

RENEWABLE ENERGY INTERCONNECTION AGREEMENT

This renewable energy system interconnection agreement (the “Agreement”) is made the _____ day of _____ (the “Effective Date”)

BETWEEN _____ (the “Customer”)

AND: BERMUDA ELECTRIC LIGHT COMPANY LIMITED (“BELCO”)

WHEREAS, the Customer owns and/or occupies the Location (as more particularly defined herein) that has an RES (as more particularly defined herein) on site;

AND WHEREAS, the Customer has contracted for the supply of electricity by BELCO to the Location;

AND WHEREAS, Customer desires to engage in the interconnected parallel operation of the RES with the electrical distribution system owned by BELCO;

AND WHEREAS, this Agreement provides for the safe and orderly interconnection of the RES at the Location and the Distribution System (as more particularly defined herein).

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein, it is agreed:

1. Definitions, Agreement Parts

1.1 In this Agreement the following terms shall have the following meanings:

Appendices – the appendices attached to this Agreement, as amended from time to time, which are an integral part of this Agreement.

Applicable Laws and Regulations - all duly promulgated applicable laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions, from time to time, of any governmental authority in Bermuda (including without limitation the Regulatory Authority, established under the Regulatory Authority Act 2011 or any successors thereto.)

Business Day – means any day other than a Saturday, Sunday or other public holiday in Bermuda.

Distribution System – BELCO’s facilities, including the Point of Interconnection, which operate up to a voltage of 4160V or less, that are used to distribute electric power between substations and customer loads.

EA - means the Electricity Act 2016.

Facility – All of the RES that is connected to the Point of Interconnection at the Location, whether

the Customer owns the RES or a third party owns the RES and includes, without limitation, the RES, inverter, storage devices and Interconnection equipment located on the RES side of the Point of Interconnection and all ancillary equipment.

Grid Code shall have the meaning set out in the EA.

Interconnection – refers to the electrical connection of a Facility in parallel with the Distribution System and **Interconnect, Interconnecting** and **Interconnected** shall be construed accordingly.

Islanding – A condition in which a portion of the Distribution System is energized by a Facility, while that portion of the Distribution System is electrically separated from the rest of the Distribution System.

kilo-Watt (kW) – the unit of electric power equal to 1,000 watts.

Point of Interconnection – The point at which electricity is imported to and exported from a Location.

Reasonable Hours – means 8:00 am to 5:00 pm Monday to Friday.

Renewable Energy – Energy that is replenished for the foreseeable future by naturally occurring processes such as sunshine, wind and tides.

Licence Threshold – has the meaning set out in the EA.

Location – The premises upon which the RES is located.

Safety Procedures – any of BELCO's safety and operating procedures as amended by BELCO from time to time.

Renewable Energy System (RES) – Equipment used to generate electricity from a Renewable Energy resource that generates power at low voltage and that has a maximum total rated generating capacity of no more than the Licence Threshold.

1.2 Other terms used but not defined in this Agreement shall have the meaning generally understood in the energy industry.

2. Applicability and Scope of Interconnection

2.1 This Agreement shall govern the terms and conditions upon which the Facility is Interconnected to the Distribution System and the terms and conditions upon which a BELCO customer with an RES may sell and exchange electric energy from its RES to BELCO. The Customer shall not transmit, distribute or sell electricity generated by the RES to any party other than BELCO. Only one Facility

shall be Interconnected to the Distribution System per Location under this Agreement.

2.2 The supply of electricity by BELCO to the Location shall not be governed by this Agreement, but shall be governed by any BELCO service rules in place and posted on BELCO's website from time to time (the "Service Rules"). The Customer shall be responsible for separately contracting for the supply of electricity by BELCO to the Location. BELCO shall, however, accept delivery of the Facility's energy production in accordance with this Agreement provided that the Customer is upon application for Interconnection and subsequently remains at all times in good standing with respect to its account for the supply of electricity by BELCO to the Location. For the avoidance of doubt, if Customer's account for the supply of electricity by BELCO to the Location becomes at any time delinquent, the Customer may be disconnected from BELCO's supply of electricity under BELCO's Service Rules and, furthermore, this Agreement may be terminated by BELCO.

2.3 BELCO reserves the right and is hereby authorized by the Customer to withhold initial Interconnection of the Facility: (i) until the qualifying criteria for Interconnection in Appendix A hereto are met; (ii) until the Facility is demonstrated, to BELCO's satisfaction, to be operating safely and in compliance with this Agreement; and (iii) until the operation of the Facility is compatible with BELCO's Distribution System plans regardless of whether or not the Facility is found to be operating safely and otherwise in compliance with this Agreement.

