

**COMBINED LICENSE APPLICATIONS  
FOR NUCLEAR POWER PLANTS  
(LWR EDITION)**

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Abbreviations

μCi/s	micro curies per second
Aac	alternate alternating current
ABWR	advanced boiling-water reactor
ac	alternating current
ACI	American Concrete Institute
ADAMS	Agencywide Documents Access and Management System
ADS	automatic depressurization system
AE	architech-engineer
AFW	auxiliary feedwater
AFWS	auxiliary feedwater system
AISC	American Institute of Steel Construction
AL	administrative letter
ALARA	as low as reasonably achievable
ALI	annual limit on intake
ALWR	advanced light-water reactor
ANS	American Nuclear Society
ANSI	American National Standards Institute
AOO	anticipated operational occurrence
ASME Code	American Society of Mechanical Engineers Boiler and Pressure Vessel Code
ASTM	American Society for Testing and Materials
ATWS	anticipated transients without scram
BE	best estimate
BL	bulletin
BOL	beginning of life
BTP	branch technical position
Btu	British thermal unit
BWR	boiling-water reactor
CBP	computer-based procedure
CCFP	conditional containment failure probability

CDF	core damage frequency
CFR	<i>Code of Federal Regulations</i>
CHRS	containment heat removal system
CIV	containment isolation valve
COL	combined license
COLA	combined license application
COL-ITAAC	combined license inspection, test, analysis, and acceptance criteria
COSS	computer operated support system
CRDM	control rod drive mechanism
CRDS	control rod drive system
CRE	control room envelope
CRHS	control room habitability system
CS	core support
CSS	containment spray solution
CVC	chemical and volume control
CVCS	chemical and volume control system
d	day
D-RAP	design reliability assurance program
DAC	design acceptance criteria
DAC	derived air concentration
DBA	design-basis accident
DBE	design-basis event
dc	direct current
DC	design certification
DC-ITAAC	design certification inspection, test, analysis, and acceptance criteria
DCD	design certification document
DCR	design certification rule
DCRA	design-centered review approach
DCS	data communication system
DHS	U.S. Department of Homeland Security
DNBW	departure from nucleate boiling ratio
DOT	U.S. Department of Transportation
EA	environmental assessment

EAB	exclusion area boundary
EAL	emergency action level
EBS	emergency boration system
EC	erosion/corrosion
ECCS	emergency core cooling system
EDG	emergency diesel generator
EIS	environmental impact statement
EOC	emergency operations center
EOF	emergency operations facility
EOL	end of life
EOP	emergency operating procedure
EP	emergency preparedness
EP-ITAAC	emergency planning inspection, test, analysis, and acceptance criteria
EPA	U.S. Environmental Protection Agency
EPIP	emergency planning implementing procedure
EPRI	Electric Power Research Institute
EPZ	emergency planning zone
ER	environmental report
ERF	emergency response facility
ESBWR	Economic Simplified Boiling-Water Reactor
ESF	engineered safety feature
ESFAS	engineered safety features actuation system
ESP	early site permit
ETE	evacuation time estimate
F-V	Fussell-Vesely
f <sup>3</sup>	cubic foot
FAC	flow-accelerated corrosion or flow-assisted corrosion
FDA	Food and Drug Administration
FEMA	Federal Emergency Management Agency
FHA	fire hazards analysis
FHS	fuel handling system
FIV	flow-induced vibration
FMEA	failure mode and effects analysis

FPP	fire protection program
FR	<i>Federal Register</i>
FR	functional requirement
FSAR	final safety analysis report
FSER	final safety evaluation report
ft	foot/feet
g/d	grams per day
GDC	general design criterion/criteria
GE	General Electric Co.
GL	generic letter
GMRS	ground motion response spectrum
GSI	generic safety issue
GTG	generic technical guidance
GWMS	gaseous waste management systems
HA	human action
HED	human engineering discrepancy
HEPA	high-efficiency particulate air
HFE	human factors engineering
hr	hour
HRA	human reliability analysis
HSI	human-system interface
HSS	high-safety significant
HVAC	heating, ventilation, and air conditioning
Hz	hertz
I&C	instrumentation and control
IEEE	Institute of Electrical and Electronics Engineers
IEEE Std	Institute of Electrical and Electronics Engineers standard
IGSCC	intergranular stress corrosion cracking
IN	information notice
in.	inch
INPO	Institute of Nuclear Power Operations
IOE	industry operating experience
ISI	inservice inspection

