Exhibit A-3, Attachment 1

Substation / Protection & Control (P&C) Testing Specification

Table of Contents

I. REVISION HISTORY

#	Detail	Changed By	Approved By	Date
15	Annual review of testing specifications;	L Weaver; J Pearson	J Tran	2/5/2018
16	Added specific test equipment; Modified scope: - Clarified ground grid testing; - Forcing relay logic prohibited; - 5 CT taps must be excited per CT; - Beckwith M-2001 Testing; - Reactor Bank Testing; - SCADA points checkout; - RCP programming;	L Weaver; J Pearson	J Tran	3/19/2019
17	Added wave traps, line tuning unit, and carrier Added schedule submittal Added neutral grounding reactor to GSU	L Weaver;	J Pearson	10/23/2019
18	Multiple revisions made during yearly team review	J Pearson	J Pearson	1/21/21

II. OVERVIEW

This specification covers supplying all labor, equipment, necessary test requirements, and procedures to perform testing of the power equipment for the project. In addition to equipment testing the contractor will be required to perform ground grid testing, DC battery testing, protective relay testing, line "End to End" testing, support during SCADA controls testing, and phase in verification. The contractor will also provide support for any additional testing or documentation requirements required by the P&C site specific sponsor to trouble shoot any relay or equipment malfunctions that would prevent the site from meeting the criteria to safely energize.

The contractor will be required to test all electrical equipment and protection devices to **NETA acceptance test standards** unless otherwise stated by the manufacturer's recommended acceptance test.

Documentation will be maintained on a real time basis and turned over to the Owner daily. Prior to energization a hard copy of all test results must be provided to the owner.

The contractor shall develop a commissioning plan for submittal to Owner for review and approval. The commissioning plan shall provide the tasks, processes, procedures, and deliverables required to prove the function and performance of the substation and its equipment for energization.

III. REFERENCE STANDARDS, CODES AND SPECIFICATIONS

Without limiting the generality of other requirements of these Specifications, all work specified herein shall conform to or exceed the applicable requirements of the referenced standards; provided, that wherever the provisions of said publications are in conflict with the requirements specified herein, the more stringent requirements shall apply.

A. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)-Latest Edition

1. NFPA 70 - National Electrical Code
2. NFPA 70E – Electrical Safety

B. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) & INSTITUTE OF ELECTRICAL & ELECTRONIC ENGINEERS (IEEE) -Latest Edition

1. ANSI C2 - National Electrical Safety Code

2. ANSI/IEEE C57.13.1 - Guide for Field Testing of Relaying Current Transformers

3. IEEE Std. 48 - Test Procedures and Requirements for Alternating Current Cable Terminations

4. IEEE Std. 81 - Guide for measuring earth resistivity, ground impedance, and earth surface potentials

5. IEEE Std. 142 - Recommended practice for grounding of industrial and commercial power systems

6. IEEE Std. 400.2 – Testing of cables

7. IEEE Std. 450 - Recommended Practice for Maintenance, Testing and Replacement of Large Lead Storage Batteries for Generating Stations and Substations

8. IEEE Std 1106 - Recommended Practice for Maintenance, Testing and Replacement of Nickel-Cadmium Storage Batteries for Generating Stations and Substations

C. INTERNATIONAL ELECTRICAL TESTING ASSOCIATION (NETA) -Latest Edition

1. NETA ATS - Acceptance Testing Specifications

2. NETA MTS - Maintenance Testing Specifications

IV. SUBMITTALS

A. Qualifications shall be submitted as specified in Qualifications section.

B. All relay or substation test reports shall be submitted in two forms: one hard copy and one electronic form.

C. NextEra requires a (i) full substation functional test procedure, (ii) a full substation circuit integrity test, and (iii) a full relay end to end test procedure written and executed 24 hours prior to energization. See detailed scope for explanation.

D. A complete testing package of all individual substation apparatuses having been reviewed and signed off 24 hours prior to substation energization.

