**CUSTOMER INSTRUCTIONS FOR COMPLETING A COVER FORM**

**PART 1: PLAN**

**Step 1: Generator Information**

* Complete Facility and Customer Contact Information of the COVER Form by completing the highlighted portions on the Facilities and Contact Information page.

**Step 2: Identify the tests that the Generator intends to conduct**

* Complete highlighted portions of Sections 3, 4, 5, and 6.

**Note: The design review must be finalized prior to completing this step.**

**Step 3: The Distributor COVER Coordinator review**

* Return the COVER form by email to the Distributor COVER Coordinator listed on the Facilities and Contact Information page.
* The COVER Coordinator will review the proposed and respond to the acceptability of the proposed COVER tests within 5 business days.

**Note: The commissioning plan review must be finalized prior to commencing testing for the next step.**

**PART 2: PRE-ENERGIZATION**

**Step 4: Completion of testing and resolution of all comments**

* Complete all applicable testing in Sections 3, 4, 5, and 6
* Sign off the COVER in Section 4 by a Generator P.Eng Representative, and submit it to the COVER Coordinator
* The COVER Coordinator will review the certified COVER and recommend to the Transmitter for connection to the grid by signing Section 6.
* Section 5 testing can only proceed when all salient comments have been resolved and tests completed for Sections 3, 4, 5, and 6.
* Controlling Authority will provide authorization to connect to the grid (for OGCC controlled distributed generators, the OGCC is the controlling authority. For other feeders the controlling authority will be Provincial Lines.)

**PART 3: POST-ENERGIZATION**

**Step 5: Final potential and on-load tests**

* Transmitter will provide authorization to connect (where applicable)
* Complete and sign Section 7 when all parts of the COVER form are complete. (Note: Cross readings to be performed within 5 business days of placing load on station)
* Summary of testing results and certificates must be kept on file for a minimum period of seven years by the Generator (as indicated by the IESO Market Rules). The Distributor may require the information on an exception basis.

|  |
| --- |
| **SYNERGY NORTH** |
| **Confirmation of Verification Evidence Report****(COVER)** |
| **Section 1 Facilities Information** |
| **Name of Customer** |  |
| **Name of Facility** |  |
| **Proposed Energization Date** |  |
| **TBH Operating Designation** |  |
| **Supply Feeder Designation** |  |
| **Section 2 Contact Information** |
| **Customer Contact** | **Distributor COVER Coordinator** |
| **Name** |  | **Name** | Daniel Dillon, P. Eng. |
| **Title** |  | **Title** | Distribution Engineer |
| **Date** |  | **Date** |  |
| **Tel#** |  | **Tel#** | (807)343-1037 |
| **Email** |  | **Email** | ddillon@synergynorth.ca |

| **SECTION 3** | **VERIFICATION – PROTECTION AND CONTROL** |
| --- | --- |
| **Legend: C = Confirm W = Witness****Results: P = Pass, F = Fail, N/A = Not Applicable** | **Test** |  | **Results** | **Initials** | **Date (mm/dd/yyyy)** | **Note #** |
| Is commissioning in compliance with the submitted Commissioning plans? | C |  |  |  |  |  |
| Are reviewed relay settings applied? | W |  |   |  |  |  |
| **Confirm that the following protection systems, as applicable, have been verified to function as per the design.****NOTE: Tests marked with and asterisks (\*) require Distributor and/or Transmitter staff coordination** |
| * Line Protection
 | N |   |   |  |  |  |
| * HV Breaker Failure Protection and reclose
 | N |   |   |  |  |  |
| * LV Breaker Failure Protection and reclose
 | N |  |  |  |  |  |
| * Transformer Differential
 | N |  |  |  |  |  |
| * Transformer Backup Protection
 | N |  |  |  |  |  |
| * Over/Under Frequency
 | N |  |  |  |  |  |
| * Over/Under Voltage
 | N |  |  |  |  |  |
| * Transfer Trip/Remote Trip\*
 | N |  |  |  |  |  |
| * Pilot Wire Protection\*
 | N |  |  |  |  |  |
| * Blocking Scheme Circuits\*
 | N |  |  |  |  |  |
| * Generation Rejection and Load Rejection Circuits\*
 | N |  |  |  |  |  |
| * Reverse Power
 | N |   |   |  |  |  |
| * Generator Prot. that Trip HV Sync Breakers
 | N |   |   |  |  |  |
| * Instrument Transformers
 | N |  |   |  |  |  |
| * Monitoring Equipment (Digital Fault Recorder, Sequence of Events Recorder, etc.)
 | N |  |  |  |  |  |