IST	inservice testing
ITAAC	inspections, tests, analyses, and acceptance criteria
ITP	initial test program
kg/yr	kilogram(s) per year
KI	potassium iodide
KIC	fracture toughness data
km	kilometer
KSA	knowledge, skills, and ability
kVA	kilovoltampere
lb	pound
LBB	leak before break
LCO	limiting condition for operation
LCS	local control station
LHGR	linear heat generation rate
LOCA	loss-of-coolant accident
LOOP	loss of offsite power
LPZ	low-population zone
LWMS	liquid waste management systems
LWR	light-water reactor
m <sup>3</sup>	cubic meter(s)
m <sup>3</sup> /yr	cubic meter(s) per year
m <sup>3</sup> /d	cubic meter(s) per day
Mbq/s	Mega-bequerels per second
MFCS	main feedwater control system
MFW	main feedwater
min	minute
MMI	Modified Mercalli Intensity
MOV	motor-operated valve
MPa	mega pascal
MPFF	maintenance-preventable functional failures
MR	maintenance rule
MRFF	maintenance rule functional failures
MSIV	main steam isolation valve

MSIVLCS	main steam isolation valve leakage control system
MSSS	main steam supply system
MWt	megawatt thermal
NDE	nondestructive examination
NDT	nil ductility temperature
NEI	Nuclear Energy Institute
NOAA	National Oceanic and Atmospheric Administration
NPSH	net positive suction head
NRC	U.S. Nuclear Regulatory Commission
NRO	Office of New Reactors
NRR	Office of Nuclear Reactor Regulation
NSSS	nuclear steam supply system
NUMARC	Nuclear Management and Resources Council
OBE	operating-basis earthquake
OER	operating experience review
OM	operation and maintenance
OMB	Office of Management and Budget
ORAP	Operational Reliability Assurance Program
OSC	operational support center
P-STG	plant-specific technical guidelines
P-SWG	plant-specific writer's guide
P&ID	pipng and instrumentation diagram
PDR	public document room
PGP	procedures generation package
pH	hydrogen concentration
PMF	probable maximum flood
PMP	probable maximum precipitation
POV	power-operated valve
PRA	probabilistic risk assessment
PS-ITAAC	physical security ITAAC
PSD	power spectral density
PSHA	probabilistic seismic hazard analysis
psi	pound(s) per square inch

psid	pounds per square inch differential
psig	pounds per square inch gauge
PTS	pressurized thermal shock
PWR	pressurized-water reactor
PWSCC	primary water stress corrosion crackling
QA	quality assurance
QAPD	quality assurance program document/quality assurance program description
RAP	reliability assurance program
RAT	reserve auxiliary transformer
RCIC	reactor core isolation cooling
RCP	reactor coolant pump
RCPB	reactor coolant pressure boundary
RCS	reactor coolant system
REM	roentgen equivalent man
REMP	radiological environmental monitoring program
REP	radiological emergency preparedness
RFCS	recirculation flow control system
RG	regulatory guide
RHR	residual heat removal
RIS	regulatory issue summary
RPV	reactor pressure vessel
RQD	rock quality designation
RSS	remote shutdown system
RTNSS	regulatory treatment of nonsafety systems
RWCS	reactor water cleanup system
RWST	refueling water storage tank
SAD	software architecture description
SAR	safety analysis report
SAS	secondary alarm system
SAT	systems approach to training
SBO	station blackout
SDP	significance determination process
sec	second

SECY	Office of the Secretary of the Commission
SER	safety evaluation report
SGBS	steam generator blowdown system
SGI	safeguards information
SLCS	standby liquid control system
SPDS	safety parameter display system
SRM	staff requirements memorandum
SRP	standard review plan
SRV	safety/relief valve
SS-ITAAC	site-specific inspection, test, analysis, and acceptance criteria
SSAR	site safety analysis report
SSAS	station service air system
SSC	structure, system, and component
SSE	safe-shutdown earthquake
SSI	soil-structure interaction
STS	standard technical specification
SWMS	solid waste management system
T-H	thermal-hydraulic
TBD	to be determined
TEDE	total effective dose equivalent
TGS	turbine generator system
TGSCC	transgranular stress-corrosion cracking
TMI	Three Mile Island
TN	transmission network
TS	technical specification
TSC	technical support center
TSO	transmission system operator
TSP	transmission system provider
TSTF	Technical Specifications Task Force
UHRS	uniform hazard response spectra
UHS	ultimate heat sink
URD	Utility Requirements Document
USGS	U.S. Geological Survey

USI	unresolved safety issue
v	volt(s)
V/H	vertical to horizontal
V&V	verification and validation
Vac	volt alternating current
yr	year