

Appendix 8 - Terminology

GENERAL CONCEPT

Absolute error
Acceptance tests
Accuracy
Accuracy class
Active energy (WH) meter
Actual value
Admittance
Air gap
Alternating current
Alternating voltage
Ammeter
Amplifier
Amplitude
Analog(ic)
Analog(ic)-digital convertor
Anode
Apparent ...
Arc, arcing
Asynchronous operation
Automatic control
Automatic regulation
Auxiliary circuit
Band of regulation
Band width
Beat
Beat frequency
Calibration
Capacitive load
Capacitive reactance
Capacitor
Cathode
Characteristic impedance
Charge (of capacitors or batteries)
Chart (graph)
Coil
Conductance
Conductivity
Consumer: customer
Control
Control value (controller output)
Controller
Corona effect
Current
Cycle
Damping
Dead band
Dead time
Diagram
Digital
Digital telemetering
Diode
Direct current
Direct voltage
Discharge
Dynamic stability
Earth fault current
Efficiency
Electrical angle (of an alternator)
Electrical Circuit
Electrical field
Electromagnetic induction
Energy
Excite (to), excitation
Fault current
Fault impedance
Feedback
Ferroresonance
Filter
Fossil energy
Frequency
Frequency band
Frequency meter
Gain
Geothermal energy
Harmonic
High frequency
Hour meter
Hydraulic energy
Impedance
Induced voltage (by electric or magnetic induction)
Inductor
Input value
Insensitivity of control (dead band)
Instability
Instantaneous value
Integral controller
Intensity of current
Interference
Linear scale
Losses

Low frequency
 Magnetic field
 Magnetizing current
 Magnitude of disturbance
 Mean value (of a periodic quantity)
 Measurement
 Measurement error
 Measurement transducer
 Modem
 Modulation
 Mutual inductance
 Noise level
 Nominal (rated) value, nominal (rated) magnitude
 Nominal current
 Nominal voltage
 Non-linear scale
 Nuclear energy
 Nuclear fission
 Operating value
 Operating voltage, service voltage
 Oscillations
 Oscillogram
 Output value
 Parallel connection
 Period
 Permissible load
 Phase displacement
 Phase opposition
 Phase sequence
 Phase, phase conductor
 Pointer
 Power
 Power factor
 Primary ...
 Proportional controller
 Proportional integral controller
 Pumping
 Ramp, slope
 Range of regulation
 Rated thermal current
 Reactive
 Reactive energy (VARH) meter
 Recovery time
 Reference value
 Regulation
 Relative error
 Reliability
 Repair
 Residual magnetization (remanence)
 Resistance (in direct current)

Resistivity
 Resonance
 Response time
 Rotating field
 Saturation
 Schematic diagram
 Secondary ...
 Self excitation
 Self inductance, self induction
 Series connection
 Shunt
 Signal
 Signal level
 Slip
 Solar energy
 Stability
 Stable
 Static stability
 Superconductivity
 Susceptance
 Synchronism
 Terminal
 Terminal voltage
 Test
 Three phase current
 Threshold value
 Thyristor
 Tidal energy
 Time constant
 Transient phenomenon
 Transient stability
 Transmitter
 Turn
 Unbalanced load
 Valve
 Varmeter
 Voltage
 Voltage Divider
 Voltmeter
 Wattmeter
 Wave energy
 Wind energy
 Winding
 Wiring diagram

POWER STATIONS

Alternator, generator
 Auxiliary (unit; station) transformer
 Base load power station
 Boiler

Boiling water reactor (BWR)
 Burner
 Condenser
 Control equipment, governing equipment
 Control rod
 Cooling system (for stator; for rotor)
 Cooling tower
 Cooling water circuit
 Dam
 Diesel engine
 Discharge
 Exciter
 Fast reactor, breeder reactor
 Fuel
 - Natural gas
 - Fuel oil
 - Coal
 - Lignite
 - Wastes
 Furnace
 Gas turbine
 Generating set, generating unit
 Generator
 Generator transformer
 Hydro-electric power station
 Limiter
 Nuclear power station
 Overspeed
 Overspeed protection device
 Peak load power station
 Penstock
 Pondage power station
 Power station with reservoir
 Pressurised water reactor (PWR)
 Pumped storage station / power plant
 Radioactive waste
 Reactor (nuclear)
 Reactor core
 Resersible pump-turbine
 Reservoir
 Run-of-river power station
 Speed regulator
 Spillway
 Steam turbine
 Synchronous compensator
 Thermal power station
 Tidal power station
 Turbine
 Turbine governor
 Turbine shaft
 Turbogenerator

