

## FIRSTENERGY STANDARD INTERCONNECTION AGREEMENT

This Interconnection Agreement ("Agreement") is made and entered into this \_\_\_\_\_ day of Select Month, \_\_\_\_\_, by The Select Utility, ("Electric Distribution Company", "EDC" or "Company"), and \_\_\_\_\_ ("Customer" or "Customer-Generator"), each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties". In consideration of the mutual covenants set forth herein, the Parties agree as follows:

### WITNESSETH:

WHEREAS, Customer is installing, or has installed, generation equipment, controls, and protective relays and equipment ("Generation Facilities") used to interconnect and operate in parallel with Company's electric system, which Generation Facilities are more fully described in Attachment A, attached hereto and incorporated herein by this Agreement:

- 1) **Application.** It is understood and agreed that this Agreement applies only to the operation of the Generation Facilities described on Attachment A.
  
- 2) **Interconnection.** Company agrees to allow Customer to interconnect and operate the Generation Facilities in parallel with Company's electric system in accordance with any operating procedures or other conditions specified in Attachment A. By this Agreement, or by inspection, if any, or by non-rejection, or by approval, or in any other way, Company does not give any warranty, express or implied, as to the adequacy, safety, compliance with applicable codes or requirements, or as to any other characteristics, of the Generation Facilities. The Generation Facilities installed and operated by or for Customer shall comply with, and Customer represents and warrants their compliance with: (a) the National Electrical Code and the National Electrical Safety Code, as each may be revised from time to time; (b) Company's rules and regulations, including Company's Interconnection Tariff and Company's Service Regulations, each as contained in Company's Retail Electric Tariff and as each may be revised from time to time with the approval of the Public Utilities Commission of Ohio ("Commission"); (c) the rules and

regulations of the Commission, including the provisions of Chapter 4901:1-22, Ohio Administrative Code Uniform Electric Interconnection Standards, as such rules and regulations may be revised from time to time by the Commission; and (d) all other applicable local, state, and federal codes and laws, as the same may be in effect from time to time.

Customer shall install, operate, and maintain, at Customer's sole cost and expense, the Generation Facilities in accordance with IEEE 1547-2003 "IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems." (IEEE 1547) and the manufacturer's suggested practices for safe, efficient and reliable operation of the Generation Facilities in parallel with Company's electric system. Customer shall bear full responsibility for the installation, maintenance and safe operation of the Generation Facilities. Upon request from the Company, Customer shall supply copies of periodic test reports or inspection logs.

Customer shall be responsible for protecting, at Customer's sole cost and expense, the Generation Facilities from any condition or disturbance on Company's electric system, including, but not limited to, voltage sags or swells, system faults, outages, loss of a single phase of supply, equipment failures, and lightning or switching surges.

Customer agrees that, without the prior written permission from Company, no changes shall be made to the configuration of the Generation Facilities, as that configuration is described in Attachment A, and no relay or other control or protection settings specified in Attachment A shall be set, reset, adjusted or tampered with, except to the extent necessary to verify that the Generation Facilities comply with Company approved settings.

**3) Operation by Customer.** Customer shall operate the Generation Facilities in such a manner as not to cause undue fluctuations in voltage, intermittent load characteristics or otherwise interfere with the operation of Company's electric system. At all times when the Generation Facilities are being operated in parallel with Company's electric system, Customer shall so operate the Generation Facilities in such a manner that no disturbance will be produced thereby to the service rendered by Company to any of its other customers

or to any electric system interconnected with Company's electric system. Customer understands and agrees that the interconnection and operation of the Generation Facilities pursuant to this Agreement is secondary to, and shall not interfere with, Company's ability to meet its primary responsibility of furnishing reasonably adequate service to its customers.

Customer's control equipment for the Generation Facilities shall immediately, completely, and automatically disconnect and isolate the Generation Facilities from Company's electric system in the event of a fault on Company's electric system, a fault on Customer's electric system, or loss of a source or sources on Company's electric system. The automatic disconnecting device included in such control equipment shall not be capable of reclosing until after service is restored on Company's electric system. Additionally, if the fault is on Customer's electric system, such automatic disconnecting device shall not be reclosed until after the fault is isolated from Customer's electric system. Upon Company's request, Customer shall promptly notify Company whenever such automatic disconnecting devices operate.

