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Glossry

Architect engineer.— A supplier of design and engineering services for construction projects (e.g., powerplants, office buildings, bridges, etc.).

Auxiliary feedwater.—A standby system used to supply the secondary (nonradioactive) side of PWR'S steam generation with cooling water in the event the main source of water fails.

Balance of plant.—The equipment, in addition to the nuclear steam supply system, which is necessary to produce electricity from a nuclear powerplant.

Boiling water reactor. -A power reactor in which water, used as a coolant and moduator, is allowed to boil in the core.

Control rod.—A rod or tube containing a material that readily absorbs neutrons used to control the power of a nuclear reactor.

Decay heat.— The heat produced by the decay of radioactive nuclides or fission fragments.

Fission.—The splitting of a heavy nucleus into two approximately equal parts, accompanied by the release of a relatively large amount of energy and one or more neutrons.

Heat sink.— Anything that absorbs heat; usually part of the environment such as a river, pond, or the atmosphere.

Light water reactor.— A reactor which uses ordinary water as opposed to heavy water as a moderator and/or coolant.

Megawatt. -A unit of energy production or consumption commonly used to describe the generating capacity of a powerplant.

Moderator.—A material such as water used in a reactor to slow down high-velocity neutrons.

Nuclear steam supply system.—An arrangement of equipment with a critical array of nuclear fuel which creates high-quality steam for running turbine generators.

Pressurized water reactors. -A power reactor in which heat is transferred from the core to a heat exchanger by water kept under high-pressure to achieve high temperature without boiling,

Probabilistic risk assessment.—An approach to safety analysis which assesses undesirable consequences and their likelihood.

Radioactivity. —The spontaneous decay or disintegration of a unstable atomic nucleus accompanied by the emission of ionizing radiation.

Reactor. -A device in which a fission-chain reactor can be initiated, maintained, and controlled.

Safety goal.— A quantitative or qualitative target for either reliability or unreliability (risk).

System.— An arrangement of equipment utilized in a powerplant for a specific function (e. g., the reactor protective system).

Vendor.— The supplier of the design and much of the equipment for the nuclear steam supply system.

Acronyms and Abbreviations

ACRS	— Advisory Committee on Reactors Safeguards	MWt	— megawatts thermal
AE	— architect engineer	NRC	— Nuclear Regulatory Commission
AEC	— Atomic Energy Commission	NSAC	— Nuclear Safety Analysis Center
AFW	— auxiliary feedwater system	NSSS	— nuclear steam supply system
ASME	— American Society of Mechanical Engineers	OL	— operating licenses
ANSI	— American National Standards Institute	OPS	— Offshore Power Systems
ASLB	— Atomic Safety Licensing Board	OTA	— Office of Technology Assessment
BOP	— balance of plant	PDA	— preliminary design approval
BWR	— boiling water reactor	PDDA	— preliminary duplicate design approval
CP	— construction permit	PRA	— probabilistic risk assessment
DBA	— design basis accident	PSAR	— preliminary safety analysis report
EPA	— Environmental Protection Agency	PWC	— power-worthiness certificate
EPRI	— Electric Power Research Institute	PWR	— pressurized water reactor
FDA	— final design approval	RSS	— reactors safety study
FSAR	— final safety analysis report	SAR	— safety analysis report
GE	— General Electric Co,	SDA	— standard design approval
INPO	— Institute of Nuclear Power Operations	SIP	— standard information package
LE R	— licensee event report	SNUPPS	— standardized nuclear unit powerplant system
LWR	— light water reactor	TMI	— Three Mile Island
MWe	— megawatts electric	TVA	— Tennessee Valley Authority