

## 5.0 LIST OF PREPARERS

<b>PREPARERS</b>		
<b>U.S. Department of Agriculture/Rural Development</b>		
Stephanie Strength	Engineering and Environmental	Project Manager
<b>URS Corporation</b>		
Name	Education And Experience	Project Role
Mary Hagerty, P.E.	BS, Geology and Civil Engineering MS, Geotechnical Engineering 25 years experience	Principal author
Ken Hagg, P.E.	BS, Civil Engineering 41 years experience	Air resources and impacts Peer review
<b>CONTRIBUTOR/REVIEWERS</b>		
<b>U.S. Department of Agriculture/Rural Development</b>		
John Cheung	Power Supply Division	Reviewer
Wei Moy	Power Supply Division	Reviewer
Mark Plank	Engineering and Environmental	Reviewer
<b>URS Corporation</b>		
Name	Education And Experience	Project Role
Jennie Agerton	B.S., Environmental Science M.S., Environmental Analysis 10 years experience	Regulatory
Barbara Lehan	B.S., Chemical Engineering M.S., Environmental Engineering 3 years experience	Technical analysis
Kelly Hurst	BS, Education 10 years experience	Technical editor
Michelle Wernig	15 years experience	Technical editor. GIS

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## LIST OF ACRONYMS AND ABBREVIATIONS

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### **A**

AAC.....	acceptable ambient concentrations
AADT.....	average annual daily traffic
ACGIH.....	American Conference of Governmental Industrial Hygienists
APE.....	area of potential effect

### **B**

BACT.....	Best Available Control Technology
BFB.....	bubbling fluidized bed
BFE.....	base flood elevation
BMP.....	Best management practice
BOR.....	U.S. Bureau Of Reclamation
Btu.....	British thermal unit

### **C**

CAMR.....	Clean Air Mercury Rule
CFB.....	circulating fluidized bed
CFR.....	Code of Federal Regulation
CH <sub>4</sub> .....	methane
CO.....	carbon monoxide
CO <sub>2</sub> .....	carbon dioxide
CWA.....	Clean Water Act
CY.....	cubic yards
CYD.....	cubic yards per day

### **D**

dba.....	A-weighted decibels
DSM.....	demand side management

### **E**

EIS.....	Environmental Impact Statement
EO.....	Executive Order
EPA.....	U.S. Environmental Protection Agency
EPD.....	Environmental Protection Division (State of Georgia)
EPRI.....	Electric Power Research Institute
ES&P.....	Erosion Sedimentation and Pollution

### **F**

FAA.....	Federal Aviation Administration
FEMA.....	Federal Emergency Management Agency
FIRM.....	Federal Insurance Rate Maps
FPPA.....	Farmland Protection Policy Act
FSC.....	Forest Stewardship Council
FWS.....	U.S. Fish and Wildlife Service

**G**

GDNR..... Georgia Department of Natural Resources  
 GDOT..... Georgia Department of Transportation  
 GFC..... Georgia Forestry Commission  
 GHG..... greenhouse gas  
 GIS..... Geographical Information System  
 gpd..... gallons per day  
 gpm..... gallons per minute  
 g/Hp-hr..... gram per horsepower-hour  
 g/hr..... grams per hour  
 GR/CF..... grain per cubic foot

**H**

HAP..... hazardous air pollutant  
 HCl..... hydrogen chloride  
 Hg<sub>part</sub>..... particulate mercury  
 Hg<sup>++</sup>..... divalent or oxidized mercury  
 Hg<sup>0</sup>..... elemental mercury  
 HHRAP..... Human Health Risk Assessment Protocol

**I**

IRIS..... Integrated Risk Information System

**K**

km..... kilometer  
 kWh..... kilowatt-hour

**L**

LAS..... land application system  
 lb/MMBTu..... pounds per million British thermal units  
 lb/yr..... pounds per year  
 Ldn..... day-night average noise level  
 LD50..... lethal dose-50 percent

**M**

MGD..... million gallons per day  
 mg/l..... milligrams per liter  
 MSA..... metropolitan statistical area  
 MWh..... megawatt hour

