CHAPTER 1

INTRODUCTION AND GENERAL DESCRIPTION OF THE PLANT

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CHAPTER 1

INTRODUCTION AND GENERAL DESCRIPTION OF THE PLANT

1.1 INTRODUCTION

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Add the following paragraphs to the end of DCD Section 1.1

STD SUP 1.1-1

This Final Safety Analysis Report (FSAR) incorporates the Design Control Document (DCD) (as identified in Table 1.6-201) for a simplified passive advanced light water reactor plant provided by Westinghouse Electric Company, the entity originally sponsoring and obtaining the AP1000 design certification documented in 10 CFR Part 52, Appendix D. Throughout this FSAR, the "referenced DCD" is the AP1000 DCD submitted by Westinghouse as Revision 19 including any supplemental material as identified in Table 1.6-201. Unless otherwise specified, reference to the DCD refers to Tier 2 information, including references to the sensitive unclassified non-safeguards information (including proprietary information) and safeguards information, contained in the AP1000 DCD. Such DCD information is included in this combined license application in the same manner as it is included in the AP1000 DCD, i.e., references in the DCD are included as references in the FSAR, and material incorporated by reference into the DCD is incorporated by reference into the FSAR. Appropriate agreements are in place to provide for the licensee's rights to possession (including constructive possession) and use of the withheld sensitive unclassified non-safeguards information (including proprietary information) and safeguards information referenced in the AP1000 DCD for the life of the project.

Appendix D to 10 CFR Part 52 is hereby incorporated by reference into the COL application.

LNP SUP 1.1-2

This FSAR is hereby submitted under Section 103 of the Atomic Energy Act by Duke Energy Florida, LLC (DEF) to the Nuclear Regulatory Commission (NRC) as part of the application for two Class 103 combined licenses (COLs) to construct and operate two nuclear power plants under the provisions of 10 CFR 52 Subpart C.

1.1.1 PLANT LOCATION

Add the following text at the beginning of DCD Subsection 1.1.1:

LNP COL 2.1-1

The Levy Nuclear Plant Units 1 and 2 (LNP) site is located in Levy County, Florida (Figure 2.1.1-201). This is a large, primarily rural area located southwest

of Gainesville and west of Ocala and approximately 15.5 kilometers (km) (9.6 miles [mi.]) northeast of the Crystal River Energy Complex, an energy facility also owned by DEF (Figure 2.1.1-201). The nearest towns from the site are Inglis and Yankeetown, which are located 6.6 km (4.1 mi.) southwest and 12.9 km (8.0 mi.) southwest from the site, respectively. The Gulf of Mexico is located approximately 12.8 km (7.9 mi.) west of the proposed LNP site and Lake Rousseau lies about 4.8 km (3.0 mi.) to the south (Figure 2.1.1-202).

Figure 2.1.1-201 identifies the site location. Figure 1.1-201 identifies the plant arrangement within the site.

1.1.5 SCHEDULE

Add the following text to the end of DCD Subsection 1.1.5:

LNP COL 1.1-1

Table 1.1-203 displays the anticipated schedule for construction and operation of two AP1000 units at the LNP site. A site-specific construction plan and startup schedule will be provided to the NRC after issuance of the COL.

1.1.6.1 Regulatory Guide 1.70

Add the following text to the end of DCD Subsection 1.1.6.1.

STD SUP 1.1-6

This FSAR generally follows the AP1000 DCD organization and numbering. Some organization and numbering differences are adopted where necessary to include additional material, such as additional content identified in Regulatory Guide 1.206. Any exceptions are identified with the appropriate left margin annotation as discussed in Subsection 1.1.6.3 and Table 1.1-202.

1.1.6.3 Text, Tables and Figures

Add the following text to the end of DCD Subsection 1.1.6.3.

STD SUP 1.1-3

Table 1.1-202 describes the left margin annotations used in this document to identify departures, supplementary information, COL items, and conceptual design information.

FSAR tables, figures, and references are numbered in the same manner as the DCD, but the first new FSAR item is numbered as 201, the second 202, the third 203, and consecutively thereafter. When a table, figure, or reference in the DCD is changed, the change is appropriately left margin annotated as identified above.

New appendices are included in the FSAR with double letter designations following the pertinent chapter (e.g., 12AA).

When it provides greater contextual clarity, an existing DCD table or figure is revised by adding new information to the table or figure and replacing the DCD table or figure with a new one in the FSAR. In this instance, the revised table or figure clearly identifies the information being added, and retains the same numbering as in the DCD, but the table or figure number is revised to end with the designation "R" to indicate that the table or figure has been revised and replaced. For example, revised "Table 4.2-1" would become "Table 4.2-1R." New and revised tables and figures are labeled in the left margin as described in Table 1.1-202.

1.1.6.5 Proprietary Information

Insert the following text to the end of DCD Subsection 1.1.6.5.

STD SUP 1.1-4

Some portions of this FSAR may be considered as proprietary, personal, or sensitive and withheld from public disclosure pursuant to 10 CFR 2.390 and Regulatory Issue Summary (RIS) 2005-026. Such material is clearly marked and the withheld material is separately provided for NRC review.

1.1.6.6 Acronyms

Add the following text to the end of DCD Subsection 1.1.6.6.

LNP SUP 1.1-5

Table 1.1-201 provides a list of acronyms and abbreviations used in the LNP 1 and 2 FSAR in addition to the acronyms identified in DCD Table 1.1-1 and system designation identified in Table 1.7-201 and DCD Table 1.7-2.

1.1.7 COMBINED LICENSE INFORMATION

Add the following text to the end of DCD Subsection 1.1.7.

LNP COL 1.1-1

This COL Item is addressed in Subsection 1.1.5.

LNP SUP 1.1-5

Table 1.1-201 (Sheet 1 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
ºC	degrees Celsius
°F	degrees Fahrenheit
χ/Q	Chi/Q (atmospheric dilution factor)
ϕ’	effective friction angle
ϕ_{cv}	critical void ratio friction angle
v	Poisson’s ratio
µm	Micrometer
µCi/cm^3 or µCi/cc	microcuries per cubic centimeter
µCi/ml	microcuries per milliliter
2-D	two dimensional
3-D	three-dimensional
a_{max}	peak acceleration
AADT	Average Annual Daily Traffic
AASHTO	American Association of State Highway and Transportation Officials
ac.	Acres
ac.-ft.	acre-feet
ACI	American Concrete Institute
ADAMS	Agencywide Documents Access and Management System
AE	Architect Engineer
AFW	Auxiliary Feedwater System
AMS	American Meteorological Society

LNP SUP 1.1-5

Table 1.1-201 (Sheet 2 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
amsl	above mean sea level
ANSS	Advanced National Seismic System
AOV	air-operated valve
AP1000	Westinghouse's AP1000 Reactor
$^{40}A/^{39}A$	Argon isotope ratio
ASCE/SEI	American Society of Civil Engineers/Structural Engineering Institute
ASD	Allowable Strength Design
ASOS	Automated Surface Observing System
AST	above ground storage tank
ASTM	American Society for Testing and Materials
BAT	Barten Aerial Technologies
BE	best estimate
BEBR	Bureau of Economic and Business Research
BES	Bulk Electric System
BF – ITAAC	Backfill ITAAC
bgs	below ground surface
BMT	Becker Hammer Test
bpf	blow per foot
B&PVC	Boiler and Pressure Vessel Code
BTOC	below top of casing
Btu/hr	British Thermal Units per hour

LNP SUP 1.1-5

Table 1.1-201 (Sheet 3 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
BWR	boiling water reactor
c’	effective cohesion
$C_{\varepsilon\alpha}$	coefficient of secondary compression
C_c	compression index
C_r	unloading-reloading index
C-I	seismic Category I
C-II	seismic Category II
CAM	Continuous Air Monitors
CAV	cumulative absolute velocity
CCDP	conditional core damage probability
CCTV	Closed Circuit Television
CD	Compact disk
CDDIS	Crustal Dynamics Data Information System
CDE	Committed Dose Equivalent
CDF	core damage frequency
CDI	Conceptual Design Information
CDL	clandestine drug lab
CEDE	Committed Effective Dose Equivalent
CEO	Chief Executive Officer
CEUS	central and eastern United States
CFBC	Cross Florida Barge Canal
cfs	cubic feet per second

LNP SUP 1.1-5

Table 1.1-201 (Sheet 4 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
CH	fat clay
Chi/Q	atmospheric dilution factor
CL	lean clay
CLSM	controlled low strength material
cm	centimeter
cm^3/cm^3	cubic centimeter per cubic centimeter
cm/5 min	centimeter per 5 minutes
cm/hr	centimeter per hour
cm/sec	centimeters per second
cm^2/sec	square centimeters per second
cm^3/sec	cubic centimeters per second
CMT	centroid-moment-tensor
cm/y	centimeters per year
CNO	Chief Nuclear Officer
CO	carbon monoxide
Co-58	cobalt isotope 58
Co-60	cobalt isotope 60
COC	cycles of concentration
COCORP	Consortium for Continental Reflection Profiling
COL	Combined License
COLA	Combined License Application
conc.	concentration

LNP SUP 1.1-5

Table 1.1-201 (Sheet 5 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
CPT	cone penetrometer test
cps	counts per second
CR	control room
CR3	Crystal River Unit No. 3 Nuclear Generating Plant
Cr-51	chromium isotope 51
CREC	Crystal River Energy Complex
CRR	Cyclic Resistance Ratio
CRS	Control Room Supervisor
CS	Creedmoor segment
CSDRS	certified design seismic design response spectra
CSR	Cyclic Stress Ratio
CSX	CSX Transportation, Inc.
CU	consolidated-undrained
CVS	Chemical Volume and Control System
d	distance from airport in kilometers (miles)
D	disturbance factor
d_{max}	maximum required depth for engineering purposes
D_r	relative density
DAC	Derived Air Concentration
DAC-hr	Derived Air Concentration-hr
DAM	Dames & Moore
$days^{-1}$	1 per day

LNP SUP 1.1-5

Table 1.1-201 (Sheet 6 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
DCD	Westinghouse Electric Company, LLC, AP1000 Design Control Document for the certified design as amended
DE	deaggregation earthquake
DEC	Duke Energy Corporation
DEF	Duke Energy Florida, LLC
DEH	high-magnitude deaggregation earthquake
DEL	low-magnitude deaggregation earthquake
DEM	middle-magnitude deaggregation earthquake
DEM	Digital Elevation Model
DEP	Department of Environmental Protection
DEP	Duke Energy Progress, Inc.
DF	design factor
DHBRC	Department of Health, Bureau of Radiation Control
DHQ	mean diurnal high water inequality
DLQ	mean diurnal low water inequality
DNAG	Decade of North American Geology/the Geological Society of America's program that includes the Magnetic Anomaly Map of North America
DOT	Florida Department of Transportation
D/Q	Relative Deposition Factor
DRAP	Reliability Assurance Program for the design phase
DTL	mean diurnal tide level
DTPG	defined test plan groups

LNP SUP 1.1-5

Table 1.1-201 (Sheet 7 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
E	East
E	elastic Young's modulus
E_{50}	half of the failure stress
E_{pmt}	rock pressuremeter test modulus
E_{rm}	rock mass modulus
E-F	Enhanced-Fujita Tornado Scale
E&I	Environment and Infrastructure
EAB	exclusion area boundary
EAL	Emergency Action Level
ECC-GC	Extended Continental Crust-Gulf Coast
ECCS	Emergency Core Cooling System
ECFS	East Coast fault system
ECL	effluent concentration limit
ECS	Emergency Communications System
EDIS	Economic Development Information System
EDR	Environmental Data Resources. Inc.
EDTA	Ethylenediaminetetraacetic Acid
Emb	expected estimate of body wave magnitude
EnC	Enon fine sand loam occurs on slopes of 6 to 10 percent
ENE	east-northeast
ENS	Emergency Notification System
EOC	Emergency Operations Centers

LNP SUP 1.1-5

Table 1.1-201 (Sheet 8 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
EOF	Emergency Operations Facility
EOP	emergency operating procedure
EPC	engineering, procurement, and construction
EPRI-SOG	Electric Power Research Institute-Seismic Owners Group
EP-ITAAC	Emergency Planning-ITAAC
EQ	Environmental Qualification
EQMEL	Environmental Qualification Master Equipment List
ERDS	Emergency Response Data System
ERNS	Emergency Response Notification System
ERO	Emergency Response Organization
ESE	east-southeast
ESP	Early Site Permit
ESATCOM	Florida Emergency Satellite Communications system
EST	earth science team
ETSZ	East Tennessee seismic zone
E-W or EW	east-west
EWD	Engineering Weather Data
F_a	amplification factor
F0	Fujita tornado scale intensity 40 – 72 mph
F1	Fujita tornado scale intensity 73 – 112 mph
F2	Fujita tornado scale intensity 113 – 157 mph

LNP SUP 1.1-5

Table 1.1-201 (Sheet 9 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
F3	Fujita tornado scale intensity 158 – 206 mph
F4	Fujita tornado scale intensity 207 – 260 mph
F5	Fujita tornado scale intensity 261 – 318 mph
FAC	flow accelerated corrosion
FAA	Federal Aviation Administration
FAS	Floridan aquifer system
FB	Fault B
FC	Fault C
FDEP	Florida Department of Environmental Protection
FDLE	Florida Department of Law Enforcement
Fe-55	iron isotope 55
Fe-59	iron isotope 59
FEM	finite element model
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FFA	flood frequency analysis
FFD	Fitness for Duty
FGDL	Florida Geographic Data Library
FGS	Florida Geological Survey
FGT	Florida Gas Transmission Company
FHA	Fire Hazards Analysis
FHB	Fuel Handling Building

LNP SUP 1.1-5

Table 1.1-201 (Sheet 10 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
FIPS	Federal Information Processing Standards
FIRS	foundation input response spectra
FMG	Failure Mode Groups
fps	feet per second
FRCC	Florida Reliability Coordinating Council
FRS	Facility Registry Building
FS	factor of safety
FSAR	Final Safety Analysis Report
FSER	Final Safety Evaluation Report
ft.	foot/feet
ft^2	square feet
ft/day	feet per day
ft^2/day	square feet per day
ft^3/day	cubic feet per day
ft/ft	feet per foot
ft/mi	Foot per mile
ft/sec or f/s	feet per second
FTS	Federal Telephone System
g	gram
G	shear modulus
g	gravity acceleration
g/cm^3	grams per cubic centimeter

LNP SUP 1.1-5

Table 1.1-201 (Sheet 11 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
Ga	billion per year
gal.	gallon
gal/ft^3	gallon per cubic foot
GC	clayey gravel
GCSZ	Gulf Coastal Source Zones
GCVSZ	Giles County, Virginia, seismic zone
GG&S	Geotechnical, Geological, and Seismological
GI-LLI	gastrointestinal tract-lower large intestine (ingestion pathway organ)
GIS	Geographic Information System
GL	ground level
GMRS	ground motion response spectrum
GMT	Greenwich Mean Time
gpd	gallon per day
gpd/ft	gallon per day per foot
gpm or gal/min	gallons per minute
gpm/ft	gallon per minute per foot
GSI	geologic strength index
GSU	main setup transformer
GT	Great Diurnal Range
h or hr.	hour
H1	Category 1 hurricane

LNP SUP 1.1-5

Table 1.1-201 (Sheet 12 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
H2	Category 2 hurricane
H3	Category 3 hurricane
ha	hectares
ha	mangrove-swamp deposits
ha-m	hectare-meter
HAR	Shearon Harris Nuclear Power Plant
HCL	hydrochloric acid
HCLPF	high confidence, low probability of failure
HEC-HMS	Hydrologic Engineering Center-Hydrologic Modeling System
HEC-RAS	Hydrologic Engineering Center – River Analysis System
HE&EC	Harris Energy and Environmental Center
HES	Hurricane Evacuation Studies
HF	high-frequency
HiRAT	High Resolution Acoustic Televiewer probe
HMG	High Mobility Grout
HMR	Hydrometeorological Report
hPa/mb	hectoPascal/milliBar
HPN	Health Physics Network
HQWL	type of rock coring tool
HRHF	hard rock high frequency
hr.	hour

LNP SUP 1.1-5

Table 1.1-201 (Sheet 13 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
hrs/yr	Hours per year
HSS	Holly Springs segment
HV	high voltage
HWI	Greenwich high water interval (in hours)
Hz	Hertz
I_{50}	point load index
I-75	Interstate 75
IBC	International Building Code
ICIS	Integrated Compliance Information System
in.	inch
in/5 min	inch per 5 minutes
in./hr	inches per hour
in/in	inch per inches
ISG	Interim Staff Guidance
ISO	Independent System Operator
ISRM	International Society of Rock Mechanics
ITA	inspections, tests, or analyses
ITP	Initial Test Plan
JOG	Joint Owners Group
JPM	job performance measures
JTG	Joint Test Group
JTWG	Joint Test Working Group

LNP SUP 1.1-5

Table 1.1-201 (Sheet 14 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
k	standard deviation of ln
ka	thousand years before present
kcf	kips per cubic foot
kg	kilogram
kg/m^2	kilograms per square meter
kg/yr	kilograms per year
kip	kilopound (1000 pounds)
$kips/ft^3$	kips per cubic foot
km	kilometer
km^2	square kilometers
km/h or km/hr	kilometers per hour
kPa	Kilopascals
kPa/sec	kilopascals per second
ksf	kips per square foot
ksi	kips per square inch
KTS	knots
kV	kilovolt
kVA	kilovoltampere
l or L	liter
L/cm^3	liters per cubic centimeter
l/day or L/day	liters per day

LNP SUP 1.1-5

Table 1.1-201 (Sheet 15 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
l/min, L/min, lpm	liters per minute
l/yr or L/yr	liters per year
LAN	Local Area Network
LB	lower bound
lb.	pound
lb/ft^2	pounds per square foot
lb/in^2	pounds per square inch
lb/m^2	pounds per square meter
lbs	Pounds
LCD	local climatological data
LCFS	Central Florida South
LCO	Limiting Conditions for Operations
LER	licensee event report
LF	low-frequency, nominally 1 to 2.5 Hz
LFL	Lower flammability limit
LiDAR and LIDAR	light detection and ranging
LLB	Lower Lower Bound
LLNL	Lawrence Livermore National Laboratory
LMG	low mobility grout
LNP 1	Levy Nuclear Plant, Unit 1
LNP 2	Levy Nuclear Plant, Unit 2
LNP or LNP 1 and 2	Levy Nuclear Plant, Units 1 and 2

LNP SUP 1.1-5

Table 1.1-201 (Sheet 16 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
LOSP	loss of off-site power
LPC	Citrus 1 and Citrus 2
lpd	liters per day
LPG	liquefied petroleum gas
lpm	liters per minute
LPZ	low population zone
LSI	Liquefaction Severity Index
LT	local time
LUST	leaking underground storage tank
LWI	Greenwich low water interval (in hours)
LWSP	Local Water Supply Plan
m	meter
M	moment magnitude
m_b	body-wave magnitude
M_d	duration magnitude
m_i	material constant
M_I	intensity magnitude (considered equivalent to M)
M_l	local magnitude
M_{max}	maximum magnitude
M_{sw}	surface wave magnitude
M_S	surface-wave magnitude
M_w	moment magnitude

LNP SUP 1.1-5

Table 1.1-201 (Sheet 17 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
m/km	meters per kilometer
m/s or m/sec	meters per second
m^{-2}	$1/m^2$
m^2	square meters
m^2/day	square meters per day
m^3	cubic meters
m^3/s	cubic meters per second
Ma	million years before present
MAT	maximum astronomical tide
mb	beach and near shore deposits
mb	millibar
mb/s	millibars per seconds
MCL	Management Counterpart Link
MCS	Monte Carlo Simulations
MCSB	Mid-Cretaceous Sequence Boundary
MCU	Middle Counting Unit
MEOW	maximum envelope of water
MESE	Mesozoic and younger crustal region
mGal	milligal
mgd	million gallons per day
MH	elastic silt
MHHW	mean higher high water

LNP SUP 1.1-5

Table 1.1-201 (Sheet 18 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
MHW	mean high water
mi.	mile(s)
$mi.^2$	square miles
$mi.^3$	cubic miles
mi/hr	mile per hour
min	minute
MIS	marine oxygen isotope stage
Mg	milligram
MH	elastic silt
MHHW	mean higher high water
MHW	mean high water
ml	milliliter
ML	Silt
mld	milliliters per day
MLE	maximum likelihood estimate
ml/g	milliliters per gram
MLU	Multi-Layer Unsteady State
MLLW	mean lower low water
MLW	mean low water
mm	millimeter
MM	Modified Mercalli
MMI	Modified Mercalli Intensity

LNP SUP 1.1-5

Table 1.1-201 (Sheet 19 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
mm/h	millimeters per hour
mm/yr	millimeters per year
mm^2/s	square millimeters per second
MMI	Modified Mercalli Intensity
MN	mean range of tide
MOM	Maximum of Maximum
MPa	megaPascal
mph	miles per hour
MPSSZ	Middleton Place-Summerville seismic zone
MR	Maintenance Rule
mrad	millirad
mrem	millirem
mrem/yr	millirem per year
MSF	magnitude scaling factor
msl	mean seal level
mS/m	Millisiemens per meter
MSPI	mitigating systems performance indicators
mSv	milliSievert
MT	magnetic particle
MTL	mean tide level
MVA	megavoltampere
m.y.	million years

LNP SUP 1.1-5

Table 1.1-201 (Sheet 20 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
N	SPT blowcount
N	North
N_{60}	SPT blow counts corrected for a hammer with 60 percent energy transfer efficiency
NA, N/A	not applicable
Na, NA	not available
NAAQS	national ambient air quality standards
NAMAG	North American Magnetic Anomaly Group
NASA	National Aeronautics and Space Administration
NAV	Avon Park Rock at the north reactor site
NAV-1	LNP 2 Avon Park Limestone
NAVD	North American Vertical Datum
NAVD 1988	North American Vertical Datum of 1988
NAVD88	North American Vertical Datum of 1988
NCDC	National Climatic Data Center
NCEDC	Northern California Earthquake Data Center
NCEER	National Center for Earthquake Engineering Research
ND	no data available/ no data recorded for parameter
NDE	non-destructive examination
NE	northeast
NED	National Elevation Dataset
NEIC	National earthquake Information Center

LNP SUP 1.1-5

Table 1.1-201 (Sheet 21 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
NERC	North American Reliability Electric Corporation
NESC	National Electric Safety Code
NGA	Next Generation Attenuation Project
NGDC	National Geophysical Data Center
NGS	National Geodetic Survey
NGVD29	National Geodetic Vertical Datum of 1929
NHC	National Hurricane Center
NHVRy	New Hope Valley Railway
NI	nuclear island
NIOSH	National Institute for Occupational Safety and Health
NIST	National Institute of Standards and Technology
NLO	non-licensed operator
NMESE	Mesozoic and older crustal region
NNE	north-northeast
NNW	north-northwest
NOAA	National Oceanic and Atmospheric Administration
NOS	Nuclear Oversight Section
NPD	Nuclear Plant Development
NPDES	National Pollution discharge Elimination System
NQWL	type of rock coring tool
NRC	U.S. Nuclear Regulatory Commission

LNP SUP 1.1-5

Table 1.1-201 (Sheet 22 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
NRCS	U.S. Department of Agriculture, Natural Resources Conservation Service
N-S	north-south
NS	Non-seismic
NSM	Nuclear Shift Manager
Nuc Ops	Nuclear Operations
NW	northwest
NWS	National Weather Service
OBE	Operating Basis Earthquake
OCB	oceanic convergent boundary
OCL	Operations Center line
OCR	over-consolidation ratio
ODCM	Off-Site Dose Calculation Manual
OE	operating experience information
Ohm-cm	Ohm-centimeter
OJT	on-the-job training
OM	Operations and Maintenance
OSC	Operations Support Center
OTF	oceanic transform fault
P*	Probability an EPRI-SOG seismic source is active
PBSRS	performance based surface horizontal and vertical response spectra

LNP SUP 1.1-5

Table 1.1-201 (Sheet 23 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
pcf	pounds per cubic foot
PCP	Process Control Program
PE&RAS	Performance Evaluation and Regulatory Affairs Section
PEER	Pacific Earthquake Engineering Research Center
PEZ	Paleozoic Extended Zone
person-hrs/year	person-hours per year
PGA	peak ground acceleration
PGM	Plant General Manager
pH	hydrogen (ion) concentration
PLS	Public Land Survey
PLT	point-load test
$PM_{2.5}$	particulate matter of 2.5 µm and smaller
PM_{10}	particulate matter of 10 µm and smaller
PMCL	Protective Measures Counterpart Link
PMF	probable maximum flood
PMH	probable maximum hurricane
PMP	probable maximum precipitation
PMS	probable maximum surge
PMT	probable maximum tsunami
PMT	pressure meter test
PMWP	probable maximum winter precipitation

LNP SUP 1.1-5

Table 1.1-201 (Sheet 24 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
POR	period of record
PORC	Plant Owner's Operations Review Committee
PORV	power operated relief valve
ppsm	people per square mile
PR	Peninsula Range
P-S	P- and S-wave (compression and shear wave)
psf	pounds per square foot
PS-ITAAC	Physical Security-ITAAC
PSHA	probabilistic seismic hazard analysis
psi	pounds per square inch
psi/sec	pounds per square inch per second
PST	preservice test
PR	Peninsula Range
PT	liquid penetrant
PTAC	Plant Transmission Activities Coordinator
PT&O	Plant Test and Operation
pu	per unit
P-wave	primary wave
PZR	Pressurizer
Qal	Quaternary alluvium
QAPD	Quality Assurance Program Description

LNP SUP 1.1-5

Table 1.1-201 (Sheet 25 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
QC	Quality Control
QMS	Westinghouse Quality Management System
Q/T	Quaternary/Tertiary
R0	extremely weak rock
R1	very weak rock
R2	weak rock
R3	medium weak rock
R4	strong rock
RAI	request for additional information
RAT	Reserve Auxiliary Transformer
Rb-Sr	rubidium-strontium
RCA	Radiological Controlled Area
RCC	roller compacted concrete
RCPB	reactor coolant pressure boundary
RCRIS	Resource Conservation and Recovery Information Service
RCPB	reactor coolant pressure boundary
RCRIS	Resource Conservation and Recovery Information Service
re	sandy solution residuum
RE	reference (controlling) earthquake
RG	Regulatory Guide

LNP SUP 1.1-5

Table 1.1-201 (Sheet 26 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
RHR	residual heat removal
RIS	Regulatory Issue Summary
RLME	repeated large magnitude earthquake
RO	Reactor Operator
RP	radiation protection
RPS	Reactor Protection System
RPT	Radiation Protection Technician
RQD	rock quality designation
RRS	required response spectrum
RSCL	Reactor Safety Counterpart Link
RT	radiography techniques
RTDP	Revised Thermal Design Procedure
RTH	Rock Testing Handbook
RTNSS	Regulatory Treatment of Non-Safety Systems
RTO	Regional Transmission Organization
RV	recreational vehicle
S	south
Shmax	maximum horizontal stress axis
S-1	top soil layer
S-2	immediate soil layer
S-3	bottom soil layer

LNP SUP 1.1-5

Table 1.1-201 (Sheet 27 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
S_{hmin}	minimum horizontal stress axis
S_u	undrained shear strength
S-SO	Superintendent – Shift Operations
SA	Spectral Acceleration
SAMDA	Severe Accident Mitigation Design Alternatives
SAMG	Severe Accident Management Guidance
SAMSON	Solar and Meteorological Surface Observation Network
SASW	spectral analysis of surface waves
SAV	Avon Park Rock at the south reactor site
SAV-1	LNP 1 Avon Park Limestone
SBO	station blackout
SC	clayey sand
SCBA	self-contained breathing apparatus
SC DOT	South Carolina Department of Transportation
SCOR	soil column outcrop response spectra
SCR	stable continental region
SDP	Significance Determination Process
SE	southeast
Sec	second
sec/m^3	seconds per cubic meter
SECY	NRC Office of the Secretary

LNP SUP 1.1-5

Table 1.1-201 (Sheet 28 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
SEI/ASCE	Structural Engineering Institute/American Society of Civil Engineers
SERC	Southeastern Electric Reliability Corporation
SGTR	steam generator tube rupture
SIWP	Site Investigation Work Plan
SLOSH	Mathematical model that stands for sea, lake, and overland surge from hurricanes
sm	silty sand
SM	Shift Manager
SNC	Southern Nuclear Company
SNM	Special Nuclear Material
SO_2	sulphur dioxide
SOC	Security Operations Center
SOFIA	Southern Florida Information Access
SOG	Seismic Owners Group
SOV	solenoid-operated valve
SP	poorly graded sand
SPN	shotpoint number
SP-SM	poorly graded sand and silty sand
SPT	standard penetration testing
sq. ft.	square foot
SQG	small quantities generated
SR	soft rock

LNP SUP 1.1-5

Table 1.1-201 (Sheet 29 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
SR	State Route
Sr-89	Strontium isotope 89
Sr-90	Strontium isotope 90
SRO	Senior Reactor Operator
SRWMD	Suwannee River Water Management District
SSC	Seismic Source Characterization
SSC	Structures, Systems, and Components
SSE	safe shutdown earthquake
SSE	south-southeast
SSHAC	Senior Seismic Hazard Analysis Committee
SS-ITAAC	Site-Specific ITAAC
SSW	south-southwest
STA	Shift Technical Advisor
STP	South Texas Project
STPNOC	STP Nuclear Operating Company
SUB	subduction zone
SV	safety valve
Sv	Sievert
SW	southwest
SWAPP	Source Water Assessment and Protection Program
SWFWMD	South West Florida Water Management District
SWPT	State Warning Point – Tallahassee

LNP SUP 1.1-5

Table 1.1-201 (Sheet 30 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
T	trace amount
T	transmissivity
Tap	Avon Park Formation
TD	total depth
TD	tropical depression
TE	equivalent period of completeness
TEDE	Total Effective Dose Equivalent
TFR	temporary flight restriction
Tha	Hawthorne Group, Arcadia Foundation
That	Hawthorne Group, Tampa Member
TIP	Trial Implementation Program
TMI	Three Mile Island
TNT	Trinitrotoluene
To	Upper Eocene Ocala Limestone
TOC	top of casing
Ts	Lower Oligocene Suwannee Limestone
TS	Technical Specification(s)
TS	tropical storm(s)
TSO	Transmission System Operator
TSCSR	Truncated Soil Column Surface Response
TSP	Transmission System Provider

LNP SUP 1.1-5

Table 1.1-201 (Sheet 31 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
TRS	test response spectrum
TVA	Tennessee Valley Authority
TWTT	two-way travel time
UAT	Unit Auxiliary Transformer
UB	upper bound
UCO	Unit Control Operator
UCS	unconfined compressive strength
UCSS	updated Charleston seismic source
UHRS	uniform hazard response spectra
USACE	U.S. Army Corps of Engineers
USBR	U.S. Department of the Interior, Bureau of Reclamation
USCO	Unit Senior Control Operator
USD	Ultimate Strength Design
USDA	U. S. Department of Agriculture
USEPA	U. S. Environmental Protection Agency
USGS	U. S. Geological Survey
UST	underground storage tank
UT	ultrasonic techniques
UTC	Coordinated Universal Time
UTM	Universal Transverse Mercator
v	Poisson's ratio
V	Volt

LNP SUP 1.1-5

Table 1.1-201 (Sheet 32 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
V_P	compressional wave velocity
V_S	shear wave velocity
V/H	vertical to horizontal
V&V	Verification and Validation
VP-NP&C	Vice President – Nuclear Projects and Construction
VT-1, -2, -3	direct visual
W	West
WAC	Waste Acceptance Criteria
WEC	Westinghouse Electric Company
Westinghouse	Westinghouse Electric Company, LLC
WGC	Weston Geophysical
WLS	liquid radwaste system
WNW	west-northwest
Wo	open water
WNW	west-northwest
WSS	solid radwaste system
WSW	worst meteorological sector
WSW	west-southwest
WTP	water treatment plant
Wts.	weight
WUS	western United States
ww	wastewater

LNP SUP 1.1-5

Table 1.1-201 (Sheet 33 of 33)
Acronyms and Abbreviations Used in the FSAR

Acronym/Abbreviation	Definition
X/Q	atmospheric dilution factor
yrs	Years
zc	decomposition residuum on sand or mixed-composition sand and gravel on upland surfaces
zp	Smectitic-clay decomposition residuum
ZPA	zero period acceleration
ZRA	zone of river anomalies

STD SUP 1.1-3

Table 1.1-202 (Sheet 1 of 2)
Left Margin Annotations

Margin Notation	Definition and Use
STD DEP X.Y.Z-#	FSAR information that departs from the generic DCD and is common for parallel applicants. Each Standard Departure is numbered separately at an appropriate level, e.g., STD DEP 9.2-1, or STD DEP 9.2.1-1
NPP DEP X.Y.Z-#	FSAR information that departs from the generic DCD and is plant specific. NPP is replaced with a plant specific identifier. Each Departure item is numbered separately at an appropriate subsection level, e.g., NPP DEP 9.2-2, or NPP DEP 9.2.1-2
STD COL X.Y-#	FSAR information that addresses a DCD Combined License Information item and is common to other COL applicants. Each COL item is numbered as identified in DCD Table 1.8-2 and FSAR Table 1.8-202, e.g., STD COL 4.4-1, or STD COL 19.59.10.5-1
NPP COL X.Y-#	FSAR information that addresses a DCD Combined License Information item and is plant specific. NPP is replaced with a plant specific identifier. Each COL item is numbered as identified in DCD Table 1.8-2 and FSAR Table 1.8-202, e.g., NPP COL 4.4-1, or NPP COL 19.59.10.5-1
NPP CDI or STD CDI	FSAR information that addresses DCD Conceptual Design Information (CDI). Replacement design information is generally plant specific; however, some may be common to other applicants. NPP is replaced with a plant specific identifier. STD is used if it is common. CDI information replacements are not numbered.

