

INTERCONNECTION AGREEMENT

BETWEEN

MANSFIELD MUNICIPAL ELECTRIC DEPARTMENT

AND

[REDACTED]

This **INTERCONNECTION AGREEMENT** (“Agreement”) is made and entered into this [REDACTED] (“Effective Date”), by Mansfield Municipal Electric Department, a Massachusetts municipal light plant operating pursuant to M.G.L. c. 164 (“MMED”) and [REDACTED] having its principal place of business at [REDACTED] (“Interconnecting Party”), each hereinafter sometimes referred to individually as “Party” or both referred to collectively as the “Parties.”

WHEREAS, MMED and Interconnecting Party wish to enter into an Agreement to document the terms under which Interconnecting Party may interconnect a Unit with MMED’s electrical system.

NOW, THEREFORE, in consideration of the premises and of the mutual agreements herein contained, the Parties covenant and agree as follows:

**ARTICLE 1
DEFINITIONS**

Any term that is capitalized herein but not defined below shall be defined in accordance with the definitions contained in the ISO-New England, Inc. Transmission, Markets and Services Tariff, as it may hereafter be amended from time to time, or a successor set of market rules taking effect within the term of this Agreement (“ISO-NE Rules”).

Acceptance Tests – This term has the meaning set forth in Section 4.1.1.

Affected Party – This term has the meaning set forth in Section 9.4.2.

Affected System – An electric system other than the MMED Electrical System that may be affected by the proposed interconnection.

Agreement – This term shall have the meaning set forth in the introductory paragraph hereof.

Applicable Laws and Regulations – All constitutional provisions, laws, statutes, rules, regulations, ordinances, treaties, orders, decrees, judgments, decisions, certificates, holdings, injunctions, registrations, licenses, franchises, permits, authorizations, guidelines, Governmental

Approvals, consents or requirements of any Governmental Authority having jurisdiction over such Party or its property, enforceable at law or in equity, including the interpretation and administration thereof by such Governmental Authority.

Bankrupt - A Party or other entity (as applicable): (a) is dissolved (other than pursuant to a consolidation, amalgamation or merger); (b) becomes insolvent or is unable to pay its debts or fails (or admits in writing its inability) generally to pay its debts as they become due; (c) makes a general assignment, arrangement or composition with or for the benefit of its creditors; (d) has instituted against it a proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditor's rights, or a petition is presented for its winding-up, reorganization or liquidation, which proceeding or petition is not dismissed, stayed or vacated within twenty (20) Business Days thereafter; (e) commences a voluntary proceeding seeking a judgment of insolvency or bankruptcy or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights; (f) seeks or consents to the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official for it or for all or substantially all of its assets; (g) has a secured party take possession of all or substantially all of its assets, or has a distress, execution, attachment, sequestration or other legal process levied, enforced or sued on or against all or substantially all of its assets; (h) causes or is subject to any event with respect to it, which, under the applicable laws of any jurisdiction, has an analogous effect to any of the events specified in clauses (a) to (g) inclusive; or (i) takes any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the foregoing acts.

Business Day – Any day except a Saturday, Sunday, or a Federal Reserve Bank holiday, a holiday recognized by the Commonwealth of Massachusetts or a holiday as defined by the North American Reliability Corporation. A Business Day shall open at 8:00 a.m. and close at 4:00 p.m. local time for the relevant Party's principal place of business. The relevant Party, in each instance, shall be the Party from whom the notice, payment or delivery is being sent.

Commercially Reasonable Efforts - A level of effort which in the exercise of prudent judgment in the light of facts or circumstances known, or which should reasonably be known, at the time a decision is made, can be expected by a reasonable person to accomplish the desired result in a manner consistent with Good Industry Practice and which takes the performing Party's interests into consideration.

Construction Plan – This term shall have the meaning set forth in Section 3.2.

Control - The possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of Interconnecting Party, whether through the ownership of voting securities, by contract or otherwise.

Delivery Point – The "Delivery Point" as that term is defined in the Power Purchase Agreement.

Effective Date – This term shall have the meaning set forth in the introductory paragraph.

Electrical System Upgrades – The additions, modifications, and upgrades to the MMED Electrical System or an Affected System at or beyond the Point of Interconnection to facilitate interconnection of the Unit. Electrical System Upgrades do not include Interconnection Facilities.

Emergency Condition – A condition or situation: (a) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (b) that, in the case of MMED, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the MMED Electrical System, MMED’s Interconnection Facilities or the electrical systems of others to which the MMED Electrical System is directly connected; or (c) that, in the case of Interconnecting Party, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Unit or Interconnecting Party’s Interconnection Facilities.

Event of Default – This term shall have the meaning set forth in Section 9.5.1.

Forced Outage – Any outage not planned in advance arising from any material malfunction in the operation of the Unit or any other event resulting in a material interruption in the delivery of energy to the Delivery Point.

Force Majeure - An unusual, unexpected and significant event: (a) that was not within the control of the Party claiming its occurrence; (b) that could not have been prevented or avoided by such Party through the exercise of reasonable diligence; and (c) that prohibits or prevents such Party from performing its obligations under this Agreement. Under no circumstances shall Force Majeure include (i) any occurrence or event that merely increases the costs or causes an economic hardship to a Party or (ii) any occurrence or event that was caused, in whole or in material part, by the Party claiming the Force Majeure. In addition, a delay or inability to perform attributable to a Party’s lack of preparation, a Party’s failure to timely take the actions necessary to obtain and maintain all necessary permits, a failure to satisfy contractual conditions or commitments that was not caused by a Force Majeure, or lack of or deficiency in funding or other resources shall each not constitute a Force Majeure.

Good Industry Practice – The practices, methods and acts that, with respect to Interconnecting Party, include but are not limited to the practices, methods and acts engaged in or approved by a significant portion of the electric generation industry in the operation and maintenance of generating equipment similar in size and technology to the Unit and, with respect to MMED, include but are not limited to the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry in the operation and maintenance of transmission and distribution systems similar in size and technology to MMED’s Electrical System, at a particular time, in the exercise of reasonable judgment in light of the facts known or that should have been known at the time a decision was made, would have been expected to accomplish the desired result in a manner consistent with law, regulation, reliability, safety, environmental protection, economy and expedition. Good Industry Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be

acceptable practices, methods, or acts generally accepted in the region.

Governmental Approval - Any approval, consent, permit, certificate, resolution, concession, license, or authorization issued by or on behalf of any applicable Governmental Authority with jurisdiction over a Party.

Governmental Authority – Any federal, state, local, regional, county, town, city or municipal government, or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, agency, bureau or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power.

MMED – This term has the meaning set forth in the introductory paragraph.

MMED Electrical System – The facilities owned, controlled or operated by MMED which include all facilities and equipment used to transmit electricity to ultimate usage points such as homes and businesses directly from nearby generators or from/to interchanges with higher voltage transmission networks which transport bulk power over longer distances.

Indemnified Party – This term has the meaning set forth in Section 9.3.2.

Indemnifying Party – This term has the meaning set forth in Section 9.3.2.

