

GLOSSARY & ABBREVIATIONS

CONTAINING DEFINITIONS & EXPANSION OF ABBREVIATIONS

AAD	Advance Against Depreciation
ABT	Availability Based Tariff
ACF	Auxiliary Consumption Factor
Act/EA	Electricity Act -2003 (EA- 2003)
AFC	Annual Fixed Charge/ Annual Fixed Cost
ALDC	Area Load Dispatch Centre
AMC	Annual Maintenance Contract
Appropriate Commission	Means Central Regulatory Commission as per sub-Section (1) of Section 76 of Act or State Regulatory Commission as per section 82 of the Act
Area of Supply	The Area within which a Distribution Licensee is Authorized to Supply Electricity
ARR	Annual Revenue Requirement
ATE/AT	Appellate Tribunal for Electricity
AUX	Auxiliary Energy Consumption
Banking of Power	It is the process under which a generating plant supply power to the grid not with the intention of selling it to either a third party or to a licensee but with the intention of exercising his eligibility to draw back this power from the grid
Barrage	A diversion structure where heading up of water is effected by gates.
Bill Meter	ABT compatible import and export meter on the basis of which energy bills shall be raised by the generating plant
Billing Month	Period between two successive meter reading dates
Bio Mass	Wastes produced during agricultural and forestry operation energy plantation e.g. Husks, shells.
Bio-Gas Plant	Power Plant Generating Electricity through Anaerobic Digestion of Wet biomass into Fuel
Biomass Power Plant	Power plant which generates electricity from biomass sources.
ВОО	Build, Own and Operate
BOOT	Build - Own - Operate - Transfer
ВОТ	Build, Own and Transfer
BSC	Balancing and Settlement Code
CAGR	Compounded Annual Growth Rate
Canal Fall	A structure designed to secure lowering of the water surface in a canal over a short distance and safe dissipation of the excess hydraulic energy.
Captive User	End user of the Electricity Generated in a Captive Generating Plant
Carbon Credit or CER	Technical term for output of CDM projects as defined by Kyoto Protocol. One CER represents one tone of carbon-di-oxide reduced.
CBG	Competitive Bidding Guidelines
CBR	Conduct of Business Regulations
CD	Contract Demand

CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CENTRAL AGENCY	National Load Dispatch Centre (NLDC) as designated by the CERC
CEO	Chief Executive Officer
CER	Certified Emission Reduction
CERC	Central Electricity Regulatory Commission
CFA	Central Finance Assistance
Check Meter	ABT compatible import and export meter for performing a check on the accuracy of the bill meter
Classification of SHP	 Micro Projects - upto 100 kW, Mini Projects - Above 100 kW and upto 5 MW, Small Projects - Above 5 MW and upto 25 MW
COD	Commercial Operation Date
COG	Cost of Generation
Co-generation	The process in which more than one form of energy (such as steam and electricity) are produced in a sequential manner.
Conventional Hydro Power Projects	Hydro Power Projects above 25 MW
Conventional Power Plants	Lignite, coal or gas based thermal generating power stations and hydro generating stations of more than 25 MW capacity
COS	Cost of Supply
CPI	Consumer Price Index
CPPs	Captive Power Plants
CPSU	Central Power Sector Units
CSP	Concentrated Solar Power
CSR	Corporate Social Responsibility
CTU	Central Transmission Utility
CUF	Capacity Utilization Factor
C-WET	Centre for Wind Energy Technology
Date of Commissioning	Date on which supply of energy is commercially commenced by the generating plant
DDG	Decentralized Distributed Generation
DER	Debt-Equity Ratio
Developer	Entity which develops the projects
DISCOM	Distribution Company
Distribution Licensee	A licensee authorized to operate and maintain a distribution system for supply of electricity to the consumers in his area of supply
Distribution System	The portion of an electric system that is dedicated to delivering electric energy to end users.
DPR	Detailed Project Report
DSI	Detailed Survey Investigations
EAR	Energy Audit Report