**N**

NAAQS..... National Ambient Air Quality Standards  
 NEPA..... National Environmental Policy Act  
 NESHAP..... National Emissions Standards for Hazardous Air Pollutants  
 NFIP..... National Flood Insurance Program

NHPA ..... National Historic Preservation Act  
 NMHC ..... non-methane hydrocarbons  
 NRHP ..... National Register of Historic Places  
 NO<sub>2</sub> ..... nitrogen dioxide  
 NOI ..... Notice of Intent  
 NPDES ..... National Pollutant Discharge Elimination System  
 NPS ..... National Park Service  
 NRCS ..... Natural Resources Conservation Service  
 NREL ..... National Renewable Energy Laboratory  
 NRHP ..... National Register of Historic Properties  
 NRI ..... Nationwide Rivers Inventory

**O**

OSHA ..... Occupational Safety and Health Administration

**P**

PEL ..... Permissible Exposure Limits  
 PM<sub>10</sub> ..... particulate matter less than 10 microns  
 PM<sub>2.5</sub> ..... particulate matter less than 2.5 microns  
 ppmw ..... part per million by weight  
 POTW ..... Publicly owned treatment works  
 PSD ..... Prevention of Significant Deterioration

**R**

REL ..... Recommended Exposure Limits  
 RfC ..... reference concentration  
 RIMS II ..... Regional Input-Output Modeling System  
 RUS ..... Rural Utilities Service (USDA)

**S**

SFI ..... Sustainable Forestry Initiative  
 SHPO ..... State Historic Preservation Offices  
 SIA ..... significant impact area  
 SIL ..... significance impact levels  
 SNCR ..... selective non-catalytic reduction  
 SO<sub>2</sub> ..... sulfur dioxide  
 SPCC ..... Spill Prevention, Control, and Countermeasure  
 STARS ..... State traffic and report statistics system  
 STEL ..... Short Term Exposure Limit  
 SWPPP ..... Storm Water Pollution Prevention Plan

**T**

TAP ..... Toxic Air Pollutant  
 TDS ..... total dissolved solids  
 TLV ..... Threshold Limit Values

tpy .....tons per year  
TVA ..... Tennessee Valley Authority  
TWA .....time-weighted averages

**U**

$\mu\text{g}/\text{m}^3$  ..... micrograms per cubic meter  
USACE..... U.S. Army Corps of Engineers  
USDA ..... United States Department of Agriculture  
USGCRP..... U.S. Global Change Research Program  
USGS..... United States Geological Survey

**V**

VMT..... vehicle miles traveled  
VOC ..... volatile organic compounds  
W

**W**

WCPC.....Water Pollution Control Plant  
WSR.....Wild and Scenic River

## GLOSSARY

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**Acid rain.** Also called acid precipitation or acid deposition, acid rain is precipitation containing harmful amounts of nitric and sulfuric acids formed primarily by nitrogen oxides and sulfur oxides released into the atmosphere when fossil fuels are burned. It can be wet precipitation (rain, snow, or fog) or dry precipitation (absorbed gaseous and particulate matter, aerosol particles or dust). Acid rain has a pH below 5.6. Normal rain has a pH of about 5.6, which is slightly acidic (EIA 2007a).

**Advisory Council on Historic Preservation:** An independent federal agency that promotes the preservation, enhancement, and productive use of our nation's historic resources, and advises the President and Congress on national historic preservation policy.

**Air quality:** The characteristics of the ambient air (all locations accessible to the general public) as indicated by concentrations of the six air pollutants for which national standards have been established, and by measurement of visibility in mandatory federal Class I areas.

**Alluvial:** Pertaining to sediments deposited by modern streams or rivers. **Alluvium** is the material deposited by streams.

**Alternatives analysis:** What CEQ calls the "heart of the EIS;" the evaluation of the Proposal compared to all of the alternatives used to define the issues and provide a clear basis or choice among the options.

**Ambient air:** Any unconfined portion of the atmosphere: open air, surrounding air.

**Anthropogenic:** Of or caused by humans.

**Aquifer:** A layer of earth materials that can yield a usable quantity of water to wells.

**Archaeology:** The scientific study, interpretation, and reconstruction of past human cultures from an anthropological perspective based on the investigation of surviving physical evidence of human activity and the reconstruction of related past environments.

