PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA
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WASHINGTON, DC 20005

NOTICE OF PROPOSED RULEMAKING

FORMAL CASE NO. 1050, IN THE MATTER OF THE INVESTIGATION OF IMPLEMENTATION OF INTERCONNECTION STANDARDS IN THE DISTRICT OF COLUMBIA

1. The Public Service Commission of the District of Columbia ("Commission") hereby gives notice, pursuant to the D.C. Official Code Section 2-505,[1] of its intent to adopt Chapter 40, of Title 15 of the District of Columbia Municipal Regulations ("DCMR"), commonly referred to as the "District of Columbia Small Generator Interconnection Rules" ("DCSGIR").

2. The proposed DCSGIR sets forth standards to establish the technical and procedural requirements for small generator facilities to be interconnected and operated in parallel with the electric distribution system owned or operated by an electric distribution company ("EDC") in the District of Columbia. The Commission gives notice of its intent to take final rulemaking action in not less than thirty (30) days after publication of this Notice of Proposed Rulemaking ("NOPR") in the *D.C. Register*.

CHAPTER 40 DISTRICT OF COLUMBIA SMALL GENERATOR INTERCONNECTIONS

Section

4000	Purpose and Applicability
4001	Interconnection Requests, Fees, and Forms
4002	Certified Interconnection Equipment
4003	Interconnection Review Levels
4004	Level 1 Interconnection Reviews
4005	Level 2 Interconnection Reviews
4006	Level 3 Interconnection Reviews
4007	Level 4 Interconnection Reviews
4008	Technical Standards
4009	Disputes
4010	Waiver
4011-4098	[Reserved]
4099	Definitions

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[1] D.C. Official Code § 2-505 (2006 Rpl.).

4000 PURPOSE AND APPLICABILITY

4000.1 This Chapter establishes District of Columbia small generator interconnection rules ("DSGIR") which apply to facilities satisfying the following criteria:

(a) The total nameplate capacity of the small generator facility is equal to or less than 10 megawatts ("MW").

(b) The small generator facility is not subject to the interconnection requirements of PJM Interconnection.

(c) The small generator facility is designed to operate in parallel with the electric distribution system.

4001 INTERCONNECTION REQUESTS, FEES, AND FORMS

4001.1 Interconnection customers seeking to interconnect a small generator facility shall submit an interconnection request using a standard form approved by the Commission to the electric distribution company ("EDC") that owns the electric distribution system to which interconnection is sought. The EDC shall establish processes for accepting interconnection requests electronically.

4001.2 The Commission shall determine the appropriate interconnection fees, and the fees shall be posted on the EDC's website and listed in the electric utility's tariffs.

4001.3 In circumstances where standard forms and agreements are used as part of the interconnection process defined in this document, electronic versions of those forms shall be approved by the Commission and posted on the EDC's website.

4002 CERTIFIED INTERCONNECTION EQUIPMENT

4002.1 Interconnection equipment shall be deemed certified with this Chapter upon establishment of the following:

(a) The interconnection equipment has been tested in accordance with Institute of Electrical and Electronics Engineers, Inc. ("IEEE"), IEEE 1547.1 in compliance with the appropriate codes and standards referenced in this Chapter by any nationally recognized testing laboratory ("NRTL") recognized by the United States Occupational Safety and Health Administration ("OSHA") to test and certify interconnection equipment pursuant to the relevant codes and standards listed in Section 4002.4.

(b) The interconnection equipment has been labeled and is publicly listed by such NRTL at the time of the interconnection application.

(c) The NRTL testing the interconnection equipment makes readily available for verification all test standards and procedures it utilized in performing such equipment certification and, with consumer approval, the test data itself. The NRTL may make such information available on its web site and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.

(d) The interconnection customer verifies that the intended use of the interconnection equipment falls within the use or uses for which the interconnection equipment is labeled, and is listed by the NRTL.

4002.2 If the interconnection equipment is an integrated equipment package such as an inverter, then the interconnection customer shall show that the generator or other electric source being utilized is compatible with the interconnection equipment and is consistent with the testing and listing specified for this type of interconnection equipment.

4002.3 If the interconnection equipment includes only interface components (switchgear, multi-function relays, or other interface devices), then an interconnection customer shall show that the generator or other electric source being utilized is compatible with the interconnection equipment and is consistent with the testing and listing specified for this type of interconnection equipment.

4002.4 To meet the requirements for automatic certification, interconnection equipment shall be evaluated by an NRTL in accordance with the following codes and standards:

(a) IEEE 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity);

(b) Underwriters Laboratories ("UL"), UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems;

(c) IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems;

(d) National Fire Protection Association ("NFPA"), NFPA 70 National Electrical Codes;

(e) IEEE Std C37.90.1-1989 (R1944) IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems;

(f) IEEE Std C37.90.2 (1995) IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers;

(g) IEEE Std C37.108-1989 (R2002) IEEE Guide for the Protection of Network Transformers;

(h) IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors;

(i) IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits;

(j) IEEE Std C62.45-1992 (R2002) IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) Power Circuits;

(k) ANSI C84.1-1995 Electric Power Systems and Equipment-Voltage Ratings (60 Hertz);

(l) IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic;

(m) NEMA MG 1-1998, Motors and Small Resources, Revision 3;

(n) IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems; and

(o) NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1.

4002.5 The interconnection equipment shall meet the requirements of the most current approved version of each document listed in Section 4002.4, as amended and supplemented at the time the interconnection request is submitted to be deemed certified.

4002.6 Certified interconnection equipment shall not require further design testing or production testing, as specified by IEEE Standard 1547 Sections 5.1 and 5.2, or additional interconnection equipment modification to meet the requirements. However, nothing herein shall preclude the need for an on-site Witness Test or operational test by the interconnection customer.

4003 INTERCONNECTION REVIEW LEVELS

4003.1 The EDC shall review interconnection requests using one (1) or more of the four (4) levels of review procedures established by this Chapter. The EDC shall first use the level of agreement specified by the interconnection customer in the application form. The EDC may not impose additional requirements not specifically authorized unless the EDC and the interconnection customer mutually agree to do so in writing.

4004 LEVEL 1 INTERCONNECTION REVIEWS

4004.1 For Level 1 Review, the EDC shall use Level 1 procedures for evaluation of all interconnection requests to connect inverter-based small generation facilities when:

(a) The small generator facility has a nameplate capacity of 10 kW or less; and

(b) The customer interconnection equipment proposed for the small generator facility is certified.

4004.2 For Level 1 Adverse Impact Screens, the EDC shall evaluate the potential for adverse system impacts using the following screens, which must be satisfied:

(a) For interconnection of a proposed small generator facility to a radial distribution circuit, the aggregated generation on the circuit, including the proposed small generator facility, shall not exceed fifteen (15) percent of the line section annual peak load as most recently measured at the substation or calculated for the line section.

(b) For interconnection of a proposed small generator facility to an area network with two (2) two-way power flow or to a spot network distribution system with two (2) two-way power flow there shall be no reverse power conditions through the EDC network protector. The proposed small generator facility shall not cause network protector cycling; inadvertent network protector opening; or impact any other customer under any conditions (including under fault conditions).

(c) For interconnection of a proposed small generator facility to the load side of spot network protectors and when aggregated with other generation, load may not exceed five (5) percent of the spot network's maximum load.

(d) When a proposed small generator facility is to be interconnected on a single-phase shared secondary line, the aggregate generation capacity on the shared secondary line, including the proposed small generator facility, may not exceed 20 kW.

(e) When a proposed small generator facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the two sides of the 240 volt service of more than twenty (20) percent of the nameplate rating of the service transformer.

(f) Construction of facilities by the EDC on its own system is not required to accommodate the small generator facility.

4004.3 The Level 1 Interconnection Review shall be conducted in accordance with the following procedures:

(a) An EDC shall, within ten (10) business days after receipt of the interconnection request, inform the interconnection customer in writing or by electronic mail that the interconnection request is complete or incomplete and indicate what, if any, materials are missing.

(b) The EDC shall, within fifteen (15) business days after the end of the ten (10) business days noted above in paragraph (a), verify that the small generator facility equipment can be interconnected safely and reliably using Level 1 screens and provide an interconnection agreement to the customer. If deemed necessary by the EDC, the EDC shall conduct a spot or area network impact study at its own expense within the fifteen (15) business days referenced above.

4004.4 Unless the EDC determines and demonstrates to the interconnection customer that a small generator facility cannot be interconnected safely or reliably to its system and provides a letter to the interconnection customer explaining its reasons for denying an interconnection request, the EDC shall approve the interconnection request subject to the following conditions:

(a) The small generator facility has been approved by local or municipal electric code officials with jurisdiction over the interconnection;

(b) A certificate of completion has been received by the EDC from the interconnection customer. Completion of local inspections may be designated on inspection forms used by local inspecting authorities;

(c) The EDC has either waived the right to a Witness Test or has completed its Witness Test in accordance with Section 4004.6; and

(d) The interconnection customer has signed a small generator interconnection agreement. When an interconnection customer does not sign the agreement within thirty (30) business days after submission by the EDC by mail or electronic mail, the interconnection request may be deemed withdrawn unless the deadline has been extended in writing by mutual agreement of the parties.

4004.5 Within ten (10) business days of the estimated commissioning date, the EDC may, upon reasonable notice and at a mutually convenient time, conduct a Witness Test of the small generator facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. If the EDC does not perform the Witness Test within the ten (10) business day period or such other time as is mutually agreed to by the parties, the Witness Test is deemed waived.

4004.6 When a small generator facility is not approved under a Level 1 review, the interconnection customer may submit a new interconnection request for consideration under Level 2, Level 3, or Level 4 procedures.

4005 LEVEL 2 INTERCONNECTION REVIEWS

4005.1 The EDC shall use the Level 2 review procedure for an interconnection request when:

(a) The nameplate capacity rating is 2 MW or less;

(b) The interconnection equipment proposed for the small generator facility is certified; and

(c) The proposed interconnection is to a radial distribution circuit or to a spot network serving one customer.

4005.2 For Level 2 Adverse Impact Screens, the EDC shall evaluate the potential or adverse system impacts using the following screens which must be satisfied:

(a) For interconnection of a proposed small generator facility to a radial distribution circuit, the aggregated generation on the circuit, including the proposed small generator facility, may not exceed fifteen (15) percent of the line section annual peak load most

recently measured at the circuit's substation or calculated for the line section.