EBA	Energy Banking Agreement
ED	Electricity Duty
EHV	Extra High Voltage
EMD	Earnest Money Deposit
Energy Account Month	Period from the date of meter reading in previous month to date of meter reading in following month
Energy Consumption	Useful energy input that is supplied by the fuel (normally bagasse or other such biomass fuel)
ENTITY	Independent Power Producer/developer
EOI	Expression of Interest
EPA	Energy Purchase Agreement
EPC contract	Engineering, Procurement and Construction Contract
EWA	Energy Wheeling Agreement
Export Meter	Bill meter installed at the grid substation
Financial Year	Year starting on 1st April of Calendar year and ending on 31st March of next calendar year.
Firm Power	Quantum of Energy which a supplier is obliged to delivered as scheduled in the given period. The technologies which can supply power on firm basis e.g. Bio Mass, Bagasse etc.
Fls	Financial Institutions
FOR	Forum of Regulators
Force Majeure	Any event or circumstance which is beyond the reasonable direct or indirect control and without the fault or negligence of the Power Producer
FY	Financial Year
GBI	Generation Based Incentive
Generating Plant Substation	Sub-station developed by the Power Producer for interface with the receiving sub-station.
Generator	A machine that converts mechanical energy into electrical energy.
GFA	Gross Fixed Asset(s)
GHG	Green House Gas
GOA	Government of Assam
GOI	Government of India
GOJK	Government of Jammu & Kashmir
Grid	Means high voltage backbone system of interconnecting transmission lines, substations and generating plants
Grid Code	Means the grid code specified by CERC/SERC
Grid Mode	Power Projects Injecting Power in to the Grid
Grid Quality Power	Power maintaining reliability & stability of Power supply as Grid supply
High Voltage	Voltage level as defined in Act/Rules
HT	High Tension
Hybrid Solar Thermal Power	Means the solar thermal power plant that uses other forms of energy

Hz	Grid Frequency
IA	Implementation Agreement
IC	Installed Capacity
ICB	International Competitive Bidding
IDC	Interest During Construction
IEGC	Indian Electricity Grid Code
Import Meter	Bill Meter Installed at the Grid Substation of STU
Infirm Power	Means energy supplied over and above the firm power, which is interruptible on a very short notice.
Inter-connection Facilities	Facilities which include switching equipment, control, protection and metering devices etc.
Inter-connection Line	Transmission/Distribution Line connecting Pooling Sub-station/Generation Plant Sub-station of Power Producer to Receiving Sub-station
Inter-connection Point	Interface point of renewable energy generating facility with the transmission system or distribution system, as the case may be.
Internal Rate of Return (IRR)	The internal rate of return is the discount rate at which the sum of periodic benefits (revenues minus operating and maintenance costs) is equal to the present value of the initial investment.
Investor	A body interested in investing in a project
IPPs	Independent Power Producers
IREDA	Indian Renewable Energy Development Agency
IRR	Internal Rate of Return
Isolation Mode	Project without Grid Connection
IWC	Interest on Working Capital
IWPA	Indian Wind Power Association
JNNSM	Jawaharlal Nehru National Solar Mission
KCal.	Kilo Calories
Kg	Kilo Gram
kV	Kilo Volt
KVA	Kilo Volt- Ampere
KVARH	Reactive power in Kilo Volt Ampere.
KWh	Kilo Watt-hour
LC	Letter of Credit
LCT	Letter of Comfort on Transmission
LDC	Load Dispatch Centre
Licensee	Person granted licensee under section 14 of the Act.
LoA	Letter of Allotment
Lol	Letter of Intent
LoP	Letter of Permission
Low Voltage	Voltage at 415 Volts and below