**Archeological resources:** Any material of human life or activities that is at least 100 years old, and that is of archaeological interest.

**Ash:** Impurities consisting of silica, iron, alumina, and other noncombustible matter that are contained in coal. Ash increases the weight of coal, adds to the cost of handling, and can affect its burning characteristics. Ash content is measured as a percent by weight of coal on a "received" or a "dry" (moisture-free, usually part of a laboratory analysis) basis.

**Average Annual Daily Traffic (ADT):** Daily number of vehicular movements (e.g., passenger vehicles, buses, and trucks) in both directions on a segment of roadway, averaged over a year.

**Baghouse:** An enclosed structure that uses filter bags to help remove fly ash and other particulates from flue and other exhaust gases.

**Base flood:** The flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the "100-year flood." The base flood is the national standard used by the NFIP and all federal agencies for the purposes of requiring the purchase of flood insurance and regulating new development. Base Flood Elevations (BFEs) are typically shown on Flood Insurance Rate Maps (FIRMs).

**Base Flood Elevation (BFE):** The computed elevation to which floodwater is anticipated to rise during the base flood. Base Flood Elevations (BFEs) are shown on Flood Insurance Rate Maps (FIRMs) and on the flood profiles.

**Baseload:** The minimum demands of electricity on a power station over a given period of time; the amount of electricity required to operate a plant continuously, day and night, all year long.

**Baseload Capacity:** The generating equipment normally operated to serve loads on an around-the-clock basis (EIA 2007a).

**Baseload Plant:** A plant, usually housing high-efficiency steam-electric units, which is normally operated to take all or part of the minimum load of a system, and which consequently produces electricity at an essentially constant rate and runs continuously. These units are operated to maximize system mechanical and thermal efficiency and minimize system operating costs (EIA 2007a).

**Berm:** A curb, ledge, wall or mound used to contain water, separate materials, and/or prevent the spread of contaminants.

**Best management practices (BMPs):** Methods that have been determined to be the most effective, practical means of preventing or mitigating pollution from non-point sources, including construction sites.

**Base flood:** the flood having a one percent chance of being equaled or exceeded in any given year.

**Biogas:** Gas, typically rich in methane, that is produced by the fermentation of organic matter such as manure under anaerobic conditions.

**Blowdown:** Removal of liquids or solids from a process, a storage vessel, or an evaporative system by the use of pressure to reduce mineral concentration that can cause scaling.

**Boiler.** A device for generating steam for power, processing, or heating purposes or for producing hot water for heating purposes or hot water supply. Heat from an external combustion source is transmitted to a fluid contained within the tubes in the boiler shell. This fluid is delivered to an end-use at a desired pressure, temperature, and quality (EIA 2007a).

**Btu (British thermal unit).** A standard unit for measuring the quantity of heat energy equal to the quantity of heat required to raise the temperature of 1 pound of water by 1 degree Fahrenheit (EIA 2007a).

**Capacity factor.** The amount of electricity that a plant produces over a period of time, divided by the amount of electricity it could have produced if it had run at full power over that time period.

**Coal.** A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time (EIA 2007a).

**Co-firing:** The practice of introducing biomass in high-efficiency, coal-fired boilers as a supplemental energy source.

**Combined cycle:** An electric generating technology in which electricity is produced from otherwise lost waste heat exiting from one or more gas (combustion) turbines. The exiting heat is routed to a conventional boiler or to a heat recovery steam generator for utilization by a steam turbine in the production of electricity. This process increases the efficiency of the electric generating unit (EIA 2007a).

**Combustion:** Burning. Many important pollutants, such as sulfur dioxide, nitrogen oxides, and particulates (PM-10) are combustion products of the burning of fuels such as coal, oil, gas and wood.

**Community** (in reference to NFIP): Any state, or area or political subdivision thereof, or any Indian tribe or authorized tribal organization or Alaska Native village or authorized native organization, which has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction.

**Contamination:** Introduction into water, air, and soil of microorganisms, chemicals, toxic substances, wastes, or wastewater in a concentration that makes the medium unfit for its next intended use.

**Contour:** An imaginary line of constant elevation on the ground surface. The corresponding line on a map is called a “contour line”.