2.4 If the Customer is the occupier of the Location, but the Customer is not the owner of the Location, then such Customer (i) represents and warrants to BELCO that it has the permission of the owner of the Location and the authority to enter into this Agreement and agrees that it shall be fully responsible and liable to BELCO with respect to all matters under this Agreement; and (ii) must notify BELCO in advance, if possible, but in any event no later than seven (7) days thereafter if Customer ceases to occupy the Location and such notice shall include the date that Customer no longer occupied the Location. For the avoidance of doubt, if the Customer is the occupier of the Location, but is not the owner of the Location, then such Customer is only entitled to Interconnect the Facility with the Distribution System while the Customer is occupying the Location.

2.5 Should an upgrade or other modification to the Distribution System be required as a result of the Facility's proposed Interconnection or actual Interconnection, then any cost incurred by BELCO in making such upgrade or modification shall be paid by the Customer. BELCO reserves the right not to carry out the upgrade or modification, and to withhold initial Interconnection, or to suspend Interconnection, until such time as Customer has paid the estimated costs of such upgrade or modification in advance.

3. Metering

3.1 As a condition of this Agreement, the Customer must have a meter installed which complies with the specifications stipulated by BELCO from time to time that is capable of measuring the flow of electricity imported to and exported from the Facility at the Point of Interconnection. BELCO shall own any such meter and shall be responsible for its reading and maintenance. If the existing meter in service at the Location is not capable of measuring the flow of electricity imported to

and exported from the Facility, then BELCO shall, upon written request of the Customer and at BELCO's own expense, acquire and install a meter selected by BELCO that is capable of meeting these requirements or, at BELCO's own expense and at BELCO's option, modify the existing meter at the Location before the anticipated generation start date of the Facility. BELCO shall own any such meter and shall be responsible for its reading and maintenance.

3.2 BELCO, at its own expense and with written consent of the Customer (such consent not to be unreasonably withheld), may install at the Location additional meters to monitor the flow of electricity. Maintenance of the additional meter(s) will be the responsibility of BELCO, which will own the meter(s).

3.3 Customer shall supply, at no expense to BELCO, a suitable location for any meter required to be used under this Agreement.

4. Facility Operating Requirements

4.1 The Facility, to ensure its safe and dependable operation of the Facility, shall be installed, operated, and maintained in accordance with (i) all applicable electrical, construction and safety codes, including without limitation, the national electrical code adopted by the Department of Planning from time to time; (ii) applicable qualifying criteria set out in Appendix A hereto; (iii) all planning regulations and requirements; (iv) any Grid Code developed in accordance with the EA and (v) otherwise in accordance with all Applicable Laws and Regulations.

4.2 The Customer shall operate and maintain the Facility, once Interconnected, in accordance with this Agreement and any instructions and requirements provided by the Facility's manufacturer. In the event of a conflict between the instructions and requirements provided by the Facility's manufacturer and the requirements under this Agreement, the provisions of this Agreement shall prevail.

4.3 The Customer shall operate and maintain the Facility in accordance with good utility practice, including, without limitation, in a manner that places the utmost importance on the safety of individuals, including BELCO's agents and employees.

4.4 The Customer shall operate and maintain the Facility in accordance with the technical requirements set out in Appendix B of this Agreement.

4.5 The Customer shall not expand, add to, or alter the Facility in any manner without having received BELCO's prior written consent and any other prior written consent, approval, permit and/or license that the Customer is required by Applicable Laws and Regulations to obtain.

4.6 Any requests made to alter or expand the Facility shall be made to BELCO at least 30 days prior to the intended operation of the altered or expanded capabilities of the Facility.

4.7 Subject to Section 2.4, the Customer is not required to give BELCO notice prior to starting or

stopping generation by the Facility, with the exception of the initial generation startup, which shall be subject to the requirements set out in Appendix A.

4.8 Interconnected operation of the Facility shall in no way adversely affect, compromise, or impair BELCO's operational requirements or protection devices that it maintains or considers appropriate for the safe and reliable supply of electrical power to the Customer and/or third parties.

4.9 The Customer acknowledges and agrees that the Customer has been advised that there are no synchronization schemes in place on BELCO's facilities, and that the upstream Distribution System contains automatic equipment that will provide for voltage regulation and/or automatic reclosing as part of normal operation.

4.10 Islanding of the Facility with any portion of the Distribution System is not permitted under any circumstances whatsoever.

