**STANDARDIZED POWER PURCHASE AGREEMENT[[1]](#footnote-1) FOR PURCHASE OF CAPACITY AND ASSOCIATED ELECTRIC ENERGY TO THE ISOLATED MINI-GRID NAMELY,**

**[\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_]**

**PURCHASER**

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**AND**

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**SELLER**

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# PURPOSE OF AGREEMENT

This is a Standardized Power Purchase Agreement for the supply, delivery and payment of power and associated energy from a Small Power Project, as defined in this Agreement, in ....................(*Country)* employing renewable and hybrid generation for supply to an Isolated Mini - Grid. Its purpose is to simplify and expedite negotiations for power purchase from a Small Power Project by defining standard principles and terms. The template shall be modified on a project by project basis as relevant and necessary.

Unless otherwise determined by policy or regulations, projects up to 10 MW shall be undertaken on a first come first served basis and those above 10 MW shall be subject to competitive bidding according to procurement rules to be developed by the Regulator.

# PRELIMINARIES

1.

## CONTRACTING AND INTERESTED PARTIES

WHEREAS the energy policy of the Government of ................ (hereinafter referred to as “Government”) promotes the development of environmentally-friendly renewable energy for power generation; and

WHEREAS the ....................Regulatory Authority (hereinafter referred to as “Regulator”) is required and empowered by the ......................Act [Chapter .....] to promote, identify and encourage the employment and development of sources of renewable energy; and

 WHEREAS … *[Name]* (hereinafter referred to as “Seller”, “Developer” or “Independent Power Producer (IPP)”), a company duly incorporated in terms of the laws of .................... (Registration … *[Number]*) and whose registered office is at … *[Physical address]* has been licensed, or intends to apply for a licence, to construct, operate and maintain a Small Power Project and associated interconnection facilities as fully described in Annex B, and desires to sell power and energy an Isolated Mini Grid operator; and

WHEREAS ….......*[Name]* (hereinafter referred to as “Purchaser”), a .......(company/local authority) duly incorporated/organized in terms of the laws of ................ (Registration … *[Number]*) and whose registered office is at … *[Physical address]* has requirements to obtain additional electric capacity and associated electric energy, and has available transmission capacity to accept and utilize such capacity and associated energy;

WHEREAS according to prevailing regulations the Seller’s power plant is a qualifying generating facility; and

WHEREAS the Seller and the Purchaser (hereinafter referred to as “Parties”) desire to enter into an agreement for the supply and purchase of electric capacity and associated electric energy;

NOW THEREFORE THE PARTIES HEREBY AGREE AS FOLLOWS:

## DEFINITIONS

In this Agreement the following terms shall have the meaning as defined:

* + 1. **Actual unit cost** means the cost of a kilowatt-hour of energy established from the tariff formula using actual audited annual costs and actual annual energy production.
		2. **Agreement** means this Power Purchase Agreement (PPA).
		3. **Commercial Operation Date** means the date on which the Project is successfully commissioned and the Parties are able to discharge their full obligations under the Agreement.
		4. **Construction Risk** means the possibility of adverse impacts on project costs of such factors as design errors, unexpected geological conditions, time and cost overruns and inability to meet technical specifications.
		5. **Default** means failure to perform an obligation. Failure to perform as a result of force majeure shall not be considered an event of default, provided written notice to the other Party is submitted within forty-eight (48) hours of the occurrence of the event.
		6. **Dependable capacity** means the maximum continuous power output of the IPP established at commissioning and validated through periodic tests.
		7. **Emergency** means a threat of or actual injury, damage or loss of life, plant or equipment.
		8. **Energy output** means the kilowatt-hours (kWh) produced and supplied by the IPP.
		9. **Estimated unit cost** means the cost of a kilowatt-hour established from the tariff formula using budgeted costs and forecast energy output.
		10. **Fiscal Policy Risk** means the possibility of adverse impact of changes in duties and taxes and other government budgetary measures.
		11. **Force majeure** means any unanticipated, disruptive and uninsurable occurrence, arising from nature or human agency which has a material and adverse effect on the ability of the Party experiencing the event to discharge its obligations.
		12. **Forced outage** means a plant shutdown arising from an emergency, or other operating situation which is not an event of force majeure, for purposes of preventing or minimising damage
		13. **Generation Facilities** means all of the Seller's electrical prime movers and generators, together with all protective and other associated or auxiliary equipment of the Seller, and rights to own or use land associated with the electrical prime movers and generators, necessary to produce capacity and/or associated electric energy pursuant to this Agreement.
		14. **Hydrological risk** means the possibility of adverse impacts of weather conditions on river flows leading to reduced availability of water for power generation
		15. **Interconnection facilities** mean the mains, switchgear, protection, metering and ancillary equipment of the Seller and Purchaser that enables exchange and measurement of power and energy.
		16. **Interconnection Point** means the point where the Generation Facilities’ electric output line or electric system feeds into the electric transmission system to which it delivers power, whether owned by the Purchaser or another.
		17. **kVA** means kilovolt-ampere, a measure of electrical power
		18. **kW** means kilowatt, a measure of electrical power or capacity
		19. **kWh** means kilowatt-hour, a measure of electrical energy
		20. **Lender** means each lender, guarantor, credit provider, multilateral agency, export credit agency or other financial institutions or insurers providing the financing or refinancing arrangements for the Project (including through the provision of hedging, agency or account bank facilities), but not including any Shareholder and any Affiliate of anyShareholders.
		21. **Market Risk** means the possibility of adverse impact on revenue arising from lower than expected consumer demand.
		22. **Metering Point** means the point at which the Revenue and Statistical metering equipment measure the supply delivered from the Seller to the Purchaser and vice versa.
		23. **Monetary Policy Risk** means the possibility of adverse impact of changes in interest, inflation and exchange rates
		24. **Open-book approach** means the establishment of revenue requirements for tariff computation on the basis of actual costs approved by the Regulator.
		25. **Operating Risk** means the possibility of adverse cost impact of lower than expected plant availability due to higher than expected planned and forced outages.
		26. **Operations Committee (OC) or Joint Operations Committee (JOC)** means a committee comprising equal number of permanent representatives of the Parties which shall be responsible for implementing the agreement, including identification and first stage resolution of problems or disputes. It shall be the responsibility of the OC to define explicit requirements for prudent utility practice.
		27. **Party** means either the Seller or Purchaser or any successor entities that assume the assets and liabilities of the Seller or Purchaser; **Parties** mean both the Seller and Purchaser or their successors.
		28. **Payment Risk** means the possibility of adverse impact of lower than expected revenue collection rates or inability to convert local currency receipts into foreign currency.
		29. **Planned outage** means a scheduled plant shutdown for maintenance purposes.
		30. **Power or capacity** means the kilowatts (kW) or kilovolt-amperes (kVA) produced and supplied by the Small Power Project.
		31. **Project** means the design, construction, operation and maintenance of plant, equipment and other facilities of the Seller and Purchaser necessary for technical operation and commercial transactions under the Agreement.
		32. **Prudent utility practice** means methods, actions and standards that are generally accepted in the electricity utility industry for the efficient planning, design, construction, operation and maintenance of electricity generation, transmission and distribution systems, plant and equipment.
		33. **Purchaser’s Facilities** has the meaning ascribed to it in Article 6.1 of this Agreement.
		34. **Qualifying generating facility** means a Small Power Project as defined by the Regulator
		35. **Regulator** means the ............................Regulatory Authority established by the ....................Authority Act, [Chapter.............]
		36. **Revenue Metering** means the Main and Check Meters installed, owned and maintained by the Purchaser as part of the Purchaser’s Project facilities.
		37. **Small Power Project** means a project of any installed capacity that generates electric energy and sells pursuant to this Agreement up to ten (10) MW of such output, or is otherwise deemed eligible for executing this Agreement.
		38. **Sovereign risk** means possibility of adverse impacts arising from political decisions affecting the government’s creditworthiness and rule of law, leading to such consequences as dishonoured government guarantees, possibility of expropriation or nationalisation, lack of enforceability of contracts.
		39. **Statistical Metering** means the Main and Check Meters installed, owned and maintained by the Seller as part of the Seller’s Project facilities.
		40. **Synchronising Point** means the point at which the Seller’s electrical system is connected in parallel with the Purchaser’s electrical system.
		41. **Tariff** means price charged by a Seller and payable by a Purchaser.

# GENERAL PRINCIPLES AND PROCEDURES

## GOVERNING LAW

This Agreement shall be governed and interpreted in accordance with the Laws of .................... (*Country*)

1. 1.

## COMMITMENT TO PRUDENT UTILITY PRACTICE

The Parties agree to conduct business in accordance with prudent utility practice in order to maximise benefits and minimise costs of the economic, environmental and social impacts of the Project. Towards this end the Parties shall establish a Joint Operations Committee which shall meet as often as necessary to deal with the technical and commercial matters pertaining to the Agreement.