| **SECTION 4** | **TELEMETRY TESTS BEFORE ENERGIZATION AT GENERATION FACILITY** |
| --- | --- |
| **Confirm the following SCADA telemetry quantities, where applicable:****Test Needed: D = to be Done****Legend: C = Confirm W = Witness****Results: P=Pass, F=Fail****All Parts: N/A = Not Applicable** | **Test** |  | **Results** | **Initials** | **Date (mm/dd/yyyy)** | **Note #** |
| * MW flows and direction
 | N |  |  |  |  |  |
| * MVAR flow and direction
 | N |  |  |  |  |  |
| * Phase to Neutral voltages
 | N |  |  |  |  |  |
| * HV switchers/HV breakers/Bus Tie Breakers Open/Close Status
 | N |  |  |  |  |  |
| * HV Line Disconnect switches Open/Close Status
 | N |  |  |  |  |  |
| * Synchronizing Breakers Open/Close Status
 | N |  |  |  |  |  |
| * AVRs, PSSs status
 | N |  |  |  |  |  |
| * Generation Rejection Selection Status
 | N |  |  |  |  |  |
| * LV Breakers/Switchers, Open/Close Status
 | N |  |  |  |  |  |
| * LV Synchronizing Breakers, Open/Close Status
 | N |  |  |  |  |  |
| * Protection Trip Alarms
 | N |  |  |  |  |  |
| * Other (Specify): Remote Trip
 | N |  |  |  |  |  |

| **SECTION 5** | **CONFIRMATION OF VERIFICATION – POWER EQUIPMENT** |
| --- | --- |
| **Legend: C = Confirm, W = Witness, Not Applicable****Results: P=Pass, F=Fail, N/A = Not Applicable** | **Test** | **Results** | **Initials** | **Date (mm/dd/yyyy)** | **Note #** |
| * **Verify the LV disconnect switches/circuit switchers are suitable as an isolation point per Utility Work Protection Code?**

NOTE: Any future modifications to the isolation device(s) used to provide supporting guarantees to Distributor staff under the Utility Work Protection Code must be re-witnessed by Distributor personnel. | W |  |  |  |  |
| * Confirm correct operation of the LV disconnect switches/circuit switchers/breakers
 | W |  |  |  |  |
| * Is closing time within manufacturer’s specification?
 | N/A |  |  |  |  |
| * Is opening time within manufacturer’s specification?
 | N/A |  |  |  |  |
| * Are the specified HV surge arrestors installed?
 | N/A |  |  |  |  |
| * Confirm the power transformer test results are within specification
 | N/A |  |  |  |  |
| * Confirm power transformers connected correctly as per the design.
 | N/A |  |  |  |  |
| * Confirm the DC system installed (ie battery, charger, dc panel, dc monitoring)? Verified
 | C |  |  |  |  |
| * Does the LV equipment (ie disconnect switches, circuit switchers, breakers, CVTs, CTs) have the appropriate voltage class and current ratings as per the submitted Single Line Diagram?
 | C |  |  |  |  |
| * Other (specify):
 | N/A |  |  |  |  |
| * **Name of Distributor Witness**
 |  |

