LIST OF ACRONYMS AND ABBREVIATIONS

\$/kW dollar per kilowatt

°C degree Celsius

°F degree Fahrenheit

µg/L microgram per liter

μg/m²/yr microgram per square meter per year

 $\begin{array}{ccc} \mu g/m^3 & \text{microgram per cubic meter} \\ \mu m/\text{minute} & \text{micrometer per minute} \\ \mu m hos/cm & \text{micromhos per centimeter} \\ 10^6 \ \text{gal/yr} & \text{million gallons per year} \end{array}$

10⁻⁶ lb/MWh 0.**0**00001 pound per megawatt-hour 10⁶ scf/yr million standard cubic feet per year

7Q10 7-day, consecutive low-flow with a 10-year return frequency

AABE American Association of Blacks in Energy

AADT annual average daily traffic

ac-ft acre-foot

ADEM Alabama Department of Environmental Management

AEGL acute exposure guideline level

AERMOD American Meteorological Society (AMS)/EPA Regulatory Model

AFM acid-forming material AGR acid gas removal

AHA American Heart Association

ALOHA Areal Locations of Hazardous Atmospheres

AM amplitude-modulated AMD acid mine drainage

AMS American Meteorological Society
ANSI American National Standards Institute

APC alpha platinum cobalt unit
APE area of potential effect

APHEA2 Air Pollution and Health: A European Approach

AQI air quality index

AQRVs air quality-related values

ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.

AST aboveground storage tank
ATV average traffic volume
AUM/ac animal unit month† per acre

BACT best available control technology

BAT best available technology
BBS Breeding Bird Survey

BCD Biological Conservation Database

BF bottomland forest

BLM Bureau of Land Management
BLS Bureau of Labor Statistics
BMP best management practice

bpf blows per foot

BPIP Building Profile Input Program
BSSC Building Seismic Safety Council
Btu/kWh British thermal unit per kilowatt-hour
Btu/lb British thermal units per pound

bu/ac bushel per acre

C active construction
CAA Clean Air Act
CaCO₃ calcium carbonate
CAIR Clean Air Interstate Rule
CAMR Clean Air Mercury Rule

CASTNet Clean Air Status and Trends Network

CBC Christmas Bird Count CCPI Clean Coal Power Initiative

CCSP U.S. Climate Change Science Program
CDHS California Department of Health Services
CEQ Council on Environmental Quality

CFR Code of Federal Regulations cfs cubic foot per second

cfs/mi² cubic foot per second per square mile

cm centimeter

cmbs centimeter below surface
CNA Central North America
CO carbon monoxide
CO₂ carbon dioxide
COS carbonyl sulfide

CPCN Certificate of Public Convenience and Necessity

CS₂ carbon disulfide
CT combustion turbine
CWA Clean Water Act

DAT deposition analysis threshold

dBA A-weighted decibel diameter at breast height

DGPS digital global positioning system

DLLday of lost lifeDOdissolved oxygen

DOE U.S. Department of Energy
DOI U.S. Department of the Interior
DOT U.S. Department of Transportation

DSM demand-side management

Eagle Act
ECT
Bald and Golden Eagle Protection Act of 1940
Environmental Consulting & Technology, Inc.
EEOC
U.S. Equal Employment Opportunity Commission

EGU electric generating unit

EIA Energy Information Agency

EIS environmental impact statement

ELF extremely low frequency

EMEPA East Mississippi Electric Power Association

EMF electric and magnetic field enhanced oil recovery

EPA U.S. Environmental Protection Agency

EPAct05 Energy Policy Act of 2005

EPT Ephemeroptera + Plecoptera + Trichoptera

ERF exposure-response function

ERPGs Emergency Response Planning Guidelines

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ES&EE Earth Science & Environmental Engineering

ESA Endangered Species Act of 1973

F open field

FAA Federal Aviation Administration
FEIS Final Environmental Impact Statement
FEMA Federal Emergency Management Agency
FFPPA Federal Farmland Protection Policy Act

FGD flue-gas desulfurization

FHWA Federal Highway Administration

FLAG Federal Land Managers' Air Quality-Related Values Workgroup

FLM Federal Land Managers
FM frequency-modulated
FR Federal Register

ft foot

ft bls foot below land surface

ft/day foot per day

ft/day/ft foot per day per foot ft²/day square foot per day

ft³ cubic foot

ft³/hr cubic foot per hour ft-msl feet above mean sea level

ft-NGVD feet National Geodetic Vertical Datum

G gas pipeline corridors
g/cm³ gram per cubic centimeter
g/m²/yr gram per square meter per year
GAQM Guideline on Air Quality Models
GCP good combustion practice