## CONFIDENTIALITY

The Parties agree to cause their employees, agents and representatives to treat as confidential this Agreement and all information furnished in terms of the Agreement. Information that needs to be disclosed by a Party because of the law or other reasonable purposes shall be disclosed upon written consent of the other Party, which consent shall not be unreasonably withheld.

## WARRANTIES, REPRESENTATIONS AND AFFIRMATION

1. The Parties warrant and represent to each other that they are legally competent to enter into this Agreement and to assume their obligations therein.
2. The Purchaser declares and affirms that it has not paid nor has it undertaken to pay any commission, bribe, pay-off or kick-back and that it has not in any other way or manner paid any sums, whether in the currency of ……… or foreign currency and whether in ……………….or abroad, or in any other manner given or offered to give any gifts and presents in ……………. or abroad to any person or to the Seller and generally, has not made any payment or accepted any gift or in any way whatsoever acted in breach of any obligation, prohibition or requirement of the ………… [*Anti-Corruption Act*] ……..to procure this Agreement. The Purchaser undertakes not to engage in any of the said or similar acts during the term and relative to this Agreement
3. The Seller declares and affirms that it has not paid , nor has it undertaken to pay, any commission, bribe, pay-off or kick-back and that it has not in any other manner paid any sums whether in ………….. currency or foreign currency and whether in ……..or abroad, or in any other manner given or offered to give any gifts and presents in ……….or abroad to any person or to the Purchaser, and generally, has not made any payment or accepted any gift or in any way whatsoever acted in breach of any obligation, prohibition or requirement of the……….. [*Anti-Corruption Act,*] to procure this Agreement. The Seller undertakes not to engage in any of the said or similar acts during the term and relative to this Agreement

## ASSIGNMENTS AND STEP IN RIGHTS

Except as otherwise provided for in this Agreement or with the written consent of the other Party, which consent shall not be unreasonably withheld, this Agreement or any of its rights and obligations shall not be ceded or assigned. It is noted and agreed that the Seller, as Developer of the Small Power Project, may be required to assign its rights to a Lender as security for loans. A Lender exercising step in rights shall be entitled to assume all the rights and obligations of the Seller.

##  RESTRUCTURING

The plans of the Government are to transition the electric power sector to a more competitive electricity market, which could involve (i) the Interconnection of the Isolated Mini – grid to the Main – grid; and/or (ii) the unbundling, restructuring, and/or reorganization (such actions collectively referred to as “Restructuring” or the “Restructured” power market) of the functions of the Purchaser and cause its rights and/or obligations under this Agreement to be transferred to successor entity(ies). The Purchaser represents and warrants that as part of any such Restructuring, it will cause any successor(s) assuming any or all of its transmission and distribution functions to fully assume in writing its power transmission obligations under this Agreement and cause any successor(s) assuming any or all of its power supply or power purchase obligations to fully assume in writing its power supply or purchase obligations under this Agreement.

## FORCE MAJEURE

A Party shall be deemed to be experiencing an event of force majeure if it is unable to discharge its obligations as a result of circumstances beyond its control as defined in this Agreement.

For the avoidance of doubt the following are some, but not all, examples of events of force majeure to the extent that they adversely affect the ability of any Party to perform:

1. Natural disasters arising from extreme weather conditions (such as floods or droughts), earthquakes, landslides, disease epidemics;
2. Acts of war, rebellion, riots or sabotage;
3. Strikes and work stoppages by employees due to causes outside the control of a Party;
4. Forced nationalisation or appropriation of the Project facilities of a Party.

A Party experiencing an event of force majeure shall be required to notify the other Party of the occurrence of such event within forty eight (48) hours of becoming aware of such an event.

The Party experiencing an event of force majeure shall be expected to take all reasonable steps within its control to restore its ability to perform as quickly as possible. If the event persists for three hundred and sixty-five (365) days without any prospects for successful resolution, either or both Parties may give notice to terminate the agreement without prejudice to any claims for performance of obligations that may have been outstanding at the time of the event of force majeure.

## DEFAULT

A Party shall be entitled to issue a notice of an event of default if the other Party fails to perform its obligations for reasons within its control.

