## SECTION 5 Acronyms and Abbreviations

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AAP AAQS AC AC/DC ACC acfm ACHP ADA ADPA ADPA ADPA ADT AIRFA AIRS ALS ANSI API APNE AQRV ARPA ASC ASCE ASIL ASME AWWA	ABB Alstrom Power Environmental Systems ambient air quality standards alternating current alternating current/direct current air-cooled condenser actual cubic feet per minute Advisory Council on Historic Preservation Americans with Disabilities Act Archaeological Data Preservation Act average daily traffic American Indian Religious Freedom Act EPA's Aerometric Information Retrieval System advanced life support American National Standards Institute American Petroleum Institute area of potential noise effect air quality related values Archaeological Resources Protection Act Application for Site Certification American Society of Civil Engineers acceptable source impact level American Society of Mechanical Engineers American Water Works Association
B.P.	Before Present
BACT	best available control technology
bcf	billion cubic feet
bcf/d	billion cubic feet per day
BFP	boiler feed pump
bgs	below the ground surface
BLM	Bureau of Land Management
BMP	best management practice
BOP	balance of plant
BPA	Bonneville Power Administration
BPIP	Building Profile Input Program
Btu	British thermal unit(s)
CAA	Clean Air Act
CaCO₃	calcium carbonate
CAO	Critical Areas Ordinance
CARB	California Air Resources Board
Catalytica	Catalytica Energy Systems

CCGG	Columbia County Grain Growers
CEM	continuous emission monitor
CEMS	continuous emissions monitoring system
CERCLA	Comprehensive Environmental Response, Compensation, and Liability
	Act
CFC	chlorofluorocarbons
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGT	combined-cycle combustion gas turbine
$CH_4$	methane
CN	curve number
CNEL	community noise equivalent level
СО	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> E	carbon dioxide equivalent
Corps	U.S. Army Corps of Engineers
CPR	cardiopulmonary resuscitation
CR	catalyst replacement
CREA	Columbia Rural Electric Association
CRF	capital recovery factor
CRMMP	cultural resources monitoring and mitigation plan
CRP	Conservation Reserve Program
CTI	CenturyTel
CUP	conditional use permit
CV	control valve
DAS	data acquisition system
dB	decibel(s)
dBA	A-weighted decibel sound level
dBC	C-weighted decibel sound level
DC	direct costs
dekatherms/d	dekatherms per day
DEM	Digital Elevation Model
DIC	direct installation costs
DLI	Department of Labor and Industries
DLN	dry, low-NO <sub>X</sub>
DNL	day-night noise level
DNR	Washington State Department of Natural Resources
DOD	U.S. Department of Defense
DOE	U.S. Department of Energy
DOH	Washington State Department of Health
DOT	U.S. Department of Transportation
dscfh	dry standard cubic feet per hour
duct burners	supplemental duct firing
EBIT	earnings before interest and taxes
Ecology	Washington State Department of Ecology

EDNA	environmental designation for noise abatement
EEI	Edison Electric Institute
EFSEC	Energy Facility Site Evaluation Council
EIS	environmental impact statement
EMT	emergency medical technician
EPA	U.S. Environmental Protection Agency
EPC	engineering, procurement, and construction
ERC	emission reduction credit
ESA	Endangered Species Act
EWG	exempt wholesale generator
EzA	Esquatzel Series soils
	1
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
famsl	feet above mean sea level
FEMA	
	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRES	finance, insurance, and real estate
FLAG	Federal Land Managers Air Quality Related Values Work Group Phase 1
	Report (USFS, NPS, USFWS, 2000)
FONSI	finding of no significant impact
ft	feet
ft/sec	feet per second
FTA	Federal Transit Administration
FTE	full-time equivalent
	-
g/ha/yr	grams per hectare per year
g/hectare	grams per hectare
$g/m^3$	grams per dry cubic meter
g/s	grams per second
0	gallons per employee per day
gal/hr	gallons per hour
GAQM	Guidelines on Air Quality Models
GE	General Electric
GEP	good engineering practice
	0 01
GHGs	greenhouse gases
GP	poorly graded gravel
gpd	gallons per day
gpd/ft <sup>2</sup>	gallons per day per square foot
gpm	gallons per minute
gr/dscf	grains per dry standard cubic foot
GSUT	generator step-up transformer
GTN	Gas Transmission-Northwest
GVWR	gross vehicle weight restriction
$H_2SO_4$	sulfuric acid
HAP	hazardous air pollutant
	r

