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## NOMENCLATURE

A/Ap/Aa	Aperture Area	m <sup>2</sup>
Ir	Irradiance	W/m <sup>2</sup>
I	Current	A
L	Length	m
P	Power	W
t	Time	Sec
T	temperature	°C
V	Voltage	V
D	diameter	m
W	width of PV cell	m

### Subscripts

max	maximum
min	minimum
mod	Module

### Greek letters

η	Efficiency
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## LIST OF ABBREVIATIONS

AT&C	Aggregate technical and commercial
BEE	Bureau of Energy Efficiency
BIPV	Building Integrated Photovoltaic
BM	Build Margin
BoS	Balance of System
CASE	Commision of alternate source of energy
CSP	Concentrated Solar Power
Capex	Capital expenses
CPV	Concentrated Photovoltaic
COE	Cost of Electricity
COP	Conference of the Parties
CCE	Cost of Conserved Energy
CUF	Capacity utilization factor
CO <sub>2</sub>	Carbon dioxide
CREED	Centre for Renewable Energy and Environment Development
CDM	Clean Development Mechanism
CdTe	Cadmium Telluride
CER	Certified emission reductions
CIGS	Copper Indium Gallium Diselenide
CIM	Common Information Models
CIS	Copper Indium Selenide
CM	Combined margin
DOLS	Dynamic ordinary least square
DSM	Demand Side Management
DC	Direct Current
DAC	Doctoral Advisory Committee
Discon	Distribution Company
DISCOM	Distribution Company
ENFUSE	Energy and Fuels Users Association of India
EFEZ	Environment-Friendly Economic Zones
EC	Energy consumption

EGS	Enhanced Geothermal Systems
EJ	Exajoules
EPA	Environmental Protection Agency
FMOLS	Full-modified ordinary least square
FSAET	Futuristic and Sustainable Aspects in Engineering and Technology
GPR	Gaussian process regression
GDP	Gross Domestic Product
GEF	Grid Emission Factors
GHG	Greenhouse gas emissions
ICAP	Institute of Chartered Accountants
IEA	International Energy Agency
ICT	Information and Communication Technology
INDC	Intended nationally determined contributions
IPCC	Intergovernmental Panel on Climate Change
ISEER	Indian Seasonal Energy Efficiency Ratio
JNNSM	Jawaharlal Nehru National Solar Mission
JI	Joint Implementation
MLR	Multiple linear regression
MEPS	Minimum Energy Performance Standards
MNRE	Ministry of Renewable Energy
MAUT	Multi-Attribute Utility Theory
LDC	Less-developed countries
LED	Light Emitting Diode
Nox	Nitrogen oxides
NIST	National Institute of Standards and Technology
NAPCC	National Action Plan of Climate Change
Opex	Operational expenditures
OP	Oil prices
OECD	Organization for Economic Cooperation and Development
O&M	Operation, and Maintenance
OM	Operating margin
PPA	Power Purchase Agreement
PPP	Purchasing power parity

PDDs	Project Design Documents
PV	Photovoltaic
PW	Peta watts
QoS	Quality of service
RAC	Refrigeration, and air conditioning
Recs	Renewable energy certificates
RE	Renewable energy
RES	Renewable Energy Resources
RoI	Return on Investment
Sox	Sulfur oxides
SERC	State Electricity Regulatory commission
SVR	Support vector regression
SDG	Sustainable Development Goal
TSP	Total suspended particulate
TERI	The Energy and Resources Institute
TR	Tonnes of Refrigeration
ToD	‘Time of Day’
ToU	Time of Use
UNFCCC	United Nations Convention on Climate Change
WEC	World Energy Council