Industry Standards – This term has the meaning set forth in Section 2.3.3.

Interconnecting Party – This term has the meaning set forth in the introductory paragraph.

Interconnection Facilities – MMED’s Interconnection Facilities and Interconnecting Party’s Interconnection Facilities, as described in Appendix 1. Collectively, Interconnection Facilities include all facilities and equipment between the Unit and the Point of Interconnection, including any Upgrades that are necessary to physically and electrically interconnect the Unit to the MMED Electrical System or ISO-NE’s transmission facilities, as applicable. Interconnection Facilities are sole use facilities and shall not include Upgrades.

Islanding - Shall mean a situation where electrical power remains in a portion of an electrical power system when the MMED Electric System has ceased providing power for whatever reason (emergency conditions, maintenance, etc.) Islanding may be intentional, such as when certain segregated loads in the Interconnecting Party’s premises are provided power by the Unit after being isolated from the MMED Electric System after a power failure.

ISO-NE – ISO – New England.

Moody’s - Moody’s Investor Services, Inc., its successors and/or assigns.

Network Upgrades – Additions, modifications, and upgrades to ISO-NE’s transmission system required at or beyond the point at which the Unit interconnects with ISO-NE’s transmission system to accommodate the interconnection of the Unit. Network Upgrades do not include Electrical System Upgrades.

Operating Requirements – Any operating and technical requirements that may be applicable to the Unit and/or the Interconnection that are imposed or recommended in accordance with Good Industry Practice from time to time by the Regional Transmission Organization, the Independent System Operator (i.e., ISO-NE), under Applicable Laws and Regulations, pursuant to manufacturer’s recommended maintenance schedules and/or MMED’s requirements under this Agreement, the Power Purchase Agreement and/or other requirements published or communicated to Interconnecting Party from time to time, including those set forth on Appendix 3.

Party or Parties – This term has the meaning set forth in the introductory paragraph.

Person – An individual, partnership, corporation, limited liability company, business trust, joint stock company, trust, unincorporated association, joint venture, firm, or other entity, or a Governmental Authority.

Point of Interconnection – The point where the Interconnection Facilities connect with the MMED Electrical System as identified in Appendices 1 and 2.

Power Purchase Agreement – That certain Power Purchase Agreement for Unit Contingent Contract Products between MMED and Interconnecting Party, dated [REDACTED].

S&P - Standard & Poor’s Rating Group and its successors and/or assigns.

Unit – Interconnecting Party’s solar photovoltaic generating facility(s) with total alternating current capacity of approximately [REDACTED] DC, 1.0 power factor, 480 volts, 60 Hertz, three-phase with protective relays and associated equipment as described in further detail in Appendix A to the Power Purchase Agreement. The term “Unit” shall not include Interconnecting Party’s Interconnection Facilities.

Upgrades – The required additions and modifications to the MMED Electrical System or an Affected System’s electric system at or beyond the Point of Interconnection, which may be Network Upgrades or Electrical System Upgrades.

ARTICLE 2. SCOPE AND LIMITATIONS OF AGREEMENT

2.1 Purpose. This Agreement governs the terms and conditions under which the Unit will interconnect with, and operate in parallel with, the MMED Electrical System.

- 2.2 No Agreement to Purchase or Deliver Power. This Agreement does not constitute an agreement to purchase power or deliver power. The purchase or delivery of power and other services that Interconnecting Party may require will be covered under separate agreements, including the Power Purchase Agreement.
- 2.3 Responsibilities of the Parties.
- 2.3.1 Interconnecting Party shall construct, interconnect, operate and maintain the Unit and construct, operate, and maintain Interconnecting Party's Interconnection Facilities and Interconnecting Party's Upgrades in accordance with the Operating Requirements, this Agreement and Good Industry Practice.
- 2.3.2 MMED shall construct, operate, and maintain MMED's Interconnection Facilities and MMED's Upgrades in accordance with the Operating Requirements, this Agreement and Good Industry Practice. Once Interconnecting Party pays MMED the full amount of all costs owed under this Interconnection Agreement then Interconnecting Party may request that MMED schedule and commence construction of MMED's Interconnection Facilities and MMED's Upgrades and MMED shall do so within a reasonable period of such request. Such construction shall be performed in accordance with the schedule provided by MMED to Interconnecting Party as part of MMED's interconnection review process
- 2.3.3 Interconnecting Party agrees to construct the Unit and Interconnecting Party's Interconnection Facilities in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory and otherwise in accordance with Good Industry Practice (collectively, the "Industry Standards") and the Operating Requirements, including MMED's written standards provided to Interconnecting Party in response to the Interconnecting Party's initial submission of an application for interconnection. Interconnecting Party agrees to design, install, maintain, and operate the Unit so that it does not adversely affect or impair the MMED Electrical System or any Affected Systems.
- 2.3.4 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 Appendices 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 Interconnection. Interconnecting Party shall provide Interconnection Facilities that adequately protect the MMED Electrical System, personnel, and other Persons from damage and injury, as reasonably determined by MMED. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities and the Upgrades shall be delineated in the Appendices to this Agreement.

- 2.3.5 MMED shall coordinate with all Affected Systems to support the Interconnection.
- 2.4 Parallel Operation Obligations. Once Interconnecting Party has satisfied the Acceptance Tests and MMED has authorized the Unit to commence parallel operation, Interconnecting Party shall abide by all rules and procedures pertaining to the parallel operation of the Unit, including, but not limited to: (a) the Operating Requirements; and (b) Industry Standards.
- 2.5 Metering. Interconnecting Party shall be responsible for all costs associated with the metering and data acquisition equipment specified in Appendices 1 and 5 of this Agreement (“Billing Meter”). The Billing Meter shall be revenue-quality, shall be: (a) capable of registering and recording instantaneous and time-differentiated energy; and (b) be located on the secondary side before the step-up transformer. The Billing Meter readings shall be adjusted to reflect the delivery of energy to the Delivery Point net of any losses incurred between the metering point and the Delivery Point, and such adjustment shall be subject to MMED’s written approval, which approval shall not be unreasonably withheld, conditioned or delayed. The Interconnecting Party shall be responsible for the installation, operation, maintenance, testing, repair, replacement and cost of such equipment. The Billing Meter shall be used to bill MMED under the Power Purchase Agreement. In addition, MMED shall install a dual channel meter on the primary side as specified in Appendices 1 and 5, at Interconnecting Party’s expense (“MMED Meter”). The MMED Meter shall be used to bill Interconnecting Party for station service and shall be capable of measuring the amount of energy delivered to MMED. MMED and Interconnecting Party may install additional metering in their respective discretion and at their respective own cost on their respective sides of the Point of Interconnection. All metering and data acquisition equipment, as applicable, shall conform to Industry Standards and the Operating Requirements, including, but not limited to ANSI C12 (latest edition), except that the Billing Meter shall not be telemetering compliant. Interconnecting Customer understands and agrees that this Agreement does not allow or otherwise provide for any type of net metering arrangement. Interconnecting Customer shall be responsible to pay MMED for all charges incurred by it under MMED’s applicable service tariff without offset, netting or credit for energy produced by the Unit.
- 2.6 Reactive Power. Interconnecting Party shall design its Unit to maintain a composite power delivery at continuous rated power output at the Point of Interconnection at a power factor of 1.0, unless MMED has established different requirements, in accordance with Good Industry Practice, that apply to all similarly situated generators on a comparable basis.
- 2.7 Islanding. Interconnecting Customer shall use best efforts to avoid unintentional Islanding at all times.
- 2.8 No Sales To Customers in MMED’s Service Territory. Under no circumstances shall

Interconnecting Party use any of the facilities required or permitted to be constructed pursuant to this Agreement to make sales of energy to any Person located in MMED's service territory. The provisions of this Section 2.8 shall survive termination or expiration of this Agreement.

