

LIST OF ABBREVIATIONS

PMUs	Phasor measurement units
DTs	Distribution transformers
DSM	Demand-side management
DRM	Demand response management
RESs	Renewable energy resources
HLM	Home load management
LV	Low voltage
DMS	Distribution management systems
SCADA	Supervisory control and data acquisition system
PQ	Power quality
UTC	Universal time coordinated
DOC	Directional overcurrent
RAPS	Relay-based local area protection scheme
ROCOF	Rate of change of frequencies
PDC	Phasor data concentrators
IEDs	Intelligent electronic devices
LAN	Local area network
GOOSE	Generic object-oriented substation event
SMV	Sampled measured values
MMS	Manufacturing message specification
MUs	Merging units
CTs	Current transformers
VTs/PTs	Voltage/Potential transformers
CB	Circuit breakers
PLL	Phase-locked loop
IGEC	Indian electricity grid code
SAS	Substation automation systems