

TABLE OF CONTENTS

1	General Project Information	1
1.1	General — Organization — Index 463-60-012.....	1
1.2	General — Description of Applicant 463-60-015.....	1
1.3	Council Recognizes Pressing Need for Energy Facilities 463-60-021	2
1.4	General — Designation of Agent 463-60-025	2
1.5	General — Application Review Costs and Funding 463-60-035.....	3
1.6	General — Where Filed 463-60-045	3
1.7	General — Form and Number of Copies 463-60-055	3
1.8	General — Full Disclosure by Applicant 463-60-065	4
1.9	General — Assurances 463-60-075.....	4
1.10	General — Mitigation Measures 463-60-085	5
1.11	General — Sources of Information 463-60-095	13
1.12	General — Consultation 463-60-101.....	13
1.13	General — Graphic Material 463-60-105	18
1.14	General — Specific Contents and Applicability 463-60-115	18
1.15	General — Amendments to Applications, Additional Studies, Procedure 463-60-116	18
1.16	General — Applications for Expedited Processing 463-60-117	19
1.16.1	The proposed facilities' environmental impact is not significant.....	19
1.16.2	As to the second criteria, the Columbia Solar Projects are consistent with and in compliance with city, county, or regional land use plans or zoning ordinances.	23
1.17	References – Chapter 1	29
2	Solar Project Proposal Descriptions	31
2.1	Site Description 463-60-125	31
2.1.1	Kittitas County Overview	31
2.1.2	Solar Project Sites	33
2.2	Legal Descriptions and Ownership Interests 463-60-135	41
2.2.1	Camas Solar Project Site	41
2.2.2	Fumaria Solar Project Site.....	42
2.2.3	Penstemon Solar Project Site.....	43
2.2.4	Typha Solar Project Site.....	44
2.2.5	Urtica Solar Project Site	45
2.3	Construction on Site 463-60-145.....	57
2.3.1	Overview of TUUSSO'S Columbia Solar Projects.....	57
2.3.2	Columbia Solar Projects Facilities and Infrastructure.....	57
2.3.3	Solar Project Sites	67
2.4	Energy Transmission Systems 463-60-155	81
2.5	Electrical Transmission Facilities 463-60-160	81
2.6	Water Supply 463-60-165.....	81
2.6.1	Construction Water Use	82

2.6.2	Operational Water Use	82
2.7	System of Heat Dissipation 463-60-175	85
2.8	Characteristics of Aquatic Discharge Systems 463-60-185	85
2.9	Wastewater Treatment 463-60-195	87
2.10	Spillage Prevention and Control 463-60-205	88
2.10.1	Construction Phase Spill Prevention, Control, and Countermeasure Plan	88
2.10.2	Operational Phase Spill Prevention, Control, and Countermeasure Plan	89
2.11	Surface-Water Runoff 463-60-215	89
2.11.1	Short-term Construction	90
2.11.2	Long-term Operation	91
2.12	Emission Control 463-60-225	92
2.13	Carbon Dioxide Mitigation 463-60-230	93
2.14	Greenhouse Gases Emissions Performance Standards 463-60-232	93
2.15	Construction and Operation Activities 463-60-235	94
2.15.1	Project Phases and Schedule	94
2.15.2	Construction Workforce and Workspace	95
2.15.3	Site Preparation and Grading Activities	95
2.15.4	Ongoing Operations and Maintenance	95
2.16	Construction Management 463-60-245	96
2.16.1	Construction Management and Organizational Structure	97
2.16.2	Quality Assurance/Quality Control	98
2.16.3	Environmental Protection	99
2.17	Construction Methodology 463-60-255	99
2.17.1	Pre-construction and Site Preparation Including Revegetation Activities	100
2.17.2	Grade and Install Construction Entrance and Fencing	100
2.17.3	Install SWPPP Measures Including Perimeter Protection	100
2.17.4	Install Interior All-weather Access Roads	101
2.17.5	Layout Arrays, Combiner Box, Trenching, and Inverter Locations	101
2.17.6	Install Piles	101
2.17.7	Install Trackers	101
2.17.8	Install Panels and Complete Racking	101
2.17.9	Trenching for AC and DC Cabling	102
2.17.10	Install Medium Voltage DC Collection System	102
2.17.11	Install Inverters	102
2.17.12	Install AC Collection System	102
2.17.13	Construction of Interconnection Facilities	103
2.17.14	Site Restoration	103
2.18	Protection from Natural Hazards 463-60-265	103
2.18.1	Earthquakes	103
2.18.2	Volcanic Eruption, Tsunami, Avalanches, or Landslides	103