STD SUP 1.1-3

Table 1.1-202 (Sheet 2 of 2)
Left Margin Annotations

Margin Notation	Definition and Use
STD SUP X.Y-#	FSAR information that supplements the material in the DCD and is common to other COL applicants. Each SUP item is numbered separately at an appropriate subsection level, e.g., STD SUP 1.10-1, or STD SUP 9.5.1-1
NPP SUP X.Y-#	FSAR information that supplements the material in the DCD and is plant specific. NPP is replaced with a plant specific identifier. Each SUP item is numbered separately at an appropriate subsection level, e.g., NPP SUP 3.10-1, or NPP SUP 9.2.5-1
DCD	FSAR information that duplicates material in the DCD. Such information from the DCD is repeated in the FSAR only in instances determined necessary to provide contextual clarity.

LNP COL 1.1-1

Table 1.1-203
Schedule for Construction and Operation of LNP 1 and LNP 2

Activity	Start	Finish
LNP 1		
Early Procurement Activities	1st Quarter 2008	
Site Preparation	2nd Quarter 2016 (or later)	
Commence Construction (Safety-Related Activities)	1st Quarter 2018 (or later)	
Fuel Load, Commence Start-Up	3rd Quarter 2023 (or later)	
Commence Operation		2nd Quarter 2024 (or later)
LNP 2		
Site Preparation	2nd Quarter 2016 (or later)	
Commence Construction (Safety-Related Activities)	1st Quarter 2018 (or later)	
Fuel Load, Commence Start-Up	1st Quarter 2025 (or later)	
Commence Operation		4th Quarter 2025 (or later)

1.2 GENERAL PLANT DESCRIPTION

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.2.2 SITE DESCRIPTION

In Subsection 1.2.2 of the DCD, replace the information entitled “Site Plan” with the following text.

Site Plan

LNP COL 2.1-1
LNP COL 3.3-1
LNP COL 3.5-1

A typical site plan for a single unit AP1000 reference unit is shown in DCD Figure 1.2-2. The directions north, south, east, and west used in this description are the conventions used in the DCD for the orientation of AP1000 structures and equipment and differ from geographic north, south, east and west.

The site plan for LNP 1 and 2 is shown on Figure 1.1-201. Principal structures and facilities, parking areas, and roads are illustrated. Orientation of the two AP1000 units is such that "plant north" faces 45 degrees east from true north. Unless otherwise noted, directions in this FSAR are based on true north. Similarly, plant elevation in the DCD is 100’-0”, whereas the plant building floor elevation for NGVD 88 is Elevation 51’-0”; therefore, DCD elevations are to be decreased by 49 ft. to be actual site elevations. The plant building floor elevation for design is NGVD 88 Elevation 51’-0” and corresponds to DCD Elevation 100’-0”. The actual plant grade floor elevation will vary to accommodate floor slope and layout requirements.

As stated in DCD Subsection 1.2.1.6.1, the power block complex consists of five principal building structures: the nuclear island, the turbine building, the annex building, the diesel generator building, and the radwaste building. Each of these building structures is constructed on an individual basemat. The nuclear island consists of the containment building, the shield building, and the auxiliary building, all of which are constructed on a common basemat.

DCD Figure 1.2-3 provides a functional representation of the principal systems and components that are located in each of the key AP1000 buildings. This figure identifies major systems and components that are contained in these structures.

Each of the two main cooling tower-circulating water pump complexes consist of mechanical draft cooling towers, a pump basin, circulating water pumps, and associated piping. The cooling towers are located west of the reactors. The circulating pumps are located near the cooling towers. The pumps circulate the cooling water from the pump basin to the main condensers and back to the cooling towers.

The makeup water pumps that provide makeup water to the circulating water system (part of the raw water pump system [RWS], saltwater subsystem) is

located south of the plant on the Cross Florida Barge Canal (CFBC). The pumps and wells of the RWS freshwater subsystem that supply the makeup requirements of the other plant systems are located south of the plant.

Road access to the site is from the west.

Construction of the LNP will utilize a barge slip located on the northern bank of the CFBC at the end of the barge slip access road from County Road 40 (CR-40). A heavy haul road will be used to transport equipment and materials from CR-40 to the LNP site.

During construction, a heavy lift crane is used to place major pieces of equipment such as the turbine-generator, the reactor vessel, the steam generators, containment ring sections, large structural modules, and other large or heavy equipment modules.

1.3 COMPARISONS WITH SIMILAR FACILITY DESIGNS

This section of the referenced DCD is incorporated by reference with no departures or supplements.

1.4 IDENTIFICATION OF AGENTS AND CONTRACTORS

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.4.1 APPLICANT – PROGRAM MANAGER

Add the following paragraphs as the first three paragraphs in DCD Subsection 1.4.1.

LNP SUP 1.4-1 Duke Energy Florida, LLC, (DEF) is the applicant for Combined Licenses for Levy Nuclear Plant Units 1 and 2 (LNP 1 and 2) and will own and operate LNP 1 and 2. DEF is a subsidiary of Progress Energy, Inc., an energy company based in Raleigh, North Carolina. Progress Energy, Inc. is a wholly-owned subsidiary of Duke Energy Corporation, an energy company based in Charlotte, North Carolina. DEF provides electricity and related services in central and northern Florida. The company serves more than 1.7 million customers in Florida.

Duke has over 45 years of experience in the design, construction and operation of nuclear power stations, and currently has twelve nuclear operating units.

Duke Energy Corporation (DEC), the largest electric power company in the United States, supplies and delivers energy to 7.1 million US customers. The company has over 57,000 megawatts of electric generating capacity in the Midwest, Florida and the Carolinas.

Add the following paragraphs to the end of DCD Subsection 1.4.1:

Contractors participating in the preparation of the COL Application are addressed in Subsection 1.4.2.8.

LNP SUP 1.4-2 Not all participants have been identified at this time. Additional participants may be required. Changes to this subsection are required to identify additional participants, principal consultants, outside service organizations, or contractors for the design, construction, and operation of LNP. Changes are also required to delineate the division of responsibility among the certified plant designer, architect-engineer, constructor, and plant operator as appropriate.

Add the following new subsection after DCD Subsection 1.4.2.7:

LNP SUP 1.4-3 ### 1.4.2.8 Other Contractors

Contractual relationships have been established with specialized consulting firms to assist in preparing the COL Application for LNP 1 and 2.

1.4.2.8.1 CH2M Hill, Inc.

CH2M Hill, Inc. is a full-service engineering, consulting, construction, and operations firm. They have experience in providing services in siting, licensing, site safety analysis reports, environmental reports, and emergency plans. CH2M Hill has demonstrated expertise with all aspects of nuclear facility development.

CH2M Hill, Inc has provided siting, environmental, emergency planning, site redress, geotechnical field investigation, geological, and seismological services to prepare the COL application for DEF.

1.4.2.8.2 Sargent & Lundy, LLC

Sargent & Lundy, LLC is a full-service architect-engineering firm with considerable nuclear plant expertise. The firm has demonstrated and proven capabilities in the design and licensing of nuclear plants both domestically and overseas. Sargent & Lundy, LLC has engineered, designed, planned, evaluated, and managed large, complex nuclear projects including 30 nuclear units.

Sargent & Lundy, LLC has provided engineering, management, and consulting services to prepare the COL application for DEF. This included project management and engineering services, developing Final Safety Analysis Report sections, developing the security plan, and preparing the COL application.

1.4.2.8.3 WorleyParsons Resources and Energy

WorleyParsons Resources and Energy is a full-service engineering firm with considerable nuclear plant expertise. The firm has demonstrated and proven capabilities in the design and licensing of nuclear plants both domestically and overseas. WorleyParsons Resources and Energy has engineered, designed, planned, evaluated, and managed large, complex nuclear projects including 16 nuclear units and been involved in the development of an early site permit.

WorleyParsons Resources and Energy has provided engineering and consulting services to prepare the COL application for DEF. This included project management and engineering services, developing Final Safety Analysis Report sections, and preparing the COL application.

1.4.2.8.4 Westinghouse Electric Company LLC

Westinghouse Electric Company LLC provided information on the design and safety analysis of the AP1000 for use in preparing the site-specific portions of the COL application and to address technical issues identified with the certified design.

1.5 REQUIREMENTS FOR FURTHER TECHNICAL INFORMATION

This section of the referenced DCD is incorporated by reference with no departures or supplements.

1.6 MATERIAL REFERENCED

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Add the following text to the end of DCD Section 1.6.

STD SUP 1.6-1

Table 1.6-201 provides a list of the various technical documents incorporated by reference in the FSAR in addition to those technical documents incorporated by reference in the AP1000 DCD.

Table 1.6-201 (Sheet 1 of 2)
Additional Material Referenced

	Author/ Report Number[(a)]	Title	Revision	FSAR Section	Document Transmittal	ADAMS Accession Number
STD SUP 1.6-1	Westinghouse/ APP-GW-GL-700	AP1000 Design Control Document	19	All	June 2011	ML11171A500
	NEI 07-08A	Generic FSAR Template Guidance for Ensuring That Occupational Radiation Exposures Are As Low As Is Reasonably Achievable (ALARA)	0	12.1	October 2009	ML093220164
	NEI 07-03A	Generic FSAR Template Guidance for Radiation Protection Program Description	0	Appendix 12AA	May 2009	ML091490684
	NEI 06-13A	Template for an Industry Training Program Description	2	13.2	March 2009	ML090910554
	NEI 07-02A	Generic FSAR Template Guidance for Maintenance Rule Program Description for Plants Licensed Under 10 CFR Part 52	0	17.6	March 2008	ML080910149
	10 CFR Part 52 Appendix D	Design Certification Rule for the AP1000 Design	--	1.1	--	--
LNP SUP 1.6-1	EP	LNP 1 and 2 Emergency Plan	6	13.3	July 2013	TBD
	Security Plans	Physical Security Plan	4	13.6	June 2011	(b)
	Security Plans	Training and Qualification Plan	4	13.6	June 2011	(b)

Table 1.6-201 (Sheet 2 of 2)
Additional Material Referenced

LNP SUP 1.6-1

Author/ Report Number[(a)]	Title	Revision	FSAR Section	Document Transmittal	ADAMS Accession Number
Security Plans	Safeguards Contingency Plan	4	13.6	June 2011	(b)
Cyber Security	Cyber Security Plan	2	13.6	September 2011	(b)
QAPD	Duke Energy Quality Assurance Topical Report for 10 CFR Part 52 Licenses	9	17.5	June 2013	ML13175A265

STD SUP 1.6-1

a) The NRC-accepted NEI documents identified by the A in the document number include the accepted template, the NRC safety evaluation, and corresponding responses to the NRC Requests for Additional Information. Only the accepted template is incorporated by reference. The remainder of the document is referenced but not incorporated into the FSAR.

LNP SUP 1.6-3

b) These documents are withheld from public disclosure.

(A) Denotes NRC approved document.

Table 1.6-202
Material Referenced

LNP DEP 6.4-1

DCD Section Number	Westinghouse Topical Report Number	Title
15.4	WCAP-7979-P-A (P) WCAP-8028-A	TWINKLE - A Multi-Dimensional Neutron Kinetics Computer Code, January 1975
	WCAP-7908-A	FACTRAN - A FORTRAN-IV Code for Thermal Transients in a UO2 Fuel Rod, December 1989
	WCAP-7907-P-A (P) WCAP-7907-A	LOFTRAN Code Description, April 1984
	WCAP-15806-P-A (P) WCAP-15807-NP-A	Westinghouse Control Rod Ejection Accident Analysis Methodology Using Multi-Dimensional Kinetics
	WCAP-10965-P-A (P) WCAP-10966-A	ANC: A Westinghouse Advanced Nodal Computer Code, September 1986
	WCAP-11397-P-A (P) WCAP-11397-A	Revised Thermal Design Procedure, April 1989
	WCAP-15644-P (P) WCAP-15644-NP	AP1000 Code Applicability Report, Revision 2, March 2004
	WCAP-11596-P-A (P) WCAP-11597-A	Qualification of the PHOENIX-P/ANC Nuclear Design System for Pressurized Water Reactor Cores, June 1988
	WCAP-16045-P-A (P) WCAP-16045-NP-A	Qualification of the Two-Dimensional Transport Code PARAGON, August 2004
	WCAP-10965-P-A, Addendum 1 (P) WCAP-10966-A Addendum 1	ANC – A Westinghouse Advanced Nodal Computer Code; Enhancements to ANC Rod Power Recovery, April 1989
	WCAP-14565-P-A (P) WCAP-15306-NP-A	VIPRE-01 Modeling and Qualification for Pressurized Water Reactor Non-LOCA Thermal-Hydraulic Safety Analysis, October 1999
	WCAP-15063-P-A, Revision 1 with Errata (P) WCAP-15064-NP-A	Westinghouse Improved Performance Analysis and Design Model (PAD 4.0), July 2000
	WCAP-16045-P-A Addendum 1-A (P) WCAP-16045-NP-A Addendum 1-A	Qualification of the NEXUS Nuclear Data Methodology, August 2007
	WCAP-10965-P-A Addendum 2-A (P)	Qualification of the New Pin Power Recovery Methodology, September 2010
	WCAP-15025-P-A (P) WCAP-15026-NP-A	Modified WRB-2 Correlation, WRB-2M, for Predicting Critical Heat Flux in 17x17 Rod Bundles with Modified LPD Mixing Vane Grids, April 1999

(P) Denotes Document is Proprietary

1.7 DRAWINGS AND OTHER DETAILED INFORMATION

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.7.2 PIPING AND INSTRUMENTATION DIAGRAMS

Add the following text to the end of DCD Subsection 1.7.2.

LNP SUP 1.7-1

Table 1.7-201 contains a list of piping and instrumentation diagrams (P&IDs) or system diagrams and the corresponding FSAR figure numbers that supplement the DCD.

LNP SUP 1.7-1

Table 1.7-201
AP1000 System Designators and System Diagrams

Designator	System	FSAR Section	FSAR Figure
CWS	Circulating Water System	10.4.5	10.4-201
RWS	Raw Water System	9.2.11	9.2-201 (Freshwater Subsystem), 10.4-201 (Saltwater Subsystem)
ZBS	Transmission Switchyard and Off-Site Power System	8.2	8.2-201, 8.2-202

1.8 INTERFACES FOR STANDARD DESIGN

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

Add the following paragraphs to the end of DCD Section 1.8.

LNP SUP 1.8-1

Departures from the referenced DCD are summarized in Table 1.8-201. Table 1.8-201 lists each departure and the FSAR section or subsection impacted.

LNP SUP 1.8-2

DCD Table 1.8-2 presents Combined License Information for the AP1000. Items requiring COL Applicant or COL Holder action are presented in Table 1.8-202. FSAR section(s) addressing these COL items are tabulated in this table. COL Holder items listed in Table 1.8-202 are regulatory commitments of the COL Holder and these actions will be completed as specified in the appropriate section of the referenced DCD. Completion of these COL Holder items is the subject of a Combined License Condition as presented in a separate document submitted as part of this COL application.

LNP SUP 1.8-3

DCD Table 1.8-1 presents interface items for the AP1000. FSAR section(s) addressing these interface items are tabulated in Table 1.8-203.

LNP SUP 1.8-1

Table 1.8-201 (Sheet 1 of 8)
Summary of FSAR Departures from the DCD

Departure Number	Departure Description Summary	FSAR Section or Subsection
STD DEP 1.1-1	An administrative departure is established to identify instances where the renumbering of FSAR sections is necessary to effectively include content consistent with Regulatory Guide 1.206, as well as NUREG-0800. See Note a.	2.1.1, 2.1.4, 2.2.1, 2.2.4, 2.4.1, 2.4.15, 2.5, 2.5.6, 9.2.11, 9.2.12, 9.2.13, 9.5.1.8, 9.5.1.9, 13.1, 13.1.4, 13.5, 13.5.3, 13.7, 17.5, 17.6, 17.7, 17.8
STD DEP 8.3-1	The Class 1E voltage regulating transformers do not have active components to limit current.	8.3.2.2
LNP DEP 1.8-1	Departure to correct error in DCD Table 1.8-1, Item 13.1, that incorrectly references Appendix O of 10 CFR 50.	Table 1.8-203

LNP SUP 1.8-1

Table 1.8-201 (Sheet 2 of 8)
Summary of FSAR Departures from the DCD

Departure Number	Departure Description Summary	FSAR Section or Subsection
LNP DEP 3.2-1	The condensate return portion of the Passive Core Cooling System has been upgraded to add downspouts and plug fabrication holes in the Polar Crane Girder in order to maximize the return of condensate to the In-Containment Refueling Water Storage Tank and ensure long-term operation of the Passive Residual Heat Removal Heat Exchanger to meet design requirements. The following are the departures from the DCD: Tier 1 Table 2.2.3-1 and Table 2.2.3-2, Tier 2 Subsections 1.9.4.2.2 and 1.9.5.1.5, Table 3.2-3 (Sheet 16 of 75), Figure 3.8.2-1 (Sheet 3), Subsections 5.4.5.2.1, 5.4.11.2 and 5.4.14.1, Chapter 6 TOC (Table of Contents, List of Figures), Subsections 6.3.1.1.1, 6.3.1.1.4, 6.3.1.1.6, 6.3.1.2, 6.3.1.3, 6.3.2.1, 6.3.2.1.1, 6.3.2.2.5, 6.3.2.2.7, 6.3.2.8, 6.3.3, 6.3.3.2.1.1, Figure 6.3-1 (Sheets 1 through 3), Figure 6.3-2 (Not Used), Section 7.4, Subsection 7.4.1.1, Table 14.3-2 (Sheets 7 and 8 of 17), Subsection 15.0.13, 15.2, Chapter 16 (TS SR 3.5.4.7, TS Bases B3.3.3 and B3.5.4), Subsections 19E.2.3.2.6 and 19E.4.10.2, Table 19E.4.10-1, and Figures 19E.4.10-1 through 19E.4.10-4.	1.9.4.2.2, 1.9.5.1.5, Table 3.2-202, Figure 3.8-201, 5.4.5.2.1, 5.4.11.2, 5.4.14.1, 6 TOC (List of Figures), 6.3.1.1.1, 6.3.1.1.4, 6.3.1.1.6, 6.3.1.2, 6.3.1.3, 6.3.2.1, 6.3.2.1.1, 6.3.2.2.5, 6.3.2.2.7, 6.3.2.8, 6.3.3, 6.3.3.2.1.1, Figure 6.3-201, 7.4, 7.4.1.1, 14 TOC (List of Tables), Table 14.3-202, 15.0.13, 15.2, 16 (TS SR 3.5.4.7, TS Bases B3.3.3 and B3.5.4), 19 TOC (List of Tables and List of Figures), 19E.2.3.2.6, 19E.4.10.2, Table 19E.4.10-201, Figures 19E.4.10-201 through 19E.4.10-204

LNP SUP 1.8-1

Table 1.8-201 (Sheet 3 of 8)
Summary of FSAR Departures from the DCD

Departure Number	Departure Description Summary	FSAR Section or Subsection
LNP DEP 3.7-1	Departure to address use of site-specific horizontal seismic response spectra for the design of drilled shafts that support the seismic Category II portions of the Annex and Turbine Buildings.	3.7.2.8.1, 3.7.2.8.3
LNP DEP 3.11-1	DCD Table 3.11-1 (Sheet 14 of 51) "Envir. Zone" numbers for Spent Fuel Pool Level Instruments SFS-JE-LT019A, SFS-JE-LT019B, and SFS-JE-LT019C are revised to be consistent with the location of the instruments.	Table 3.11-201
LNP DEP 6.2-1	The ITAAC Acceptance Criteria for the in-containment PXS compartment vents are revised to reflect the current plant configuration. An analysis demonstrates a postulated hydrogen flame would not result in a failure of the containment shell. The following are the departures from the DCD: Tier 1 Table 2.3.9-3, and Tier 2 Subsections 6.2.4.5.1 and 19.41.7.	6.2.4.5.1 19.41.7
LNP DEP 6.3-1	The DCD states that the PRHR HX can maintain safe shutdown conditions for non-LOCA accidents "indefinitely." A quantitative duration of greater than 14 days has been adopted based on that time being long enough to minimize the need to switch to passive feed and bleed cooling except for very unlikely or extreme hazard events. The following are the departures from the DCD: Subsection 5.4.14.1, Subsections 6.3.1.1.1, 6.3.1.2, 6.3.1.3, 6.3.2.1.1, 6.3.3.4.1, Subsection 7.4.1.1, Table 9.5.1-1 (Sheet 11), Subsection 15.2.6.1, Table 19.59-18 (Sheet 6), Subsection 19E.4.10.2.	5.4.14.1, 6.3.1.1.1, 6.3.1.2, 6.3.1.3, 6.3.2.1.1, 6.3.3.4.1, 7.4.1.1, Table 9.5.1-201, 15.2.6.1, Table 19.59-202, 19E.4.10.2

Table 1.8-201 (Sheet 4 of 8)
LNP SUP 1.8-1 **Summary of FSAR Departures from the DCD**

Departure Number	Departure Description Summary	FSAR Section or Subsection
LNP DEP 6.4-1	The main control room habitability system design and operator dose evaluation have been revised. Shielding was added to control room VES filter, VBS signals were added, VES actuation setpoints were adjusted to meet design requirements and allowable secondary iodine activity level was lowered. The following are the departures from the DCD: Tier 1 Subsection 2.2.5, Tier 1 Table 2.2.5-1, Tier 1 Table 2.2.5-5, Tier 1 Subsection 2.7.1, Tier 2 Table 1.6-1, Subsection 1.9.4.2.3, Appendix 1A, Subsection 3.1.2, Subsection 6.4, Subsection 6.4.2.6, Subsection 6.4.3.2, Subsection 6.4.4, Table 6.4-2, Subsection 7.3.1.2.17, Subsection 9.2.6.1.1, Subsection 9.4.1.1.1, Subsection 9.4.1.1.2, Subsection 9.4.1.2.1.1, Subsection 9.4.1.2.3.1, Figure 9.4.1-1 (Sheet 5 of 7), Table 11.1-4, Table 11.1-5, Table 11.1-6, Subsection 11.5.1.1, Subsection 11.5.2.3.1, Subsection 12.2.1.3.1, Subsection 12.2.1.3.2, Subsection 12.3.2.2.7, Table 12.2-28, Table 12.2-29, Figure 12.3-1 (Sheet 6 of 16), Table 14.3-7 (Sheet 2 of 3), Subsection 15.0.11.1, Subsection 15.0.11.6 (new), Table 15.0-2 (Sheet 4 of 5), Subsection 15.1.5.4.1, Subsection 15.1.5.4.6, Table 15.1.5-1, Subsection 15.3.3.3.1, Table 15.3-3 (Sheet 1 of 2), Subsection 15.4.8.1.1.3, Subsection 15.4.8.1.2, Subsection 15.4.8.2, Subsection 15.4.8.2.1, Subsection 15.4.8.2.1.1, Subsection 15.4.8.2.1.2, Subsection 15.4.8.2.1.3, Subsection 15.4.8.2.1.4, Subsection 15.4.8.2.1.5, Subsection 15.4.8.2.1.7, Subsection 15.4.8.2.1.8, Subsection 15.4.8.2.1.9, Subsection 15.4.8.3, Subsection 15.4.8.3.1, Subsection 15.4.8.3.5, Subsection 15.4.8.3.6, Table 15.4-1 (Sheets 2 and 3 of 3), Table 15.4-3 (deleted), Table 15.4-4 (Sheets 1 and 2 of 2), Figure 15.4.8-1, Figure 15.4.8-2, Figure 15.4.8-3, Figure 15.4.8-4 (Not Used), Subsection 15.4.10,	Chapter 1 (Table of Contents), Table 1.6-202, 1.9.4.2.3, Appendix 1AA, Chapter 3 (Table of Contents) 3.1.2, Chapter 6 (Table of Contents, List of Tables) 6.4, 6.4.2.6, 6.4.3.2, 6.4.4, Table 6.4-202, Chapter 7 (Table of Contents), 7.3.1.2.17, Chapter 9 (Table of Contents, List of Figures) 9.2.6.1.1, 9.4.1.1.1, 9.4.1.1.2, 9.4.1.2.1.1, 9.4.1.2.3.1, Figure 9.4-201, Chapter 11 (Table of Contents, List of Tables) Table 11.1-201, Table 11.1-202, Table 11.1-203, 11.5.1.1, 11.5.2.3.1, Chapter 12 (Table of Contents, List of Tables, List of Figures), 12.2.1.3.1,

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Table 1.8-201 (Sheet 5 of 8)
LNP SUP 1.8-1 **Summary of FSAR Departures from the DCD**

Departure Number	Departure Description Summary	FSAR Section or Subsection
	Subsection 15.6.2.6, Table 15.6.2-1, Table 15.6.3-3, Subsection 15.6.5.3.2, Subsection 15.6.5.3.5, Subsection 15.6.5.3.8.1, Subsection 15.6.5.3.8.2, Table 15.6.5-2 (Sheets 1-3 of 3), Table 15.6.5-3, Subsection 15.6.3.3.1, Subsection 15.6.3.3.6, Subsection 15.6.6, Subsection 15.7.4.5, Table 15.7-1, Subsection 15A.3.1.2, Subsection 15B.1, Chapter 16 LCO 3.7.4, SR 3.7.4.1, Bases 3.4.10, Bases 3.7.4, Bases 3.7.6.	12.2.1.3.2, Table 12.2-201, Table 12.2-202, 12.3.2.2.7, Figure 12.3-201, Chapter 14 (Table of Contents, List of Tables) Table 14.3-203, Chapter 15 (Table of Contents, List of Tables, List of Figures) 15.0.11.1, 15.0.11.6, Table 15.0-201, 15.1.5.4.1, 15.1.5.4.6, Table 15.1-201, 15.3.3.3.1, Table 15.3-201, 15.4.8.1.1.3, 15.4.8.1.2, 15.4.8.2, 15.4.8.2.1, 15.4.8.2.1.1, 15.4.8.2.1.2, 15.4.8.2.1.3, 15.4.8.2.1.4, 15.4.8.2.1.5, 15.4.8.2.1.7, 15.4.8.2.1.8, 15.4.8.2.1.9, 15.4.8.3, 15.4.8.3.1, 15.4.8.3.5, 15.4.8.3.6, 15.4.10, Table 15.4-201, Table 15.4-202, Figure

LNP SUP 1.8-1

Table 1.8-201 (Sheet 6 of 8)
Summary of FSAR Departures from the DCD

Departure Number	Departure Description Summary	FSAR Section or Subsection
		15.4-201, Figure 15.4-202, Figure 15.4-203, 15.6.2.6, 15.6.3.3.1, 15.6.3.3.6, 15.6.5.3.2, 15.6.5.3.5, 15.6.5.3.8.1, 15.6.5.3.8.2, 15.6.6, Table 15.6-201, Table 15.6-202, Table 15.6-203, Table 15.6-204, 15.7.4.5, Table 15.7-201, 15A.3.1.2, 15B.1, 16 LCO 3.7.4, 16 SR 3.7.4.1, 16 Bases 3.4.10, 16 Bases 3.7.4, 16 Bases 3.7.6

LNP SUP 1.8-1

Table 1.8-201 (Sheet 7 of 8)
Summary of FSAR Departures from the DCD

Departure Number	Departure Description Summary	FSAR Section or Subsection
LNP DEP 6.4-2	Main Control Room Heatup. The following are the departures from the DCD: Tier 1 Tables 2.2.5-1, 2.2.5-4, 2.5.2-3 and 2.5.2-4, Tier 2 Table 3.7.3-1 (Sheets 1 and 2 of 3), Table 3.9-12 (Sheet 6 of 7), Table 3.9-16 (Sheet 23 of 26), Table 3.9-17, Table 3.11-1 (Sheets 17, 30, and 47 of 51), Figure 3D.5-1 (Sheet 1 of 3), Table 3I.6-2 (Sheet 11 of 28), Table 3I.6-3 (Sheets 10 and 28 of 32), Subsections 6.4.2.2, 6.4.2.3, 6.4.3.2, 6.4.4, 6.4.5.1, 6.4.5.3, and 6.4.8, Table 6.4-3, Figure 7.2-1 (Sheet 13 of 21), Subsection 7.3.1.2.17, Table 7.3-1 (Sheet 7 of 9), Table 7.3-3 (Sheet 2 of 2), Table 7.5-1 (Sheet 11 of 12), Table 7.5-7 (Sheet 4 of 4), Subsections 9.3.1.1.2, 9.4.1.1.2, 9.4.1.2.3.1 and 14.2.9.1.6, Table 14.3-7 (Sheet 1 of 3), TS 3.3.2, TS 3.7.6, TS B 3.3.2, TS B 3.7.6, TS Figure B 3.7.6-2.	3 TOC (List of Tables, List of Figures), Table 3.7-207, Table 3.9-202, Table 3.9-203, Table 3.9-204, Table 3.11-202, Figure 3D-201, Table 3I-201, Table 3I-202, 6 (TOC, List of Tables) 6.4.2.2, 6.4.2.3, 6.4.3.2, 6.4.4, 6.4.5.1, 6.4.5.3, 6.4.8, Table 6.4-203, 7 (TOC, List of Tables, List of Figures), Figure 7.2-202, 7.3.1.2.17, Table 7.3-201, Table 7.3-202, Table 7.5-203, Table 7.5-204, 9 (TOC), 9.3.1.1.2, 9.4.1.1.2, 9.4.1.2.3.1, 14 (TOC, List of Tables), 14.2.9.1.6, Table 14.3-204, 16 (TS 3.3.2 and 3.7.6, Bases B 3.3.2 and B 3.7.6)

LNP SUP 1.8-1

Table 1.8-201 (Sheet 8 of 8)
Summary of FSAR Departures from the DCD

Departure Number	Departure Description Summary	FSAR Section or Subsection
LNP DEP 7.3-1	Source Range Neutron Flux Doubling Block Permissive The following are departures from the DCD: Tier 2 subsections 7.3.1.2.14, 9.3.6.3.7, 9.3.6.4.5.1, 9.3.6.7 and 19E.2.7.2. Tables 7.3-1 (Sheets 6 and 7 of 9), 7.3-2 (Sheet 1 of 4) and 14.3-2 (Sheets 9 and 12 of 17). Figure 7.2-1 (Sheet 3 of 21), Technical Specification Table 3.3.2-1 (Pages 9 and 10 of 13) and associated section B 3.3.2 Bases, TS B 3.3.1.	Subsections 7.3.1.2.14, 9.3.6.3.7, 9.3.6.4.5.1, 9.3.6.7 and 19E.2.7.2. Tables 7.3-201 (Sheets 1 and 2 of 2), 7.3-202 (Sheet 1 of 1) and 14.3-201 (Sheets 1 and 2 of 2). Figure 7.2-201 (Sheet 1 of 1), Technical Specification Table 3.3.2-1 (Pages 9 and 10 of 13) and associated B 3.3.2 Bases, TS B 3.3.1.

a) The Departure is standard for AP1000 COLAs but the applicable FSAR Sections or Subsections may vary in the AP1000 Subsequent COLAs.

