Appendix A – Technical Specifications
2025 JEA Industrial Painting and Coating Services

Section 1.0 – General Scope

1.1 This specification sets forth information and requirements necessary for the furnishing of labor, equipment, tools, expendables, and miscellaneous supplies to properly paint and apply coatings to designated plant assets. The Contract will be structured in a "Time and Materials" format. The painting and coating applications will include surface preparation of various substrates in accordance with this specification. In addition, supplemental painting and/or coating specifications developed by JEA's Engineering/Maintenance department or from the Original Equipment Manufacturer (OEM) will accompany each project. The Contractor will supply all paint and coating for items to be painted or coated such as structural steel, tanks, ladders, handrails, pumps, motors, piping, etc. For each project, Contractor shall provide material submittals for JEA review. All submittals must be approved by JEA prior to commencing work.

1.2 This technical specification requires the Contractor to be SSPC certified or have a NACE certified inspector to bid on JEA work, and that the Contractor perform work to industry standards associated with SSPC, ASTM and NACE programmatic requirements for the services. JEA reserves the right to use in house or third-party inspectors to verify the quality of the work. Work performed that is substandard to the industry requirements shall be repaired at the Contractor's expense.

1.3 The list of JEA electric plant locations is listed below. All plant facilities are located within Duval County in Jacksonville, Florida.

Plant Locations

1.3.1 Northside Generating Station (NGS)
4377 Heckscher Drive
Jacksonville, FL 32226

1.3.2 Brandy Branch Generating Station (BBGS)
15701 West Beaver Street
Jacksonville, FL 32234

1.3.3 Kennedy Generating Station (KGS)
4215 Talleyrand Avenue
Jacksonville, FL 32206

1.3.4 Greenland Energy Center (GEC)
6850 Energy Center Drive
Jacksonville, FL 32256

Section 2.0 – Contractor General Requirements

2.1 The Contractor shall have a minimum response time of 48 hours; a response constitutes mobilization on JEA site as requested through a request for painting and coating services.

2.2 When the scope of work requires confined space monitoring, the Contractor shall provide all necessary rescue equipment such as tripods, confined space monitors, and hole watch.

2.3 The Contractor's onsite supervisor and/or Project Manager shall be OSHA 30 trained.

2.4 The Contractor's onsite supervisor(s) may be required to attend a JEA production meeting once a week as scheduled by the JEA representative; therefore, the supervisor (s) must speak and understand English.

2.5 All reports required in this specification shall be submitted on time and in legible condition to the Contract Administrator.

2.6 The Contractor will furnish all paints and coatings. The Contractor shall provide the square footages and paint quantities necessary for the completion of each project.

2.7 Disposal of mixed liquid waste shall be managed in accordance with federal, state, and local regulations as well as JEA policy. All waste management procedures shall be approved by the JEA Plant Environmental Department.

2.8 The Contractor shall be responsible for location of electrical and water supply sources in the project work areas. JEA will supply non-potable water and 110V electricity from the nearest existing outlet/source at no charge.

2.9 The JEA representative reserves the right to inspect and approve all elevated access equipment used on any project, i.e.- spider baskets, boom man-lifts, swing-stage, scaffolding, etc.

2.10 The Contractor shall be responsible for coordinating work with other crafts and contractors working on-site/same job, and with the JEA Representative. The Contractor painting activities shall not interfere with plant maintenance operations.

2.11 The Contractor shall be responsible for inspecting their own work, verifying compliance with this specification and manufacturer's instructions. The inspection documentation shall be available upon request to the JEA Representative. JEA reserves the right to inspect the work at any time. All work is subject to Acceptance by the JEA Representative based upon NACE, SSPC, and ASTM Standards of the industrial painting and coatings industry. The Contractor may be held responsible for rework costs because of failed inspections and non-acceptance. Rework costs shall be the responsibility of the Contractor and will include all labor, materials, expendables, and rental equipment necessary to complete the work resulting in a successful inspection and JEA acceptance.

