

EXHIBIT A.5 **SUBMITTAL REQUIREMENTS**

1.0 GENERAL

- 1.1 Without limiting the information summarized herein, the purpose of this exhibit is to summarize the minimum requirements for Contractor-provided submittals, including Contractor Deliverables.

2.0 DEFINITIONS

- 2.1 Unless defined in this exhibit, terms that begin with an upper case shall have the meaning defined in Exhibit A.1 (*Scope of Work*).

3.0 SUBMITTAL REQUIREMENTS

3.1 General requirements:

- 3.1.1 Contractor shall name and label all submittals using an Owner-approved naming convention. Such naming convention shall be used consistently for all submittals, and the only filename modification for revised submittals shall be a change in revision number. Unidentifiable submittals will be returned for proper identification.
- 3.1.2 Submittals shall be accompanied by copies of native, electronic design files (e.g., AutoCAD .dwg file, PLS-CADD .bak file, electrical model files (PSS/E, EasyPower, ETAP, CYME), etc.), including for interim design transmittals (e.g., 30%, 90%, etc. as applicable) and As-Built Drawings.
- 3.1.3 All design submittals shall be provided in a common and consistent coordinate system. Such coordinate system shall be subject to Owner approval.
- 3.1.4 All design submittals (including product sheets, mix designs, verification procedures, installation procedures, testing procedures, etc.) shall be approved by the applicable engineer of record prior to submitting to Owner.

3.2 Quality requirements:

- 3.2.1 Scanned submittals are not acceptable. All submittal text shall be electronically recognizable and searchable.
- 3.2.2 Submittals to Owner shall be of suitable quality for legibility and reproduction purposes. Every line, character, and letter shall be clearly legible. Drawings shall be useable for further reproduction to yield legible hard copies.
- 3.2.3 Documents submitted to Owner that do not conform to specified requirements shall be subject to rejection by Owner, and upon request, Contractor shall resubmit conforming documents. If conforming submittals cannot be obtained, such documents shall be retraced, redrawn, or photographically restored as may be necessary to meet such requirements. Contractor's (or its subcontractor's) failure to initially satisfy the legibility quality requirements will not relieve Contractor (or its subcontractors) from meeting the required schedule for submittals, as prescribed in the submittal schedule in Exhibit G.1 (*Submittal Schedule*) or elsewhere in the Agreement.

- 3.3 Quantity requirements:
 - 3.3.1 Contractor shall electronically transmit one (1) copy of all submittals to Owner, including modifications to submittals, except as otherwise specified herein or elsewhere in the Agreement.
 - 3.3.2 Contractor shall transmit submittals as hard copy format (if required) in the quantities set forth herein or elsewhere in the Agreement.
- 3.4 Languages and dimensions:
 - 3.4.1 All words shall be in the English language.
 - 3.4.2 All dimensional units shall be in English units. When both metric and English units of measurement are presented, English dimensional units shall prevail.
 - 3.4.3 All drawings and dimensions shall be to scale; not-to-scale (“**NTS**”) dimensions will not be permitted on scalable drawings. A scale bar shall be included to permit use following photo-reduction.
- 3.5 Submittal completeness:
 - 3.5.1 Submittals shall be complete with respect to dimensions, design criteria, materials of construction, and other information specified to enable Owner to review the information effectively.
 - 3.5.2 Where standard drawings are furnished which cover a number of variations of the general class of equipment, each drawing shall be annotated to indicate exactly which parts of the drawing apply to the equipment being furnished. Use hatch marks to indicate variations which do not apply to the submittal. The use of “highlighting markers” will not be an acceptable means of annotating submittals. Such annotation shall also include proper identification of the submittal permanently attached to the drawing.
- 3.6 Transmittal of submittals:
 - 3.6.1 Submittals and Project documents shall be transmitted in (a) nonproprietary, native electronic format, incorporating any necessary reference files; and/or (b) *.pdf files created directly from native electronic format.
 - 3.6.2 All electronic submittals shall be uploaded to Contractor’s web-based document management site.
 - 3.6.3 All electronic submittals shall be clearly named and versioned (e.g., revision number, date appended to file name).
 - 3.6.4 Each submittal shall be accompanied by a completed transmittal letter. Submittals that are not accompanied by a completed transmittal letter will not be accepted and will be returned to Contractor. All Contractor transmittal letters submitted to Owner shall contain the following information, at a minimum: (a) transmittal number; (b) date of transmittal; (c) Contractor’s name; (d) Project name; (e) Owner’s project number; (f) filename and revision number; (g) description of the information contained in the specific transmittal; and (h) purpose of transmitting to Owner (i.e., issued for information, issued for review, etc.), including applicable Agreement references.