Table 1.8-202 (Sheet 1 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
1.1-1	Construction and Startup Schedule	1.1.7	1.1.5 1.1.7	A
1.9-1	Regulatory Guide Conformance	1.9.1.5	1.9.1 1.9.1.1 1.9.1.2 1.9.1.3 1.9.1.4 1.9.1.5 Appendix 1A Appendix 1AA	A
1.9-2 [(a)]	Bulletins and Generic Letters	1.9.5.5	1.9.5.5	A
1.9-3 [(a)]	Unresolved Safety Issues and Generic Safety Issues	Table 1.9-2 1.9.4.1	1.9.4.1 1.9.4.2.3	A
2.1-1	Geography and Demography	2.1.1	1.1.1 1.2.2 2.1 2.1.4	A
2.2-1	Identification of Site-Specific Potential Hazards	2.2.1	2.2 2.1.1	A
2.3-1	Regional Climatology	2.3.6.1	2.3.1 2.3.6.1	A

Table 1.8-202 (Sheet 2 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
2.3-2	Local Meteorology	2.3.6.2	2.3.2 2.3.6.2	A
2.3-3	Onsite Meteorological Measurements Program	2.3.6.3	2.3.3 2.3.6.3	A
2.3-4	Short-Term Diffusion Estimates	2.3.6.4	2.3.4 2.3.6.4 15.6.5.3.7.3 15A.3.3	A
2.3-5	Long-Term Diffusion Estimates	2.3.6.5	2.3.5 2.3.6.5	A
2.4-1	Hydrological Description	2.4.1.1	2.4.1.2 2.4.15.1	A
2.4-2	Floods	2.4.1.2	2.4.2 2.4.3 2.4.4 2.4.5 2.4.6 2.4.7 2.4.8 2.4.9 2.4.15.2	A

Table 1.8-202 (Sheet 3 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
2.4-3	Cooling Water Supply	2.4.1.3	2.4.1 2.4.1.1 2.4.15.3	A
2.4-4	Groundwater	2.4.1.4	2.4.12 2.4.15.4	A
2.4-5	Accidental Release of Liquid Effluents into Ground and Surface Water	2.4.1.5	2.4.13 2.4.15.5	A
2.4-6	Flood Protection Emergency Operation Procedures	2.4.1.6	2.4.10 2.4.14 2.4.15.6	A
2.5-1	Basic Geologic and Seismic Information	2.5.1	2.5.1 2.5.4 2.5.4.1 2.5.6.1 Appendix 2AA Appendix 2BB	A
2.5-2	Site Seismic and Tectonic Characteristics Information	2.5.2.1	2.5.2 2.5.4 2.5.4.7 2.5.4.9 2.5.6.2 Appendix 2AA	A

Table 1.8-202 (Sheet 4 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
2.5-3	Geoscience Parameters	2.5.2.3	2.5.2.6 2.5.4 2.5.4.11 2.5.6.3	A
2.5-4	Surface Faulting	2.5.3	2.5.3 2.5.6.4	A
2.5-5	Site and Structures	2.5.4.6.1	2.5.4 2.5.4.1 2.5.4.3 2.5.6.5 Appendix 2BB	A
2.5-6	Properties of Underlying Materials	2.5.4.6.2	2.5.4 2.5.4.2 2.5.4.3 2.5.4.4 2.5.4.6 2.5.4.7 2.5.4.10.2 2.5.6.6 Appendix 2BB Appendix 2CC	A

Table 1.8-202 (Sheet 5 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
2.5-7	Excavation and Backfill	2.5.4.6.3	2.5.4 2.5.4.5 2.5.4.10.4 2.5.4.12 2.5.6.7	A
2.5-8	Ground Water Conditions	2.5.4.6.4	2.5.4 2.5.4.6 2.5.6.8	A
2.5-9	Liquefaction Potential	2.5.4.6.5	2.5.4 2.5.4.8 2.5.6.9	A
2.5-10	Bearing Capacity	2.5.4.6.6	2.5.4 2.5.4.10 2.5.6.10	A
2.5-11	Earth Pressures	2.5.4.6.7	2.5.4 2.5.4.10.4 2.5.4.11 2.5.6.11	A
2.5-12	Static and Dynamic Stability of Facilities	2.5.4.6.9	2.5.4 2.5.4.10.3 2.5.6.12	A

Table 1.8-202 (Sheet 6 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
2.5-13	Subsurface Instrumentation	2.5.4.6.10	2.5.4 2.5.4.10.3.5 2.5.6.13	A
2.5-14	Stability of Slopes	2.5.5	2.5.5 2.5.6.14	A
2.5-15	Embankments and Dams	2.5.6	2.4.4 2.5.5 2.5.6.15	A
2.5-16	Settlement of Nuclear Island	2.5.4.6.11	2.5.4 2.5.4.10.3 2.5.6.16	A
2.5-17	Waterproofing System	2.5.4.6.12	2.5.6.17 14.3.3.2	A
3.3-1	Wind and Tornado Site Interface Criteria	3.3.3	1.2.2 2.2 2.2.1 3.3.1.1 3.3.2.1 3.3.2.3 3.3.3 3.5.1.5 3.5.1.6	A

Table 1.8-202 (Sheet 7 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
3.4-1	Site-Specific Flooding Hazards Protective Measures	3.4.3	3.4.1.3 3.4.3	A
3.5-1	External Missile Protection Requirements	3.5.4	1.2.2 2.2 2.2.1 3.3.1.1 3.3.2.1 3.3.2.3 3.5.1.5 3.5.1.6 3.5.4	A
3.6-1	Pipe Break Hazards Analysis	3.6.4.1	3.6.4.1 14.3.3.4	H
3.6-4	Primary System Inspection Program for Leak-Before-Break Piping	3.6.4.4	3.6.4.4	A
3.7-1	Seismic Analysis of Dams	3.7.5.1	3.7.2.12 3.7.5.1	A
3.7-2	Post-Earthquake Procedures	3.7.5.2	3.7.4.4 3.7.5.2	A
3.7-3	Seismic Interaction Review	3.7.5.3	3.7.5.3	H

Table 1.8-202 (Sheet 8 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
3.7-4	Reconciliation of Seismic Analyses of Nuclear Island Structures	3.7.5.4	3.7.5.4	H
3.7-5	Location of Free-Field Acceleration Sensor	3.7.5.5	3.7.4.2.1 3.7.5.5	A
3.8-5	Structures Inspection Program	3.8.6.5	3.8.3.7 3.8.4.7 3.8.5.7 3.8.6.5 17.6	A
3.8-6	Construction Procedures Program	3.8.6.6	3.8.6.6	H
3.9-2	Design Specification and Reports	3.9.8.2	3.9.8.2	H
3.9-3	Snubber Operability Testing	3.9.8.3	3.9.3.4.4 3.9.8.3	A
3.9-4	Valve Inservice Testing	3.9.8.4	3.9.6 3.9.6.2.2 3.9.6.2.3 3.9.6.2.4 3.9.6.3 3.9.8.4	A

Table 1.8-202 (Sheet 9 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
3.9-5	Surge Line Thermal Monitoring	3.9.8.5	3.9.3.1.2 3.9.8.5 14.2.9.2.22	A
3.9-7	As-Designed Piping Analysis	3.9.8.7	3.9.8.7 14.3.3.5	H
3.11-1	Equipment Qualification File	3.11.5	3.11.5	H
4.4-2	Confirm Assumptions for Safety Analyses DNBR Limits	4.4.7.2	4.4.7	H
5.2-1	ASME Code and Addenda	5.2.6.1	5.2.1.1 5.2.6.1	A
5.2-2	Plant Specific Inspection Program	5.2.6.2	5.2.4 5.2.4.1 5.2.4.3.1 5.2.4.3.2 5.2.4.4 5.2.4.5 5.2.4.6 5.2.4.8 5.2.4.9 5.2.4.10 5.2.6.2	A

Table 1.8-202 (Sheet 10 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
5.2-3	Response to Unidentified Reactor Coolant System Leakage Inside Containment	5.2.6.3	5.2.6.3 5.2.5.3.5	A
5.3-1	Reactor Vessel Pressure – Temperature Limit Curves	5.3.6.1	5.3.6.1	H
5.3-2	Reactor Vessel Materials Surveillance Program	5.3.6.2	5.3.2.6 5.3.2.6.3 5.3.6.2	A
5.3-4	Reactor Vessel Materials Properties Verification	5.3.6.4.1	5.3.6.4.1	H
5.3-7	Quickloc Weld Build-up ISI	5.3.6.6	5.2.4.1 5.3.6.6	A
5.4-1	Steam Generator Tube Integrity	5.4.15	5.4.2.5 5.4.15	A
6.1-1	Procedure Review for Austenitic Stainless Steels	6.1.3.1	6.1.1.2 6.1.3.1	A
6.1-2	Coating Program	6.1.3.2	6.1.2.1.6 6.1.3.2	A
6.2-1	Containment Leak Rate Testing	6.2.6	6.2.5.1 6.2.5.2.2 6.2.6	A

Table 1.8-202 (Sheet 11 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
6.3-1	Containment Cleanliness Program	6.3.8.1	6.3.8.1	A
6.4-1	Local Hazardous Gas Services and Monitoring	6.4.7	6.4.4 6.4.4.2 6.4.7	A
6.4-2	Procedures for Training for Control Room Habitability	6.4.7	6.4.3 6.4.7	A
6.6-1	Inspection Programs	6.6.9.1	6.6 6.6.1 6.6.3.1 6.6.3.2 6.6.3.3 6.6.4 6.6.6 6.6.9.1	A
6.6-2	Construction Activities	6.6.9.2	6.6.2 6.6.9.2	A
7.1-1	Setpoint Calculations for Protective Functions	7.1.6.1	7.1.6.1	B
7.5-1	Post Accident Monitoring	7.5.5	7.5.2 7.5.3.5 7.5.5	A

Table 1.8-202 (Sheet 12 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
8.2-1	Offsite Electrical Power	8.2.5	8.2.1 8.2.1.1 8.2.1.1.1 8.2.1.2 8.2.1.3 8.2.1.4 8.2.5	A
8.2-2	Technical Interfaces	8.2.5	8.2.1.2.1 8.2.2 8.2.5	A
8.3-1	Grounding and Lightning Protection	8.3.3	8.3.1.1.7 8.3.1.1.8 8.3.3	A
8.3-2	Onsite Electrical Power Plant Procedures	8.3.3	8.3.1.1.2.4 8.3.1.1.6 8.3.2.1.4 8.3.3	A
9.1-5	Inservice Inspection Program of Cranes	9.1.6.5	9.1.4.4 9.1.5.4 9.1.6	A
9.1-6	Radiation Monitor	9.1.6.6	9.1.4.3.8 9.1.5.3 9.1.6	A

Table 1.8-202 (Sheet 13 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
9.1-7	Metamic Monitoring Program	9.1.6.7	9.1.6	H
9.2-1	Potable Water	9.2.11.1	9.2.5.2.1 9.2.5.3 9.2.12.1	A
9.2-2	Waste Water Retention Basins	9.2.11.2	9.2.9.2.1 9.2.9.2.2 9.2.9.5 9.2.12.2	A
9.3-1	Air Systems (NUREG-0933 Issue 43)	9.3.7	9.3.7	A
9.4-1	Ventilation Systems Operations	9.4.12	9.4.1.4 9.4.7.4 9.4.12	A
9.5-1	Qualification Requirements for Fire Protection Program	9.5.1.8.1	9.5.1.6 9.5.1.8 9.5.1.8.1.2 9.5.1.8.2.1 9.5.1.8.3 9.5.1.8.4 9.5.1.8.5 9.5.1.8.6, 9.5.1.8.7 9.5.1.9.1 13.1.1.2.10 13.1.2.1.2.9	A

Table 1.8-202 (Sheet 14 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
9.5-2	Fire Protection Analysis Information	9.5.1.8.2	9.5.1.9.2 9A.3.3.1 to 9A.3.3.11	A
9.5-3	Regulatory Conformance	9.5.1.8.3	9.5.1.8.8 9.5.1.8.1.1 9.5.1.8.9 9.5.1.9.3 9A.3.3	A
9.5-4	NFPA Exceptions	9.5.1.8.4	9.5.1.9.4 9.5.1.8.1.1	A
9.5-6	Verification of Field Installed Fire Barriers	9.5.1.8.6	9.5.1.8.6 9.5.1.9.6	H
9.5-8	Establishment of Procedures to Minimize Risk for Fire Areas Breached During Maintenance	9.5.1.8.7	9.5.1.9.7 9.5.1.8.1.2.a.3.vi	A
9.5-9	Offsite Interfaces	9.5.2.5.1	9.5.2.2.5 9.5.2.5.1	A
9.5-10	Emergency Offsite Communications	9.5.2.5.2	9.5.2.2.5 9.5.2.5.2	A
9.5-11	Security Communications	9.5.2.5.3	9.5.2.5.3 Physical Security Plan	A

Table 1.8-202 (Sheet 15 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
9.5-13	Fuel Degradation Protection	9.5.4.7.2	9.5.4.5.2 9.5.4.7.2	A
10.1-1	Erosion-Corrosion Monitoring	10.1.3	10.1.3.1	H
10.2-1	Turbine Maintenance and Inspection	10.2.6	10.2.6	H
10.4-1	Circulating Water Supply	10.4.12.1	10.4.5.2.1 10.4.5.2.2 10.4.5.5 10.4.12.1	A
10.4-2	Condensate, Feedwater and Auxiliary Steam System Chemistry Control	10.4.12.2	10.4.7.2.1 10.4.12.2	A
10.4-3	Potable Water	10.4.12.3	10.4.5.2.2 10.4.12.3	A
11.2-1	Liquid Radwaste Processing by Mobile Equipment	11.2.5.1	11.2.1.2.5.2 11.2.5.1	A
11.2-2	Cost Benefit Analysis of Population Doses	11.2.5.2	11.2.3.5 11.2.5.2	A
11.3-1	Cost Benefit Analysis of Population Doses	11.3.5.1	11.3.3.4 11.3.5.1	A

Table 1.8-202 (Sheet 16 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
11.4-1	Solid Waste Management System Process Control Program	11.4.6	11.4.2.4.3 11.4.6	A
11.5-1	Plant Offsite Dose Calculation Manual (ODCM)	11.5.7	11.5.8	A
11.5-2	Effluent Monitoring and Sampling	11.5.7	11.5.1.2 11.5.2.4 11.5.3 11.5.4 11.5.4.1 11.5.4.2 11.5.6.5 11.5.8	A
11.5-3	10 CFR 50, Appendix I	11.5.7	11.2.3.5 11.3.3.4 11.5.8	A
12.1-1	ALARA and Operational Policies	12.1.3	12.1 12.1.3 Appendix 12AA	A
12.2-1	Additional Contained Radiation Sources	12.2.3	12.2.1.1.10 12.2.3	A
12.3-1	Administrative Controls for Radiological Protection	12.3.5.1	Appendix 12AA 12.3.5.1 12.5.4	A

Table 1.8-202 (Sheet 17 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
12.3-2	Criteria and Methods for Radiological Protection	12.3.5.2	12.3.4 12.3.5.2	A
12.3-3	Groundwater Monitoring Program	12.3.5.3	12.3.5.3 12AA.5.4.14 Appendix 12AA	A
12.3-4	Record of Operational Events of Interest for Decommissioning	12.3.5.4	12.3.5.4 12AA.5.4.15 Appendix 12AA	A
12.5-1	Radiological Protection Organization and Procedures	12.5.5	12.5.5 Appendix 12AA	A
13.1-1	Organizational Structure of Combined License Applicant	13.1.1	13.1 to 13.1.4 Appendix 13AA	A
13.2-1	Training Program for Plant Personnel	13.2.1	13.2 13.2.1	A
13.3-1	Emergency Planning and Communications	13.3.1	13.3 13.3.1 Emergency Plan	A
13.3-2	Activation of Emergency Operations Facility	13.3.1	13.3 13.3.1 Emergency Plan	A

Table 1.8-202 (Sheet 18 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
13.4-1	Operational Review	13.4.1	13.4 13.4.1	A
13.5-1	Plant Procedures	13.5.1	13.5 13.5.1 13.5.2 13.5.3	A
13.6-1	Security	13.6	13.6 13.6.1 14.3.2.3.2	A
13.6-5	Cyber Security Program	13.6.1	13.6 13.6.1	H
14.4-1	Organization and Staffing	14.4.1	14.2.2 14.4.1	A
14.4-2	Test Specifics and Procedures	14.4.2	14.4.2	H
14.4-3	Conduct of Test Program	14.4.3	14.2.1 14.2.3 14.2.6 14.4.3	H
14.4-4	Review and Evaluation of Test Results	14.4.4	14.2.3.2 14.2.3.3 14.4.4	H

Table 1.8-202 (Sheet 19 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
14.4-5	Testing Interface Requirements	14.4.5	14.2.9.4.15 14.2.9.4.22 to 14.2.9.4.27 14.2.10.4.29 14.4.5 Physical Security Plan	A
14.4-6	First-Plant-Only and Three-Plant-Only Tests	14.4.6	14.4.6	B
15.0-1	Documentation of Plant Calorimetric Uncertainty Methodology	15.0.15.1	15.0.15 15.0.3.2	H
15.7-1	Consequences of Tank Failure	15.7.6	2.4.13 15.7.6	A
16.1-1	Technical Specification Preliminary Information	16.1	16.1.1	A
16.3-1	Procedure to Control Operability of Investment Protection Systems, Structures and Components	16.3.2	16.3.1 16.3.2	A
17.5-1	Quality Assurance Design Phase	17.5.1	17.1 17.5 17.7	A
17.5-2	Quality Assurance for Procurement, Fabrication, Installation, Construction and Testing	17.5.2	17.5 17.7	A

Table 1.8-202 (Sheet 20 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
17.5-4	Quality Assurance Program for Operations	17.5.4	17.5 17.7	A
17.5-8	Operational Reliability Assurance Program Integration with Quality Assurance Program	17.5.8	17.5 17.7	A
18.2-2	Design of the Emergency Operations Facility	18.2.6.2	9.5.2.2.5 18.2.1.3 18.2.6.2	A
18.6-1	Plant Staffing	18.6.1	18.6 18.6.1 13.1.3 13.1.1.4	A
18.10-1	Training Program Development	18.10.1	13.1.1.3.2.4 13.2 18.10 18.10.1	A
18.14-1	Human Performance Monitoring	18.14	18.14	A
19.59.10-1	As-Built SSC HCLPF Comparison to Seismic Margin Evaluation	19.59.10.5	19.59.10.5	H

Table 1.8-202 (Sheet 21 of 21)
COL Item Tabulation

LNP SUP 1.8-2

COL Item	Subject	DCD Subsection	FSAR Section(s)	COL Applicant (A), Holder (H), Or Both (B)
19.59.10-2	Evaluation of As-Built Plant Versus Design in AP1000 PRA and Site-Specific PRA External Events	19.59.10.5	19.59.10.5	B
19.59.10-3	Internal Fire and Internal Flood Analyses	19.59.10.5	19.59.10.5	H
19.59.10-4	Implement Severe Accident Management Guidance	19.59.10.5	19.59.10.5	H
19.59.10-5	Equipment Survivability	19.59.10.5	19.59.10.5	H
19.59.10-6	Confirm that the Seismic Margin Assessment analysis is applicable to the COL site	19.59.10.5	19.55.6.3 19.59.10.5	A

a) COL Items 1.9-2 and 1.9-3 are un-numbered in the DCD.

Table 1.8-203 (Sheet 1 of 7)
Summary of FSAR Discussions of AP1000 Plant Interfaces

LNP SUP 1.8-3

Item No.	Interface	Interface Type	Matching Interface Item	Section[a] or Subsection
2.1	Envelope of AP1000 plant site related parameters	Site Interface	Site-specific parameters	Table 2.0-201
2.2	External missiles from man-made hazards and accidents	Site Interface	Site-specific parameters	2.2.2.2, 2.2.3.1, 2.2.3.2, 3.5
2.3	Maximum loads from man-made hazards and accidents	Site Interface	Site-specific parameters	2.2.2.2, 2.2.3.1, 2.2.3.2, 3.5
2.4	Limiting meteorological parameters (χ/Q) for design basis accidents and for routine releases and other extreme meteorological conditions for the design of systems and components exposed to the environment	Site Interface	Site-specific parameters	Table 2.0-201
2.5	Tornado and operating basis wind loadings	Site Interface	Site-specific parameters	Table 2.0-201
2.6	External missiles generated by natural phenomena	Site Interface	Site-specific parameters	Table 2.0-201
2.7	Snow, ice and rain loads	Site Interface	Site-specific parameters	Table 2.0-201
2.8	Ambient air temperatures	Site Interface	Site-specific parameters	Table 2.0-201
2.9	On-site meteorological measurement program	Requirement of AP1000	Combined License applicant program	2.3.3
2.10	Flood and ground water elevations	Site Interface	Site-specific parameters	Table 2.0-201
2.11	Hydrostatic loads on systems, components and structures	Site Interface	Site-specific parameters	Table 2.0-201

Table 1.8-203 (Sheet 2 of 7)
Summary of FSAR Discussions of AP1000 Plant Interfaces

LNP SUP 1.8-3

Item No.	Interface	Interface Type	Matching Interface Item	Section[a] or Subsection
2.12	Seismic parameters • peak ground acceleration • response spectra • shear wave velocity	Site Interface	Site-specific parameters	Table 2.0-201
2.13	Required bearing capacity of foundation materials	Site Interface	Site-specific parameters	Table 2.0-201
3.1	Deleted	N/A	N/A	N/A
3.2	Operating procedures to minimize water hammer	Requirement of AP1000	Combined License applicant procedure	10.3.2.2.1, 10.4.7.2.1
3.3	Site seismic sensor location and “trigger” value	Requirement of AP1000	On-site implementation	3.7.4.2.1
3.4	Depth of overburden	Requirement of AP1000	On-site implementation	3.8.5.1, 2.5.4
3.5	Depth of embedment	Requirement of AP1000	On-site implementation	3.8.5.1, 2.5.4
3.6	Specific depth of waterproofing	Requirement of AP1000	On-site implementation	2.5.4.3, 2.5.4.5
3.7	Foundation Settlement Monitoring	Requirement of AP1000	Combined License applicant coordination	2.5.4.10.3.5
3.8	Lateral earth pressure loads	Not an Interface	N/A	N/A to FSAR; see DCD
3.9	Preoperational piping vibration test parameters	Not an Interface	N/A	N/A to FSAR; see DCD

Table 1.8-203 (Sheet 3 of 7)
Summary of FSAR Discussions of AP1000 Plant Interfaces

LNP SUP 1.8-3

Item No.	Interface	Interface Type	Matching Interface Item	Section[a] or Subsection
3.10	Inservice Inspection requirements and locations	Requirement of AP1000	Combined License applicant program	5.2.4, 6.6
3.11	Maintenance of preservice and reference test data for inservice testing of pumps and valves	Requirement of AP1000	Combine License applicant program	3.9.6
3.12	Earthquake response procedures	Requirement of AP1000	Combine License applicant program	3.7.4.4
5.1	Steam Generator Tube Surveillance Requirements	Requirement of AP1000	Combined License applicant program	5.4.2.5
6.1	Inservice Inspection requirements for the containment	Requirement of AP1000	Combined License applicant program	6.6
6.2	Off-site environmental conditions assumed for Main Control Room and technical support center habitability design	AP1000 Interface	Site-specific parameter	2.2.3, 6.4
7.1	Listing of all design criteria applied to the design of the I&C systems	Not an Interface	N/A	N/A to FSAR; see DCD
7.2	Power required for site service water instrumentation	NNS and Not an Interface	N/A	N/A to FSAR; see DCD
7.3	Other provision for site service water instrumentation	NNS and Not an Interface	N/A	N/A to FSAR; see DCD
7.4	Post Accident Monitoring System	NNS	Combined License applicant coordination	7.5.5
8.1	Listing of design criteria applied to the design of the off-site power system	NNS	Combined License applicant coordination	8.1.4.3

Table 1.8-203 (Sheet 4 of 7)
Summary of FSAR Discussions of AP1000 Plant Interfaces

LNP SUP 1.8-3

Item No.	Interface	Interface Type	Matching Interface Item	Section[a] or Subsection
8.2	Off-site ac requirements: • Steady-state load; • Inrush kVA for motors; • Nominal voltage; • Allowable voltage regulation • Nominal frequency; • Allowable frequency fluctuation; • Maximum frequency decay rate; • Limiting under frequency value for RCP	NNS	Combined License applicant coordination	8.2.2
8.3	Off-site transmission system analysis: • Loss of AP1000 or largest unit; • Voltage operating range; • Transient stability must be maintained and the RCP bus voltage must remain above the voltage required to maintain the flow assumed in Chapter 15 analyses for a minimum of three (3) seconds following a turbine trip; • The protective devices controlling the switchyard breakers are set with consideration given to preserving the plant grid connection following a turbine trip.	NNS	Combined License applicant analysis	8.2.1.2.1, 8.2.2
8.4	Listing of design criteria applied to the design of on-site ac power systems	NNS and Not an Interface	N/A	N/A to FSAR; see DCD
8.5	On-site ac requirements	NNS and Not an Interface	N/A	N/A to FSAR; see DCD
8.6	Diesel generator room coordination	NNS and Not an Interface	N/A	N/A to FSAR; see DCD

Table 1.8-203 (Sheet 5 of 7)
Summary of FSAR Discussions of AP1000 Plant Interfaces

LNP SUP 1.8-3

Item No.	Interface	Interface Type	Matching Interface Item	Section[a] or Subsection
8.7	Listing of design criteria applied to the design of on-site dc power systems	Not an Interface	N/A	N/A to FSAR; see DCD
8.8	Provisions of dc power systems to accommodate the site service water system	NNS and Not an Interface	N/A	N/A to FSAR; see DCD
9.1	Listing of design criteria applied to the design of portions of the site service water within AP1000	NNS and Not an Interface	N/A	N/A to FSAR; see DCD
9.2	Integrated heat load to site service water system	NNS and Not an Interface	N/A	N/A to FSAR; see DCD
9.3	Plant cooling water systems parameters	NNS and Not an Interface	N/A	N/A to FSAR; see DCD
9.4	Plant makeup water quality limits	NNS	Site-specific parameter	9.2.11
9.5	Requirements for location and arrangement of raw and sanitary water systems	NNS	Site implementation	9.2.5.2.1
9.6	Ventilation requirements for diesel-generator room	NNS and Not an Interface	N/A	N/A to FSAR; see DCD
9.7	Requirements to satisfy fire protection program	AP1000 Interface	Combined License applicant program	9.5.1.8
9.8	Requirements for location and size of waste water retention basins and associated plant outfall	NNS	Site implementation	9.2.9.2.2

Table 1.8-203 (Sheet 6 of 7)
Summary of FSAR Discussions of AP1000 Plant Interfaces

LNP SUP 1.8-3

Item No.	Interface	Interface Type	Matching Interface Item	Section[a] or Subsection
11.1	Expected release rates of radioactive material from the Liquid Waste System including: • Location of release points • Effluent temperature • Effluent flow rate • Size and shape of flow orifices	Site Interface	Site-specific parameters	11.2
11.2	Expected release rates of radioactive materials from the Gaseous Waste System including: • Location of release points • Height above grade • Height relative to adjacent buildings • Effluent temperature • Effluent flow rate • Effluent velocity • Size and shape of flow orifices	Site Interface	Site-specific parameters	11.3
11.3	Expected release rates of radioactive material from the Solid Waste System including: • Location of release points • Material types • Material quantities • Size and shape of material containers	Site Interface	Site-specific parameters	11.4.6
11.4	Requirements for off-site sampling and monitoring of effluent concentrations	AP1000 Interface	Combined License applicant program	11.5.4, 11.5.8
12.1	Identification of miscellaneous radioactive sources	AP1000 Interface	Combined License applicant program	12.2.1.1.10

Table 1.8-203 (Sheet 7 of 7)
Summary of FSAR Discussions of AP1000 Plant Interfaces

LNP SUP 1.8-3

LNP DEP 1.8-1

LNP SUP 1.8.3

Item No.	Interface	Interface Type	Matching Interface Item	Section[a] or Subsection
13.1	The information pertaining to design features that affect plans for coping with emergencies in the operation of the reactor facility or a major portion thereof as specified in 10 CFR 52.137(a)(11)	AP1000 Interface	Combined License applicant program	13.3
13.2	Physical Security Plan consistent with AP1000 plant	AP1000 Interface	Combined License applicant program	13.6
14.1	Identification of special features to be considered in development of the initial test program	Requirement of AP1000	Combined License applicant program	14
14.2	Maintenance of preoperational test data and inservice inspection baseline data	AP1000 Interface	Combined License applicant program	14
16.1	Administrative requirements associated with reliability information maintenance	AP1000 Interface	Combined License applicant program	16
16.2	Administrative requirements associated with the Technical Specifications	Requirement of AP1000	Combined License applicant program	16
16.3	Site and operator related information associated with the Reliability Assurance Program (D-RAP)	Requirement of AP1000	Combined License applicant program	16.2
18.1	Operating staff consistent with Human Factors evaluations	AP1000 Interface	Combined License applicant program	18.6
18.2	Operator training consistent with Human Factors evaluations	AP1000 Interface	Combined License applicant program	18.10
18.3	Operating Procedures consistent with Human Factors evaluations	AP1000 Interface	Combined License applicant program	18.6, 18.14

a) This table supplements DCD Table 1.8-1 by providing additional information in the Section or Subsection column. Section/Subsection designations are FSAR unless otherwise noted.