2.18.3	Floods/Storm Events	103
2.19	Security Concerns 463-60-275.....	104
2.19.1	Fencing	104
2.19.2	Lighting/Cameras	104
2.20	Study Schedules 463-60-285	104
2.20.1	Natural Resources Site Visits with the Washington Department of Fish and Wildlife (April 12, 2017).....	104
2.20.2	Natural Resource Surveys (April 3–12, 2017).....	104
2.20.3	Wetland Delineations (April 3–12, 2017).....	105
2.20.4	Archaeological Surveys (April 4–17, 2012)	105
2.20.5	Built Environment Surveys (April 5–6, 2017).....	106
2.21	Potential for Future Activities at Site 463-60-295.....	106
2.22	Analysis of Alternatives 463-60-296	106
2.23	Pertinent Federal, State, and Local Requirements 463-60-297 (Compliance Evaluation) ...	107
2.23.1	Pertinent Federal Statutes, Regulations, Rules, and Permits	110
2.23.2	Pertinent State Statutes, Regulations, Rules, and Permits.....	112
2.23.3	Pertinent Local Ordinances and Permits.....	117
2.24	References – Chapter 2	124
3	Natural Environment Affected Environment and Impacts.....	127
3.1	Earth 463-60-302.....	127
3.1.1	Affected Environment for Geology	127
3.1.2	Impacts to Geology.....	128
3.1.3	Mitigation Measures for Geology.....	130
3.1.4	Affected Environment for Soils	130
3.1.5	Impacts to Soils	137
3.1.6	Mitigation Measures for Soils	141
3.1.7	Affected Environment for Topography.....	141
3.1.8	Impacts to Topography.....	142
3.1.9	Unique Physical Features.....	142
3.1.10	Erosion/Enlargement of Land Area (Accretion).....	143
3.1.11	Seismic Hazards.....	143
3.2	Air 463-60-312	143
3.2.1	Affected Environment for Air Quality	143
3.2.2	Impacts to Air Quality	145
3.2.3	Affected Environment for Odor.....	146
3.2.4	Impacts to Odor	146
3.2.5	Affected Environment for Climate.....	146
3.2.6	Impacts to Climate.....	147
3.2.7	Affected Environment for Climate Change	148
3.2.8	Impacts to Climate Change	148

3.2.9	Affected Environment for Dust.....	149
3.2.10	Impacts to Dust.....	149
3.3	Water 463-60-322.....	149
3.3.1	Affected Environment for Water Resources	149
3.3.2	Impacts to Water Resources	168
3.3.3	Mitigation Measures for Water Resources	170
3.3.4	Affected Environment for Surface Water.....	175
3.3.5	Impacts to Surface Water	183
3.3.6	Affected Environment for Runoff/Absorption	184
3.3.7	Impacts to Runoff/Absorption	184
3.3.8	Mitigation for Runoff/Absorption	185
3.3.9	Affected Environment for Floodplains	186
3.3.10	Impacts to Floodplains.....	186
3.3.11	Affected Environment for Groundwater	189
3.3.12	Impacts to Groundwater	191
3.3.13	Mitigation for Groundwater	191
3.3.14	Public Water Supply	191
3.4	Habitat, Vegetation, Fish, and Wildlife 463-60-332.....	192
3.4.1	Affected Environment for Habitat and Species.....	192
3.4.2	Affected Environment for Special-status Species	218
3.4.3	Impacts to Habitat.....	223
3.4.4	Impacts to Special-status Species	228
3.4.5	Impacts to Fish and Wildlife.....	229
3.4.6	Mitigation for Habitat and Species.....	232
3.5	Wetlands 463-60-333	239
3.5.1	Affected Environment for Wetland Delineations.....	239
3.5.2	Affected Environment for Wetland Categories	242
3.5.3	Affected Environment for Water Sources	261
3.5.4	Impacts to Wetlands	263
3.5.5	Impacts to Wetland Buffers	264
3.6	Energy and Natural Resources 463-60-342.....	271
3.6.1	Affected Environment for Energy and Natural Resources	271
3.6.2	Impacts to Energy and Natural Resources.....	272
3.7	References – Chapter 3	278
4	Built Environment Affected Environment and Impacts	285
4.1	Environmental Health 463-60-352.....	285
4.1.1	Affected Environment for Noise.....	285
4.1.2	Impacts to Noise	287
4.1.3	Kittitas County Noise Regulations/Guidelines	292
4.1.4	Washington Noise Regulations/Guidelines	293