5. Access & Inspection

5.1 Except where the Customer does not have authority to give such a grant, the Customer hereby grants BELCO and/or its authorized agent the right to enter the Location and its surrounding property and to enjoy safe and adequate access to the Facility for the purpose of inspecting its equipment or the Facility, conducting any feasibility studies and carrying out any necessary upgrades or modifications to the Distribution System in connection therewith, maintaining and operating its equipment, for meter reading and testing, and/or disconnecting the Facility and/or any ancillary equipment as the case may be, without prior notice to the Customer provided such entry and access is made during Reasonable Hours except in cases of emergency. To the extent that the Customer must procure any such grant of entry and access to the Facility from a third party, the Customer represents and warrants to BELCO that it has done so and agrees that it shall do so for the duration of this Agreement. For the avoidance of doubt, nothing articulated herein shall limit or otherwise affect any other right of entry which BELCO may have from time to time pursuant to its incorporating legislation, as amended, its Service Rules and/or Applicable Laws and Regulations.

5.2 BELCO and/or its authorized agent reserves the right, but not the obligation, to inspect the Facility prior to and/or during generation start-up to ensure that the installation complies with this Agreement.

5.3 BELCO shall have access to the metering equipment at the Location and means of isolating the Facility.

6. Compensation

6.1 BELCO shall provide the Customer with information on its exported energy at the Point of Interconnection with each monthly bill for the supply of electricity by BELCO to the Location. The meter shall record instantaneously all energy flow from the Facility into the Distribution System.

6.2 The Customer shall be compensated for the Facility's energy that is exported to BELCO in each month in the manner mandated or approved by the Regulatory Authority of Bermuda from time to time.

6.3 The Customer's compensation for the Facility's exported energy and any charges for Customer usage of energy supplied by BELCO will be displayed on each monthly bill of the Customer's for the supply of energy from BELCO to the Location.

6.4 For the avoidance of doubt, if the Customer owes BELCO an amount for the supply of energy, this amount is due to be paid under the BELCO's Service Rules regardless of any compensation to be paid to the Customer.

7. Effective Date, Term, Termination, and Disconnection

7.1 This Agreement shall commence on the Effective Date.

7.2 This Agreement shall remain in effect for a period of one year from the Effective Date and shall be automatically renewed for successive one-year periods thereafter, unless terminated in accordance with this Agreement.

7.3 Notwithstanding anything else herein, no termination shall become effective until the Customer and BELCO have complied with all Applicable Laws and Regulations, if any, applicable to such termination.

7.4 The Customer may terminate this Agreement at any time by giving BELCO thirty (30) days' notice.

7.5 If the Customer is the occupier of the Location, but the Customer is not the owner of the Location, then this Agreement shall terminate on the date that BELCO is notified that the Customer no longer occupies the Location. If no such notification has been received by BELCO, but BELCO reasonably believes that the Customer no longer occupies the Location, then BELCO may terminate this Agreement by giving the Customer thirty (30) days' notice of breach, provided that the Customer may cure such breach during the notice period by providing BELCO with cogent evidence that it still occupies the Location.

7.6 This Agreement shall terminate automatically and without notice in the event that the Customer terminates its account for the supply of electricity to the Location from BELCO.

7.7 BELCO may terminate this Agreement for any breach by the Customer after following the notification procedure set out in Section 8.2 of this Agreement, provided that BELCO may immediately and without prior notice terminate this Agreement if the Facility is not in compliance with Applicable Laws and Regulations.

7.8 In the event that the Facility has not generated electricity for a period of twelve (12)

months, BELCO may terminate this Agreement upon the provision of thirty (30) days' notice to the Customer.

7.9 Upon termination of this Agreement, the Facility shall be disconnected from the Distribution System.

7.10 The costs of disconnection shall be borne by the Customer.

7.11 For the avoidance of doubt, the termination of this Agreement shall not relieve either the Customer or BELCO of such of its liabilities and obligations, owed or continuing at the time of the termination.

7.12 In the event that this Agreement is terminated for any reason, any compensation to be paid to the Customer shall be paid to the Customer in the next billing cycle following termination.

8. Suspension of Interconnection/Breach

8.1 BELCO may temporarily disconnect or temporarily reduce the output of the Facility if any of the following technical breaches of this Agreement occur:

- (a) BELCO becomes aware that, in BELCO's sole discretion, the Facility is not operating in accordance with this Agreement;
- (b) BELCO becomes aware that, in BELCO's sole discretion, the operation of the Facility is or may become a threat to the safety of anyone;
- (c) BELCO becomes aware that, in BELCO's sole discretion, the operation of the Facility is or may become a threat to any other RES; and/or
- (d) BELCO becomes aware that, in BELCO's sole discretion, the operation of the Facility is or may become a threat to the integrity of any part of the Distribution System.