1.9 COMPLIANCE WITH REGULATORY CRITERIA

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

1.9.1 REGULATORY GUIDES

Add the following paragraphs to the end of DCD Subsection 1.9.1:

STD COL 1.9-1

Divisions 2, 3, 6, 7, 9, and 10 of the regulatory guides do not apply to the construction or operational safety considerations and are not addressed in the FSAR.

Division 4 of the regulatory guides applies to the Environmental Report and the topics are addressed in the Environmental Report. Two Division 4 Regulatory Guides are addressed in Appendix 1AA.

Division 5 of the regulatory guides applies to materials and plant protection. As appropriate, the Division 5 regulatory guide topics are addressed in the DCD and plant-specific security plans (i.e., Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Cyber Security Plan).

Applicable Division 8 Regulatory Guides are addressed in Appendix 1AA.

Appendix 1AA provides a discussion of plant specific regulatory guide conformance, addressing new Regulatory Guides and new revisions not addressed by the referenced DCD. Regulatory Guides that are completely addressed by the DCD are not listed.

The following subsections provide a summary discussion of Divisions 1, 4, 5 and 8 of the regulatory guides as applicable to the content of this FSAR, or to the construction and/or operations phases.

1.9.1.1 Division 1 Regulatory Guides - Power Reactors

Add the following paragraphs to the end of DCD Subsection 1.9.1.1:

STD COL 1.9-1

Appendix 1AA provides an evaluation of the degree of compliance with Division 1 regulatory guides as applicable to the content of this FSAR, or to the site-specific design, construction and/or operational aspects. The revisions of the regulatory guides against which the degree of compliance is evaluated are indicated. Any exceptions or alternatives to the provisions of the regulatory guides are identified and justification is provided. One such general alternative is the use of previous revisions of the Regulatory Guide for design aspects as stated in the DCD in order to preserve the finality of the certified design (see Notes at the end of

Appendix 1AA). Table 1.9-201 identifies the appropriate regulatory guide to FSAR cross-references. The cross-referenced sections contain descriptive information applicable to the regulatory guide positions found in Appendix 1AA.

Superseded or canceled regulatory guides are not considered in Appendix 1AA or Table 1.9-201.

1.9.1.2 Division 4 Regulatory Guides - Environmental and Siting

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Add the following as the first paragraph in DCD Subsection 1.9.1.2:

STD COL 1.9-1

Division 4 of the regulatory guides applies to the Environmental Report and the topics are addressed in the Environmental Report. Appendix 1AA provides an evaluation of the degree of compliance with Division 4 regulatory guides as applicable to the content of this FSAR, or to the site-specific design, construction and/or operational aspects. The revisions of the regulatory guides against which the plant is evaluated are indicated. Any exceptions or alternatives to the provisions of the regulatory guides are identified and justification is provided. One such general alternative is the use of previous revisions of the Regulatory Guide for design aspects as stated in the DCD in order to preserve the finality of the certified design (see Notes at the end of Appendix 1AA). For those regulatory guides applicable, Table 1.9-201 identifies the appropriate FSAR cross-references. The cross-referenced sections contain descriptive information applicable to the regulatory guide positions found in Appendix 1AA.

1.9.1.3 Division 5 Regulatory Guides - Materials and Plant Protection

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Add the following as the first paragraph in DCD Subsection 1.9.1.3:

STD COL 1.9-1

Division 5 of the regulatory guides applies to materials and plant protection. Appendix 1AA provides an evaluation of the degree of conformance with Division 5 regulatory guides as applicable to the content of the AP1000 DCD and the plant-specific Cyber Security Plan. The plant-specific physical security plans (i.e., Physical Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan) were developed using the template in NEI 03-12, Revision 6, "Template for the Security Plan, Training and Qualification Plan, Safeguards Contingency Plan [and Independent Spent Fuel Storage Installation Security Program]," which was endorsed for use by NRC letter dated April 9, 2009. The plant-specific physical security plans include no substantive deviations from the NRC-endorsed template in NEI 03-12, Revision 6. Therefore, the degree of conformance with Division 5 regulatory guides for the plant-specific physical security plans is consistent with the degree of conformance of NEI 03-12, Revision 6.

1.9.1.4 Division 8 Regulatory Guides - Occupational Health

Add the following paragraphs to the end of DCD Subsection 1.9.1.4:

STD COL 1.9-1

Appendix 1AA provides an evaluation of the degree of compliance with Division 8 regulatory guides as applicable to the content of this FSAR, or to the site-specific design, construction and/or operational aspects. The revisions of the regulatory guides against which the plant is evaluated are indicated. Any exceptions or alternatives to the provisions of the regulatory guides are identified and justification is provided. One such general alternative is the use of previous revisions of the Regulatory Guide for design aspects as stated in the DCD in order to preserve the finality of the certified design (see Notes at the end of Appendix 1AA). For those regulatory guides applicable, Table 1.9-201 identifies the appropriate FSAR cross-references. The cross-referenced sections contain descriptive information applicable to the regulatory guide positions found in Appendix 1AA.

Superseded or canceled regulatory guides are not considered in Appendix 1AA or Table 1.9-201.

1.9.1.5 Combined License Information

Add the following as the first paragraph in DCD Subsection 1.9.1.5:

STD COL 1.9-1

Division 1, 4, 5 and 8 Regulatory Guides applicable to the content of this FSAR, or to the site-specific design, construction and/or operational aspects are listed in Table 1.9-201 and Appendix 1AA.

1.9.2 COMPLIANCE WITH STANDARD REVIEW PLAN (NUREG-0800)

Add the following paragraph to the end of DCD Subsection 1.9.2:

STD SUP 1.9-1

Table 1.9-202 provides the required assessment of conformance with the applicable acceptance criteria and the associated FSAR cross-references.

The design related SRP acceptance criteria addressed by the certified design are identified as such in Table 1.9-202.

1.9.4.1 Review of NRC List of Unresolved Safety Issues and Generic Safety Issues

Add the following paragraphs to the end of DCD Subsection 1.9.4.1:

STD COL 1.9-3

Table 1.9-203 addresses the second un-numbered COL Information Item identified at the end of DCD Table 1.8-2 and listed in Table 1.8-202 as COL Information Item 1.9-3, "Unresolved Safety Issues and Generic Safety Issues." As such, Table 1.9-203 lists those issues on DCD Table 1.9-2 identified by Note "d," which apply to other than design issues, Note "f," which apply either to resolution of Combined License (COL) Information Items or to nuclear power plant operations issues, Note “h,” which apply to issues unresolved pending generic resolution at the time of submittal of the AP1000 DCD, and any new Unresolved Safety Issues and Generic Safety Issues that have been included in NUREG-0933 (through supplement 30) since the DCD was developed. Many of these have since been resolved and incorporated into the applicable licensing regulations or guidance (e.g., the standard review plans). These resolved items (as indicated by NUREG-0933) are identified only as “Resolved per NUREG-0933.” Many others are not in the list of items in NUREG-0933 Appendix B identified as applicable to new plants. These items are identified only as “Not applicable to new plants.” For the remaining items, the table provides the FSAR sections that address the topic.

1.9.4.2.2 Task Action Plan Items

LNP DEP 3.2-1

A-31 Residual Heat Removal Requirements

Replace the first and second paragraphs of DCD Subsection 1.9.4.2.2, Action Plan Item A-31, AP1000 Response, with the following:

The AP1000 employs safety-related core decay heat removal systems that establish and maintain the plant in a safe, stable condition following design basis events. It is not necessary that these passive systems achieve cold shutdown as defined by Regulatory Guide 1.139.

The AP1000 complies with General Design Criteria 34 by using a more reliable and simplified system design. The passive core cooling system is employed for both hot-standby and long-term cooling modes. Hot-standby conditions are achieved immediately and a temperature of 420°F is reached within 36 hours as discussed in subsection 19E.4.10.2. Reactor pressure is controlled and can be reduced to about 250 psig. The passive residual heat removal system provides a closed cooling system to maintain long-term core cooling. Passive feed and bleed cooling, using the passive injection features for the feed and the automatic depressurization system for bleed, provides safety-related cooling capability. See

Section 7.4 for a discussion of safe shutdown and Section 6.3 for a description of the passive core cooling system.

1.9.4.2.3 New Generic Issues

LNP DEP 6.4-1

Revise the second sentence in the first paragraph of the AP1000 Response for Issue 83 in DCD Subsection 1.9.4.2.3 as follows:

If ac power is unavailable for more than 10 minutes or if "High-2" particulate or iodine radioactivity is detected in the main control room supply air duct, which would lead to exceeding General Design Criteria 19 operator dose limits, the protection and safety monitoring system automatically isolates the main control room and operator habitability requirements are then met by the main control room emergency habitability system (VES).

Add the following text in DCD Subsection 1.9.4.2.3, following the AP1000 Position for Issue 185.

STD COL 1.9-3

Issue 186 Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants

Discussion:

This issue concerns licensees operating within the regulatory guidelines of Generic Letter 85-11 that may not have taken adequate measures to assess and mitigate the consequences of dropped heavy loads.

FSAR Position:

There are no planned heavy load lifts outside those already described in the DCD. However, over the plant life there may be occasions when heavy loads not presently addressed need to be lifted (i.e. in support of special maintenance/ repairs). For these occasions, special procedures are generated that address the activity. Further discussion is provided in Subsection 9.1.5.3.

Issue 189 Susceptibility of Ice Condenser and Mark III Containments to Early Failure From Hydrogen Combustion During a Severe Accident Description

Discussion:

This issue concerns the early containment failure probability for ice condenser and BWR MARK III containments given the

relatively low containment free volume and low containment strength in these designs.

FSAR Position:

The AP1000 design does not have an ice condenser containment or a Mark III containment. Therefore, this issue is not addressed in this FSAR.

Add the following text in DCD Subsection 1.9.4.2.3 following the AP1000 Position for Issue 191.

STD COL 1.9-3 Issue 191 Assessment of Debris Accumulation on PWR Sump Performance (REV. 1)

Discussion:

Results of research on BWR ECCS suction strainer blockage identified new phenomena and failure modes that were not considered in the resolution of Issue A-43. In addition, operating experience identified new contributors to debris and possible blockage of PWR sumps, such as degraded or failed containment paint coatings.

FSAR Position:

The design aspects of this issue are addressed by the DCD. The protective coatings program controls the procurement, application, inspection, and monitoring of Service Level I and Service Level III coatings with the quality assurance features discussed above. The protective coatings program complies with Regulatory Guide 1.54, and is controlled and implemented by administrative procedures. The program is discussed in Subsection 6.1.2.1.6.

Administrative procedures implement the containment cleanliness program. Implementation of the program minimizes the amount of debris that might be left in containment following refueling and maintenance outages. The program is consistent with the containment cleanliness program used in the evaluation discussed in DCD Subsection 6.3.8.2. The program is discussed in Subsection 6.3.8.1.

Issue 196 Boral Degradation

Discussion:

The issue specifically addresses the use of Boral in long-term dry storage casks for spent reactor fuel.

FSAR Position:

Long-term dry storage casks for spent reactor fuel are not used and therefore this issue is not addressed in this FSAR.

1.9.5.1.5 Station Blackout

Replace the third paragraph of DCD Subsection 1.9.5.1.5, AP1000 Response, with the following:

LNP DEP 3.2-1

The AP1000 safety-related passive systems automatically establish and maintain safe, stable conditions for the plant following design basis events, including an extended loss of ac power sources. The passive systems can maintain these safe, stable conditions after design basis events for at least 72 hours, without operator action, following a loss of both onsite and offsite ac power sources. Subsection 1.9.5.4 provides additional information on long-term actions following an extended station blackout beyond 72 hours.

Add the following text to the end of DCD Subsection 1.9.5.1.5.

STD SUP 1.9-3

Training and procedures to mitigate a 10 CFR 50.63 “loss of all alternating current power” (or station blackout (SBO)) event are implemented in accordance with Sections 13.2 and 13.5, respectively. As recommended by NUMARC 87-00 (Reference 201), the SBO event mitigation procedures address response (e.g., restoration of onsite power sources), ac power restoration (e.g., coordination with transmission system load dispatcher), and severe weather guidance (e.g., identification of actions to prepare for the onset of severe weather such as an impending tornado), as applicable. The AP1000 is a passive design and does not rely on offsite or onsite ac sources of power for at least 72 hours after an SBO event, as described above.

Restoration from an SBO event will be contingent upon ac power being made available from any one of the transmission lines described in Section 8.2 or any one of the standby diesel generators.

1.9.5.2.15 Severe Accident Mitigation Design Alternatives

Add the following text to the end of DCD Subsection 1.9.5.2.15.

FSAR Position:

STD SUP 1.9-2 The severe accident mitigation design alternatives (SAMDA) evaluation for AP1000 contained in DCD Appendix 1B is not incorporated into this FSAR, but is addressed in the COL application Environmental Report.

1.9.5.5 Operational Experience

Add the following paragraph to the end of DCD Subsection 1.9.5.5.

STD COL 1.9-2 Table 1.9-204 lists the Bulletins and Generic Letters addressed by topical discussion in this FSAR. Table 1.9-204 also lists Bulletins and Generic Letters categorized as part of the first un-numbered COL Information Item identified at the end of DCD Table 1.8-2 and listed in Table 1.8-202 as COL Information Item 1.9-2. Table 1.9-204 provides the appropriate FSAR cross-references for the discussion of the topics addressed by those Bulletins and Generic Letters. Bulletins or Generic Letters issued after those listed in the DCD are also included in Table 1.9-204. Issues identified as “procurement” or “maintenance” or “surveillance” in WCAP-15800 are addressed as part of the scope of the certified design and are not specifically identified in Table 1.9-204. Issues identified as “procedural” in WCAP-15800 are addressed by the procedures discussed in DCD Section 13.5 and are not specifically identified in Table 1.9-204. Other items in WCAP-15800, including the Circulars and Information Notices, are considered to have been adequately addressed based on the guidance identified in Regulatory Guide 1.206 and the NRC Standard Review Plans.

1.9.6 REFERENCES

Add the following text to the end of DCD Subsection 1.9.6.

201. NUMARC 87-00, Guidelines and Technical Bases for NUMARC Initiatives Addressing Station Blackout at Light Water Reactors, Revision 1, August 1991.

Table 1.9-201 (Sheet 1 of 19)
Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
	Division 1 Regulatory Guides		
STD COL 1.9-1	1.6	Independence Between Redundant Standby (Onsite) Power Sources and Between Their Distribution Systems (Rev. 0, March 1971)	16 (TS Bases 3.8.1)
	1.7	Control of Combustible Gas Concentrations in Containment (Rev. 3, March 2007)	DCD discussion only; see DCD Table 1.9-1
	1.8	Qualification and Training of Personnel for Nuclear Power Plants (Rev. 3, May 2000)	12.1 (NEI 07-08A) Appendix 12AA Appendix 12AA (NEI 07-03A) 13.1.1.4 13.1.3.1 13.2 (NEI 06-13A) 16 (TS 5.3.1) 17.5 (QAPD, IV)
	1.11	Instrument Lines Penetrating the Primary Reactor Containment (Rev. 1, March 2010)	DCD discussion only; see DCD Table 1.9-1
	1.12	Nuclear Power Plant Instrumentation for Earthquakes (Rev. 2, March 1997)	3.7.4.1
	1.13	Spent Fuel Storage Facility Design Basis (Rev. 2, March 2007)	16 (TS 3.7.11) 16 (TS 3.7.12)
	1.20	Comprehensive Vibration Assessment Program for Reactor Internals During Preoperational and Initial Startup Testing (Rev. 3, March 2007)	DCD discussion only; see DCD Table 1.9-1
LNP COL 1.9-1	1.21	Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents From Light-Water-Cooled Nuclear Power Plants (Rev.1, June 1974)	11.5.1.2 11.5.4.1 11.5.4.2 12.3.4

Table 1.9-201 (Sheet 2 of 19)
Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[a]
LNP COL 1.9-1	1.23	Meteorological Monitoring Programs for Nuclear Power Plants (Rev. 1, March 2007)	2.2.3.2.3 2.3.2.1.1 2.3.2.1.7 2.3.3 2.3.3.1 2.3.3.1.5 2.3.3.1.6 2.3.4.1 Table 2.3.3-202
STD COL 1.9-1	1.26	Quality Group Classifications and Standards for Water-, Steam-, and Radioactive - Waste - Containing Components of Nuclear Power Plants (Rev. 4, March 2007)	5.2.4.1 17.5 (QAPD IV)
LNP COL 1.9-1	1.27	Ultimate Heat Sink for Nuclear Power Plants (Rev. 2, January 1976)	2.3.1.2.5
STD COL 1.9-1	1.28	Quality Assurance Program Requirements (Design and Construction) (Rev. 3, August 1985)	14.2.2.2 17.5 (QAPD, II, 17.1) 17.5 (QAPD, IV)
	1.29	Seismic Design Classification (Rev. 4, March 2007)	17.5 (QAPD IV)
	1.30	Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electric Equipment (Rev. 0, August 1972)	Not referenced; see Appendix 1AA
	1.31	Control of Ferrite Content in Stainless Steel Weld Metal (Rev. 3, April 1978)	6.1.1.2
	1.32	Criteria for Power Systems for Nuclear Power Plants (Rev. 3, March 2004)	16 (TS Bases 3.8.1)

Table 1.9-201 (Sheet 3 of 19)
Regulatory Guide/FSAR Section Cross-References

STD COL 1.9-1

Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
1.33	Quality Assurance Program Requirements (Operation) (Rev. 2, February 1978)	13.1.2.1 16 (TS 5.4.1) 17.5 (QAPD, IV)
1.37	Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water Cooled Nuclear Power Plants (Rev. 1, March 2007)	17.5 (QAPD, II, 13.2) 17.5 (QAPD, IV)
1.38	Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage and Handling of Items for Water-Cooled Nuclear Power Plants (Rev. 2, May 1977)	DCD discussion only; see DCD Table 1.9-1
1.39	Housekeeping Requirements for Water-Cooled Nuclear Power Plants (Rev. 2, September 1977)	DCD discussion only; see DCD Table 1.9-1
1.44	Control of the Use of Sensitized Stainless Steel (Rev. 0, May 1973)	6.1.1.2
1.45	Reactor Coolant Pressure Boundary Leakage Detection Systems (Rev. 0, May 1973)	16 (TS Bases 3.4.7) 16 (TS Bases 3.4.9)
1.52	Design, Inspection and Testing Criteria for Air Filtration and Adsorption Units of Post-Accident Engineered-Safety-Feature Atmosphere Cleanup Systems in Light-Water-Cooled Nuclear Power Plants (Rev. 3, June 2001)	16 (TS 3.7.6)
1.53	Application of the Single-Failure Criterion to Safety Systems (Rev. 2, November 2003)	DCD discussion only; see DCD Table 1.9-1
1.54	Service Level I, II, and III Protective Coatings Applied to Nuclear Power Plants (Rev. 1, July 2000)	1.9.4.2.3 6.1.2.1.6 17.5 (QAPD, IV)

Table 1.9-201 (Sheet 4 of 19)
Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
STD COL 1.9-1	1.57	Design Limits and Loading Combinations for Metal Primary Reactor Containment System Components (Rev. 1, March 2007)	DCD discussion only; see DCD Table 1.9-1
LNP COL 1.9-1	1.59	Design Basis Floods for Nuclear Power Plants (Rev. 2, August 1977)	2.4.5.1.2 2.4.5.2.1 2.4.5.2.2 2.4.5.4.4 2.4.5.4.7.1 2.4.5.4.9 2.4.6.7.4
STD COL 1.9-1	1.60	Design Response Spectra for Seismic Design of Nuclear Power Plants (Rev. 1, December 1973)	Table 2.0-201 3.7.2.4.1.7 3.7.2.8.1 3.7.2.8.2 3.7.2.8.3 Table 3.7-203
	1.61	Damping Values for Seismic Design of Nuclear Power Plants (Rev. 1, March 2007)	DCD discussion only; see DCD Table 1.9-1
	1.68	Initial Test Program for Water-Cooled Nuclear Power Plants (Rev. 3, March 2007)	14.2.1 14.2.3 14.2.8 14.2.5.2 16 (TS Bases 3.1.8)
	1.70	Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants (LWR Edition) (Rev. 3, November 1978)	1.1.6.1
	1.71	Welder Qualification for Areas of Limited Accessibility (Rev. 1, March 2007)	DCD discussion only; see DCD Table 1.9-1
	1.75	Criteria for Independence of Electrical Safety Systems (Rev. 3 February 2005)	DCD discussion only; see DCD Table 1.9-1

Table 1.9-201 (Sheet 5 of 19)
Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
LNP COL 1.9-1	1.76	Design-Basis Tornado and Tornado Missiles for Nuclear Power Plants (Rev. 1, March 2007)	2.3.1.2.2 Table 2.0-201, footnote (e)
STD COL 1.9-1	1.77	Assumptions Used for Evaluating a Control Rod Ejection Accident for Pressurized Water Reactors (Rev. 0, May 1974)	16 (TS Bases 3.2.1) 16 (TS Bases 3.2.2) 16 (TS Bases 3.2.4) 16 (TS Bases 3.2.5)
LNP COL 1.9-1	1.78	Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release (Rev. 1, December 2001)	6.4.3 16 (TS Bases 3.7.6) Table 19.58-201
STD COL 1.9-1	1.82	Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident (Rev. 3, November 2003)	DCD discussion only; see DCD Table 1.9-1
	1.83	Inservice Inspection of Pressurized Water Reactor Steam Generator Tubes (Rev. 1, July 1975)	DCD discussion only; see DCD Table 1.9-1
	1.84	Design, Fabrication, and Materials Code Case Acceptability, ASME Section III (Rev. 33, August 2005)	DCD discussion only; see DCD Table 1.9-1
	1.86	Termination of Operating Licenses for Nuclear Reactors (Rev. 0, June 1974)	Not referenced; see Appendix 1AA
LNP COL 1.9-1	1.91	Evaluations of Explosions Postulated To Occur on Transportation Routes Near Nuclear Power Plants (Rev. 1, February 1978)	2.2.3.2.1

Table 1.9-201 (Sheet 6 of 19)
Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[a]
STD COL 1.9-1	1.92	Combining Modal Responses and Spatial Components in Seismic Response Analysis (Rev. 2, July 2006)	DCD discussion only; see DCD Table 1.9-1
	1.93	Availability of Electric Power Sources (Rev. 0, December 1974)	16 (TS Bases 3.8.1) 16 (TS Bases 3.8.5)
	1.94	Quality Assurance Requirements for Installation, Inspection and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants (Rev. 1, April 1976)	Not referenced; see Appendix 1AA
	1.97	Criteria For Accident Monitoring Instrumentation For Nuclear Power Plants (Rev. 4, June 2006)	Not referenced; See Appendix 1AA
	1.97	Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant Environs Conditions During and Following an Accident (Rev. 3, May 1983)	Table 7.5-201 Appendix 12AA 13.3 (Emergency Plan H.1.1) 16 (TS Bases 3.3.3)
	1.99	Radiation Embrittlement of Reactor Vessel Materials (Rev. 2, May 1988)	16 (TS Bases 3.4.3)
	1.101	Emergency Response Planning and Preparedness for Nuclear Power Reactors (Rev. 5, June 2005)	Not referenced; see Appendix 1AA
LNP COL 1.9-1	1.101	Emergency Planning and Preparedness for Nuclear Power Reactors (Rev. 4, July 2003)	Not referenced; See Appendix 1AA
	1.101	Emergency Planning and Preparedness for Nuclear Power Reactors (Rev. 3, August 1992)	9.5.1.8.2.2 Table 9.5-201

Table 1.9-201 (Sheet 7 of 19)
Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
LNP COL 1.9-1	1.109	Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I (Rev. 1, October 1977)	2.3.5.1 11.2.3.5 11.3.3.4 11.3.3.4.1 12.4.1.9.3
	1.110	Cost-Benefit Analysis for Radwaste Systems for Light-Water-Cooled Nuclear Power Reactors (Rev. 0, March 1976)	11.2.3.5.3 11.3.3.4.4
	1.111	Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water-Cooled Reactors (Rev. 1, July 1977)	2.3.5.1
STD COL 1.9-1	1.112	Calculation of Releases of Radioactive Materials in Gaseous or Liquid Effluents from Light-Water-Cooled Power Reactors (Rev. 1, March 2007)	DCD discussion only; see DCD Table 1.9-1
LNP COL 1.9-1	1.114	Guidance to Operators at the Controls and to Senior Operators in the Control Room of a Nuclear Power Unit (Rev. 2, May 1989)	13.1.2.1.2.6 13.1.2.1.3
STD COL 1.9-1	1.115	Protection Against Low-Trajectory Turbine Missiles (Rev. 1, July 1977)	3.5.1.3
	1.116	Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems (Rev. 0-R, May 1977)	Not referenced; see Appendix 1AA
	1.121	Bases for Plugging Degraded PWR Steam Generator Tubes (Rev. 0, August 1976)	16 (TS Bases 3.4.18)

Table 1.9-201 (Sheet 8 of 19)
Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[a]
STD COL 1.9-1	1.124	Service Limits and Loading Combinations for Class 1 Linear-Type Supports (Rev. 2, February 2007)	DCD discussion only; see DCD Table 1.9-1
	1.128	Installation Design and Installation of Vented Lead-Acid Storage Batteries for Nuclear Power Plants (Rev. 2, February 2007)	DCD discussion only; see DCD Table 1.9-1
	1.129	Maintenance, Testing, and Replacement of Vented Lead-Acid Storage Batteries for Nuclear Power Plants (Rev. 2, February 2007)	Table 8.1-201 8.3.2.1.4 16 (TS Bases 3.8.1)
	1.130	Service Limits and Loading Combinations for Class 1 Plate-And-Shell-Type Supports (Rev. 2, March 2007)	DCD discussion only; see DCD Table 1.9-1
LNP COL 1.9-1	1.132	Site Investigations for Foundations of Nuclear Power Plants (Rev. 2, October 2003)	2.5.0.4 2.5.4.2 2.5.4.2.1.1 2.5.4.2.1.1.1 2.5.4.2.1.1.2 2.5.4.2.1.1.3 Table 2.0-201
STD COL 1.9-1	1.133	Loose-Part Detection Program for the Primary System of Light-Water-Cooled Reactors (Rev. 1, May 1981)	Not referenced; see Appendix 1AA
	1.134	Medical Evaluation of Licensed Personnel at Nuclear Power Plants (Rev. 3, March 1998)	Not referenced; see Appendix 1AA
	1.135	Normal Water Level and Discharge at Nuclear Power Plants (Rev. 0, September 1977)	DCD discussion only; see DCD Table 1.9-1

Table 1.9-201 (Sheet 9 of 19)
Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
LNP COL 1.9-1	1.138	Laboratory Investigations of Soils and Rocks for Engineering Analysis and Design of Nuclear Power Plants (Rev. 2, December 2003)	2.5.0.4 2.5.4.2 2.5.4.2.1.5 2.5.4.2.1.5.1
STD COL 1.9-1	1.139	Guidance for Residual Heat Removal (Rev. 0, May 1978)	DCD discussion only; see DCD Table 1.9-1
	1.140	Design, Inspection, and Testing Criteria for Air Filtration and Adsorption Units of Normal Atmosphere Cleanup Systems in Light-Water-Cooled Nuclear Power Plants (Rev. 2, June 2001)	9.4.1.4 9.4.7.4 16 (TS Bases 3.9.6)
	1.143	Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light-Water-Cooled Nuclear Power Plants (Rev. 2, November 2001)	11.2.1.2.5.2 11.2.3.6 11.3.3.6 11.4.5 11.4.6.2
LNP COL 1.9-1	1.145	Atmospheric Dispersion Models for Potential Accident Consequence Assessments at Nuclear Power Plants (Rev. 1, November 1982)	2.3.4.2
STD COL 1.9-1	1.147	Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1 (Rev. 15, October 2007)	5.2.4 6.6
LNP COL 1.9-1	1.149	Nuclear Power Plant Simulation Facilities for Use in Operator Training and License Examinations (Rev. 3, October 2001)	13.1.3.1 13.2 (NEI 06-13A)
STD COL 1.9-1	1.150	Ultrasonic Testing of Reactor Vessel Welds During Preservice and Inservice Examinations (Rev. 1, February 1983)	DCD discussion only; see DCD Table 1.9-1

Table 1.9-201 (Sheet 10 of 19)
Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
STD COL 1.9-1	1.152	Criteria for Use of Computers in Safety Systems of Nuclear Power Plants (Rev. 2, January 2006)	Not referenced; see Appendix 1AA
	1.154	Format and Content of Plant-Specific Pressurized Thermal Shock Safety Analysis Reports for Pressurized Water Reactors (Rev. 0, January 1987)	Not referenced; see Appendix 1AA
LNP COL 1.9-1	1.155	Station Blackout (Rev. 0, August 1998)	Table 8.1-201 17.5 (QAPD III.2)
STD COL 1.9-1	1.159	Assuring the Availability of Funds for Decommissioning Nuclear Reactors (Rev. 1, October 2003)	Not referenced; see Appendix 1AA
	1.160	Monitoring the Effectiveness of Maintenance at Nuclear Power Plants (Rev. 2, March 1997)	3.8.3.7 3.8.4.7 3.8.5.7 17.6 (NEI 07-02A)
	1.162	Format and Content of Report for Thermal Annealing of Reactor Pressure Vessels (Rev. 0, February 1996)	Not referenced; see Appendix 1AA
	1.163	Performance-Based Containment Leak-Test Program (Rev. 0, September 1995)	6.2.5.1 6.2.5.2.2 16 (TS 5.5.8)
LNP COL 1.9-1	1.165	Identification and Characterization of Seismic Sources and Determination of Safe Shutdown Earthquake Ground Motion (Rev. 0, March 1997) (Withdrawn 75 FR 22868, 04/30/2010)	Not referenced; see Appendix 1AA