4.1.5	Federal Noise Regulations/Guidelines	294
4.1.6	Construction Phase Spill Prevention, Control, and Countermeasure Plan	297
4.1.7	Operational Phase Spill Prevention, Control, and Countermeasure Plan.....	298
4.1.8	Environmental Protection and Compliance Program	298
4.1.9	Solid or Semi-solid Wastes.....	298
4.2	Land and Shoreline Use 463-60-362	301
4.2.1	Affected Environment for Land Use and Zoning	301
4.2.2	Impacts to Land Use and Zoning	304
4.2.3	Light and Glare	308
4.2.4	Affected Environment for Aesthetics	310
4.2.5	Impacts to Aesthetics	317
4.2.6	Affected Environment for Recreation	319
4.2.7	Impacts to Recreation.....	326
4.2.8	Washington State Department of Archaeology and Historic Preservation Consultation	327
4.2.9	Tribal Consultation.....	327
4.2.10	Affected Environment for Historical and Cultural Preservation	328
4.2.11	Impacts to Historic and Cultural Preservation	358
4.2.12	Affected Environment for Agriculture.....	361
4.2.13	Impacts to Agriculture	363
4.3	Transportation 463-60-372	364
4.3.1	Construction Traffic Volumes	364
4.3.2	Affected Environment for Transportation.....	365
4.3.3	Impacts to Transportation.....	368
4.3.4	Affected Environment for Waterborne, Rail, and Air Traffic	373
4.3.5	Impacts to Waterborne, Rail, and Air Traffic	374
4.3.6	Affected Environment for Parking.....	374
4.3.7	Impacts to Parking.....	374
4.4	Socioeconomics 463-60-535	375
4.4.1	Overall Economy	380
4.4.2	Workforce, Employment, and Unemployment.....	380
4.4.3	Affected Environment for Housing.....	386
4.4.4	Impacts on Housing, Motels, and Campgrounds	389
4.4.5	Affected Environment for Tax Revenues.....	392
4.4.6	Impacts to Tax Revenues.....	394
4.4.7	Affected Environment for Fire Protection and Safety Services	396
4.4.8	Impacts to Fire Protection and Safety Services	398
4.4.9	Affected Environment for Police	399
4.4.10	Impacts to Police	401
4.4.11	Affected Environment for Schools	401
4.4.12	Impacts to Schools	404

4.4.13	Affected Environment for Parks and Other Recreational Facilities	404
4.4.14	Impacts to Parks and Other Recreational Facilities	405
4.4.15	Affected Environment for Utilities	405
4.4.16	Impacts to Utilities	407
4.4.17	Affected Environment for Maintenance	407
4.4.18	Impacts to Maintenance	407
4.4.19	Affected Environment for Communications	407
4.4.20	Impacts to Communications	407
4.4.21	Affected Environment for Water and Stormwater.....	408
4.4.22	Impacts to Water and Stormwater	411
4.4.23	Affected Environment for Sewer and Solid Waste	414
4.4.24	Impacts to Sewer and Solid Waste.....	416
4.4.25	Affected Environment for Other Governmental Services	416
4.4.26	Impacts to Other Governmental Services	417
4.4.27	Affected Environment for Local Government Revenues	418
4.4.28	Impacts to Local Government Revenues	422
4.5	References – Chapter 4	422
5	Applications for Permits and Authorizations	433
5.1	Air Emissions Permits and Authorizations 463-60-536	433
5.2	Wastewater/Stormwater Discharge Permit Applications 463-60-537	433

