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## **APPENDICES**

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Habitat Subtype Photographs
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### **APPENDIX 3.8-1**

Land and Shoreline Use Consistency Analysis
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### **APPENDIX 3.10-1**

Sky Glow Information and Comparisons
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### **APPENDIX 3.10-2**

SWCA 2022 Visual Impact Assessment Report
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**APPENDIX 3.16-1**

Horse Heaven Wind Farm's Proximity to other Environmental Stressors

**APPENDIX 4.3-1**

Emission Calculations

**APPENDIX 4.6-1**

GAL 2022 Wind Turbine Wildlife Collision Risk Assessment

**APPENDIX 4.10-1**

Glare Analysis Inputs and Assumptions

**APPENDIX 4.11-1**

Inputs for Noise Modeling Assessment

**APPENDIX 4.16-1**

Technical Review of Horse Heaven Wind Farm, LLC's Economic Impact Analysis Methodology

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## ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit	CH <sub>4</sub>	methane
ADT	average daily traffic	CIE	Commission Internationale de l'Eclairage
ACEC	Area of Critical Environmental Concern	cm	centimeters
APP	Avoidance and Protection Plan	CO	carbon monoxide
Applicant	Horse Heaven Wind Farm, LLC	CO <sub>2</sub>	carbon dioxide
ASC	Application for Site Certification	CO <sub>2e</sub>	carbon dioxide equivalent
ASCE	American Society of Civil Engineers	Columbia Ridge	Columbia Ridge Landfill and Green Energy Plant
ASOS	Automated Surface Observing Systems	CRP	U.S. Department of Agriculture's Conservation Reserve Program
ASR	aquifer storage and recovery	CSZ	Cascadia Subduction Zone
B.P.	before present	CTUIR	Confederated Tribes of the Umatilla Indian Reservation
BBCS	Bird and Bat Conservation Strategy	CWA	Clean Water Act
BCAA	Benton Clean Air Agency	DAHP	Department of Archaeology and Historic Preservation
BCC	Benton County Code	dB	decibels
BCEM	Benton County Emergency Management	dBA	A-weighted decibels
BDI	Basin Disposal, Inc.	DDT	dichlorodiphenyltrichloroethane
Benton PUD	Benton County Public Utility District	DEQ	Oregon Department of Environmental Quality
Benton REA	Benton County Rural Electric Association	DNR	Washington State Department of Natural Resources
BESS	battery energy storage system	DSRP	Detailed Site Restoration Plan
bgs	below ground surface	Ecology	Washington State Department of Ecology
BFCOG	Benton-Franklin Council of Governments	EDNA	Environmental Designation for Noise Abatement
BFEDD	Benton-Franklin Economic Development District	EF	emissions factor
BLM	Bureau of Land Management	EFSEC	Washington Energy Facility Site Evaluation Council
BMP	best management practice	EIS	Environmental Impact Statement
BPA	Bonneville Power Administration	EJ	environmental justice
CAA	Clean Air Act	ELZ	Environmental Lighting Zone
CadnaA	Computer Aided Noise Abatement	EPA	U.S. Environmental Protection Agency
CARA	Critical Aquifer Recharge Area	ESA	Endangered Species Act
CCS	crypto-crystalline silicate	ESCP	Erosion and Sediment Control Plan
CEQ	Council on Environmental Quality	FAA	Federal Aviation Administration
CESA	Clean Energy States Alliance	FAR	Federal Aviation Regulation
CFR	Code of Federal Regulations		