GHG greenhouse gas

GIS geographical information system

GLO General Land Office gpd gallon per day

gpd/ft gallon per day per foot gpd/ft² gallon per day per square foot

gpm gallon per minute

gpm/ft gallon per minute per foot
GPS global positioning system
gr/dscf grain per dry standard cubic foot
GPN Gruf Posteretier Network

GRN Gulf Restoration Network

GS G sand interval

GSA Geological Society of America

H hardwoods

H' taxa diversity index

H₂ hydrogen H₂O water

H₂S hydrogen sulfide H₂SO₄ sulfuric acid

HABS Historic American Building Survey

HAP hazardous air pollutant
HAS habitat assessment score
HCN hydrogen cyanide

HDPE high-density polyethylene

HEM-3 EPA's Human Exposure Model, Version 3

Hgp particle-bound mercury
HHV higher heating value
HP hardwood-pine
HQ hazard quotient
hr/yr hour per year

HRSG heat recovery steam generator

HUD Department of Housing and Urban Development

Hz Hertz

I-10 Interstate 10
I-20 Interstate 20
I-59 Interstate 59

IARC International Agency for Research on Cancer

IBC International Building Code

ICNIRP International Commission on non-Ionizing Radiation Protection

IDLH immediately dangerous to life or health IGCC integrated gasification combined-cycle

IRP integrated resource plan IRS Internal Revenue Service

ISO International Standards Organization

IWAQM Interagency Workgroup on Air Quality Modeling

JAN Jackson International Airport

JS J sand interval

KBR Kellogg Brown & Root, Inc. KCS Kansas City Southern

Kf soil erodibility of the fine-earth fraction (material less than 2 millimeters in size)

kg/day kilogram per day

kg/ha/yr kilogram per hectare per year

kg/km²/month kilogram per square kilometer per month

kg/m³ kilogram per cubic meter

 $\begin{array}{cc} km & kilometer \\ kV & kilovolt \end{array}$

lb pound

lb CO₂/MWh pound of carbon dioxide per megawatt-hour

lb/acpound per acrelb/ft²pound per square footlb/hrpound per hourlb/minpound per minute

lb/MMBtu pound per million British thermal units

lb/MWh pound per megawatt-hour

lb/yr pound per year

 $\begin{array}{ll} LCOE & levelized \ cost \ of \ electricity \\ L_{dn} & day-to-night \ sound \ level \\ L_{eq} & equivalent \ sound \ level \\ \end{array}$

lf linear foot
LOS level of service
LPN listing priority number
LWA Lower Wilcox aquifer

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m/s meter per second

MACT maximum achievable control technology

MARIS Mississippi Automated Resource Information System

M_b body-wave magnitude

MBCI Mississippi Band of Choctaw Indians

MCEQ Mississippi Commission on Environmental Quality

MCL maximum contaminant level 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

MEI Meridian Key Field Airport meq/100g milli-equivalent per 100 grams

mg/kg milligram per kilogram mg/L milligram per liter

MG Mississippi Gasification, LLC

MGD million gallons per day

mi² square mile

mills/kWh 0.1 cent per kilowatt-hour Mississippi Power Mississippi Power Company

MM5 Version 5 of the Penn State/NCAR Mesoscale Model

MMbtu/hr million British thermal units per hour

mmhos/cm millimhos per centimeter

MMREM MPCA Mercury Risk Estimation Method MMV measurement, modeling, and validation MNHP Mississippi Natural Heritage Program

MOA Memorandum of Agreement

MODFLOW Modular Three-Dimensional Finite Difference Ground Water Flow Model

MPCA Minnesota Pollution Control Agency

mph mile per hour

MS Mississippi State Highway

MSDH Mississippi State Department of Health MSHA Federal Mining Safety and Health Act

MSMRA Mississippi Surface Mining and Reclamation Act of 1977

MW megawatt

MWA Middle Wilcox aquifer MWh/yr megawatt-hour per year

MWQCIIC Mississippi's Water Quality Criteria for Intrastate, Interstate, and Coastal Waters

N₂ nitrogen

NAAQS national ambient air quality standard NACC North American Coal Corporation

NADP National Atmospheric Deposition Program

NAS Naval Air Station

NATA National-Scale Air Toxics Assessment

NCDC National Climatic Data Center

NCEDC Northern California Earthquake Data Center
ND not detected above method detection limits
NEHRP National Earthquake Hazards Reduction Program

NEIC National Earthquake Information Center NEPA National Environmental Policy Act of 1969 NESHAP National Emissions Standards for Hazardous Air Pollutants

NETL National Energy Technology Laboratory

New South Associates, Inc.