E. Name plate photos shall be supplied for all substation apparatuses (i.e breakers, GSU, arrestor, CCVT, PT, SSVT, etc…)

F. Name plate photos shall be supplied for all control house equipment with microprocessors (i.e. relays, meters, communication processors, etc…)

G. Relay test forms shall encompass the following information at a minimum:
- 'As Found' versus 'As Left' relay setting databases and comparisons files;
- Relay test reports (PDF format preferred);
- Protection Suite test plan (.db format or equivalent);

H. After energization, relay phase in verifications shall be performed on all relays. This includes calculating expected magnitude and phase angles to compare to actual values. Phase in documentation shall be submitted upon successful verification.

I. Red line drawings with all 'as built' changes made by the contractor shall be provided to NextEra personnel prior to leaving in both electronic and hard copy. A station copy shall remain in the substation as an accurate set for operations personnel.

NOTE – the NextEra standard is 'red' for drawing additions, 'yellow' for removals, and 'green' for commenting.

V. QUALIFICATIONS OF TESTING FIRM

A. The testing firm shall be a totally independent entity from the construction contractor, the manufacturer of the equipment to be tested, and from the engineer of record for the facility.

B. The testing firm shall have at least three years' experience testing similar types of equipment and systems as found in the project. The firm shall also provide references for three systems similar to the project, which the firm has completed testing within the last three years.

C. Resumes of all personnel shall be submitted to the NextEra for review.

D. The testing firm shall submit a schedule to complete the testing required.

E. The testing firm shall submit all testing forms for review prior to mobilization.

VI. EXECUTION AND DIVISION OF RESPONSIBILITY

A. The scope of this project for the Contractor includes P&C field equipment installation and connections, testing and commissioning. The Contractor shall input Engineer of Record (EOR) supplied relay settings, perform operational/functional tests on all equipment and phase-in all equipment.

B. Installing and testing SCADA, RTUs, or Substation Communication Equipment may require additional specialized test equipment, fiber optics test equipment, or other test equipment.

C. The Contractor shall be available to assist in performing all point checkout testing to identified control centers.

D. All testing documentation must be submitted 24 hours prior to energization (Phase-In). As equipment is tested, the expectation is testing documentation is turned over for review and approval as it is performed with all documentation available 24 hours prior to energization.

E. The testing firm is ultimately responsible for testing all substation equipment in the proposed scope and turning over a functioning product ready for energization upon completion of testing. This is to include troubleshooting of any installed scope within the substation that is found to be non-functional during testing execution. If scope gaps are discovered between the building contractors scope and the testing firm scope, the testing firm is to bring these items to the attention of NextEra as soon as possible for resolution.

F. The testing firm shall provide all material, equipment, labor and technical supervision to perform such tests and inspections as specified herein.

G. The testing firm is responsible for programming all protective and alarming devices with the proper settings provided by the EOR. Settings shall not be changed or applied to any device without written authorization from the NextEra setting provider.

H. The testing firm shall notify NextEra immediately upon the discovery of any defective equipment or incorrect system design or installation.

I. The testing firm shall provide an experienced person on-site during energizing and fill out the appropriate phase in forms and documentation, with appropriate

test equipment to provide assistance in the event of a malfunction during the system start-up process.

VII. TEST EQUIPMENT

The Contractor shall furnish all their own test equipment identifying their needs prior to project commencement.

A. The Contractor is to be experienced in the use of appropriate relay test equipment. Contractor to use Doble Engineering F6000 relay tests sets utilizing the Doble ProTest Test Plan, Protection Suite, and/or Enoserv RTS as approved relay testing tools.

NOTE – additional relay test equipment such as Manta MTS-5000 or Omicron CPC-100/356 may be necessary depending on the interconnecting utility's requirements for relay end to end testing.

B. Contractor shall have the latest version of software as well as laptop computers using the manufacturers relay software to communicate and set the relays. This includes AcSELerator Quickset, GE UR Enervista, Cooper ProView, NovaTech NCD3, etc...