LTPLR	Long Term Prime Lending Rate
MAT	Minimum Alternate Tax
MCR	Maximum Continuous Rating
MkCal	Million Kilo Calories
MMC	Monthly Minimum Charges
MNRE	Ministry of New and Renewable Energy
MoA	Memorandum of Agreement
MOP	Ministry of Power
MOU	Memorandum of Understanding
MPPs	Merchant Power Producers
MSW	Municipal Solid Waste
MU	Million Unit
MW	Mega Watt
MYT	Multi Year Tariff
National Solar Mission or	Jawaharlal Nehru National Solar Mission 2009 launched by Government of
Solar Mission	India
NEP	National Electricity Policy
NGHR	Normative Gross Heat Rate
NGO	Non-Government Organization
NO	Network Operator
NOC	No Objection Certificate
Non-Firm Power	The power from Renewable Sources which can not be scheduled e.g. Wind and Small Hydro. Non Firm Power is dependent on natural phenomenon like sun, cloud, wind etc., that cannot be predicted
NPV	Net Present Value
NRSE	New and Renewable Source of Energy
NVVN	NTPC Vidyut Vyapar Nigam wholly subsidiary company of NTPC
O&M	Operation and Maintenance
OA	Open Access
Open Access	Non-discriminatory provision for use of transmission lines/distribution system / associated facilities with such lines or system by any licensee /consumer/ person engaged in generation in accordance with the regulations specified by the appropriate commission
PAT	Profit after Tax
PEA	Power Evacuation Agreement
PF	Power Factor
PFR	Pre-feasibility Report
Phase-1	Remaining period of the 11th Plan & first year of 12th Plan (2012-13) as expressed in National Solar Mission
Phase-2	Remaining four year of the 12th Plan (2013-17) as expressed in National Solar Mission

Plant	Input sources along with solar thermal energy for electricity generation, and wherein not less than 75% of electricity is generated from solar energy component.
PLR	Primary Lending Rate
PPA/PSA	Power Purchase Agreement/ Power Supply Agreement
Project	Means a Generating Station or the Evacuation System upto Inter-Connection Point.
PT	Potential Transformer
PV	Photovoltaic
Quantum of Purchase	Percentage share of purchase of electricity from renewable sources as specified in the regulations.
R&D	Research & Development
R&M	Repair and Maintenance
Rate of Return	The rate of return on investment is the ratio of annual benefits (net of annual cost) as a percentage of the original
Reactive Power	The portion of power that is produced by load inductances or capacitances.
REC	Renewable Energy Certificate
Receiving Sub-station	EHV/HV Sub-Station developed by RVPNL/Discom of Rajasthan for evacuation of power generated from Renewable Energy Sources.
Renewable Energy Power Plants	Power plants other than the conventional power plants generating grid quality electricity from renewable energy sources
Renewable Energy Sources	Renewable sources such as Small Hydro, Wind, Solar including its integration with Combined Cycle, Biomass, Bio fuel cogeneration, urban/municipal waste and other such sources as approved by the MNRE
Renewable Energy/ Power	Means the grid quality energy/power generated from renewable energy sources
Renewable Sources	Sources of energy used to produce electricity such as Small Hydro, Wind, Solar, Biomass, Bagasse based co-generation, Urban/Municipal Waste.
REO	Renewable Energy Obligation
RES	Renewable Energy Sources
RLDC	Regional Load Dispatch Centre
ROE	Return on Equity
ROR	Run of the River
Royalty on Water	Royalty paid by SHP to the Government on the Water used in the Project
RPO	Renewable Purchase Obligation
RPS	Renewable Purchase Specification
RPS	Renewable Portfolio Standard
RPSSGP	Roof Top PV and Small Solar Generation Programmes
Rs./ M k Cal.	Rupees per Million Kilo Calories
Rs./kWh	Rupees per Kilo Watt hour
RTU	Remote Terminal Units
Run-of- river Plant	Plant without storage reservoirs where water is used at the rate at which it "runs" in the river.