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Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[a]
STD COL 1.9-1	1.166	Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator Post Earthquake Actions (Rev. 0, March 1997)	3.7.4.4
	1.167	Restart of a Nuclear Power Plant Shut Down by a Seismic Event (Rev. 0, March 1997)	3.7.4.4
	1.168	Verification, Validation, Reviews, and Audits for Digital Computer Software Used in Safety Systems of Nuclear Power Plants (Rev. 1, February 2004)	DCD discussion only; see DCD Table 1.9-1
	1.174	An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis (Rev. 1, November 2002)	Not referenced; see Appendix 1AA
	1.175	An Approach for Plant-Specific, Risk-Informed Decision making: Inservice Testing (Rev. 0, August 1998)	Not referenced; see Appendix 1AA
	1.177	An Approach for Plant-Specific, Risk-Informed Decision making: Technical Specifications (Rev. 0, August 1998)	16 (TS Bases 3.5.1) 16 (TS Bases 3.7.10)
	1.178	An Approach for Plant-Specific Risk-Informed Decision making for Inservice Inspection of Piping (Rev. 1, September 2003)	Not referenced; see Appendix 1AA
	1.179	Standard Format and Content of License Termination Plans for Nuclear Power Reactors (Rev. 0, January 1999)	Not referenced; see Appendix 1AA
	1.180	Guidelines for Evaluating Electromagnetic and Radio-Frequency Interference in Safety-Related Instrumentation and Control Systems (Rev. 1, October 2003)	DCD discussion only; see DCD Table 1.9-1

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Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
STD COL 1.9-1	1.181	Content of Updated Final Safety Analysis Report in Accordance with 10 CFR 50.71(e) (Rev. 0, September 1999)	Not referenced; see Appendix 1AA
	1.182	Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants (Rev. 0, May 2000)	16 (TS Bases SR 3.0.3) 17.6 (NEI 07-02A)
	1.183	Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors (Rev. 0, July 2000)	16 (TS Bases 3.7.5) 16 (TS Bases 3.9.4) 16 (TS Bases 3.9.7)
	1.184	Decommissioning of Nuclear Power Reactors (Rev. 0, July 2000)	Not referenced; see Appendix 1AA
	1.185	Standard Format and Content for Post-shutdown Decommissioning Activities Report (Rev. 0, July 2000)	Not referenced; see Appendix 1AA
	1.186	Guidance and Examples for Identifying 10 CFR 50.2 Design Bases (Rev. 0, December 2000)	Not referenced; see Appendix 1AA
	1.187	Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiment (Rev. 0, November 2000)	Not referenced; see Appendix 1AA
	1.188	Standard Format and Content for Applications To Renew Nuclear Power Plant Operating Licenses (Rev. 1, September 2005)	Not referenced; see Appendix 1AA
LNP COL 1.9-1	1.189	Fire Protection for Nuclear Power Plants (Rev. 1, March 2007)	9.5.1.8.1.1 9.5.1.8.2.2 13.1.2.1.2.9 17.5 (QAPD III.2)

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Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
STD COL 1.9-1	1.191	Fire Protection Program for Nuclear Power Plants During Decommissioning and Permanent Shutdown (Rev. 0, May 2001)	Not referenced; see Appendix 1AA
	1.192	Operation and Maintenance Code Case Acceptability, ASME OM Code (Rev. 0, June 2003)	3.9.6.3
	1.193	ASME Code Cases Not Approved for Use (Rev. 1, August 2005)	Not referenced; see Appendix 1AA
LNP COL 1.9-1	1.194	Atmospheric Relative Concentrations for Control Room Radiological Habitability Assessments at Nuclear Power Plants (Rev. 0, June 2003)	2.2.3.2.3 2.3.4.4
STD COL 1.9-1	1.195	Methods and Assumptions for Evaluating Radiological Consequences of Design Basis Accidents at Light-Water Nuclear Power Reactors (Rev. 0, May 2003)	Not referenced; see Appendix 1AA
	1.196	Control Room Habitability at Light-Water Nuclear Power Reactors (Rev. 1, January 2007)	6.4.3
	1.197	Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors (Rev. 0, May 2003)	DCD discussion only; see DCD Table 1.9-1
LNP COL 1.9-1	1.198	Procedures and Criteria for Assessing Seismic Soil Liquefaction at Nuclear Power Plant Sites (Rev. 0, November 2003)	2.5.4.8 2.5.4.8.2

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Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
STD COL 1.9-1	1.199	Anchoring Components and Structural Supports in Concrete (Rev. 0, November 2003)	DCD discussion only; see DCD Table 1.9-1
	1.200	An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities (Rev. 1, January 2007)	19.59.10.6
	1.201	Guidelines for Categorizing Structures, Systems, and Components in Nuclear Power Plants According to Their Safety Significance (Rev. 1, May 2006)	Not referenced; see Appendix 1AA
	1.202	Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors (Rev. 0, February 2005)	Not referenced; see Appendix 1AA
	1.203	Transient and Accident Analysis Methods (Rev. 0, December 2005)	Not referenced; see Appendix 1AA
LNP COL 1.9-1	1.204	Guidelines for Lightning Protection of Nuclear Power Plants (Rev. 0, November 2005)	Table 8.1-201 8.3.1.1.8
STD COL 1.9-1	1.205	Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants (Rev. 0, May 2006)	Not referenced; see Appendix 1AA

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Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[a]
LNP COL 1.9-1	1.206	Combined License Applications for Nuclear Power Plants (LWR Edition) (Rev. 0, June 2007)	1.1.6.1 2.1 2.1.2.2 2.1.3.1 2.1.3.4 2.2 2.2.2 2.2.2.6 2.2.3.1 2.4 2.5 2.5.4 14.2.1 14.3.2.3.1 Table 8.1-201 Appendix 12AA (NEI 07-03A)
STD COL 1.9-1	1.207	Guidelines for Evaluating Fatigue Analyses Incorporating the Life Reduction of Metal Components Due to the Effects of the Light-Water Reactor Environment for New Reactors (Rev. 0, March 2007)	Not referenced; see Appendix 1AA

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Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
LNP COL 1.9-1	1.208	A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion (Rev. 0, March 2007)	2.0 2.5.0.2 2.5.0.2.6 2.5.1 2.5.1.2.4 2.5.2 2.5.2.2 2.5.2.3 2.5.2.4 2.5.2.4.3 2.5.2.4.4.2 2.5.2.5 2.5.2.5.1.1 2.5.2.5.1.6 2.5.2.6.2 2.5.2.6.3 2.5.2.7.3.3 2.5.2.7.4.3 2.5.2.7.4.4 2.5.3 2.5.3.6 2.5.3.8.1
STD COL 1.9-1	1.209	Guidelines for Environmental Qualification of Safety-Related Computer-Based Instrumentation and Control Systems in Nuclear Power Plants (Rev. 0, March 2007)	Not referenced; see Appendix 1AA
LNP COL 1.9-1	1.221	Design-Basis Hurricane and Hurricane Missiles for Nuclear Power Plants (Rev. 0, October 2011)	3.3.2.1 3.5.1.4 3.5.2 Table 3.5-202

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Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[a]
STD COL 1.9-1	4.7	General Site Suitability Criteria for Nuclear Power Stations (Rev. 2, April 1998)	Not referenced; see Appendix 1AA
STD COL 1.9-1	4.15	Quality Assurance for Radiological Monitoring Programs (Inception through Normal Operations to License Termination) − Effluent Streams and the Environment (Rev. 2, July 2007)	11.5.3
	4.15	Quality Assurance for Radiological Monitoring Programs (Inception through Normal Operations to License Termination) − Effluent Streams and the Environment (Rev. 1, February 1979)	11.5.1.2 11.5.3 11.5.4 11.5.6.5
	Division 5 Regulatory Guides		Note b
	Division 8 Regulatory Guides		
	8.2	Guide for Administrative Practices in Radiation Monitoring (Rev. 0, February 1973)	12.1 (NEI 07-08A) 12.3.4 Appendix 12AA (NEI 07-03A)
	8.4	Direct-Reading and Indirect-Reading Pocket Dosimeters (Rev. 0, February 1973)	Appendix 12AA (NEI 07-03A)
	8.5	Criticality and Other Interior Evacuation Signals (Rev. 1, March 1981)	Appendix 12AA (NEI 07-03A)
	8.6	Standard Test Procedure for Geiger-Muller Counters (Rev. 0, May 1973)	Appendix 12AA (NEI 07-03A)
	8.7	Instructions for Recording and Reporting Occupational Radiation Data (Rev. 2, November 2005)	12.1 (NEI 07-08A) Appendix 12AA (NEI 07-03A)

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Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[(a)]
LNP COL 1.9-1	8.8	Information Relevant to Ensuring That Occupational Radiation Exposures at Nuclear Power Stations Will Be as Low as Is Reasonably Achievable (Rev. 3, June 1978)	12.1 (NEI 07-08A) 12.3.4 Appendix 12AA Appendix 12AA (NEI 07-03A) 13.1.2.1.1 13.1.2.1.1.5
STD COL 1.9-1	8.9	Acceptable Concepts, Models, Equations, and Assumptions for a Bioassay Program (Rev. 1, July 1993)	12.1 (NEI 07-08A) Appendix 12AA (NEI 07-03A)
LNP COL 1.9-1	8.10	Operating Philosophy for Maintaining Occupational Radiation Exposures as Low as Is Reasonably Achievable (Rev. 1-R, May 1977)	12.1 (NEI 07-08A) 12.3.4 Appendix 12AA Appendix 12AA (NEI 07-03A) 13.1.2.1.1 13.1.2.1.1.5
STD COL 1.9-1	8.13	Instruction Concerning Prenatal Radiation Exposure (Rev. 3, June 1999)	12.1 (NEI 07-08A) Appendix 12AA (NEI 07-03A)
	8.15	Acceptable Programs for Respiratory Protection (Rev. 1, October 1999)	12.1 (NEI 07-08A) Appendix 12AA (NEI 07-03A)
	8.27	Radiation Protection Training for Personnel at Light-Water-Cooled Nuclear Power Plants (Rev. 0, March 1981)	12.1 (NEI 07-08A) Appendix 12AA (NEI 07-03A)
	8.28	Audible-Alarm Dosimeters (Rev. 0, August 1981)	12.1 (NEI 07-08A) Appendix 12AA (NEI 07-03A)
	8.29	Instruction Concerning Risks from Occupational Radiation Exposure (Rev. 1, February 1996)	12.1 (NEI 07-08A) Appendix 12AA (NEI 07-03A)

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Regulatory Guide/FSAR Section Cross-References

	Regulatory Guides		FSAR Chapter, Section, or Subsection[a]
	8.34	Monitoring Criteria and Methods To Calculate Occupational Radiation Doses (Rev. 0, July 1992)	12.1 (NEI 07-08A) Appendix 12AA (NEI 07-03A)
	8.35	Planned Special Exposures (Rev. 0, June 1992)	12.1 (NEI 07-08A) Appendix 12AA (NEI 07-03A)
	8.36	Radiation Dose to the Embryo/Fetus (Rev. 0, July 1992)	12.1 (NEI 07-08A) Appendix 12AA (NEI 07-03A)
STD COL 1.9-1	8.38	Control of Access to High and Very High Radiation Areas of Nuclear Plants (Rev. 1, May 2006)	12.1 (NEI 07-08A) Appendix 12AA Table 12AA-201 Appendix 12AA (NEI 07-03A)

a) NEI templates are incorporated by reference. See Table 1.6-201.

b) Division 5 of the regulatory guides applies to materials and plant protection. As appropriate, the Division 5 regulatory guide topics are addressed in the DCD and plant specific security plans (i.e., Physical Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Cyber Security Plan).

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Conformance with SRP Acceptance Criteria

Criteria Section[b]		Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
1	Introduction and Interfaces, Initial Issuance, 03/2007		N/A	No specific acceptance criteria associated with these general requirements.
2.0	Site Characteristics and Site Parameters, Initial Issuance, 03/2007		N/A	No specific acceptance criteria are identified.
2.1.1	Site Location and Description		Acceptable	
2.1.2	Exclusion Area Authority and Control		Acceptable	
2.1.3	Population Distribution		Exception	For consistency between the ER and the FSAR, population calculations are based upon distance units of kilometers rather than miles.
2.2.1-2.2.2	Identification of Potential Hazards in Site Vicinity		Acceptable	
2.2.3	Evaluation of Potential Accidents		Acceptable	
2.3.1	Regional Climatology		Acceptable	
2.3.2	Local Meteorology		Acceptable	

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Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
2.3.3	Onsite Meteorological Measurements Programs		Acceptable	
2.3.4	Short-Term Atmospheric Dispersion Estimates for Accident Releases		Acceptable	
2.3.5	Long-Term Atmospheric Dispersion Estimates for Routine Releases		Acceptable	
2.4.1	Hydrologic Description		Acceptable	
2.4.2	Floods, Rev. 4, 03/2007		Acceptable	
2.4.3	Probable Maximum Flood (PMF) on Streams and Rivers, Rev. 4, 03/2007		Acceptable	
2.4.4	Potential Dam Failures		Acceptable	
2.4.5	Probable Maximum Surge and Seiche Flooding		Acceptable	
2.4.6	Probable Maximum Tsunami Hazards		Acceptable	
2.4.7	Ice Effects		Acceptable	
2.4.8	Cooling Water Canals and Reservoirs		Acceptable	
2.4.9	Channel Diversions		Acceptable	
2.4.10	Flooding Protection Requirements		Acceptable	
2.4.11	Low Water Considerations		Acceptable	
2.4.12	Groundwater		Acceptable	
2.4.13	Accidental Releases of Radioactive Liquid Effluents in Ground and Surface Waters		Acceptable	
2.4.14	Technical Specifications and Emergency Operation Requirements		Acceptable	

Table 1.9-202 (Sheet 3 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]		Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
STD SUP 1.9-1	2.5.1	Basic Geologic and Seismic Information, Rev.4, 03/2007		Acceptable	
LNP SUP 1.9-1	2.5.2	Vibratory Ground Motion, Rev. 4, 03/2007		Acceptable	
STD SUP 1.9-1	2.5.3	Surface Faulting, Rev. 4, 03/2007		Acceptable	
	2.5.4	Stability of Subsurface Materials and Foundations		Acceptable	
	2.5.5	Stability of Slopes System		Acceptable	
	3.2.1	Seismic Classification, Rev. 2, 03/2007			See Notes d and e.
	3.2.2	System Quality Group Classification, Rev. 2, 03/2007			See Notes d and e.
	3.3.1	Wind Loadings		Acceptable	See Notes d, e, and f.
	3.3.2	Tornado Loadings		Acceptable	See Notes d, e, and f.
	3.4.1	Internal Flood Protection for Onsite Equipment Failures		Acceptable	See Notes d, e, and f.
	3.4.2	Analysis Procedures			See Notes d and e.
	3.5.1.1	Internally Generated Missiles (Outside Containment)			See Notes d and e.
	3.5.1.2	Internally Generated Missiles (Inside Containment)			See Notes d and e.
	3.5.1.3	Turbine Missiles		Acceptable	See Notes d, e, and f.

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Conformance with SRP Acceptance Criteria

Criteria Section[b]		Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
3.5.1.4	Missiles Generated by Tornadoes and Extreme Winds			See Notes d and e.
3.5.1.5	Site Proximity Missiles (Except Aircraft), Rev.4, 03/2007		Acceptable	See Notes d, e, and f.
3.5.1.6	Aircraft Hazards		Acceptable	See Notes d, e, and f. Aircraft hazard event probability is consistent with SRP 2.2.3, Rev. 3, Technical Rationale 2.
3.5.2	Structures, Systems, and Components to be Protected from Externally-Generated Missiles			See Notes d and e.
3.5.3	Barrier Design Procedures			See Notes d and e.
3.6.1	Plant Design for Protection Against Postulated Piping Failures in Fluid Systems Outside Containment			See Notes d and e.
3.6.2	Determination of Rupture Locations and Dynamic Effects Associated with the Postulated Rupture of Piping, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
3.6.3	Leak-Before-Break Evaluation Procedures, Rev. 1, 03/2007		Acceptable	See Notes d, e, and f.
3.7.1	Seismic Design Parameters			See Notes d and e.
3.7.2	Seismic System Analysis		Acceptable	See Notes d, e, and f.
3.7.3	Seismic Subsystem Analysis			See Notes d and e.
3.7.4	Seismic Instrumentation, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
3.8.1	Concrete Containment, Rev. 2, 03/2007			See Notes d and e.

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Table 1.9-202 (Sheet 5 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
3.8.2	Steel Containment, Rev. 2, 03/2007			See Notes d and e.
3.8.3	Concrete and Steel Internal Structures of Steel or Concrete Containments, Rev. 2, 03/2007			See Notes d and e.
3.8.4	Other Seismic Category I Structures, Rev. 2, 03/2007			See Notes d and e.
3.8.5	Foundations, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
3.9.1	Special Topics for Mechanical Components			See Notes d and e.
3.9.2	Dynamic Testing and Analysis of Systems, Structures, and Components			See Notes d and e.
3.9.3	ASME Code Class 1, 2, and 3 Components, Component Supports, and Core Support Structures, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
3.9.4	Control Rod Drive Systems			See Notes d and e.
3.9.5	Reactor Pressure Vessel Internals			See Notes d and e.
3.9.6	Functional Design, Qualification, and Inservice Testing Programs for Pumps, Valves, and Dynamic Restraints		Acceptable	See Notes d, e, and f.
3.9.7	Risk-Informed Inservice Testing, Rev. 0, 08/1998		N/A	
3.9.8	Risk-Informed Inservice Inspection of Piping, Rev. 0, 09/2003		N/A	
3.10	Seismic and Dynamic Qualification of Mechanical and Electrical Equipment			See Notes d and e.
3.11	Environmental Qualification of Mechanical and Electrical Equipment		Acceptable	See Notes d, e, and f.

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Conformance with SRP Acceptance Criteria

Criteria Section[b]		Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
3.12	ASME Code Class 1, 2, and 3 Piping Systems, Piping Components and their Associated Supports, Initial Issuance, 03/2007			See Note g.
3.13	Threaded Fasteners - ASME Code Class 1, 2, and 3, Initial Issuance, 03/2007			See Note g.
4.2	Fuel System Design			See Notes d and e.
4.3	Nuclear Design			See Notes d and e.
4.4	Thermal and Hydraulic Design, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
4.5.1	Control Rod Drive Structural Materials			See Notes d and e.
4.5.2	Reactor Internal and Core Support Structure Materials			See Notes d and e.
4.6	Functional Design of Control Rod Drive System, Rev. 2, 03/2007			See Notes d and e.
5.2.1.1	Compliance with the Codes and Standards Rule, 10 CFR 50.55a		Acceptable	See Notes d, e, and f.
5.2.1.2	Applicable Code Cases			See Notes d and e.
5.2.2	Overpressure Protection			See Notes d and e.
5.2.3	Reactor Coolant Pressure Boundary Materials		Acceptable	See Notes d, e, and f.
5.2.4	Reactor Coolant Pressure Boundary Inservice Inspection and Testing, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
5.2.5	Reactor Coolant Pressure Boundary Leakage Detection, Rev. 2, 03/2007			See Notes d and e.
5.3.1	Reactor Vessel Materials, Rev. 2, 03/2007			See Notes d and e.

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Conformance with SRP Acceptance Criteria

Criteria Section[b]		Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
5.3.2	Pressure-Temperature Limits Upper-Shelf Energy and Pressurized Thermal Shock, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
5.3.3	Reactor Vessel Integrity, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
5.4	Reactor Coolant System Component and Subsystem Design, Rev. 2, 03/2007		N/A	No specific acceptance criteria associated with these general requirements.
5.4.1.1	Pump Flywheel Integrity (PWR), Rev. 2, 03/2007			See Notes d and e.
5.4.2.1	Steam Generator Materials			See Notes d and e.
5.4.2.2	Steam Generator Program, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
5.4.6	Reactor Core Isolation Cooling System (BWR), Rev. 4, 03/2007		N/A	
5.4.7	Residual Heat Removal (RHR) System, Rev. 4, 03/2007			See Notes d and e.
5.4.8	Reactor Water Cleanup System (BWR)		N/A	
5.4.11	Pressurizer Relief Tank			See Notes d and e.
5.4.12	Reactor Coolant System High Point Vents, Rev. 1, 03/2007			See Notes d and e.
5.4.13	Isolation Condenser System (BWR), Initial Issuance, 03/2007		N/A	
6.1.1	Engineered Safety Features Materials, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.

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	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
6.1.2	Protective Coating Systems (Paints) - Organic Materials		Acceptable	See Notes d, e, and f.
6.2.1	Containment Functional Design			See Notes d and e.
6.2.1.1.A	PWR Dry Containments, Including Subatmospheric Containments			See Notes d and e.
6.2.1.1.B	Ice Condenser Containments, Rev. 2, 07/1981		N/A	
6.2.1.1.C	Pressure-Suppression Type BWR Containments, Rev. 7, 03/2007		N/A	
6.2.1.2	Subcompartment Analysis			See Notes d and e.
6.2.1.3	Mass and Energy Release Analysis for Postulated Loss-of-Coolant Accidents (LOCAs)			See Notes d and e.
6.2.1.4	Mass and Energy Release Analysis for Postulated Secondary System Pipe Ruptures, Rev. 2, 03/2007			See Notes d and e.
6.2.1.5	Minimum Containment Pressure Analysis for Emergency Core Cooling System Performance Capability Studies			See Notes d and e.
6.2.2	Containment Heat Removal Systems, Rev. 5, 03/2007			See Notes d and e.
6.2.3	Secondary Containment Functional Design			See Notes d and e.
6.2.4	Containment Isolation System			See Notes d and e.
6.2.5	Combustible Gas Control in Containment		Acceptable	See Notes d, e, and f.
6.2.6	Containment Leakage Testing		Acceptable	See Notes d, e, and f.

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	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
6.2.7	Fracture Prevention of Containment Pressure Boundary, Rev. 1, 03/2007			See Notes d and e.
6.3	Emergency Core Cooling System		Acceptable	See Notes d, e, and f.
6.4	Control Room Habitability System		Acceptable	See Notes d, e, and f.
6.5.1	ESF Atmosphere Cleanup Systems			See Notes d and e.
6.5.2	Containment Spray as a Fission Product Cleanup System, Rev. 4, 03/2007			See Notes d and e.
6.5.3	Fission Product Control Systems and Structures			See Notes d and e.
6.5.4	Ice Condenser as a Fission Product Cleanup System, Rev. 3, 12/1988		N/A	
6.5.5	Pressure Suppression Pool as a Fission Product Cleanup System, Rev. 1, 03/2007		N/A	
6.6	Inservice Inspection and Testing of Class 2 and 3 Components, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
6.7	Main Steam Isolation Valve Leakage Control System (BWR), Rev. 2, 07/1981		N/A	
7	Instrumentation and Controls –Overview of Review Process, Rev. 5, 03/2007			See Notes d and e.
Appendix 7.0-A	Review Process for Digital Instrumentation and Control Systems, Rev. 5, 03/2007			See Notes d and e.
7.1	Instrumentation and Controls –Introduction, Rev. 5, 03/2007			See Notes d and e.

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Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
7.1-T Table 7-1	Regulatory Requirements, Acceptance Criteria, and Guidelines for Instrumentation and Control Systems Important to Safety, Rev. 5, 03/2007			See Notes d and e.
Appendix 7.1-A	Acceptance Criteria and Guidelines for Instrumentation and Controls Systems Important to Safety, Rev. 5, 03/2007			See Notes d and e.
Appendix 7.1-B	Guidance for Evaluation of Conformance to IEEE Std 279, Rev. 5, 03/2007			See Notes d and e.
Appendix 7.1-C	Guidance for Evaluation of Conformance to IEEE Std 603, Rev. 5, 03/2007			See Notes d and e.
Appendix 7.1-D	Guidance for Evaluation of the Application of IEEE Std 7-4.3.2 Initial Issuance 03/2007			See Notes d and e.
7.2	Reactor Trip System, Rev. 5, 03/2007			See Notes d and e.
7.3	Engineered Safety Features Systems, Rev. 5, 03/2007			See Notes d and e.
7.4	Safe Shutdown Systems, Rev. 5, 03/2007			See Notes d and e.
7.5	Information Systems Important to Safety, Rev. 5, 03/2007			See Notes d and e.
7.6	Interlock Systems Important to Safety, Rev. 5, 03/2007			See Notes d and e.
7.7	Control Systems, Rev. 5, 03/2007			See Notes d and e.
7.8	Diverse Instrumentation and Control Systems, Rev. 5, 03/2007			See Notes d and e.
7.9	Data Communication Systems, Rev. 5, 03/2007			See Notes d and e.

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Table 1.9-202 (Sheet 11 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
8.1	Electric Power – Introduction		N/A	No specific acceptance criteria associated with these general requirements.
8.2	Offsite Power System, Rev. 4, 03/2007		Acceptable	See Notes d, e, and f.
8.3.1	A-C Power Systems (Onsite)		Acceptable	See Notes d, e, and f.
8.3.2	D-C Power Systems (Onsite)		Acceptable	See Notes d, e, and f.
8.4	Station Blackout, Initial Issuance, 03/2007			See Note g.
9.1.1	Criticality Safety of Fresh and Spent Fuel Storage and Handling			See Notes d and e.
9.1.2	New and Spent Fuel Storage, Rev. 4, 03/2007			See Notes d and e.
9.1.3	Spent Fuel Pool Cooling and Cleanup System, Rev. 2, 03/2007			See Notes d and e.
9.1.4	Light Load Handling System (Related to Refueling)		Acceptable	See Notes d, e, and f.
9.1.5	Overhead Heavy Load Handling Systems, Rev. 1, 03/2007		Acceptable	See Notes d, e, and f.
9.2.1	Station Service Water System, Rev. 5, 03/2007		Acceptable	See Notes d, e, and f.
9.2.2	Reactor Auxiliary Cooling Water Systems, Rev. 4, 03/2007			See Notes d and e.
9.2.4	Potable and Sanitary Water Systems			See Notes d and e.
9.2.5	Ultimate Heat Sink		Acceptable	See Notes d, e, and f.
9.2.6	Condensate Storage Facilities		Acceptable	See Notes d, e, and f.
9.3.1	Compressed Air System, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
9.3.2	Process and Post-accident Sampling Systems			See Notes d and e.

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Table 1.9-202 (Sheet 12 of 26)[a]
Conformance with SRP Acceptance Criteria

Criteria Section[b]		Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
9.3.3	Equipment and Floor Drainage System			See Notes d and e.
9.3.4	Chemical and Volume Control System (PWR) (Including Boron Recovery System)			See Notes d and e.
9.3.5	Standby Liquid Control System (BWR)		N/A	
9.4.1	Control Room Area Ventilation System		Acceptable	See Notes d, e, and f.
9.4.2	Spent Fuel Pool Area Ventilation System			See Notes d and e.
9.4.3	Auxiliary and Radwaste Area Ventilation System			See Notes d and e.
9.4.4	Turbine Area Ventilation System			See Notes d and e.
9.4.5	Engineered Safety Feature Ventilation System			See Notes d and e.
9.5.1	Fire Protection Program, Rev. 5, 03/2007		Acceptable	See Notes d, e, and f.
9.5.2	Communications Systems		Acceptable	See Notes d, e, and f.
9.5.3	Lighting Systems			See Notes d and e.
9.5.4	Emergency Diesel Engine Fuel Oil Storage and Transfer System		Acceptable	See Notes d, e, and f.
9.5.5	Emergency Diesel Engine Cooling Water System			See Notes d and e.
9.5.6	Emergency Diesel Engine Starting System			See Notes d and e.
9.5.7	Emergency Diesel Engine Lubrication System			See Notes d and e.
9.5.8	Emergency Diesel Engine Combustion Air Intake and Exhaust System			See Notes d and e.
10.2	Turbine Generator		Acceptable	See Notes d, e, and f.
10.2.3	Turbine Rotor Integrity, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
10.3	Main Steam Supply System, Rev. 4, 03/2007		Acceptable	See Notes d, e, and f.
10.3.6	Steam and Feedwater System Materials		Acceptable	See Notes d, e, and f.

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Table 1.9-202 (Sheet 13 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
10.4.1	Main Condensers			See Notes d and e.
10.4.2	Main Condenser Evacuation System		Acceptable	See Notes d, e, and f.
10.4.3	Turbine Gland Sealing System			See Notes d and e.
10.4.4	Turbine Bypass System			See Notes d and e.
10.4.5	Circulating Water System		Acceptable	See Notes d, e, and f.
10.4.6	Condensate Cleanup System			See Notes d and e.
10.4.7	Condensate and Feedwater System, Rev. 4, 03/2007		Acceptable	See Notes d, e, and f.
10.4.8	Steam Generator Blowdown System (PWR)			See Notes d and e.
10.4.9	Auxiliary Feedwater System (PWR)			See Notes d and e.
11.1	Source Terms			See Notes d and e.
11.2	Liquid Waste Management System		Acceptable	See Notes d, e, and f.
11.3	Gaseous Waste Management System		Acceptable	See Notes d, e, and f.
11.4	Solid Waste Management System		Acceptable	See Notes d, e, and f.
11.5	Process and Effluent Radiological Monitoring Instrumentation and Sampling Systems, Rev. 4, 03/2007		Acceptable	See Notes d, e, and f.

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Table 1.9-202 (Sheet 14 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
12.1	Assuring that Occupational Radiation Exposures Are As Low As Is Reasonably Achievable		Exception	See Notes d, e, and f. An exception is taken to following the guidance of RG 1.206 to address RG 8.20, 8.25, and RG 8.26. NUREG-1736, Final Report (published 2001) lists RG 8.20 and RG 8.26 as "outdated" and recommends the methods of RG 8.9 R1. RG 8.25 states it is not applicable to nuclear facilities licensed under 10 CFR Part 50, and, by extension, to 10 CFR Part 52. An exception is taken to RG 8.8 C.3.b. RG 1.16 C.1.b (3) data is no longer reported. Reporting per C.1.b (2) is also no longer required.

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Table 1.9-202 (Sheet 15 of 26)[a]
Conformance with SRP Acceptance Criteria

Criteria Section[b]		Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
12.2	Radiation Sources		Exception	See Notes d, e, and f. A general description of miscellaneous sealed sources related to radiography is provided in FSAR text. Other requested details are maintained on-site for NRC review and audit upon their procurement.
12.3-12.4	Radiation Protection Design Features		Acceptable	See Notes d, e, and f.
12.5	Operational Radiation Protection Program		Acceptable	See Notes d, e, and f.

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Table 1.9-202 (Sheet 16 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
13.1.1	Management and Technical Support Organization, Rev. 5, 03/2007		Exception	See Notes d, e, and f. Design and construction responsibilities are not defined in numbers. The experience requirements of corporate staff are set by corporate policy and not provided here in detail, however the experience level of the corporate staff, as discussed Subsections 13.1.1, 13.1.1.1, and Appendix 13AA, in the area of nuclear plant development, construction, and management establishes that the applicant has the necessary capability and staff to ensure that design and construction of the facility will be performed in an acceptable manner.

