

APPENDIX A – TECHNICAL SPECIFICATIONS

92790 – VARIOUS SUBSTATIONS BATTERY BANK TESTING AND INSPECTION VOLTAGE

1. SCOPE

The purpose of this specification is to include all materials, labor, equipment and expendables necessary 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 Wednesday of each month at 8:00 AM at the JEA Westside Service Center. Contact Roger Parker at 904-665-8894 or parkra@jea.com to register.

This is a three (3) year contract with one (1) renewal option.

Tasks

Task 1: To be completed quarterly in the months of January, April, July, and October for Group 1 batteries.

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

Task 2: To be completed annually within the months of January, February, or March for Group 2 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

Task 3: To be completed in January and July for Group 3 (VRLA) batteries.

1. Measure battery cell/unit internal ohmic values

Task 4: To be performed for approximately 20 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.

2. 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.

GROUP 1 BATTERIES

BB CONTROL B50-ED26-002

BB CT-1 CONTROL B51-ED26-002

BB CT-1 LUBE

BB CT-2 CONTROL B52-ED26-002

BB CT-2 LUBE

BB CT-3 CONTROL B53-ED26-002

BB CT-3 LUBE

BB PDC STRING-1 COMBINEDCYCLE01

BB PDC STRING-2 COMBINEDCYCLE02

Greenland BOP

Greenland Unit #1

Greenland Unit #2

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

SJRPP Unit 1 1B1 125VDC

SJRPP Unit 2 2B1 125VDC

GROUP 2 BATTERIES

Anheuser Busch
Arlington
Bartram - 1
Bartram - 2
Baymeadows
BB CONTROL B50-ED26-002
BB CT-1 CONTROL B51-ED26-002
BB CT-1 LUBE
BB CT-2 CONTROL B52-ED26-002
BB CT-2 LUBE
BB CT-3 CONTROL B53-ED26-002
BB CT-3 LUBE
BB PDC STRING-1 COMBINEDCYCLE01
BB PDC STRING-2 COMBINEDCYCLE02
Beeghly Heights - 1
Beeghly Heights - 2
Blount Island
Brandy Branch - 1 (Sub)
Brandy Branch - 2 (Sub)
Brandy Branch 26kV-1
Brandy Branch 26kV-2
Brooklyn
Buckman
Cecil Field
Cecil North - 1
Cecil North - 2
Center Park - 1
Center Park - 2
Church Street
College Street
Commercial Metals
Craven Road
Dillon
Eastport
Firestone 230
Firestone 69 & 138
Forest - 1
Georgia Street
Grand Park
Greenland 230
Greenland 26
Greenland BOP
Greenland EC - 1 (Sub)
Greenland EC - 2 (Sub)
Greenland Unit #1
Greenland Unit #2
Hamilton
Hartley
Herlong
Hunter
Imeson
Jax Heights - 1
Jax Heights - 2
Jax Port - 1
Jax Port - 2
Kennedy 26
Kennedy 69
Kings Avenue - 1
Kings Avenue - 2
Lane Avenue
Main Street
Mandarin - 1
Mandarin - 2
Mayport
McDuff
Merrill
Millcove
Mobile Cart 5014
Mobile Cart 5015
Mount Pleasant - 1
Mount Pleasant - 2
NAS
Nassau
Neptune

Forest - 2
Fort Caroline
Garden City

Normandy EV-1
Normandy EV-2
Normandy EV-3

GROUP 2 BATTERIES continued

Northshore
Northside Aux (Sub)
Northside Gen (Sub)
Northwest JAX
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
Oakwood Villa
Orange Park
Paxon
Phillips Highway
Picketville
Point Meadows BB-1
Point Meadows BB-2
Powers
Randall Street
Ribault
Ritter Park

Robinwood
San Pablo
San Souci
SJRPP - DCP 1 (Sub)
SJRPP - DCP 2 (Sub)
SJRPP Unit 1 1B1 125VDC
SJRPP Unit 2 2B1 125VDC
SOCC
Southeast
Southpoint
Southside GIS - Relay
Southside GIS 13KV
Southside GIS 26KV
Southside GIS 69KV
Starratt - 1
Starratt - 2
Steelbald 2 Old Building
Steelbald New Building
Switzerland
University Park
Water Street
West Jax
Westlake - 1
Westlake - 2