APPENDICES AND ATTACHMENTS

Appendix A:	Washington SEPA Environmental Checklist
Appendix B:	Vegetation Management Plan
Appendix C:	Habitat, Vegetation, Fish, and Wildlife Assessment Report
Appendix D:	Visual/Aesthetic Assessment Report
Appendix E:	Solar Glare Hazard Analysis Report
Appendix F:	Decommissioning Plan
Appendix G:	Camas Solar Project Site Reports and Permit Applications
G-1:	Camas Solar Project Critical Areas Report
G-2:	Camas Solar Project Cultural Resources Report
G-3:	Camas Solar Project Permit Applications
G-4:	Camas Solar Project Geotechnical Engineering Study
G-5:	Camas Solar Project Drainage Report
Appendix H:	Fumaria Solar Project Site Reports and Permit Applications
H-1:	Fumaria Solar Project Critical Areas Report
H-2:	Fumaria Solar Project Cultural Resources Report
H-3:	Fumaria Solar Project Permit Applications
H-4:	Fumaria Solar Project Geotechnical Engineering Study
H-5:	Fumaria Solar Project Drainage Report

Appendix I: Penstemon Solar Project Site Reports and Permit Applications

- I-1: Penstemon Solar Project Critical Areas Report
- I-2: Penstemon Solar Project Cultural Resources Report
- I-3: Penstemon Solar Project Permit Applications
- I-4: Penstemon Solar Project Geotechnical Engineering Study
- I-5: Penstemon Solar Project Drainage Report

Appendix J: Typha Solar Project Site Reports and Permit Applications

- J-1: Typha Solar Project Critical Areas Report
- J-2: Typha Solar Project Cultural Resources Report
- J-3: Typha Permit Applications
- J-4: Typha Solar Project Geotechnical Engineering Study
- J-5: Typha Solar Project Drainage Report

Appendix K: Urtica Solar Project Site Reports and Permit Applications

- K-1: Urtica Solar Project Critical Areas Report
- K-2: Urtica Solar Project Cultural Resources Report
- K-3: Urtica Solar Project Permit Applications
- K-4: Urtica Solar Project Geotechnical Engineering Study
- K-5: Urtica Solar Project Drainage Report