(b) For interconnection of a proposed small generator facility to the load side of a spot network that protector supplies one specific service point, the proposed small generator facility shall utilize a certified inverter-based equipment package and may not exceed five (5) percent of the spot network's maximum load.

(c) For interconnection with two (2) two-way power flow, there shall be no reverse power conditions through the EDC network protector. The proposed small generator facility cannot cause network protector cycling; inadvertent network protector opening; or impacts on any other customer under any conditions (including under fault conditions).

(d) The proposed small generator facility, in aggregation with other generation on the distribution circuit, may not contribute more than ten (10) percent to the distribution circuit's maximum fault current at the point on the primary line nearest the point of common coupling.

(e) The proposed small generator facility, in aggregate with other generation on the distribution circuit, may not cause any distribution protective devices and equipment (including substation breakers, fuse cutouts, and line reclosers), or other customer equipment on the electric distribution system to be exposed to fault currents exceeding 87.5 percent of the short circuit interrupting capability. The interconnection request may not receive approval for interconnection on a circuit that already exceeds 87.5 percent of the short circuit interrupting capability.

(f) The proposed small generator facility's point of common coupling may not be on a transmission line.

(g) When a customer-generator facility is to be connected to three-phase, three-wire primary EDC distribution lines, a three-phase or single-phase generator shall be connected phase-to-phase.

(h) When a customer-generator facility is to be connected to three-phase, four-wire primary EDC distribution lines, a three-phase or single-phase generator shall be connected line-to-neutral and shall be effectively grounded.

(i) When the proposed small generator facility is to be interconnected on single-phase shared secondary line, the aggregate generation

capacity on the shared secondary line, including the proposed small generator facility, shall not exceed 20 kW.

(j) When a proposed small generator facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the two sides of the 240 volt service of more than twenty (20) percent of the nameplate rating of the service transformer.

(k) A small generator facility, in aggregate with other generation interconnected to the distribution side of a substation transformer feeding the circuit where the small generator facility proposes to interconnect, may not exceed 10 MW in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity.

(l) Except as permitted by an additional review in Level 2 Procedures, Section 4005.7, no construction of facilities by an EDC on its own system shall be required to accommodate the small generator facility.

4005.3 Interconnection to area networks is not permitted under the Level 2 review process.

4005.4 The Level 2 interconnection review shall be conducted in accordance with the following procedures:

(a) An EDC shall, within ten (10) business days after receipt of the interconnection request, inform the interconnection customer in writing or by electronic mail that the interconnection request is complete or incomplete.

(b) When an interconnection request is complete, the EDC shall assign a queue position. The queue position of the interconnection request shall be used to determine the potential adverse system impact of the small generator facility based on the relevant screening criteria. The EDC shall notify the interconnection customer about other higher-queued interconnection customers on the same substation bus circuit or spot network for which interconnection is sought.

(c) When an EDC determines additional information is required to complete an evaluation, the EDC shall request the information. The time necessary to complete the evaluation may be extended by mutual agreement of the parties, but only to the extent of the time required for receipt of the additional information. During an

extension of time to submit additional information, the EDC may not begin a new review process or alter the interconnection customer's queue position.

(d) Within twenty (20) business days after the EDC notifies the interconnection customer that it has received a completed interconnection request, the EDC shall:

(1) Evaluate the interconnection request using the Level 2 screening criteria;

(2) Review the interconnection customer's analysis, if provided by the interconnection customer, using the same criteria used by the customer;

(3) May conduct a spot network impact study within the above noted timeframe, if deemed necessary by the EDC; and

(4) Provide the interconnection customer with the EDC's evaluation, including a comparison of the results of its own analyses with those of interconnection customer, if applicable. When an EDC does not have a record of receipt of the interconnection request and the interconnection customer can demonstrate that the original interconnection request was delivered, the EDC shall expedite its review to complete the evaluation of the interconnection request within twenty (20) business days of the interconnection customer's re-submittal.

4005.5 Notwithstanding Section 4005.4(d)(4), the EDC shall not be obligated to meet the timeline for reviewing the interconnection request until such time as the EDC has completed the review of all other interconnection requests that have a higher queue position.

4005.6 When an EDC determines that the interconnection request passes the Level 2 screening criteria, the EDC shall provide the interconnection customer a small generator interconnection agreement within five (5) business days after the determination.

4005.7 When an EDC determines that the interconnection request fails one (1) or more of the Level 2 screening criteria but determines that the small generator facility can be interconnected safely and reliably, the EDC shall provide the interconnection customer a small generator interconnection agreement within five (5) business days after the determination.

4005.8 Additional review may be appropriate when a small generator facility has failed to meet one or more of the Level 2 screens. An EDC shall offer to perform additional review to determine whether minor modifications to the electric distribution system would enable the interconnection to be made consistent with safety, reliability and power quality criteria. The EDC shall provide the interconnection customer with a nonbinding, good faith estimate of the costs of additional review and minor modifications. The EDC shall undertake the additional review or modifications only after the interconnection customer consents to pay for the review and modifications.

4005.9 An interconnection customer shall have thirty (30) business days to sign and return the agreement. When an interconnection customer does not sign the agreement within thirty (30) business days, the interconnection request shall be deemed withdrawn unless the interconnection customer requests to have the deadline extended in writing prior to the expiration of the thirty (30) business day period. The request for extension may not be unreasonably denied by the EDC.

4005.10 When construction is required under the provisions of Sections 4005.6 and 4005.7, the interconnection of the small generator facility shall proceed according to any milestones agreed to by the parties in the small generator interconnection agreement. The small generator interconnection agreement shall not become final until:

(a) The milestones agreed to in the small generator interconnection agreement are satisfied;

(b) The small generator facility is approved by electric code officials with jurisdiction over the interconnection;

(c) The interconnection customer provides a certificate of completion to the EDC. Completion of local inspections may be designated on inspection forms used by local inspecting authorities; and

(d) There is a successful completion of the witness test per the terms and conditions found in the Standard Agreement for Interconnection of Small Generator Facilities, unless waived.

4005.11 If the small generator facility is not approved under a Level 2 review, the EDC shall provide the interconnection customer a letter explaining its reasons for denying the interconnection request. The interconnection customer may submit a new interconnection request for consideration under a Level 3 or Level 4 interconnection review. The queue position assigned to the Level 2 interconnection request shall be retained provided

the request is made within fifteen (15) business days of notification that the current interconnection request is denied.

4006 LEVEL 3 INTERCONNECTION REVIEWS

4006.1 The EDC shall use Level 3 review procedures for evaluating interconnection requests to area networks and radial distribution circuits where power shall not be exported based on the criteria in this section; however, interconnection to spot networks is not permitted under the Level 3 review process.

4006.2 For interconnection requests to the load side of an area network the following criteria shall be satisfied to qualify for a Level 3 expedited review:

(a) The nameplate capacity of the small generator facility is less than or equal to 50 kW; and

(b) The proposed small generator facility utilizes a certified inverter-based equipment package.

4006.3 For Level 3A Adverse Impact Screens, the EDC shall evaluate the potential for adverse system impacts using the following screens which must be satisfied:

(a) If the small generator facility utilizes reverse power relays and/or other protection functions that prevent power flow to the area network, the proposed small generator facility cannot cause network protector cycling; inadvertent network protector opening; or impact any other customer under any conditions (including under fault conditions);

(b) The aggregated other generation on the area network may not exceed the smaller of five (5) percent of an area network's maximum load or 50 kW; and

(c) No construction of facilities by the electric distribution company shall be required to accommodate the small generator facility.

4006.4 For Level 3A, the EDC shall use the additional review procedures listed in Section 4006.8 and the following review procedures:

(a) The EDC shall evaluate the interconnection request under Level 2 interconnection review procedures as set forth in Level 3A Procedures except that the EDC may have twenty-five (25) business days to conduct an area network impact study to

determine any potential adverse system impacts of interconnecting to the EDC's area network; however, the EDC shall not be obligated to meet the timeline for reviewing the interconnection request as provided for herein until such time as the EDC has completed the review of all other interconnection requests that have a higher queue position.

(b) In the event the area network impact study identifies potential adverse system impacts, the EDC may determine at its sole discretion that it is inappropriate for the small generator facility to interconnect to the area network in which case the interconnection request shall be denied; however, the interconnection customer may elect to submit a new interconnection request for consideration under Level 4 procedures in which case the queue position assigned to the Level 3 interconnection request shall be retained provided the request is made within fifteen (15) business days of notification that the current application is denied.

(c) If deemed necessary by the EDC, the EDC shall conduct an area network impact study at its own expense.

(d) In the event the EDC denies the interconnection request, the EDC shall provide the interconnection customer with a copy of its area network impact study and written justification for denying the interconnection request.

4006.5 For interconnection requests to a radial distribution circuit, the following criteria shall be satisfied to qualify for a Level 3 review:

(a) The small generator facility has a nameplate capacity of 10 MW or less;

(b) The aggregated total of the nameplate capacity of all of the generators on the circuit, including the proposed small generator facility, is 10 MW or less;

(c) The small generator shall use reverse power relays or other protection functions that prevent power flow onto the electric distribution system;

(d) The small generator is not served by a shared transformer; and

(e) No construction of facilities by the electric distribution company on its own system shall be required to accommodate the small generator facility.

4006.6 Level 3.B Adverse Impact Screens are the same as the Level 2 adverse impact screens.

4006.7 Level 3.B review procedures are the same as Level 2 review procedures, except that Section 4006.8 contains additional procedures for all Level 3 requests.

4006.8 The following additional procedures shall apply to all Level 3 interconnection requests:

(a) Once the interconnection request is deemed complete by the EDC, the EDC shall assign a queue position based upon the date and time the interconnection request is determined to be complete. The queue position of each interconnection request shall be used to determine the potential adverse system impact of the small generator facility based on the relevant screening criteria. The interconnection customer shall proceed under the timeframes of this section. The EDC shall notify the interconnection customer about other higher-queued interconnection customers on the same radial line or area network to which the interconnection customer is seeking to interconnect.

(b) The interconnection customer shall have thirty (30) business days after submission of the small generator interconnection agreement, to sign and return the small generator interconnection agreement. If the interconnection customer does not sign the small generator interconnection agreement within thirty (30) business days, the request shall be deemed withdrawn unless the parties mutually agree in writing to extend the time period for executing the small generator interconnection agreement prior to the expiration of the thirty (30) business day period. After the small generator interconnection agreement is signed by the parties, interconnection of the small generator facility shall proceed according to any milestones agreed to by the parties in the small generator interconnection agreement.