Voltage regulator
 Wind farm

TRANSMISSION

Angle tower
 Auto reclosing relay
 Auto-transformer
 Auxiliary services supply
 Bank of accumulators
 Bank of capacitors
 Bay
 Breaking capacity, rupturing capacity
 Buchholz relay
 Bundle conductors
 Busbar
 Busbar connection
 Busbar isolator
 Busbar section
 By pass isolator (over a circuit breaker)
 Cable armour
 Cable sheath
 Circuit
 Circuit breaker
 Closing mechanism
 Combined instrument transformer
 Conductor
 Conductor failure
 Conductor joint
 Control desk
 Control panel
 Control room
 Coupling bay, bus coupler
 Current transformer
 Double-circuit line
 Earthing switch
 Earth wire
 FACTS (Flexible Alternating Current Transmission System)
 Flashover
 Immobilization, immobilize (to)
 Insulator
 Insulator string
 Interlock
 Invertor
 Insulator
 Isolator
 Junction box
 Line
 Line isolator
 Line trap

Load breaking switch
 Locked in close/open position
 Metal-clad installation, capsulated installation
 Mimic board
 Multiple-circuit line
 Neutral isolator
 Oil-filled cable
 On-load tap-changer
 Over ... Relay
 Overhead line
 Phase discrepancy
 Position indicator
 Push button
 Quadruple conductor
 Quick break switch
 Receiver
 Rectifier
 Relay
 Relay cubicle
 Sag
 Selector isolator
 Separated windings transformer
 Short- circuit between phases
 Short- circuit to earth
 Short-circuit (single- two- three- phase)
 Shunt circuit breaker
 Shunt compensator
 Single conductor
 Single-circuit line
 Spacer (for bundle conductors)
 Span (of an overhead line)
 Static compensator
 Static convertor
 Straight line tower
 Substation
 Surge arrester, surge strike
 Swinging (galloping) of conductor
 Switch
 Synchronous coupler
 Terminal block, terminal box
 Terminal tower, tension tower
 Three windings transformer
 Tower, pylon
 Transfer bars
 Transformer ratio
 Transformer tap
 Transformer with off-load tap changing
 Transformer with on-load tap changing
 Trimming
 Triple conductor

Twin conductor
 Under frequency relay
 Undergrounded link / line
 Visual signal
 Voltage transformer
 Wire
 Wiring

SYSTEM OPERATION

Active power flow
 Alarm
 Attempt to reclose the line
 Automatic reclosing, automatic reclosure
 Back up protection
 Black start capability
 Blackout
 Busbar protection
 Cascading line tripping
 Closing (manual or automatic)
 Closing instruction
 Congestion
 Connection of outgoing feeder to busbar
 Contingency
 Contingency analysis
 Continuous operating conditions
 Continuous operation
 Control instruction
 Control, order
 Day-ahead (D-1)
 Dead-end circuit
 Dead-end supply
 Defence plan
 Device, automatic device
 Differential protection
 Directional protection by signal comparison
 Direct-wire telephony
 Disconnection (of a generating unit)
 Dispatcher
 Distance protection
 Disturbance
 Drop in voltage
 Duration of non-availability
 (on) Duty engineer
 Earth fault
 Emergency
 Energize, apply voltage (to)
 Extra high voltage network
 Failure, breaker failure
 Fault
 Fault location