Appendix L: TUUSSO Solar Project Site Plans and Designs

LIST OF TABLES

Table 1.10-1. Summary of Mitigation Measures for the Columbia Solar Projects Potential Construction and Operational Impacts	5
Table 1.12-1. Agency and Tribal Consultation	14
Table 1.16-1. Kittitas County Comprehensive Plan GPO General Policy Statements.....	26
Table 1.16-2. Kittitas County Comprehensive Plan GPO Zoning Implementation Statements	27
Table 2.11-1. Potential Columbia Solar Project Pollutants.....	91
Table 2.15-1. Columbia Solar Projects Construction Schedule	94
Table 2.17-1. Construction Equipment.....	99
Table 2.23-1. Pertinent Federal, State and Local Codes, Ordinances, Statutes, Rules, Regulations, and Permits	108
Table 2.23-2. Kittitas County Comprehensive Plan GPO General Policy Statements.....	120
Table 3.1-1. Estimated Wind Pressure Loads on Solar Panels Calculated Using Maximum Wind Speeds	129
Table 3.2-1. Representative Meteorological Conditions in the Proposed Action Area	144
Table 3.2-2. National Ambient Air Quality Standards.....	145
Table 3.2-3. Emissions Inventory in Tons per Year for Kittitas County, Washington.....	147
Table 3.2-4. Construction-Related Emissions in Tons Resulting from the Proposed Solar Project (Per Project Site)	147
Table 3.3-1. Summary of the WAC Water Typing System	150
Table 3.3-2. Summary of Water Features within and near the Columbia Solar Project Sites	166
Table 3.3-3. Water Typing and Minimum Buffer Distance Summary for each Columbia Solar Project Site	167
Table 3.3-4. Proposed Water Resources Impact Summary for each Columbia Solar Project Site	168
Table 3.3-5. Water Protection Buffers and Project Encroachment within Each Columbia Solar Project Site	171
Table 3.3-6. FEMA-Mapped 100-year Floodplain Project Encroachment and Impacts within Each Columbia Solar Project Site	187
Table 3.4-1. Available Habitat Types within the Columbia Solar Project Analysis Areas	196
Table 3.4-2. Noxious Weeds Documented in the Columbia Solar Projects Project-scale Analysis Areas	207
Table 3.4-3. Representative Species Observed or Likely to Occur in the Columbia Solar Project Analysis Areas.....	209
Table 3.4-4. Special-status Species with Potential to Occur in the Columbia Solar Project Project-scale Analysis Areas.....	219
Table 3.4-5. Construction and Operation Impacts: Acres of Habitat Types Potentially Affected by Construction Activities and from Fencing during Long-term Operation of the Columbia Solar Project.....	224
Table 3.4-6. Acres of Habitat Types Potentially Affected by Impervious Areas from Long-term Operation of the Columbia Solar Projects.....	226
Table 3.4-7. Acres of Special-status Species Habitat Impacted by Fencing and Conversion to an Impervious Area of the Columbia Solar Projects	229
Table 3.4-8. Acres of Representative Species Habitat (in the Landscape-scale Analysis Area) Impacted by Fencing and Conversion to an Impervious Area of the Columbia Solar Projects	230
Table 3.4-9. Nesting Seasons for Raptor Species Likely to Occur in the Analysis Areas	234
Table 3.4-10. Surface Waters in the Project-scale Analysis Areas and Applicable Buffers.....	234
Table 3.5-1. Wetland Size, Rating, and Classification for Wetlands within the Study Areas for Each Columbia Solar Project Site	241
Table 3.5-2. Washington State Department of Ecology Wetland Rating System Categories.....	242
Table 3.5-3. Wetland Rating and Minimum Buffer Distance Summary for each Columbia Solar Project Site	258
Table 3.5-4. Proposed Wetland Impact Summary for each Columbia Solar Project Site	263
Table 3.5-5. Wetland Buffers and Project Encroachment within Each Columbia Solar Project Site	265
Table 4.1-1. Representative Existing Conditions Based on Land Use.....	286
Table 4.1-2. Nearest Sensitive Receptor to Each Solar Project	286