(c) The interconnection agreement shall not be final until:

(1) Any milestones agreed to in the small generator interconnection agreement are satisfied;

(2) The small generator facility is approved by electric code officials with jurisdiction over the interconnection;

(3) The interconnection customer provides a certificate of completion to the EDC; and

(4) There is a successful completion of the witness test per the terms and conditions found in the Standard Agreement for Interconnection of Small Generator Facilities unless waived.

(d) If the small generator facility is not approved under a Level 3 review, the interconnection customer may submit a new interconnection request for consideration under the Level 4 procedures without sacrificing the original queue position, provided the revised interconnection request is submitted within fifteen (15) business days of notice that the current request has not been approved.

4007 LEVEL 4 INTERCONNECTION REVIEWS

4007.1 The EDC shall use the Level 4 study review procedures for evaluating interconnection requests when:

(a) The nameplate capacity of the small generation facility is less than 10 MW;

(b) The interconnection request was not approved under a Level 1, Level 2, or Level 3 expedited review and the interconnection customer has submitted an interconnection request for consideration under a Level 4 study review; and

(c) The interconnection request does not meet the criteria for qualifying for an expedited review under Level 1, Level 2 or Level 3 review procedures.

4007.2 The Level 4 review shall be conducted in accordance with the following process:

(a) Within ten (10) business days from receipt of an interconnection request, the EDC shall notify the interconnection customer whether the request is complete. When the interconnection request is deemed not complete, the EDC shall provide the interconnection customer with a written list detailing information required to complete the interconnection request. The interconnection customer shall have ten (10) business days to provide appropriate data in order to complete the interconnection request, or the interconnection request shall be considered withdrawn. The parties may agree to extend the time for receipt of the additional information. The interconnection request shall be deemed complete when the required information has been provided by the

interconnection customer, or the parties have agreed that the interconnection customer may provide additional information at a later time.

(b) When an interconnection request is complete, the EDC shall assign a queue position. The queue position of an interconnection request shall be used to determine the cost responsibility necessary for the facilities to accommodate the interconnection. The EDC shall notify the interconnection customer about other higher-queued interconnection customers.

(c) The following procedures shall be followed in performing a Level 4 study review:

(1) By mutual agreement of the parties, the scoping meeting, interconnection feasibility study, interconnection impact study, or interconnection facilities studies provided for in a Level 4 review and discussed in this paragraph may be waived;

(2) If agreed to by the parties, a scoping meeting shall be held within ten (10) business days, or other mutually agreed to time, after the EDC has notified the interconnection customer that the interconnection request is deemed complete, or the interconnection customer has requested that its interconnection request proceed after failing the requirements of a Level 2 review or Level 3 review. The purpose of the meeting shall be to review the interconnection request, existing studies relevant to the interconnection request, and the results of the Level 1, Level 2 or Level 3 screening criteria;

(3) When the parties agree at a scoping meeting that an interconnection feasibility study shall be performed, the EDC shall provide to the interconnection customer, no later than five (5) business days after the scoping meeting, an interconnection feasibility study agreement, including an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study;

(4) When the parties agree at a scoping meeting that an interconnection feasibility study is not required, the EDC shall provide to the interconnection customer, no later than five (5) business days after the scoping meeting, an interconnection system impact study agreement, including

an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study; and

(5) When the parties agree at the scoping meeting that an interconnection feasibility study and system impact study are not required, the EDC shall provide to the interconnection customer, no later than five (5) business days after the scoping meeting, an interconnection facilities study agreement including an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study.

(d) Any required interconnection studies shall be carried out using the following guidelines:

(1) An interconnection feasibility study shall include the following analyses and conditions for the purpose of identifying and addressing potential adverse system impacts to the EDC's electric distribution system that would result from the interconnection:

(A) Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection;

(B) Initial identification of any thermal overload or voltage limit violations resulting from the interconnection;

(C) Initial review of grounding requirements and system protection;

(D) Description and nonbinding estimated cost of facilities required to interconnect the small generator facility to the EDC's electric distribution system in a safe and reliable manner; and

(E) Additional evaluations at the expense of the interconnection customer, when an interconnection customer requests that the interconnection feasibility study evaluate multiple potential points of interconnection.

(2) An interconnection system impact study shall evaluate the impact of the proposed interconnection on both the safety

and reliability of the EDC's electric distribution system. The study shall identify and detail the system impacts that result when a small generator facility is interconnected without project or system modifications, focusing on the adverse system impacts identified in the interconnection feasibility study, or potential impacts including those identified in the scoping meeting. The study shall consider all generating facilities that, on the date the interconnection system impact study is commenced, are directly interconnected with the EDC's system, have a pending higher queue position to interconnect to the system, or have a signed a small generator interconnection agreement.

(A) A distribution interconnection system impact study shall be performed when a potential distribution system adverse system impact is identified in the interconnection feasibility study. The EDC shall send the interconnection customer an interconnection system impact study agreement within five (5) business days of transmittal of the interconnection feasibility study report. The agreement shall include an outline of the scope of the study and a good faith estimate of the cost to perform the study. The impact study shall include:

i. A load flow study;
ii. Identification of affected systems;
iii. An analysis of equipment interrupting ratings;
iv. A protection coordination study;
v. Voltage drop and flicker studies;
vi. Protection and set point coordination studies;
vii. Grounding reviews; and
viii. Impact on system operation.

(B) An interconnection system impact study shall consider the following criteria:

i. A short circuit analysis;
ii. A stability analysis;
iii. Alternatives for mitigating adverse system impacts on affected systems;
iv. Voltage drop and flicker studies;
v. Protection and set point coordination studies; and

vi. Grounding reviews.

(C) The final interconnection system impact study shall provide the following:

i. The underlying assumptions of the study;
ii. The results of the analyses;
iii. A list of any potential impediments to providing the requested interconnection service;
iv. Required distribution upgrades; and
v. A nonbinding good faith estimate of cost and time to construct any required distribution upgrades.

(D) The parties shall use an interconnection impact study agreement approved by the Commission.

(3) The interconnection facilities study shall be conducted as follows:

(A) Within five (5) business days of completion of the interconnection system impact study, the EDC shall transmit a report to the interconnection customer with an interconnection facilities study agreement, which includes an outline of the scope of the study and a nonbinding good faith estimate of the cost to perform the study;

(B) The interconnection facilities study shall estimate the cost of the equipment, engineering, procurement and construction work including overheads needed to implement the conclusions of the interconnection feasibility study and the interconnection system impact study to interconnect the small generator facility. The interconnection facilities study shall identify:

i. The electrical switching configuration of the equipment, including transformer, switchgear, meters and other station equipment;

ii. The nature and estimated cost of the EDC's interconnection facilities and distribution

upgrades necessary to accomplish the interconnection; and

iii. An estimate of the time required to complete the construction and installation of the facilities;

(C) The parties may agree to permit an interconnection customer to separately arrange for a third party to design and construct the required interconnection facilities. The EDC may review the design of the facilities under the interconnection facilities study agreement. When the parties agree to separately arrange for design and construction and to comply with security and confidentiality requirements, the EDC shall make all relevant information and required specifications available to the interconnection customer to permit the interconnection customer to obtain an independent design and cost estimate for the facilities, which shall be built in accordance with the specifications;

(D) Upon completion of the interconnection facilities study, and with the agreement of the interconnection customer to pay for the interconnection facilities and distribution upgrades identified in the interconnection facilities study, the EDC shall provide the interconnection customer with a small generator interconnection agreement within five (5) business days; and

(E) The parties shall use an interconnection facility study agreement approved by the Commission.

(e) When an EDC determines, as a result of the studies conducted under a Level 4 review, that it is appropriate to interconnect the small generator facility, the EDC shall provide the interconnection customer with a small generator interconnection agreement. If the interconnection request is denied, the EDC shall provide a written explanation;

(f) An interconnection customer shall have thirty (30) business days, or another mutually agreeable time frame, after submission of the small generator interconnection agreement to sign and return the agreement. If an interconnection customer does not sign the agreement within thirty (30) business days, the interconnection

request shall be deemed withdrawn unless the interconnection customer requests to have the deadline extended by the thirtieth (30^{th}) business day. The request for extension may not be unreasonably denied by the EDC. When construction is required, the interconnection of the small generator facility shall proceed according to milestones agreed to by the parties in the small generator interconnection agreement. The small generator interconnection agreement may not be final until:

(1) The milestones agreed to in the small generator interconnection agreement are satisfied;

(2) The small generator facility is approved by electric code officials with jurisdiction over the interconnection;

(3) The interconnection customer provides a certificate of completion to the EDC. Completion of local inspections may be designated on inspection forms used by local inspecting authorities; and

(4) There is a successful completion of the witness test per the terms and conditions found in the Standard Agreement for Interconnection of Small Generator Facilities, unless waived.

4007.3 An interconnection system impact study is not required when the interconnection feasibility study concludes there is no adverse system impact, or when the study identifies an adverse system impact, but the EDC is able to identify a remedy without the need for an interconnection system impact study.

4007.4 The parties shall use a form of interconnection feasibility study agreement approved by the Commission.

4008 TECHNICAL STANDARDS

4008.1 The technical standard to be used in evaluating all interconnection requests under Level 1, Level 2, Level 3 and Level 4 reviews, unless otherwise provided for in these procedures, is IEEE Standard 1547. Until IEEE 1547.2, "Application Guide for IEEE 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems" is completed and approved, the PJM Interconnection Planning Manual Attachment H, which is available at www.pjm.com/committees/mrc/downloads/20060911-item-03-attachment-h-to-manual-14b-2-to-10-mw.pdf, shall be used as a guide (but

not a requirement) to detail and illustrate the interconnection protection requirements that are provided in IEEE 1547.

4008.2 When an interconnection request is for a small generator facility that includes multiple energy production devices at a site for which the interconnection customer seeks a single point of common coupling, the interconnection request shall be evaluated on the basis of the aggregate nameplate capacity of multiple devices.

4008.3 When an interconnection request is for an increase in capacity for an existing small generator facility, the interconnection request shall be evaluated on the basis of the new total nameplate capacity of the small generator facility.

4008.4 An EDC shall maintain records of the following for a minimum of three (3) years:

(a) The total number of and the nameplate capacity of the interconnection requests received, approved and denied under Level 1, Level 2, Level 3 and Level 4 reviews;

(b) The number of interconnection requests that were not processed within the timelines established in this rule;

(c) The number of scoping meetings held and the number of feasibility studies, impact studies, and facility studies performed and the fees charged for these studies;

(d) The justifications for the actions taken to deny interconnection requests; and

(e) Any special operating requirements required in interconnection agreements that are not part of the EDC's written and published operating procedures applicable to small generator facilities.

