Confirmation of Verification Evidence Report (Cover)

Generator instructions for completing this cover form

Part 1 - Plan

Step 1: Generator Information

- Complete facility and Generator contact information of the COVER form by completing the highlighted portions of sections 1 & 2.

Step 2: Identify the Tests that the Generator Intends to Conduct

Note: The design review for this generation facility must be completed by Enova prior to starting this step.

- Complete protection group and legend columns of section 3 (highlighted yellow), where applicable.
- Complete tests needed and legend columns of section 4 (highlighted yellow).
- Complete legend column of section 5 (highlighted yellow).
- Complete legend and date received columns of section 6 (highlighted yellow).
- Submit commissioning plan for the facility to Enova.

Step 3: Enova's COVER Coordinator Review

- Return COVER form by email to the Enova COVER coordinator listed in section 2.
- The COVER coordinator will review the proposed COVER and respond to the acceptability of the proposed COVER tests within 30 working days.

PART 2: Pre-Energization

Step 4: Completion of Testing and Resolution of all Comments

Note: The Commissioning plan review must be finalized prior to commencing testing.

- Complete all applicable testing and obtain required approvals in sections 3, 4, 5 & 6.
- Sign off the COVER, in section 6, by a Generator P.Eng representative, and submit it to the COVER coordinator by email.
- The COVER coordinator will review the certified COVER and recommend to the controlling authorities for connection to the grid by signing section 6.
- Section 7 testing can only proceed when all salient comments have been resolved and tests completed for sections 3 to 6.
- Energization can only take place after controlling authorities have provided authorization to connect.

PART 3: Post-Energization

Step 5: Final Energization and On-load Checks

- Generator will complete and sign section 7 when all parts of the COVER form are complete. (Note: cross readings to be performed within 2 business days of placing the station in service as a generator).

- Summary of testing results and certificates must be kept on file for a minimum period of seven (7) years by the Generator (as indicated by IESO Market Rules, Chp.4, 5.1.3. Enova may require this information, on an exception basis).
- Enova COVER coordinator will distribute complete COVER to distribution list found on page 9.

Distributed Connected Generation

5/11/2020

Section 1: Facilities Information

Name of Proponent:	Legal Name
Name of Facility:	Name of Facility
Address of Facility:	Address of Facility
Proposed Energization Date:	Usually 2 weeks after commissioning date
Enova Operating Designation:	n/a
Claim Notification:	n/a
OEB Generator License Number:	n/a
Supply Feeder Designations:	Supply Feeder Designation

Section 2: Contact Information

Enova Power Corp.	Legal Name	Name of Engineering Company
Contact: Rupinder Singh, E.I.T	Contact:	Contact:
Title: Distribution Designer	Title:	Title:
Tel: 226-896-2200 ext. 6222	Tel:	Tel:
Fax: (519) 886–7049	Cell:	Cell:
email: rupinder.singh@enovapower.com	Email:	Email:

Section 3: Verification and Protection Control

Protection Group to verify: A, B, or A&B Legend: C = Confirm, N/A = Not Applicable Results: P = Pass, F = Fail, N/A = Not Applicable	Protect'n Group to Verify	Legend	Results	Initials	Date	Note #
Is commissioning in compliance with the submitted Commissioning plans?						
Are reviewed relay settings applied?						
Confirm that the following protection systems, as applicable, have been verified to function as per the design: NOTE: Tests marked with an asterisks (*) require Enova staff coordination						
Feeder Protection (all elements used to protect feeder)						
HV Breaker Failure Protection and Reclose						
LV Breaker Failure Protection and Reclose						
Transformer Differential						
Transformer Backup Protection						
Under and Over Frequency						
Under and Over Voltage						
Transfer Trip / Remote Trip *						
DGEO (Distributed Generator End Open) *						
Line Differential Protection *						
Anti-Islanding Protection *						
Blocking Scheme Circuits *						
Generation Rejection & Load Rejection Circuits *						
Reverse Power						
Gen. Prot. That trip HV Sync Breakers						
Instrument Transformer (eg. CTs + VTs, etc.)						
Monitoring Equipment (eg. DFR, SER, etc.)						
Other (Specify)						

Section 4: Telemetry Tests Before Energization at Generator Owned G.S.

