



AGREEMENT FOR THE INTERCONNECTION OF CUSTOMER'S GENERATION FACILITY TO THE APS DISTRIBUTION SYSTEM

Thank you for your interest in connecting your renewable energy system to the APS grid. Please read this Interconnect Agreement carefully.

1. PARTIES

This Agreement for the interconnection of Customer's Generation Facility to the APS Distribution System (hereinafter referred to as "Agreement" or "Interconnect Agreement") is entered into as of the date your application is submitted (the "Effective Date") by and between ARIZONA PUBLIC SERVICE COMPANY, an Arizona corporation (hereinafter called "APS"), and CUSTOMER (hereinafter called "Customer"). APS and Customer are hereinafter sometimes referred to individually as "Party" and collectively as "Parties."

2. RECITALS

This agreement is entered into in respect to the following facts and considerations, all of which are considered to be an essential part of the terms and conditions, which follow:

2.1 Customer intends to invest in, construct, own, lease, maintain and/or operate a Generating Facility ("GF"), which will be operated in electrical parallel with APS' electric distribution system ("the APS System").

2.2 The GF shall be permanently located at the site address provided in this application (the "Property").

2.3 The specifications of the GF are to be described in the technical Interconnection Application which will be submitted by the Customer's Installer/Dealer.

2.4 APS and Customer intend to interconnect their respective facilities and systems in order that Customer may operate its GF in electrical parallel with the APS System. Such interconnection and parallel operation shall be undertaken in accordance with the terms and conditions of this Agreement.

Customer will be contacted by the APS billing department to discuss solar net metering and net billing plans; Customer acknowledges that they will take or return this call in a timely manner.

3. AGREEMENT

Now therefore, in consideration of the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

4. DEFINITIONS

The following terms, when used in this Agreement, shall have the meanings specified:

4.1 Agreement: This Agreement (also referred to as “Interconnection Agreement”) titled “Agreement for the Interconnection of Customer’s Generation Facility to the APS Distribution System between Arizona Public Service Company and Customer.” together with other exhibits attached hereto and incorporated herein by specific reference.

4.2 APS Interconnection Requirements Manual: The APS document titled “Interconnection Requirements for Distributed Generation”, which outlines APS’ interconnection requirements to interconnect a GF to the APS System.

4.3 The APS System: Refers to APS’ electric distribution system.

4.4 Cogeneration Facility: Any facility that sequentially produces electricity, steam or forms of useful energy (e.g., heat) from the same fuel source and which are used for industrial, commercial, heating, or cooling purposes.

4.5 Customer: A Customer is considered to be an APS account holder (“APS Customer of Record”) that receives electric service from APS and also generates electricity at the Property receiving such electric service. For the purpose of this Agreement a Customer shall be understood to include any independent party or entity that either invests in, owns, or operates the GF including without limitation its grantees, lessees, or licensees.

4.6 Disconnect Device: A Disconnect Switch or a rack-out circuit breaker acceptable to APS to electrically isolate the Customer’s GF from the APS System.

4.7 Disconnect Switch: A visible open disconnect device that the Customer is required to install and maintain in accordance with the requirements set forth in the APS Interconnection Requirements Manual and this Agreement. It will completely isolate the Customer’s Generating Facility from the APS System, including the Utility metering equipment located at the SES.

4.8 ESRM: Refers to APS’ Electric Service Requirements Manual, available at http://www.aps.com/files/_files/pdf/ESPServices/ESRM.pdf.

4.9 Generating Facility (GF): All or part of the Customer's electrical generator(s) or inverter(s), together with the interconnection facilities and all protective, safety, and associated equipment and improvements which Customer installs and which are necessary to interconnect the GF to the APS System and generate electric power. The GF shall comply with APS' ESRM, the APS Interconnection Requirements Manual and the requirements set forth in this Agreement. A GF shall be understood to include any Qualifying Facility (QF) under this Agreement.

4.10 Generator: An induction or synchronous machine or static inverter used to produce electrical power.

4.11 Minimum Protective Devices and Relays: The minimum required protective relaying and/or safety devices or requirements specified in the APS Interconnection Requirements Manual, for the purpose of protecting the APS System from damage or disruptions caused by a fault, malfunction or improper operation of the Customer's GF. Minimum Protective Devices and Relays shall not be construed to include additional relaying, protective or safety devices as may be required by industry and government codes and standards, equipment manufacturer requirements and prudent engineering design and practice to fully protect Customer's GF or facilities; such shall be the sole responsibility of the Customer.

4.12 OSHA: Occupational Safety and Health Administration. See www.osha.com.

4.13 Point(s) of Interconnection: The physical location(s) where APS' service conductors are connected to Customer's service conductors or bus to allow parallel operation of Customer's GF with the APS System.