**Criteria:** Standards, rules, or tests on which a judgment or decision may be based.

**Criteria air pollutants:** A group of 6 common air pollutants regulated by EPA on the basis of criteria (information on health and/or environmental effects of pollution) and for which NAAQS have been established. In general, criteria air pollutants are widely distributed over the country. They are: PM (which includes PM<sub>2.5</sub> and PM<sub>10</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), and lead (Pb).

**Cultural resources:** Any building, site, district, structure, object, data, or other material significant in history, architecture, archeology, or culture. Cultural resources include: historic properties as defined in the National Historic Preservation Act (HNPA), cultural items as defined in the Native American Graves Protection and Repatriation Act (NAGPRA), archeological resources as defined in the Archeological Resources Protection Act (ARPA), sacred sites as defined in Executive Order 13007, *Protection and Accommodation of Access to “Indian Sacred Sites,”* to which access is provided under the American Indian Religious Freedom Act (AIRFA), and collections.

**Cumulative impacts:** Impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such actions. Effects resulting from individually minor but collectively significant actions taking place over a period of time.

**dBA (A-weighted decibel):** The unit measurement of sound level calculated by taking ten times the common logarithm of the ratio of the magnitude of the particular sound pressure to the standard reference sound pressure of 20 micropascals and its derivatives.

**Decibel (dB):** The A-scale sound level is a quantity, in decibels, read from a standard sound-level meter with A-weighting circuitry. The A-scale weighting discriminates against the lower frequencies according to a relationship approximating the auditory sensitivity of the human ear. The A-scale sound level measures approximately the relative “noisiness” or “annoyance” of many common sounds.

**Demand side management.** The planning, implementation, and monitoring of utility activities designed to encourage consumers to modify patterns of electricity usage, including the timing and level of electricity demand (EIA 2007a).

**Discharge:** The volume of fluid plus suspended sediment that passes a given point within a given period of time.

**Discount rate.** The annual interest on an item, divided by the capital including that interest.

**Dissolved oxygen:** An amount of oxygen dispersed in water, usually expressed as mg/L; DO sustains the lives of fish and other aquatic organisms; cold and flowing water usually contains more DO than warm, stagnant water.

**Distributed generation:** In general, distributed generation is electric generation that is used at or near the source of the generator. Specifically, in EPAAct2005: “An electric power generation facility that is designed to serve retail electric consumers at or near the facility site.”

**Dominant species:** A plant species that exerts a controlling influence on or defines the character of a community.

**Drained:** A condition in which ground or surface water has been reduced or eliminated from an area by artificial means.

**Efficiency:** The efficiency of an energy-producing unit such as a power plant or engine that burns fuel can be thought of as the ratio of input energy (fuel) to net output energy.

**Electric load:** The combined electrical needs of all units in a system.

**Endangered species:** A species that is threatened with extinction throughout all or a significant portion of its range.

**Environment:** The total surroundings of an organism, including both non-living (abiotic) and living (biotic) components, that is, other plants and animals as well as those of its own kind.

**Environmental assessment:** A concise public document which serves to briefly provide sufficient evidence and analysis for determining whether to prepare an EIS [environmental impact statement] or a Finding of No Significant Impact (FONSI) in compliance with NEPA.

**Farmland Protection Policy Act (FPPA):** A federal law that aims to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to non-agricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with state, local, and private programs and policies to protect farmland.

**Federal Aviation Administration (FAA):** Federal agency primarily responsible for the advancement, safety and regulation of civil aviation in the United States.

**Fill material:** Any material placed in an area to increase surface elevation.

**FIRM:** See “Flood Insurance Rate Map”.

**Flood Insurance Rate Map (FIRM):** The official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community.

**Flora:** plant species that occur in an area.

**Flue gas:** The air coming out of a chimney after combustion; it can include nitrogen oxides, carbon oxides, water vapor, sulfur oxides, particles and many chemical pollutants.

**Flue gas desulfurization:** Removes PM and SO<sub>2</sub> by producing contact between the exhaust gas and a scrubbing slurry (generally lime or limestone). Mounted horizontal plates facilitate the transport of the slurry, whose contact with the exhaust gas forms a wet mixture of calcium sulfite and sulfate.