Fault clearance time	Opening instruction (from protection equipment)
Final tripping, definitive tripping	Opening of a ring connection
Flow (power flows, loop flows, parallel path flows, unscheduled flows)	Operating conditions
Gradual increase of voltage	Operating test
Grid, network	Outage
In service, in operation	Outgoing
Inadvertent operation	Out of operation for maintenance
Incident	Out of service
Influence factor	Overcurrent
In service, in operation	Overcurrent protection
Interconnected network	Over-excitation
Interconnection line, tie-line, cross border line	Overhaul
Intermittent fault	Overload
Interruption of supply	Overload protection
Intraday	Overvoltage
Island	Parallel (to)
Islanding	Parallel operation
Isolated network operation	Peak load
Isolation	Permanent / remaining fault
Issuing of permit to work (by the person responsible)	Permit to work
Line protection	Phase angle
Load flow calculations	Phase sequence indicator
Local control	Phase shifter transformer (PST)
Loss of voltage	Pilot wire protection
Main protection	Protection against loss of synchronism
Maintenance	Radial network
Make a ring connection (to)	Radial operation
Manual control	Reactive power flow
Manual regulation	Regional (RCC) or national (NCC) control centre
Maximum capacity	Release from service or operation (to)
Meshed network	Remote control
N-1 rule or criterion	Remote supervision. Telemonitoring
Network diagram	Restore to service (to)
Network losses	Ring connection
Network with earthed neutral	Ring network
Network with isolated neutral	Ring operation
No load operation	Risk of failure
Node (electrical)	SCADA system (Supervisory Control And Data Acquisition)
Non-availability	Security of supply
- For breakdown, outage	Separate network
- For maintenance	Shift engineer, switching engineer
Non-successful reclosing	Short-circuit current
Notice for planned outage	Short-circuit current calculations
Notice of completion of work, cancellation of permit to work	Short-circuit power
Off load	Short-circuit protection
On load	Single - three-phase reclosing
	Stand- by reserve
	State estimation

Sticking snow	Consumption of electricity
Successful reclosing	Contract price
Switching	Control area, control block
Switching centre, remote control centre	Control Deviation
Switching instruction	Controller (primary, secondary)
Switching out, switch (to)	Controlling power range
Synchronise (to), synchronisation	Cost of no-load operation
Synchroscope	Cost of start-up
Synchronous operation	Countermeasure
Telemetry, telemeasurement (TM)	Couple (to)
Telesignalisation (TS)	Curtailment (factor)
Test voltage	Demand
Transfer protection of a circuit to the coupler breaker (to)	Deviation
Transformer protection	Deviation from synchronous time
Transient fault	Drop
Transit, powerflow	Duration of the contract
Transmission losses	Electricity account
Transmission System Operator (TSO)	Electricity billing
Tripping	Electricity tariff
Under-excitation	Energy reserve
Unintentional deviation, inadvertent deviation	Error correction
Voltage collapse	Error detection
Voltage drop	Exchange deviation
Voltage lack	Exchange power control
Voltage range	Exchange program / schedule
WAMS (Wide inter-Area Measurement System)	Expiration of the contract
Withdrawal from service	Extension of the contract
Working zone	Frequency bias, K-factor
	Frequency control
	Frequency deviation
	Frequency offset (+ / - 0,1 Hz)
	Frequency reduction / drop
	Frequency setpoint
	Gate (of market)
	Hot reserve (stand-by)
	Hydraulic reserve
	Incremental (marginal) cost of generation.
	Load (to)
	Load curve
	Load shedding
	Margin
	Marginal generation
	Matching, cross checking
	Maximum demand
	- Daily
	- Weekly
	- Monthly
	- Annual
	Meter reading
	Meter registration
	Metering
OFFER-DEMAND BALANCING	
Already Allocated Capacity (AAC)	
Ancillary services	
Area Control Error (ACE)	
Auctions	
Automatic Generation Control (AGC)	
Availability	
Available capacity	
Available Transfer Capacity (ATC)	
Balance perimeter	
Balance responsible entity	
Balancing mechanism	
Billing period	
Billing point	
Breakdown, shutdown	
Check metering	
Cold reserve (stand-by)	
Consumer	

(15) Minute reserve
Net Transfer Capacity (NTC)
Network Power-Frequency characteristic
Off peak load hours
Output power
Peak-load hours
Power deviation
Power reserve
Power-factor meter
Power-Frequency control
Primary control
Purchase
Regulating point, setpoint value
Reserve (primary, secondary, tertiary)
Revision of the contract
Seasonal tariff
Secondary frequency control / load
frequency control
Self-regulation of load
Setting up of actual value
Spinning reserve
Stand- by reserve
Supplier
Tender / offer
Thermal reserve
Time deviation with UTC (Universal Time
co-ordinated)
Total Transfer Capacity (TTC)
Transit charge
Transmission Reliability Margin (TRM)
Unload (to)
Load reduction