| **SECTION 6** | **ELECTRICAL SAFETY** |
| --- | --- |
| **Legend: SD = Supporting Document, N/A = Not Applicable** | **Legend** | **Date (mm/dd/yyyy)** |
| * Prior to energizing any new or modified customer or generator facilities, Electrical Safety Authority (ESA) must provide a Temporary Connection Authorization (Ontario Electrical Safety Code Article 2-014). **Attach Document**
 | SD |  |
| * Prior to final in-service of new or modified customer or generator facilities, ESA must provide Connection Authorization (Code Article 2-012). **Attach Document**
 | SD |  |
| * All customers must provide a letter signed and stamped by a Professional Engineer registered in the province of Ontario stating that their equipment and installation meets CSA and/or other applicable electrical safety standards, prior to ready for Service Date. **Attach Document**
 | SD |  |

|  |  |
| --- | --- |
| **The COVER Coordinator approves the proposed checks, verifications, tests and notes submitted by the Generator for the scheduled COVER.** | **COVER Coordinator Initials \_\_\_\_** |

**NOTES:** (For Sections 3-6)

|  |  |  |  |
| --- | --- | --- | --- |
| **#:** | **Comments:** | **Initials** | **Date Action Resolved: (dd/mm/yyyy)** |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |
| 7 |  |  |  |
| 8 |  |  |  |
| 9 |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**By signing this form, the Generator acknowledges that all required verifications specified under this COVER document have been completed and that the Generation Facility design and operation meets the minimum standards for customer facilities connected to a distribution system, as per the Distribution System Code.**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Signature of Generator Representative (Note: Must be P. Eng)**

**Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**[ ]  Part 1 Completed (Sections 3-6) COVER Coordinator Initials \_\_\_\_\_\_**

**The COVER Coordinator has reviewed the Generator’s Certified COVER document and the Generator’s Facilities may be connected to the Distributor’s distribution system subject to the Transmitter’s final review (if applicable).**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Signature of SYNERGY NORTH Representative**

**Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

| **SECTION 7** | **CONFIRM ON POTENTIAL LOAD CHECKS AT RATED SYSTEM VOLTAGE** |
| --- | --- |
| **Legend: C = Confirm, W = Witness, N/A = not applicable****Result: P = Pass, F = Fail****All Parts: N/A = Not Applicable** | **Test** | **Results** | **Initials** | **Date (mm/dd/yyyy)** | **Note #** |
| Are phasor (X-Watt meter) readings completed and analyzed by the Generator vs protection listed in Section 1? | W |  |  |  |  |
| Are phasor (X-Watt meter) readings completed and analyzed by the Generator vs SCADA quantities listed in Section 4? | N/A |  |  |  |  |
| On Load SCADA Values confirmed consistent with test(s) performed in Section 4? | N/A |  |  |  |  |
| Other (specify):  | N/A |  |  |  |  |

**NOTES:** (For Section 7)

|  |  |  |  |
| --- | --- | --- | --- |
| **#:** | **Comments:** | **Initials** | **Date Action Resolved: (dd/mm/yyyy)** |
| **1** |  |  |  |
| **2** |  |  |  |

**I/we acknowledge the completion of the COVER as noted and the deficiencies identified in the “NOTES” section have been resolved.**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Signature of Generator Representative (Note: Must be P. Eng)**

**Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**The COVER Coordinator has reviewed the Generator’s potential/on load checks at the rated system voltage**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Signature of SYNERGY NORTH Representative**

**Print Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

| **SECTION 8** | **TEST SUMMARY REPORTS** |
| --- | --- |

In accordance with the Code, Appendix F, the Generator shall at the Distributor’s request, provide the Distributor with a summary of testing results, including any certificates of inspection or other applicable authorizations or approvals certifying that any of the Generator’s new, modified, or replacement Facilities have passed the relevant tests and comply with all applicable instruments and standards referred to in the Code. This information will be kept on file for a period of seven years by the Generator.