

## APPENDIX A

### 2022AS RFP Technical Specifications and Required Submittals

Appendix A includes certain technical submittals which are required bid submittals and bidder must include in the bid package as separate attachments:

Appendix A	Supply-side Resource Required Submittals	Applicable to:
<i>Appendix A-2</i>	<i>Interconnection Studies and Agreements (all bids)</i>	<i>All bids</i>
<i>Appendix A-3</i>	<i>Permit-Matrix (all bids)</i>	<i>All bids</i>
<i>Appendix A-5</i>	<i>Project One-Line Drawing and Layout (all bids)</i>	<i>All bids</i>
<i>Appendix A-6</i>	<i>Division of Responsibility (BTA bids only)</i>	<i>BTA bids</i>
<i>Appendix A-8</i>	<i>Real Estate Specifications (BTA bids only)</i>	<i>BTA bids</i>
<i>Appendix A-9</i>	<i>Product Data- Equipment Supply Matrix (all bids)</i>	<i>All bids</i>
<i>Appendix A-10</i>	<i>Plant Performance Guarantee/Warranties for (BTAs bids only)</i>	<i>BTA bids</i>

In addition to the required submittals, Appendix A includes required technical specifications for BTA bids. BTA bidders must comply with the following specifications or provide an exceptions list:

Appendix A	Supply-side Resource – BTA Technical Specifications	Applicable to:
<i>Appendix A-1.2</i>	<i>Wind Work Specifications</i>	<i>Wind bids</i>
<i>Appendix A-1.3</i>	<i>Wind Work Specifications – Observation Tower</i>	<i>Wind bids</i>
<i>Appendix A-1.4</i>	<i>Solar Work Specifications</i>	<i>Solar bids</i>
<i>Appendix A-1.5</i>	<i>HV Work Specifications</i>	<i>All BTA bids</i>
<i>Appendix A-1.6</i>	<i>Battery Energy Storage System Technical Specifications</i>	<i>BTA bids with Energy Storage</i>
<i>Appendix A-4.1</i>	<i>Contract Safety Plan Requirements</i>	<i>All BTA bids</i>
<i>Appendix A-4.2</i>	<i>Contractor Health Safety and Environmental Requirements</i>	<i>All BTA bids</i>
<i>Appendix A-7</i>	<i>General Owner Standards and Specifications:</i>	<i>All BTA bids</i>

A full list of Appendix A technical specifications for wind, solar and energy storage resources is included in Appendix A-1.1 - Technical Specifications Matrix. PacifiCorp will provide any additional Technical Specifications for BTA bids for other resource types upon receipt of Appendix B-1 Notice of Intent to Bid.

## APPENDIX A-1.1

### Technical Specifications Matrix

[INCLUDED AS SEPARATE ATTACHMENTS]

The following specifications are provided as separate attachments. BTA Bidders must comply with these technical specifications or else provide a documented list of exceptions.

A-1.2	Wind Work Specifications
A-1.3	Wind Work Specifications – Observation Tower
A-1.4	Solar Work Specifications
A-1.5	HV Work Specifications
A-1.6	Battery Energy Storage System Technical Specifications

A-4.1	Contract Safety Plan Requirements
A-4.2	Contractor Health Safety and Environmental Requirements

A-7	<b>General Owner Standards and Specifications:</b>
A-7.01	Attachment 1A Project Document Formatting and Requirements
A-7.02	Attachment 1B Project Document Deliverables
A-7.03	Computer Aided Design (PacifiCorp Energy) General AutoCAD/Drafting Standards (Specification DCAP876)
A-7.04.1	Substation Equipment—Power Transformer
A-7.04.2	Substation Equipment—Collector Substation Main Power
A-7.04.3	Two-Winding Dist Transformer Specification
A-7.05	Material Specification ZS 061, Electrical Equipment—Insulating Oil.
A-7.06	Material Specification ZS 065, Wind, Ice, and Seismic Withstand
A-7.07	Material Specification ZS 066, Contaminated-Environment Protection
A-7.08	Procedure SP-TRF-INST, Transformer Receiving, Installation and Testing
A-7.09	Danger Sign
A-7.10.1	PacifiCorp Engineering Handbook, Part 6B.5 Fence Application and Construction
A-7.10.2	Chain Link Fencing and Gates
A-7.10.3	Cantilever Side Gate
A-7.11	PacifiCorp Engineering Handbook, Part 6B.6 Substation Grounding
A-7.12	PacifiCorp Protective Relaying Standard, Document Number: GEN-ENG-RELAY-0001