**ARTICLE 3.
PLANS AND SPECIFICATIONS**

- 3.1 Provision Of Plans And Specifications. All available data, plans and specifications applicable to the Interconnection Facilities and Upgrades in the possession of each Party shall be made available to the other party for inspection. Upon receipt of written notice each Party shall use Commercially Reasonable Efforts to make available to the other, copies of interim plans, specifications, and shop drawings generated during design and construction of the Interconnection Facilities and Upgrades specified herein for coordination of technical and physical requirements required by MMED. Prior to any installation by Interconnecting Party, the plans and specifications of Interconnecting Party delineating changes, modifications and additions to the Interconnection Facilities from that previously specified in this Agreement shall be submitted to MMED for its acceptance. Such acceptance shall not be unreasonably withheld. Interconnecting Party shall be required to reimburse MMED for the cost of a system impact study conducted in connection with the Interconnection.
- 3.2 Construction Plan. Interconnecting Party shall provide MMED with a construction plan for designing, procuring, installing, constructing and connecting Interconnecting Party's Interconnection Facilities ("Construction Plan"). MMED shall have the right to review and approve the Construction Plan, which approval shall not be unreasonably withheld, conditioned or delayed. MMED shall approve, or reject, the Construction Plan within ten (10) Business Days after receipt by MMED of the final and complete Construction Plan by sending written notice of approval or rejection to the Interconnecting Party. . Once MMED approves the Construction Plan, Interconnecting Party shall design, construct or cause to be constructed, the Interconnection Facilities in accordance with the Operating Requirements, Good Industry Practice and the Construction Plan. Interconnecting Party shall have the duty to inform MMED of any proposed material deviation from the terms of the Construction Plan. Any such proposed material deviation shall be adopted only upon written consent of MMED, which shall not be unreasonably withheld or delayed.
- 3.3 As Built Plans. Upon the completion of construction of the Interconnecting Party's Interconnection Facilities, Interconnecting Party shall prepare an "as built" plan showing the location of the Interconnecting Party's Interconnection Facilities that have actually been constructed and copies of such "as built" plan shall be furnished to MMED. Such "as built" plans shall be submitted to MMED both in hard copy and electronic format that is acceptable to MMED. Interconnecting Party shall also provide MMED with a one-line diagram depicting the Unit, Interconnection Facilities and metering equipment which shall be included in this Agreement as Appendix 2.

- 3.4 Changes in Unit. Except for normal and routine replacement of modules, inverters, conduit, switches and wiring incident to operation and maintenance of the Unit, Interconnecting Party agrees that it will not make any alterations, improvements, additions or changes (“Alterations”) to the Unit without in each instance obtaining the MMED’s prior written consent to such proposed Alterations, which consent shall not be unreasonably withheld, conditioned, or delayed.
- 3.5 Procedure for Approval of Alterations. Prior to commencing any Alterations, Interconnecting Party shall submit, or shall cause to be submitted, to MMED for MMED’s written approval complete drawings, plans and specifications for the proposed Alterations. Such drawings, plans and specifications shall: (i) be fully detailed; (ii) show complete dimensions; (iii) comply with all Operating Requirements; and (iv) comply with all Applicable Laws and Requirements. Any review or approval by MMED of such Alterations is without any representation or warranty whatsoever to Interconnecting Party with respect to the adequacy, correctness or efficiency of such drawings, plans and specifications, its compliance with Applicable Law and Regulations, Operating Requirements, or otherwise. After submission to MMED of such drawings, plans and specifications, Interconnecting Party shall not commence, or cause to be commenced, any Alterations until such Alterations shall have been approved in writing by the MMED. MMED shall approve, or reject, such drawings, plans and specifications within sixty (60) days after receipt by MMED of final and complete drawings, plans and specifications by sending written notice of approval or rejection to the Interconnecting Party. In the event MMED rejects such drawings, plans and specifications, it shall set forth in reasonable detail the basis for such rejection in its written notice required pursuant to the preceding sentence. Upon receipt of such notice of rejection, the Interconnecting Party shall work in good faith with MMED to amend and restate such drawings, plans and specifications and shall resubmit such materials to MMED for approval as promptly as possible. Before commencing Alterations, Interconnecting Party shall obtain, or cause to be obtained at Interconnecting Party’s expense and provide MMED with copies of, all permits, approvals and certificates required under all Applicable Law and Regulations to commence and perform such Alterations. Following compliance by Interconnecting Party with its foregoing obligations under this Section 3.5, Interconnecting Party shall timely commence, or cause to be commenced, such Alterations in order to complete same within a reasonable period of time. All Alterations shall be diligently pursued and shall be performed in a good and workmanlike manner and in accordance with Good Industry Practice. After completion of the Alterations, Interconnecting Party shall provide, or cause to be provided, MMED with copies of all final approvals of the Alterations required to comply with all Applicable Law and Regulations.
- 3.6 Authority of MMED If Alterations Are Not Approved. If any Alteration is made to the Unit without MMED’s prior written approval, MMED may immediately disconnect the Unit until MMED has reviewed and approved such changes. If MMED requires any changes to the Alterations made by Interconnecting Party without MMED’s prior approval, then MMED has the right to keep the Unit disconnected until MMED’s changes are made.

- 3.7 User Manuals. Upon the completion of construction of the Interconnecting Party's Interconnection Facilities and the Unit, Interconnecting Customer shall provide a copy of each equipment user manual for each device to MMED.

ARTICLE 4.
INSPECTION, TESTING, AUTHORIZATION, AND RIGHT OF ACCESS

4.1 Equipment Testing and Inspection

4.1.1 Interconnecting Party shall conduct the Acceptance Test set forth on Appendix 5 with respect to the Unit and Interconnecting Party's Interconnection Facilities prior to interconnection. Interconnecting Party shall notify MMED of the date for the Acceptance Test no fewer than five (5) Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. MMED may, at its own expense, send qualified personnel who are either employed by MMED or have been hired as a consultant by MMED to the Unit site to inspect the interconnection and observe the testing. Interconnecting Party shall provide MMED a written test report when such testing and inspection is completed. In the event that any Acceptance Test is not successfully completed, Interconnecting Party will take such actions as are necessary in order to successfully complete such Acceptance Test and notify MMED of its successful completion.