4.14 Property – Has the meaning set forth in Section 2.2.

4.15 Qualifying Facility (QF): Any Cogeneration or Small Power Production Facility that meets the criteria for size, fuel use, efficiency, and ownership as promulgated in 18 CFR, Chapter I, Part 292, Subpart B of the Federal Energy Regulatory Commission's Regulations, as amended.

4.16 Small Power Production Facility: A facility that uses primarily biomass, waste, or renewable resources, including wind, solar, and water to produce electric power.

4.17 UL: Underwriters Laboratories Inc. See www.ul.com.

5. EFFECTIVE DATE AND TERM

This Agreement shall become effective on the Effective Date specified in Section 1 and shall remain in effect thereafter unless and until (a) it is terminated by mutual agreement of the Parties, (b) it is replaced by another interconnection agreement, (c) it is terminated by either Party pursuant to a Default of this Agreement as specified in Section 16 hereof, (d) upon termination of electric service to the Customer, or (e) it is superseded by another interconnection agreement between the Parties with respect to the GF. Upon

termination of this Agreement, Customer shall immediately permanently lock open the Disconnect Switch and shall be responsible for ensuring that the electrical conductors connecting the GF to Customer's distribution system or the APS System are immediately lifted and permanently removed, so as to preclude any possibility of interconnected operation in the future. In the event Customer fails to do so, APS shall have the right to enter the premises where the GF and its related facilities are located in order to permanently lock open the Disconnect Switch or disconnect service, without liability for injury or damage to Customer or any third party and Customer hereby consents to such entry and disconnection. APS reserves the right to inspect the Customer's facility to verify that the GF is permanently disconnected.

6. INTERCONNECTION FACILITIES AND POINT(S) OF INTERCONNECTION

6.1 Customer is responsible for and shall pay for all facilities required to be installed solely to interconnect Customer's GF to the APS System including, but not limited to, connection, transformation, switching, protective relaying, metering and safety equipment, including a Disconnect Switch. All such facilities are to be installed by Customer at Customer's sole expense. During the term of this Agreement Customer shall maintain the GF, connection facilities, and all other materials required hereunder in a safe and in good operating condition.

6.2 All Generating Facilities other than those comprising a Backup Generator must include a system dedicated kWh meter, or meters, (the "Performance Meter"), which measures the energy production of the Generator(s). The Performance Meter must be installed in compliance with the APS Electric Service Requirements Manual (ESRM) Section 300, which is available on APS' website, and must be installed so as to record the AC energy output produced by the Generator.

APS may, at its discretion and expense, replace a Customer-installed Performance Meter with an APS-owned Performance Meter for system monitoring purposes.

7. NOTICES

All written notices pursuant to this Agreement shall be delivered by registered or certified mail including express overnight courier service, postage prepaid, return receipt requested, or by electronic mail (scanned PDF image) at the address of the Party set forth below as follows:

To APS:

Arizona Public Service
Attn: Renewable Energy Delivery
P.O. Box 53933, MS 3108
Phoenix, AZ 85072-3933
Telephone: (602) 371-6160
Email: commercial-renewables@aps.com

To Customer:

Customer's Name
Attn: Customer's Name
Customer's mailing address
City, AZ Zip
Telephone: Customer's phone number
Email: Customer's email

Either Party may change its address by providing written notice given to the other Party in the manner provided above. Any such notice shall be deemed to have been duly given and served on the date which is three (3) business days after the date deposited in the United States mail in accordance with this section 7, or on the date of receipt, if delivered by express overnight courier service or electronic mail.

8. ENTIRE AGREEMENT

8.1 This Agreement and the documents attached hereto or referenced herein constitute the entire Agreement between the Parties relating to the subject matter hereof, there being no other agreements or understandings, written or oral, other than those contained in this Agreement and the attachments hereto. In the event of a conflict among the provisions of this Agreement and an attached or referenced document, this Agreement shall govern. This Agreement does not modify, change or impact any other agreement between the parties relating to the supply of electric service, or the sale of, or purchase of, electric power.

8.2 The Parties may amend this Agreement but such amendment may only be effective and enforceable if it is set forth in a written instrument signed by both Parties.

9. CUSTOMER'S OBLIGATIONS

9.1 Customer shall not commence interconnected operation of the GF with the APS System until the GF has been inspected by an authorized APS representative and written notification is received from APS allowing the GF to commence parallel operation with the APS System.

Customer shall give at least five (5) business days' written notice to APS when initial startup is to begin. APS shall have the right to have a representative present during initial energizing and testing of Customer's GF.

9.2 Customer shall design, install, operate and maintain:

9.2.1 The GF in accordance with the requirements of all applicable construction and safety codes, laws and governmental agencies having jurisdiction, and in accordance with the requirements set forth in the ESRM, the APS Interconnection Requirements Manual, and the terms and conditions of this Agreement.