**4) Interconnection and Operation.** The Customer-Generator may interconnect and operate the Customer-Generator Facility with the EDC's system once all of the following have occurred:

- a) **Electrical Inspection:** Upon completing construction, the Customer-Generator shall have the Customer-Generator Facility inspected or otherwise certified by the local electrical wiring inspection authority having jurisdiction, that the facility meets the requirements of the National Electric Code.
- b) **Certificate of Completion:** The Applicant shall provide the EDC with a completed copy of the Certificate of Completion, including evidence of the electrical inspection by the local authority having jurisdiction. The evidence of completion of the electrical inspection may be provided on inspection forms used by local inspecting authorities.
- c) **Inspection:** The EDC has either completed its inspection or waived the right to inspection in this Agreement. After receipt of the Certificate of Completion, the EDC may, upon reasonable notice and at a mutually convenient time, conduct

an inspection of the Customer-Generator facility and observe a Witness Test to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with its requirements.

- d) Metering: Revenue quality metering equipment shall be installed and tested by the EDC. (Note: The EDC may allow interconnected operations prior to the meter installation.)
- e) Acceptance: The EDC's representative has signed and returned the Certificate of Completion or provided notification by electronic mail or other acceptable means that the requirements for interconnection are complete and interconnection of the Customer-Generator facility is accepted for parallel operation.

**5) Access and Inspection by Company.** Customer must provide the Company reasonable opportunity to inspect the Generation Facilities prior to operation and witness the initial testing and commissioning of the Generation Facilities. Company may witness any commissioning tests required by IEEE 1547. Following the initial testing and inspection of the Generation Facilities and upon reasonable advance notice to Customer, Company shall have access at reasonable times to the Generation Facilities to perform reasonable on-site inspections to verify that the installation, maintenance and operation of the Generation Facilities comply with the requirements of this Agreement. The Company's cost of such inspection(s) shall be at Company's expense; however, Company shall not be responsible for any other cost Customer may incur as a result of such inspection(s). Upon written request, Customer shall inform Company of the next scheduled maintenance and allow Company to witness the maintenance program and any associated testing. Company shall also have at all times immediate access to breakers or any other equipment that will isolate the Generation Facilities from Company's electric system.

**6) Exterior AC Disconnect Switch / Isolation Device.** Small Generation Facilities shall be capable of being isolated from the EDC by means of a lockable, visible-break isolation device accessible by the EDC. The isolation device shall be installed, owned and maintained by the Customer-Generator and located between the small generation facility and the point of interconnection. A draw-out type circuit breaker with a provision for

padlocking at the draw-out position can be considered an isolation device for purposes of this requirement.

A Customer-Generator may elect to provide the EDC access to an isolation device that is contained in a building or area that may be unoccupied and locked or not otherwise readily accessible to the EDC, by installing a lockbox provided by the EDC that shall provide ready access to the isolation device. The Customer-Generator shall install the lockbox in a location that is readily accessible by the EDC and the Customer-Generator shall permit the EDC to affix a placard in a location of its choosing that provides clear instructions to EDC operating personnel on access to the isolation device. The Customer-Generator, at its option, may provide and install both the lockbox and placard.

**7) Disconnection of Generation Facilities.** Company shall have the right and authority to isolate the Generation Facilities at Company's sole discretion if Company believes that: (a) continued interconnection and parallel operation of the Generation Facilities with Company's electric system creates or contributes (or will create or contribute) to a system emergency on either Company's or Customer's electric system; (b) the Generation Facilities are not in compliance with the requirements of this Agreement, and the non-compliance adversely affects the safety, reliability or power quality of Company's electric system; or (c) the Generation Facilities interfere with the operation of Company's electric system. In non-emergency situations, Company shall give Customer notice of noncompliance including a description of the specific noncompliance condition and allow Customer a reasonable time to cure the noncompliance prior to isolating the generating facilities.