2.12 Contractor shall adhere to JEA's Drug-and Alcohol-Free Workplace policy on JEA's website. Adherence to this policy is the responsibility of all JEA employees, Contractors, and Visitors while on JEA property. The policy prohibits the use of any tobacco containing materials (i.e., chewing tobacco, cigarettes, e-cigarettes, cigars, pipes, etc.).

2.13 On a project-by-project basis, JEA may elect to have the contract perform in compliance to NACE or SSPC-QS-1 certification requirements. JEA has a NACE certified inspector that may on a project-by-project basis implement these requirements. If JEA requires additional inspection, JEA will hire a third-party inspector.

Section 3.0 – Contractor Safety

3.1 **IT IS EXTREMELY IMPORTANT THAT THE CONTRACTOR AND JEA WORK TOGETHER TO ADDRESS ANY SAFETY CONCERNS SUCH THAT POTENTIAL ACCIDENTS ARE AVOIDED.**

3.2 The Contractor is responsible for meeting all Contractor Safety requirements outlined on JEA's website.

3.2.1 JEA Safety Orientation (JEASO) is required for all Contractor employees working on JEA projects and sites subject to the Contractor Safety Management Process (CSMP) and shall include familiarization with JEA safety requirements and this manual. The JEASO presentation is available on JEA.com and shall be presented to each Contractor subject to this manual. It is the Contractor's responsibility to maintain a roster of each employee that has completed the JEASO and provide that roster to any JEA employee or designee upon request.

3.2.2 JEA Site Specific Training (SST) is required for all Contractor employees working at each electric plant location. The JEA Safety Department or JEA Project Representatives will provide a PowerPoint Training module for the site location. These manuals are also located on JEA's website. Contractor is responsible for ensuring ALL personnel have received the appropriate safety training, as required by JEA Contractor Safety Program, and shall submit a roster of the employees who received the training.

3.3 Contractor shall have at least one (1) competent supervisor, as defined by OSHA, always on site when and where work is being performed. The supervisor shall have at least five (5) years of industrial paint application experience. Contractor shall be able to validate personnel credentials upon JEA request.

3.4 Contractors are required to provide and always wear Personal Protective Equipment (PPE) while on all JEA electric plant sites. PPE shall include, but not be limited to, safety glasses, hard hats, hearing protection, safety-toed boots, disposable full body protective clothing including hoods and booties, and all types of work gloves. **The cost of all PPE shall be included in the pricing.**

3.5 The contractor shall also be required to provide their own hazard appropriate PPE such as hole watch, gas monitor, lighting, and ventilation equipment as well as all sanitary facilities for their employees.

3.6 Contractor shall abide by JEA's Lockout Tagout LOTO policy & procedure.

3.7 Contractor's employees shall have the Contractors' name and an employee name on their hard hat.

3.8 Hearing protection shall be required while working in electric plant power block areas and when operating machinery or equipment (including saws).

3.9 Contractor employees are not permitted to wear ripped jeans, shorts, tennis shoes, sleeveless shirts, or shirts with offensive logos or messages.

3.10 Contractor shall provide warning signs and barricade tape to all work areas as required.

3.11 Contractor shall always maintain a safe work environment. Contractor shall keep their work areas free of trip hazards daily and shall maintain excellent housekeeping through the completion date of the project.

3.12 JEA utilizes numerous chemicals, industrial gases, and fuel types in the electric production process. During work, the Contractor may encounter or come in proximity with these hazardous elements. The Contractor and JEA Project Representative shall work closely to identify these hazards prior to entering a work area using a Safety Task Assignment, Job Hazard Analysis, or similar template. Should the Contractor detect a gas leak or chemical spill in the work area, the JEA Project Representative shall be notified immediately, and all Contractor employees relocated to a safe distance upwind of the leak or spill.