9.2.2 Control and protective devices, in addition to the Minimum Protective Devices and Relays as required by the APS Interconnection Requirements Manual, in order to protect the APS System, and to protect the GF from abnormal operating conditions such as, but not limited to, electrical overloading, abnormal voltages, and fault currents. Such protective devices shall promptly disconnect the GF from the APS System in the event of a power outage on the APS System.

The GF shall be operated with all of the protective relaying, and any Customer operating procedures and switching apparatus in service whenever the GF is connected to, or is operated in parallel with, the APS System.

9.2.3 An acceptable visibly open and lockable isolation point will be provided and installed by the Customer on the Customer's side of the SES meter section, to electrically isolate the Customer-owned facilities from all APS

electric service equipment in order to establish a safe work area for APS personnel. The isolation point will comprise a load break Disconnect Device and shall be capable of being locked in a visibly “open” position by a standard APS padlock, and shall be installed in a place so as to provide easy and unrestricted accessibility to APS personnel on a 24-hour basis. APS shall have the right to lock open the Disconnect Device without notice to Customer, or require Customer to lock open, the Disconnect Device when interconnected operation of the GF with the APS System could adversely affect the APS System, or endanger life or property, or upon termination of this Agreement.

9.2.4 Interconnection facilities on Customer's premises as may be required to deliver power from Customer's GF to the APS System at the Point of Interconnection, and all equipment downstream (Customer's side) of the Customer's service entrance section.

9.3 The electrical output of Customer's GF shall not contain harmonic content, which may cause disturbances on or damage to the APS System or equipment, or other third parties' systems, such as but not limited to computer, telephone, communication and other sensitive electronic or control systems.

9.4 Customer shall exercise reasonable care to assure that the electrical characteristics of its load and its GF, such as deviation from sine wave form or unusual short interval fluctuations in power demand or production, shall not be such as to result in impairment of service to other APS customers or in interference with operation of computer, telephone, television or other communication systems or facilities. The current imbalance for a three phase system, as measured at the Customer's service entrance section shall not be greater than ten percent (10%) at any time. The power factor of the Customer's GF shall not be less than ninety percent (90%) lagging, but shall not be leading, unless agreed to in writing in advance by an authorized representative of APS or otherwise required by APS.

9.5 Customer shall protect, operate and maintain the GF in accordance with those practices and methods, as they are amended or changed from time-to-time that are commonly used in prudent engineering and electric utility operations and shall operate and maintain the GF lawfully in a safe manner and non-hazardous condition.

9.6 Customer shall submit to APS, for APS review and written approval, written equipment specifications, and detailed plans of the interconnection facilities, control and protective devices and settings, and facilities as specified in the APS Interconnection Requirements Manual, as may be revised from time to time, for the design, installation and operations of its GF prior to their actual installation.

9.7 Following APS' email approval of Customer's proposed GF and associated facilities, neither Customer nor its successors or assigns shall remove, alter or otherwise modify or change the equipment specifications, including, without

limitation, the plans, control and protective devices or settings, and in general the GF's system specifications configuration or any facilities appurtenant thereto. If Customer desires to make such changes or modifications, Customer shall resubmit to APS plans describing said changes or modifications for approval by APS. No such change or modification may be made without the prior written approval of APS' authorized representative.

9.8 If Customer utilizes the APS System to facilitate start-up of its GF, the voltage flicker level shall not exceed APS standards in effect from time to time during the term of this Agreement.

9.9 Customer shall obtain and maintain all required permits and inspections indicating that Customer's GF complies with local and other applicable construction and safety codes.

9.10 In the event that APS provides more than one point of electrical service delivery to Customer's Property, then Customer shall (a) have controls and/or operating procedures in place that are acceptable to APS to ensure that APS' points of delivery are never connected together or electrically paralleled in anyway; and (b) ensure that the GF is never connected to an electrical service other than the one specified in this Agreement.

10. MUTUAL UNDERSTANDINGS

10.1 At its sole cost, APS shall be allowed to install on Customer's premises, at a location mutually agreed to by the Parties, any instrumentation equipment for research purposes. Such equipment shall be owned, furnished, installed and maintained by APS. The installation, operation and maintenance of such equipment shall not interfere with Customer's use and operation of its premises, but Customer shall afford APS continuing access to this equipment consistent with the requirements of APS' tariffs.

10.2 APS' approvals given pursuant to this Agreement or actions taken hereunder shall not be construed as any warranty or representation to Customer or any third party regarding the safety, durability, reliability, performance or fitness of Customer's generation and service facilities, its control or protective devices or the design, construction, installation or operation thereof.