(Confirm the following SCADA telemetry quantities, where applicable)						
Test Needed: D = to be Done Legend: C = Confirm; Results: P = Pass, F = Fail All Parts: N/A = Not Applicable	Test Needed	Legend	Results	Initials	Date	Note #
MW Flows and Directions						
MVAR Flow and Directions						
Phase to Phase or Phase to Neutral Voltages						
HV switchers/HV breakers/Bus Tie Breakers Open/Close Status						
HV Line Disconnect Switches Open/Close Status						
Synchronizing Breakers Open/Close Status						
Automatic Voltage Regulators, Power System Stabilizers status						
Generation Rejection Selection Status						
LV Breakers/Switchers Open/Close Status						
LV Synchronizing Breakers Open/Close Status						
Protection Trip Alarm: Transfer Trip Receive						
Protection Trip Alarm: DGEO Send						
Protection Trip Alarm: Breaker Failure						
Protection Trip Alarm: Interconnection Protection Failure						
Protection Trip Alarm: All Others						
Other (specify)						

Section 5: Confirmation of Verification-Power Equipment

Legend: C = Confirm, W = Witness Result: P = Pass, F = Fail All Parts: N/A = Not Applicable	Legend	Results	Initials	Date	Note #
Verify the DG main disconnecting means and interrupting devices are suitable as an isolation point per Utility Work Protection Code?					
Confirm correct operation of the DG main disconnecting means and interrupting devices are in compliance with OESC 14-700, 14-701, 84-008, and 84-018.					
Is closing time within manufacturer's specification?					
Is opening time within manufacturer's specification?					
Are the specified HV surge arrestors installed?					
Confirm the power transformer Doble test results are within specification					
Confirm power transformers connected correctly as per the design.					
Confirm the DC system installed (ie battery, charger, dc panel, dc monitoring)? Verified					
Does the HV equipment (ie, disconnect switches, circuit switchers, breakers, CVTs, CTs) have the appropriate voltage class and current ratings as per the submitted Single Line Diagram?					
Other (specify)					
Name of Enova Witness:					
NOTE: Any future modifications to the isolation device(s) used to provide supporting guarantees to Enova staff under the Utility Work Protection Code must be re-witnessed by Enova personnel.					

Notes for Sections 3-5

Note #	Comments	COVER Coordinator Concurrence	Date Action Resolved
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			

Section 6: Electrical Safety

Legend: SD = Supporting Document, N/A = Not Applicable	Legend	Date
Prior to energizing any new or modified Generator or generator facilities, Electrical Safety Authority (ESA) must provide a Temporary Connection Authorization (Ontario Electrical Safety Code Article 2-014). **Attach document**.		
Prior to final in-service of new or modified Generator or generator facilities, ESA must provide Connection Authorization (Code Article 2-012). **Attach document**.		
All Generators 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**.		

Part 1: Plan Stage Review (step 3)

Enova COVER coordinator is satisfied with the proposed tests, checks and verification plan identified in Sections 3, 4, 5 & 6.	
	Initials

Part 2: Pre-Energization (step 4)

By signing this form, the Generator acknowledges that all required verifications specified under this COVER document have been completed and that the Generator facility design and operation meets the minimum standards for Generator facilities connected to a distribution system, as per the Distribution System Code.	
	Signature of Generator Representative (P. Eng)
	Print Name:
	Title:
	Date:

The COVER Coordinator has reviewed the Generator's Certified COVER document and the Generator's facility may be connected to the grid, subject to Controlling Authorities final review.	
	Signature of COVER Coordinator
	Rupinder Singh, E.I.T
	Distribution Designer
	Date:
The COVER coordinator shall forward (scan/fax) the completed document to the applicable Controlling Authorities to initiate the connection.	

CONTROLLING AUTHORITY COVER ACCEPTANCE OF CONNECTION	
Signature of Controlling Authority	Date

Section 7: Confirm on Potential/On Load Checks at Rated System Voltage

Legend: C = Confirm, W = Witness Result: P = Pass, F = Fail All Parts: N/A = Not Applicable	Legend	Results	Initials	Date	Note #
Are phasor readings completed and analyzed by the Generator for Protection listed in Section 3?					
Are phasor readings completed and analyzed by the Generator for SCADA quantities listed in Section 4?					
On Load SCADA Values confirmed consistent with test(s) performed in Section 4?					
On load power factor test performed to verify operating power factor, at the Point of Common Coupling as per section D.8. Schedule D of the DCA. Attach report.					

Notes for section 7:

Note #	Comments	COVER Coordinator Concurrence	Date Action Resolved
1			
2			
3			
4			
5			

Part 3: Post-Energization

I/we acknowledge the completion of the COVER as noted and the deficiencies identified in the "NOTES" section have been resolved.	P.Eng Seal of Generator Representative

The Enova COVER Coordinator has reviewed the Generator's potential/on load checks at the rated system voltage.	
	Signature of COVER Coordinator

Section 8: Test Summary Reports

In accordance with the Distribution System Code, Appendix F, for a Generation facility of Small size, Mid size, and Large size, the Generator shall, at Enova's request, provide Enova 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 Distribution System Code. This information will be kept on file for a period of seven (7) years by the Generator.

Distribution List (when all sections are completed):

☐ Enova COVER Coordinator	☐ Generator
☐ Controlling Authorities	☐ Records Management