3.13 Contractor shall abide by the JEA Hot Work Permit Program, Lockout/Tagout (LOTO) Procedure, and the Confined Space Entry Procedure.

3.14 Contractor shall abide by the JEA Contractor's Safe Work Practices Manual.

Section 4.0 – Security

4.1 Contractor shall supply a list of names of the personnel they will be using during a given project to the JEA Project Representative one (1) week prior to start of the project so they can secure

their access into the plant. **A photo ID is required for all personnel that will be working on JEA property.**

4.2 Only authorized Contractor personnel shall have drive-on plant access. Contractor shall be responsible for transporting their personnel from the JEA designated parking area to their work area.

4.3 A JEA issued security badge shall be always visible while on JEA property.

4.4 Background checks and mandatory training may be required for entry to NERC regulated spaces.

4.5 Parking on JEA property shall be approved through the JEA Project Representative. Parking for Company vehicles and Company personnel vehicles is limited to four (4) vehicles within the NGS facility. All Company vehicles driven onto plant sites must be properly identified with Company placards. Additional parking for personnel is available off-site in the designated Contractor parking area. Additional information can be found in the Contractor Safety Management Process document on jea.com (https://www.jea.com/About/Procurement/Contractor_Safety/CSMPSafetyPre-QualOrientGuide_pdf/)

4.6 Certain work for JEA may entail entering maritime facilities, such as the fuel loading docks and/or the adjoining JAXPORT properties, all of which are governed by the Transportation Security Administration (TSA). To gain access these facilities, the Contractor must obtain, in advance and at their own cost, a Transportation Worker Identification Credential (TWIC). The estimated cost is $125.00 and is valid for five (5) years. Eligibility for a TWIC is subject to certain immigration and criminal background check requirements. Additional and up-to-date details may be found at https://www.tsa.gov/twic.

Section 5.0 - Materials (Paint)

5.1 A basecoat and topcoat will be used on most steel structures. The color will be determined by the JEA Paint Color Book and will predominately be a topcoat of "Beige-Gray." Both coats will be applied per this specification and manufacturer's data sheets at a cured final dry film thickness according to the manufacturer's specifications. In areas of severe corrosive environments, additional costs of urethane or epoxy may be applied as designated by the program administrator.

5.2 Designated special equipment, i.e., motors, pumps, panels, piping, and handrails, etc. may be painted with urethanes and epoxies. Specific coating systems will be designated by the JEA representative.

Section 6.0 – Surface Preparation

6.1 The Contractor's requirement to perform substrate cleaning and preparation will depend on the state of corrosion, environmental conditions, proximity to plant operations and equipment, and coating being applied. The acceptable preparation methods will be according to the manufacturer's specifications and subject to approval by the JEA representative. NACE, SSPC, and ASTM Standards will apply to all surface preparation activities.

6.2 At a minimum, all steel surfaces shall be cleaned in accordance with SSPC-SP-12 High Pressure Water Jetting and degreased per SSPC-SP-1, Chemical Cleaning in combination with SSPC-SP-2 Hand Tool Cleaning and SSPC-SP-3 Power Tool Cleaning. Severe corrosion in structural steel scopes of work may require abrasive grit blasting per SSPC-SP-6 Commercial

Blast, SSPC-SP-7 Brush Off Blast, and/or SSPC-SP-14 Industrial Blast Cleaning. All loose rust, oil, grease, dirt, dust, salts, and chalking shall be completely removed.

6.3 Previously coated surfaces shall be evaluated for proper adherence profile and all loose, delaminated coating will be removed. In some instances, a new profile may need to be established. Existing glossed coatings shall be abraded by mechanical means to provide adequate profile for bonding of subsequent coatings. New profiles will range from 1.5 to 2.5 mils depending on specific paint systems. Surface profiles will be verified using ASTM 4417 or NACE RPO 287, Replica Tape Methods. Profile Comparators are excluded, as they are subjective.