4.1.2 MMED shall provide Interconnecting Party written acknowledgment that it has received Interconnecting Party's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by MMED of the safety, durability, suitability, or reliability of the Unit or any associated control, protective, and safety devices owned or controlled by Interconnecting Party or the quality of power produced by the Unit.

4.2 Authorization Required Prior to Parallel Operation

4.2.1 MMED shall use Commercially Reasonable Efforts to list applicable parallel operation requirements in Appendix 3 of this Agreement. Additionally, MMED shall notify Interconnecting Party of any changes to these requirements as soon as they are known.

4.2.2 Interconnecting Party shall not operate the Unit in parallel with the MMED Electrical System without prior written authorization of MMED. MMED will review the Interconnecting Party's proposed parallel operation of the Unit and

provide or deny its authorization within twenty (20) Business Days after MMED receives notification that Interconnecting Party has completed the testing and inspections specified in Section 4.1 and complied with all applicable parallel operation requirements specified in Section 4.2.1. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

4.3 Right of Access

4.3.1 Upon reasonable notice, MMED may send a qualified person to the premises of the Unit at or immediately before the time the Unit first produces energy to inspect the Interconnection, and observe the commissioning of the Unit (including any required testing), startup, and operation for a period of up to five (5) Business Days after initial start-up of the Unit. In addition, Interconnecting Party shall notify MMED at least five (5) Business Days prior to conducting any on-site verification testing of the Unit.

4.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, MMED shall have access to the Unit's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

4.3.3 At all times, Interconnecting Party shall provide the following access services to MMED at Interconnecting Party's expense: (i) vehicular access, including snow plowing, to the Unit and (ii) all keys and security codes necessary to access the Delivery Point, the Unit substation and metering installations.

4.4 Costs. Except as expressly provided in Section 4.3.3, each Party shall be responsible for its own costs associated with compliance with this Article 4.

ARTICLE 5. TERM, TERMINATION, AND DISCONNECTION

5.1 Term of Agreement. This Agreement shall become effective on the Effective Date and shall remain in effect for the duration of the Term of Service (as defined under the Power Purchase Agreement) unless such term is extended as mutually agreed by the Parties, or unless terminated earlier by MMED as a result of an Event of Default under Article 9.5. In the event that this Agreement remains in effect after the termination or expiration of the Power Purchase Agreement (for any reason), then, as a condition of Interconnecting Party's continued operation of the Unit, Interconnecting Party shall be required to apply to MMED for transmission service under MMED's then-current transmission tariff and

pay MMED's then-applicable wheeling rates in order to transmit energy generated by the Unit across MMED's distribution system.

5.2 Termination.

5.2.1 MMED may terminate this Agreement after Event of Default pursuant to Article 9.5.

5.2.2 Upon termination of this Agreement, the Unit will be disconnected from the MMED Electrical System, unless a superseding interconnection agreement is established. The Unit shall not be connected to the MMED Electrical System at any time after this Agreement is terminated, regardless of whether the Interconnecting Party may have rights under the Power Purchase Agreement to wheel power across the MMED Electrical System. This Agreement or a separate interconnection agreement shall be effective at all times that the Unit is connected to the MMED Electrical System. All costs required to effectuate such disconnection shall be borne by the Interconnecting Party.

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

5.2.4 This provisions of this Article 5 shall survive termination or expiration of this Agreement.

5.3 Temporary Disconnection. Temporary disconnection shall continue only for so long as reasonably necessary under Good Industry Practice. MMED shall not be liable to Interconnecting Party for any damages whatsoever related to temporary disconnections as set forth in this Section 5.3.

5.3.1 Emergency Conditions. Under Emergency Conditions, MMED may immediately suspend interconnection service and temporarily disconnect the Unit. MMED shall notify Interconnecting Party promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect Interconnecting Party's operation of the Unit. Interconnecting Party shall notify MMED promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the MMED Electrical System or any Affected Systems. 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.

5.3.2 Routine Maintenance, Construction, and Repair. MMED may interrupt interconnection service or curtail the output of the Unit and temporarily disconnect the Unit from the MMED Electrical System when necessary for routine maintenance, construction, and repairs on the MMED Electrical System.

MMED shall provide Interconnecting Party with five (5) Business Days notice prior to such interruption. MMED shall use Commercially Reasonable Efforts to coordinate such reduction or temporary disconnection with Interconnecting Party. MMED shall not be liable to Interconnecting Party for any damages whatsoever related to interruptions or curtailments as set forth in this Section 5.3.2.

- 5.3.3 Forced Outages. During any Forced Outage, MMED may suspend interconnection service to effect immediate repairs on the MMED Electrical System. MMED shall use Commercially Reasonable Efforts to provide Interconnecting Party with prior notice. If prior notice is not given, MMED shall, upon request, provide Interconnecting Party written documentation after the fact explaining the circumstances of the disconnection.
- 5.3.4 Adverse Operating Effects. MMED shall notify Interconnecting Party as soon as practicable if, based on Good Industry Practice, operation of the Unit may cause disruption or deterioration of service to other parties served from the same electric system, or if operating the Unit could cause damage to the MMED Electrical System or Affected Systems. If, after notice, Interconnecting Party fails to remedy the adverse operating effect within a reasonable time, MMED may disconnect the Unit. MMED shall provide Interconnecting Party with five Business Day notice of such disconnection, unless the provisions of Article 5.3.1 apply.
- 5.3.5 Modification of the Unit. Interconnecting Party must receive written authorization from MMED before making any change to the Unit that may have an impact on the safety or reliability of the MMED Electrical System or any other Affected Systems. Such authorization shall not be unreasonably withheld, conditioned, or delayed. Modifications shall be done in accordance with Good Industry Practice. If Interconnecting Party makes such modification without MMED's prior written authorization, MMED shall have the right to temporarily disconnect the Unit.
- 5.3.6 Reconnection. The Parties shall cooperate with each other to restore the Unit, Interconnection Facilities, and the MMED Electrical System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

ARTICLE 6.

COST RESPONSIBILITY FOR INTERCONNECTION FACILITIES AND ELECTRICAL SYSTEM UPGRADES

6.1 Interconnection Facilities

- 6.1.1 Interconnecting Party shall pay for the reasonable actual and documented cost to construct MMED's Interconnection Facilities as set forth in Appendix 1 to this

Agreement. MMED shall provide a good faith estimate, including reasonable and customary overheads, for the purchase and construction of MMED's Interconnection Facilities and provide a reasonable itemization of such costs.

6.1.2 Interconnecting Party shall be responsible for all expenses associated with owning, operating, maintaining, repairing, and replacing Interconnecting Party's Interconnection Facilities.

6.1.3 Interconnecting Party shall be responsible for all expenses reasonably incurred by MMED, including reasonable and customary overheads, associated with operating, maintaining, repairing, and replacing MMED's Interconnection Facilities. MMED's good faith estimate, including overheads, for the operation, maintenance, repair and replacement of its Interconnection Facilities is provided in Appendix 1.