HAZMAT	hazardous materials team
HCM	Highway Capacity Manual
HF	hydrogen fluorides
HHV	high heat value
HNO <sub>3</sub>	nitric acid
HP	high pressure
hp	horsepower
HPA	Hydraulic Project Approval
HRSG	heat recovery steam generator
HVAC	heating, ventilating, and air conditioning
Hz	hertz
I&C	instrumentation and control
IC	indirect costs
IDLH	immediately dangerous to life and health
IES	Illuminating Engineering Society
in/yr	inches per year
IP	intermediate pressure
IWAQM2	Interagency Workgroup on air Quality Modeling Phase 2 <i>Summary</i>
~	Report and Recommendations for Modeling Long Range Transport Impacts
	(EPA-454/R-98-019)
JV	joint venture
kg/ha/yr	kilograms per hectare per year
kg/s/CGT	kilograms per second per combustion gas turbine
km	kilometer(s)
kPa	kilopascal(s)
kV	kilovolt(s)
kW	kilowatt(s)
kWh	kilowatt-hour(s)
L	length
L.L.C.	limited liability company
LAER	lowest achievable emission rate
lb/gal	pounds per gallons
lb/hr	pounds per hour
lb/lb-mole	pounds per pound-mole
lb/million Btu	pounds per million British thermal units
lb/MMBtu	pounds per million British thermal units
Ldn	day-night noise level
Leq	equivalent noise level
LHV	low heat value
Ln	percentile noise level
LOS	level of service
LP	low pressure
	10 W DIEDS WIE
LTO	low temperature oxidation

M/R station	metering/regulatory station
m/s	meters per second
MACT	maximum achievable control technology
MAOP	maximum allowable operating pressure
mb	millibar(s)
MBTA	Migratory Bird Treaty Act
MDF	medium-density fiberboard
MG	million gallons
mg/L	milligrams per liter
$\mu g/m^3$	micrograms per cubic meter
$mg/m^3$	milligrams per cubic meter
ML	silt
Mm	
	megameter(s) millimeter(s)
mm MM5	Mesocale Model – Generation 5
MMBtu	million British thermal unit(s)
MMBtu/hr	
,	million British thermal units per hour
µmhos/cm MMSCFH	micromhos per centimeter million standard subis fost per bour
MMTCE	million standard cubic feet per hour million matrix tans of carbon aquivalent
	million metric tons of carbon equivalent
mph mscfh	miles per hour million standard subis fast per bour
	million standard cubic feet per hour mean sea level
msl MTCA	
MTCA	Model Toxics Control Act
MTCDE	metric tons of CO <sup>2</sup> equivalent
MTCE	metric tons of carbon equivalent
MTCE/yr MVA	metric tons of carbon equivalent per year
	megavolt ampere(s)
mVA	million ampere(s)
MVM	million vehicle-miles
MW	megawatt(s)
MWh	megawatt-hour(s)
2(NH <sub>4</sub> (SO <sub>4</sub> ))	ammonium bisulfate
N/A	not available
N <sub>2</sub>	nitrogen
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NASS	National Agricultural Statistics Service
nd	not detected within the sensitivity of the instrument
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Act
ng/J	nanograms per joule
NH <sub>3</sub>	ammonia
5	