4008.5 An EDC shall provide a report to the Commission containing the information required in Section 4008.4, paragraphs (a)-(c) within ninety (90) calendar days of the close of each year.

4008.6 An EDC shall designate a contact person and contact information on its website and the Commission's website for submission of all interconnection requests and from whom information on the interconnection request process and the EDC's electric distribution system can be obtained regarding a proposed project. The information shall include studies and other materials useful to an understanding of the feasibility of interconnecting a small generator facility at a particular point

on the EDC's electric distribution system, except to the extent that providing the materials would violate security requirements or confidentiality agreements, or otherwise deemed contrary to District or federal law/regulations. In appropriate circumstances, the EDC may require confidentiality prior to release of information.

4008.7 When an interconnection request is deemed complete, a modification other than a minor equipment modification that is not agreed to in writing by the EDC, shall require submission of a new interconnection request.

4008.8 When an interconnection customer is not currently a customer of the EDC at the proposed site, upon request from the EDC, the interconnection customer shall provide proof of site control evidenced by a property tax bill, deed, lease agreement, or other legally binding contract.

4008.9 To minimize the cost of interconnecting multiple small generator facilities, the EDC or the customer may propose a single point of common coupling for multiple small generator facilities located at a single site. If the interconnection customer rejects the EDC's proposal for a single point of common coupling, the interconnection customer shall pay the additional cost, if any, of providing a separate point of common coupling for each small generator facility. If the EDC rejects the customer's proposal for a single point of common coupling without providing a written technical explanation, the EDC shall pay the additional cost, if any, of providing a separate point of common coupling for each small generator facility.

4008.10 Small generator facilities shall be capable of being isolated from the EDC. For level 2-4 small generator facilities interconnecting to a primary line, the isolation shall be by means of a lockable, visible-break isolation device accessible by the EDC. For level 2-4 small generator facilities interconnecting to a secondary line, the isolation shall be by means of a lockable isolation device whose status is clearly indicated and is accessible by the EDC. The isolation device shall be installed, owned and maintained by the owner of the small generation facility and located between the small generation facility and the point of common coupling. 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. Level 1 interconnections do not require an external isolation device.

4008.11 A level 2-4 interconnection customer 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 interconnection customer shall install the lockbox in a location that is readily accessible by the EDC, and the

interconnection customer 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. In the event that the interconnection customer fails to comply with the terms of this subsection and the EDC needs to gain access to the isolation device, the EDC shall not be held liable for any damages resulting from any necessary EDC action to isolate the interconnection customer.

4008.12 Any metering necessitated by a small generator interconnection shall be installed, operated and maintained in accordance with applicable tariffs. Any such metering requirements shall be clearly identified as part of the small generator interconnection agreement executed by the interconnection customer and the EDC.

4008.13 The EDC shall design, procure, construct, install, and own any Distribution Upgrades. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the interconnection customer. The interconnection customer may be entitled to financial contribution from any other EDC customers who may in the future utilize the upgrades paid for by the interconnection customer. Such contributions shall be governed by the rules, regulations, and decisions of the Commission.

4008.14 EDC monitoring and control of small generator facilities shall be permitted only if the nameplate rating is equal to or greater than 3 MW. Any monitoring and control requirements shall be consistent with the EDC's written and published requirements and shall be clearly identified as part of an interconnection agreement executed by the interconnection customer and the EDC.

4008.15 The interconnection customer shall design its Small Generator Facility to maintain a composite power delivery at continuous rated power output at the Point of common coupling at a power factor within the power factor range required by the EDC's applicable tariff for a comparable load customer. EDC may also require the Interconnection Customer to follow a voltage or VAR schedule if such schedules are applicable to similarly situated generators in the control area on a comparable basis and have been approved by the Commission. The specific requirements for meeting a voltage or VAR schedule shall be clearly specified in Attachment 3 of the "District of Columbia Small Generator Interconnection Rule Level 2-4 Standard Agreement for Interconnection of Small Generator Facilities". (Under no circumstance shall these additional requirements for reactive power or voltage support exceed the normal operating capabilities of the Small Generator Facility.)

4009 DISPUTES

4009.1 A party shall attempt to resolve all disputes regarding interconnection as provided in the DCSGIR promptly, equitably, and in a good faith manner.

4009.2 When a dispute arises, a party may seek immediate resolution through complaint procedures available through the Commission by providing written notice to the Commission and the other party stating the issues in dispute.

4009.3 When disputes relate to the technical application of the DCSGIR, the Commission may designate a technical consultant to resolve the dispute. Upon Commission designation, the parties shall use the technical consultant to resolve disputes related to interconnection. Costs for a dispute resolution conducted by the technical consultant shall be established by the technical consultant and subject to review by the Commission.

4009.4 Pursuit of dispute resolution shall not affect an interconnection customer with regard to consideration of an interconnection request or an interconnection customer's queue position.

4010 WAIVER

4010.1 The Commission may, in its discretion, waive any provisions of Chapter 40 upon notice to the affected persons.

4011-4098 (Reserved)

4099 DEFINITIONS

4099.1 When used in this chapter, the following terms and phrases shall have the following meaning:

"Adverse system impact" means a negative effect, due to technical or operational limits on conductors or equipment being exceeded, that compromises the safety and reliability of the electric distribution system.

"Affected System" means an electric system not owned or operated by the electric distribution company reviewing the interconnection request that may suffer an adverse system impact from the proposed interconnection.

"Area Network" means a type of electric distribution system served by multiple transformers interconnected in an electrical network circuit, which is generally used in large metropolitan areas that are densely populated. Area networks are also known as

grid networks. Area network has the same meaning as the term distribution secondary grid networks in 4.1.4 .1 of IEEE Standard 1547.

"Certificate of Completion" means a certificate in a completed form approved by the Commission containing information about the interconnection equipment to be used, its installation and local inspections.

"Certified Equipment" means a designation that the interconnection equipment meets the requirements set forth in Section 4002 of this document.

"Commission" means the Public Service Commission of the District of Columbia.

"Commissioning Test" means the tests applied to a small generator facility by the interconnection customer after construction is completed to verify that the facility does not create adverse system impacts. The scope of the commissioning tests performed shall include the commissioning test specified IEEE Standard 1547 section 5.4 "Commissioning tests".

"Distribution System Upgrade" means a required addition or modification to the EDC's electric distribution system at or beyond the point of common coupling to accommodate the interconnection of a small generator facility. Distribution upgrades do not include interconnection facilities.

"District of Columbia Small Generator Interconnection Rule (DCSGIR)" means the most current version of the procedures for interconnecting Small Generator Facilities adopted by the District of Columbia Public Service Commission.

"Draw-out Type Circuit Breaker" means a switching device capable of making, carrying and breaking currents under normal and abnormal circuit conditions such as those of a short circuit. A draw-out circuit breaker can be physically removed from its enclosure creating a visible break in the circuit. For the purposes of these regulations, the draw-out circuit breaker shall be capable of being locked in the open, draw-out position.

"Electric Distribution Company" or "EDC" means an electric utility entity that distributes electricity to customers and is subject to the jurisdiction of the Commission.

"Electric Distribution System" means the facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries from interchanges with higher voltage transmission networks that transport bulk power over longer distances. The voltage levels at which electric distribution systems operate differ among areas but generally carry less than 69 kilovolts of electricity. Electric distribution system has the same meaning as the term Area EPS, as defined in 3.1.6.1 of IEEE Standard 1547.

"Estimated Commissioning Date" means the date an interconnection customer is expected to start operation.

"Facilities study" means an engineering study conducted by the EDC to determine the required modifications to the EDC's Electric Distribution System, including the cost and the time required to build and install such modifications as necessary to accommodate an Interconnection Request.

"Fault current" means the electrical current that flows through a circuit during an electrical fault condition. A fault condition occurs when one or more electrical conductors contact ground or each other. Types of faults include phase to ground, double-phase to ground, three-phase to ground, phase-to-phase, and three-phase. Fault current is several times larger in magnitude than the current that normally flows through a circuit.

"Governmental Authority" means any federal, State, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, respective facilities, or services provided, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, EDC or any affiliate thereof.

"IEEE Standard 1547" means the Institute of Electrical and Electronics Engineers, Inc. (IEEE) Standard 1547 (2003) "Standard for Interconnecting Distributed Resources with Electric Power Systems", as amended and supplemented at the time the interconnection request is submitted.

"IEEE Standard 1547.1" means the IEEE Standard 1547.1 (2005) "Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems", as amended and supplemented at the time the interconnection request is submitted.

"Interconnection customer" means an entity that has submitted an interconnection request to interconnect a small generator facility to an EDC's electric distribution system.

"Interconnection equipment" means a group of equipment, components, or an integrated system connecting an electric generator with a local electric power system or an electric distribution system that includes all interface equipment including switchgear, protective devices, inverters or other interface devices. Interconnection equipment may be installed as part of an integrated equipment package that includes a generator or other electric source.

"Interconnection facilities" means facilities and equipment required by the EDC to accommodate the interconnection of a small generator facility. Collectively, interconnection facilities include all facilities and equipment between the small generator facility and the point of common coupling, including modification, additions, or upgrades that are necessary to physically and electrically interconnect the small generator facility to the electric distribution system. Interconnection facilities are sole use facilities and do not include distribution upgrades.

"Interconnection request" means an interconnection customer's request, in a form approved by the Commission, requesting the interconnection of a new small generator facility, or to increase the capacity or modify operating characteristics of an existing approved small generator facility that is interconnected with the EDC's electric distribution system.

"Line section" means that portion of an EDC's distribution system connected to an interconnection customer, bounded by automatic sectionalizing devices or the end of the distribution line.

"Local Electric Power System" or "Local EPS" means facilities that deliver electric power to a load that are contained entirely within a single premises or group of premises. Local electric power system has the same meaning as the term local electric power system defined in 3.1.6.2 of IEEE Standard 1547.

"Minor equipment modification" means changes to the proposed small generator facility that do not have a material impact on safety or reliability of the electric distribution system.

"Nameplate capacity" means the maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer and is usually indicated on a nameplate physically attached to the power production equipment.

"Nationally recognized testing laboratory" or "NRTL" means a qualified private organization that meets the requirements of the Occupational Safety and Health Administration's (OSHA) regulations. NRTLs perform independent safety testing and product certification. Each NRTL shall meet the requirements as set forth by OSHA in the NRTL program.