10.3 APS (including its employees, agents and representatives) shall have the right to enter Customer's premises at all reasonable times to (a) inspect Customer's GF, protective devices, and to read or test instrumentation equipment that APS may install, provided that as reasonably possible, notice is given to Customer prior to entering its premises; (b) maintain or repair APS equipment; (c) disconnect, or cause the GF to be disconnected without notice if, in APS' opinion, a hazardous condition exists and such immediate action is necessary to protect persons, the APS System or other customers' or third parties' property and facilities from damage or interference caused by Customer's GF, or improperly operating protective devices; (d) open, or cause to be opened/verify opened, the Disconnect Device if an operating clearance is required by APS personnel.

10.4 If, at any time, APS should have reason to question the integrity of any of the GF protective and switching apparatus and believes that such loss of integrity may impair the operation of the APS' System, Customer, or its grantee, lessee, licensee, GF System Owner and/or Operating Entity shall demonstrate, to APS' reasonable satisfaction, the correct calibration and operation of the equipment in question. The demonstration shall be coordinated with Customer and APS.

10.5 APS will not install and maintain any lines or equipment on Customer's side of the Point of Interconnection except its metering and telecommunication equipment and, at its option research equipment. For the mutual protection of Customer and APS, only authorized employees of APS are permitted to make and energize the service connection between the APS System and the Customer's service entrance conductors. Such employees carry credentials, which they will show to Customer upon request.

10.6 Notwithstanding any other provisions of this Agreement, APS shall have the right to unilaterally file with the Arizona Corporation Commission (the ACC), pursuant to the ACC's rules and regulations, an application for a change in requirements, charges, classification, or service, any rule, regulation or agreement relating hereto.

11 ADDITIONAL TERMS AND CONDITIONS

11.1 The GF shall meet the specifications set forth in the Interconnect Application that will be provided by the Customer's Installer/Dealer.

11.2 In addition to the interconnection facilities and equipment provided for in Section 9 of this Agreement and additional safety equipment, Customer shall install, or cause to be installed, and will maintain the following Minimum Protective Devices and Relays on the GF:

11.2.1 Static inverters shall be tested and certified to UL *Standard for Inverters, Converters and Controllers for use in Independent Power Systems*, UL 1741, by a Nationally Recognized Testing Laboratory (NRTL) certified by OSHA to perform the UL1741 test standard.

11.2.2 Such other equipment as specified in this Agreement, or as may mutually be agreed upon by the Customer and APS from time to time during the term of this Agreement and any extensions thereof.

11.3 In the event APS or its authorized agents lock open, or cause to be locked open, the Disconnect Switch, Customer shall not remove or tamper with such lock.

11.4 Customer shall, at the time of the APS site inspection, perform a shutdown test of the inverter(s) to ensure that they shut down upon simulated loss of the utility source.

12. SUCCESSORS AND ASSIGNS

Customer may not assign its rights nor delegate its duties under this Agreement, or any part of such rights or duties, without the prior written consent of APS' authorized

representative. Any such assignment or delegation made without such written consent shall be null and void. This Agreement shall be binding on and inure to the benefit of the respective successors and permitted assigns of the Parties.

13. EFFECT OF SECTION HEADINGS

Section headings appearing in this Agreement are inserted for convenience only, and shall not be construed as interpretations of text.

14. INDEMNITY

To the extent permitted by law, each Party to this Agreement will indemnify, defend and hold harmless the other Party, its officers, agents, and employees from any claims, damages and actions of any kind or nature arising from personal injury (including without limitation, death) and/or tangible property damage or loss except this indemnity shall not extend or apply to such claims, damages and actions resulting from the negligence or willful or intentional acts or omissions of the indemnified Party. This indemnification shall survive the termination or expiration of this Agreement.

15. GOVERNING LAW

This Agreement shall be governed by, construed, and enforced in accordance with the laws of the State of Arizona applicable to contracts entered into and to be performed solely within such state, without reference to its principles governing conflicts of laws.

16. EVENTS OF DEFAULT

A Party shall be in default under this Agreement in the event of a breach of any term or condition under the Agreement which breach is not cured within five (5) business days after receipt of written notice of such breach.

17. SEVERABILITY

Whenever possible, each provision of this Agreement will be interpreted in such a manner as to be effective and valid under applicable law, but if any provision of this Agreement is held by a court of competent jurisdiction to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein or therein.

18. INSURANCE

During the term of this Agreement and any extensions thereof, Customer at its option may elect to maintain public liability and property damage insurance to cover Customer's use, interconnection and operation of the GF as contemplated in this Agreement. Any insurance coverage shall not constitute a limitation of Customer's indemnity under Section 14, Indemnity hereof.

19. ELECTRONIC SIGNATURE

By clicking “I understand and agree,” you accept this Interconnection Agreement in its entirety.

If you click no, you may not be interconnected to the APS electrical distribution system.