GROUP 3 BATTERIES (VRLA)

Greenland BOP

NSGS Blackstart
Switchgear (48VDC)

SUBSTATION LOCATIONS

ANHEUSER BUSCH SUBSTATION	111 Busch Dr Jacksonville FL 32218
ARLINGTON SUBSTATION	6212 Macy Ave Jacksonville FL 32211
BARTRAM SUBSTATION	4503 Race Track Rd St Johns FL 32259
BAYMEADOWS SUBSTATION	7601 Southside Blvd Jacksonville FL 32256
BEEGHLY HEIGHTS SUBSTATION	14153 Urn Rd Jacksonville FL 32218
BLOUNT ISLAND SUBSTATION	5740 Gateco Blvd Jacksonville FL 32226
BRANDY BRANCH POWER PLANT	15701 W Beaver St Jacksonville FL 32234
BROOKLYN SUBSTATION	1798 Broadway Ave Jacksonville FL 32209
CECIL COMMERCE SUBSTATION	13701 Waterworks St Jacksonville FL 32221
CECIL FIELD SUBSTATION	10471 103rd St JACKSONVILLE FL 32210
CENTER PARK SUBSTATION	2797 Kernan Blvd N Jacksonville FL 32225
CHURCH STREET SUBSTATION	1015 W Church St Jacksonville FL 32204
COLLEGE STREET SUBSTATION	831 College St Jacksonville FL 32204

COMMERCIAL METALS SUBSTATION	2038 LANE AVE N JACKSONVILLE FL 32254
CRAVEN ROAD SUBSTATION	4388 Sunbeam Rd Jacksonville FL 32257
DILLON SUBSTATION	4215 Talleyrand Ave Jacksonville FL 32206
EASTPORT SUBSTATION	9323 Eastport Rd Jacksonville FL 32218
FAIRFAX SUBSTATION	3000 Fairfax St Jacksonville FL 32209
FIRESTONE SUBSTATION	6878 Firestone Rd Jacksonville FL 32244
FOREST SUBSTATION	10569 Forest Blvd S Jacksonville FL 32246
FORT CAROLINE SUBSTATION	12337 McCormick Rd Jacksonville FL 32225
GARDEN CITY SUBSTATION	2961 Armsdale Rd Jacksonville FL 32218
GEORGIA STREET SUBSTATION	637 N Georgia St Jacksonville FL 32202
GLOBAL SHREDDING SUBSTATION	16770 Rebar Rd Jacksonville FL 32234
GRAND PARK SUBSTATION	2930 W 20th St Jacksonville FL 32254
GREENLAND ENERGY CENTER	6850 Energy Center Dr Jacksonville FL 32256
GREENLAND SUBSTATION	14402 Old Saint Augustine Rd Jacksonville FL 32258
HAMILTON SUBSTATION	4534 Lexington Ave Jacksonville FL 32210
HARTLEY ROAD SUBSTATION	3919 Hartley Rd Jacksonville FL 32257

HERLONG SUBSTATION	7424 Wiley Rd Jacksonville FL 32210
HERSCHEL STREET SUBSTATION	3751 Herschel St Jacksonville FL 32205
HUNTER ROAD SUBSTATION	4223 Adirof Rd Jacksonville FL 32207
IMESON CENTER SUBSTATION	1 Imeson Park Blvd Jacksonville FL 32218
IMESON SUBSTATION	601 Heckscher Dr Jacksonville FL 32226
IVY STEEL SUBSTATION	3165 W 20th St Jacksonville FL 32254
JAX HEIGHTS SUBSTATION	9800 Alvin Rd S Jacksonville FL 32222
JAXPORT SUBSTATION	5411 William Mills St Jacksonville FL 32226
KENNEDY GENERATING STATION	4215 Talleyrand Ave Jacksonville FL 32206
KINGS AVENUE SUBSTATION	1756 Kings Ave Jacksonville FL 32207
LANE AVENUE SUBSTATION	1014 Lane Ave S Jacksonville FL 32205
MAIN STREET SUBSTATION	1055 Main St N Jacksonville FL 32206
MANDARIN SUBSTATION	3476 Loretto Rd Jacksonville FL 32223
MAYPORT SUBSTATION	2972 Mayport Rd Jacksonville FL 32233
McDUFF SUBSTATION	1030 McDuff Ave S Jacksonville FL 32205