6.4 All prepared areas may be inspected by the JEA Representative and subject to approval prior to application of coatings. It is the Contractor's responsibility to notify and schedule the inspections in advance. Surface preparation inspections are "Hold Points", when imposed by JEA.

6.5 Satisfactory inspection by the JEA Representative, at any point in the coating process does not relieve the Contractor of ownership and responsibility regarding coating application long term service life and warranties to JEA. NACE and SSPC standards will be applied in all inspections and evaluations.

Section 7.0 – Cleaning/Rinsing Surfaces to be Painted

7.1 The Contractor will Chlor*Rid wash all surfaces to be coated rendering the surface to contain less than 6 parts per centimeter squared. Testing to determine the appropriate level shall be by Chlor* Rid surface test kits. Chlor*Rid shall be injected during the pressure cleaning cycle with a "Dosimeter". This standard also applies between each coat applied. JEA may approve alternate surface preparation methodologies, subject to JEA's sole approval.

7.2. Surface preparation methods shall include pressure cleaning with a 5,000psi pump to provide the final preparation to a WJ-4 Visual Standard. The 5,000psi pressure washer shall include an oscillating spinner tip as surface conditions warrant for surface preparation compliance cleanliness. A dilution ratio of a 100:1 minimum shall be maintained in the jet wash stream. Where chloride cleaning standards are not achieved, dilution may be modified to a 50:1 ratio.

7.2.1 Chlorides shall be maintained at acceptable levels prior to applying any specified coatings against reacted salts. Chlor*Rid is biodegradable and contains non-hazardous ingredients to the environment. Chlor*Rid will not interfere with the bonding of future applications of coatings.

7.2.2 Chlor*Rid is to be applied to all substrates to reduce the levels of salt to below the following levels:

Chloride Salts
6 Parts Per Centimeter Squared - Non-Immersion
3 Parts Per Centimeter Squared - Immersion

Note: Parts Per Centimeter Squared and Parts Per Million are the same when using all Chlor-Rid Test Kits.

7.2.3 Prior to cleaning or blasting, test surfaces for chlorides will be tested for contaminants with the CHLOR*TESTTM Steel Kits. After cleaning or blasting a small sample area, the Contractor will retest to verify cleanliness. Adjust speed of travel, pressure, or dilution as necessary and retest to verify desired cleanliness level is attained. The quantity of tests will be subject to approval by the owner's

representative. A minimum of one test will be conducted prior to application of any coating. No less than 1 CHLOR*TEST* per coat per 100 square feet of surface. The number of CHLOR*TEST* samples may be reduced on large scopes of work at the discretion of the JEA representative.

7.2.4 Prior to preparing any item, surface contaminants must be removed and not driven into surfaces by water jetting. Remove grease and oil from the surface with a Cleaner Degreaser diluted to the desired strength for effective removal. Any chemical contamination shall be eliminated by means of neutralization or flushing or both prior to additional surface preparation.

Section 8.0 - Inspection Reports

8.1 Daily Inspection and Reports: The Contractor shall measure and document an "Atmospheric Condition Report" consisting of a minimum of four (4) readings per shift per day. The readings shall be spaced apart at intervals conducive to monitoring and maintaining the environmental parameters set forth in this specification. If required, all documentation will be subject to review per requirements set forth in any SSPC-QS-1 program. The report shall at a minimum contain:

a. ambient temperature
b. dew point
c. surface temperature
d. wind velocity and direction
e. specific locations of daily painting activities including detailed tasks and reports shall include documentation of all QA/QC activities mentioned in this specification and shall not be limited to the following: wet film thickness, compressor air quality tests, dosimeter ratios, dry film thickness, coating quantities, etc.

This report shall also be dated, reflect the number of personnel on site, and reflect the number of hours worked for each day. The SSPC Daily Quality Control Form, QCF-9005A Inspection Report is an approved format, but the Contractor may request the use of an alternate format subject to JEA approval.

