

# Battery Bank Testing and Inspection

## 1. SCOPE

JEA is accepting bids for a three year contract to perform the following tasks in accordance with NERC Standard PRC-005-6. All tasks must be completed within the months listed without exception. The contracted service provider will perform all inspection and testing services, no subcontracting. The contracted service provider will be required to achieve and maintain JEA Safety Prequalification. All employees of the contracted service provider who require entry into substations must complete the 4-hour JEA Substation Safety Training prior to entry. The Substation Safety Training class is offered on the second Tuesday of each month at 8:00 AM at the JEA Utility Training Center. Contact Jim Ayers at 904-665-5362 or [ayerjl@jea.com](mailto:ayerjl@jea.com) to register.

## 2. Tasks

**Task 1:** To be completed quarterly within the months of January, April, July, and October for all “Group 1 - Generating Station” batteries.

1. Verify station DC supply voltage.
2. Inspect Electrolyte level (VLA Batteries only)
3. Inspect for unintentional grounds

**Task 2:** To be completed quarterly within the months of January, April, July, and October for all “Group 2 - VRLA” batteries.

1. Verify station DC supply voltage.
2. Inspect Electrolyte level (VLA Batteries only)
3. Inspect for unintentional grounds
4. Inspect condition of all battery cells by measuring battery cell/unit internal ohmic values

**Task 3:** To be completed annually within the months of January, February, or March for “Group 1, Group 2, and Group 3 - All Substation” batteries.

1. Verify float voltage of battery charger
2. Verify battery continuity
3. Verify battery terminal connection resistance
4. Verify battery intercell or unit-to-unit connection resistance
5. Measure battery cell/unit internal ohmic values
6. Inspect physical condition of battery rack

**Note:** Alber Cellcorder CRT-400 must be used for items 3-5. Alternatives must be approved by JEA prior to use.

**Task 4:** To be performed for approximately 25 banks per year.

1. Verify that the station battery can perform as manufactured by conducting a performance or modified performance capacity test of the entire battery bank.
  - a. JEA will provide and connect a temporary battery bank for station supply for the duration of each capacity test.

**Note: Alber BCT-2000 or similar shall be used for measurement purposes. Alternatives must be approved by JEA prior to use.**

### **3. REPORTS**

1. JEA will receive a full report including test sheets in .pdf format within two weeks of completion of each task.
2. Test reports for each battery bank shall be an individual .pdf with the filename consisting of the battery bank name and date of testing or inspection.
3. Test sheets are to contain data and test results only. Recommendations for further testing or repairs are to be collectively reported on a summary sheet within the full report for each task.
4. All test sheets and reports are to be maintained in a searchable online database accessible via web browser. JEA will be provided with a minimum of seven login credentials.

### **4. Minimum Qualifications**

1. The Bidder shall be in the successful performance of five (5) similar contracts on the bid due date.
  - a. A similar contract is defined as providing testing and inspection of utility battery banks per NERC Standard PRC-005-6 and providing the results via searchable, password protected, online database accessible via web browser. Each contract must be greater than \$45,000.00 per contract.

# APPENDIX

## Group 1- Generating Station Names and Locations

Substation Name	Number of Banks	Address
Brandy Branch Generating Station	9	15701 W Beaver St, Jacksonville FL 32234
Greenland Energy Center	2	6850 Energy Center Dr, Jacksonville FL 32256
Northside Generating Station	9	4377 Heckscher Dr, Jacksonville FL 32226

<b>Brandy Branch</b>
BB CONTROL
BB CT-1 CONTROL
BB CT-1 LUBE
BB CT-2 CONTROL
BB CT-2 LUBE
BB CT-3 CONTROL
BB CT-3 LUBE
BB PDC STRING-1
BB PDC STRING-2
<b>Greenland</b>
Greenland Unit 1
Greenland Unit 2
<b>Northside</b>
NSGS - Unit 1 Station
NSGS - Unit 2 Station
NSGS - Unit 3 Station A
NSGS - Unit 3 Station B
NSGS Blackstart Switchgear (48VDC)
NSGS CT-3
NSGS CT-4
NSGS CT-5
NSGS CT-6