6.2 Electrical System Upgrades

6.2.1 Electrical System Upgrades to the MMED Electrical System needed for operation and delivery of the output of Interconnecting Party's Unit from the Point of Interconnection are reasonably itemized in Appendix 4 of this Agreement.

6.2.2 Interconnecting Party shall pay for the actual and documented cost to construct the Electrical System Upgrades set forth in Appendix 4 of this Agreement. MMED shall provide a good faith estimate, including reasonable and customary overheads, for the purchase and construction of such Electrical System Upgrades and provide a reasonable itemization of such costs.

6.3 Use and Capacity. Electrical System Upgrades built under this Agreement shall be owned, operated, maintained, repaired and replaced by MMED, and may be used to provide service to other MMED members to the extent that such use does not affect MMED's ability to meet its obligation to Interconnecting Party under this Agreement.

ARTICLE 7. COST RESPONSIBILITY FOR NETWORK UPGRADES

If Network Upgrades or Electrical System Upgrades are required on an Affected System, then Interconnecting Party shall be responsible for the actual cost of such Upgrades.

ARTICLE 8. BILLING, PAYMENT, MILESTONES, AND FINANCIAL SECURITY

8.1 Billing and Payment Procedures and Final Accounting

8.1.1 MMED shall bill Interconnecting Party, in advance, for the expected design, engineering, construction, and procurement costs of Interconnection Facilities,

Electrical System Upgrades and Network Upgrades, as applicable, contemplated by this Agreement. Interconnecting Party shall pay the full amount due simultaneous with or prior to requesting that MMED schedule and commence construction pursuant to Section 2.3.2 and before construction is scheduled and commenced by MMED. The invoice shall provide a breakdown of the costs consistent with Good Industry Practice and the terms of this Agreement. The amount billed by MMED to Interconnecting Party shall be subject to revision if Interconnecting Party is removed from MMED's queue of projects for failure to comply the terms of the Interconnection Request filed by Interconnecting Party, which is incorporated herein and attached hereto as Appendix 6. The amount owed to MMED by Interconnecting Party in accordance with this Article 8.1 shall be paid by Interconnecting Party in accordance with this Agreement and the Interconnection Request filed by Interconnecting Party.

8.1.2 Within forty five (45) calendar days of completing the construction and installation of MMED's Interconnection Facilities and/or Upgrades described in the Appendices to this Agreement, MMED shall provide Interconnecting Party with a final accounting report, with cost breakdowns of the actual reasonable and documented costs, consistent with Good Industry Practice and this Agreement. The report will document any difference between (a) Interconnecting Party's cost responsibility for the actual cost of such Interconnection Facilities or Upgrades, and (b) Interconnecting Party's previous aggregate payments to MMED for such Interconnection Facilities or Upgrades. If Interconnecting Party's cost responsibility exceeds its previous aggregate payments, MMED shall invoice Interconnecting Party for the amount due and Interconnecting Party shall make payment to MMED within thirty (30) calendar days. If Interconnecting Party's previous aggregate payments exceed its cost responsibility under this Agreement, MMED shall refund to Interconnecting Party an amount equal to the difference within forty five (45) calendar days of the final accounting report.

8.1.3 As applicable, MMED shall bill Interconnecting Party for its share of the actual reasonable incurred and documented operation and maintenance costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. Interconnecting Party shall pay each bill within thirty (30) calendar days of receipt, or as otherwise agreed to by the Parties. Each invoice shall provide a breakdown of the costs consistent with Good Industry Practice and this Agreement.

ARTICLE 9.
ASSIGNMENT, LIABILITY, INDEMNITY, FORCE MAJEURE, CONSEQUENTIAL DAMAGES, AND DEFAULT

9.1 Assignment. This Agreement shall inure to the benefit of, and shall be binding upon, the Parties hereto and their respective successors and permitted assigns. Neither Party shall assign, in whole or in part, this Agreement without the prior written consent of the other

Party, which consent may not be unreasonably withheld, conditioned or delayed. An assignment shall include a change in Control of Interconnecting Party, which shall require MMED's consent. This Agreement may be collaterally assigned to a financing party on the same terms, and subject to the same conditions, set forth in the Power Purchase Agreement.

9.2 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, special, consequential, or punitive damages.

9.3 Indemnity

9.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement.

9.3.2 Each Party (each, an "Indemnifying Party") shall at all times indemnify, defend, and hold the other Party, its managers, employees, officers, directors, and agents (each, an "Indemnified 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) by or to third parties, arising out of or resulting from the Indemnifying Party's (including its managers, employees, officers, directors, and agents') negligent actions or omissions under this Agreement, except that a Party shall not be indemnified for its own of gross negligence or intentional wrongdoing.

9.3.3 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 person 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.

9.3.4 If an Indemnifying Party is obligated to indemnify and hold any Indemnified Party harmless under this article, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual loss, net of any insurance or other recovery.

9.3.5 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.

9.4 Force Majeure. If Force Majeure prevents a Party from fulfilling any obligations under this Agreement, the Party affected by Force Majeure (“Affected Party”) shall promptly notify the other Party, either in writing or via the telephone, of the existence of such Force Majeure. The notification must specify in reasonable detail the circumstances of the Force Majeure, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure until such Force Majeure ends. The Affected Party will 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 cannot be mitigated by the use of Commercially Reasonable Efforts. The Affected Party will use Commercially Reasonable Efforts to resume its performance as soon as possible. If a Party should be delayed in, or prevented from performing or carrying out any of the agreements, covenants and obligations under this Agreement by reason of Force Majeure for a consecutive period of (i) 120 calendar days or longer or (ii) a total of 240 calendar days then the Party not impacted by Force Majeure may terminate this Agreement and neither Party shall have any liability to the other as a result of such termination, provided, however, that Interconnecting Party shall pay MMED for costs incurred prior to such termination.

9.5 Default.

9.5.1 Events of Default. For purposes of this Agreement, each of the following shall constitute an event of default (“Event of Default”) with respect to Interconnecting Party:

- (a) Failure by the Interconnecting Party to make, when due, any payment required under this Agreement if such failure is not remedied within five (5) Business Days after written notice of such failure is given by MMED.
- (b) The Interconnecting Party becomes Bankrupt.
- (c) Failure by the Interconnecting Party to perform any material covenant set forth in this Agreement and such failure is not excused by Force Majeure or such failure continues uncured for more than thirty (30) calendar days after written notice to the Interconnecting Party specifying the nature of such failure; provided, however, that in the event of an Event of Default that is not reasonably capable of cure within thirty (30) calendar days, the Interconnecting Party commences to cure such Event of Default within thirty (30) calendar days and uses Commercially Reasonable Efforts to cure such Event of Default; provided, however, that such cure period shall not exceed ninety (90) calendar days.
- (d) Failure of Interconnecting Party to maintain or cause to be maintained insurance for the Unit as set forth in Article 10 and such failure is not cured within five (5) Business Days after MMED notifies Interconnecting Party of such failure.