Table 4.1-3.	Maximum Noise Levels for Common Construction Equipment.....	287
Table 4.1-4.	Calculated Noise Levels at Nearest Receptor Due to Construction of the Camas Solar Project Site	288
Table 4.1-5.	Calculated Noise Levels at Property Boundary Due to Operation of the Camas Solar Project Site	289
Table 4.1-6.	Calculated Noise Levels at Nearest Receptor Due to Construction of the Fumaria Solar Project Site	289
Table 4.1-7.	Calculated Noise Levels at Property Boundary Due to Operation of the Fumaria Solar Project Site	290
Table 4.1-8.	Calculated Noise Levels at Nearest Receptor Due to Construction of the Penstemon Solar Project Site.....	290
Table 4.1-9.	Calculated Noise Levels at Property Boundary Due to Operation of the Penstemon Solar Project Site.....	290
Table 4.1-10.	Calculated Noise Levels at Nearest Receptor Due to Construction of the Typha Solar Project Site	291
Table 4.1-11.	Calculated Noise Levels at Property Boundary Due to Operation of the Typha Solar Project Site	291
Table 4.1-12.	Calculated Noise Levels at Nearest Receptor Due to Construction of the Urtica Solar Project Site	292
Table 4.1-13.	Calculated Noise Levels at Property Boundary Due to Operation of the Urtica Solar Project Site	292
Table 4.1-14.	Washington State Maximum Allowed Amount of Noise Coming into a Property.....	293
Table 4.2-1.	Kittitas County Comprehensive Plan Land Use Designations and Acreages.....	301
Table 4.2-2.	Elements of Line, Form, Color, and Texture Common to all Five Columbia Solar Project Sites	311
Table 4.2-3.	Summary of Five Columbia Solar Project KOP Locations, Directions of View, and Viewsheds	312
Table 4.2-4.	Recreational Use Rates in the SCORP North Cascades Region and Washington	320
Table 4.2-5.	Previous Cultural Resource Investigations Within Approximately 1 Mile of the Project Area.....	334
Table 4.2-6.	Previously Recorded Sites Within Approximately 1 Mile of the Project Areas.....	337
Table 4.2-7.	Agricultural Characteristics for Kittitas County and Washington (2012)	361
Table 4.3-1.	Estimated Construction Vehicle Traffic Volumes	364
Table 4.3-2.	Construction Equipment.....	365
Table 4.3-3.	Highway and Access Road Information for the Five Columbia Solar Project Sites	367
Table 4.3-4.	Potential Construction Vehicle Impacts for Columbia Solar Project Sites	368
Table 4.4-1.	Population and Growth Rate Data for Kittitas County, the Cities, and Washington (2000, 2010, and 2015).....	377
Table 4.4-2.	Percent Minority Population in Kittitas County, the Cities, and Washington (2015)	378
Table 4.4-3.	Population by Race/Ethnicity, Including Hispanic or Latino in Kittitas County, Ellensburg, and Washington (2015).....	378
Table 4.4-4.	Median Annual Household and Per Capita Incomes, and Percent of the Population Below the Poverty Level (2015)	379
Table 4.4-5.	Workforce, Employment, and Unemployment in Kittitas County, the Cities, and Washington (2015)	381
Table 4.4-6.	Employment by Industry in Kittitas County, Ellensburg, and Washington (2015).....	381
Table 4.4-7.	Top 10 Employers in Kittitas County (2014).....	382
Table 4.4-8.	Columbia Solar Projects Construction Schedule	382
Table 4.4-9.	Peak Construction Workforce Characteristics for the Five Columbia Solar Projects.....	383
Table 4.4-10.	Housing Characteristics in Kittitas County, the Cities, and Washington (2015)	386
Table 4.4-11.	Housing Characteristics in Kittitas County, the Cities, and Washington (2000)	386
Table 4.4-12.	Representative Hotels, Motels, and Bed & Breakfasts in Kittitas County	387
Table 4.4-13.	Representative RV and Camping Parks in Kittitas County	388
Table 4.4-14.	Potential Columbia Solar Projects Construction and Operations Employees Washington State Occupational Wages (May 2016)	391
Table 4.4-15.	Kittitas County Top 10 Property Tax Payers, 2014 Assessment for 2015 Tax.....	392

Table 4.4-16. Sales Tax Rates in Kittitas County and the Cities, 3rd Quarter 2017	393
Table 4.4-17. City of Ellensburg Top 10 Property Tax Payers, 2014 Assessment for 2015 Tax.....	393
Table 4.4-18. Operational Kittitas County Property Tax Payments from the Five Columbia Solar Projects.....	395
Table 4.4-19. Kittitas County Emergency Services Facilities	396
Table 4.4-20. Public Education Facilities in the Ellensburg and Western Kittitas County Areas	402
Table 4.4-21. Puget Sound Energy 2014 Electricity Fuel Mix.....	405
Table 4.4-22. Kittitas County PUD Electricity Use and Costs by Customer Class.....	406
Table 4.4-23. Kittitas County PUD Electric Generation by Fuel Source Mix.....	406
Table 4.4-24. Kittitas County Group A Water Systems	408
Table 4.4-25. Kittitas County Sanitary Sewer Facilities.....	414
Table 4.4-26. Kittitas County Waste and Recycling Facilities (2014).....	415
Table 4.4-27. Kittitas County Waste and Recycling Facilities and Quantities (2014)	416
Table 4.4-28. Kittitas County 2016 Annual Budget Summary.....	418
Table 4.4-29. Kittitas County General Fund – Revenue by Department (2016)	419
Table 4.4-30. City of Ellensburg 2016 Annual Budget Summary.....	420
Table 4.4-31. City of Ellensburg City Budget by Fund (2016).....	421