C. Other test equipment would include equipment to test current transformers, such as Vanguard EZCT-2000, breaker close and trip tests, such as variac's or resistor boxes, digital ammeters, digital voltmeters, and high voltage resistance tests using 500V-10KV Meggers. Other equipment might include AVO-PMM-1 multifunction power meters, AVO BM403/2 Megger, Fluke 8060A or Fluke 87/89 digital multimeters, SWR meters, and signal generators.

D. Substation ground grid tests and fall of potential tests shall be completed prior to primary cable neutrals, transmission line OPGW, & supplemental ground wires to ensure the substation is totally isolated from the turbine ground grid as well as interconnection ground grid. Suggested test equipment includes the AEMC 4630 ground tester or Megger DET4TCR2 ground resistance tester.

E. All test equipment shall be designed specifically for the electrical power system testing and for the specific purpose that it is being used for.

F. Accuracy of all test equipment shall be adequate for the tests being performed.

1. Dated calibration labels shall be visible on all test equipment with

calibration occurring within 6 months for analog devices and 12 months for digital devices. Calibration accuracy shall be directly traceable to the National Institute of Standards and Technology (NIST).

2. All meters shall be true RMS reading devices.

3. All test equipment shall be in a state of good repair and working order.

VIII. ELECTRICAL INSPECTION AND REQUIRED WITNESS TESTING

A. All substation equipment nameplate information shall be compared with the drawings and verify relay settings with the drawings and make the appropriate red line corrections as needed.

B. Size of all buses, cables, and wiring shall be verified.

C. All substation equipment make and model numbers are to be recorded with nameplate pictures taken.

NOTE - This information shall be uploaded to the NEER Power Delivery AMP database by NextEra personnel. Maintenance task information per PRC-005 shall be set by NextEra personnel and is NOT responsibility of the contractor.

D. Substation testing contractor is required to perform the following tests with a NextEra project commissioning lead witness (P&C) present to validate the tests. These test at a minimum are as follows:

- Functional test validation;
- Circuit integrity test validation;
- Relay end to end test validation;
- Point to point checkout validation (SCADA);

IX. SAFETY AND PRECAUTIONS

A. The testing firm will be responsible for the safety of all personnel and equipment during the testing service.

B. The testing firm shall observe and follow the site safety specific guidelines. .

C. The testing firm shall provide safety precautions during high voltage testing.

D. Identify areas of hazard and erect physical barriers to prevent or restrict access. Portions of the substation may be under restriction for load bank commissioning of the Wind Turbine / Solar array.

E. Provide personnel in the vicinity of the test area during the periods of high voltage application to ensure unauthorized personnel cannot enter the test area.

F. Follow the local, state and National safety rules and the site specific safety rules.

G. Fully ground equipment after high voltage testing for sufficient time to fully discharge any static charge.

H. Properly protect all equipment tested and checked for operation, to ensure that any subsequent testing of other equipment or system does not disturb, damage, or otherwise interfere with the functional capability of the equipment.

X. DETAILED SCOPE

A. Overview

The Protection and Control work, which includes Testing and Commissioning for this project will consist of, but not limited to, the following:

- Field wiring verifications of pre-installed relay panels
- Complete checkout of all station apparatus
- Installation of Relay Settings and testing
- Complete Testing and Commissioning of all relays, meters, RTU, & communication processors

B. Equipment (relays, meters, data concentrators, etc…)

Relays and devices installed in the Relay and Communications Panels include but not limited to the following:

- SEL Relays (SEL-3xx, SEL-4xx, SEL-7xx, etc…)
- GE Relays (UR Platform)
- Basler Relays (M2001, BE1-851, 59N, etc…)
- Carrier Sets (Ametek, Pulsar, etc…)
- Schneider Electric - Modicon PLC
- Metering – ION-8650, SEL-735, etc…

- NovaTech Orion LX data concentrators or SEL- RTAC
- GPS – Substation Satellite Clock w/ antenna (SEL-2407)
- Beckwith M2001 (C or D) used for OLTC control
- APT Eclipse used for transformer monitoring and control

D. Functional Tests

Functional test procedure to be written and executed by contractor including correct input/output operation on each relay, test block operation, trip/close circuit paths, and any other operational tests to ensure the DC elementary functions as engineered.