This report shall be available to the JEA Representative during working hours on the project site. A weekly summary shall be provided to the JEA representative upon request. All reports are the property of the owner.

Section 9.0 - Inspection Techniques

9.1 Inspections will be scheduled by the Contractor's Superintendent or Foreman supervising the crew at that time. Inspection "Hold Points" will be following surface preparation activities and prior to application of paint basecoat or between coats. It is the responsibility of the supervisor in charge to have fully inspected the work and state that all work is in accordance with technical standards and specifications. The paint Contractor may be held responsible for rework costs after failed inspections. The determination of rework costs will include lost labor time, expendables, materials, and rental equipment at the discretion of the JEA Representative. Rework events and failed inspections will be documented in detail.

9.2 A wet film thickness gauge of steel or aluminum, calibrated to read in mils, will be used to measure wet film thickness to the nearest mil. A predetermined wet film thickness shall be achieved to assure that the required dry film thickness is obtained. Applicators are expected to use wet film gauges on a continuing basis to assure proper millage. The contractor may be held responsible for excessive millage.

9.3 An Elcometer Paint Inspector, Microtest, or similar quality gauge will be used to measure the thickness to the nearest mil. Gauges shall be calibrated each day or per manufacturer

recommendations. The average D.F.T. will be recorded per Steel Structures Council PA 2 "Number of measurements for conformance to a Thickness Specification."

9.4 All surfaces which that will be in submersion service shall require a pinhole detection test (discontinuity test) as prescribed in NACE RPO-188. All pinholes shall be marked with chalk and repaired per the manufacturer instruction. No further pinhole check will be required following repairs as further damage to the film may occur.

9.5 If the composition of the original paint system is unknown, a spot test shall be made to determine the compatibility of the new paint system with the old. The new system is to be applied to a small area and tested of inspected for adhesion, lifting, bleeding or other evidence of incompatibility.

9.6 Any adhesion testing will be performed at the discretion of the owner's representative. The adhesion test shall be performed in accordance with ANSI/ASTM D3359. Method A shall be used for coatings greater than 5 mils total, and Method B for coatings less than 5 mils DFT. Destructive testing must have the approval of the owner and is reserved for areas believed to have insufficient adhesion. The Elcometer Pull Adhesion Tester, Hate Self Alignment Tester, & Patti Pneumatic Adhesion Tester are superior testing mechanisms for adhesion testing and are accepted when conducted as outlined under ASTM 4541 test methods. This is a destructive test; therefore, the area must be touched-up after the test.

9.7 Additional testing for specialized equipment may be required at the request of the JEA Project Representative.

Section 10.0 – Coating Application

10.1 Surfaces such as nameplates, signage, glass, plates, gauges, valve stem threads, moving parts, site glasses, hydraulic pistons, seals, filter breathing surfaces, stainless steel, generator windings, bearing assemblies, fire sprinklers, lights, or any other "out of scope" area etc. shall be protected, covered, masked off and not painted or sandblasted. Damage to these surfaces will be charged back to the contractor. Note that bare, grounded conductors shall <u>not</u> be painted.

10.2 Where instructions contained in this specification, bid documents, and/or manufacturer's instructions conflict, the higher standard shall prevail as determined by the JEA representative.

10.3 No coating shall occur until the specified degree of preparation is achieved in accordance with NACE or SSPC standards or manufacturer recommendation and the surface is free of contamination including blast media. All prepared surfaces shall be coated within the same day unless previously agreed upon by the JEA Project Representative, exempting surfaces maintained with a dehumidification unit or approved blast holder, such as Chlor* Blast.

10.4 All welds, corners, angles, bolt heads, threads, edges (except outer edges on individual steel plates) and other difficult access areas shall receive a stripe coat of the material specified after the application of the first primer coat. This shall be done in addition to the specified number of coats.