SBD	Standard Bidding Document
SC & TEC	System Coordination and Techno-Economic Clearance
Scheduled Generation	Scheduled of Generation in MW or ML) ex-bus given by the State Load Dispatch Centre for any period.
Self Identified Project	Developers to Identify Projects
SEMs	Special Energy Meters
SERC	State Electricity Regulation Commission
SFC	Specific Fuel Consumption
SHP	Small Hydro Plant (Electricity Generating Station)
Single Window	System facilitated by Nodal Agency to expedite process of receiving clearances from multiple agencies and fulfill all inception-related requirements of an RE project.
SLDC	State Load Dispatch Centre
SLM	Straight - Line Method
Small Aero generator (Mini-wind mills)	It is a stand alone generator which can be used to produce electricity for captive purposes. Can be installed where wind speed is more than 15kmph. It consists of smaller capacity in wind electric generator, (up to 30 kW) a tower, a battery bank with an inverter and electronic control system.
Small Hydro Plant	Hydro Power Station with an installed capacity up-to and including 25 MW
Solar Plant/Solar Power Plant	A power plant or system utilizing solar energy through solar photo-voltaic or concentrated solar thermal devices including its integration into conventional fossil fuel for generating of electricity.
Solar PV Power	The solar photo voltaic (PV) power project that uses sunlight for direct conversion into electricity through photo voltaic technology.
Solar PV Power Plant	Solar Photo Voltaic (SPV) Power Plant that uses sunlight for direct conversion into electricity through Photo Voltaic technology.
Solar Thermal Power (ST)	The solar thermal power project that uses sunlight for direct conversion into electricity through concentrated solar power technology based on either line focus or pointy focus principle. The direct sun light is concentrated several times to reach higher energy densities and thus higher temperatures whereby the heat generated is used to operate a conventional cycle to generated electricity.
SP	Storage Projects
Special Purpose Vehicle	Legal entity owning, operating and maintaining a generating station with no other business or activity to be engaged in by the legal entity
SPG	Solar Power Generator
SPO	Solar Purchase Obligation
SPPs	Solar Power Plants
SPV	Special Purpose Vehicle
SSLDC	Sub- State Load Dispatch Centre
Stand Alone	Projects without connecting to main grid
State Identified Projects	State or Sponsored Agencies to identify projects
STC	State Technical Committee
STU	State Transmission Utility

Substation	Facility equipment that switches, changes, or regulates electric voltage.
Substation capacity	The substation capacities are given in kVA (kilovolt-amperes).
Supply	In relation to Electricity, means the sale of Electricity to licensee or Consumer
Switchyard	Area holding power transformers and related switchgear, circuit breakers etc.
T&D	Transmission and Distribution
Tail race	The channel located between a hydroelectric powerhouse and the river into which the water is discharged after passing through the turbines.
Tariff	Schedule of charges for generation, transmission, wheeling and supply of electricity together with terms and conditions for application thereof.
TEC	Tecno-Economic-Clearance
TEFR	Techno-Economic Feasibility Report
TL	Transformation Loss
TOD	Time of Day
TP	Tariff Policy
TPC	Third Party Consumers
TPH	Tonnes Per Hour
TPS	Thermal Power Station
Trading	Purchase of electricity for resale there of
Transmission Charges	The charges payable by renewable energy sources for the use of transmission system
Transmission Licensee	A Licensee authorized to established or operate transmission lines
TSU	Transmission System User
UI	Unscheduled Interchange
UNFCCC	United Nation's Framework Convention for Climate Change
Useful thermal output	Useful heat (steam) that is provided to the process by the cogeneration facility
VAT	Value Added Tax
Waste to Energy (WTE)	Energy generated out of waste that includes municipal solid waste, wastage from govt., industrial and urban areas or any other form of organic / inorganic waste
WBA	Wheeling and Banking Agreement
WEA	Wind Energy Association
WEG	Wind Energy Generator. A machine/device, which converts kinetic energy of wind into electrical energy with proven technology
Wheeling Charges	Operation whereby distribution system and associated facilities of transmission licensee /distribution licensee are used by another person on payment basis to be determined under section 62 of Electricity Act 2003
Wind Farm	Cluster of WEGs elected by a single developer and generating electricity from wind
WPD	Wind Power Developer/ Wind Power Density
WPI	Wholesale Price Index
WRA	Wind Resource Assessment
WTGs	Wind Turbine Generators
Year	Means a financial year