## Group 2 - VRLA Battery Name and Location

Battery Name	Number of Banks	Address
Greenland BOP (VRLA)	1	6850 Energy Center Dr, Jacksonville FL 32256

## Group 3 – Substation Batteries Names and Locations

Substation Name	Number of Banks	Address
Anheuser Busch Substation	1	111 Busch Dr, Jacksonville FL 32218
Arlington Substation	1	6212 Macy Ave, Jacksonville FL 32211
Bartram Substation	2	4503 Race Track Rd, St Johns FL 3225 9
Baymeadows Substation	1	7601 Southside Blvd, Jacksonville FL 32256
Beeghly Heights Substation	2	14153 Urn Rd, Jacksonville FL 32218
Blount Island Substation	1	8 Blount Island Dr, Jacksonville FL 32218
Brandy Branch Power Plant	4	15701 W Beaver St, Jacksonville FL 32234
Brooklyn Substation	1	1798 Broadway Ave, Jacksonville FL 32209
Cecil Commerce Substation	2	13701 Waterworks St, Jacksonville FL 32221
Cecil Field Substation	1	10471 103rd St, Jacksonville FL 32210
Center Park Substation	2	2797 Kernan Blvd N, Jacksonville FL 32225
Church Street Substation	1	1015 W Church St, Jacksonville FL 32204
College Street Substation	1	831 College St, Jacksonville FL 32204
Commercial Metals Substation	1	2038 Lane Ave N, Jacksonville FL 32254
Craven Road Substation	1	4388 Sunbeam Rd, Jacksonville FL 32257
Dillon Substation	1	4215 Talleyrand Ave, Jacksonville FL 32206
Dinsmore Substation	2	12160 New Kings Rd, Jacksonville FL 32219
Eastport Substation	1	9323 Eastport Rd, Jacksonville FL 32218
Firestone Substation	2	6878 Firestone Rd, Jacksonville FL 32244
Forest Substation	2	10569 Forest Blvd S, Jacksonville FL 32246
Fort Caroline Substation	2	12337 McCormick Rd, Jacksonville FL 32225
Garden City Substation	1	2961 Armsdale Rd, Jacksonville FL 32218
Georgia Street Substation	1	637 N Georgia St, Jacksonville FL 32202
Grand Park Substation	1	2930 W 20Th St, Jacksonville FL 32254
Greenland Energy Center	2	6850 Energy Center Dr, Jacksonville FL 32256
Greenland Substation	3	14402 Old Saint Augustine Rd, Jacksonville FL 32258