- Check operation of all active digital inputs.
- Check all output contacts or SCRs, preferably by operating the controlled device such as circuit breaker, auxiliary relay, or alarm.
- For local anti-islanding, perform '94' function verifications.
- Check all internal relay logic functions used in the protection scheme.
- During logic testing contractor shall NOT force logic to bypass during testing (i.e. block close contact to '1' to simulate)
- NERC sites only: logic simulation testing (PRC-023, PRC-024, & PRC-025) for the transmission line and generator side of the substation relays
- Upon completion of testing, reset all min/max recorders, communications statistics, fault counters, sequence of events recorder, and all event records.
- Verify correct labeling on all relays for targets as well as pushbuttons.
- OLTC operations

E. Relay End to End Tests

Relay End to End test procedure to be written and executed by contractor including the correct function of the transmission line relay scheme. This includes verifications on both the primary protective relay, backup protective relay, anti-islanding scheme '94' verifications, breaker failure tests between substations, mirror bit communications (as applicable), and any other specific requirement dictated by the interconnecting transmission service provider. In some instances, synchronized test sets (using GPS) may be needed to ensure test plans begin at the same time at both substations.

- For pilot schemes, perform a loop-back test to check the receive and transmit time of the communication channel. Measure the time per SER and record the results.
- For pilot schemes, perform satellite synchronized end-to-end tests.

- For pilot schemes with direct transfer trip (DTT), perform transmit and received DTT at each terminal.
- For pilot scheme with anti-islanding, perform '94' function verifications.

F. Circuit Integrity Tests

Circuit Integrity test procedure to be written and executed by contractor for ALL CTs and CCVTs/PTs via pushing current or voltage from the SOURCE to each end device (relay, meter, wind control, etc…). Additionally, perform a single ground verification test, positive/negative deflection tests, and correct knife blade operation (shorting function) in the case of CT test blocks.

- For every CT (breaker, GSU, or standalone CT) push current (1A) from the source to each remote end device (relay, meter, Wind Control, etc…) per AC elementary drawing. Highlight the drawing and fill out a circuit integrity test form.
- For every CCVT/PT, push voltage (67V or 115V) from the source device to each remote end device (relay, meter, Wind Control, etc…) per AC elementary drawing. Highlight the drawing and fill out a circuit integrity test form.
- Verify there is a single point ground per design, see AC elementary drawing for location typically in marshalling or termination cabinet.

NOTE – the SOURCE of each CT is defined as the customer connection point or terminal block within the GSU or breaker. The CT tap needs to be verified to match the CT ratio in the relay settings.

NOTE2 – the SOURCE of each CCVT/PT is defined as the customer connection or terminal block on the low side of the CCVT/PT. NOT the termination point in the CCVT or PT junction box.

G. Power Transformers (GSU)

- Verify OEM has sufficiently dressed out GSU, OEM paper work available, and nameplate information is consistent with design drawings
- For the GSU's CTs perform insulation resistance tests (megger to ground and megger CT to CT).
- For the GSU's CTs perform excitation tests (saturation). Any CT with multiple tap combinations a minimum of 5 taps require excitation tests.
- For the GSU's CTs perform voltage ratio tests at all taps.
- For the GSU's CTs ensure proper polarity orientation per engineering design.

- For the GSU's CTs ensure tap settings coincide with relay oneline drawing, AC three line drawing, and relay settings. Any unused CTs shall be shorted to ground.
- Verify internal wiring, tightness of internal connections, identify remote cables and megger as necessary, visually verify remote wiring is consistent with design drawings, and verify tightness of remote connections.
- Verify the fault pressure relay scheme to operate as intended.
- Verify all GSU alarms and the correct setup of transformer monitoring devices such as the APT Eclipse used for fan monitoring and control.
- Verify for GSUs with dynamic on load tap changer (OLTC) control each Beckwith M-2001 controllers (c or d models) to be operating correctly including their tap position status. The INCON tap position shall be set to match the analog meter on each tap changer as well as the Beckwith M-2001.
- Verify for GSUs with de-energized tap changer (DETC) the tap position correctly matches the reactive power study and perform a TTR to confirm.
- Verify for GSUs with a neutral grounding reactor (NGR) the unit is installed correctly as well as perform a megger and resistance check to compare to the nameplate.
- All CT's are to be tested on the GSU