8.2 Except as otherwise expressly set out herein, in the event that BELCO becomes aware of a breach under this Agreement (which, for avoidance of doubt, shall not be limited to the breaches enumerated in Section 8.1 above) that is capable of remedy, BELCO shall provide the Customer with notice of the breach setting out the nature of the breach. In the event that Customer does not remedy such breach within thirty (30) days of receipt of the notice of the breach, BELCO may, at its sole discretion, terminate this Agreement or grant such written extensions of time to the Customer to remedy the breach as BELCO sees fit. Except as otherwise expressly set out herein, in the event that BELCO becomes aware of a breach under this Agreement (which, for avoidance of doubt, shall not be limited to the breaches enumerated in Section 8.1 above) that is not capable of being remedied, BELCO may, at its sole discretion, terminate this Agreement immediately and without prior notice, but in such case BELCO shall within fourteen (14) days after such termination provide the Customer with notice of the breach that sets out the nature of the breach.

8.3 The Customer agrees that the Customer shall not be entitled to any form of compensation from BELCO as a result of (i) the Facility being off line as a result of any disconnection (temporary or otherwise); or (ii) any reduction of output of the Facility.

9. Outages

9.1 BELCO may temporarily disconnect the Facility or reduce the Facility's output for scheduled and unscheduled outages, emergency conditions, forced outages or to comply with good utility practice. To the extent reasonably possible, advance notice of such disconnection or reduction shall be provided.

9.2 BELCO shall provide, to the extent reasonably possible, advance notice that interruption or reduction of the Facility's output shall be required in order to permit BELCO to construct, install, maintain, repair or inspect any part of the Distribution System.

9.3 If at any time BELCO determines that the continued operation of the RES may endanger any person or property or the Distribution System, or have an adverse effect on the safety or power quality of other BELCO customers, BELCO shall have the right to disconnect the RES from the Distribution System and the Customer will be promptly informed in writing of the action taken and the reasons for such action. The RES shall remain disconnected until such time as BELCO and, if required, the Bermuda Government's Electrical Inspector, are satisfied that the endangering or power quality conditions have been corrected and BELCO shall not be obligated to accept any electrical energy from the Customer during such period. It is the responsibility of the Customer to protect his or her RES from voltage imbalances from the Distribution System or reclosing operations after a power interruption.

10. Information

10.1 BELCO reserves the right to require the Customer to provide BELCO with additional information other than that supplied in the application for Interconnection if BELCO deems such additional information is necessary to adequately serve the Customer.

10.2 Customer consents to BELCO holding and processing data relating to him or her for legal, administrative and management purposes and, in particular, to the processing of any "sensitive personal data" (as defined in the Personal Information Protection Act 2016 once in force).

11. Safe Work System

11.1 The work procedures described in BELCO's Safety Procedures shall be followed by BELCO in providing isolation for work on any part of the Interconnection.

11.2 In the event of a conflict between the terms of this Agreement and the Safety Procedures, the terms of the Safety Procedures shall take precedence.

12. Limitation of Liability and Third Party Claim Indemnity

12.1 BELCO shall not be liable to the Customer for any loss, cost, claim, injury (including death), liability, or expense, including reasonable attorney's fees relating to this Agreement (including damage to the Facility due to voltage spikes, surges or total or partial failure of electricity supply and damage caused as a result of any third party's equipment connected to the Facility, regardless if such equipment is there with BELCO's knowledge or consent, and/or third party interference with the Facility) except to the extent that such loss, cost, claim, injury (including death), liability, or expense is caused by the negligence, intentional misconduct or intentional failure to act of BELCO.

12.2 Each party's liability to the other party for any loss, cost, claim, injury (including death), 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 whether based in whole or in part in contract, in tort, including negligence, strict liability or any other theory of liability, except as allowed under section 12.3.

12.3 Each Party ("indemnifying party") shall at all times indemnify, defend, and hold the other party ("indemnified party") harmless from and against, any and all actions, claims, demands, losses, judgments, interest, costs (including legal fees, court costs and disbursements), damages, and expenses whatsoever (including claims and actions relating to injury to or death of any person or damage to property) by or to third parties that may be brought against or suffered by the indemnified party or which the indemnified party may suffer or sustain, pay or incur, relating to or arising from the indemnifying party's performance of this Agreement, except in cases of negligence, intentional wrongdoing and/or intentional failure to act by the indemnified party.

