

<b>RBL Category No</b>	<b>Category Name</b>	<b>Required Reference Amount</b>
<b>CS</b>	<b>Communications System Work</b>	<b>3 Project References each exceeding the amount below:</b>
CS-1A	Tower Foundation Work	\$100,000.00
CS-1B	Tower Erection/Maintenance Work	\$100,000.00
CS-1C	Antenna Work	\$100,000.00
CS-1D	Communications Electrical Work	\$100,000.00
CS2	Data Networks Equipment, Including Fiber Optics Equipment Installation	\$25,000.00
CS3	Fiber Optics Cable Installation	\$250,000.00
CS5	Voice and Data Equipment Installation, Construction, Maintenance & Repair	\$5,000.00
<b>EG</b>	<b>Electrical Grid Work</b>	<b>3 Project References completed within the last five (5) years each exceeding the amount below:</b>
EG1	Electrical Secondary Service Installation	\$25,000.00
EG2	OH Distribution Construction up to 45kV (Energized & De-energized)	\$100,000.00
EG4	OH Transmission Construction over 69kV (Energized)	\$1,000,000.00
EG5	OH Transmission Construction over 69kV (DE-energized)	\$500,000.00
EG6	Underground Distribution Construction up to 45KV	\$100,000.00
EG7	Underground Transmission Construction over 69kV – Direct Buried Cable	\$1,000,000.00
EG8	Underground Transmission Construction over 69kV HPFF Pipe-Type Cable	\$2,000,000.00
<b>GC</b>	<b>General Construction Work</b>	<b>3 Project References each equal to or greater than the amount below:</b>
GC11	Line Locate Services/Wire Testing	\$1,000.00
<b>SB</b>	<b>Substation Work</b>	<b>3 Project References completed in the last five (5) years each exceeding the amount below:</b>
SB1	Substation Construction - up to 500kV	\$500,000.00
<b>SW</b>	<b>Well Drilling</b>	<b>1 project within the last five (5) years meeting the following:</b>
SW8	Well Drilling	a) Drilling of a well located in Northeast Florida with equal to or greater than 12-inch diameter casing and equal to or greater than least 800 feet deep. b) Cost of project greater than or equal to \$200,000.00 c) Contractor has a valid Florida Well Drilling License

<b>WM</b>	<b>Water &amp; Sewer Main Work</b>	<b>3 Project References within the last 10 yrs. whose combined total meets the length below:</b>
WM1	Water/Sewer Reclaim Pressure Pipe Construction Underground Trench (by the open cut method) greater than or equal to 24" Diameter	Greater than or equal to 2,000 linear feet
WM2	Water/Sewer Reclaim Pressure Pipe Construction Underground (by the open cut method) less than 24" Diameter	Greater than or equal to 2,000 linear feet
WM3	Gravity Sanitary Sewer Main Construction Underground (by the open cut method)	Greater than or equal to 2,000 linear feet
WM4	Trenchless Line Rehabilitation (CIPP, Pipebursting, Sliplining)	Greater than or equal to 2,000 linear feet
<b>WP</b>	<b>Water &amp; Sewer Plant Work</b>	<b>3 Project References within the last 5 years, each exceeding the amount below:</b>
WP1	Pump Station (Class III or IV) Installation, Construction, Maintenance, and Repair	\$1,000,000.00
WP2	Water & Sewer Plant Systems Installation, Construction, Maintenance and Repair	\$3,000,000.00

## SCADA Integrators (Supervisory Control and Data Acquisition)

RBL Category No	Category Name	Required Reference Amount
SC	<b>SCADA Integrators (Supervisory Control and Data Acquisition)</b>	<ul style="list-style-type: none"> <li>Instrumentation and control integrator companies and programmers doing work for JEA must adhere the following certification and experience requirements. Copies of current, valid certifications must be provided to JEA to maintain status as an approved JEA Instrumentation and Controls Integrator.</li> <li>Based on a company's certifications and the experience level of its integrators/programmers it will be placed into one of two tiers that will determine the company's qualification to bid on projects of different levels of complexity.</li> <li>Both Tier I and Tier II approved companies must have integration/programming staff located within a six-hour driving radius from Jacksonville, FL / Duval County. This requirement shall remain for the duration of the awarded project.</li> <li>The company and staff must have the capability to use JEA-approved virtual meeting platforms.</li> <li>All approved companies shall have a minimum of two certified integrators on staff assigned to the awarded project. See section II.2.1 for required certifications.</li> <li>Tier I or Tier II status will be granted based on each certification category as defined in section II.2.</li> <li>Tier one certification does not automatically grant approval for all categories.</li> </ul>
SC1	Tier 1 SCADA Integrators	Tier I approval is for complex jobs (see III.3.1) and would consist of the integration company meeting all tier two requirements and having adequate experience in successful completion of complex jobs. Adequate experience (see III.2.1) will be evaluated by JEA W WW Standards in conjunction with W WW Controls group.
SC2	Tier 2 SCADA Integrators	Tier II approval is for simple project jobs (see III.3.2) which would not require additional integrator experience. Adequate experience (see III.2.2) will be evaluated by JEA W WW Standards in conjunction with the W WW Controls group.