"Parallel operation" or "parallel" means the sustained state of operation over 100 milliseconds, which occurs when a small generator facility is connected electrically to the electric distribution system and thus has the ability for electricity to flow from the small generator facility to the electric distribution system.

"PJM Interconnection" means the regional transmission organization that is regulated by the Federal Energy Regulatory Commission and functionally controls the transmission system for the region that includes the District of Columbia.

"Point of common coupling" means the point where the small generator facility is electrically connected to the electric distribution system. Point of common coupling is has the same meaning as defined in 3.1.13 of IEEE Standard 1547.

"Primary line" means a distribution line rated at greater than 600 volts.

"Production Test" as defined in IEEE Standard 1547.

"Queue position" means the order of a valid interconnection request, relative to all other pending valid interconnection requests, that is established based upon the date and time of receipt of the valid interconnection request by the EDC.

"Radial distribution circuit" means a circuit configuration where independent feeders branch out radially from a common source of supply. From the standpoint of a utility system, the area described is between the generating source or intervening substations and the customer's entrance equipment. A radial distribution system is the most common type of connection between a utility and load in which power flows in one direction from the utility to the load.

"Scoping meeting" means a meeting between representatives of the interconnection customer and EDC conducted for the purpose of discussing alternative interconnection options, exchanging information including any electric distribution system data and earlier study evaluations that would be reasonably expected to impact interconnection options, analyzing information, and determining the potential feasible points of interconnection.

"Secondary line" means a service line subsequent to the primary line that is rated for 600 volts or less, also referred to as the customer's service line.

"Shared transformer" means a transformer that supplies secondary source voltage to more than one customer.

"Small generator facility" means the equipment used by an interconnection customer to generate or store electricity that operates in parallel with the electric distribution system and, for the purposes of this standard, is rated 10 MW or less. A small generator facility typically includes an electric generator, prime mover, and the interconnection equipment required to safely interconnect with the electric distribution system or local electric power system.

"Spot Network" means a type of electric distribution system that uses two or more inter-tied transformers to supply an electrical network circuit. A spot network is generally used to supply power to a single customer or a small group of customers. Spot network has the same meaning as the term distribution secondary spot networks defined in 4.1.4.2 of IEEE Standard 1547.

"Standard Agreement for Interconnection of Small Generator Facilities, interconnection agreement, or agreement" means a set of standard forms of interconnection agreements approved by the Commission which are applicable to interconnection requests pertaining to small generating facilities. The agreement between the Interconnection Customer and the EDC, which governs the connection of the Small Generator Facility to the EDC's Electric Distribution System, as well as the ongoing operation of the Small Generator Facility after it is connected to the EDC's Electric Distribution System.

"UL Standard 1741" means Underwriters Laboratories' standard titled "Inverters Converters, and Controllers for Use in Independent Power Systems", as amended and supplemented at the time the interconnection request is submitted.

"Witness test" means verification (either by an on-site observation or review of documents) by the EDC that the installation evaluation required by IEEE Standard 1547 Section 5.3 and the commissioning test required by IEEE Standard 1547 Section 5.4 have been adequately performed. For interconnection equipment that has not been certified, the witness test shall also include the verification by the EDC of the on-site design tests as required by IEEE Standard 1547 Section 5.1 and verification by the EDC of production tests required by IEEE Standard 1547 Section 5.2. All tests verified by the EDC are to be performed in accordance with the applicable test procedures specified by IEEE Standard 1547.1.

3. All persons interested in commenting on the subject matter of the proposed rulemaking action may submit comments, in writing, not later than thirty (30) days after publication of this notice in the *D.C. Register*, with reply comments to be filed within forty-five (45) days from the date of publication in the *D.C. Register*. Comments and replies must be sent to Dorothy Wideman, Commission Secretary, Public Service Commission of the District of Columbia, 1333 H Street, N.W., West Tower, Suite 200, Washington, D.C. 20005. Copies of the proposed rules may be obtained, at cost, by writing the Commission Secretary at the above address or through the Commission's website at www.dcpsc.org. Once the comment period has expired, the Commission will take final rulemaking action.

Level 1
Interconnection Request Application Form and Agreement

Interconnection Customer Contact Information

Name _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Mobile): _____

Facsimile Number: _____ E-Mail Address: _____

Alternative Contact Information (if different from Customer Contact Information)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Mobile): _____

Facsimile Number: _____ E-Mail Address: _____

Equipment Contractor

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Mobile): _____

Facsimile Number: _____ E-Mail Address: _____

Electrical Contractor (if Different from Equipment Contractor):

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Mobile): _____

Facsimile Number: _____ E-Mail Address: _____

License number: _____

Active License? Yes ___ No ___

Facility Information (building where the small generator facility is located)

Electric Distribution Company (EDC) Serving Facility Site: _____

Electric Supplier (if different from EDC):_____

Account Number of Facility site (existing EDC customers): _____

Facility Address (building where the small generator facility is located)

Address: _____

City: _____ State: _____ Zip Code: _____

Small Generator Facility Information

Inverter Manufacturer:_____ Model:_____

Nameplate Rating: ____(kW) ____(kVA) ____(AC Volts)

System Design Capacity: _____ (kW) _____ (kVA)

Prime Mover: Photovoltaic ☐ Reciprocating Engine ☐ Fuel Cell ☐
Turbine ☐ Other _____

Energy Source: Solar ☐ Wind ☐ Hydro ☐ Diesel ☐ Natural Gas
Fuel Oil ☐ Other_____

Is the inverter lab certified? Yes☐
(If yes, attach manufacturer's cut sheet showing listing and label information from the appropriate listing authority, e.g. UL 1741 listing. If no, facility is not eligible for Level 1 Application.)

☐ Net Meter (Small generator facility will export power pursuant to District of Columbia Customer Net Energy Metering Contract)

Estimated Commissioning Date: _____

Insurance Disclosure

The attached terms and conditions contain provisions related to liability, and indemnification and should be carefully considered by the interconnection customer. The interconnection customer is not required to obtain general liability insurance coverage as a precondition for interconnection approval; however, the interconnection customer is advised to consider obtaining appropriate insurance coverage to cover the interconnection customer's potential liability under this agreement.

Customer Signature

I hereby certify that: 1) I have read and understand the terms and conditions which are attached hereto by reference and are a part of this agreement; 2) I hereby agree to comply with the attached terms and conditions; and 3) to the best of my knowledge, all of the information provided in this application request form is complete and true.

Interconnection Customer Signature: _____

Title: _____ Date: _____

An application fee of $100 payable to the EDC is required before the application can be processed. Please verify that the fee is included with the application: Application fee included ☐

Conditional Agreement to Interconnect Small Generator Facility

Receipt of the application fee is acknowledged and, by its signature below, the EDC has determined the interconnection request is complete. Interconnection of the small generator facility is conditionally approved contingent upon the attached terms and conditions of this agreement the return of the attached Certificate of Completion duly executed, verification of electrical inspection and successful witness test or EDC waiver thereof.

EDC Signature: _____ Date: _____

Printed Name: _____ Title: _____

Terms and Conditions for Interconnection

1) **Construction of the Small Generator Facility**. The interconnection customer may proceed to construct (including operational testing not to exceed 2 hours) the small generator facility once the conditional agreement to interconnect a small generator facility has been signed by the EDC.
2) **Final Interconnection and Operation.** The interconnection customer may operate the small generator facility and interconnect with the EDC's electric distribution system once all of the following have occurred:
   a) Electrical Inspection: Upon completing construction, the interconnection customer will cause the small generator facility to be inspected by the local electrical wiring inspector with jurisdiction who shall establish that the small generator facility meets the requirements of the National Electrical Code.
   b) Certificate of Completion: The interconnection customer shall provide the EDC with a completed copy of the Certificate of Completion, including evidence of the electrical inspection performed 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. The interconnection request shall not be finally approved until the EDC's representative signs the Certificate of Completion.
   c) EDC has either waived the right to a Witness Test in the interconnection request, or completed its Witness Test as per the following:
      i) Within ten (10) business days of the estimated commissioning date, the EDC may, upon reasonable notice and at a mutually convenient time, conduct a Witness Test of the small generator facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes.
      ii) If the EDC does not perform the Witness Test within the 10 day period or such other time as is mutually agreed to by the parties, the Witness Test is deemed waived.

3) **IEEE 1547**. The small generator facility is installed, operated, and tested in accordance with the requirements of IEEE standard 1547, "Standard for Interconnecting Distributed Resources with Electric Power Systems", as amended and supplemented, at the time the interconnection request is submitted.
4) **Access.** The EDC shall have direct, unabated access to the metering equipment of the small generator facility at all times. The EDC shall provide reasonable notice to the customer when possible prior to using its right of access.
5) **Metering.** Any required metering shall be installed pursuant to appropriate tariffs and tested by the EDC pursuant to the EDCs meter testing requirements.
6) **Disconnection.** The EDC may temporarily disconnect the small generator facility upon the following conditions:
   a) For scheduled outages upon reasonable notice;
   b) For unscheduled outages or emergency conditions;
   c) If the small generator facility does not operate in the manner consistent with this agreement;
   d) Improper installation or failure to pass the Witness Test;
   e) If the small generator facility is creating a safety, reliability or a power quality problem; or
   f) The interconnection equipment used by the small generator facility is de-listed by the Nationally Recognized Testing Laboratory that provided the listing at the time the interconnection was approved.
7) **Indemnification**. The parties shall at all times indemnify, defend, and save the other party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other party's action or inactions of its obligations under this agreement on behalf of the indemnifying party, except in cases of gross negligence or intentional wrongdoing by the indemnified party.
8) **Limitation of Liability**. Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever.
9) **Termination**. This agreement may be terminated under the following conditions:
   a) By interconnection customer - The interconnection customer may terminate this application agreement by providing written notice to the EDC.
   b) By the EDC - The EDC may terminate this agreement if the interconnection customer fails to remedy a violation of terms of this agreement within 30 calendar days after notice, or such other date as may be mutually agreed to prior to the expiration of the 30 calendar day remedy period. The termination date can be no less than 30 calendar days after the interconnection customer receives notice of its violation from the EDC.
10) **Modification of Small Generator Facility**. The interconnection customer must receive written authorization from the EDC before making any changes to the small generator facility, other than minor changes that do not have a significant impact on safety or reliability of the electric distribution system as determined by the EDC. If the interconnection customer makes such modifications without the EDC's prior written authorization, the EDC shall have the right to temporarily disconnect the small generator facility.
11) **Permanent Disconnection.** In the event the agreement is terminated, the EDC shall have the right to disconnect its facilities or direct the customer to disconnect its small generator facility.