10.5 All paint must be applied within the environmental parameters in this specification. Strict adherence to dew point and ambient temperature requirements shall be observed. Coatings shall not be applied when the surface temperature is within 5°F (3°C) of the dew point unless the coating is otherwise being applied according to the manufacturer's recommendations. Dew point measurements shall be recorded before and during any coating application. Readings shall be taken during any significant ambient weather changes and, in any event, shall be taken several times each day when blasting or coating work is being performed.

10.6 Materials shall be applied evenly and free of runs, sags, and pinholes. When sprayed, the paint shall be applied with a minimum 25% overlap crisscross pattern. Paint will be applied only on dry, clean

surfaces during periods of favorable weather, unless otherwise permitted by the manufacturer in writing.

10.7 The Contractor shall be responsible for inter-coat contamination. In the event surfaces are damaged or contaminated, they shall be cleaned and re-coated at the Contractor's expense. Recoat time windows will be maintained as specified by the manufacturer's instructions. Exceeding recoat limits shall require re-profiling and/or re-cleaning the surface to assure proper bonding of future coats.

10.8 The Contractor shall be responsible for adequately protecting all machinery and plant property from damage due to paint over-spray and abrasive blasting. Over-spray damage is the responsibility of the contractor unless a written release is provided by the owner. Signs are to be posted indicating spray painting is in progress. Designated parking is to be enforced and the work zone shall be isolated by barricades or caution tape.

10.9 All painting materials shall be stored in a clean, dry, well-ventilated place, protected from sparks, flame, direct rays of the sun, and excessive heat or cold. The Contractor shall be solely responsible for the protection and safety of the materials stored at the job site. Special consideration shall be given to protect materials from exposure to freezing temperatures.

Section 11.0 - Equipment

11.1 Effective oil and water separators shall be used in all compressed air lines serving spray painting and sandblasting operations to remove detrimental oil and moisture from the air. Separators shall be placed as far as practical from the compressor.

11.2 All equipment for the completion of the work shall be provided by the Contractor. Equipment shall be in optimal operating condition and shall comply with recommendations of the paint manufacturer. Any equipment that has frequent downtime or require excessive maintenance shall be removed and replaced.

11.3 All safety equipment shall comply with all applicable OSHA/ NIOSH and plant regulations. If plant or manufacturer recommendations are at variances with State, Federal of other government agency with jurisdiction the higher standard applies. Safety compliance is the responsibility of the contractor during the conduct of the project.

11.4 The compressed air supply used for abrasive blasting shall be tested periodically for the presence of oil and moisture. Tests shall be made when starting blasting operations and before application of any coatings. Additional tests shall be made every four hours or more frequently if required by poor weather conditions. The approved method of testing is the Blotter test as described in ASTM D4285. Tests shall be done without sand by directing the nozzle toward a piece of clean, white absorbent paper, cloth, or clear plastic for one minute to detect any oil or moisture. If the test indicates the presence of oil or moisture in the air supply, these steps must be taken: Stop all blasting operations and make necessary repairs, adjustments, or changes in the equipment to ensure a clean, dry oil-free air supply. Do not proceed with blast operations until the air supply is retested and approved by the JEA representative. All blasted cleaned work, which was completed using the contaminated air supply since the previous test, shall be re-blasted to the specification.

Section 12.0 - Notice to Proceed

12.1 Prior to the commencement of work, the Contractor shall provide JEA a written estimate of labors and materials needed to complete the task; this will include detailed material submittals. JEA will review the estimate and submittals and, if approved, issue a Purchase Order based on either Time & Material (T&M) rates provided in the bid workbook, or, in some cases, a Lump Sum.

Section 13.0 - Warranty

13.1 The Contractor shall warrant the coating against defects for at least two (2) years after the date of acceptance by JEA. Defects are defined as cracking, delamination, or excessive fading. The warranty shall require the Contractor to supply all necessary labor, materials, and equipment to repair defects to the satisfaction of JEA. The Contractor shall not make any exemption or exception to the above stated conditions or warranty.