MERRILL ROAD SUBSTATION	7730 Merrill Rd Jacksonville FL 32277
MILLCOVE SUBSTATION	1428 Millcoie Rd Jacksonville FL 32225
MONCRIEF SUBSTATION	8500 Moncreif Rd W Jacksonville FL 32219
MT PLEASANT SUBSTATION	831 Kernan Blvd Jacksonville FL 32225
NASSAU SUBSTATION	85960 Wilson Neck Dr Yulee FL 32097
NAVAL AIR STATION SUBSTATION	7001 Roosevelt Blvd Jacksonville FL 32212
NEPTUNE SUBSTATION	1012 Strickland Rd Neptune Beach FL 32266
NORMANDY SUBSTATION	9801 Crystal Springs Rd Jacksonville FL 32221
NORTHSHORE SUBSTATION	5122 Springfield Blvd Jacksonville FL 32208
NORTHSIDE AUXILIARY SUBSTATION	4377 Heckscher Dr Jacksonville FL 32226
NORTHSIDE GENERATING STATION	4377 Heckscher Dr Jacksonville FL 32226
NORTHWEST JAX SUBSTATION	4700 Pearce St Jacksonville FL 32209
OAKWOOD VILLA SUBSTATION	439 Bowlan St Jacksonville FL 32211
ORANGE PARK SUBSTATION	733 Shaw St Orange Park FL 32073
ORTEGA SUBSTATION	4450 Verona Ave Jacksonville FL 32210
PARK & KING SUBSTATION	2658 Gale Ct Jacksonville FL 32204

PAXON SUBSTATION	1607 Lane Ave N Jacksonville FL 32254
PHILLIPS HWY SUBSTATION	7601 Phillips Hwy Jacksonville FL 32256
PICKETTville SUBSTATION	6901 Old Kings Rd Jacksonville FL 32219
POINT MEADOWS SUBSTATION	7740 Point Meadows Dr Jacksonville FL 32256
POWERS AVENUE SUBSTATION	6266 Powers Ave Jacksonville FL 32217
RANDALL STREET SUBSTATION	3065 Randall St Jacksonville FL 32205
RIBAULT SUBSTATION	4205 Soutel Dr Jacksonville FL 32208
RITTER PARK SUBSTATION	131 Noah Rd Jacksonville FL 32218
ROBINWOOD SUBSTATION	10327 Alden Rd Jacksonville FL 32246
ROSSELLE SUBSTATION	2640 Rosselle St Jacksonville FL 32204
SAN PABLO SUBSTATION	13865 Wm Davis Pkwy Jacksonville FL 32224
SAN SOUCI SUBSTATION	8070 Hogan Rd Jacksonville FL 32216
SJRPP GENERATING STATION	11201 New Berlin Rd Jacksonville FL 32226
SOUTHEAST JAX SUBSTATION	9999 Chester Lake Dr Jacksonville FL 32256
SOUTHPOINT SUBSTATION	7551 Salisbury Rd Jacksonville FL 32256
SOUTHSIDE SUBSTATION	801 Broadcast Pl

	Jacksonville FL 32207
ST JOHNS PARK SUBSTATION	4461 St. Johns Ave Jacksonville FL 32210
STARRATT ROAD SUBSTATION	14740 Yellow Bluff Rd Jacksonville FL 32226
STEELBALD SUBSTATION	16770 Rebar Rd Jacksonville FL 32234
SWITZERLAND SUBSTATION	5145-1 Longleaf Pine Pkwy St Johns FL 32259
TWENTY FIRST & HUBBARD SUBSTATION	205 E 21st St Jacksonville FL 32206
UNIVERSITY PARK SUBSTATION	5913 Fort Caroline Rd Jacksonville FL 32277
WATER STREET SUBSTATION	1 Independent Dr Jacksonville FL 32202
WEST JAX SUBSTATION	1901 Pickettville Rd Jacksonville FL 32220
WEST LAKE SUBSTATION	5040 Jones Rd Jacksonville FL 32219