**Fly ash:** Non-combustible residual particles expelled by flue gas.

**Fugitive dust:** Particles lifted into the ambient air due to man-made and natural activities such as the movement of soil, vehicles, equipment, blasting, and wind. This excludes particulate emitted directly from the exhaust of motor vehicles and other internal combustion engines.

**Generating capacity:** The total amount of electrical power that a utility can produce at any one time, usually measured in megawatts.

**Geothermal resources:** Internal heat of the earth when used as a source of energy, it is usually contained in underground reservoirs of steam, hot water, and hot dry rocks.

**Groundwater:** Water in the porous rocks and soils of the earth's crust.

**Growing season:** The portion of the year when soil temperatures at 19.7 inches below the soil surface are higher than biologic zero (5° C) (US Department of Agriculture - Soil Conservation Service 1985).

**Habitat:** The environment occupied by individuals of a particular species, population, or community.

**Hazardous substances:** Solid or liquid materials, which may cause or contribute to mortality or serious illness by virtue of physical and chemical characteristics, or pose a hazard to human health or the environment when improperly managed, disposed of, treated, stored, or transported.

**Hazardous waste:** A waste or combination of wastes which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible illness; or pose a substantial present or potential hazard to human health or the

environment when improperly treated, stored, transported, disposed of, or otherwise managed.

**Heavy metals:** Metallic elements like mercury, lead, cadmium, arsenic, copper and zinc that can be harmful pollutants when they enter air, soil, and water.

**Historic Property:** As defined by the NHPA, a historic property or historic resource is any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places (NRHP), including any artifacts, records, and remains that are related to and located in such properties. The term also includes properties of traditional religious and cultural importance (traditional cultural properties), which are eligible for inclusion in the NRHP as a result of their association with the cultural practices or beliefs of an Indian tribe or Native Hawaiian organization.

**Hydric soil:** A soil that is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation (US Department of Agriculture-Soil Conservation Service 1985). Hydric soils that occur in areas having positive indicators of hydrophytic vegetation and wetland hydrology are wetland soils.

**Hydroelectric:** Related to electric energy produced by moving water (i.e. through a dam on a river that stores water in a reservoir).

**Hydrology:** The science dealing with the properties, distribution, and circulation of water.

**Hydrophytic vegetation:** The sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content. When hydrophytic vegetation comprises a community where indicators of hydric soils and wetland hydrology also occur, the area has wetland vegetation.

**Intermittent electric generator or intermittent resource:** An electric generating plant with output controlled by the natural variability of the energy resource rather than dispatched based on system requirements. Intermittent output usually results from the direct, non-stored conversion of naturally occurring energy fluxes such as solar energy, wind energy, or the energy of free-flowing rivers (that is, run-of-river hydroelectricity) (EIA on-line glossary).

**Karst:** A landscape characterized by the presence of caves, springs, sinkholes and losing streams, created as groundwater dissolves soluble rock such as limestone or dolomite.

**Levelized cost:** The present value of the total cost of building and operating a generating plant over its economic life, converted to equal annual payments; costs are levelized (adjusted to remove the impact of inflation) in real dollars (EIA undated).

**Limestone:** A sedimentary rock composed of calcium carbonate; a rock of marine origin derived from the lime mud and ooze that accumulated on calm, shallow sea floors.

**Megawatthour (MWh).** One million watts delivered for one hour.

**Mitigation:** A method or action to reduce or eliminate adverse program impacts.

**Monitoring (monitor):** Systematically observing, recording, or measuring some environmental attribute, such as air quality or water quality, or ascertaining compliance with a given law, regulation, or standard.

**National Environmental Policy Act (NEPA):** Establishes procedures that federal agencies must follow in making decisions on federal actions that may impact the environment. Procedures include evaluation of environmental effects of proposed actions, and alternatives to proposed actions, involvement of the public and cooperating agencies.

**National Ambient Air Quality Standards (NAAQS):** Standards established at the federal level that define the limits for airborne concentrations of designated “criteria” pollutants (e.g. nitrogen dioxide, sulfur dioxide, CO, PM, O<sub>3</sub>, and lead) to protect public health with an adequate margin of safety (primary standards) and to protect public welfare, including plant and animal life, visibility, and materials (secondary standards). States may establish more stringent standards if they want to do so.