12.4 Every limitation of liability, defence and immunity of any nature available to a party shall extend to and for the benefit of the directors, officers, employees, agents, subcontractors and shareholders of that party.

13. Insurance, Incident Notification

13.1 The Customer shall, at its own expense, at all times during this Agreement, maintain in force general liability insurance, including bodily injury and property damage liability coverage, that would be considered sufficient by a prudent person to insure against all reasonably foreseeable claims that may arise out of this Agreement. The Customer shall provide BELCO, upon request at any time, with a certificate of insurance confirming that such coverage is in place. The Customer agrees to immediately, but in no case later than three (3) days, notify BELCO in the event that an accident or incident occurs that relates to the Facility and/or the Distribution System resulting in any injuries or damages.

14. Right and Title, No Partnership

14.1 Nothing in this Agreement operates to convey to either party any implied right, interest or title to

any equipment of the other party.

14.2 Nothing in this Agreement shall limit BELCO's ability to upgrade its Distribution System through or to change, in part or in whole, the design, function, operation or layout of its Distribution System.

14.3 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.

14.4 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.

14.5 The Customer represents and warrants that the operation of the Facility shall not violate or infringe upon any patent, copyright, trade secret or the proprietary rights of others.

15. Force Majeure

15.1 Notwithstanding anything to the contrary contained in this Agreement, neither BELCO nor the Customer shall be liable to the other for any breach of this Agreement if such breach is caused or arises by reason of any matter or thing beyond the reasonable control of either party, including but not limited to:

- (a) Acts of God, insurrection or civil disorder, riot, military operations, national or local emergency;
- (b) Acts or omissions of any government authority, other competent authority or court; (c) Industrial disputes of any kind;
- (d) Fire, lightning, explosion, floods, subsidence, storm, weather of exceptional severity;
- (e) Failure of power supply or embargo; and/or
- (f) Any other cause or reason outside either party's control.

Provided, however, that the rights and obligations of BELCO and the Customer are only temporarily suspended during the force majeure period to the extent that performance is reasonably affected thereby.

16. Notice

Except as expressly set out herein, any notice, demand or other communication required or permitted to be given or made under this Agreement shall be in writing and shall be sufficiently given or made if delivered in person, by courier, by mail, by facsimile or by email.

The parties' addresses for notice hereunder shall be as follows:

In case of BELCO

BELCO

27 Serpentine Road

Pembroke, Bermuda

Attention:

Facsimile: (441)292-8975

E-mail:

In case of the Customer

Name: Address:

Attention: Facsimile: E-

mail:

Each notice sent in accordance with this Section shall be deemed to have been received:

(a) on the day that it was delivered, if delivered personally, or on the first Business Day thereafter if the day on which it was delivered was not a business day;

(b) within two (2) Business Days, if sent by courier;

(c) within five (5) Business Days, if sent by mail;

(d) on the day that it was sent by e-mail or facsimile, or on the first Business Day thereafter if the day on which it was sent by e-mail or facsimile was not a Business Day.

Either party may change any of the details of its address for notice by giving notice as provided herein to the other party.

17. Disputes

17.1 The Customer and BELCO agree to attempt in good faith to resolve any dispute arising out of this Agreement. In the event of a dispute, either party shall provide the other party with a written notice of dispute. Such notice of dispute shall describe in detail the nature of the dispute. If such dispute has not been resolved within fourteen (14) days after receipt of the notice of dispute, then, either party may pursue any dispute resolution procedure allowed under Applicable Law and Regulations. In the absence of another dispute resolution procedure required pursuant to Applicable Laws and Regulations, the parties may agree to refer it to be determined by a single arbitrator. In the event that the parties agree to arbitration, the arbitrator shall be appointed by agreement between the parties or, if an agreement cannot be reached within a 7 day period, then the arbitrator shall be selected and appointed by the Appointments Committee of the Chartered Institute of Arbitrators, Bermuda Branch. Any such arbitration shall be held in Bermuda. Any such arbitration shall be subject to and governed by the Arbitration Act 1986 or any re-enactment or statutory modification thereof for the time being in force. The commencement of any dispute resolution procedure hereunder shall not automatically stay or suspend the rights or obligations of either the Customer or BELCO under this Agreement.

17.2 Either party may handle any dispute resulting from an act or omission of the other party that allegedly contravenes the Regulatory Authority Act 2011 (the “RAA”), the EA, any regulations made by a Minister or administrative determination made by the Authority in accordance with section 58 of the RAA.

18. Governing Law

This Agreement and disputes arising hereunder shall be governed by and construed in accordance with the laws of Bermuda.