(e) Interconnecting Party commits a default under the Purchase Power Agreement, and MMED terminates such Agreement.

9.5.2 If an Event of Default is not cured as provided in this Article 9, or if an Event of Default is not capable of being cured within the period provided for herein, MMED 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 MMED terminates this Agreement, to recover from the Interconnecting Party all amounts due hereunder, plus all other damages and remedies to which MMED is entitled at law or in equity except as limited by Section 9.2. The provisions of this Article 9 will survive termination of this Agreement.

ARTICLE 10. INSURANCE

10.1 General Liability.

10.1.1 In connection with Interconnecting Party's performance of its duties and obligations hereunder, Interconnecting Party shall maintain, during the term of the Agreement, commercial general liability insurance with a per occurrence limit of not less than five million dollars (\$5,000,000) for each occurrence and in the aggregate, automobile liability insurance in the amount of one million dollars (\$1,000,000), worker's compensation insurance as required by Applicable Laws and Regulations, and property insurance on the Unit for the entire term of this Agreement in an amount not less than the full replacement cost of the Unit without deduction for depreciation, from companies authorized to do business in the Commonwealth of Massachusetts.

10.1.2 Any combination of General Liability and Umbrella/Excess Liability policy limits can be used to satisfy the limit requirements stated above.

10.1.3 The insurance required to be purchased in this Article 10 may be purchased for the direct benefit of MMED and shall respond to third party claims asserted against MMED (hereinafter known as "Owners Protective Liability"). Should this option be chosen, the requirement of Section 10.1.4(a) will not apply but the Owners Protective Liability policy will be purchased for the direct benefit of MMED and MMED will be designated as the primary and "Named Insured" under the policy.

10.1.4 All required insurance shall be carried by reputable insurers qualified to underwrite insurance in Massachusetts having a Best Rating of "A-". In addition, all insurance shall, (a) include MMED as an additional insured;

(b) contain a severability of interest clause or cross-liability clause; and (c) provide that MMED shall not incur liability to the insurance carrier for payment of premium for such insurance. In addition, Interconnecting Party shall either: (i) cause all policies of insurance obtained under this Article to require that the insurance carrier provide thirty (30) calendar days' prior written notice to MMED before insurance provided under such policies may be reduced or cancelled or (ii) within two (2) Business Days of receipt by Interconnecting Party from its insurance carrier, transmit to MMED by facsimile a copy of all changes in policy conditions.

- 10.1.5 Evidence of the insurance required shall state that coverage provided is primary and is not in excess to or contributing with any insurance or self-insurance maintained by Interconnecting Party. Interconnecting Party is responsible for providing MMED with evidence of insurance on an annual basis.

Prior to MMED commencing work on the Electrical System Upgrades and Network Upgrades, as applicable, and annually thereafter, Interconnecting Party shall have its insurer furnish to MMED certificates of insurance evidencing the insurance coverage required above. Interconnecting Party shall notify and send to MMED a certificate of insurance for any policy written on a "claims-made" basis. Interconnecting Party will maintain extended reporting coverage for three years on all policies written on a "claims-made" basis. In the event that an Owners Protective Liability policy is provided, the original policy shall be provided to MMED.

- 10.1.6 All insurance certificates, statements of self insurance, endorsements, cancellations, terminations, alterations, and material changes of such insurance shall be issued and submitted to the following:

c/o Joseph M. Sollecito, Director
Mansfield Municipal Electric Department
125 High Street, Unit #2
Mansfield, MA 02048

- 10.2 MMED agrees to maintain general liability insurance consistent with MMED's commercial practice.
- 10.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

ARTICLE 11. CONFIDENTIALITY

The Parties consider this Agreement to be sensitive commercial information. Accordingly, the Parties shall not disclose this Agreement to any third party unless and to the extent required to make such disclosure by action of a court or other government authority or applicable law. Each Party shall only disclose this Agreement and other confidential information received from the other Party to (a) those of its employees, consultants, authorized representatives, and attorneys having a “need to know” in order to carry out their functions in connection with the Agreement and (b) to prospective lenders and investors that agree to maintain the confidentiality of the information disclosed. Interconnecting Party acknowledges that MMED is a public entity and is required to comply with the provisions of the Massachusetts Open Meeting and Public Records Laws regarding disclosure of the pricing and other terms of this Agreement.

ARTICLE 12. DISPUTE RESOLUTION

For any disputes between the Parties under this Agreement the Parties shall be able to pursue all available legal remedies and/or equitable remedies.

ARTICLE 13. MISCELLANEOUS

13.1 Governing Law and Waiver of Jury Trial. All disputes arising out of the performance or non-performance under this Agreement shall be construed in accordance with the laws of the Commonwealth of Massachusetts, notwithstanding any laws requiring the application of the laws of another state. The Parties agree that sole and exclusive jurisdiction and venue for any action or litigation arising from or relating to this Agreement shall be an appropriate federal court located in the Commonwealth of Massachusetts, provided that such court has jurisdiction. Absent such federal jurisdiction, the Parties agree that sole and exclusive jurisdiction and venue for any action or litigation arising from or relating to this Agreement shall be an appropriate state court located in the Commonwealth of Massachusetts. Each Party agrees to waive all rights to a trial by jury in the event of litigation to resolve any disputes hereunder.

13.2 Amendment. The Parties may amend this Agreement by a written instrument duly executed by both Parties.

13.3 No Third-Party Beneficiaries. This Agreement is intended solely for the benefit of the Parties hereto, and nothing therein will be construed to create any duty to, or standard of care with reference to, or any liability to, any person not a Party hereto.

13.4 Waiver

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

13.4.2 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 Interconnecting Party shall not constitute a waiver of any legal rights which Interconnecting Party may have to obtain an interconnection from MMED. Any waiver of this Agreement shall, if requested, be provided in writing.

13.5 Entire Agreement. This Agreement, including all Appendices, 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 which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

13.6 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.

13.7 Relationship of the Parties. 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.

13.8 Notices. Any notice, demand, request, consent, approval, confirmation, communication, or statement which is required or permitted under this Agreement, shall be in writing, except as otherwise provided, and shall be given or delivered by Federal Express or comparable overnight delivery service, postage prepaid, addressed to the Party at the address set forth below. Notwithstanding the foregoing, bills, invoices, credit memos, reports and other communications in the ordinary performance of the respective duties and obligations of the parties hereunder, may be sent by e-mail, telefax, first class mail or any other method, whether herein specifically provided or as the parties may hereafter adopt. Changes in such address shall be made by notice similarly given.

Notices to MMED shall be sent to:

Joseph M. Sollecito, Director
Mansfield Municipal Electric Department
125 High Street, Unit #2
Mansfield, MA 02048
Phone: 508-261-7361
Fax: 508-261-7391

With copies to:

Christopher J. Pollart, Esq.
Rubin and Rudman, LLP
53 State Street, 15th Floor
Boston, Massachusetts 02109
Phone: 617-330-7003
Fax: 617-330-7550

Notices to Interconnecting Party shall be sent to:



Notices shall be deemed to have been received, and shall be effective, upon receipt. Notices of changes of address by either Party shall be made in writing no later than ten (10) calendar days prior to the effective date of such change; provided, however, that any failure hereof shall not be deemed an event of default or other grounds for termination of the Agreement.