12) **Disputes.** Each party agrees to attempt to resolve all disputes regarding the provisions of these interconnection procedures pursuant to the dispute resolution provisions of the District of Columbia Small Generator Interconnection Rules.
13) **Governing Law, Regulatory Authority, and Rules.** The validity, interpretation and enforcement of this agreement and each of its provisions shall be governed by the laws of the District of Columbia. Nothing in this agreement is intended to affect any other agreement between the EDC and the interconnection customer. However, in the event that the provisions of this agreement are in conflict with the provisions of the EDC's tariff, the EDC tariff shall control.
14) **Survival Rights**. This agreement shall continue in effect after termination to the extent necessary to allow or require either party to fulfill rights or obligations that arose under the agreement.
15) **Assignment/Transfer of Ownership of the Small Generator Facility**. This agreement shall terminate upon the transfer of ownership of the small generator facility to a new owner unless the transferring owner assigns the agreement to the new owner and so notifies the EDC in writing prior to the transfer of electric service.
16) **Definitions**. Any capitalized term used herein and not defined shall have the same meaning as the defined terms used in the District of Columbia Small Generator Interconnection Rule.
17) **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, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

(If to Interconnection Customer)
Use the contact information provided in the agreement for the interconnection customer. The interconnection customer is responsible for notifying the EDC of any change in the contact party information, including change of ownership.

(If to EDC)
Use the contact information provided on the EDC's web page for small generator interconnection.

Level 2, Level 3 and Level 4
Interconnection Request Application Form

Interconnection Customer Contact Information

Name _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Mobile): _____

Facsimile Number: _____ E-Mail Address: _____

Alternative Contact Information (if different from Customer Contact Information)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Mobile): _____

Facsimile Number: _____ E-Mail Address: _____

Facility Address (Building where the small generator facility is located)

Address: _____

City: _____ State: _____ Zip Code: _____

Equipment Contractor

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Mobile): _____

Facsimile Number: _____ E-Mail Address: _____

Electrical Contractor (if Different from Equipment Contractor):

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Telephone (Daytime): _____ (Mobile): _____

Facsimile Number: _____ E-Mail Address: _____

License number: _____

Active License? Yes ___ No ___

Electric Service Information for Customer Facility Where Generator Will Be Interconnected

Electric Distribution Company (EDC) serving Facility site: _____

Electric Supplier (if different from EDC):_____

Account Number of Facility site (existing EDC customers): _____

Capacity: _____(Amps) Voltage: _____(Volts)

Type of Service: ☐ Single Phase ☐ Three Phase

If 3 Phase Transformer, Indicate Type

Primary Winding ☐ Wye ☐ Delta

Secondary Winding ☐ Wye ☐ Delta

Transformer Size:_____ Impedance: _____

Intent of Generation (choose one)

☐ Offset Load (Unit will operate in parallel, but will not export power to EDC)

☐ Net Meter (Small generator facility will export power pursuant to District of Columbia Customer Net Energy Metering Contract)

☐ Export Power (Unit will operate in parallel and will export power, but does not fit the criteria established in the District of Columbia Customer Net Energy Metering Contract for net metering)

Note: if Unit will operate in parallel and participate in the PJM market(s), unit will need to obtain an interconnection agreement from PJM.

☐ Back-up Generation (Units that temporarily parallel for more than 100 milliseconds)

Backup units that do not operate in parallel for more than 100 milliseconds do not need an interconnection agreement.

Requested Procedure Under Which to Evaluate Interconnection Request
Please indicate below which review procedure applies to the interconnection request.

☐ **Level 2** - Certified interconnection equipment with an aggregate electric nameplate capacity less than or equal to 2 MW. Indicate type of certification below. (Application fee amount is $500).

☐ **Level 3** – Small generator facility does not export power. Nameplate capacity rating is equal to less than 50 kW if connecting to area network or equal to or less than 10 MW if connecting to a radial distribution feeder. (Application fee amount is $500).

☐ **Level 4** – Nameplate capacity rating is less than 10 MW and the small generator facility does not qualify for a Level 1, Level 2 or Level 3 review or the small generator facility

has been reviewed but not approved under a Level 1, Level 2 or Level 3 review. (Application fee amount is $1,000, to be applied toward any subsequent studies related to this application).

Descriptions for interconnection review categories do not list all criteria that must be satisfied. For a complete list of criteria, please refer to the District of Columbia Small Generator Interconnection Rule.

Small Generator Facility Information

Energy Production Equipment/Inverter Information

Energy Source: ☐ Hydro ☐ Wind ☐ Solar ☐ Diesel ☐ Biomass ☐ Natural Gas
☐ Coal ☐ Oil ☐ Other _____

Energy Converter Type: ☐ Water Turbine ☐ Wind Turbine ☐ Photovoltaic Cell
☐ Steam Turbine ☐ Combustion Turbine ☐ Reciprocating Engine
☐ Other _____

Generator Type: ☐ Synchronous ☐ Induction ☐ Inverter ☐ Other _____

Rating: _____ kW Rating: _____ kVA Number of Units: _____

Rated Voltage: _____ Volts

Rated Current: _____ Amps

System Type Tested (Total System): ☐ Yes ☐ No; attach product literature

Interconnection components/system(s) to be used in the Small Generation Facility that are lab certified (required for Level 2 Interconnection requests only).

Component/System NRTL Providing Label & Listing

1. _____
2. _____
3. _____
4. _____

Please provide copies of manufacturer brochures or technical specifications

For Synchronous Machines:

Note: Contact EDC to determine if all the information requested in this section is required for the proposed small generator facility.

Manufacturer: _____

Model No. _____ Version No. _____

Submit copies of the Saturation Curve and the Vee Curve

☐ Salient ☐ Non-Salient

Torque: _____ lb-ft Rated RPM: _____ Field Amperes: _____ at rated generator voltage and current and _____% PF over-excited

Type of Exciter: _____

Output Power of Exciter: _____
Type of Voltage Regulator: _____ Locked Rotor Current: _____ Amps Synchronous Speed: _____RPM
Winding Connection: _____ Min. Operating Freq./Time: _____
Generator Connection: ☐ Delta ☐ Wye ☐ Wye Grounded
Direct-axis Synchronous Reactance (Xd) _____ohms
Direct-axis Transient Reactance (X'd) _____ohms
Direct-axis Sub-transient Reactance (X"d) _____ohms
Negative Sequence Reactance: _____ ohms
Zero Sequence Reactance: _____ ohms
Neutral Impedance or Grounding Resister (if any): _____ ohms

For Induction Machines:
Note: Contact EDC to determine if all the information requested in this section is required for the proposed small generator facility.

Manufacturer: _____
Model No. _____ Version No. _____
Locked Rotor Current: _____ Amps
Rotor Resistance (Rr)_____ohms Exciting Current ____Amps
Rotor Reactance (Xr)_____ohms Reactive Power Required: _____
Magnetizing Reactance (Xm)_____ohms ___VARs (No Load)
Stator Resistance (Rs)_____ohms ___VARs (Full Load)
Stator Reactance (Xs)_____ohms
Short Circuit Reactance (X"d)_____ohms
Phases: ☐ Single ☐ Three-Phase
Frame Size: _____ Design Letter: ____ Temp. Rise: _____°C.

Reverse Power Relay Information (Level 3 Review Only)
Manufacturer: _____
Relay Type: _____ Model Number: _____
Reverse Power Setting: _____
Reverse Power Time Delay (if any): _____

Additional Information For Inverter Based Facilities
Inverter Information:
Manufacturer:_____ Model: _____
Type: ☐ Forced Commutated ☐ Line Commutated
Rated Output _____ Watts _____ Volts
Efficiency _____% Power Factor _____%
Inverter UL1547 Listed: : ☐ Yes ☐ No

DC Source / Prime Mover:
Rating: _____ kW Rating: _____ kVA
Rated Voltage: _____Volts
Open Circuit Voltage (If applicable): _____Volts
Rated Current: _____Amps
Short Circuit Current (If applicable): _____Amps

Other Facility Information:

One Line Diagram attached: ☐ Yes

Plot Plan attached: ☐ Yes

Estimated Commissioning Date: _____

Customer Signature

I hereby certify that all of the information provided in this application request form is true.

Interconnection Customer Signature: _____

Title: _____ Date: _____

An application fee is required before the application can be processed. Please verify that the appropriate fee is included with the application:

Application fee included ☐

Amount _____

EDC Acknowledgement

Receipt of the application fee is acknowledged and the interconnection request is complete.

EDC Signature: _____ Date: _____

Printed Name: _____ Title: _____

District of Columbia Small Generator Interconnection Rule Level 2-4
Standard Agreement for Interconnection of Small Generator Facilities

This Agreement is made and entered into this ___ day of _____, by and between _____, a _____ organized and existing under the laws of _____, (''Interconnection Customer,'') and _____, a _____, existing under the laws of _____, (''EDC''). Interconnection Customer and EDC each may be referred to as a ''Party,'' or collectively as the ''Parties.''

Recitals:

Whereas, Interconnection Customer is proposing to install or direct the installation of a Small Generator Facility, or is proposing a generating capacity addition to an existing Small Generator Facility, consistent with the Interconnection Request completed by Interconnection Customer on _____; and

Whereas, the Interconnection Customer will operate and maintain, or cause the operation and maintenance of the Small Generator Facility; and

Whereas, Interconnection Customer desires to interconnect the Small Generator Facility with EDC's Electric Distribution System.

Now, therefore, in consideration of the premises and mutual covenants set forth herein, and other good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, the Parties covenant and agree as follows:

Article 1. Scope and Limitations of Agreement

1.1 This Agreement shall be used for all approved Level 2, Level 3 and Level 4 Interconnection Requests according to the procedures set forth in the District of Columbia Small Generator Interconnection Rule.

1.2 This Agreement governs the terms and conditions under which the Small Generator Facility will interconnect to, and operate in Parallel with, the EDC's Electric Distribution System.

1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power.

1.4 Nothing in this Agreement is intended to affect any other agreement between the EDC and the Interconnection Customer. However, in the event that the provisions of this Agreement are in conflict with the provisions of the EDC's tariff, the EDC tariff shall control.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations.

1.5.2 The EDC shall construct, own, operate, and maintain its Interconnection Facilities in accordance with this Agreement, IEEE Standard 1547, the National Electrical Safety Code and applicable standards promulgated by the District of Columbia Public Service Commission.