The Customer retains the option to temporarily disconnect from the Company's system at any time. Such temporary disconnection shall not be a termination of this Agreement unless the Customer exercises its termination rights under Section 11.

Subject to Commission Rule, for routine maintenance and repairs on Company's utility system, Company shall provide Customer with seven business days' notice of service interruption.

**8) Rates and Other Charges.** This Agreement does not constitute an agreement by Company to purchase or wheel power produced by the Generation Facilities, or to furnish any backup, supplemental or other power or services associated with the Generation Facilities, and this Agreement does not address any charges for facilities that may be installed by Company in connection with interconnection of the Generation Facilities. It is understood that if Customer desires an agreement whereby Company wheels power, or purchases energy and/or capacity, produced by the Generation Facilities, or furnishes any backup, supplemental or other power or services associated with the Generation Facilities, then Company and Customer may enter into another mutually acceptable separate agreement detailing the charges, terms and conditions of such purchase or wheeling, or such backup, supplemental or other power or services. It is also understood that if any such facilities are required, including any additional metering equipment, as determined by Company, in order for the Generation Facilities to interconnect with and operate in parallel with Company's electric system, then a separate agreement shall be executed by Company and Customer detailing the charges and terms and conditions of payment.

**9) Insurance.** Customer shall maintain reasonable amounts of insurance coverage against risks related to the Generation Facilities for which there is a reasonable likelihood of occurrence. Customer shall agree to provide Company from time to time with proof of such insurance upon Company's request.

**10) Indemnification.** Each Party (the "Indemnifying Party") to the extent permitted by law shall indemnify and hold harmless the other Party from and against all claims, liability, damages and expenses, including attorney's fees, based on any injury to any person, including the loss of life, or damage to any property, including the loss of use thereof, arising out of, resulting from, or connected with, or that may be alleged to have arisen out of, resulted from, or connected with, an act or omission by the Indemnifying Party, its employees, agents, representatives, successors or assigns in the construction, ownership, operation or maintenance of the Indemnifying Party's facilities used in connection with this Agreement. Upon written request of the Party seeking relief under this Section 10, the Indemnifying Party shall defend any suit asserting a claim covered by this Section 10. If a

Party is required to bring an action to enforce its rights under this Section 10, either as a separate action or in connection with another action, and said rights are upheld, the Indemnifying Party shall reimburse such Party for all expenses, including attorney's fees, incurred in connection with such action.

11) **Effective Term and Termination Rights.** This Agreement shall become effective when executed by both Parties and shall continue in effect until terminated in accordance with the provisions of this Agreement. This Agreement may be terminated for the following reasons: (a) Customer may terminate this Agreement at any time by giving Company at least sixty (60) days' prior written notice stating Customer's intent to terminate this Agreement at the expiration of such notice period; (b) Company may terminate this Agreement at any time following Customer's failure to generate energy from the Generation Facilities in parallel with Company's electric system by the later of two years from the date of execution of this Agreement or twelve (12) months after completion of the interconnection provided for by this Agreement; (c) either Party may terminate this Agreement at any time by giving the other Party at least sixty (60) days' prior written notice that the other Party is in default of any of the material terms and conditions of this Agreement, so long as the notice specifies the basis for termination and there is reasonable opportunity for the Party in default to cure the default; or (d) Company may terminate this Agreement at any time by giving Customer at least sixty (60) days' prior written notice in the event that there is a change in an applicable rule or statute affecting this Agreement.

Upon termination of this Agreement, Customer's Generation Facilities shall be disconnected from the Company's system.

Termination of this Agreement shall not relieve either party of its liabilities and obligations, owed or continuing at the time of the termination.

12) **Termination of Any Applicable Existing Agreement.** From and after the date when service commences under this Agreement, this Agreement shall supersede any oral and/or written agreement or understanding between Company and Customer concerning

the service covered by this Agreement and any such agreement or understanding shall be deemed to be terminated as of the date service commences under this Agreement.