13.9 Security Arrangements. Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. Interconnecting Party shall comply with the recommendations offered by reliability entities having jurisdiction and, eventually, best practice recommendations from the electric reliability authority pertaining to the Unit.

13.10 Environmental Releases. Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Unit or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (a) provide the notice as soon as practicable, provided 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 (b) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

{Remainder of Page Left Blank. Signatures Follow.}

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

MANSFIELD MUNICIPAL ELECTRIC DEPARTMENT

Name: _____

Title: _____



Name: _____

Title: _____

APPENDIX 1

DESCRIPTION AND COSTS OF THE UNIT, INTERCONNECTION FACILITIES AND METERING EQUIPMENT

Equipment, including the Unit, Interconnection Facilities, and metering equipment shall be itemized below and identified as being owned by Interconnecting Party or MMED. A good faith estimate, including reasonable and customary overheads, of the cost of MMED's Interconnection Facilities and metering equipment is set forth on Appendix 4 hereto. MMED will provide a good faith estimate of the annual operation and maintenance expenses associated with MMED's Interconnection Facilities and metering equipment.

Interconnecting Party's Interconnection Facilities

Interconnecting Party shall construct and install the following: [NOTE: To be determined]

MMED's Interconnection Facilities

MMED shall construct and install the following: [NOTE: To be determined]

APPENDIX 2

**ONE-LINE DIAGRAM DEPICTING THE UNIT, INTERCONNECTION
FACILITIES, METERING EQUIPMENT, AND UPGRADES**

SEE NEXT PAGE.

APPENDIX 3

ADDITIONAL OPERATING REQUIREMENTS FOR THE MMED ELECTRICAL SYSTEM AND AFFECTED SYSTEMS NEEDED TO SUPPORT INTERCONNECTING PARTY'S NEEDS

The Unit must meet performance requirements set forth in relevant sections of IEEE Standard 1547-2003. The following italicized text is excerpted from IEEE Standard 1547-2003 and applies to Section 4.2.3 only. The numbering is also from IEEE Standard 1547-2003 and therefore is not in sequence with the numbering set forth in this Agreement.

4.1.1 Voltage regulation

The DR [distributed resource] shall not actively regulate the voltage at the PCC [unless required by NEPOOL's operating procedures]. The DR shall not cause the Area EPS service voltage at other Local EPSs to go outside the requirements of ANSI C84. 1 -1995, Range A.

4.1.2 Integration with Area EPS grounding

The grounding scheme of the DR interconnection shall not cause overvoltages that exceed the rating of the equipment connected to the Area EPS and shall not disrupt the coordination of the ground fault protection on the Area EPS.

4.1.3 Synchronization

The DR unit shall parallel with the Area EPS without causing a voltage fluctuation at the PCC greater than $\pm 5\%$ of the prevailing voltage level of the Area EPS at the PCC, and meet the flicker requirements of 4.3 .2.

4.1.8.2 Surge withstand performance

The interconnection system shall have the capability to withstand voltage and current surges in accordance with the environments defined in IEEE Std C62. 41.2-2002 or IEEE C3 7.90.1-2002 as applicable.

4.2 Response to Area EPS abnormal conditions¹⁰

Abnormal conditions can arise on the Area EPS that require a response from the connected DR. This response contributes to the safety of utility maintenance personnel and the general public, as well as the avoidance of damage to connected equipment, including the DR. All voltage and frequency parameters specified in these subclauses shall be met at the PCC, unless otherwise stated.

4.2.1 Area EPS faults

The DR unit shall cease to energize the Area EPS for faults on the Area EPS

¹⁰ The isolation of a portion of the Area EPS, presenting the potential for an unintended DR island, is a special concern and is addressed in 4.4.1. Setting adjustments may only be made as approved by the authority who has jurisdiction over the DR interconnection.

circuit to which it is connected.

4.2.2 Area EPS reclosing coordination

The DR shall cease to energize the Area EPS circuit to which it is connected prior to reclosure by the Area EPS.

4.2.3 Voltage

The protection functions of the interconnection system shall detect the effective (rms) or fundamental frequency value of each phase-to-phase voltage, except where the transformer connecting the Local EPS to the Area EPS is a grounded wye-wye configuration, or single phase installation, the phase-to-neutral voltage shall be detected. When any voltage is in a range given in Table 1, the DR shall cease to energize the Area EPS within the clearing time as indicated. Clearing time is the time between the start of the abnormal condition and the DR ceasing to energize the Area EPS. For DR less than or equal to 30 kW in peak capacity, the voltage set points and clearing times shall be either fixed or field adjustable. For DR greater than 30 kW the voltage set points shall be field adjustable.

The voltages shall be detected at either the PCC or the point of DR connection when any of the following conditions exist:

- (a) The aggregate capacity of DR systems connected to a single PCC is less than or equal to 30 kW,
- (b) the interconnection equipment is certified to pass a non-islanding test for the system to which it is to be connected,
- (c) the aggregate DR capacity is less than 50% of the total Local EPS minimum annual integrated electrical demand for a 15 minute time period, and export of real or reactive power by the DR to the Area EPS is not permitted.

Table 1 – Interconnection system response to abnormal voltages	
<i>Voltage range(% of base voltage^a)</i>	<i>Clearing time (s)^b</i>
<i>V < 50</i>	<i>0.16</i>
<i>50 ~ V < 88</i>	<i>2.00</i>
<i>110 < V < 120</i>	<i>1.00</i>
<i>V ~ 120</i>	<i>0.16</i>
<i>^a Base are</i>	
<i>Table 1.</i>	
<i>^bDR ~ 30 kW, maximum clearing times; DR > 30 kW, default clearing times</i>	

4.2.4 Frequency

When the system frequency is in a range given in Table 2, the DR shall cease to energize the Area EPS within the clearing time as indicated. Clearing time is the time between the start of the abnormal condition and the DR ceasing to

energize the Area EPS. For DR less than or equal to 30 kW in peak capacity, the frequency set points and clearing times shall be either fixed or field adjustable. For DR greater than 30 kW, the frequency set points shall be field adjustable.

Adjustable under-frequency trip settings shall be coordinated with Area EPS operations.

Table 2 – Interconnection system response to abnormal frequencies		
DR size	Frequency range (Hz)	Clearing time (s)^a
~ 30 kW	> 60.5	0.16
	< 59.3	0.16
> 30 kW	> 60.5	0.16
	< {59.8 - 57.0} (adjustable setpoint)	Adjustable 0.16 to 300
	< 57.0	0.16

^aDR ~ 30 kW, maximum clearing times; DR > 30 kW, default clearing times

4.2.5 Loss of synchronism

Loss of synchronism protection is not required except as necessary to meet 4.3.2.

