i) Voltage level (110/33/11 KV ii) Available transformer capacity iii) Distance of SS from the generating plant.
	C	Type of Generating plant	Fossil fuel based generating plant / Captive Generating Plant/ Co -Generation plant / Waste heat recovery based Co-gen plant etc.
	D	Type of Primary fuel proposed in case the plant is a Fossil Fuel based one.	
	E	Whether fuel linkage has been arranged, if so furnish complete details such as source etc..	Agreements if any already executed, copy may be furnished.
	F	Whether all the statutory clearances such as TNPCB, MOE & F, Civil Aviation etc have been obtained.	Copies of clearances obtained may be furnished. Action plan for the other clearances may be furnished. Copies of such clearances may be furnished
	G	Proposed plant capacity in MW	Furnish split up details in case of more than one generator (Unit - 1,2 & 3 etc)

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Details of the Applicant		
H	<p>If Co - generation plant / Waste heat recovery plant etc</p> <p>a) In case of Co-gen plant whether it is coming under Topping cycle/bottoming cycle</p> <p>b) Whether proof for qualifying as Co-gen as per MOP resolution A-40/95-IPC-1 dt.6.11.1996 is enclosed</p>	<p>Please furnish type of industry, Process diagram and write up. Also furnish the supporting fuel proposed and details about the linkages etc</p> <p>Say Yes/No.</p> <p>If no reason may be furnished</p>
I	Voltage level at Generator end	
J	Voltage level at Grid inter face Point	
K	Phase and Frequency in Hz.	
L	Other Technical specifications	Furnish full Technical details
M	Probable date of commissioning of different units.	
N	Whether you are already availing HT supply at the location where the Generator is proposed to be located. And the purpose for which the supply is availed may be furnished.	If yes, please furnish the HT SC No, Distribution Circle, Sanctioned Demand, Voltage level, and tariff etc..

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4	A	i) Quantum of annual generation expected in a financial year (MU/MW) unit wise. ii) Quantum of power proposed to be used at the site itself (auxiliary consumption/Industrial consumption separately) (MU/MW) unit wise.	Aux : MU/MW (%) Indl : MU/MW
	B	In case of power evacuation mentioned where the power is proposed to be taken	i) Interstate quantum in MW (location) ii) Intrastate quantum in MW (EDC to which it is proposed) a. Captive use b. 3 rd party sale c. Sale to TANGEDCO
5	For Mere Parallel operation of Generators		
	A	Total industrial load in KW	
	B	Sanctioned demand of service connection	
	C	Load (KW) fed by the captive generating plant	
	D	Is the load fed by the Captive Generating plant is demarcated or the load fed by the CGP and the licensee is combined. (furnish the full details)	
	E	Protection arrangements proposed to prevent power flow to grid when the generator runs in parallel with the grid.	

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6	Power for Construction	Whether power is required for construction. If required, mentioned the quantum & voltage level (Application to be made to the SE/EDC concerned.)
7	<p>Start up power</p> <p>Whether start up power is required for the generator. If required, the quantum of demand required may be furnished. (Start up power to be availed at the same voltage level at which the interface of generator is permitted.</p>	Application to be made to the SE/EDC concerned
8.	<p>Interfacing line</p> <p>a. Whether the generator will lay the interfacing line (dedicated transmission line) from the generator switchyard to the substation proposed to be evacuated as per the section 9 & 10 of the E-Act,2003.</p> <p>b. If so, time period required for completion of interfacing line</p> <p>c. If the generator proposes TANGEDCO to execute the interfacing line along with bay works at the SS under payment basis .</p>	<p>Bay works at the SS end of TANGEDCO will be carried out by TANGEDCO/TANTRANSCO at the cost of the generating company</p> <p>YES/NO</p>

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9.	Details of payment of application fee a. Amount b. PR.NO/Date	Rs.1 Lakh / Rs.50,000/- (Original PR to be enclosed)

We hereby declare all the above details are true and correct. We are also agreeable to furnish any other details as may be required by the TANGEDCO from time to time.

Date :

Place :

Signature of the Authorized Signatory of
the Applicant with designation

Seal of the Company

List of documents to be furnished along with this format.

Apart from the documents listed in this format the following documents are to be enclosed.

1. Geographical location of the generating station.
2. Site plan in appropriate scale. The site plan should indicate following details
 - a. The proposed location of the connection point
 - b. Generators
 - c. Transformer
 - d. Site building
3. Memorandum & Articles of Association
4. Authenticated descriptive write up about the plant process with process flow chart in case of industry co-existing with generator/captive generator/Co-generator
5. Write up on generator protection scheme with protection diagrams in quadruplicate.
6. Documents in respect of the following
 - i) Site identification and land acquisition
 - ii) Environmental Clearance
 - iii) Forest clearance
 - iv) Fuel arrangements
 - v) Water linkage
 - vi) CEIG safety certificate
 - vii) TNPCB consent to establish/operate

7. Electrical single line diagram (SLD) of the plant. Location of Interface meter(s) and energy accounting meters (for auxiliary consumption, start up power consumption, generation of individual units and industrial loads etc.) shall also be included.

8. Copy of purchase order for the generator.

9. Generator Technical details & Generator Transformer details along with the signature of the authorized signatory, in the prescribed format.

10. Application format duly filled in may be submitted to officer mentioned below for issue of approval.

Chief Engineer/Private Power Projects
6th floor Eastern wing, NPKRR Maaligai,
144, Anna Salai, Chennai -600002.
Ph.No.044-28520441
E-mail id: ceipp@tnebnnet.org

11. Generator Transformer Data

Sl. No	Description of details required	Data
1	MVA Rating	
2	Primary Voltage	
3	Secondary Voltage	
4	Type of cooling	
5	Winding configuration (Primary & Secondary)	
6	Breaker Rating in MVA	
7	Normal Tap setting	
8	Tap step (off- Load and On-Load Tap)	
9	Tap ratio (in %)	
10	Maximum and Minimum Tap number	
11	Maximum and Minimum Tap voltage	
12	Phase displacement	
13	% Impedance	
14	Leakage Reactance	
15	Resistance	
16	Reactance	

12. Generator Details

Sl. No	Description of details required	Data
1	MW/MVA Rating	
2	KV Rating	
3	Armature Resistance (R_a)	
4	Direct Axis Reactance (X_d)	
5	Quadrature Axis Reactance (X_q)	
6	Negative Seq. Reactance (X_n)	
7	Zero Seq. Reactance (X_o)	
8	Direct Axis Transient Reactance (X_d)	
9	Quadrature Axis Transient Reactance (X_q)	
10	Direct Axis sub Transient Reactance (X_d)	
11	Quadrature Axis sub Transient Reactance (X_q)	
12	Inertia in MU/MVA	
13	Damping factor	
14	Winding connection	
	Mass details	
i)	Mass no	
ii)	Inertia	
iii)	Damping factor	
iv)	Stiffness Co-efficient	
v)	Capability Curve diagram to be enclosed	