# SCADA Integrators (Supervisory Control and Data Acquisition)

## II.2. INTEGRATOR CERTIFICATION AND EXPERIENCE

The actual integrators doing the work must be factory certified or trained by manufacturer software/hardware specified in the project.

- Siemens certified in Step 7, TIA Portal, and/or WinCC.
- GE Certified in iFix.
- Rockwell certified in CompactLogix and/or ControlLogix and Studio 5000 or equivalent.
- Schneider certified in M580 PLC and Control Expert Software.

Refer to the Integrator Experience Matrix in III.4 to evaluate the combination of PLC/HMI programming and water/wastewater or reuse programming experience for each integrator/programmer to determine qualification for working on complex and/or simple projects.

## III. PROJECT QUALIFICATION

### III.1. COMPANY PROJECT QUALIFICATION

- Tier I approved companies may do work on complex, simple or incidental projects provided the integrators/programmers assigned to do the work meet the experience requirements in the Integrator Experience Matrix.
- Tier II approved companies may not do complex projects. Tier II approved companies may do simple and incidental projects provided the integrators/programmers assigned to do the work meet the experience requirements in the Integrator Experience Matrix.

### III.2. INTEGRATOR/PROGRAMMER PROJECT QUALIFICATION

#### COMPLEX PROJECT INTEGRATOR/PROGRAMMER EXPERIENCE REQUIREMENT

- The integrator/programmer assigned to do the work must have a combination of PLC/HMI programming and water/wastewater or reuse programming experience to qualify for a complex project (Green area of matrix).

#### SIMPLE PROJECT INTEGRATOR/PROGRAMMER EXPERIENCE REQUIREMENT

- The integrator/programmer assigned to do the work must have a combination of PLC/HMI programming and water/wastewater or reuse programming experience to qualify for a simple project (Yellow or Green area of matrix).

#### INCIDENTAL PROGRAMMING INTEGRATOR/PROGRAMMER EXPERIENCE REQUIREMENT

- The integrator/programmer assigned to do the work must have a combination of PLC/HMI programming and water/wastewater or reuse programming experience to qualify to work on incidental programming tasks. (Red, Yellow or Green area of matrix)

# SCADA Integrators (Supervisory Control and Data Acquisition)

## III.3. PROJECT COMPLEXITY DEFINITIONS

### COMPLEX PROJECT

A complex project is any water/wastewater, or reuse process control system project that contains any one of the following:

- Two or more PLCs that communicate with each other.
- Two or more PI or PID loops, with a cascading loop counting as two.
- Plant HMI development (not local Operator displays)
- Potable Water Treatment

JEA Water and Wastewater Standards

494 Instrumentation and Controls Integrator Requirements

- Other features as specified in the project scope (e.g. processes/technologies that are new to JEA)

### SIMPLE PROJECT

A simple project is any water/wastewater, or reuse process control system project that is not classified as a complex project.

### INCIDENTAL PROGRAMMING

Incidental programming work includes but is not limited to, development of Function Blocks (FB) or Function Calls (FC) for use in operating logic, development of an API or ActiveX controls for an HMI, or conversion of existing logic from Step7 to TIA Portal under the direct supervision of JEA's W WW Controls group.

## INTEGRATOR EXPERIENCE MATRIX

- G (green) = Qualified to work on complex projects  
Y (yellow) = Qualified to work on simple projects  
R (red) = Qualified to work on incidental support projects

Years of Applicable Programming	10	R	Y	G	G	G	G	G	G	G	G	G
	9	R	Y	G	G	G	G	G	G	G	G	G
	8	R	Y	G	G	G	G	G	G	G	G	G
	7	R	Y	Y	G	G	G	G	G	G	G	G
	6	R	Y	Y	Y	G	G	G	G	G	G	G
	5	R	Y	Y	Y	G	G	G	G	G	G	G
	4	R	Y	Y	Y	Y	G	G	G	G	G	G
	3	R	R	Y	Y	Y	Y	G	G	G	G	G
	2	R	R	R	Y	Y	Y	Y	Y	Y	Y	Y
	1	R	R	R	R	R	R	R	R	R	R	R
	0											
		0	1	2	3	4	5	6	7	8	9	10
Years of Water/Wastewater or Reuse Programming Experience												