NHPA	National Historic Preservation Act
NIST	National Institute of Standards and Technology
NMFS	National Marine Fisheries Service
NMVOCs	nonmethane volatile organic compounds
NO <sub>2</sub>	nitrogen dioxide
NOC	notice of construction
NOI	notice of intent
NOx	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPE	Northwest Power Enterprises, Inc.
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NSR	new source review
NTU	
	nephelometric turbidity unit
NWAPCA	Northwest Air Pollution Central Authority
NWI	National Wetland Inventory
NWR	National Wildlife Refuge
O&M	operation and maintenance
$O_3$	ozone
OAQPS	Office of Air Quality Planning and Standards
OAR	Oregon Administrative Rule
OFM	Office of Financial Management (Washington)
OMI	Operations and Maintenance Instructions
OSHA	Occupational Safety and Health Administration
OWS	oil-water separator
0110	on-water separator
РАН	polycyclic aromatic hydrocarbons
Pb	lead
PEC	purchased equipment costs
PEM	palustrine emergent
PFO	palustrine forested
PG&E	Pacific Gas and Electric
PGA	peak ground acceleration
PGT	Pacific Gas Transmission
PHS	priority habitats and species
PM	particulate matter
$PM_{10}$	particulates less than 10 microns in diameter
PNUCC	Pacific Northwest Utilities Conference Committee
	parts per billion
ppb PPL	PPL Global, L.L.C.
ppm	parts per million
ppmvd PSD	parts per million by volume, dry
PSD	prevention of significant deterioration
psi	pounds per square inch
psia	pounds per square inch absolute

psig	pounds per square inch gauge
PSS	palustrine scrub-shrub
PST	Pacific Standard Time
PVC	polyvinyl chloride
QA/QC	quality assurance/quality control
RACT	reasonably available control technology
RBLC	EPA's RACT/BACT/LAER Clearinghouse
RCRA	Resource Conservation and Recovery Act
RCW	Revised Code of Washington
REA	Rural Electric Association
RH	
RM	relative humidity
RMP	river mile(s) EPA's Pisk Management Program
	EPA's Risk Management Program
Rn	riverwash
RO	reverse osmosis
ROW	right-of-way
RV	recreational vehicle
SARA	Superfund Amendments and Reauthorization Act
SCA	Site Certification Agreement
SCADA	supervisory control and data acquisition
SCBA	self-contained breathing apparatus
SCC	Source Classification Code
scf	standard cubic feet
scf/lb-mole	standard cubic feet per pound-mole
scf/MMBtu	standard cubic feet per million British thermal units
scfh	standard cubic feet per hour
scfm	standard cubic feet per minute
SCR	selective catalytic reduction
sdcfh	standard dry cubic feet per hour
SE2	Sumas 2 Generation Facility
SEPA	State Environmental Policy Act
SER	significant emission rate
SHPO	State Historic Preservation Office
SIL	significant impact level
SIP	State Implementation Plan
SNCR	selective non-catalytic reduction
SO <sub>2</sub>	sulfur dioxide
SO <sub>3</sub>	sulfur trioxide
SO <sub>X</sub>	sulfur oxides
SPC	Starbuck Power Company, L.L.C.
SPCC	Spill Prevention Countermeasure and Control
SPP	Starbuck Power Project
sq. ft.	square feet
-	-
SQER	small quantity emission rates

SR	State Route
SrD	Stratford very stony silt loam
STG	steam turbine-generator
SWPC	Siemens Westinghouse Power Corporation
SWPPP	Stormwater Pollution Prevention Plan
TAP	toxic air pollutant
T-BACT	best available control technology for air toxic compounds
Tc	terrace escarpment
TCI	total capital investment
TLV-TWA	threshold limit value – time weighted average
TMPP	Three Mountain Power Project
ton/hr	tons per hour
TPY	total net NO <sub>X</sub> reductions
TRB	Transportation Research Board
TSP	total suspended particulates
UBC UFC UHC UMC UPC UPRR UPS USC USCS USDA USDA USFS USFWS USFWS USGS UTM	Uniform Building Code Uniform Fire Code unburned hydrocarbons Uniform Mechanical Code Uniform Plumbing Code Union Pacific Railroad uninterruptible power supply U.S. Code Unified Soil Classification System U.S. Department of Agriculture USDA Forest Service U.S. Fish and Wildlife Service U.S. Fish and Wildlife Service U.S. Geological Survey universal transverse Mercator
V	velocity
VOC	volatile organic compound
VRI	Visual Resource Inventory
VRM	Visual Resource Management
WAC WASS WCSB WDFW WG WSDOT WSDOT WSHA WSHPO WSP WSUCE	Washington Administrative Code Washington Agricultural Statistics Service Western Canada Supply Basin Washington Department of Fish and Wildlife water gauge Washington State Department of Transportation Washington State Department of Transportation Washington State Historic Preservation Office Washington State Patrol Washington State University Cooperative Extension

WUTC Washington Utilities and Transportation Commission

yd<sup>3</sup> cubic yard(s)