1.5.3 The Interconnection Customer shall construct, own, operate, and maintain its Interconnection Facilities in accordance with this Agreement, IEEE Standard 1547, the National Electrical Code and applicable standards promulgated by the District of Columbia Public Service Commission.

1.5.4 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the Point of common coupling.

1.5.5 The Interconnection Customer agrees to design, install, maintain and operate its Small Generator Facility so as to minimize the likelihood of causing an Adverse System Impact on an electric system that is not owned or operated by the EDC.

1.6 Metering

The Interconnection Customer shall be responsible for the cost of the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachments 4 and 5 of this Agreement.

1.7 Reactive Power

The Interconnection Customer shall design its Small Generator Facility to maintain a composite power delivery at continuous rated power output at the Point of common coupling at a power factor within the power factor range required by the EDC's applicable tariff for a comparable load customer. EDC may also require the Interconnection Customer to follow a voltage or VAR schedule if such schedules are applicable to similarly situated generators in the control area on a comparable basis and have been approved by the Commission. The specific requirements for meeting a voltage or VAR schedule shall be clearly specified in Attachment 3. Under no circumstance shall these additional requirements for reactive power or voltage support exceed the normal operating capabilities of the Small Generator Facility.

1.8 Capitalized Terms

Capitalized terms used herein shall have the meanings specified in the Definitions section of the District of Columbia Small Generator Interconnection Rule or the body of this Agreement.

Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment Testing and Inspection

The Interconnection Customer shall test and inspect its Small Generator Facility including the Interconnection Equipment prior to interconnection in accordance with IEEE Standard 1547, IEEE Standard1547.1, and the technical and procedural requirements in the District of Columbia Small Generator Interconnection Rule. The Interconnection Customer shall not operate its Small Generator Facility in Parallel with EDC's Electric Distribution System without prior written authorization by the EDC as provided for in 2.1.1 – 2.1.3.

2.1.1 The EDC shall have the option of performing a Witness Test after construction of the small generator facility is completed. The Interconnection Customer shall provide the EDC at least twenty (20) days' notice of the planned Commissioning Test for the small generator facility. If the EDC elects to perform a Witness Test, it shall contact the Interconnection Customer to schedule the Witness Test at a mutually agreeable time within ten (10) business days of the scheduled commissioning test. If the EDC does not perform the Witness Test within ten (10) business days of the commissioning test, the Witness Test is deemed waived unless the parties mutually agree to extend the date for scheduling the Witness Test. If the Witness Test is not acceptable to the EDC, the Interconnection Customer will be granted a period of thirty (30) calendar days to address and resolve any deficiencies. The time period for addressing and resolving any deficiencies may be extended upon the mutual agreement of the EDC and the Interconnection Customer. If the Interconnection Customer fails to address and resolve the deficiencies to the satisfaction of the EDC, the applicable termination provisions of 3.3.7 shall apply. If a Witness Test is not performed by the EDC or an entity approved by the EDC, the Interconnection Customer must still satisfy the interconnection test specifications and requirements set forth in IEEE Standard 1547 Section 5. The Interconnection Customer shall, if requested by the EDC, provide a copy of all documentation in its possession regarding testing conducted pursuant to IEEE Standard 1547.1.

2.1.2 To the extent that the Interconnection Customer decides to conduct interim testing of the Small Generator Facility prior to the Witness Test, it may request that the EDC observe these tests and that these tests be deleted from the final Witness Test. The EDC may, at its own expense, send qualified personnel to the Small Generator Facility to observe such interim testing. Nothing in this Section 2.1.2 shall require the EDC to observe such interim testing or preclude the EDC from performing these tests at the final Witness Test. Regardless of whether the EDC observes the interim testing, the Interconnection Customer shall obtain permission in advance of each occurrence of operating the Small Generator Facility in parallel with the EDC's system.

2.1.3 Upon successful completion of the Witness Test, the EDC shall affix an authorized signature to the Certificate of Completion and return it to the Interconnection Customer approving the interconnection and authorizing Parallel Operation. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

2.2 Commercial Operation

The interconnection customer shall not operate the Small Generator Facility, except for interim testing as provided in 2.1, until such time as the Certificate of Completion is signed by all Parties.

2.3 Right of Access

The EDC shall have access to the disconnect switch and metering equipment of the Small Generator Facility at all times. The EDC shall provide reasonable notice to the customer when possible prior to using its right of access.

Article 3. Effective Date, Term, Termination, and Disconnection

3.1 Effective Date

This Agreement shall become effective upon execution by the Parties.

3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and shall remain in effect in perpetuity unless terminated earlier in accordance with Article 3.3 of this Agreement.

3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination.

3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the EDC thirty (30) calendar days' prior written notice.

3.3.2 Either Party may terminate this Agreement after default pursuant to Article 6.5.

3.3.3 The EDC may terminate upon sixty (60) calendar days' prior written notice for failure of the Interconnection Customer to complete construction of the Small Generator Facility within 12 months of the in-service date as specified by the Parties in Attachment 1, which may be extended by mutual agreement of the Parties and such extension shall not be unreasonably withheld.

3.3.4 The EDC may terminate this Agreement upon sixty (60) calendar days' prior written notice if the Interconnection Customer fails to operate the Small Generator Facility in parallel with EDC's electric system for three consecutive years.

3.3.5 Upon termination of this Agreement, the Small Generator Facility will be disconnected from the EDC's Electric Distribution System. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

3.3.6 The provisions of this Article shall survive termination or expiration of this Agreement.

3.3.7 The EDC may terminate this Agreement if the Interconnection Customer fails to comply with the Witness Test requirement in 2.2.1.

3.4 Temporary Disconnection

A Party may temporarily disconnect the Small Generator Facility from the Electric Distribution System in the event of an Emergency Condition for so long as the Party determines it is reasonably necessary in the event one or more of the following conditions or events occurs:

3.4.1 Emergency Conditions— This refers to any condition or situation that arises: (1) that in the judgment of the Party making the claim is reasonably likely to endanger life or property; or (2) that, in the case of the EDC, is reasonably likely to cause an Adverse System Impact; or (3) that, in the case of the Interconnection Customer, is reasonably likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generator Facility or the Interconnection Equipment. Under Emergency Conditions, the EDC or the Interconnection Customer may immediately suspend interconnection service and temporarily disconnect the Small Generator Facility. The EDC shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generator Facility. The Interconnection Customer shall notify the EDC promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the EDC's Electric Distribution System. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of both Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

3.4.2 Scheduled Maintenance, Construction, or Repair – The EDC may interrupt interconnection service or curtail the output of the Small Generator Facility and temporarily disconnect the Small Generator Facility from the EDC's Electric Distribution System when necessary for scheduled maintenance, construction, or repairs on EDC's Electric Distribution System. The EDC shall provide the Interconnection Customer with five (5) business days' notice prior to such interruption. The EDC shall use reasonable efforts to coordinate such reduction or temporary disconnection with the Interconnection Customer.

3.4.3 Forced Outages - During any forced outage, the EDC may suspend interconnection service to effect immediate repairs on the EDC's Electric Distribution System. The EDC shall use reasonable efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the EDC shall, upon written request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse Operating Effects – The EDC shall provide the Interconnection Customer with a written notice of its intention to disconnect the Small Generator Facility if, based on the operating requirements specified in Attachment 3, the EDC determines that operation of the Small Generator Facility will likely cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generator Facility could cause damage to

the EDC's Electric Distribution System. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon written request. The EDC may disconnect the Small Generator Facility if, after receipt of the notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time unless Emergency Conditions exist in which case the provisions of 3.4.1 apply.

3.4.5 Modification of the Small Generator Facility - The Interconnection Customer must receive written authorization from the EDC prior to making any change to the Small Generator Facility, other than a Minor Equipment Modification, that could cause an Adverse System Impact. If the Interconnection Customer makes such modification without the EDC's prior written authorization, the EDC shall have the right to temporarily disconnect the Small Generator Facility until such time as the EDC reasonably concludes the modification poses no threat to the safety or reliability of its Electric Distribution System.

3.4.6 Reconnection - The Parties shall cooperate with each other to restore the Small Generator Facility, Interconnection Facilities, and EDC's Electric Distribution System to their normal operating state as soon as reasonably practicable following any disconnection pursuant to this section; provided, however, that if such disconnection is carried out pursuant to Section 3.4.5 due to the Interconnection Customer's failure to obtain prior written authorization from the EDC for Minor Equipment Modifications, the EDC shall reconnect the Interconnection Customer only after determining that the modifications do not impact the safety or reliability of its Electric Distribution System.

Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades

4.1 Interconnection Facilities

4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement if required under the additional review procedures of Level a 2 review or under a Level 4 review. If a Facilities Study was performed, the EDC shall identify the Interconnection Facilities necessary to safely interconnect the Small Generator Facility with the EDC's Electric Distribution System, the cost of those facilities, and the time required to build and install those facilities.

4.1.2 The Interconnection Customer shall be responsible for its expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its Interconnection Equipment, and (2) its reasonable share of operating, maintaining, repairing, and replacing any Interconnection Facilities owned by the EDC as set forth in Attachment 2 and Attachment 3.

4.2 Distribution Upgrades

The EDC shall design, procure, construct, install, and own any Distribution Upgrades. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to

the Interconnection Customer. The Interconnection Customer may be entitled to financial contribution from any other EDC customers who may in the future utilize the upgrades paid for by the Interconnection Customer. Such contributions shall be governed by the rules, regulations and decisions of the District of Columbia Public Service Commission.

Article 5. Billing, Payment, Milestones, and Financial Security

5.1 Billing and Payment Procedures and Final Accounting (Applies to additional reviews conducted under a Level 2 review and Level 4 reviews)

5.1.1 The EDC shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of EDC-provided Interconnection Facilities and Distribution Upgrades contemplated by this Agreement as set forth in Appendix 3, on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within thirty (30) calendar days of receipt, or as otherwise agreed to by the Parties.

5.1.2 Within ninety (90) calendar days of completing the construction and installation of the EDC's Interconnection Facilities and Distribution Upgrades described in the Attachments 1 and 2 to this Agreement, the EDC shall provide the Interconnection Customer with a final accounting report of any difference between (1) the actual cost incurred to complete the construction and installation and the budget estimate provided to the Interconnection Customer and a written explanation for any significant variation; and (2) the Interconnection Customer's previous deposit and aggregate payments to the EDC for such Interconnection Facilities and Distribution Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous deposit and aggregate payments, the EDC shall invoice the Interconnection Customer for the amount due, and the Interconnection Customer shall make payment to the EDC within thirty (30) calendar days. If the Interconnection Customer's previous deposit and aggregate payments exceed its cost responsibility under this Agreement, the EDC shall refund to the Interconnection Customer an amount equal to the difference within thirty (30) calendar days of the final accounting report.