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Table 1.9-202 (Sheet 17 of 26)[a]
Conformance with SRP Acceptance Criteria

Criteria Section[b]		Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
				Resumes and/or other documentation of qualification and experience of initial appointees to appropriate management and supervisory positions are available for NRC after position vacancies are filled.
13.1.2 - 13.1.3	Operating Organization, Rev. 6, 03/2007		Exception	See Notes d, e, and f. The SRP requires resumes of personnel holding plant managerial and supervisory positions to be included in the FSAR. Current industry practice is to have the resumes available for review by the regulator when requested but not be kept in the FSAR. Additionally, at time of COLA, most positions are unfilled.

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Table 1.9-202 (Sheet 18 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
13.2.1	Reactor Operator Requalification Program; Reactor Operator Training		Exception	See Notes d, e, and f. SRP requires meeting the guidance of NUREG-0711. NEI 06-13A, Template for an Industry Training Program Description, which is incorporated by reference in FSAR 13.2, does not address meeting the guidance of NUREG-0711. NEI 06-13A, is approved by NRC to meet the regulatory requirements for the FSAR description of the Training Program. SRP requires meeting the guidance of Regulatory Guide 1.149, “Nuclear Power Plant Simulation Facilities for Use in Operator Training and License Examinations” RG 1.149 is not addressed in NEI 06-13A. Level of detail is consistent with NEI 06-13A.

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Table 1.9-202 (Sheet 19 of 26)[a]
Conformance with SRP Acceptance Criteria

Criteria Section[b]		Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
13.2.2	Non-Licensed Plant Staff Training		Exception	See Notes d, e, and f. Level of detail is consistent with NEI 06-13A.
13.3	Emergency Planning		Acceptable	See Notes d, e, and f.
13.4	Operational Programs		Acceptable	See Notes d, e, and f.
13.5.1.1	Administrative Procedures – General, Initial Issuance, 03/2007		Exception	The procedure development schedule is addressed in the COL application (not in the SAR as requested by this SRP).
13.5.2.1	Operating and Emergency Operating Procedures, Rev. 2, 03/2007		Exception	See Notes d, e, and f. Procedures are generally identified in this section by topic, type, or classification in lieu of the specific title and represent general areas of procedural coverage.
13.6	Physical Security		Acceptable	See Security Plan developed in accordance with NEI 03-12.
13.6.1	Physical Security - Combined License Review Responsibilities, Initial Issuance, 03/2007		Acceptable	See Security Plan developed in accordance with NEI 03-12.
13.6.2	Physical Security - Design Certification, Initial Issuance, 03/2007		Acceptable	See notes d and e.

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Table 1.9-202 (Sheet 20 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
13.6.3	Physical Security - Early Site Permit, Initial Issuance, 03/2007		N/A	
14.2	Initial Plant Test Program - Design Certification and New License Applicants		Exception	See Notes d, e, and f. The level of detail is consistent with DCD section content addressing nonsafety-related systems.
14.2.1	Generic Guidelines for Extended Power Uprate Testing Programs, Initial Issuance, 08/2006		N/A	No power uprate is sought.
14.3	Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007		Acceptable	
14.3.1	[Reserved]			
14.3.2	Structural and Systems Engineering - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007			See Notes d and e.
14.3.3	Piping Systems and Components - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007			See Notes d and e.
14.3.4	Reactor Systems - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007			See Notes d and e.
14.3.5	Instrumentation and Controls - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007			See Notes d and e.

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Table 1.9-202 (Sheet 21 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
14.3.6	Electrical Systems - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007			See Notes d and e.
14.3.7	Plant Systems - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007		Acceptable	See Notes d, e, and f.
14.3.8	Radiation Protection - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007			See Notes d and e.
14.3.9	Human Factors Engineering - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007			See Notes d and e.
14.3.10	Emergency Planning - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007		Acceptable	See Notes d, e, and f.
14.3.11	Containment Systems - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007			See Notes d and e.
14.3.12	Physical Security Hardware - Inspections, Tests, Analyses, and Acceptance Criteria, Initial Issuance, 03/2007		Acceptable	See Notes d, e, and f.
15	Introduction –Transient and Accident Analysis			See Notes d and e.
15.0.1	Radiological Consequence Analyses Using Alternative Source Terms, Rev. 0, 07/2000			See Notes d and e.

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Table 1.9-202 (Sheet 22 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
15.0.2	Review of Transient and Accident Analysis Method, Rev. 0, 12/2005			See Notes d and e.
15.0.3	Design Basis Accident Radiological Consequences of Analyses for Advanced Light Water Reactors, Initial Issuance, 03/2007			See Notes d and e.
15.1.1 - 15.1.4	Decrease in Feedwater Temperature, Increase in Feedwater Flow, Increase in Steam Flow, and Inadvertent Opening of a Steam Generator Relief or Safety Valve, Rev. 2, 03/2007			See Notes d and e.
15.1.5	Steam System Piping Failures Inside and Outside of Containment (PWR)			See Notes d and e.
15.2.1 - 15.2.5	Loss of External Load; Turbine Trip; Loss of Condenser Vacuum; Closure of Main Steam Isolation Valve (BWR); and Steam Pressure Regulator Failure (Closed), Rev. 2, 03/2007			See Notes d and e.
15.2.6	Loss of Nonemergency AC Power to the Station Auxiliaries, Rev. 2, 03/2007			See Notes d and e.
15.2.7	Loss of Normal Feedwater Flow, Rev. 2, 03/2007			See Notes d and e.
15.2.8	Feedwater System Pipe Breaks Inside and Outside Containment (PWR), Rev. 2, 03/2007			See Notes d and e.

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Table 1.9-202 (Sheet 23 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
15.3.1 - 15.3.2	Loss of Forced Reactor Coolant Flow Including Trip of Pump Motor and Flow Controller Malfunctions, Rev. 2, 03/2007			See Notes d and e.
15.3.3 - 15.3.4	Reactor Coolant Pump Rotor Seizure and Reactor Coolant Pump Shaft Break			See Notes d and e.
15.4.1	Uncontrolled Control Rod Assembly Withdrawal from a Subcritical or Low Power Startup Condition			See Notes d and e.
15.4.2	Uncontrolled Control Rod Assembly Withdrawal at Power			See Notes d and e.
15.4.3	Control Rod Misoperation (System Malfunction or Operator Error)			See Notes d and e.
15.4.4 - 15.4.5	Startup of an Inactive Loop or Recirculation Loop at an Incorrect Temperature, and Flow Controller Malfunction Causing an Increase in BWR Core Flow Rate, Rev. 2, 03/2007			See Notes d and e.
15.4.6	Inadvertent Decrease in Boron Concentration in the Reactor Coolant System (PWR), Rev. 2, 03/2007			See Notes d and e. See Notes d and e.
15.4.7	Inadvertent Loading and Operation of a Fuel Assembly in an Improper Position, Rev. 2, 03/2007			See Notes d and e.
15.4.8	Spectrum of Rod Ejection Accidents (PWR)			See Notes d and e.

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Table 1.9-202 (Sheet 24 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
15.4.8.A	Radiological Consequences of a Control Rod Ejection Accident (PWR) , Rev. 1, 07/1981			See Notes d and e.
15.4.9	Spectrum of Rod Drop Accidents (BWR)		N/A	
15.5.1 - 15.5.2	Inadvertent Operation of ECCS and Chemical and Volume Control System Malfunction that Increases Reactor Coolant Inventory, Rev. 2, 03/2007			See Notes d and e.
15.6.1	Inadvertent Opening of a PWR Pressurizer Pressure Relief Valve or a BWR Pressure Relief Valve, Rev. 2, 03/2007			See Notes d and e.
15.6.5	Loss-of-Coolant Accidents Resulting From Spectrum of Postulated Piping Breaks Within the Reactor Coolant Pressure Boundary			See Notes d and e.
15.8	Anticipated Transients Without Scram, Rev. 2, 03/2007			See Notes d and e.
15.9	Boiling Water Reactor Stability, Initial Issuance, 03/2007		N/A	
16	Technical Specifications, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
16.1	Risk-informed Decision Making: Technical Specifications, Rev. 1, 03/2007		N/A	This SRP applies to the Technical Specifications change process.

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Table 1.9-202 (Sheet 25 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
17.1	Quality Assurance During the Design and Construction Phases, Rev. 2, 07/1981		Acceptable	See Notes d, e, and f.
17.2	Quality Assurance During the Operations Phase, Rev. 2, 07/1981			See Notes d and e.
17.3	Quality Assurance Program Description, Rev. 0, 08/1990			See Notes d and e.
17.4	Reliability Assurance Program (RAP), Initial Issuance, 03/2007			See Notes d and e.
17.5	Quality Assurance Program Description - Design Certification, Early Site Permit and New License Applicants, Initial Issuance, 03/2007		Acceptable	See Notes d, e, and f. This section covers the requirements of SRP Section 17.5 through reference to Quality Assurance Program Description which is maintained separately and developed in accordance with NEI 06-14A.
17.6	Maintenance Rule, Initial Issuance, 03/2007		Acceptable	Content developed in accordance with NEI 07-02A
18.0	Human Factors Engineering, Rev. 2, 03/2007		Acceptable	See Notes d, e, and f.
19.0	Probabilistic Risk Assessment and Severe Accident Evaluation for New Reactors, Rev. 2, 06/2007		Acceptable	See Notes d, e, and f.

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Table 1.9-202 (Sheet 26 of 26)[a]
Conformance with SRP Acceptance Criteria

	Criteria Section[b]	Reference Criteria	FSAR Position[c]	Comments/Summary of Exceptions
19.1	Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities, Rev. 2, 06/2007		Acceptable	See Notes d, e, and f.
19.2	Review of Risk Information Used to Support Permanent Plant-Specific Changes to the Licensing Basis: General Guidance, Initial Issuance, 06/2007		Acceptable	See Note g.

a) This table is provided as a one-time aid to facilitate NRC review. This table becomes historical information and need not be updated.

b) If no revision or date is specified, it is Rev. 3, 03/2007.

c) Consult the AP1000 Design Control Document (DCD) Appendix 1A and Appendix 1AA to determine extent of conformance with Regulatory Guides (except Regulatory Guide 1.206).

d) Conformance with a previous revision of this SRP is documented in AP1000 Design Control Document (Section 1.9.2 and WCAP-15799).

e) Conformance with the design aspects of this SRP is as stated in the AP1000 DCD.

f) Conformance with the plant or site-specific aspects of this SRP is as stated under “FSAR Position.”

g) This SRP is not applicable to the AP1000 certified design.

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Table 1.9-203 (Sheet 1 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
TMI Action Plan Items			
I.A.1.1	Shift Technical Advisor	f	Resolved per NUREG-0933
I.A.1.2	Shift Supervisor Administrative Duties	f	Resolved per NUREG-0933
I.A.1.3	Shift Manning	f	Resolved per NUREG-0933
I.A.1.4	Long-Term Upgrading	f	Resolved per NUREG-0933
I.A.2.1(1)	Qualifications - Experience	f	Resolved per NUREG-0933
I.A.2.1(2)	Immediate Upgrading of RO & SRO Training and Qualifications, Training	f	Resolved per NUREG-0933
I.A.2.1(3)	Facility Certification of Competence and Fitness of Applicants for Operator and Senior Operator Licenses	f	Resolved per NUREG-0933
I.A.2.3	Administration of Training Programs	f	Resolved per NUREG-0933
I.A.2.4	NRR Participation in Inspector Training	d	Not applicable to new plants
I.A.2.6(1)	Revise Regulatory Guide 1.8	f	Resolved per NUREG-0933
I.A.3.1	Revise Scope of Criteria for Licensing Examinations	f	Resolved per NUREG-0933
I.A.3.5	Establish Statement of Understanding with INPO and DOE	d	Not applicable to new plants
I.A.4.1(2)	Interim Changes in Training Simulators	f	Resolved per NUREG-0933
I.A.4.2(1)	Research on Training Simulators	f	Resolved per NUREG-0933
I.A.4.2(2)	Upgrade Training Simulator Standards	f	Resolved per NUREG-0933
I.A.4.2(3)	Regulatory Guide on Training Simulators	f	Resolved per NUREG-0933
I.A.4.2(4)	Review Simulators for Conformance to Criteria	f	Resolved per NUREG-0933

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Table 1.9-203 (Sheet 2 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
I.A.4.3	Feasibility Study of Procurement of NRC Training Simulator	d	Not applicable to new plants
I.A.4.4	Feasibility Study of NRC Engineering Computer	d	Not applicable to new plants
I.B.1.3(1)	Require Licensees to Place Plant in Safest Shutdown Cooling Following a Loss of Safety Function Due to Personnel Error	d	Not applicable to new plants
I.B.1.3(2)	Use Existing Enforcement Options to Accomplish Safest Shutdown Cooling	d	Not applicable to new plants
I.B.1.3(3)	Use Non-Fiscal Approaches to Accomplish Safest Shutdown Cooling	d	Not applicable to new plants
I.B.2.1(1)	Verify the Adequacy of Management and Procedural Controls and Staff Discipline	d	Not applicable to new plants
I.B.2.1(2)	Verify that Systems Required to Be Operable Are Properly Aligned	d	Not applicable to new plants
I.B.2.1(3)	Follow-up on Completed Maintenance Work Orders to Ensure Proper Testing and Return to Service	d	Not applicable to new plants
I.B.2.1(4)	Observe Surveillance Tests to Determine Whether Test Instruments Are Properly Calibrated	d	Not applicable to new plants
I.B.2.1(5)	Verify that Licensees Are Complying with Technical Specifications	d	Not applicable to new plants
I.B.2.1(6)	Observe Routine Maintenance	d	Not applicable to new plants
I.B.2.1(7)	Inspect Terminal Boards, Panels, and Instrument Racks for Unauthorized Jumpers and Bypasses	d	Not applicable to new plants
I.B.2.2	Resident Inspector at Operating Reactors	d	Not applicable to new plants

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Table 1.9-203 (Sheet 3 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
I.B.2.3	Regional Evaluations	d	Not applicable to new plants
I.B.2.4	Overview of Licensee Performance	d	Not applicable to new plants
I.C.1(1)	Small Break LOCAs	f	Resolved per NUREG-0933
I.C.1(2)	Inadequate Core Cooling	f	Resolved per NUREG-0933
I.C.1(3)	Transients and Accidents	f	Resolved per NUREG-0933
I.C.2	Shift and Relief Turnover Procedures	f	Resolved per NUREG-0933
I.C.3	Shift Supervisor Responsibilities	f	Resolved per NUREG-0933
I.C.4	Control Room Access	f	Resolved per NUREG-0933
I.C.6	Procedures for Verification of Correct Performance of Operating Activities	f	Resolved per NUREG-0933
I.C.7	NSSS Vendor Review of Procedures	f	Resolved per NUREG-0933
I.C.8	Pilot Monitoring of Selected Emergency Procedures for Near-Term Operating License Applicants	f	Resolved per NUREG-0933
I.D.5(5)	Disturbance Analysis Systems	d	Not applicable to new plants
I.D.6	Technology Transfer Conference	d	Not applicable to new plants
I.E.1	Office for Analysis and Evaluation of Operational Data	d	Not applicable to new plants
I.E.2	Program Office Operational Data Evaluation	d	Not applicable to new plants
I.E.3	Operational Safety Data Analysis	d	Not applicable to new plants
I.E.4	Coordination of Licensee, Industry, and Regulatory Programs	d	Not applicable to new plants

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Table 1.9-203 (Sheet 4 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
I.E.5	Nuclear Plant Reliability Data Systems	d	Not applicable to new plants
I.E.6	Reporting Requirements	d	Not applicable to new plants
I.E.7	Foreign Sources	d	Not applicable to new plants
I.E.8	Human Error Rate Analysis	d	Not applicable to new plants
I.F.2(6)	Increase the Size of Licensees' QA Staff	f	Resolved per NUREG-0933
I.F.2(9)	Clarify Organizational Reporting Levels for the QA Organization	f	Resolved per NUREG-0933
I.G.1	Training Requirements	f	Resolved per NUREG-0933
I.G.2	Scope of Test Program	f	Resolved per NUREG-0933
II.B.4	Training for Mitigating Core Damage	f	Resolved per NUREG-0933
II.B.5(1)	Behavior of Severely Damaged Fuel	d	Not applicable to new plants
II.B.5(2)	Behavior of Core Melt	d	Not applicable to new plants
II.B.5(3)	Effect of Hydrogen Burning and Explosions on Containment Structures	d	Not applicable to new plants
II.B.6	Risk Reduction for Operating Reactors at Sites with High Population Densities	f	Resolved per NUREG-0933
II.E.1.3	Update Standard Review Plan and Develop Regulatory Guide	d	Resolved per NUREG-0933
II.E.6.1	Test Adequacy Study	d	Resolved per NUREG-0933
II.F.5	Classification of Instrumentation, Control, and Electrical Equipment	d	Not applicable to new plants
II.H.4	Determine Impact of TMI on Socioeconomic and Real Property Values	d	Not applicable to new plants

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Table 1.9-203 (Sheet 5 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
II.J.1.1	Establish a Priority System for Conducting Vendor Inspections	d	Not applicable to new plants
II.J.1.2	Modify Existing Vendor Inspection Program	d	Not applicable to new plants
II.J.1.3	Increase Regulatory Control Over Present Non-Licensees	d	Not applicable to new plants
II.J.1.4	Assign Resident Inspectors to Reactor Vendors and Architect-Engineers	d	Not applicable to new plants
II.J.2.1	Reorient Construction Inspection Program	d	Not applicable to new plants
II.J.2.2	Increase Emphasis on Independent Measurement in Construction Inspection Program	d	Not applicable to new plants
II.J.2.3	Assign Resident Inspectors to All Construction Sites	d	Not applicable to new plants
II.J.3.1	Organization and Staffing to Oversee Design and Construction	f	Not applicable to new plants
II.J.4.1	Revise Deficiency Reporting Requirements	f	Resolved per NUREG-0933
II.K.1(1)	Review TMI-2 PNs and Detailed Chronology of the TMI-2 Accident	f	Resolved per NUREG-0933
II.K.1(3)	Review Operating Procedures for Recognizing, Preventing, and Mitigating Void Formation in Transients and Accidents	f	Resolved per NUREG-0933
II.K.1(4)	Review Operating Procedures and Training Instructions	f	Resolved per NUREG-0933
II.K.1(5)	Safety-Related Valve Position Description	f	Resolved per NUREG-0933
II.K.1(6)	Review Containment Isolation Initiation Design and Procedures	f	Resolved per NUREG-0933

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Table 1.9-203 (Sheet 6 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
II.K.1(9)	Review Procedures to Assure That Radioactive Liquids and Gases Are Not Transferred out of Containment Inadvertently	f	Resolved per NUREG-0933
II.K.1(10)	Review and Modify Procedures for Removing Safety-Related Systems from Service	f	Resolved per NUREG-0933
II.K.1(11)	Make All Operating and Maintenance Personnel Aware of the Seriousness and Consequences of the Erroneous Actions Leading up to, and in Early Phases of, the TMI-2 Accident	f	Resolved per NUREG-0933
II.K.1(12)	One Hour Notification Requirement and Continuous Communications Channels	f	Resolved per NUREG-0933
II.K.1(13)	Propose Technical Specification Changes Reflecting Implementation of All Bulletin Items	f	Resolved per NUREG-0933
II.K.1(14)	Review Operating Modes and Procedures to Deal with Significant Amounts of Hydrogen	f	Resolved per NUREG-0933
II.K.1(15)	For Facilities with Non-Automatic AFW Initiation, Provide Dedicated Operator in Continuous Communication with CR to Operate AFW	f	Resolved per NUREG-0933
II.K.1(16)	Implement Procedures That Identify PZR PORV "Open" Indications and That Direct Operator to Close Manually at "Reset" Setpoint	f	Resolved per NUREG-0933
II.K.1(17)	Trip PZR Level Bistable so That PZR Low Pressure Will Initiate Safety Injection	f	Resolved per NUREG-0933
II.K.1(26)	Revise Emergency Procedures and Train ROs and SROs	f	Resolved per NUREG-0933
II.K.3(3)	Report Safety and Relief Valve Failures Promptly and Challenges Annually	f	Resolved per NUREG-0933
II.K.3(5)	Automatic Trip of Reactor Coolant Pumps	f	Resolved per NUREG-0933
II.K.3(10)	Anticipatory Trip Modification Proposed by Some Licensees to Confine Range of Use to High Power Levels	f	Resolved per NUREG-0933

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Table 1.9-203 (Sheet 7 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
II.K.3(11)	Control Use of PORV Supplied by Control Components, Inc. Until Further Review Complete	f	Resolved per NUREG-0933
II.K.3(12)	Confirm Existence of Anticipatory Trip Upon Turbine Trip	f	Resolved per NUREG-0933
II.K.3(30)	Revised Small-Break LOCA Methods to Show Compliance with 10 CFR 50, Appendix K	f	Resolved per NUREG-0933
II.K.3(31)	Plant-Specific Calculations to Show Compliance with 10 CFR 50.46	f	Resolved per NUREG-0933
III.A.1.1(1)	Implement Action Plan Requirements for Promptly Improving Licensee Emergency Preparedness	f	Resolved per NUREG-0933
III.A.1.1(2)	Perform an Integrated Assessment of the Implementation	f	Not applicable to new plants
III.A.2.1(1)	Publish Proposed Amendments to the Rules	d	Resolved per NUREG-0933
III.A.2.1(2)	Conduct Public Regional Meetings	d	Not applicable to new plants
III.A.2.1(3)	Prepare Final Commission Paper Recommending Adoption of Rules	d	Not applicable to new plants
III.A.2.1(4)	Revise Inspection Program to Cover Upgraded Requirements	d	Resolved per NUREG-0933
III.A.2.2	Development of Guidance and Criteria	d	Resolved per NUREG-0933
III.A.3.3	Communications	d	Resolved per NUREG-0933
III.C.1(1)	Review Publicly Available Documents	d	Not applicable to new plants
III.C.1(2)	Recommend Publication of Additional Information	d	Not applicable to new plants
III.C.1(3)	Program of Seminars for News Media Personnel	d	Not applicable to new plants
III.C.2(1)	Develop Policy and Procedures for Dealing With Briefing Requests	d	Not applicable to new plants

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Table 1.9-203 (Sheet 8 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
III.C.2(2)	Provide Training for Members of the Technical Staff	d	Not applicable to new plants
III.D.2.4(2)	Place 50 TLDs Around Each Site	d	Not applicable to new plants
III.D.2.6	Independent Radiological Measurements	d	Not applicable to new plants
III.D.3.2(1)	Amend 10 CFR 20	d	Not applicable to new plants
III.D.3.2(2)	Issue a Regulatory Guide	d	Not applicable to new plants
III.D.3.2(3)	Develop Standard Performance Criteria	d	Not applicable to new plants
III.D.3.2(4)	Develop Method for Testing and Certifying Air-Purifying Respirators	d	Not applicable to new plants
III.D.3.3	In-Plant Radiation Monitoring	COL Item 12.3-2	12.3.4, Appendix 12AA
III.D.3.5(1)	Develop Format for Data To Be Collected by Utilities Regarding Total Radiation Exposure to Workers	d	Not applicable to new plants
III.D.3.5(2)	Investigate Methods of Obtaining Employee Health Data by Nonlegislative Means	d	Not applicable to new plants
III.D.3.5(3)	Revise 10 CFR 20	d	Not applicable to new plants
IV.A.1	Seek Legislative Authority	d	Not applicable to new plants
IV.A.2	Revise Enforcement Policy	d	Not applicable to new plants
IV.B.1	Revise Practices for Issuance of Instructions and Information to Licensees	d	Not applicable to new plants

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Table 1.9-203 (Sheet 9 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
IV.D.1	NRC Staff Training	d	Not applicable to new plants
IV.E.1	Expand Research on Quantification of Safety Decision-Making	d	Not applicable to new plants
IV.E.2	Plan for Early Resolution of Safety Issues	d	Not applicable to new plants
IV.E.3	Plan for Resolving Issues at the CP Stage	d	Not applicable to new plants
IV. E.4	Resolve Generic Issues by Rulemaking	d	Not applicable to new plants
IV.G.1	Develop a Public Agenda for Rulemaking	d	Not applicable to new plants
IV.G.2	Periodic and Systematic Reevaluation of Existing Rules	d	Not applicable to new plants
IV.G.3	Improve Rulemaking Procedures	d	Not applicable to new plants
IV.G.4	Study Alternatives for Improved Rulemaking Process	d	Not applicable to new plants
IV.H.1	NRC Participation in the Radiation Policy Council	d	Not applicable to new plants
V.A.1	Develop NRC Policy Statement on Safety	d	Not applicable to new plants
V.B.1	Study and Recommend, as Appropriate, Elimination of Nonsafety Responsibilities	d	Not applicable to new plants
V.C.1	Strengthen the Role of Advisory Committee on Reactor Safeguards	d	Not applicable to new plants
V.C.2	Study Need for Additional Advisory Committees	d	Not applicable to new plants
V.C.3	Study the Need to Establish an Independent Nuclear Safety Board	d	Not applicable to new plants

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Table 1.9-203 (Sheet 10 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
V.D.1	Improve Public and Intervenor Participation in the Hearing Process	d	Not applicable to new plants
V.D.2	Study Construction-During-Adjudication Rules	d	Not applicable to new plants
V.D.3	Reexamine Commission Role in Adjudication	d	Not applicable to new plants
V.D.4	Study the Reform of the Licensing Process	d	Not applicable to new plants
V.E.1	Study the Need for TMI-Related Legislation	d	Not applicable to new plants
V.F.1	Study NRC Top Management Structure and Process	d	Not applicable to new plants
V.F.2	Reexamine Organization and Functions of the NRC Offices	d	Not applicable to new plants
V.F.3	Revise Delegations of Authority to Staff	d	Not applicable to new plants
V.F.4	Clarify and Strengthen the Respective Roles of Chairman, Commission, and Executive Director for Operations	d	Not applicable to new plants
V.F.5	Authority to Delegate Emergency Response Functions to a Single Commissioner	d	Not applicable to new plants
V.G.1	Achieve Single Location, Long-Term	d	Not applicable to new plants
V.G.2	Achieve Single Location, Interim	d	Not applicable to new plants
Task Action Plan Items			
A-3	Westinghouse Steam Generator Tube Integrity (former USI)	COL Item 5.4-1	5.4.2.5
A-19	Digital Computer Protection System	d	Not applicable to new plants
A-20	Impacts of the Coal Fuel Cycle	d	Not applicable to new plants
A-23	Containment Leak Testing	COL Item 6.2-1	6.2.5.1

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Table 1.9-203 (Sheet 11 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
A-27	Reload Applications	d	Not applicable to new plants
B-1	Environmental Technical Specifications	d	Not applicable to new plants
B-2	Forecasting Electricity Demand	d	Not applicable to new plants
B-11	Subcompartment Standard Problems	d	Not applicable to new plants
B-13	Marviken Test Data Evaluation	d	Not applicable to new plants
B-20	Standard Problem Analysis	d	Not applicable to new plants
B-25	Piping Benchmark Problems	d	Not applicable to new plants
B-27	Implementation and Use of Subsection NF	d	Not applicable to new plants
B-28	Radionuclide/Sediment Transport Program	d	Not applicable to new plants
B-29	Effectiveness of Ultimate Heat Sinks	d	Not applicable to new plants
B-30	Design Basis Floods and Probability	d	Not applicable to new plants
B-33	Dose Assessment Methodology	d	Not applicable to new plants
B-35	Confirmation of Appendix I Models for Calculations of Releases of Radioactive Materials in Gaseous and Liquid Effluents from Light Water Cooled Power Reactors	d	Not applicable to new plants
B-37	Chemical Discharges to Receiving Waters	d	Not applicable to new plants
B-42	Socioeconomic Environmental Impacts	d	Not applicable to new plants
B-43	Value of Aerial Photographs for Site Evaluation	d	Not applicable to new plants
B-44	Forecasts of Generating Costs of Coal and Nuclear Plants	d	Not applicable to new plants

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Table 1.9-203 (Sheet 12 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
B-49	Inservice Inspection Criteria and Corrosion Prevention Criteria for Containments	d	Not applicable to new plants
B-59	(N-1) Loop Operation in BWRs and PWRs	d	Not applicable to new plants
B-64	Decommissioning of Reactors	f	Resolved per NUREG-0933.
B-72	Health Effects and Life Shortening from Uranium and Coal Fuel Cycles	d	Not applicable to new plants
C-4	Statistical Methods for ECCS Analysis	d	Not applicable to new plants
C-5	Decay Heat Update	d	Not applicable to new plants
C-6	LOCA Heat Sources	d	Not applicable to new plants
New Generic Issues			
43.	Reliability of Air Systems	f, j	Resolved per NUREG-0933.
59.	Technical Specification Requirements for Plant Shutdown when Equipment for Safe Shutdown is Degraded or Inoperable	d	Not applicable to new plants
67.2.1	Integrity of Steam Generator Tube Sleeves	d	Not applicable to new plants
67.5.1	Reassessment of Radiological Consequences	d	Not applicable to new plants
67.5.2	Reevaluation of SGTR Design Basis	d	Not applicable to new plants

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Table 1.9-203 (Sheet 13 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
67.10.0	Supplement Tube Inspections	d	Not applicable to new plants
99.	RCS/RHR Suction Line Valve Interlock on PWRs	f	Resolved per NUREG-0933
111.	Stress Corrosion Cracking of Pressure Boundary Ferritic Steels in Selected Environments	d	Not applicable to new plants
112.	Westinghouse RPS Surveillance Frequencies and Out-of-Service Times	d	Not applicable to new plants
118.	Tendon Anchorage Failure	f	Resolved per NUREG-0933.
119.1	Piping Rupture Requirements and Decoupling of Seismic and LOCA Loads	d	Not applicable to new plants
119.3	Decoupling the OBE from the SSE	d	Not applicable to new plants
119.4	BWR Piping Materials	d	Not applicable to new plants
119.5	Leak Detection Requirements	d	Not applicable to new plants
128.	Electrical Power Reliability	h (High)	Resolved per NUREG-0933.
130.	Essential Service Water Pump Failures at Multiplant Sites	f	See DCD Subsection 1.9.4, item 130
133.	Update Policy Statement on Nuclear Plant Staff Working Hours	d	Not applicable to new plants
136.	Storage and Use of Large Quantities of Cryogenic Combustibles On Site	d	Not applicable to new plants
139.	Thinning of Carbon Steel Piping in LWRs	d	Not applicable to new plants
146.	Support Flexibility of Equipment and Components	d	Not applicable to new plants
147.	Fire-Induced Alternate Shutdown Control Room Panel Interactions	d	Not applicable to new plants

