

SYSTEM ENERGY RESOURCES, INC.

EARLY SITE PERMIT APPLICATION

for the

GRAND GULF NUCLEAR STATION SITE

PART 3

ENVIRONMENTAL REPORT

Revision 2

GGNS
EARLY SITE PERMIT APPLICATION
PART 3 – ENVIRONMENTAL REPORT

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ABBREVIATIONS AND ACRONYMS

Abbreviation or Acronym	Description
ABWR	Advanced Boiling Water Reactor
ACR	Advanced CANDU Reactor
AEA	Atomic Energy Act
ALARA	As Low As Reasonably Achievable
ANO	Arkansas Nuclear One
AP 1000	Advanced Passive (Pressurized Water Reactor) 1000
AREOR	Annual Radiological Environmental Operating Report
BOD	Biological Oxygen Demand
BOP	Balance of Plant
BWR	Boiling Water Reactor
CEDE	Committed Effective Dose Equivalent
CEUS	Central and Eastern United States
CFCs	Chlorinated Fluorocarbons
CFR	Code of Federal Regulations
CHI/Q	Relative Concentration (X/Q)
COL	Combined (Construction and Operating) License
CP	Construction Permit
CPTs	Cone Penetrometer Tests
CST	Condensate (Water) Storage Tank
CWA	Clean Water Act
CWPT	Circulating Water Pipe Trench
D&D	Decontamination and Decommissioning
DBA	Design Basis Accident
DDE	Deep Dose Equivalent
DDT	Dichloro-Diphenyl-Trichloroethene
DEQ	Department of Environmental Quality
DG	Draft Guide
DOE	Department of Energy
DW	Dewatering Well
EA	Environmental Assessment
EAB	Exclusion Area Boundary
E-NE	East-Northeast

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Abbreviation or Acronym	Description
EIA	Energy Information Administration
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
ER	Environmental Report
ESBWR	Economic Simplified Boiling Water Reactor
ESC	Energy Services Center
E-SE	East-Southeast
EPZ	Emergency Planning Zone
ESF	Engineered Safeguard Feature
ESP	Early Site Permit
FER	Final Environmental Report
FERC	Federal Energy Regulatory Commission
FFCA	Federal Facilities Compliance Act
FGEIS	Final Generic Environmental Impact Statement
FHA	Fuel Handling Accident
FOL	Facility Operating License
FWPCA	Federal Water Pollution Control Act
GEIS	Generic Environmental Impact Statement
GG	Grand Gulf
GGNS	Grand Gulf Nuclear Station
gpd	Gallons per day
GTCC	Greater Than Class C
GT-MHR	Gas Turbine – Modular Helium Reactor
HHV	Higher Heating Value
HLW	High Level Waste
HUD	Department of Housing and Urban Development
HVAC	Heating, Ventilation And Air Conditioning
IPEC	Indian Point Energy Center
IRIS	International Reactor Innovative And Secure
JAF	James A. Fitzpatrick
LDWF	Louisiana Department of Wildlife and Fisheries
LHV	Lower Heating Value

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Abbreviation or Acronym	Description
LLD	Lower Limits of Detection
LLW	Low Level Waste
LMDCT	Linear Mechanical Draft Cooling Towers
LOCA	Loss Of Coolant Accident
LPZ	Low Population Zone
LRGEIS	License Renewal Generic Environmental Impact Statement
LSU	Louisiana State University
LWR	Light-Water-Cooled Reactors
m/s	Meters per second
MDA	Mississippi Development Authority
MDAH	Mississippi Department of Archives and History
MDEQ	Mississippi Department of Environmental Quality
MDOT	Mississippi Department of Transportation
MDWFP	Mississippi Department of Wildlife, Fisheries, and Parks
MGD	Million Gallons Per Day
MHTGR	Modular High-Temperature Gas Reactor
MP&L	Mississippi Power & Light Company
mph	Miles per hour
MSDH	Mississippi State Department of Health
MSL or (msl)	Mean Sea Level
MSUES	Mississippi State University Extension Service
MSW	Municipal Solid Waste
MT	Metric Ton
MTU	Metric Tons of Uranium
MW	Monitoring Well
MWd	Mega-Watt days (MWd)
MWe	Megawatts electric
MWt	Megawatts thermal
NCDC	National Climatic Data Center
NEPA	National Environmental Policy Act
NDCT	Natural Draft Cooling Towers
NE	Northeast

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Abbreviation or Acronym	Description
NEI	Nuclear Energy Institute
NHS	Normal Plant Heat Sink
NMFS	National Marine Fisheries Service
N-NE	North-Northeast
N-NW	North-Northwest
NOAA	National Oceanographic and Atmosphere Administration
NOPSI	New Orleans Public Services, Inc.
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
NRCS	Natural Resources Conservation Service
NW	Northwest
NWS	National Weather Service
ODCM	Offsite Dose Calculation Manual
OSHA	Occupational Safety and Health Administration
OW	Observation Well
PBAPS	Peach Bottom Atomic Power Station
PBMR	Pebble Bed Modular Reactor
PNS	Pilgrim Nuclear Station
PPE	Plant Parameters Envelope
ppm	Parts per million
PPMVD	Parts Per Million Dry Volume
PSHA	Probabilistic Seismic Hazard Assessment
PSW	Plant Service Water
PV	Photovoltaic
PWR	Pressurized Water Reactor
RBS	River Bend Station
RCRA	Resource Conservation and Recovery Act
REMP	Radiological Environmental Monitoring Program
ROI	Region Of Interest
ROW	Right of Way
RRY	Reactor Reference Year
SE	Southeast

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Abbreviation or Acronym	Description
SERI	System Energy Resources, Inc.
SGTR	Steam Generator Tube Rupture
SMEPA	South Mississippi Electric Power Association
SMSA	Standard Metropolitan Statistical Area
SSAR	Site Safety Analysis Report
SSE	Safe Shutdown Earthquake
S-SE	South-Southeast
S-SW	South-Southwest
SW	Southwest
SWPPP	Stormwater Pollution Prevention Plan
SWS	Service Water System
SWU	Separative Work Units
T&D	Transmission and Distribution
T/E (T&E)	Threatened or (and) Endangered
TDS	Total Dissolved Solids
TEDE	Total Effective Dose Equivalent
TLD	Thermo-luminescent dosimeter
TSS	Total Suspended Solids
TW	Test Well
UFSAR	Updated Final Safety Analysis Report
UHC	Unburned Hydrocarbon Emissions
UHS	Ultimate Heat Sink
URL	Uniform Resource Locator
USACE	The United States Army Corps of Engineers
USEC	United States Enrichment Corporation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
USNRC	U.S. Nuclear Regulatory Commission
USWB	U.S. Weather Bureau
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compounds
W3	Waterford-3

GGNS
EARLY SITE PERMIT APPLICATION
PART 3 – ENVIRONMENTAL REPORT

ABBREVIATIONS AND ACRONYMS (Continued)

Abbreviation or Acronym	Description
W-NW	West-Northwest
W-SW	West-Southwest