FGTS	Freight and Goods Transportation System	MOVES	Motor Vehicle Emission Simulator
FHWA	Federal Highway Administration	MPD	Multiple Property Documentation
FMSIB	Freight Mobility Strategic Investment Board	mph	miles per hour
FR	Federal Register	MSA	Metropolitan Statistical Area
FRA	Federal Railroad Administration	MSW	municipal solid waste
FSAC	Freight Station Accounting Code	MW	megawatts
FTA	Federal Transit Administration	Mw	moment magnitude; also M
FTE	full-time equivalent	Mwac	megawatts of alternative current
GAP	Gap Analysis Project	MW-hr	megawatt hours
GE	General Electric	N <sub>2</sub> O	nitrous oxide
GE	General Electric	NAAQS	National Ambient Air Quality Standards
GHG	greenhouse gas	NCT	Notice Criteria Tool
GMA	Washington State Growth Management Act	Nez Perce	Nez Perce Tribe
GWP	global warming potential	NLCD	National Land Cover Database
HAP	hazardous air pollutant	NO <sub>2</sub>	nitrogen dioxide
HCA	habitat concentration area	NOx	oxides of nitrogen
HRA	Historical Research Associates, Inc.	NPDES	National Pollutant Discharge Elimination System
HV	high voltage	NRCS	Natural Resources Conservation Service
Hz	hertz	NRHP	National Register of Historic Places
I-82	Interstate 82	NRO	noise reduced operation
I-84	Interstate 84	NSR	noise sensitive receptor
IAF-NGT	Ice Age Floods National Geologic Trail	O&M	operation and maintenance
IBC	International Building Code	O <sub>3</sub>	ozone
IDP	Inadvertent Discovery Plan	ODFW	Oregon Department of Fish and Wildlife
JARPA	Joint Aquatic Resource Permit Application	OFM	Washington State Office of Financial Management
km	kilometers	OHV	off-highway vehicle
km <sup>2</sup>	square kilometers	OHWL	Ordinary High Water Line
KOP	key observation point	OPRD	Oregon Parks and Recreation Department
kV	kilovolts	Pb	lead
LED	light-emitting diode	PCFM	post-construction fatality monitoring
LEED	Leadership in Energy and Environmental Design	PGA	peak ground acceleration
LNTE	low noise trailing edge	PHS	Priority Habitats and Species
LOS	level of service	Plateau	Columbia Plateau
mag/arcsec <sup>2</sup>	magnitudes per square arcsecond	PM <sub>10</sub>	particulate matter less than 10 microns
met tower	meteorological tower		

PM <sub>2.5</sub>	particulate matter less than 2.5 microns in diameter	USDA	U.S. Department of Agriculture
Project	Horse Heaven Wind Farm; <i>also</i> Proposed Action	USFWS	U.S. Fish and Wildlife Service
Proposed Action	Horse Heaven Wind Farm; <i>also</i> Project	USGS	U.S. Geological Survey
PUD	Public Utility District	UTC	Washington Utilities and Transportation Commission
PV	photovoltaic	VAA	Vegetation Area of Analysis
RCCH	RCCH Health Care Partners/Trios	VMT	vehicle miles travelled
RCW	Revised Code of Washington	VOC	volatile organic compound
RFD	reasonably foreseeable development	VRM	Visual Resource Management
RV	recreational vehicle	WAC	Washington Administrative Code
Sandia	Sandia National Laboratories	Waste Management	Waste Management of Kennewick
SCA	Site Certification Agreement	WDFW	Washington Department of Fish and Wildlife
SCADA	supervisory control and data acquisition	WHCWG	Wildlife Habitat Connectivity Working Group
SECOMM	Southeast Communications Center	WHR	Washington Heritage Register
SEPA	Washington State Environmental Policy Act	WISAARD	Washington Information System for Architectural and Archaeological Records Data
SGHAT	Solar Glare Hazard Analysis Tool	WNHP	Washington Natural Heritage Program
SIP	State Implementation Plan	WQI	Freshwater Quality Index
SMA	Shoreline Management Act	WRIA	Water Resource Inventory Area
SMP	Shoreline Master Program	WSDOT	Washington State Department of Transportation
SO <sub>2</sub>	sulfur dioxide	Yakama Nation	Confederated Tribes and Bands of the Yakama Nation
SPCC	Spill Prevention, Control, and Countermeasures	YFTB	Yakima Fold and Thrust Belt
SPL	sound pressure level	ZOI	zone of influence
SWPPP	Stormwater Pollution Prevention Plan		
TAC	Technical Advisory Committee		
TCP	traditional cultural property		
TIP	transportation improvement program		
TLG	TLG Transport		
Tribes	Yakama Nation, the Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe, and the Wanapum Tribe		
TUS	traditional use study		
TV	television		
UE	utilities element		
UFC	Unified Facilities Criteria		

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