- 3.6.5 Contractor shall provide a transmittal notification email to Owner at the time of each submittal. The completed transmittal letter shall be attached to the notification email.
- 3.6.6 Contractor shall, at the time of each submission, call to the attention of Owner in the letter of transmittal any deviations from the Requirements.
- 3.6.7 Contractor shall check and approve submittals of subcontractors and manufacturers prior to transmitting them to Owner. Contractor's submission shall constitute a representation to Owner that Contractor approves such submittal(s) and has determined and verified all information contained therein, and Contractor assumes full responsibility for doing so; and Contractor has coordinated each submittal with requirements of the Work and the Agreement.
- 3.6.8 Contractor shall cause the applicable engineer(s) of record to review and approve the submittal prior to transmitting it to Owner. An approval stamp from such engineer(s) of record shall be included on the submittal to indicate such approval.
- 3.7 Owner's review:
 - 3.7.1 Owner's review and approval of submittals will not relieve Contractor of responsibility for any deviation from the Requirements unless Contractor has in writing called Owner's attention to such deviation at the time of submission, and Owner has given written concurrence in and approval of the specific deviation. Approval by Owner shall not relieve Contractor from responsibility for errors or omissions in submittals.
 - 3.7.2 Contractor shall make all modifications noted or indicated by Owner and return the required number of revised submittals until approved. Direct specific attention in writing, or on revised submittals, to changes other than the modifications called for by Owner on previous submittals. After submittals have been approved, submit copies thereof for final distribution. Previously-approved submittals transmitted for final distribution will not be further reviewed and are not to be revised. If errors are discovered during manufacture or fabrication, correct the submittal and resubmit for review.
 - 3.7.3 Contractor shall submit equipment catalog cut sheets for Owner review and approval prior to procurement.
- 3.8 Design submittals:
 - 3.8.1 All design submittals shall bear the Project name, the status of the submittal (e.g., Preliminary, Issued for Bid, Issued for Construction, As Built), and shall be sequentially numbered with a unique identifier.
 - 3.8.2 Issued-for-construction drawings shall not be changed or substantially-deviated from without Owner approval.
 - 3.8.3 As-Built Drawings: As-Built Drawings shall be issued as the next sequential revision from previous releases. The revision block shall state "As Built". All clouds, revision diamonds, and other interim control markings shall be removed, and all information listed as "later" or "hold" shall be completed. The As-Built Drawings shall include a final bill of materials, and native copies of all drawings and layouts. As-Built Drawings shall be created in the latest version of AutoCAD, ETAP, etc. or in the version of the respective software utilized by Owner, as applicable.

- 3.8.4 All materials shall be fully identified by Contractor, and each engineering package shall include a bill of materials, including all equipment and materials to be procured. Every item in the bill of materials shall have a unique identifier (typically numerical). Each bill of materials shall list product name, manufacturer, unique product / part number, and quantity.
- 3.8.5 All engineering shall be performed under the supervision of and stamped by the engineer(s) of record, who shall be a registered professional engineer with a current license in the Project jurisdiction. Such professional engineer(s) shall be registered in the applicable discipline for the drawings being signed and sealed.