

**SYSTEM ENERGY RESOURCES, INC.**

**EARLY SITE PERMIT APPLICATION**

*for the*

**GRAND GULF NUCLEAR STATION SITE**

**PART 2**

**SITE SAFETY ANALYSIS REPORT**

**Revision 2**

GGNS  
EARLY SITE PERMIT APPLICATION  
PART 2 – SITE SAFETY ANALYSIS REPORT

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ABBREVIATIONS AND ACRONYMS

Abbreviation / Acronym	Description
ABWR	Advanced Boiling Water Reactor
amsl	Above Mean Sea Level
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
BZ	Background Source Zone
Cal. yr B.P.	Calendar Year Before Present (A.D. 1950)
CEUS	Central and Eastern United States
CFR	Code of Federal Regulations
CH	Fat Clay
CL	Clay
CM	California Modified Sampler
COL	Combined (Construction and Operating) License
CPT	Cone Penetrometer Tests
CU	Consolidated Undrained
DPF	Design Project Flood
D/Q	Relative Deposition Coefficient
E	East
EAB	Exclusion Area Boundary
E-NE	East-Northeast
EPRI	Electric Power Research Institute
ER	Environmental Report
ESC	Energy Services Center
E-SE	East-Southeast
ESP	Early Site Permit
EST	Earth Science Team
GGNS	Grand Gulf Nuclear Station
GPS	Global Positioning System
GW	Sandy Gravel
HMR	Hydrometeorological Report
ISRM	International Society of Rock Mechanics
kips	Kilo-Pounds per Square Foot
ksf	kips per Square Foot
LANDSAT	Land Remote-Sensing Satellite

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Abbreviation / Acronym	Description
LL	Liquefied Limit
LLNL	Lawrence Livermore National Laboratory
LMDCTs	Linear Mechanical Draft Cooling Towers
LNG	Liquefied Natural Gas
LOCA	Loss-of-Coolant Accident
LPZ	Low Population Zone
Ma	Million Years
MDEQ	Mississippi Department of Environmental Quality
ML	Silt
MP&L	Mississippi Power & Light Company
msl (or MSL)	Mean Sea Level
N	North
NCDC	National Climatic Data Center
NDCT	Natural Draft Cooling Tower
NE	Northeast
NEI	Nuclear Energy Institute
NHS	Normal Plant Heat Sink
NMSZ	New Madrid Seismic Zone
N-NE	North-Northeast
N-NW	North-Northwest
NOAA	National Oceanographic and Atmosphere Administration
NOTA	None of the Above
NRC	Nuclear Regulatory Commission
NW	Northwest
NWS	National Weather Service
ODCM	Offsite Dose Calculation Manual
OBE	Operating Basis Earthquake
P	Compression Wave
pcf	Pounds per Cubic Foot
PI	Plasticity Index
PL	Plastic Limit
PMF	Probable Maximum Flood

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Abbreviation / Acronym	Description
PMP	Probable Maximum Precipitation
PPE	Plant Parameters Envelope
PSAR	Preliminary Safety Analysis Report
psf	Pounds per Square Foot
PSHA	Probabilistic Seismic Hazards Analysis
psi	Pounds per Square Inch
PSW	Plant Service Water
S	South
SAR	Safety Analysis Report
SC	Clayey Sand
SE	Southeast
SERI	System Energy Resources, Inc.
SH	Horizontal Shear Wave
SM	Silty Sand
SMEPA	South Mississippi Electric Power Association
SOG	Seismicity Owners Group
SP	Sand
SPT	Standard Penetration Test
SSAR	Site Safety Analysis Report
SSC	Structures, Systems and Components
S-SE	South-Southeast
SSE	Safe Shutdown Earthquake
S-SW	South-Southwest
SW	Gravelly Sand
SW	Southwest
Tc	Time of Concentration
Tm	Tertiary Stratigraphic Unit Designation
tsf	Tons per Square Foot
TSRC	Torsional Shear and Resonant Column
UCSC	Uniform Soil Classification System
UFSAR	Updated Final Safety Analysis Report
UHS	Ultimate Heat Sink

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ABBREVIATIONS AND ACRONYMS (Continued)

Abbreviation / Acronym	Description
USDOT	United States Department of Transportation
USCS	Uniform Soil Classification System
USGS	US Geological Survey
UTEXAS	University of Texas at Austin
UTM	Universal Transverse Mercator
W	West
WLA	William Lettis and Associates, Inc.
W-NW	West-Northwest
W-SW	West-Southwest
X/Q	Relative Concentration Coefficient (CHI/Q)