A-7.13	PacifiCorp Protective Relaying Standard, Arc Flash Hazard Standard, Document: GEN-ENG-RELAY-0002
A-7.14	PacifiCorp Protective Relaying Standard, "Relay Current Transformer (CT) and Potential Transformer (PT) Insulation Integrity Test," Document: GEN-ENG-RELAY-003
A-7.15	PacifiCorp Protective Relaying Standard, "Thermal Plant Protective Relay Maintenance and Testing-PRC-005," Document: GEN-ENG-RELAY-1003
A-7.16	PacifiCorp Protective Relaying Standard, "Relay Testing & Commissioning Checklist"
A-7.17	PacifiCorp Protective Relaying Standard, "Relay Installation Procedure," Document: GPCP-EQPMNT-INST
A-7.18	PacifiCorp Protective Relaying Standard, "Current Transformer Installation Procedure (Relay)," Document: GPCP-CT-INST
A-7.19	PacifiCorp Protective Relaying Standard, "Current Transformer Installation Form (Relay)," Document: GPCP-CT-INST
A-7.20	SG001 Substation High Voltage Signs
A-7.21	Specification for Substation Equipment Installation Testing Commissioning
A-7.22.1	SV001 Bird and Animal Protection-General Installation Instructions
A-7.22.2	SV002 Bird and Animal Protection for Miscellaneous Equipment
A-7.22.3	Bird and Animal Protection—General Installation Instructions
A-7.23	Volume 8 Consultant Drafting Procedures and Standards

## **APPENDIX A-2**

### **Interconnection Studies or Agreement**

Bidders shall provide an unredacted version of the interconnection study and interconnection agreement for the proposed resource and label the attachment as Appendix A-2 to their RFP bid response.

### **APPENDIX A-3**

#### **Permitting Matrix**

[INCLUDED AS A SEPARATE EXCEL ATTACHMENT]

Bidders shall complete the Permitting Matrix and label it Appendix A-3 in their bid response.

## **APPENDIX A-4**

### **Contractor Safety Plan and Contractor Health Safety and Environmental Requirements**

[INCLUDED AS SEPARATE ATTACHMENTS]

The following Appendices are provided as separate attachments and are requirements for all BTA bids. All bidders, regardless of transaction structure,<sup>1</sup> are encouraged to abide by and have similar safety standards and requirements.

Appendix A-4.1 (BTA)	Contract Safety Plan Requirements	Separate Attachment	Informational	Word
Appendix A-4.2 (BTA)	Contractor Health Safety and Environmental Requirements	Separate Attachment	Informational	Word

---

<sup>1</sup> PPA and tolling agreement bidders and Demand-side bidders offering Professional Services Agreement contracts

## **APPENDIX A-5**

### **Project Single-Line Drawing and Layouts**

Bidders shall provide a single line drawing and layout shown on a United States Geological Survey (USGS) 7.5-minute series map for the proposed resource and label the attachments as Appendix A-5 to their RFP bid response.

## **APPENDIX A-6**

### **Division of Responsibility**

[INCLUDED AS A SEPARATE ELECTRONIC SPREADSHEET (EXCEL FILE)]

BTA Bidders shall complete the attached spreadsheet and submit as Appendix A-6 to their RFP bid response.