**National Flood Insurance Program (NFIP):** The NFIP is a federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for state and community floodplain management regulations that reduce future flood damages.

**National Register of Historic Places (NRHP):** The nation's official list of cultural resources worthy of preservation. Authorized under the National Historic Preservation Act of 1966, the National Register is part of a national program to coordinate and support public and private efforts to identify, evaluate, and protect our historic and archeological resources. Properties listed in the Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture. The National Register is administered by the National Park Service.

**Native vegetation:** Plant life that occurs naturally in an area without agriculture or cultivation efforts.

**Navigable waters:** The waters of the United States, including the territorial seas; all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow

of the tide, as defined by Title 40 of the Code of Federal Regulations, Section 110.1 (40 CFR 110.1).

**NEPA:** See “National Environmental Policy Act”.

**Net Generation.** Gross generation minus plant use from all electric utility owned plants. The energy required for pumping at a pumped-storage plant is regarded as plant use and must be deducted from the gross generation.

**Net metering service:** as defined in EPAAct2005, Section 1251: “service to an electric consumer under which electric energy generated by that electric consumer from an eligible on-site generating facility and delivered to the local distribution facilities may be used to offset electric energy provided by the electric utility to the electric consumer during the applicable billing period.”

**NFIP:** See “National Flood Insurance Program”.

**Noise:** Sound that is perceived by humans as annoying and unwanted.

**Nonattainment area:** An area that has been designated by the U.S. Environmental Protection Agency and the appropriate state air quality agency as exceeding one or more National Ambient Air Quality Standards.

**Non-hydric soil:** A soil that has developed under predominantly aerobic soil conditions. These soils normally support mesophytic or xerophytic species.

**No-rise Certification for Floodways:** Any project in a floodway must be reviewed to determine if the project will increase flood heights. An engineering analysis must be conducted before a permit can be issued. The community's permit file must have a record of the results of this analysis, which can be in the form of a No-rise Certification. This No-rise Certification must be supported by technical data and signed by a registered professional engineer. The supporting technical data should be based on the standard step-backwater computer model used to develop the 100-year floodway shown on the Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map (FBFM).

**NRHP:** See “National Register of Historic Places”.

**Organic soil:** soil is classified as an organic soil when it is: (1) saturated for prolonged periods (unless artificially drained) and has more than 30-percent organic matter if the mineral fraction is more than 50-percent clay, or more than 20-percent organic matter if the mineral fraction has no clay; or (2) never saturated with water for more than a few days and having more than 34-percent organic matter.

**Particulate matter (PM):** Solid or liquid matter suspended in the atmosphere.

**Peak Demand.** The maximum load during a specified period of time.

**Peak Load Plant.** A plant usually housing gas turbines; diesels; or pumped-storage hydroelectric equipment normally used during the peak-load periods.

**Peaking Capacity.** Capacity of generating equipment normally reserved for operation during the hours of highest daily, weekly, or seasonal loads. Some generating equipment may be operated at certain times as peaking capacity and at other times to serve loads on an around-the-clock basis.

**Photovoltaic:** Converting light into electricity; semiconductor devices that convert sunlight into direct current electricity (i.e. solar cells).

**Plant community:** All of the plant populations occurring in a shared habitat or environment.

**Potable:** A liquid, usually water, which is drinkable.

**Power purchase agreement:** The off-take contract from a large customer to buy the electricity generated by a power plant.

**Radiative forcing.** Radiative forcing is a measure of how the energy balance of the Earth-atmosphere system is influenced when factors that affect climate are altered. The word radiative arises because these factors change the balance between incoming solar radiation and outgoing infrared radiation within the Earth's atmosphere. This radiative balance controls the Earth's surface temperature. The term forcing is used to indicate that Earth's radiative balance is being pushed away from its normal state.

**Renewable energy portfolio standard:** a requirement on electric utilities and other electric suppliers to supply a minimum percentage or amount of their load with eligible sources of renewable energy.

**Reserve margin:** The amount of unused available capacity of an electric power system (at peak load for a utility system) as a percentage of total capability.