5.1.3 If a Party in good faith disputes any portion of its payment obligation pursuant to this Article 5, such Party shall pay in a timely manner all non-disputed portions of its invoice, and such disputed amount shall be resolved pursuant to the dispute resolution provisions contained in Article 8. Provided that such Party's dispute is in good faith, the disputing Party shall not be considered to be in default of its obligations pursuant to this Article.

5.2 Interconnection Customer Deposit

At least twenty (20) business days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the EDC's Interconnection Facilities and Distribution Upgrades, the Interconnection Customer shall provide the EDC with a

deposit equal to 50% of the estimated costs prior to its beginning design of such facilities, provided that the total cost is in excess of $1,000.

Article 6. Assignment, Limitation on Damages, Indemnity, Force Majeure, and Default

6.1 Assignment

This Agreement may be assigned by either Party upon fifteen (15) business days' prior written notice, and with the opportunity to object by the other Party. Should the Interconnection Customer assign this agreement, the EDC has the right to request that the assignee agree to the assignment and the terms of this Agreement in writing. When required, consent to assignment shall not be unreasonably withheld; provided that:

6.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate (which shall include a merger of the Party with another entity), of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement;

6.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the EDC, for collateral security purposes, to aid in providing financing for the Small Generator Facility. For Small Generator systems that are integrated into a building facility, the sale of the building or property will result in an automatic transfer of this agreement to the new owner who shall be responsible for complying with the terms and conditions of this Agreement.

6.1.3 Any attempted assignment that violates this Article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same obligations as the Interconnection Customer.

6.2 Limitation on Damages

Except for cases of gross negligence or willful misconduct, the liability of any Party to this Agreement shall be limited to direct actual damages, and all other damages at law are waived. Under no circumstances, except for cases of gross negligence or willful misconduct, shall any Party or its directors, officers, employees and agents, or any of them, be liable to another Party, whether in tort, contract or other basis in law or equity for any special, indirect, punitive, exemplary or consequential damages, including lost profits, lost revenues, replacement power, cost of capital or replacement equipment. This limitation on damages shall not affect any Party's rights to obtain equitable relief, including specific performance, as otherwise provided in this Agreement. The provisions of this Section 6.2 shall survive the termination or expiration of the Agreement.

6.3 Indemnity

6.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in Article 6.2.

6.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

6.3.3 Promptly after receipt by an indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this Article may apply, the indemnified Party shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

6.3.4 If an indemnified Party is entitled to indemnification under this Article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this Article, to assume the defense of such claim, such indemnified Party may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

6.3.5 If an indemnifying Party is obligated to indemnify and hold any indemnified Party harmless under this Article, the amount owing to the indemnified person shall be the amount of such indemnified Party's actual loss, net of any insurance or other recovery.

6.4 Force Majeure

6.4.1 As used in this Article, a Force Majeure Event shall mean any act of God, labor disturbance, act of the public enemy, war, acts of terrorism, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment through no direct, indirect, or contributory act of a Party, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of gross negligence or intentional wrongdoing.

6.4.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force

Majeure Event, its expected duration, and the steps that the Affected Party is taking and will take to mitigate the effects of the event on its performance. If the initial notification was verbal, it should be promptly followed up with a written notification. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure Event until the event ends. The Affected Party shall be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be reasonably mitigated. The Affected Party shall use reasonable efforts to resume its performance as soon as possible.

6.5 Default

6.5.1 No default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement, or is the result of an act or omission of the other Party.

6.5.2 Upon a default of this Agreement, the non-defaulting Party shall give written notice of such default to the defaulting Party. Except as provided in Article 6.5.3, the defaulting Party shall have sixty (60) calendar days from receipt of the default notice within which to cure such default; provided however, that if such default is not capable of cure within sixty (60) calendar days, the defaulting Party shall commence such cure within twenty (20) calendar days after notice and shall continuously and diligently strive to complete such cure within six months from receipt of the default notice; and, if cured within such time, the default specified in such notice shall cease to exist.

6.5.3 If a Party has made an assignment of this Agreement not specifically authorized by Article 6.1, fails to provide reasonable access pursuant to Article 2.3, is in default of its obligations pursuant to Article 7, or if a Party is in default of its payment obligations pursuant to Article 5 of this Agreement, the defaulting Party shall have thirty (30) days from receipt of the default notice within which to cure such default.

6.5.4 If a default is not cured as provided for in this Article, or if a default is not capable of being cured within the period provided for herein, the non-defaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this Article will survive termination of this Agreement.

Article 7. Insurance

For Small Generator Facilities with a Nameplate Capacity of 1 MW or above, the Interconnection Customer shall carry adequate insurance coverage that shall be acceptable to the EDC; provided, that the minimum comprehensive/general liability coverage that shall be continuously maintained by the Interconnection Customer during the term shall be not less than $2,000,000 for each occurrence, and an aggregate, if any, of at least

$4,000,000. The EDC, its officers, employees and agents will be included as an additional insured on this policy.

Article 8. Dispute Resolution

8.1 A party shall attempt to resolve all disputes regarding interconnection as provided in this Agreement and the District of Columbia Small Generator Interconnection Rule promptly, equitably, and in a good faith manner.

8.2 When a dispute arises, a party may seek immediate resolution through complaint procedures available through the Commission, or an alternative dispute resolution process approved by the Commission, by providing written notice to the Commission and the other party stating the issues in dispute. Dispute resolution will be conducted in an informal, expeditious manner to reach resolution with minimal costs and delay. When available, dispute resolution may be conducted by phone.

8.3 When disputes relate to the technical application of this Agreement and the District of Columbia Small Generator Interconnection Rule, the Commission may designate a technical consultant to resolve the dispute. Upon Commission designation, the parties shall use the technical consultant to resolve disputes related to interconnection. Costs for a dispute resolution conducted by the technical consultant shall be established by the technical consultant, subject to review by the Commission.

8.4 Pursuit of dispute resolution may not affect an Interconnection Customer with regard to consideration of an Interconnection Request or an Interconnection Customer's queue position.

8.5 If the Parties fail to resolve their dispute under the dispute resolution provisions of this Article, nothing in this Article shall affect any Party's rights to obtain equitable relief, including specific performance, as otherwise provided in this Agreement.

Article 9. Miscellaneous

9.1 Governing Law, Regulatory Authority, and Rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the District of Columbia, without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations.

9.2 Amendment

Modification of this Agreement shall be only by a written instrument duly executed by both Parties.

9.3 No Third-Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other

than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

9.4 Waiver

9.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement shall not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

9.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from EDC. Any waiver of this Agreement shall, if requested, be provided in writing.

9.5 Entire Agreement

This Agreement, including all attachments, constitutes the entire Agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants that constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

9.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

9.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

9.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other governmental authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

9.9 Environmental Releases

Each Party shall notify the other Party, first orally and then in writing, of the release any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generator Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (1) provide the notice as soon as practicable, provided that such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

9.10 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

9.10.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

9.10.2 The obligations under this Article will not be limited in any way by any limitation of subcontractor's insurance.

Article 10. Notices

10.1 General

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, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to Interconnection Customer:

Interconnection Customer: _____
Attention: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone: _____ Fax: _____ E-mail _____

If to EDC:

EDC_____
Attention: _____
Address: _____
City: _____ State:_____ Zip:_____
Phone: _____ Fax: _____E-mail_____

10.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

If to Interconnection Customer
Interconnection Customer: _____
Attention: _____
Address: _____
City: _____ State:_____ Zip:_____

If to EDC
EDC: _____
Attention: _____
Address: _____
City: _____ State:_____ Zip:_____

10.3 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating representative: _____

Attention: _____

Address: _____

City: _____ State:_____ Zip:_____

Phone: _____ Fax: _____E-Mail_____

EDC's Operating Representative: _____

Attention: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

10.4 Changes to the Notice Information

Either Party may change this notice information by giving five (5) business days' written notice prior to the effective date of the change.

Article 11. Signatures

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

For the Interconnection Customer:

Name: _____

Title: _____

Date: _____

For EDC:

Name: _____

Title: _____

Date: _____

Attachment 1

Construction Schedule, Proposed Equipment & Settings

This attachment shall include the following:

1. The construction schedule for the Small Generator Facility
2. A one-line diagram indicating the Small Generator Facility, Interconnection Equipment, Interconnection Facilities, Metering Equipment, and Distribution Upgrades
3. Component specifications for equipment identified in the one-line diagram
4. Component settings
5. Proposed sequence of operations

Attachment 2

Description, Costs and Time Required to Build and Install EDC's Interconnection Facilities

EDC's Interconnection Facilities, including any required metering, shall be itemized, and a best estimate of itemized costs, including overheads, shall be provided based on the Facilities Study.

Also, a best estimate for the time required to build and install EDC's Interconnection Facilities will be provided based on the Facilities Study.

Attachment 3

Operating Requirements for Small Generator Facilities Operating in Parallel

Applicable sections of EDC's operating manuals applying to the small generator interconnection shall be listed and Internet links shall be provided. Any special operating requirements not contained in EDC's existing operating manuals shall be clearly identified. These operating requirements shall not impose additional technical or procedural requirements on the small generator facility beyond those found the District of Columbia Small Generator Interconnection Rule, except those required for safety, provided that these documents and requirements are approved by the Commission.

Attachment 4

Monitoring and Control Requirements

EDC monitoring and control requirements shall be clearly specified and a reference shall be provided to the EDC's written requirements documents from which these documents are derived along with an internet link to the requirements documents. EDC monitoring and control of small generator facilities shall be permitted only if the nameplate rating is equal to or greater than 3 MW.

Attachment 5

Metering Requirements

Metering requirements for the Small Generator Facility shall be clearly indicated along with an identification of the appropriate tariffs that establish these requirements and an internet link to these tariffs.

Attachment 6

As Built Documents

After completion of the Small Generator Facility, the Interconnection Customer shall provide the EDC with documentation indicating the as-built status of the following when it returns the Certificate of Completion to the EDC:

1. A one-line diagram indicating the Small Generator Facility, Interconnection Equipment, Interconnection Facilities, Metering Equipment, and Distribution Upgrades
2. Component specifications for equipment identified in the one-line diagram
3. Component settings
4. Proposed sequence of operations