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Table 1.9-203 (Sheet 14 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
148.	Smoke Control and Manual Fire-Fighting Effectiveness	d	Not applicable to new plants
155.2	Establish Licensing Requirements For Non-Operating Facilities	d	Not applicable to new plants
156	Systematic Evaluation Program	f	Not applicable to new plants
156.6.1	Pipe Break Effects on Systems and Components	High	The AP1000 is a new plant that takes the effects of a pipe break into account and therefore issue 156.6.1 is not applicable.
163	Multiple Steam Generator Tube Leakage	h (High)	See DCD Subsection 1.9.4.2.3, item 163
168	Environmental Qualification Of Electrical Equipment	f	Not applicable to new plants
178	Effect Of Hurricane Andrew On Turkey Point	d	Not applicable to new plants
180	Notice Of Enforcement Discretion	d	Not applicable to new plants
181	Fire Protection	d	Not applicable to new plants
183	Cycle-Specific Parameter Limits In Technical Specifications	d	Not applicable to new plants
184	Endangered Species	d	Not applicable to new plants

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Table 1.9-203 (Sheet 15 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
185	Control of Recriticality following Small-Break LOCA in PWRs	h	Not applicable to new plants
186	Potential Risk and Consequences of Heavy Load Drops in Nuclear Power Plants	Continue	1.9.4.2.3 9.1.5.3
189	Susceptibility of Ice Condenser and Mark III Containments to Early Failure from Hydrogen Combustion During a Severe Accident Description	Continue	Not applicable to the AP1000.
191	Assessment Of Debris Accumulation On PWR Sump Performance	h (High)	See DCD Subsections 6.3.2.2.7 and 1.9.4.2.3, item 191
199	Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States	Issue to be Prioritized by NRC in the Future	2.5
Human Factors Issues			
HF1.1	Shift Staffing	f	13.1.2 18.6
HF2.1	Evaluate Industry Training	d	Not applicable to new plants
HF2.2	Evaluate INPO Accreditation	d	Not applicable to new plants
HF2.3	Revise SRP Section 13.2	d	Not applicable to new plants
HF3.1	Develop Job Knowledge Catalog	d	Not applicable to new plants
HF3.2	Develop License Examination Handbook	d	Not applicable to new plants
HF3.5	Develop Computerized Exam System	d	Not applicable to new plants

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Table 1.9-203 (Sheet 16 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
HF4.2	Procedures Generation Package Effectiveness Evaluation	d	Not applicable to new plants
HF7.1	Human Error Data Acquisition	d	Not applicable to new plants
HF7.2	Human Error Data Storage and Retrieval	d	Not applicable to new plants
HF7.3	Reliability Evaluation Specialist Aids	d	Not applicable to new plants
HF7.4	Safety Event Analysis Results Applications	d	Not applicable to new plants
Chernobyl Issues			
CH1.1A	Symptom-Based EOPs	d	Not applicable to new plants
CH1.1B	Procedure Violations	d	Not applicable to new plants
CH1.2A	Test, Change, and Experiment Review Guidelines	d	Not applicable to new plants
CH1.2B	NRC Testing Requirements	d	Not applicable to new plants
CH1.3A	Revise Regulatory Guide 1.47	d	Not applicable to new plants
CH1.4A	Engineered Safety Feature Availability	d	Not applicable to new plants
CH1.4B	Technical Specification Bases	d	Not applicable to new plants
CH1.4C	Low Power and Shutdown	d	Not applicable to new plants
CH1.5	Operating Staff Attitudes Toward Safety	d	Not applicable to new plants
CH1.6A	Assessment of NRC Requirements on Management	d	Not applicable to new plants
CH1.7A	Accident Management	d	Not applicable to new plants
CH2.1A	Reactivity Transients	d	Not applicable to new plants

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Table 1.9-203 (Sheet 17 of 17)
Listing of Unresolved Safety Issues and Generic Safety Issues

Action Plan Item/Issue No.	Title	Applicable Screening Criteria	Notes
CH2.3B	Contamination Outside Control Room	d	Not applicable to new plants
CH2.3C	Smoke Control	d	Not applicable to new plants
CH2.3D	Shared Shutdown Systems	d	Not applicable to new plants
CH2.4A	Firefighting With Radiation Present	d	Not applicable to new plants
CH3.1A	Containment Performance	d	Not applicable to new plants
CH3.2A	Filtered Venting	d	Not applicable to new plants
CH4.3A	Ingestion Pathway Protective Measures	d	Not applicable to new plants
CH4.4A	Decontamination	d	Not applicable to new plants
CH4.4B	Relocation	d	Not applicable to new plants
CH5.1A	Mechanical Dispersal in Fission Product Release	d	Not applicable to new plants
CH5.1B	Stripping in Fission Product Release	d	Not applicable to new plants
CH5.2A	Steam Explosions	d	Not applicable to new plants
CH6.1B	Structural Graphite Experiments	d	Not applicable to new plants
CH6.2	Assessment	d	Not applicable to new plants

Notes (from DCD Table 1.9-2):

(d) Issue is not a design issue (Environmental, Licensing, or Regulatory Impact Issue; or covered in an existing NRC program).
(f) Issue is not an AP1000 design certification issue. Issue is applicable to current operating plants or is programmatic in nature.
(h) Issue is unresolved pending generic resolution (for example, prioritized as High, Medium, or possible resolution identified).
(j) The AP600 DSER (Draft NUREG-1512) identified this item as required to be discussed.

Table 1.9-204 (Sheet 1 of 7)
Generic Communications Assessment

	Number	Title	Comment
	BULLETIN		
STD COL 1.9-2	80-06	Engineered Safety Feature (ESF) Reset Controls (3/80)	See Note a.
	80-10	Contamination of Nonradioactive System and Resulting Potential for Unmonitored, Uncontrolled Release of Radioactivity to Environment (5/80)	Appendix 12AA
LNP COL 1.9-2	80-15	Possible Loss of Emergency Notification System (ENS) with Loss of Offsite Power (6/80)	9.5.2.2.5 9.5.2.5.1
STD COL 1.9-2	88-11	Pressurizer Surge Line Thermal Stratification	3.9.3.1.2
	02-01	Reactor Pressure Vessel Head Degradation and Reactor Coolant Pressure Boundary Integrity	5.2.4 See Note a.
	02-02	Reactor Pressure Vessel Head and Vessel Head Penetration Nozzle Inspection Programs	5.2.4 See Note a.
	03-01	Potential Impact of Debris Blockage on Emergency Sump Recirculation at Pressurized-Water Reactors	6.3 See Note a.
	03-02	Leakage from Reactor Pressure Vessel Lower Head Penetrations and Reactor Coolant Pressure Boundary Integrity	5.2.4.3 See Note a.
	03-03	Potentially Defective 1-inch Valves for Uranium Hexafluoride Cylinders	N/A
	03-04	Rebaselining of Data in the Nuclear Materials Management and Safeguards System	N/A One time report.

Table 1.9-204 (Sheet 2 of 7)
Generic Communications Assessment

	Number	Title	Comment
STD COL 1.9-2	04-01	Inspection of Alloy 82/182/600 Materials Used in the Fabrication of Pressurizer Penetrations and Steam Space Piping Connections at Pressurized-Water Reactors	See Note a.
	05-01	Material Control and Accounting at Reactors and Wet Spent Fuel Storage Facilities	13.5.2.2.9
	05-02	Emergency Preparedness and Response Actions for Security-Based Events	13.3
LNP COL 1.9-2	07-01	Security Officer Attentiveness	Administrative
STD COL 1.9-2	GENERIC LETTERS		
	80-22	Transmittal of NUREG-0654 “Criteria for Preparation and Evaluation of Radiological Emergency Response Plans” (3/80)	13.3
	80-26	Qualifications of Reactor Operators (3/80)	13.2 18.10
	80-51	On-Site Storage Of Low-Level Waste (6/90)	11.4.6
	80-55	Possible Loss of Hotline With Loss Of Off-Site Power	See Bulletin 80-15
	80-77	Refueling Water Level (8/80)	16.1 See Note a.
	80-094	Emergency Plan (11/80)	13.3

Table 1.9-204 (Sheet 3 of 7)
Generic Communications Assessment

	Number	Title	Comment
STD COL 1.9-2	80-099	Technical Specification Revisions for Snubber Surveillance (11/80)	Snubbers no longer in generic Tech Specs See Note a.
	80-108	Emergency Planning (12/80)	13.3
	81-02	Analysis, Conclusions and Recommendations Concerning Operator Licensing (1/81)	13.2
	81-10	Post-TMI Requirements for the Emergency Operations Facility (2/81)	13.3
	81-38	Storage of Low-Level Radioactive Waste at Power Reactor Sites (11/81)	11.4.6
	81-40	Qualifications of Reactor Operators (12/81)	13.1 13.2
	82-02	Commission Policy on Overtime (2/82)	16.1
	82-04	Use of INPO See-in Program (3/82)	13.1 13.5
LNP COL 1.9-2	82-12	Nuclear Power Plant Staff Working Hours (6/82)	13.1.2
STD COL 1.9-2	82-13	Reactor Operator and Senior Reactor Operator Examinations (6/82)	For information only.
	82-18	Reactor Operator and Senior Reactor Operator Requalification Examinations (10/82)	13.2
STD COL 1.9-2	83-06	Certificates and Revised Format For Reactor Operator and Senior Reactor Operator Licenses (1/83)	13.2

Table 1.9-204 (Sheet 4 of 7)
Generic Communications Assessment

Number	Title	Comment
83-11	Licensee Qualification for Performing Safety Analyses in Support of Licensing Actions (2/83)	13.1 See Note a.
83-12	Issuance of NRC FORM 398 - Personal Qualifications Statement - Licensee (2/83)	13.2
83-17	Integrity of the Requalification Examinations for Renewal of Reactor Operator and Senior Reactor Operator Licenses (4/83)	13.1
83-22	Safety Evaluation of “Emergency Response Guidelines” (6/83)	18.9
83-40	Operator Licensing Examination (12/83)	13.2
84-10	Administration of Operating Tests Prior to Initial Criticality (10 CFR 55.25) (4/84)	13.2
84-14	Replacement and Requalification Training Program (5/84)	13.2
84-17	Annual Meeting to Discuss Recent Developments Regarding Operator Training, Qualifications, and Examinations (7/84)	Administrative
84-20	Scheduling Guidance for Licensee Submittals of Reloads That Involve Unreviewed Safety Questions (8/84)	13.5
85-04	Operating Licensing Examinations (1/85)	Administrative
85-05	Inadvertent Boron Dilution Events (1/85)	13.5

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Table 1.9-204 (Sheet 5 of 7)
Generic Communications Assessment

Number	Title	Comment
85-14	Commercial Storage At Power Reactor Sites Of Low Level Radioactive Waste Not Generated By The Utility (8/85)	Administrative
85-18	Operator Licensing Examinations (9/85)	Administrative
85-19	Reporting Requirements On Primary Coolant Iodine Spikes (9/85)	16.1
86-14	Operator Licensing Examinations (8/86)	Administrative
87-14	Operator Licensing Examinations (8/87)	Administrative
88-05	Boric Acid Corrosion of Carbon Steel Reactor Pressure Boundary Components in PWR Plants (3/88)	5.2.4 See Note a.
88-14	Instrument Air Supply System Problems Affecting Safety-Related Equipment (8/88)	9.3.7
88-18	Plant Record Storage on Optical Disk (10/88)	17
89-07	Power Reactors Safeguards Contingency Planning for Surface Vehicle Bombs (4/89)	13.6
89-07 S1	Power Reactor Safeguards Contingency Planning for Surface Vehicle Bombs	13.6
89-08	Erosion/Corrosion-Induced Pipe Wall Thinning	10.1.3.1

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Table 1.9-204 (Sheet 6 of 7)
Generic Communications Assessment

	Number	Title	Comment
	89-12	Operator Licensing Examination (7/89)	13.2
LNP COL 1.9-2	89-15	Emergency Response Data System (8/ 89)	9.5.2.2.5 13.3
STD COL 1.9-2	89-17	Planned Administrative Changes to the NRC Operator Licensing Written Examination Process (9/89)	N/A
LNP COL 1.9-2	91-14	Emergency Telecommunications (9/91)	9.5.2.2.5 13.3
STD COL 1.9-2	91-16	Licensed Operators and Other Nuclear Facility Personnel Fitness for Duty (10/91)	13.7
	92-01	Reactor Vessel Structural Integrity (1/92)	5.3.2.6.3
	93-01	Emergency Response Data System Test Program	13.3
	93-03	Verification of Plant Records	17
	96-02	Reconsideration of Nuclear Power Plant Security Requirements Associated with an Internal Threat (2/96)	13.6
	03-01	Control Room Habitability	6.4 See Note a.
	04-01	Requirements for Steam Generator Tube Inspections	5.4.2.5 16.1 See Note a.

Table 1.9-204 (Sheet 7 of 7)
Generic Communications Assessment

	Number	Title	Comment
STD COL 1.9-2	04-02	Potential Impact of Debris Blockage on Emergency Recirculation during Design Basis Accidents at Pressurized-Water Reactors	6.3.8.1 See Note a.
	06-01	Steam Generator Tube Integrity and Associated Technical Specifications	5.4.2.5 16.1 See Note a.
	06-02	Grid Reliability and the Impact on Plant Risk and the Operability of Offsite Power	8.2.1.1 8.2.2 See Note a.
	06-03	Potentially Nonconforming Hemyc and MT Fire Barrier Configurations	9.5.1.8 See Note a.
	07-01	Inaccessible or Underground Power Cable Failures that Disable Accident Mitigation Systems or Cause Plant Transients.	17.6 See Note a.
LNP COL 1.9-2	08-01	Managing Gas Accumulation in Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems	5.4 6.2 6.3 See Note a.

STD COL 1.9-2 (a) The design aspects of this topic are as stated in the AP1000 DCD.

Add the following section after DCD Section 1.9.

1.10 NUCLEAR POWER PLANTS TO BE OPERATED ON MULTI-UNIT SITES

STD SUP 1.10-1

The certification for the AP1000 is for a single unit. Dual siting of AP1000 is achievable, provided that the centerlines of the units are sufficiently separated. The primary consideration in setting this separation distance is the space needed to support plant construction via the use of a heavy-lift crane.

Security controls during construction and operation are addressed in the Physical Security Plan.

Management and administrative controls are established to identify potential hazards to structures, systems, and components (SSCs) of an operating unit as a result of construction activities at a unit under construction. Controls within this section are not required unless there is an operating unit on the site, i.e., a unit with fuel loaded into the reactor vessel. Advance notification, scheduling and planning allow site management to implement interim controls to reduce the potential for impact to SSCs.

This section presents an assessment of the potential impacts of construction of one unit on SSCs important to safety for an operating unit, in accordance with 10 CFR 52.79(a)(31). This assessment includes:

- Identification of potential construction activity hazards
- Identification of SSCs important to safety and limiting conditions for operation (LCOs) for the operating unit
- Identification of potentially impacted SSCs and LCOs
- Identification of applicable managerial and administrative controls

1.10.1 POTENTIAL CONSTRUCTION ACTIVITY HAZARDS

LNP SUP 1.10-1

The power blocks for LNP 1 and 2 have a minimum separation of at least 274 meters (900 feet) between plant centerlines.

STD SUP 1.10-1

Construction activities may include site exploration, grading, clearing, and installation of drainage and erosion-control measures; boring, drilling, dredging, pile driving and excavating; transportation, storage and warehousing of equipment; and construction, erection, and fabrication of new facilities.

Construction activities and their representative hazards to an operating unit are shown in Table 1.10-201.

1.10.2 POTENTIALLY IMPACTED SSCS AND LIMITING CONDITIONS FOR OPERATION

The construction activities described above were reviewed for possible impact to operating unit SSCs important to safety.

LNP SUP 1.10-1

- LNP 1 and 2 SSCs important to safety are described in LNP FSAR Chapter 3.
- As indicated in Chapter 16, the LCOs for LNP 1 and 2 are located in Part 4 of the COL Application.

STD SUP 1.10-1

The initial assessment consisted of a review of individual SSCs and LCOs to determine whether an item is applicable, or may be eliminated due to either examination or being internal and specific to an operating unit. The assessment identified the SSCs that could reasonably be expected to be impacted by construction activities unless administrative and managerial controls are established. The results of the assessment are presented in Table 1.10-202.

Periodic assessment during construction is addressed in Appendix 13AA, Subsection 13AA.1.1.1.1.8.

1.10.3 MANAGERIAL AND ADMINISTRATIVE CONTROLS

To eliminate or mitigate construction hazards that could potentially impact operating unit SSCs important to safety, specific managerial and administrative controls have been identified as shown in Table 1.10-203.

Although not all of the managerial and administrative construction controls are necessary to protect the operating unit, the identified controls are applied to any operating unit as a conservative measure. This conservative approach provides reasonable assurance of protecting the identified SSCs from potential construction hazards and preventing the associated LCOs specified in the operating unit Technical Specifications from being exceeded as a result of construction activities, as discussed below.

The majority of the operating unit SSCs important to safety are contained and protected within safety-related structures. The managerial controls protect these internal SSCs from postulated construction hazards by maintaining the integrity and design basis of the safety-related structures and foundations. Heavy load drop controls, crane boom failure standoff requirements, ground vibration controls and construction generated missile(s) control are examples of managerial controls that provide this protection.

Other managerial controls support maintaining offsite power, control of hazardous materials and gases, and protection of cooling water supplies and safety system instrumentation. These managerial controls prevent or mitigate external construction impacts that could affect SSCs important to safety. These controls also prevent or mitigate unnecessary challenges to safety systems caused by plant construction hazards, such as disruption of offsite transmission lines or impact to plant cooling water supplies.

The above discussed controls to eliminate or mitigate construction hazards that could potentially impact operating unit SSCs important to safety are in place when there is an operating nuclear unit on the site. Additional controls may be established during construction as addressed in Appendix 13AA, Subsection 13AA.1.1.1.1.8.

STD SUP 1.10-1

Table 1.10-201 (Sheet 1 of 2)
Potential Hazards from Construction Activities

Construction Activity Hazard	Potential Impact
Site Exploration, Grading, Clearing, Installation of Drainage and Erosion Control Measures	• Overhead Power Lines • Transmission Towers • Underground Conduits, Piping, Tunnels, etc. • Site Access and Egress • Drainage Facilities and Structures • Onsite Transportation Routes • Slope Stability • Soil Erosion and Local Flooding • Construction-Generated Dust and Equipment Exhausts • Encroachment on Plant Control Boundaries • Encroachment on Structures and Facilities
Boring, Drilling, Pile Driving, Dredging, Demolition, Excavation	• Underground Conduits, Piping, Tunnels, etc. • Foundation Integrity • Structural Integrity • Slope Stability • Erosion and Turbidity Control • Groundwater and Groundwater Monitoring Facilities • Dewatering Structures, Systems and Components • Nearby Structures, Systems and Components • Vibratory Ground Motion
Equipment Movement, Material Delivery, Vehicle Traffic	• Overhead Power Lines • Transmission Towers • Underground Conduits, Piping, Tunnels • Crane Load Drops • Crane or Crane Boom Failures • Vehicle Accidents • Rail Car Derailments
Equipment and Material Laydown, Storage, Warehousing	• Releases of Flammable, Hazardous or Toxic Materials • Wind-Generated, Construction-Related Debris and Missiles

STD SUP 1.10-1

Table 1.10-201 (Sheet 2 of 2)
Potential Hazards from Construction Activities

Construction Activity Hazard	Potential Impact
General Construction, Erection, Fabrication	• Physical Integrity of Structures, Systems and Components • Adjacent or Nearby Structures, Systems and Components • Instrumentation and Control Systems and Components • Electrical Systems and Components • Cooling Water Systems and Components • Waste Heat Environmental Controls and Parameters • Radioactive Waste Release Points and Parameters • Abandonment of Structures, Systems or Components • Relocation of Structures, Systems or Components • Removal of Structures, Systems or Components
Connection, Integration, Testing	• Instrumentation and Control Systems and Components • Electrical and Power Systems and Components • Cooling Water Systems and Components

STD SUP 1.10-1

Table 1.10-202 (Sheet 1 of 2)
Hazards During Construction Activities

Construction Hazard	Impacted SSCs
Impact on Overhead Power Lines	• Offsite Power System
Impact on Transmission Towers	• Offsite Power Systems
Impact on Utilities, Underground Conduits, Piping, Tunnels, Tanks	• Fire Protection System • Service Water System(1)
Impact of Construction-Generated Dust and Equipment Exhausts	• Control Room Emergency HVAC Systems(1) • Diesel Generators
Impact of Vibratory Ground Motion	• Offsite Power System • Onsite Power Systems • Instrumentation and Seismic Monitors
Impact of Crane or Crane Boom Failures	• Safety-Related Structures
Impact of Releases of Flammable, Hazardous or Toxic Materials	• Control Room Emergency HVAC Systems(1)
Impact of Wind-Generated, Construction-Related Debris and Missiles	• Safety-Related Structures • Control Room Emergency HVAC Air Intake(1)
Impact on Electrical Systems and Components	• Offsite Power System • Onsite Power Systems
Impact on Cooling Water Systems and Components	• Service Water System(1) • Ultimate Heat Sink(1)
Impact on Radioactive Waste Release Points and Parameters	• Gaseous and Liquid Radioactive Waste Management Systems
Impact of Relocation of Structures, Systems or Components	• Fire Protection System • Service Water System(1)
Impact of Site Groundwater Depression and Dewatering	• Safety-Related Structures and Foundations

STD SUP 1.10-1

Table 1.10-202 (Sheet 2 of 2)
Hazards During Construction Activities

Construction Hazard	Impacted SSCs
Impact of Equipment Delivery and Heavy Equipment Delivery	• Safety-Related Structures and Foundations
Impact of Local Flooding	• Safety-related structures, systems, and components (SSCs)

[1] Not applicable to AP1000 operating units.

STD SUP 1.10-1

Table 1.10-203 (Sheet 1 of 3)
Managerial and Administrative Construction Controls

Construction Hazards to SSCs	Managerial Control
Impact on Transmission Power Lines and Offsite Power Lines	• Safe standoff clearance distances are established for transmission power lines, including verification of standoff distance for modules, the reactor vessel and other equipment to be transported beneath energized electric lines to meet minimum standoff clearance requirements. • Physical warning or caution barriers and signage are erected along transport routes.
Impact on Transmission Towers	• Establish controls or physical barriers to avoid equipment collisions with electric transmission support towers
Impact on Utilities, Underground Conduits, Piping, Tunnels, Tanks	• Grading, excavation, and pile driving require location and identification of equipment or underground structures that must be relocated, removed, or left in place and protected prior to the work activity.
Impact of Construction-Generated Dust and Equipment Exhausts	• Fugitive dust and dust generation is controlled. Potentially affected system air intakes and filters are periodically monitored.
Impact of Vibratory Ground Motion	• Construction administrative procedures, methods, and controls are implemented to prevent exceeding ground vibration and instrumentation limit settings.
Impact of Crane or Crane Boom Failures	• Construction standoff distance controls prevent heavy load impacts from crane boom failures and crane load drops. Drop analyses may be substituted if minimum standoff distances are not practical.

STD SUP 1.10-1

Table 1.10-203 (Sheet 2 of 3)
Managerial and Administrative Construction Controls

Construction Hazards to SSCs	Managerial Control
Impact of Releases of Flammable, Hazardous or Toxic Materials and Missile Generation	• Environmental, safety and health controls limit transport, storage, quantities, type and use of flammable, hazardous, toxic materials and compressed gasses. Construction safety and storage controls maintain potential missile generation events from compressed gasses within the operating unit design basis.
Impact of Wind-Generated, Construction-Related Debris and Missiles	• Administrative controls address equipment, material storage and transport during high winds or high wind warnings. • Plant procedures are followed during severe weather conditions which may call for power reduction or shut down.
Impact on Electrical Systems and Components	• Affected operating unit electrical systems and components within the construction area are identified and isolated or relocated or otherwise protected.
Impact on Cooling Water Systems and Components	• Transport of heavy load equipment over buried cooling water piping is prohibited without evaluation.
Impact on Radioactive Waste Release Points and Parameters	• Engineering evaluation and managerial controls are implemented, as necessary, to prevent radioactive releases beyond the established limits due to construction activity.
Impact of Relocation of Structures, Systems or Components	• Administrative controls identify SSCs that require relocation. Temporary or permanent design changes are implemented if necessary.

STD SUP 1.10-1

Table 1.10-203 (Sheet 3 of 3)
Managerial and Administrative Construction Controls

Construction Hazards to SSCs	Managerial Control
Impact of Equipment Delivery and Heavy Equipment Delivery	• Rail transport speed limits and maximum rail loading weights onsite are established. • General equipment and heavy equipment movement controls and limitations are established.
Impact of Local Flooding	• Site grading and drainage provisions consider potential flooding impacts from local intense precipitation
Impact of Site Groundwater Dewatering	• Administrative controls address groundwater level monitoring

APPENDIX 1A CONFORMANCE WITH REGULATORY GUIDES

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

STD COL 1.9-1 Appendix 1AA is provided to supplement the information in DCD Appendix 1A.

APPENDIX 1B SEVERE ACCIDENT MITIGATION DESIGN ALTERNATIVES

STD SUP 1B-1 DCD Appendix 1B is not incorporated into this FSAR. Rather, the severe accident mitigation design alternatives are addressed in the Environmental Report. As indicated in 10 CFR Part 52, Appendix D, Section III.B, "...the evaluation of severe accident mitigation design alternatives in appendix 1B of the generic DCD are not part of this appendix."

APPENDIX 1AA CONFORMANCE WITH REGULATORY GUIDES

STD COL 1.9-1

DIVISION 1- Power Reactors

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
Regulatory Guide 1.7, Rev. 3, 03/07 – Control of Combustible Gas Concentrations in Containment			
Conformance of the design aspects with Revision 2 of the Regulatory Guide is as stated in the DCD. Conformance with Revision 3 of this Regulatory Guide for programmatic and/or operational aspects is documented below.			
C.2		Conforms	
C.4		Conforms	
Regulatory Guide 1.8, Rev. 3, 5/00 – Qualification and Training of Personnel for Nuclear Power Plants			
C.1		Conforms	
C.2	Section 4 of ANSI/ANS-3.1-1993	Exception	Not able to meet Regulatory Guide 1.8, Rev. 3 qualification requirements for licensed personnel prior to operations.
Regulatory Guide 1.11, Rev. 1, 3/10 – Instrument Lines Penetrating the Primary Reactor Containment			
Conformance with the design aspects is as stated in the DCD. This guidance is completely within the scope of the DCD.			
Regulatory Guide 1.12, Rev. 2, 3/97 – Nuclear Power Plant Instrumentation for Earthquakes			
Conformance of the design aspects is as stated in the DCD. Conformance for programmatic and/or operational aspects is documented below.			
C.3		Conforms	
C.8		Conforms	
Regulatory Guide 1.13, Rev. 2, 03/07 - Spent Fuel Storage Facility Design Basis			

	Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
STD COL 1.9-1	Conformance of the design aspects with Revision 1 of the Regulatory Guide is as stated in the DCD. Conformance with Revision 2 of this Regulatory Guide for programmatic and/or operational aspects is documented below.			
		C.7	Conforms	
	Regulatory Guide 1.20, Rev. 3, 3/07 – Comprehensive Vibration Assessment Program For Reactor Internals During Preoperational and Initial Startup Testing			
	Conformance with Revision 2 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.			
	Regulatory Guide 1.21, Rev. 1, 6/74 – Measuring Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents From Light-Water-Cooled Nuclear Power Plants			
	Conformance of the design aspects is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.			
		C.1	Conforms	
		C.3-C.5	Conforms	
		C.6	Conforms	
		C.7-C.14	Conforms	
LNP COL 1.9-1	**Regulatory Guide 1.23, Rev. 1, 3/07 –Meteorological Monitoring Programs for Nuclear Power Plants**			
		C.1-C.5	Conforms	

	Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
LNP COL 1.9-1	C.6		Exception	The lowest wind speed Category (≤ 5 m/s) in Table 3 was revised from the RG 1.23 guidance to reflect two categories (i.e., ≤ 4 m/s to represent the manufacturer's stated instrument threshold, and 0.4 to 5.0 m/s). The additional lowest wind speed category was included because of the high frequency of observed light, but non-calm winds at the LNP site and the low starting speed of the instrumentation. Approximately 19 percent of all observed winds were assigned to the lowest wind speed category after a detailed review of the meteorological data.
	C.7-C.9		Conforms	

STD COL 1.9-1

Regulatory Guide 1.26, Rev. 4, 3/07 – Quality Group Classifications and Standards for Water-, Steam-, and Radioactive-Waste-Containing Components of Nuclear Power Plants

Conformance with Revision 3 of the Regulatory Guide for DCD scope of work is as stated in the DCD. Conformance with Revision 4 of this Regulatory Guide for remaining scope is documented below.

General	Conforms	

Regulatory Guide 1.28, Rev. 3, 8/85 – Quality Assurance Program Requirements (Design and Construction)

Conformance for DCD scope of work is as stated in the DCD. Conformance for remaining scope is documented below.

General	Exception	Quality assurance requirements utilize the more recently NRC endorsed NQA-1 in lieu of the identified outdated standards.

Regulatory Guide 1.29, Rev. 4, 3/07 – Seismic Design Classification

Conformance with Revision 3 of the Regulatory Guide for DCD scope of work is as stated in the DCD. Conformance with Revision 4 of this Regulatory Guide for remaining scope is documented below.

	Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
STD COL 1.9-1	C.4		Conforms	

Regulatory Guide 1.30, Rev. 0, 8/72 – Quality Assurance Requirements for the Installation, Inspection, and Testing of Instrumentation and Electric Equipment

Conformance for DCD scope of work is as stated in the DCD. Conformance for remaining scope is documented below.

General	Exception	Quality assurance requirements utilize the more recently NRC endorsed NQA-1 in lieu of the identified outdated standards.

Regulatory Guide 1.32, Rev. 3, 03/04 – Criteria for Power Systems for Nuclear Power Plants

Conformance of the design aspects with Revision 2 of the Regulatory Guide is as stated in the DCD. Conformance with Revision 3 of this Regulatory Guide for programmatic and/or operational aspects is documented below.

General	Conforms	

LNP COL 1.9-1

Regulatory Guide 1.33, Rev. 2, 2/78 – Quality Assurance Program Requirements (Operation)

General	Exception	The QAPD identified in Section 17.5 follows NQA-1 and NEI 06-14A, August 2010, rather than the older standards referenced in Regulatory Guide 1.33.

STD COL 1.9-1

Regulatory Guide 1.37, Rev. 1, 3/07 – Quality Assurance Requirements for Cleaning of Fluid Systems and Associated Components of Water Cooled Nuclear Power Plants

Conformance of the design aspects with Revision 0 of the Regulatory Guide is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.

