“DG Interconnection Agreement N.V. ELMAR”

As of September 2012

N.V. ELMAR is in the process of changing various articles of its Regulations. One of them is to allow interconnection of customer-owned generating facilities or Distributed Generation (DG) to the distribution system.

N.V. ELMAR has evaluated several DG interconnection philosophies and possibilities for introducing a policy that is both responsible and fair for both the Applicant and N.V. ELMAR. This new “DG Interconnection Agreement N.V. ELMAR” is an updated version of the prior “Basic Interconnection Requirements Policy N.V. ELMAR” issued in 2009. The “DG Interconnection Agreement N.V. ELMAR” covers the terms and conditions to start accepting requests higher than the prior 5kW limit and covers the introduction of a grid usage fee and a payback tariff for monthly surplus energy.

Technical aspects of the DG Interconnection Agreement will be the maximum DG capacity allowance for these DG-units. An impact study might be required to determine the maximum DG capacity allowance. This impact study is necessary to guarantee the integrity of the electrical distribution system. In addition to the 5kWp limit, N.V. ELMAR has increased the maximum installed capacity of DG-systems to 10kWp per domestic parcel and 100kWp per commercial parcel or institutions. The total kWp is determined by the sum of the capacity of each DG unit. In the case of Photovoltaic (PV) system, it is determined by the sum of the capacity of each solar module under standard test conditions (STC). This maximum DG capacitance allowance shall never exceed the parcel simultaneous capacity of the installation that has been checked and approved by the Department of Technical Inspections (DTI). To guarantee the quality of the distribution grid, N.V. ELMAR has the right to reject a request based on the impact analysis study. In the unlikely event that the DG installation starts behaving abnormally, N.V. ELMAR has the right to disconnect the system until it is repaired.

The Applicant needs to take into account that the DG-unit can only be interconnected with the electrical grid if the DG-unit can be automatically synchronized with N.V. ELMAR’s 4 wire-system, three phase, 127V/220V, ± 4%, 60hz.

If the Applicant has a three phase unit, it will be interconnected to N.V. ELMAR’s 4 wire system which includes, that the neutral wire (supplied by N.V. ELMAR) is not allowed under any circumstances to be connected to any installation ground.

If the Applicant has a single phase unit, a 2 wire system will be supplied with a neutral wire on which it is also not allowed to connect any installation ground.

Grounding of the PV system and other installation requirements will be according to the manufacture specification of the installation and the guidelines described both in NEN1010:2005, rubric 712 or the NEC 2008, article 690.

An important aspect in the new policy will be the introduction of a monthly grid usage fee of AWG 15.- per installed kWp. For residential application, the Grid Usage Fee will be exempted for the first 3kWp installed capacity. If the DG system produces more energy than what the Applicant consumes, N.V. ELMAR will pay the Applicant this monthly energy surplus, based on a Monthly Surplus Tariff. This tariff is based for residential system on 85% of the actual first bracket A-tariff. For non-residential system, the monthly surplus tariff is based on 50% of the actual B-tariff. Upon signing the DG interconnection agreement the monthly grid usage fee will be charged.

Inverters need to comply with UL1741. Depending on the impact analysis study, units above 10kW might need to have the reactive power control capability and/or a Low Voltage Ride-Through (LVRT) feature capability. Single phase inverters with a maximum capacity of 3kW are allowed to be connected to a 127V system. Single phase inverters with a maximum capacity of 5kW are allowed to be connected to a 220V system. All system above 5kW needs to be 3 phase units or installed in a 3 phase configuration.

N.V. ELMAR recommends the Applicant to contact the DTI, where they can assist on all necessary documentation. The Applicant is allowed to interconnect and have a digital bi-directional DG meter installed after his/her DG-installation has been electrically certified by DTI.

The Applicant represents and warrants that:

- The DG Facility is fully and accurately described in the Application;
- All information in the Application is true and correct;
- The DG Facility has been installed to Applicant's satisfaction;
- Applicant has been adequately instructed in the operation and maintenance of the DG Facility.
- Applicant is responsible for the integrity and safety of the requested installation.

N.V. ELMAR is the owner of the electrical distribution system serving Aruba.

Applicant wishes to interconnect the DG Facility to the electrical Distribution System and N.V. ELMAR is willing to permit such interconnection subject to the terms and conditions set forth herein.

Applicant desires to install a Distributed Generation (DG) facility or energy storage device with an installed capacity of _____kWp and to interconnect the DG Facility to the electrical distribution System. The grid usage fee for this installation is AWG _____ .

N.V. ELMAR has reviewed and approved the Applicant's DG Interconnection system on dated _____, and supporting installation materials. The completed Application is attached and incorporated into this Agreement.

If the Applicant wishes to modify or remove the DG Facility, the Applicant should give thirty (30) calendar days prior written notice to N.V. ELMAR to dissolve this agreement.

Parties have executed this Agreement on _____

Applicant

Name _____

Address _____

E-mail Address _____

User Number _____

Bank Account no. _____

N.V. ELECTRICITEIT-MAATSCHAPPIJ ARUBA

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Robert Henriquez

Managing-director

Applicant

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