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switched way (1) A way connected to the bus through a three-pole, group operated switch. (SWG/PE) C37.71-1984r

(2) A way connected to the bus through a switch.

(SWG/PE) C37.100-1992

(3) A way connected to the bus through a three-phase group-operated switch or single-phase switch.

(SWG/PE) C37.73-1998

switchgear (1) A general term covering switching and interrupting devices and their combination with associated control, instrumentation, metering, protective and regulating devices, also assemblies of these devices with associated interconnections, accessories and supporting structures used primarily in connection with the generation, transmission, distribution, and conversion of electric power.

(SWG/PE/IA/PSP) C37.20.3-1996, 1015-1997, C37.20.2-1993, C37.20.1-1993r, C37.100-1992

(2) **(hydroelectric power plants)** An assembly of equipment used to switch and control electrical power.

(PE/EDPG) 1020-1988r

switchgear assembly An assembled equipment (indoor or outdoor) including, but not limited to, one or more of the following categories: switching, interrupting, control, instrumentation, metering, protective, and regulating devices; together with their supporting structures, enclosures, conductors, electrical interconnections, and accessories.

(SWG/PE) C37.20.1-1993r, C37.20.2-1993, C37.20.3-1996, C37.100-1992

switchgear pothead A pothead intended for use in a switchgear where the inside ambient air temperature may exceed 40°C. It may be an indoor or outdoor pothead that has been suitably modified by silver surfacing (or the equivalent) the current-carrying parts and incorporates sealing materials suitable for the higher operating temperatures. *See also:* pothead.

(PE) 48-1975s

switchgear, protective *See:* protective switchgear.

switch hook (hookswitch) A switch on a telephone set, associated with the structure supporting the receiver or handset. It is operated by the removal or replacement of the receiver or handset on the support. *See also:* telephone station; switch stick.

(EEC/PE) [119]

switch indicator (1) A device used at a noninterlocked switch to indicate the presence of a train in a block.

(EEC/PE) [119]

(2) An indicator that shows the setting of a switch. *See also:* flag.

(C) 610.10-1994w

switching (1) The process by which the remanent polarization is reversed (or reoriented) to a new value of P_r (generally equal and opposite). Switching can be produced by electric fields or mechanical stresses.

(UFPC) 180-1986w

(2) **(single-phase motor)** The point in the starting operation at which the stator-winding circuits are switched from one connection arrangement to another. *See also:* asynchronous machine.

(PE) [9]

(3) **(test, measurement, and diagnostic equipment)** The act of manually, mechanically or electrically actuating a device for opening or closing an electrical circuit.

(MIL) [2]

(4) In networking, pertaining to a connection that is established by closing switches. *See also:* packet switching; message switching; digital switching; circuit switching.

(C) 610.7-1995

(5) The process of using a switch.

(C) 610.10-1994w

switching amplifier An amplifier that is designed to be applied so that its output is sustained at one of two specified states dependent upon the presence of specified inputs. *See also:* feedback control system.

(IA/ICTL/IAC) [60]

switching array (telephone switching systems) An assemblage of multiplexed crosspoints.

(COM) 312-1977w

switching branch (synchronous motor drives) A part of the circuit, including at least one switching element, bounded by two principal terminals. *Note:* A switching branch may include one or more simultaneously conducting converter switching elements connected together, commutating reactor

windings, and other devices intended to protect the semiconductor devices or to ensure their proper function, such as voltage and current dividers, and snubbers. In the simplest case, a switching branch may consist of only the switching element, which may be a single semiconductor device. The adjective "switching" may be omitted when the context of converter circuits is clear.

(IA/ID/SPC) 995-1987w, 936-1987w

switching card (test, measurement, and diagnostic equipment) A plug-in device that provides the necessary interconnection to the unit under test.

(MIL) [2]

switching circuit (data transmission) Term applied to the method of handling traffic through a switching center, either from a local user or from other switching centers, whereby additional electrical connection is established between the calling and the called station.

(PE) 599-1985w

switching coefficient The derivative of applied magnetizing force with respect to the reciprocal of the resultant switching time. It is usually determined as the reciprocal of the slope of a curve of reciprocals of switching times versus values of applied magnetizing forces. The magnetizing forces are applied as step functions.

(C) [20]

switching computer A communications computer designed to handle switching messages or packets in a network. *See also:* gate.

(C) 610.7-1995, 610.10-1994w

switching control center (telephone switching systems) A place where maintenance analysis and control activities are centralized for switching entities situated in different locations.

(COM) 312-1977w

switching current The value of current expressed in rms symmetrical amperes that the power circuit breaker element of the circuit protector interrupts at the rated maximum voltage and rated frequency under the prescribed test conditions.

(SWG/PE) C37.100-1992, C37.29-1981r

switching current rating The designated rms current that a load-break connector can connect and disconnect for a specified number of times under specified conditions.

(T&D/PE) 386-1995

switching device (switch) A device designed to close or open, or both, one or more electric circuits. *Note:* The term *switch* in international (IEC) practice refers to a mechanical switching device capable of opening and closing rated continuous load current. *See also:* nonmechanical switching device; mechanical switching device.

(SWG/PE) C37.100-1992

switching entity (telephone switching systems) A switching network and its control.

(COM) 312-1977w

switching function A function that has only a finite number of possible values and whose independent variables each have only a finite number of possible values.

(C) 1084-1986w

switching impulse (1) Ideally, an aperiodic transient impulse voltage that rises rapidly to a maximum value and falls, usually less rapidly, to zero. Switching impulses generally have front times of the order of tens to thousands of microseconds, in contrast to lightning impulses, which have front times from fractions of a microsecond to tens of microseconds.

332-1972w

(2) An impulse with a front duration of some tens to thousands of microseconds.

(PE/PSIM) 4-1995

switching impulse insulation level (power and distribution transformers) An insulation level expressed in kilovolts of the crest value of a switching impulse withstand voltage.

(PE/TR) C57.12.80-1978r

switching impulse protective level (of a surge protective device) The maximum switching impulse expected at the terminals of a surge protective device under specified conditions of operation. *Note:* The switching impulse protective levels given by the higher of either: a) the switching impulse discharge voltage for a specified current magnitude and wave shape, or b) the switching impulse sparkover voltage for a specified voltage wave shape.

(C/PE/TR) 1313.1-1996, C57.12.80-1978r