**Runoff:** The non-infiltrating water entering a stream or other conveyance channel shortly after a rainfall.

**Saturated soil conditions:** A condition in which all easily drained voids (pores) between soil particles in the root zone are temporarily or permanently filled with water to the soil surface at pressures greater than atmospheric.

**Scoping:** Planning component of the NEPA process at the outset of preparing an EA or an EIS to help determine the scope of the study and the major issues that merit investigation and analysis.

**Sediment:** Particles derived from rock or biological sources that have been transported by water.

**Selective non-catalytic reduction:** A non-combustion control technology that converts nitrogen oxides (NO<sub>x</sub>) into molecular nitrogen and water by injecting a reducing agent (i.e. ammonia) into the flue gas.

**Sensitive receptor:** Areas defined as those sensitive to noise, such as hospitals, residential areas, schools, outdoor theaters, and protected wildlife species.

**Sequestration.** The process of injecting into geologic formations (oil and gas reservoirs, coal bed methane, or saline) or deep-ocean formations.

**SFHA:** See “Special Flood Hazard Area”.

**SHPO:** See “State Historic Preservation Officer”.

**Siltation:** Deposition of fine mineral particles (silt) on the beds of streams or lakes.

**Sinkhole:** A rounded depression in the landscape formed when an underground cavity collapses.

**Slash.** Branches or other residue left on the forest floor after timber harvesting.

**Soil:** Unconsolidated mineral and organic material that supports, or is capable of supporting, plants, and which has recognizable properties due to the integrated effect of climate and living matter acting upon parent material, as conditioned by relief over time.

**Special Flood Hazard Area (SFHA):** The land area covered by the floodwaters of the base flood is the Special Flood Hazard Area (SFHA) on NFIP maps. The SFHA is the area where the NFIP's floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

**Source:** Any place or object from which pollutants are released. A source can be a power plant, factory, dry cleaning business, gas station or farm. Cars, trucks and other motor vehicles are sources, and consumer products and machines used in industry can be sources too. Sources that stay in one place are referred to as stationary sources; sources that move around, such as cars or planes, are called mobile sources.

**Species:** All organisms of a given kind; a group of plants or animals that breed together but are not bred successfully with organisms outside their group.

**Spring:** A natural discharge of water from a rock or soil to the surface.

**State Historic Preservation Officer (SHPO):** Appointed under the authority of the National Historic Preservation Act of 1966, the State Historic Preservation Officer is the

official in each state and territory charged with administering national and state historic preservation program at the state level.

**Storm water:** Runoff water resulting from precipitation.

**Topography:** The configuration of a surface, including its relief and the position of its natural and man-made features.

**Toxicity:** A measure of how toxic or poisonous something is.

**Viewshed:** Subunits of the landscape where the scene is contained by topography, similar to a watershed.

**Visual resources:** The quality of the environment as perceived through the visual sense; visual resources are evaluated by comparing project features with the major features in the existing landscape; denotes an interaction between a human observer and the landscape he or she is observing.

**Volatile Organic Compounds (VOCs):** Gaseous organic compounds that participate in atmospheric sunlight-induced chemical reactions. Some compounds are specifically listed as exempt due to their having negligible light-induced chemical reactivity. [40 CFR 5 1.100.] Sunlight-induced reactions of VOCs with oxides of nitrogen and sulfur can produce O<sub>3</sub> and PM.

**Water table:** The upper surface of groundwater or that level below which the soil is saturated with water. It is at least 6 in. thick and persists in the soil for more than a few weeks.

**Wetland determination:** The process or procedure by which an area is adjudged a wetland or non-wetland.

**Wetland hydrology:** The sum total of wetness characteristics in areas that are inundated or have saturated soils for a sufficient duration to support hydrophytic vegetation.

**Wetland soil:** A soil that has characteristics developed in a reducing atmosphere, which exists when periods of prolonged soil saturation result in anaerobic conditions. Hydric soils that are sufficiently wet to support hydrophytic vegetation are wetland soils.

**Wetland vegetation:** The sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present. Hydrophytic vegetation occurring in areas that also have hydric soils and wetland hydrology may be properly referred to as wetland vegetation.

**Wetlands:** Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.