H. Open Air Breakers

- Verify internal wiring, tightness of internal connections, identify remote cables and megger as necessary, visually verify remote wiring is consistent with design drawings, and verify tightness of remote connections.
- Verify physical condition of the breaker, bushings, insulators, and correct function of heaters.
- Perform a trip coil test at reduced voltage (90 VDC) for all trip coils. Record and measure each trip coil resistance.
- Perform electrical operation tests to verify the anti-pump scheme and trip free conditions.
- Perform a timing test of each breaker on 'close', 'open', and 'reclose' conditions to compare within manufacturer's specifications.
- Perform a contact resistance tests on each phase to compare within manufacturer's specifications.
- Perform insulation resistance test on each phase with the breaker open as well as closed to compare within manufacturers specifications.
- Verify trip coil monitoring and close coil monitoring.
- Fill SF6 gas and verify SF6 gas (as applicable) properly loaded per manufacturers instruction..

- For the breaker CTs perform insulation resistance tests (megger to ground and megger CT to CT).
- For the breaker CTs perform excitation tests (saturation). Any CT with multiple tap combinations a minimum of 5 taps require excitation tests.
- For the breaker CTs perform voltage ratio tests at all taps.
- For the breaker CTs ensure proper polarity orientation per engineering design.
- For the breaker CTs ensure tap settings coincide with relay oneline drawing, AC three line drawing, and relay settings. Any unused CTs shall be shorted to ground.
- Verify all local annunciators (as applicable) to be functioning correctly as well communications configured per engineering drawings (SEL-2533)
- For breakers with point on wave controllers or zero crossing controllers, verify correct configuration and operation per design.

I. Motor Operated Disconnect Switches

- For motor operated disconnect switches (MODs), verify internal wiring, tightness of internal connections, identify remote cables, , visually verify remote wiring is consistent with design drawings, and verify tightness of remote connections.
- Megger and inductor the high side arms and jaw connections.
- Verify piercing of all MODs as well as correct alignment of blades on closing.
- Closing and alignment shall be approved by onsite NEER commissioning manager and NEER operations personnel prior to piercing.
- Auxillary contacts are to be aligned and verified.

J. Instrument Transformers - Coupling Capacitor Voltage Transformer, Potential Transformers, & Station Service Transformers

- Verify internal wiring, tightness of internal connections, identify remote cables and megger as necessary, visually verify remote wiring is consistent with design drawings, all vendor grounding straps removed per single point ground, fusing per drawings is correct, and verify tightness of remote connections.

  Perform a comprehensive test of the voltage transformers to include, megger test, polarity test, and transformer turns ratio test (TTR),

K. Stand-Alone/Combination Metering Units

- Verify internal wiring, tightness of internal connections, identify remote cables and megger as necessary, visually verify remote wiring is consistent with design drawings, all grounding straps removed per single point ground, and verify tightness of remote connections.

- Perform a comprehensive test of the current transformers for all CT's associated with the breaker to include, megger test with single ground, polarity test, ratio test, voltage ratio test, and excitation test.
- Perform a comprehensive test of the voltage transformers to include, megger test, polarity test, and transformer turns ratio test (TTR).

L. DC Systems / Batteries / Chargers

- Perform full battery bank inspection and resistance checks of all DC bus battery terminals
- Perform capacity test on the battery bank per manufacturer's instruction.
- Perform a comprehensive test of the battery bank charger to verify float and equalize output, output current limit, and AC ripple voltage test. Verify battery charger load sharing function.
- Perform a ground test of the battery bank
- Test high and low voltage battery bank alarms and ground detection.