General	Conforms	

Regulatory Guide 1.38, Rev. 2, 5/77 – Quality Assurance Requirements for Packaging, Shipping, Receiving, Storage and Handling of Items for Water-Cooled Nuclear Power Plants

	Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
STD COL 1.9-1	Conformance for DCD scope of work is as stated in the DCD. Conformance for remaining scope is documented below.			
	General		Exception	Quality assurance requirements utilize the more recently NRC endorsed NQA-1 in lieu of the identified outdated standards.
	Regulatory Guide 1.39, Rev. 2, 9/77 – Housekeeping Requirements for Water-Cooled Nuclear Power Plants			
	Conformance for DCD scope of work is as stated in the DCD. Conformance for remaining scope is documented below.			
	General		Exception	Quality assurance requirements utilize the more recently NRC endorsed NQA-1 in lieu of the identified outdated standards.
	Regulatory Guide 1.45, Rev. 0, 5/73 – Reactor Coolant Pressure Boundary Leakage Detection Systems			
	Conformance of the design aspects is as stated in the DCD. Conformance with programmatic and/or operational aspects is documented below.			
	C.7		Conforms	
LNP DEP 6.4-1	**Regulatory Guide 1.52, Rev. 3, 6/01 – Design, Inspection and Testing Criteria for Air Filtration and Adsorption Units of Post-Accident Engineered-Safety-Feature Atmosphere Cleanup Systems in Light-Water-Cooled Nuclear Power Plants**			
	Conformance with the design and operational aspects is as stated in the DCD, with the exception of Criteria Section C.4.9 and Table 1. Conformance with Section C.4.9 and Table 1 is documented below.			
	C.4.9		Conforms	
	Table 1		Conforms	
STD COL 1.9-1	**Regulatory Guide 1.53, Rev. 2, 11/03 – Application of the Single-Failure Criterion to Safety Systems**			
	Conformance of the design aspects with Revision 0 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.			

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
Regulatory Guide 1.54, Rev. 1, 7/00 – Service Level I, II, And III Protective Coatings Applied To Nuclear Power Plants			
Conformance of the design aspects is as stated in the DCD. Conformance with programmatic and/or operational aspects is documented below.			
	General	Conforms	
Regulatory Guide 1.57, Rev. 1, 3/07 – Design Limits and Loading Combinations for Metal Primary Reactor Containment System Components			
Conformance with Revision 0 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.			
Regulatory Guide 1.59, Rev. 2, 8/77 – Design Basis Floods for Nuclear Power Plants			
	General	Exception	Regulatory Guide 1.59, Appendix A indicates use of ANSI N170-1976 "Standards for Determining Design Basis Flooding at Power Reactor Sites." In place of this standard, ANSI/ANS 2.8-1992 "Determining Design Basis Flooding at Power Reactor Sites" was used. ANSI/ANS 2.8-1992 was withdrawn on July 26, 2002. However, a replacement standard has not been issued. NUREG-0800 2.4.3 Revision 4, March 2007 and 2.4.4 Revision 3, March 2007 include ANSI/ANS 2.8-1992 as a reference. ANSI/ANS 2.8-1992 is also specifically identified in the review procedures subsection of NUREG-0800 2.4.4.
STD COL 1.9-1			
Regulatory Guide 1.61, Rev. 1, 3/07 – Damping Values for Seismic Design of Nuclear Power Plants			
Conformance with Revision 0 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.			

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
Regulatory Guide 1.65, Rev. 0, 10/73 – Materials and Inspections for Reactor Vessel Closure Studs			
Conformance of the design aspects is as stated in the DCD. Conformance with programmatic and/or operational aspects is documented below.			
	C.3	Conforms	
	C.4	Exception	ASME XI ISI criteria for reactor vessel closure stud examinations are applied in lieu of the ASME III NB 2545 and NB 2546 surface examinations. The volumetric examinations currently required by ASME XI provide improved (since 1973) detection of bolting degradation.
Regulatory Guide 1.68, Rev. 3, 3/07 – Initial Test Program for Water-Cooled Nuclear Power Plants			
Conformance with Revision 2 of the Regulatory Guide is documented in the DCD. Conformance of the design aspects is as stated in the DCD. Conformance with Revision 3 of this Regulatory Guide for programmatic and/or operational aspects is documented below.			
	C.2-C.9 Appendix B Appendix C	Conforms	
STD COL 1.9-1	**Regulatory Guide 1.70, Rev. 3, 11/78, Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants (LWR Edition)**		
	General	Exception	The format and content of the FSAR follow Regulatory Guide 1.206 and the AP1000 Design Control Document as required by Appendix D of 10 CFR Part 52.
Regulatory Guide 1.71, Rev. 1, 3/07 – Welder Qualification for Areas of Limited Accessibility			
Conformance of the design aspects with Revision 0 of the Regulatory Guide is as stated in the DCD. Conformance with Revision 1 of the Regulatory Guide during the operational phase (i.e., after the construction phase is completed per the DCD) is documented below.			

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
General		Conforms	

Regulatory Guide 1.75, Rev. 3, 2/05 – Criteria for Independence of Electrical Safety Systems

Conformance with Revision 2 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.

Regulatory Guide 1.76, Rev. 1, 3/07 – Design-Basis Tornado and Tornado Missiles for Nuclear Power Plants

Conformance with Revision 0 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.

Regulatory Guide 1.78, Rev. 1, 12/01 – Evaluating the Habitability of a Nuclear Power Plant Control Room During a Postulated Hazardous Chemical Release

Conformance with the design aspects is as stated in the DCD. Conformance with programmatic and/or operational aspects is documented below.

General		Conforms

Regulatory Guide 1.82, Rev. 3, 11/03 – Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident

Conformance with the design aspects is as stated in the DCD. Conformance with programmatic and/or operational aspects is documented below.

STD COL 1.9-1	C.1.1.2	Conforms	
	C.1.1.5	Conforms	

Regulatory Guide 1.83, Rev. 1, 7/75 – Inservice Inspection of Pressurized Water Reactor Steam Generator Tubes

Conformance of the design aspects is as stated in the DCD. The programmatic and/or operational aspects are not applicable since this guidance was withdrawn by NRC (74 FR 58324, 11/12/2009).

Regulatory Guide 1.84, Rev. 33, 8/05 – Design, Fabrication, and Materials Code Case Acceptability, ASME Section III

Conformance with Revision 32 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions

Regulatory Guide 1.86, Rev. 0, 6/74 - Termination of Operating Licenses for Nuclear Reactors

This Regulatory Guide is outside the scope of the FSAR.

Regulatory Guide 1.91, Rev. 1, 2/78 – Evaluations of Explosions Postulated to Occur on Transportation Routes Near Nuclear Power Plants

Conformance of the design aspects is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.

	General	Conforms	

Regulatory Guide 1.92, Rev. 2, 07/06 – Combining Modal Responses and Spatial Components in Seismic Response Analysis

Conformance with Revision 1 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.

Regulatory Guide 1.94, Rev. 1, 4/76 – Quality Assurance Requirements for Installation, Inspection and Testing of Structural Concrete and Structural Steel During the Construction Phase of Nuclear Power Plants

Conformance for DCD scope of work is as stated in the DCD. Conformance for remaining scope is documented below.

STD COL 1.9-1	General	Exception	Quality assurance requirements utilize the more recently NRC endorsed NQA-1 in lieu of the identified outdated standards.

Regulatory Guide 1.97, Rev. 4, 6/06 – Criteria For Accident Monitoring Instrumentation For Nuclear Power Plants

Conformance with Revision 3 of the Regulatory Guide is as stated in the DCD. Conformance with this Regulatory Guide for programmatic and/or operational aspects is documented below.

	General	Exception	Portable equipment outside the DCD scope conforms to Revision 3 of this Regulatory Guide for consistency with DCD scope since Revision 4 indicates that partial implementation is not advised.

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
Regulatory Guide 1.101, Rev. 5, 6/05 – Emergency Response Planning and Preparedness for Nuclear Power Reactors			
	General	Exception	Rev. 5 is not applicable for this site. Rev. 3 and 4 are essentially the same except for endorsement of NEI 99-01 which is not directly applicable to the AP1000 passive design. The EP conforms to Rev. 3 and 4 with the exception that the EALs are written with necessary modifications to address the passive plant design.
Regulatory Guide 1.109, Rev. 1, 10/77 – Calculation of Annual Doses to Man from Routine Releases of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR Part 50, Appendix I			
	Conformance of the design aspects is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.		
	General	Conforms	
Regulatory Guide 1.110, Rev. 0, 3/76 – Cost-Benefit Analysis for Radwaste Systems for Light-Water-Cooled Nuclear Power Reactors			
STD COL 1.9-1	Conformance of the design aspects is as stated in the DCD. Conformance with Revision 0 of this Regulatory Guide for programmatic and/or operational aspects is documented below.		
	General	Conforms	
Regulatory Guide 1.111, Rev. 1, 7/77 – Methods for Estimating Atmospheric Transport and Dispersion of Gaseous Effluents in Routine Releases from Light-Water-Cooled Reactors			
	General	Conforms	
Regulatory Guide 1.112, Rev. 1, 3/07 – Calculation of Releases of Radioactive Materials in Gaseous and Liquid Effluents from Light-Water-Cooled Nuclear Power Reactors			
	Conformance of the design aspects with Revision 0-R of the Regulatory Guide is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.		

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
General	ANSI 18.1-1999	Conforms	

Regulatory Guide 1.113, Rev. 1, 4/77 – Estimating Aquatic Dispersion of Effluents from Accidental and Routine Reactor Releases for the Purpose of Implementing Appendix I

General	Conforms	

Regulatory Guide 1.114, Rev. 2, 5/89 – Guidance to Operators at the Controls and to Senior Operators in the Control Room of a Nuclear Power Unit

General	Conforms	

Regulatory Guide 1.115, Rev. 1, 7/77 – Protection Against Low-Trajectory Turbine Missiles

Conformance of the design aspects is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.

General	Conforms	

Regulatory Guide 1.116, Rev. 0-R, 5/77 – Quality Assurance Requirements for Installation, Inspection, and Testing of Mechanical Equipment and Systems

STD COL 1.9-1

Conformance for DCD scope of work is as stated in the DCD. Conformance for remaining scope is documented below.

General	Exception	Quality assurance requirements utilize the more recently NRC endorsed NQA-1 in lieu of the identified outdated standards.

Regulatory Guide 1.124, Rev. 2, 02/07 – Service Limits and Loading Combinations for Class 1 Linear-Type Supports

Conformance with Revision 1 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.

Regulatory Guide 1.128, Rev. 2, 2/07 – Installation Design and Installation of Vented Lead-Acid Storage Batteries for Nuclear Power Plants

Conformance with Revision 1 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.

	Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
	Regulatory Guide 1.129, Rev. 2, 2/07 – Maintenance, Testing, and Replacement of Vented Lead-Acid Storage Batteries for Nuclear Power Plants			
	General	IEEE Std. 450-2002	Exception	Approved Generic Technical Specifications are based on IEEE Std 450-1995.
	Regulatory Guide 1.130, Rev. 2, 3/07 - Service Limits and Loading Combinations for Class 1 Plate-And-Shell-Type Supports			
	Conformance with Revision 1 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.			
	Regulatory Guide 1.132, Rev. 2, 10/03 – Site Investigations for Foundations of Nuclear Power Plants			
	General		Conforms	
	Regulatory Guide 1.133, Rev. 1, 5/81 – Loose-Part Detection Program for the Primary System of Light-Water-Cooled Reactors			
	Conformance of the design aspects is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.			
STD COL 1.9-1	C.2b		Conforms	Procedures are addressed in Section 13.5
	C.3a		Conforms	Procedures are addressed in Section 13.5
	C.4g		Conforms	Procedures are addressed in Section 13.5
	C.4h		Conforms	Procedures are addressed in Section 13.5
	C.4i		Conforms	ALARA is addressed in Chapter 12 and Section 13.5
	C.4j		Conforms	Training is addressed in Section 13.2

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
C.6		Exception	Regulatory Guide 1.16 has been withdrawn. Event reporting is performed in accordance with 10 CFR 50.72 and 50.73 utilizing the guidance of NUREG-1022.

Regulatory Guide 1.134, Rev. 3, 3/98 – Medical Evaluation of Licensed Personnel at Nuclear Power Plants

General Conforms

Regulatory Guide 1.135, Rev. 0, 9/77 – Normal Water Level and Discharge at Nuclear Power Plants

Conformance of the design aspects is as stated in the DCD. The programmatic and/or operational aspects are not applicable since this guidance was withdrawn by NRC (74 FR 39349, 08/06/2009).

Regulatory Guide 1.138, Rev. 2, 12/03 – Laboratory Investigations of Soils and Rocks for Engineering Analysis and Design of Nuclear Power Plants

General Conforms

Regulatory Guide 1.139, Rev. 0, 5/78 – Guidance for Residual Heat Removal

Conformance with the design aspects is as stated in the DCD. The programmatic and/or operational aspects are not applicable since this guidance was withdrawn by NRC (73 FR 32750, 06/10/2008).

STD COL 1.9-1

Regulatory Guide 1.143, Rev. 2, 11/01 – Design Guidance for Radioactive Waste Management Systems, Structures, and Components Installed in Light-Water-Cooled Nuclear Power Plants

Conformance of the design aspects is as stated in the DCD. Conformance with Revision 2 of this Regulatory Guide for programmatic and/or operational aspects is documented below.

General Conforms

Regulatory Guide 1.145, Rev. 1, 11/82 (Revised 2/83 to correct page 1.145-7) – Atmospheric Dispersion Models for Potential Accident Consequence Assessments at Nuclear Power Plants

General Conforms

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
	Regulatory Guide 1.147, Rev. 15, 10/07 – Inservice Inspection Code Case Acceptability, ASME Section XI, Division 1		
	Conformance with Revision 12 of the Regulatory Guide is documented in the DCD. Conformance of the design aspects is as stated in the DCD. Conformance with Revision 15 of this Regulatory Guide for programmatic and/or operational aspects is documented below.		
	General	Conforms	
	Regulatory Guide 1.149, Rev. 3, 10/01 – Nuclear Power Plant Simulation Facilities for Use in Operator Training and License Examinations		
	C.1	Conforms	During cold licensing, training is conducted using a simulator with limited scope in accordance with Appendix D of ANSI/ANS-3.5-1998. Operator Licensing examinations are conducted on a simulator meeting the applicable requirements of ANSI/ANS-3.5-1998.
	Regulatory Guide 1.150, Rev. 1, 2/83 – Ultrasonic Testing of Reactor Vessel Welds During Preservice and Inservice Examinations		
	Conformance with the design aspects is as stated in the DCD. The programmatic and/or operational aspects are not applicable since this guidance was withdrawn by NRC (73 FR 7766, 2/11/2008).		
STD COL 1.9-1	**Regulatory Guide 1.152, Rev. 2, 1/06 – Criteria for Use of Computer Systems in Safety Systems of Nuclear Power Plants**		
	Conformance of the design aspects with Revision 1 of the Regulatory Guide is as stated in the DCD. Conformance with Revision 2 of this Regulatory Guide for programmatic and/or operational aspects is documented below.		
	General	Exception	The Cyber Security Program is based on March 2009 revisions of the 10 CFR 73.54 regulations in lieu of Revision 2 of this Regulatory Guide.
	Regulatory Guide 1.154, Rev. 0, 1/87 – Format and Content of Plant-Specific Pressurized Thermal Shock Safety Analysis Reports for Pressurized Water Reactors		
	General	Conforms	

	Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
	Regulatory Guide 1.159, Rev. 1, 10/03 – Assuring the Availability of Funds for Decommissioning Nuclear Reactors			
		General	N/A	This Regulatory Guide is outside the scope of the FSAR.
	Regulatory Guide 1.160, Rev. 2, 3/97 – Monitoring the Effectiveness of Maintenance at Nuclear Power Plants			
		General	Conforms	
	Regulatory Guide 1.162, Rev. 0, 2/96 – Format and Content of Report for Thermal Annealing of Reactor Pressure Vessels			
			N/A	This Regulatory Guide is outside the scope of the FSAR.
	Regulatory Guide 1.163, Rev. 0, 9/95 – Performance-Based Containment Leak-Test Program			
	Conformance of the design aspects is as stated in the DCD. Conformance with Revision 0 of this Regulatory Guide for programmatic and/or operational aspects is documented below.			
		General	Conforms	
STD COL 1.9-1	**Regulatory Guide 1.165, Rev. 0, 3/97 – Identification and Characterization of Seismic Sources and Determination of Safe Shutdown Earthquake Ground Motion**			
		General	N/A	Seismic analysis performed in accordance with Regulatory Guide 1.208.
	Regulatory Guide 1.166, Rev. 0, 3/97 – Pre-Earthquake Planning and Immediate Nuclear Power Plant Operator Postearthquake Actions			
		General	Conforms	
	Regulatory Guide 1.167, Rev. 0, 3/97 – Restart of a Nuclear Power Plant Shut Down by a Seismic Event			
		General	Conforms	

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions

Regulatory Guide 1.168, Rev. 1, 2/04 – Verification, Validation, Reviews, and Audits for Digital Computer Software Used in Safety Systems of Nuclear Power Plants

Conformance of the design aspects with Revision 0 of the Regulatory Guide is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.

	General	Conforms

Regulatory Guide 1.174, Rev. 1, 11/02 – An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis

This Regulatory Guide is outside the scope of the FSAR.

Regulatory Guide 1.175, Rev. 0, 8/98 – An Approach for Plant-Specific, Risk-Informed Decisionmaking: Inservice Testing

Risk-informed inservice testing is not being utilized for this plant.

Regulatory Guide 1.177, Rev. 0, 8/98 – An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications

	General	Conforms

Regulatory Guide 1.178, Rev. 1, 9/03 – An Approach for Plant-Specific Risk-Informed Decisionmaking for Inservice Inspection of Piping

STD COL 1.9-1 Risk-informed inservice inspection is not being utilized for this plant.

Regulatory Guide 1.179, Rev. 0, 1/99 – Standard Format and Content of License Termination Plans for Nuclear Power Reactors

	N/A	This Regulatory Guide is outside the scope of the FSAR.

Regulatory Guide 1.180, Rev. 1, 10/03 – Guidelines for Evaluating Electromagnetic and Radio-Frequency Interference in Safety-Related Instrumentation and Control Systems

Conformance of the design aspects is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
General		Conforms	Exclusion zones are established through administrative controls to prohibit the activation of portable EMI/RFI emitters (e.g., welders and transceivers) in areas where safety-related I&C systems are installed.

Regulatory Guide 1.181, Rev. 0, 9/99 – Content of the Updated Final Safety Analysis Report in Accordance with 10 CFR 50.71(e)

General		Conforms	

Regulatory Guide 1.182, Rev. 0, 5/00 – Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants

General		Conforms	

Regulatory Guide 1.184, Rev. 0, 7/00 – Decommissioning of Nuclear Power Reactors

		N/A	This Regulatory Guide is outside the scope of the FSAR.

Regulatory Guide 1.185, Rev. 0, 7/00 – Standard Format and Content for Post-shutdown Decommissioning Activities Report

		N/A	This Regulatory Guide is outside the scope of the FSAR.

STD COL 1.9-1

Regulatory Guide 1.186, Rev. 0, 12/00 – Guidance and Examples for Identifying 10 CFR 50.2 Design Bases

		N/A	This Regulatory Guide is outside the scope of the FSAR.

Regulatory Guide 1.187, Rev. 0, 11/00 – Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments

General		Conforms	

Regulatory Guide 1.188, Rev. 1, 9/05 – Standard Format and Content for Applications To Renew Nuclear Power Plant Operating Licenses

		N/A	This Regulatory Guide is outside the scope of the FSAR.

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
	Regulatory Guide 1.189, Rev. 1, 3/07 – Fire Protection for Nuclear Power Plants		
	Conformance with Revision 0 of the Regulatory Guide is documented in the DCD. Conformance of the design aspects is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.		
	General	Conforms	
	Regulatory Guide 1.191, Rev. 0, 5/01 – Fire Protection Program for Nuclear Power Plants During Decommissioning and Permanent Shutdown		
		N/A	This Regulatory Guide is outside the scope of the FSAR.
	Regulatory Guide 1.192, Rev. 0, 6/03 – Operation and Maintenance Code Case Acceptability, ASME OM Code		
	General	Conforms	
LNP COL 1.9-1	**Regulatory Guide 1.193, Rev. 2, 10/07 – ASME Code Cases Not Approved for Use**		
	General	Conforms	
STD COL 1.9-1	**Regulatory Guide 1.194, Rev. 0, 6/03 – Atmospheric Relative Concentrations for Control Room Radiological Habitability Assessments at Nuclear Power Plants**		
	General	Conforms	
	Regulatory Guide 1.195, Rev. 0, 5/03 – Methods and Assumptions for Evaluating Radiological Consequences of Design Basis Accidents at Light-Water Nuclear Power Reactors		
	This Regulatory Guide is not applicable to the AP1000 certified design.		
	Regulatory Guide 1.196, Rev. 1, 1/07 – Control Room Habitability at Light-Water Nuclear Power Reactors		

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions

Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below. This Regulatory Guide is not applicable to the AP1000 certified design.

General — Conforms

Regulatory Guide 1.197, Rev. 0, 5/03 – Demonstrating Control Room Envelope Integrity at Nuclear Power Reactors

Conformance with the design aspects is as stated in the DCD. Conformance with programmatic and/or operational aspects is documented below.

General — Conforms

Regulatory Guide 1.198, Rev. 0, 11/03 – Procedures and Criteria for Assessing Seismic Soil Liquefaction at Nuclear Power Plant Sites

General — Conforms

Regulatory Guide 1.199, Rev. 0, 11/03 – Anchoring Components and Structural Supports in Concrete

Conformance with Revision 0 of the Regulatory Guide is as stated in the DCD. This guidance is completely within the scope of the DCD.

Regulatory Guide 1.200, Rev. 1, 1/07 – An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities

General — Conforms

STD COL 1.9-1

Regulatory Guide 1.201, Rev. 1, 5/06 – Guidelines for Categorizing Structures, Systems, and Components in Nuclear Power Plants According to Their Safety Significance

This Regulatory Guide is not applicable to the AP1000 certified design.

Regulatory Guide 1.202, Rev. 0, 2/05 – Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors

This Regulatory Guide is outside the scope of the FSAR.

Regulatory Guide 1.203, Rev. 0, 12/05 – Transient and Accident Analysis Methods

	Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
	This Regulatory Guide is not applicable to the AP1000 certified design.			
	Regulatory Guide 1.204, Rev. 0, 11/05 – Guidelines for Lightning Protection of Nuclear Power Plants			
	General		Conforms	
	Regulatory Guide 1.205, Rev. 0, 5/06 – Risk-Informed, Performance-Based Fire Protection for Existing Light-Water Nuclear Power Plants			
	This Regulatory Guide is not applicable to the AP1000 certified design.			
	Regulatory Guide 1.206, Rev. 0, 6/07 – Combined License Applications for Nuclear Power Plants (LWR Edition)			
	General	Format	Conforms	
	General	Content	Exception	Exceptions to content are identified in Table 1.9-202.
	Regulatory Guide 1.207, Rev. 0, 3/07 – Guidelines for Evaluating Fatigue Analyses Incorporating the Life Reduction of Metal Components Due to the Effects of the Light-Water Reactor Environment for New Reactors			
	This Regulatory Guide is not applicable to the AP1000 certified design.			
	Regulatory Guide 1.208, Rev. 0, 3/07 – A Performance-Based Approach to Define the Site-Specific Earthquake Ground Motion			
	General		Conforms	
STD COL 1.9-1	Appendix C, Section C.3		Exception 3.4	Exception is taken to requirement that 0.05 and 0.95 fractile hazard curves be provided. These were not run. Hazard curves were run at 0.15 and 0.85th percentile instead of 0.16 and 84th as they are very close approximations (+/- 1 sigma).
	Regulatory Guide 1.209, Rev. 0, 3/07 – Guidelines for Environmental Qualification of Safety-Related Computer-Based Instrumentation and Control Systems in Nuclear Power Plants			
	This Regulatory Guide is not applicable to the AP1000 certified design.			

	Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
LNP COL 1.9-1	**Regulatory Guide 1.221, Rev. 0, 10/11 - Design-Basis Hurricane and Hurricane Missiles for Nuclear Power Plants**			
	General		Conforms	
	DIVISION 4 – Environmental and Siting			
STD COL 1.9-1	**Regulatory Guide 4.7 Rev. 2, 4/98 – General Site Suitability Criteria for Nuclear Power Stations**			
	General		Conforms	
	Regulatory Guide 4.15 Rev. 2, 7/07 – Quality Assurance for Radiological Monitoring Programs (Inception through Normal Operations to License Termination) – Effluent Streams and the Environment			
			Exception	The Guidance of Rev. 1, February 1979 will be followed as per the justification provided in FSAR Subsection 11.5.3.
	DIVISION 5 – Materials and Plant Protection			
	The plant-specific physical security plans include no substantive deviations from the NRC-endorsed template in NEI 03-12, Rev. 6. Therefore, the degree of conformance with Division 5 regulatory guides for the Physical Security Plan, Training and Qualification Plan, and Safeguards Contingency Plan is consistent with the degree of conformance of NEI 03-12, Rev. 6.			
STD COL 1.9-1	**Regulatory Guide 5.9 Rev. 2, 12/83 – Guidelines for Germanium Spectroscopy Systems for Measurement of Special Nuclear Material**			
			N/A	This Regulatory Guide is outside the scope of the FSAR.
	Regulatory Guide 5.12, Rev. 0, 11/73 – General Use of Locks in the Protection and Control of Facilities and Special Nuclear Materials			
	Conformance of the design aspects is as stated in the DCD.			
			N/A	This Regulatory Guide is outside the scope of the FSAR.

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
Regulatory Guide 5.65, Rev. 0, 9/86 – Vital Area Access Controls, Protection of Physical Security Equipment, and Key and Lock Controls			
Conformance of the design aspects is as stated in the DCD.			
		N/A	This Regulatory Guide is outside the scope of the FSAR.
Regulatory Guide 5.71, Rev. 0, 1/10 – Cyber Security Programs for Nuclear Facilities			
Conformance with regulatory positions C.1 through C.5 of Regulatory Guide 5.71, Rev. 0, is as stated in the Cyber Security Plan (CSP), with exceptions to the guidance as noted in Attachment A of the CSP.			
DIVISION 8 – Occupational Health			
Regulatory Guide 8.2, Rev. 0, 2/73 – Guide for Administrative Practices in Radiation Monitoring			
General	10 CFR Part 20; ANSI 13.2-1969	Exception	The reference to 10 CFR 20.401 is no longer valid in the current version of 10 CFR Part 20. ANSI N13.2-1969 was reaffirmed in 1988.
Regulatory Guide 8.4, Rev. 0, 2/73 - Direct-Reading and Indirect-Reading Pocket Dosimeters			
General	10 CFR Part 20	Exception	The reference to 10 CFR 20.202 (a) and 20.401 is no longer valid in the current version of 10 CFR Part 20.
STD COL 1.9-1	ANSI N13.5-1972		ANSI N13.5-1972 was reaffirmed in 1989. The two performance criteria specified in Regulatory Guide 8.4 (accuracy and leakage) for these devices are met using acceptance standards in ANSI N322-1997 "American National Standard Inspection, Test, Construction, and Performance Requirements for Direct Reading

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
			Electrostatic/Electroscope Type Dosimeters".
	Regulatory Guide 8.5, Rev. 1, 3/81 - Criticality and Other Interior Evacuation Signals		
	General	Conforms	
	Regulatory Guide 8.6, Rev. 0, 5/73 - Standard Test Procedure for Geiger-Muller Counters		
	General	Exception	Instrument calibration program is based upon criteria in ANSI N323A-1997 (with 2004 Correction Sheet) “Radiation Protection Instrumentation Test and Calibration, Portable Survey Instruments.” The ANSI 42.3-1969 Standard is no longer recognized as sufficient for calibration of modern instruments.
	Regulatory Guide 8.7, Rev. 2, 11/05 - Instructions for Recording and Reporting Occupational Radiation Dose Data		
	General	Conforms	
	Regulatory Guide 8.8, Rev. 3, 6/78 – Information Relevant to Ensuring That Occupational Radiation Exposures at Nuclear Power Stations Will Be As Low As Is Reasonably Achievable		
STD COL 1.9-1	Conformance of the design aspects is as stated in the DCD. Conformance with Revision 3 of this Regulatory Guide for programmatic and/or operational aspects is documented below.		
	C.1	Conforms	
	C.3.a	Conforms	
	C.3.b	Exception	Regulatory Guide 1.16 C.1.b.(3) data is no longer reported. Reporting per C.1.b(2) is also no longer required.
	C.3.c	Conforms	

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
C.4.b-C.4.d	ANSI Z-88.2, Regulatory Guide 8.15, NUREG-0041	Conforms	Conformance is with the latest revision of NUREG-0041.

Regulatory Guide 8.9, Rev. 1, 7/93 – Acceptable Concepts, Models, Equations, and Assumptions for a Bioassay Program

General Conforms

Regulatory Guide 8.10, Rev. 1-R, 5/77 – Operating Philosophy For Maintaining Occupational Radiation Exposures as Low as is Reasonably Achievable

General Conforms

Regulatory Guide 8.13, Rev. 3, 6/99 – Instruction Concerning Prenatal Radiation Exposure

General Conforms

Regulatory Guide 8.15, Rev. 1, 10/99 – Acceptable Programs for Respiratory Protection

General Conforms

Regulatory Guide 8.27, Rev. 0, 3/81 – Radiation Protection Training for Personnel at Light-Water-Cooled Nuclear Power Plants

General Conforms

Regulatory Guide 8.28, Rev. 0, 8/81 – Audible-Alarm Dosimeters

STD COL 1.9-1 General ANSI N13.27-1981 Conforms

Regulatory Guide 8.29, Rev. 1, 2/96 – Instruction Concerning Risks from Occupational Radiation Exposure

General Conforms

Regulatory Guide 8.34, Rev. 0, 7/92 – Monitoring Criteria and Methods To Calculate Occupational Radiation Doses

General Conforms

Criteria Section	Referenced Criteria	FSAR Position	Clarification/ Summary Description of Exceptions
Regulatory Guide 8.35, Rev. 0, 6/92 – Planned Special Exposures			
General		Conforms	
Regulatory Guide 8.36, Rev. 0, 7/92 – Radiation Dose to the Embryo/Fetus			
General		Conforms	
Regulatory Guide 8.38, Rev. 1, 5/06 – Control of Access to High and Very High Radiation Areas in Nuclear Power Plants			
Conformance of the design aspects is as stated in the DCD. Conformance with Revision 1 of this Regulatory Guide for programmatic and/or operational aspects is documented below.			
General		Conforms	

Note a. Above stated general alternatives regarding the use of previous revisions of the Regulatory Guide for design aspects as stated in the DCD is provided to preserve the finality of the certified design. Further, each stated conformance with the programmatic and/or operational aspects is only to the extent that a design change or departure from the approved DCD is not required to implement those programmatic and/or operational aspects. As the operational and programmatic aspects become more fully defined (for example, during preparation, approval, or initial implementation of plant procedures), there exists a potential that a conflict could be identified between the design as certified in the DCD and the programmatic and/or operational aspects of the guidance. In such cases, the design certification (rule) becomes the controlling factor, and the design conformance to the Regulatory Guide is per the revision stated in the DCD.

Note b. A “Criteria Section” entry of “General” indicates a scope for the conformance statement of “all regulatory guide positions related to programmatic and/or operational aspects.” Thus, an associated conformance statement of “Conforms” indicates that the applicant “complies with all regulatory guide positions related to programmatic and/or operational aspects.”