13) **Notice.** Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, sent by Electronic Mail (E-mail), sent by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to EDC:

The contact listed on the EDC website as the primary contact for the EDC listed in the Customer-Generator's facility Information section on Attachment A of this Interconnection Agreement.

If to Customer-Generator:

The contact listed in the Legal Name and Mailing Address of Customer-Generator section on Attachment A of this Interconnection Agreement. The Customer-Generator is responsible for notifying the EDC of any change in the contact party information.

In the event the original applicant sells or otherwise transfers ownership of the property listed in the Customer-Generator facility's Information section listed on Attachment A of the Interconnection Agreement, the original applicant shall provide the EDC with the appropriate contact information for the new owner of the property. Upon any subsequent transfer of ownership, the then current owner shall provide the EDC with the new owner's information.

14) **Force Majeure.** For purposes of this Agreement, the term "Force Majeure" means any cause or event not reasonably within the control of the Party claiming Force Majeure, including, but not limited to, the following: acts of God, strikes, lockouts, or other industrial disturbances; acts of public enemies; orders or permits or the absence of the necessary orders or permits of any kind which have been properly applied for from the government of

the United States, the State of Ohio, any political subdivision or municipal subdivision or any of their departments, agencies or officials, or any civil or military authority; unavailability of a fuel or resource used in connection with the generation of electricity; extraordinary delay in transportation; unforeseen soil conditions; equipment, material, supplies, labor or machinery shortages; epidemics; landslides; lightning; earthquakes; fires; hurricanes; tornadoes; storms; floods; washouts; drought; arrest; war; civil disturbances; explosions; breakage or accident to machinery, transmission lines, pipes or canals; partial or entire failure of utilities; breach of contract by any supplier, contractor, subcontractor, laborer or material man; sabotage; injunction; blight; famine; blockade; or quarantine.

If either Party is rendered wholly or partly unable to perform its obligations under this Agreement because of Force Majeure, both Parties shall be excused from whatever obligations under this Agreement are affected by the Force Majeure (other than the obligation to pay money) and shall not be liable or responsible for any delay in the performance of, or the inability to perform, any such obligations for so long as the Force Majeure continues. The Party suffering an occurrence of Force Majeure shall, as soon as is reasonably possible after such occurrence, give the other Party written notice describing the particulars of the occurrence and shall use commercially reasonable efforts to remedy its inability to perform; provided, however, that the settlement of any strike, walkout, lockout or other labor dispute shall be entirely within the discretion of the Party involved in such labor dispute.

**15) Dispute Resolution.** In the event that Customer and Company are unable to agree on matters relating to this Agreement, either Customer or Company may submit a complaint to the Commission in accordance with the Commission's applicable rules.

The Company or the Customer who is a non-mercantile, nonresidential customer may seek resolution of any disputes related to this Agreement in accordance with Chapter 4901:1-26, Ohio Administrative Code Alternative Dispute Resolution.

**16) Commission Jurisdiction.** Both Company and this Agreement are subject to the jurisdiction of the Commission. To the extent that Commission approval of this Agreement may be required now or in the future, this Agreement and Company's commitments hereunder are subject to such approval.

**17) Multiple Counterparts** -- This Agreement may be executed in two counterparts, each of which is deemed an original but all constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be signed by their respective duly authorized representatives.

Select Utility \_\_\_\_\_

Customer-Generator \_\_\_\_\_

BY: \_\_\_\_\_

BY: \_\_\_\_\_

NAME: \_\_\_\_\_

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

DESCRIPTION OF FACILITY  
For a Level 2 or 3 Review Interconnection Agreement <sup>1</sup>

**CUSTOMER-GENERATOR CONTACT INFORMATION**

**Legal Name and Mailing Address of Customer-Generator: (if an Individual, Individual's Name)**

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Contact Person (If other than Above): \_\_\_\_\_