LIST OF FIGURES

Figure 2.1-1.	Columbia Solar Project site locations.....	32
Figure 2.1-2.	Camas Solar Project site location.....	34
Figure 2.1-3.	Fumaria Solar Project site location.....	36
Figure 2.1-4.	Penstemon Solar Project site location.....	37
Figure 2.1-5.	Typha Solar Project site location.....	39
Figure 2.1-6.	Urtica Solar Project site location.....	40
Figure 2.2-1.	Camas Solar Project site.....	47
Figure 2.2-2.	Fumaria Solar Project site, Map 1 of 5.....	48
Figure 2.2-3.	Fumaria Solar Project site, Map 2 of 5.....	49
Figure 2.2-4.	Fumaria Solar Project site, Map 3 of 5.....	50
Figure 2.2-5.	Fumaria Solar Project site, Map 4 of 5.....	51
Figure 2.2-6.	Fumaria Solar Project site, Map 5 of 5.....	52
Figure 2.2-7.	Penstemon Solar Project site.....	54
Figure 2.2-8.	Typha Solar Project site.....	55
Figure 2.2-9.	Urtica Solar Project site.....	56
Figure 2.3-1.	Camas Solar Project preliminary project plan.....	59
Figure 2.3-2.	Fumaria Solar Project preliminary project plan.....	60
Figure 2.3-3.	Penstemon Solar Project preliminary project plan.....	61
Figure 2.3-4.	Typha Solar Project preliminary project plan.....	62
Figure 2.3-5.	Urtica Solar Project preliminary project plan.....	63
Figure 2.16-1.	Columbia Solar Projects management structures.....	97
Figure 2.23-1.	Shoreline of the State encroachment areas for the Typha Solar Project.....	114
Figure 3.1-1.	Boring locations at the Camas Solar Project site.....	131
Figure 3.1-2.	Boring locations at the Fumaria Solar Project site.....	133
Figure 3.1-3.	Boring locations at the Penstemon Solar Project site.....	135
Figure 3.1-4.	Boring locations at the Typha Solar Project site.....	136
Figure 3.1-5.	Boring locations at the Urtica Solar Project site.....	138
Figure 3.3-1.	Camas Solar Project site map showing water resources, north portion.....	151
Figure 3.3-2.	Camas Solar Project site map showing water resources, south portion.....	152
Figure 3.3-3.	Fumaria Solar Project site map showing water resources, Map 1 of 8.....	153
Figure 3.3-4.	Fumaria Solar Project site map showing water resources, Map 2 of 8.....	154
Figure 3.3-5.	Fumaria Solar Project site map showing water resources, Map 3 of 8.....	155
Figure 3.3-6.	Fumaria Solar Project site map showing water resources, Map 4 of 8.....	156
Figure 3.3-7.	Fumaria Solar Project site map showing water resources, Map 5 of 8.....	157
Figure 3.3-8.	Fumaria Solar Project site map showing water resources, Map 6 of 8.....	158
Figure 3.3-9.	Fumaria Solar Project site map showing water resources, Map 7 of 8.....	159
Figure 3.3-10.	Fumaria Solar Project site map showing water resources, Map 8 of 8.....	160
Figure 3.3-11.	Penstemon Solar Project site map showing water resources.....	161
Figure 3.3-12.	Typha Solar Project site map showing water resources, north portion.....	162
Figure 3.3-13.	Typha Solar Project site map showing water resources, south portion.....	163
Figure 3.3-14.	Urtica Solar Project site map showing water resources, east portion.....	164
Figure 3.3-15.	Urtica Solar Project site map showing water resources, west portion.....	165
Figure 3.3-16.	Penstemon Solar Project water buffer encroachment.....	173
Figure 3.3-17.	Urtica Solar Project wetland and water buffer encroachment.....	174
Figure 3.3-18.	Proposed drainage conditions for the Camas Solar Project site.....	176
Figure 3.3-19.	Proposed drainage conditions for the Fumaria Solar Project site.....	178
Figure 3.3-20.	Proposed drainage conditions for the Penstemon Solar Project site.....	179
Figure 3.3-21.	Proposed drainage conditions for the Typha Solar Project site.....	181
Figure 3.3-22.	Proposed drainage conditions for the Urtica Solar Project site.....	182
Figure 3.4-1.	Columbia Solar Projects project-scale analysis areas.....	193
Figure 3.4-2.	Columbia Solar Projects landscape-scale analysis area.....	195
Figure 3.4-3.	Habitat types within the project-scale analysis area for the Camas Solar Project site.....	197
Figure 3.4-4.	Habitat types within the project-scale analysis area for the Fumaria Solar Project, Map 1 of 4.....	198