19. Severability of Terms

If any term or provision of this Agreement is found to be unenforceable, invalid or illegal, it shall be considered separate and severable and the remaining provisions of the Agreement shall remain in force and be binding upon BELCO and the Customer as though the provision had been included provided that the Agreement, as modified, remains operable.

20. Entire Agreement

This Agreement, including its Appendices, contain the entire understanding between BELCO and the Customer with respect to the subject matter hereof. All prior agreements, representations, statements, negotiations and undertakings are hereby superseded with respect to the subject matter of this Agreement. In the event of a conflict between this Agreement and the Service Rules, this Agreement shall govern with respect to the subject matter hereof unless otherwise stated herein.

21. Modification to this Agreement

Subject to Applicable Laws and Regulations, no addition to or modification of this Agreement shall be effective unless it is in writing, signed by the duly authorized representative of BELCO and by the Customer, provided that should any modification to this Agreement be, in BELCO’s sole opinion, appropriate or necessary for technical, safety and/or legal reasons, BELCO may amend this Agreement to incorporate such modifications.

22. Assignment

Neither party may assign this Agreement or any interest created hereunder or any portion thereof, to any person without the express consent of the other party, which consent shall not be unreasonably withheld.

23. Successors

This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and permitted assigns.

24. Waiver of Terms

Appendix A – RES Qualifying Criteria for Interconnection

If Customer is delinquent with respect to its payment for the supply of electricity from BELCO upon applying to Interconnect a Facility, BELCO may, at its sole option, refuse to enter into an Interconnection agreement with Customer and/or refuse to Interconnect the Facility to the Distribution System.

To be eligible for Interconnection with the Distribution System, the Facility must meet the following qualifying criteria:

- (a) At all times, the maximum electric power output of the Facility must not exceed the Licence Threshold.
- (b) The Facility must be an RES and must operate in parallel with the Distribution System.
- (c) The Customer must satisfy BELCO that he or she has complied with all Applicable Laws and Regulations and that all required regulatory approvals for the Facility have been obtained, including planning permissions and any such other permissions and licenses as may be required.
- (d) The Facility must be able to be connected electrically to the Distribution System and to operate in synchronism with voltage and frequency maintained by BELCO.
- (e) The Facility must meet all applicable safety and performance standards established by the national electrical code adopted by the Department of Planning from time to time, the Institute of Electrical and Electronic Engineers, Underwriters Laboratories, or any other agency which has been approved by BELCO. The Facility must meet the following particular standards, as applicable:
 - (i) IEEE Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems for Generating Facilities up to 10 MW in size,
 - (ii) IEEE Standard 1547.1 for Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems, and
 - (iii) UL 1741 Standard for Inverters, Converters and Controllers for Use in Independent Power Systems.
- (f) The Facility must meet the technical requirements in Appendix B.

Assessment of Proposed Facilities by BELCO

A customer seeking to Interconnect a Facility to the Distribution System must submit a written application form to BELCO which shall form part of the Agreement. The form of application is included in Annex 1 to this Appendix A. Such forms are available at BELCO's head office. Upon receipt of a complete application form and execution of the Agreement, BELCO shall conduct a feasibility study, the cost of which shall be borne by the Customer. If the qualifying criteria in this Appendix are met but BELCO finds that any upgrades or modifications to the Distribution System are required to Interconnect the proposed Facility, BELCO shall provide the Customer with a written quotation of estimated costs associated with completion of any such upgrades or modifications within thirty (30) days. The Customer may be required to pay for such costs in advance, but absent such a requirement, Customer must provide acceptance of the associated costs to confirm agreement for BELCO to proceed with such upgrades or modifications. Irrespective of whether the Customer is required to pay for such costs in advance, BELCO

will carry out the necessary upgrades or modifications within a reasonable period of time.

Testing

The Customer shall undertake any testing specified in any guidelines provided by the RES manufacturer and shall ensure that the results of such testing are made available to BELCO upon request. These tests shall include a loss of mains protection test, reconnection to mains test and any other tests recommended by the RES manufacturer. At its discretion, BELCO may require that on-site tests be witnessed by BELCO or its agent, and in such event, the witness may not be the installer and the Customer shall provide BELCO with adequate opportunity and reasonable notice to witness the tests.

The Customer shall provide BELCO with a commissioning test report containing the results of all tests and listing of the protection settings and shall keep another copy within close proximity to the Facility.