Mailing Address (If other than Above): \_\_\_\_\_

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

**Alternative Contact Information: (if different from Customer-Generator above)**

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

**The Customer-Generator's Facility Information:**

Facility Address: \_\_\_\_\_

City: \_\_\_\_\_ State: OH Zip Code: \_\_\_\_\_

Account #: \_\_\_\_\_ Meter #: \_\_\_\_\_

Do you plan to export power? Select \_\_\_\_\_

If Yes, Estimated Maximum: \_\_\_\_\_ kW<sub>Ac</sub>, Est. Gross Annual Energy Production: \_\_\_\_\_ kWh

One-line Diagram Attached (Required): Select Site Plan Attached (Required): Select

Energy Source: Select \_\_\_\_\_ Gross Generator Rating: \_\_\_\_\_ kW<sub>Ac</sub>

Utility Accessible Disconnect or Lock Box: Select \_\_\_\_\_

<sup>1</sup> Customers proposing to install generation greater than 2,000 kW are required to contact their EDC for the appropriate application procedures.

CERTIFICATE OF COMPLETION

For a Level 2 or 3 Review Interconnection Agreement

Customer-Generator Information

Legal Name and Mailing Address of Customer-Generator (if an Individual, Individual's Name)

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Contact Person (if other than Above): \_\_\_\_\_

Mailing Address (if other than Above): \_\_\_\_\_

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

The Customer-Generator's Facility Information:

Facility Address: \_\_\_\_\_

City: \_\_\_\_\_ State: OH Zip Code: \_\_\_\_\_

Nearest Crossing Street: \_\_\_\_\_

Electric Distribution Company ("EDC"): Select Utility \_\_\_\_\_

Account #: \_\_\_\_\_ Meter #: \_\_\_\_\_

Inverter Type; Select Type \_\_\_\_\_ Energy Source: Select \_\_\_\_\_

Number of Units: \_\_\_\_\_ Manufacturer: \_\_\_\_\_

Model Number of Inverter: \_\_\_\_\_ Inverter Rating: \_\_\_\_\_ kW<sub>AC</sub>

(Attach additional sheets as necessary in the event of multiple units of various types/sizes)

Equipment Installation Contractor:

Check if owner-installed: ( )

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Contact Person (if other than Above): \_\_\_\_\_

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

The undersigned asserts that the Generation Facilities have been installed in accordance with of the Interconnection Application as well as all applicable codes and regulations.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

**Electrical Contractor:** (if Different from Equipment Installation Contractor)

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Contact Person (if other than Above): \_\_\_\_\_

Telephone (Daytime): \_\_\_\_\_ (Evening): \_\_\_\_\_

Facsimile Number: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

The undersigned asserts that the Generation Facilities have been installed in accordance with the Interconnection Application as well as all applicable codes and regulations.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

**Electrical Inspection<sup>1</sup>:**

The system has been installed and inspected in compliance with the provisions of the National Electrical Code and other applicable codes and standards as well as the local Building/Electrical Code of: \_\_\_\_\_

*(Appropriate Governmental Authority)*

By: \_\_\_\_\_ Date: \_\_\_\_\_

**Customer-Generator Signature<sup>2</sup>:**

The Customer-Generator Facility is complete and ready for interconnected operation in accordance with all of the provisions of the Interconnection Agreement. The Customer-Generator acknowledges that it shall **not** operate the facility until receipt of Final Acceptance (below), or as otherwise provided for by regulation.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

**Final Acceptance to Interconnect Small Generator Facility** (for Use by EDC Only)

The requirements for interconnection are complete and interconnection of the Customer-Generator Facility is accepted upon signature and return of this Certificate of Completion or by notification by electronic mail or other acceptable means by the EDC.

Electric Distribution Company waives Witness Test? (Initial) Yes (\_\_\_\_)No(\_\_\_\_)

If no, Successful Witness Test Date: \_\_\_\_\_ Passed: (Initial) (\_\_\_\_)

EDC Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

<sup>1</sup> Completion of local inspections may be designated on inspection forms used by local inspecting authorities.

<sup>2</sup> As a condition of interconnected operation, you are required to send/fax/e-mail a completed signed copy of this Certificate of Completion to your EDC at the address in the Terms & Conditions for Interconnection.