Figure 3.4-5.	Habitat types within the project-scale analysis area for the Fumaria Solar Project, Map 2 of 4.....	199
Figure 3.4-6.	Habitat types within the project-scale analysis area for the Fumaria Solar Project, Map 3 of 4.....	200
Figure 3.4-7.	Habitat types within the project-scale analysis area for the Fumaria Solar Project, Map 4 of 4.....	201
Figure 3.4-8.	Habitat types within the project-scale analysis area for the Penstemon Solar Project.	202
Figure 3.4-9.	Habitat types within the project-scale analysis area for the Typha Solar Project.	203
Figure 3.4-10.	Habitat types within the project-scale analysis area for the Urtica Solar Project.	204
Figure 3.5-1.	Camas Solar Project site map showing water resources, north portion.....	243
Figure 3.5-2.	Camas Solar Project site map showing water resources, south portion.....	244
Figure 3.5-3.	Fumaria Solar Project site map showing water resources, Map 1 of 8.....	245
Figure 3.5-4.	Fumaria Solar Project site map showing water resources, Map 2 of 8.....	246
Figure 3.5-5.	Fumaria Solar Project site map showing water resources, Map 3 of 8.....	247
Figure 3.5-6.	Fumaria Solar Project site map showing water resources, Map 4 of 8.....	248
Figure 3.5-7.	Fumaria Solar Project site map showing water resources, Map 5 of 8.....	249
Figure 3.5-8.	Fumaria Solar Project site map showing water resources, Map 6 of 8.....	250
Figure 3.5-9.	Fumaria Solar Project site map showing water resources, Map 7 of 8.....	251
Figure 3.5-10.	Fumaria Solar Project site map showing water resources, Map 8 of 8.....	252
Figure 3.5-11.	Penstemon Solar Project site map showing water resources.....	253
Figure 3.5-12.	Typha Solar Project site map showing water resources, north portion.....	254
Figure 3.5-13.	Typha Solar Project site map showing water resources, south portion.....	255
Figure 3.5-14.	Urtica Solar Project site map showing water resources, east portion.....	256
Figure 3.5-15.	Urtica Solar Project site map showing water resources, west portion.....	257
Figure 3.5-16.	Camas Solar Project wetland buffer encroachment.....	267
Figure 3.5-17.	Typha Solar Project wetland buffer encroachment.....	268
Figure 3.5-18.	Urtica Solar Project wetland buffer encroachment.....	270
Figure 4.2-1.	Columbia Solar Project site locations.....	302
Figure 4.2-2.	SGHAT tool results example.....	309
Figure 4.2-3.	Kittitas County selected major state recreational parks.....	321
Figure 4.2-4.	Camas Solar Project cultural and built environment resources, north portion.....	339
Figure 4.2-5.	Camas Solar Project cultural and built environment resources, south portion.....	340
Figure 4.2-6.	Fumaria Solar Project cultural and built environment resources, Map 1 of 7.....	342
Figure 4.2-7.	Fumaria Solar Project cultural and built environment resources, Map 2 of 7.....	343
Figure 4.2-8.	Fumaria Solar Project cultural and built environment resources, Map 3 of 7.....	344
Figure 4.2-9.	Fumaria Solar Project cultural and built environment resources, Map 4 of 7.....	345
Figure 4.2-10.	Fumaria Solar Project cultural and built environment resources, Map 5 of 7.....	346
Figure 4.2-11.	Fumaria Solar Project cultural and built environment resources, Map 6 of 7.....	347
Figure 4.2-12.	Fumaria Solar Project cultural and built environment resources, Map 7 of 7.....	348
Figure 4.2-13.	Penstemon Solar Project cultural and built environment resources.....	350
Figure 4.2-14.	Typha Solar Project cultural and built environment resources, north portion.....	353
Figure 4.2-15.	Typha Solar Project cultural and built environment resources, south portion.....	354
Figure 4.2-16.	Urtica Solar Project cultural and built environment resources, east portion.....	356
Figure 4.2-17.	Urtica Solar Project cultural and built environment resources, west portion.....	357
Figure 4.3-1.	Columbia Solar Project locations, highways, and roads.....	366
Figure 4.4-1.	Kittitas County and cities overview map.....	376