Hamilton Substation	1	4534 Lexington Ave, Jacksonville FI 32210,
Hartley Road Substation	1	3919 Hartley Rd, Jacksonville FI 32257
Herlong Substation	1	7424 Wiley Rd, Jacksonville FI 32210
Herschel Street Substation	1	3751 Herschel St, Jacksonville FI 32205
Hunter Road Substation	1	4223 Adiorlf Rd, Jacksonville FI 32207
Imeson Substation	1	601 Heckscher Dr, Jacksonville FI 32226
Jax Heights Substation	2	9800 Alvin Rd S, Jacksonville FI 32222
Jaxport Substation	1	5411William Mills St, Jacksonville FI 32226
Kennedy Generating Station	3	4215 Talleyrand Ave, Jacksonville FI 32206
Kings Avenue Substation	1	1756 Kings Ave, Jacksonville FI 32207
Lane Avenue Substation	1	1014 Lane Ave S, Jacksonville FI 32205
Main Street Substation	1	1055 Main St N, Jacksonville FI 32206
Mandarin Substation	2	3476 Loretto Rd, Jacksonville FI 32223
Mayport Substation	1	2972 Mayport Rd, Jacksonville FI 32233
Mayo Substation	2	13945 W.M. Davis PKWY, Jacksonville FL 32224
McDuff Substation	1	1030 McDuff Ave S, Jacksonville FI 32205
Merrill Road Substation	1	7730 Merrill Rd, Jacksonville FI 32277
Millcove Substation	1	1428 Millcoe Rd, Jacksonville FI 32225
Moncrief Substation	1	8500 Moncrief Rd W, Jacksonville FI 32219
Mt Pleasant Substation	2	831 Kernan Blvd, Jacksonville FI 32225
Nassau Substation	2	85960 Wilson Neck Dr, Yulee FI 32097
Naval Air Station Substation	1	7001 Roosevelt Blvd, Jacksonville FI 32212
Neptune Substation	1	1012 Strickland Rd, Neptune Beach FI 32266
Nocatee Substation	2	14981 Phillips Highway, Jacksonville FL 32258
Normandy Substation	5	9801 Crystal Springs Rd, Jacksonville FI 32221
Northshore Substation	1	5122 Springfield Blvd, Jacksonville FI 32208
Northside Auxiliary Substation	1	4377 Heckscher Dr, Jacksonville FI 32226
Northside Generating Station Substation	2	4377 Heckscher Dr, Jacksonville FI 32226
Northwest Jax Substation	1	4700 Pearce St, Jacksonville FI 32209
Oakwood Villa Substation	1	439 Bowan St, Jacksonville FI 32211
Orange Park Substation	1	733 Shaw St, Orange Park FI 32073
Ortega Substation	1	4450 Verona Ave, Jacksonville FI 32210
Park & King Substation	1	2658 Gale Ct, Jacksonville FI 32204
Paxon Substation	1	1607 Lane Ave N, Jacksonville FI 32254
Phillips Hwy Substation	1	7601 Phillips Hwy, Jacksonville FI 32256
Pickettville Substation	1	6901 Old Kings Rd, Jacksonville FI 32219
Point Meadows Substation	2	7740 Point Meadows Dr, Jacksonville FI 32256
Powers Avenue Substation	1	6266 Powers Ave, Jacksonville FI 32217
Randall Street Substation	1	3065 Randall St, Jacksonville FI 32205
Ribault Substation	1	4205 Soutel Dr, Jacksonville FI 32208
Ritter Park Substation	1	131 Noah Rd, Jacksonville FI 32218

Robinwood Substation	2	10327 Alden Rd, Jacksonville FI 32246
Rosselle Substation	1	2640 Rosselle St, Jacksonville FI 32204
San Pablo Substation	1	13865 WM Davis Pkwy, Jacksonville FI 32224
San Souci Substation	1	8070 Hogan Rd, Jacksonville FI 32216
SJRPP Generating Station	2	11201 New Berlin Rd, Jacksonville FI 32226
Southeast Jax Substation	2	9999 Chester Lake Dr, Jacksonville FI 32256
Southpoint Substation	1	7551 Salisbury Rd, Jacksonville FI 32256
Southside Substation	4	801 Broadcast Pl, Jacksonville FI 32207
St Johns Park Substation	1	4461 St. Johns Ave, Jacksonville FI 32210
Starratt Road Substation	2	14740 Yellow Bluff Rd, Jacksonville FI 32226
Steelbald Substation	2	16770 Rebar Rd, Jacksonville FI 32234
Switzerland Substation	1	5145-1 Longleaf pine Pkwy, St Johns FI 3225 9
University Park Substation	1	5913 Fort Caroline Rd, Jacksonville FI 32277
Water Street Substation	1	1 Independent Dr, Jacksonville FI 32202
West Jax Substation	2	1901 Pickettville Rd, Jacksonville FI 32220
West Lake Substation	2	5040 Jones Rd, Jacksonville FI 32219
Westside Service Center (Mobile Carts)	2	
Total	123	