Department of Planning Inspection

The Customer shall be responsible for liaising with the Department of Planning (“DOP”) and ensuring that all appropriate inspections required by the DOP are conducted and approved. Once the Facility has passed all DOP inspections and the Customer has received an occupancy certificate from the DOP (the “Certificate”) and such other licences as may be required under Applicable Laws and Regulations, the Customer shall request that BELCO schedule inspection, meter installation, if required, testing and Interconnection (the “Interconnection Request”) if wishing to proceed to Interconnection. The Certificate shall be provided to BELCO at this time.

BELCO Inspection, Meter Installation, Testing and Interconnection

Within five (5) Business Days of receipt of the Interconnection Request, BELCO will contact the Customer to schedule an inspection of the Facility at BELCO’s expense.

Inspection, meter installation, if required, and the testing and interconnection shall be scheduled to occur within ten (10) Business Days of the Interconnection Request at a time mutually agreeable to the parties. BELCO may not determine that a Facility has failed BELCO’s inspection unless there is evidence of failure to comply with the qualifying criteria set out in this Appendix A. If a Facility initially fails BELCO’s inspection, BELCO shall provide detailed information on the reason(s) for failure and shall offer to repeat the inspection at the Customer’s expense at a time mutually agreeable to both parties.

Following completion of the inspection, any required meter installation and testing, and provided the Agreement remains in effect, the Facility may begin Interconnected operation with the Distribution System.

The procedures and requirements set out herein are based on BELCO’s current Distribution System and may be modified by BELCO from time to time. Such modified processes and requirements may result in changes to the procedures and requirements involved with Interconnection to BELCO’s Distribution

System. BELCO shall notify the Customer of any updates to the Grid Code and provide a reasonable period for the Customer to implement such changes.

Appendix B - RES Technical Requirements

1.0 Method of Connection and Installation

1.1 Protection

Connection of the Facility shall not impair the integrity or degrade the safety of the Distribution System. IEEE1547.2003 contains the *minimum* requirements to achieve this goal.

1.2 Basic Protection Requirements

The Facility shall be disconnected from the Distribution System when the voltage or frequency exceeds pre-defined acceptable limits. The method and settings are indicated below:

Protection Required	Setting	Disconnection Time (Sec)
Over Voltage	+10%	1.5
Under Voltage	-10%	1.5
Over Frequency	62 Hz	0.5
Under Frequency	56.4 Hz	0.5
Loss of Mains	See Table 2	0.5

Table 1 – Recommended protection and settings for RES

1.3 Loss of Mains

The Loss of Mains protection device used shall apply the existing and accepted techniques of either a Rate of Change of Frequency (ROCOF) or Vector Shift method or another method accepted in European or North American standards. The recommended settings to be applied are indicated below in Table 2:

Type	Setting
ROCOF	0.125 Hz/s over 6 cycles
Vector Shift	6 degrees

Table 2 – Recommended Loss of Mains protection settings for RES

1.4 Flicker

The RES and its connection to the Distribution System shall not cause any objectionable flicker for other customers on the network. Flicker shall be considered objectionable when it either causes a modulation of the light level of lamps sufficient to be irritating to humans, or causes equipment misoperation. The Customer shall comply with UK Engineering Association Publication P28 (1989), IEEE Std 519, P1453, IEC/TR3 61000-3-7, IEC 61000-4-15 and IEC 61400-21 and shall consult the Grid Code, or in the absence of a Grid Code, BELCO, for further guidance.

1.5 Harmonics

At the Point of Interconnection, the RES shall not cause any excessive harmonic current injection or voltage levels to be present. Before connection, the RES shall comply with IEEE 519-2014 and Customer shall consult the Grid Code, or in the absence of a Grid Code, BELCO, as to the acceptable

harmonic distortion limits.

1.6 Power Factor

The RES shall operate as closely to unity power factor as possible. Operation shall not exceed a power factor of 0.95 lagging to 0.95 leading. The Customer shall seek BELCO’s agreement prior to operating outside such limits.

1.7 Automatic Reconnection

Upon disconnection of the Facility from the Distribution System, it is required that the Facility is only reconnected to the Distribution System when the voltage and frequency parameters have remained within the acceptable limits of Table 1 above for a period of five minutes.

1.8 Signage

A suitable sign shall be placed at the Point of Interconnection. An example is given below.