## APPENDIX A-7

### General Technical Specifications

[INCLUDED AS SEPARATE ATTACHMENTS]

All BTA bidders are required to comply with the following General Technical Specifications

Appendix A-7 (BTA)	General Technical Specifications
Appendix A-7.01 (BTA)	Project Document Formatting and Requirements
Appendix A-7.02 (BTA)	Document Deliverables
Appendix A-7.03 (BTA)	General AutoCAD Drafting Standards (Spec DCAP876)
Appendix A-7.04.1 (BTA)	EBU PX-S01-S01A Substation Equipment—Power Transformer
Appendix A-7.04.2 (BTA)	EBU PX-S02 Substation Equipment—Collector Substation Main Power
Appendix A-7.04.3 (BTA)	ZS-102 Two-Winding Dist Transformer Specification
Appendix A-7.05 (BTA)	EBU SI-S04 Electrical Equipment-Insulating Oil.
Appendix A-7.06 (BTA)	EBU SI-S02 Wind, Ice, and Seismic Withstand
Appendix A-7.07 (BTA)	EBU SI-S03 Contaminated-Environment Protection
Appendix A-7.08 (BTA)	Procedure SP-TRF-INST Transformer Installation
Appendix A-7.09 (BTA)	TD051 Danger Sign
Appendix A-7.10.1 (BTA)	Engineering Handbook Part 6B 5 Fence Application and Construction
Appendix A-7.10.2 (BTA)	Section 02810 Chain Link Fencing and Gates
Appendix A-7.10.3 (BTA)	Section 02815 Cantilever Slide Gate
Appendix A-7.11 (BTA)	Engineering Handbook Park 6B 6 Substation Grounding
Appendix A-7.12 (BTA)	GEN-ENG-RELAY-0001 Protective Relaying Requirements for New Plants
Appendix A-7.13 (BTA)	GEN-ENG-RELAY-0002-Arc Flash Requirements for New Plants
Appendix A-7.14 (BTA)	GEN-ENG-RELAY-0003 CT and PT Integrity Test
Appendix A-7.15 (BTA)	GEN-ENG-RELAY-1003 Protective Relay Maintenance and Testing PRC 005
Appendix A-7.16 (BTA)	Relay Testing and Commissioning Checklist
Appendix A-7.17 (BTA)	Relay Installation Procedure GPCP-EQPMNT-INST
Appendix A-7.18 (BTA)	Current Transformer Installation Procedure GPCP-CT-INST
Appendix A-7.19 (BTA)	Current Transformer Installation Form GPCF-CT-INST
Appendix A-7.20 (BTA)	SG001 Substation High-Voltage Warning Signs
Appendix A-7.21 (BTA)	EXHIBIT Xv4 Substation Equipment Installation
Appendix A-7.22.1 (BTA)	SV 251 Bird and Animal Protection for Miscellaneous Equipment
Appendix A-7.22.2 (BTA)	SV 001 Bird and Animal Protection—General Information
Appendix A-7.22.3 (BTA)	SV 002 Bird and Animal Protection—General Installation Instructions
Appendix A-7.23 (BTA)	Volume 8 Consultant Drafting Procedures and Standards

**APPENDIX A-8**

**Real Estate Specifications**

[INCLUDED AS A SEPARATE ATTACHMENT]

BTA Bidders shall complete and submit attachment labeled as Appendix A-8 to their RFP bid response.

**APPENDIX A-9**

**Equipment Supply Matrix**

[INCLUDED AS A SEPARATE ELECTRONIC SPREADSHEET (EXCEL FILE)]

All Bidders shall complete and submit Appendix A-9 to their RFP bid response.

## **APPENDIX A-10**

### **Plant Performance Guarantee / Warranties**

[INCLUDED AS A SEPARATE ELECTRONIC SPREADSHEET (EXCEL FILE)]

BTA bidders to provide equipment warranties and performance guarantees for major equipment components (i.e., turbines, panels, etc.) as Appendix A-10 to their RFP bid response. Warranties shall be consistent with the specifications in Appendix A-1.