NGCC natural gas combined-cycle

NHPA National Historic Preservation Act

NIEHS
National Institute of Environmental Health Sciences
NIOSH
National Institute for Occupational Safety and Health
NMMAPS
National Morbidity, Mortality, and Air Pollution Study

NO nitr**ic** oxide NO₂ nitrogen dioxide

NOAA National Oceanic and Atmospheric Administration

NOI Notice of Intent NO_x oxides of nitrogen

NPDES National Pollutant Discharge Elimination System

NPS National Park Service

NRCS Natural Resources Conservation Service
NRHP National Register of Historic Places
NRPB National Radiation Protection Board
NSPS New Source Performance Standards

NSR New Source Review

NTU nephelometric turbidity units NWI National Wetlands Inventory NWS Norfolk Southern Systems

O&M operation and maintenance OLF outlying landing field

OLWR Office of Land and Water Resources

OPC Office of Pollution Control

OSHA Occupational Safety and Health Administration

OUC Orlando Utilities Commission

PAC protection action criteria PAC process air compressor

PAH polynuclear aromatic hydrocarbon

PC pulverized coal

PCB polychlorinated biphenyl PGA peak ground acceleration

PH pine-hardwood

PHMSA Pipeline and Hazardous Materials Safety Administration

PHWD Pat Harrison Waterway District

PM particulate matter

 PM_{10} particulate matter less than or equal to 10 micrometers in aerodynamic diameter $PM_{2.5}$ particulate matter less than or equal to 2.5 micrometers in aerodynamic diameter

POM polycyclic organic matter

POTW publically owned treatment works

PP planted pine part per billion ppm part per million

ppmv part per million by volume ppmvd part per million by dry volume

ppt part per thousand

PRIME plume rise model enhancement PSC Public Service Commission DOE/EIS-0409 May 2010

PSD Prevention of Significant Deterioration PSDF Power Systems Development Facility

psi pound per square inch

psia pound per square inch absolute

QA/QC quality assurance/quality control

R road

R/C residential/commercial
R&D research and development
RAC reference air concentration

RBA rapid bioassessment

RCRA Resource Conservation and Recovery Act

RfC reference concentration
RfD oral reference dose

RGM reactive gaseous divalent mercury (Hg²⁺)

RHPP Red Hills Power Project
RIM rate impact measure

RIMS Regional Industrial Multiplier System

RMP risk management plan ROD Record of Decision RV recreational vehicle

S shrubland standard unit SA spectral acceleration scf standard cubic foot

SCR selective catalytic reduction SCS Southern Company Services, Inc.

SFWMD South Florida Water Management District
SHPO State Historic Preservation Officer

SIA significant impact area
SIL significant impact level
SIP State Implementation Plan

SMCRA Surface Mine Control and Reclamation Act SMEPA South Mississippi Electric Power Association

SNG Southern Natural Gas

 $\begin{array}{ccc} SO_2 & & sulfur \ dioxide \\ SO_3 & & sulfur \ trioxide \\ SO_x & & sulfur \ oxides \end{array}$

SPCC spill prevention, control, and countermeasure SPLP synthetic precipitation leaching procedure

SPR strategic petroleum reserve SPT standard penetration test

SSTEMP Stream Segment Temperature Model

STEL short-term exposure limit

SWPPP stormwater pollution prevention plan

syngas synthesis gas

T soil loss tolerance t/1000t ton of material

TCLP toxicity characteristic leaching procedure

TDS total dissolved solids

TFM toxic-forming materials

TGPL Tennessee Gas Pipeline Company
THPO Tribal Historic Preservation Officer

TMD toxic material drainage
TMDL total maximum daily load

tpd ton per day tph ton per hour tpy ton per year

TRC total resource cost

TRIGTM Transport Integrated Gasification

TSS total suspended solids
TVA Tennessee Valley Authority

TVAR Tennessee Valley Archaeological Research

U.S. 45
U.S. Highway 45
U.S. 78
U.S. Highway 78
U.S. Highway 80
U.S.C.
United States Code
underburden

UHF ultra high frequency

UIC underground injection control

UNEP United Nations Environment Programme

URE unit risk estimate URF unit risk factors

USACE
USDA
U.S. Army Corps of Engineers
USDA
U.S. Department of Agriculture
USFWS
U.S. Fish and Wildlife Service

USGS U.S. Geological Survey

UTM Universal Transverse Mercator

V/m volts per meter VHF very high frequency

VISTAS Visibility Improvement State and Tribal Association of the Southeast

Vittor Barry Vittor & Associates, Inc.

VMT vehicle-mile traveled VOC volatile organic compound

WGS water gas shift

WHO World Health Organization
WIC Women, Infants, and Children
WMA Wildlife Management Area

WMO World Meteorological Organization
WPA Works Progress Administration
WRAP Wetland Rapid Assessment Procedure
WRDA Water Resources Development Act
WRIR Water Resources Investigation Report

WSA wet gas sulfuric acid WSS Web Soil Survey

WWTP wastewater treatment plant

YLL year of lost life