4.2.6 Reconnection to Area EPS

After an Area EPS disturbance, no DR reconnection shall take place until the Area EPS voltage is within Range B of ANSI C84. 1 -1995, Table 1, and frequency range of 59.3Hz to 60.5Hz.

The DR interconnection system shall include an adjustable delay (or a fixed delay of five minutes) that may delay reconnection for up to five minutes after the Area EPS steady-state voltage and frequency are restored to the ranges identified above.

4.3.1 Limitation of dc injection

The DR and its interconnection system shall not inject dc current greater than 0.5% of the full rated output current at the point of DR connection.

4.3.2 Limitation of flicker induced by the DR

The DR shall not create objectionable flicker for other customers on the Area EPS.¹¹

¹¹ Flicker is considered objectionable when it either causes a modulation of the light level of lamps sufficient to be irritating to humans, or causes equipment misoperation. For guidance, refer to IEEE Std 519TM-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems; IEEE P1453 TM, Draft Recommended Practice for Measurement and Limits of Voltage Flicker on AC Power Systems; International Electrotechnical Commission IEC/TR3 61000-3-7 Assessment of Emission Limits for Fluctuating Loads in MV and HV Power Systems, IEC 61000-4-15 Flickermeter - Functional and Design Specifications, IEC 61400-21 IEC 61400-21, Wind Turbine Generator Systems - Part 21: Measurement and assessment of power quality characteristics of grid connected wind turbines - Ed. 1.0 (2000-1 2).

4.3.3 Harmonics

When the DR is serving balanced linear loads, harmonic current injection into the Area EPS at the PCC shall not exceed the limits stated below in Table 3. The harmonic current injections shall be exclusive of any harmonic currents due to harmonic voltage distortion present in the Area EPS without the DR connected.

Table 3 – Maximum harmonic current distortion in percent of current (I)^a						
Individual harmonic order h (odd harmonics)^b	h < 11	11 ~ h < 17	17 ~ h < 23	23 ~ h < 35	35 ~ h	Total Demand Distortion (TDD)
Percent (%)	4.0	2.0	1.5	0.6	0.3	5.0
<i>^aI = the greater of the Local EPS maximum load current integrated demand (15 or 30 minutes) without the DR unit, or the DR unit rated current capacity (transformed to the PCC when a transformer exists between the DR unit and the PCC).</i>						
<i>^bEven harmonics are limited to 25% of the odd harmonic limits above.</i>						

4.4.1 Unintentional islanding

For an unintentional island in which the DR energizes a portion of the Area EPS through the PCC, the DR interconnection system shall detect the island and cease to energize the Area EPS within two seconds of the formation of an island.¹²

¹² Some examples by which this requirement may be met are:

1. The DR aggregate capacity is less than one-third of the minimum load of the Local EPS.
2. The DR is Listed to pass an applicable non-islanding test.
3. The DR installation contains reverse or minimum power flow protection, sensed between the Point of DR Connection and the PCC, which will disconnect or isolate the DR if power flow from the Area EPS to the Local EPS reverses or falls below a set threshold.

The DR contains other non-islanding means such as a) forced frequency or voltage shifting, b) transfer trip, or c) governor and excitation controls that maintain constant power and constant power factor.

APPENDIX 4

MMED'S DESCRIPTION OF ITS UPGRADES AND GOOD FAITH ESTIMATE OF UPGRADE COSTS

MMED Electrical System Upgrades

MMED shall construct and install the following: [NOTE: To be determined]

Capital Cost Estimate for MMED Interconnection Facilities and Electrical System Upgrades:

Material (w/Overheads)	\$
Construction (w/Overheads)	\$
Total Capital Cost	\$

The Capital Cost Estimate includes the costs of MMED's Interconnection Facilities, specified in Appendix 1.

APPENDIX 5 PERFORMANCE TESTS FOR PV GENERATORS

1. OVERVIEW

Commissioning of the Unit will require, among other things, the successful completion of a series of DC-side tests and AC-side Commissioning activities, to be witnessed by the Company. Interconnecting Party shall use Commercially Reasonable Efforts to have the installed capacity of the Unit confirmed via an analysis of the manufacturer's flash test results for each individual module installed in the Unit. This schedule describes the relevant DC and AC test procedures and analyses in detail.

2. SYSTEM ACCEPTANCE TESTING AND COMMISSIONING TURNOVER PACKAGE

Interconnecting Party's technical personnel, with the assistance of the equipment manufacturer(s) as needed, will perform a complete Commissioning of the DC and AC system equipment following Interconnecting Party's rigorous Commissioning procedures. These Commissioning procedures shall include the tests outlined in this Exhibit as well as other standard tests, inspections, safety and quality checks for solar photovoltaic power plants of a similar size. All testing and Commissioning will be conducted in accordance with Interconnecting Party's specifications. The system inverters will be Commissioned on site by a manufacturer's representative or qualified technician and will confirm that the inverter can be operated locally per specification and that automatic operations such as wake-up and sleep routines, power tracking and fault detection responses occur as specified.

Upon completion of each of the Commissioning procedures, Interconnecting Party's technician or engineer will initial the Commissioning checklist or test result page to indicate that the test has been completed successfully. The results of string testing will be summarized and complete results will be provided in CD-ROM format. Documentation of all procedures and complete test results will be submitted to Company in hard copy and/or electronic format.

3. SYSTEM TESTS – to be performed by Interconnecting Party technical personnel. Any testing done by manufacturer personnel will be performed under Interconnecting Party's supervision.

3.1 System Capacity Test: Demonstrate that the Unit will produce the kW output at the Point of Interconnection for which it is designed under the ambient conditions existing at the time of such demonstration.

3.2 Open Circuit Voltage Test – Demonstrate that all strings are properly connected and that all PV modules are producing an appropriate voltage level.

3.4 Operating Current Test– Verify that all strings are producing an adequate and consistent operating current.

3.5 Inverter Commissioning– Verify proper operation of all inverters, including

remote functions (if applicable) and verification of safety and control features.

3.6 String I-V Curve Test– Compare current and voltage for each string in a sample of combiner boxes. Identify and correct causes of any test result anomalies

4. Data Acquisition System (DAS) – Demonstrate that DAS and required electronic communications are fully functional.

5. MMED System Protection Tests

- Perform CT and CT circuit polarity, ratio, insulation, excitation, continuity and burden tests for any CTs utilized for MMED interface protection requirements.
- Perform VT and VT circuit polarity, ratio, insulation and continuity tests for any VTs utilized for MMED interface protection requirements.
- Perform relay pick up and time delay tests for the actual settings to be utilized.
- Perform functional circuit breaker trip testing from protective relays.
- Perform relay in service test to verify proper phase rotation and magnitudes of currents and voltages.
- Perform circuit breaker close interlock testing if applicable.
- Perform paralleling and disconnection operation, including anti-islanding upon loss of the MMED interface. This can be simulated by opening a switch in series with the interface and verifying that the facility disconnects.
- Where internal inverter elements are utilized to satisfy MMED interface protection requirements, these elements shall be tested for proper operation and setpoints.

APPENDIX 6
INTERCONNECTION REQUEST

See attached.