Isolate on-site generator at _____

Isolate mains supply at _____

Figure 1- Warning signs indicating dual supply presence

1.9 Disconnect Device

The design, installation, operation and maintenance of the RES shall comply with BELCO approved control and protection equipment, which shall include a manual load-break disconnect device (“Disconnect Device”). The Disconnect Device shall be lockable in the open position and accessible by BELCO as a means of electrically isolating the RES from the Distribution System and to establish working clearance for maintenance and repair work, in accordance with accepted electrical practice. The Disconnect Device shall be furnished and installed by the Customer and is to be connected between the RES and the Distribution System. The Disconnect Device shall be located in the immediate vicinity of the electric meter at the main service entrance or may be located at an alternate location which is easily accessible by BELCO personnel on a 24-hour basis. Where the Disconnect Device is in an alternative location, a placard shall be placed at the electric meter at the main service entrance identifying the exact location of the Disconnect Device. The Disconnect Device shall be clearly labelled “RES Disconnect”.

Annex 1 – RES Interconnection Application Form

**RENEWABLE ENERGY SYSTEM
INTERCONNECTION APPLICATION**

Section 1: APPLICANT CONTACT INFORMATION

Name: _____ _____	
Address:	Mailing Address:
BELCO supply account #:	
E-mail Address:	
Telephone No:	
Name of RES Provider:	
RES Provider Contact or Consultant E-mail Address:	
RES Provider Contact or Consultant Telephone No:	

If the Interconnection and generation start-up process is to be coordinated through a party or individual other than the Customer, please provide their contact details :

Contact Name:
Company Name:
Contact/Company Mailing Address: _____ _____
E-mail Address:
Telephone No:

Customer agrees that by providing the above contact details, BELCO shall be permitted to contact and take instructions from that party in relation to such Interconnection and generation start-up.

Section 2: EXPECTED IN-SERVICE DATE (YY/MM/DD)

Section 3: PROPOSED INTERCONNECTION DETAILS

Appropriate Interconnection: Single Phase	Three Phase
BELCO system Interconnection voltage: 120V	240V Other (Specify)

Anticipated annual energy generation: (kWh):

Section 4: EQUIPMENT INFORMATION

General RES Information

Renewable Energy Resource:				
Number of Generating Units:				
Manufacturer:			Model Name and No:	
Product Certification Info:				
Generator Type: Synchronous Induction Inverter Other:				
Nameplate Rating (AC)				
Rated Power Factor:				
Rated Voltage (Volts):				
Rated Frequency: 60Hz				
Single Phase:			Three Phase:	
Generator Connection: Delta Wye Grounded Wye				

Inverter Information

Manufacturer:		Model No:		
Terminal Voltage:		Single Phase:	Three Phase:	
Nameplate kVA:		No. of Units:		
Frequency:		Rated Power Factor:		
Product:				
Certification Info:				

Interconnection Transformer and Fuse Information (where applicable)

Manufacturer:		Model No:		
No. of Units:				
Nameplate kVA				
Primary Voltage:		Secondary Voltage:		
Connection: Single Phase				
Three Phase Connection:		Delta	Wye	Grounded Wye
Primary Fuse Data: Fuse Type:		Fuse Size:		Fuse Speed:

Section 5: PROTECTIVE EQUIPMENT

5.1 Interconnection Circuit Breaker Information (where applicable)

Manufacturer:	Type No:
Load Rating (Amps):	Interrupting Rate (Amps):
Trip Speed:	Cycles:
Tripping Curves:	

(Complete all applicable items, attach a separate sheet if necessary)

5.1 Provide manufacturer’s information for the protection package or devices	Provide manufacturer’s documentation for protective functions: (1) Under/Over Voltage (2) Over/Under Frequency (3) Anti-Islanding (4) Over-Current
5.2 Range of available settings for each Protective Function	Provide list of Protection Functions with ranges of protection settings for tripping or shutdown, along with time delays.
5.3 Proposed Settings (Set point and times)	Provide list of Protection Functions with settings for tripping or shutdown, along with time delays.

Section 6: DOCUMENTATION REQUIRED – Three copies of each required.

(Information below to be submitted for all projects. All diagrams are to be neatly drawn- 11”x 17” size preferred. Free hand drawn and illegible diagrams will not be accepted by BELCO).

6.1 Electrical One-Line Diagram

A single-line drawing showing the electrical relationship and descriptions of the significant electrical components such as the generator, inverters, cables and wiring switches, meters, transformers, circuit breakers, with operating voltages and ratings.

6.2 Site Plan

A site plan showing the physical arrangement of the major equipment, including generating equipment, transformers, switches, control panels, the Customer’s existing metered services and the Interconnection with BELCO’s Distribution System.

6.3 Protective Device Data

For all protective devices used to protect and control the Interconnection, please provide proposed protective device settings, circuit breaker and fuse data and coordination curves, and a description of how the protection scheme is intended to function.