M. Grounding System Verifications

- Verify that all substation grounding of all equipment and metal surfaces are in compliance with the EOR drawings and specifications. Record values on the ground grid plan for each testing point.
- Perform a ground grid fall of potential test or equivalent to validate the adequacy of the station grounding system. The number of test points and distance shall be in the project specific ground grid resistivity report. Typically to identify the "S" or 62.5%, the diagonal length of the substation multiplied by 5 is the distance of the furthest probe and a minimum of 10 points shall be taken returning to the substation ground well to observe the ground grid characteristics.

N. Bus Insulator Verifications

- Perform a hi-pot test to introduce high voltages (10kV) to the collection bus and/or transmission bus ensuring there are no inadvertent grounds on the primary as well as to verify adequate insulator function.

O. Capacitor Banks

- Verify internal wiring, tightness of internal connections, identify remote cables and megger as necessary, visually verify remote wiring is consistent with design drawings, and verify tightness of remote connections.

- Perform electrical tests on all capacitor cans measuring capacitance on each can to be within manufacturer's specifications.
- For any unbalance protection on the capacitor bank, perform tests on the RPD, neutral CT, and/or neutral PT. For example, potential transformer tests should include megger, power factor, and transformer turns ratio tests.
- For medium or low voltages, verify operation of capacitor bank switcher as applicable checking the physical condition, grounds, auxiliary contacts, line connections, erosion indicators, ground clearance, local/remote operation, kirk-key interlocks (if applicable per design), anti-pump circuity, mechanical operation, and electrical operation.

P. Reactor Banks

- Verify internal wiring, tightness of internal connections, identify remote cables and megger as necessary, visually verify remote wiring is consistent with design drawings, and verify tightness of remote connections.
- Perform electrical tests on each reactor performing a megger test and transformer turns ratio validation test.
- For any unbalance protection on the reactor bank, perform tests on the RPD, neutral CT, and/or neutral PT. For example, potential transformer tests should include megger, power factor, and transformer turns ratio tests.
- For medium or low voltages, verify operation of reactor bank switcher as applicable checking the physical condition, grounds, auxiliary contacts, line connections, erosion indicators, ground clearance, local/remote operation, kirk-key interlocks (if applicable per design), anti-pump circuity, mechanical operation, and electrical operation.

Q. Surge Arrestors

- Verify physical and mechanical condition, inspect for correct mounting, verify electrical phase to phase, and phase to ground clearances.
- Verify the ground lead on each arrestor is attached to a ground bus or ground electrode.
- Perform a megger test to ensure electrical insulation.
- Perform power factor testing of each individual arrestor (rated 100KV and above only) at the top and bottom connections.

R. Air Disconnect (Hook) Switches

- Visually inspect condition of each switch, check for porcelain damage, verify grounding, compare equipment nameplate, and add lubricants per manufacturer specifications.
- Verify correct blade alignment, blade penetration, travel stops, arc interrupter operation, and mechanical operation.

Perform electrical tests such as megger tests at 10KV to verify electrical insulation and inductor tests measuring resistance at 100 Amps.

S. Verification of Physical Clearances

- Measure phase to phase and phase to ground clearances per physical drawing specifications to ensure adequate clearances are met.

T. SCADA Points Check Out

- Support internal testing with the SCADA EOR to inject currents, voltages, and simulate alarms. This is to ensure correct alarms, metering values, and controls back to the NextEra Control Center or any local HMI screens.
- Support external testing with interconnect for RTU-to-RTU points verification.

U. Wave Trap & Line Tuning Unit

- For each wave trap measure and plot the impedance for each frequency.
- For each line tuning unit check and record the tap setting of the tuning unit. Measure the protective sparks gap using a feeler gauge.

V. Carrier Set

- For each carrier set verify the satellite clock is connected, keying of transmitter/receiver is set to the correct frequency, local configuration settings, and calibrate carrier level indicator.
- Perform reference level reading for benchmarking, receiver margin, checkback, and verify the remote end. Measure the reflected power readings