For the avoidance of doubt the following shall constitute some, but not all, examples of events of default:

1. **Failure to fulfil conditions precedent** – neglecting to complete the pre-operation phase works within the agreed timelines for reasons within the reasonable control of a Party;
2. **Failure to supply or pay** – negligence by the Seller that results in non-delivery to the Purchaser of the agreed power and energy without compensatory payment;
3. **Failure to take or pay** – negligence by the Purchaser that results in non-dispatch of the Seller’s generating plant without compensatory payment;
4. **Failure to respond to a request to cure** – neglecting to respond to a request to cure an event of default within agreed timelines;
5. **Any other material breach of provisions of the agreement –** neglecting to fulfil agreed obligations or honour agreed warrants and representations;
6. **Liquidation –** voluntary or forced winding up of business.

Upon the occurrence of an event of default the aggrieved Party shall, within seven (7) days or such longer period as the aggrieved Party in its sole discretion may decide, notify the other Party in writing and either demand performance or compensation or demand both performance and compensation for any loss suffered. Without prejudice to any other remedies available at law, an aggrieved Party shall be entitled to serve notice of termination in case the event of default remains without cure or efforts at curing, for sixty (60) days.

Failure to perform as a result of force majeure shall not be considered an event of default, provided written notice to the other Party is submitted within forty-eight (48) hours of the occurrence of the event. The failure to perform without providing such notice shall be deemed an event of default.

## INSURANCE

For the duration of this Agreement, each Party shall maintain comprehensive insurance coverage for the replacement value of their portion of the Project facilities.

## AMENDMENTS

Either Party may request the amendment of provisions of this Agreement. Any amendments to the Agreement shall only take effect upon the written consent of the Parties. Amendments to an Annexure shall be in the form of a substitute Annexure duly signed and dated by the Parties.

## DISPUTE RESOLUTION

* + 1. **Amicable settlement**

Any dispute between the Parties on any matter arising from the interpretation or performance of this Agreement shall in the first instance be amicably settled between the Parties.

* + 1. **Appeal to Regulator**

If the Parties are unable to settle a dispute within a reasonable period not exceeding sixty (60) days, they shall submit the matter to the Regulator for resolution. The Parties shall abide by and act in accordance with the Regulator’s decision pending any legal appeal that may arise from the decision of the Regulator.

* + 1. **Arbitration**

The Parties agree to submit any matter that is not settled amicably or by the Regulator to a final and binding resolution by an Arbitrator agreed to by both Parties. If the Parties fail to agree on a single Arbitrator the matter shall be determined by a panel of three arbitrators appointed as follows: one appointed by the Seller, one appointed by the Purchaser and one, who shall be the chairman, appointed by the ............ [*local* c*ommercial arbitration centre*] with agreement of the other two arbitrators.

The proceedings shall be conducted in .............(*place*) according to the terms of the standard procedures of the .............................[*local commercial arbitration centre*].

* + 1. **No interruption to performance**

To the extent possible without prejudice to their rights, the Parties agree to continue fulfilling their obligations under this Agreement during the dispute resolution process.

## NOTICES AND COMMUNICATIONS

All notices and communications, including bills and payment demands, shall be in writing and addressed to the designated representatives, to be advised from time to time by each Party, and shall be deemed to have reached the other Party on the date of delivery if sent by hand or courier or on the first business day following the date of successful transmission by electronic means (email, fax, telex or similar).

Unless otherwise notified by any Party, the physical address for delivery of all notices and communications shall be the registered offices.

## ENTIRE AGREEMENT

This Agreement contains the entire agreement between the Parties with respect to the subject matter of this Agreement. Neither Party will be deemed to have made any representations, warranties, commitments or other undertakings with respect to the subject matter of this Agreement that are not contained in this Agreement.

# TERM AND TERMINATION

## TERM

Notwithstanding the date of signature this Agreement shall be deemed to commence on ... *[Date]* and the Commercial Operation Date of the Project shall be … *[Date]*, or such other earlier or later date as the Parties may subsequently agree and record in writing, and shall, unless or until terminated in terms of the relevant provisions of this Agreement, remain in force for fifteen (15) years or such other period which is not less than the minimum period required for the Project to satisfy obligations to equity and debt providers.

The Agreement may be extended for a further period to be determined by mutual consent upon written notice given at least twenty-four (24) months before the end of the initial term. The notice period and duration of any subsequent periods shall be determined by mutual written consent.

## TERMINATION

Either Party may elect to terminate the agreement under the following conditions:

* + 1. **Notice –** eitherParty may terminate this Agreement by providing twelve (12) months notice in writing to the other Party, provided that the notifying Party shall provide compensation for consequential damages and for any prejudice to Lenders and other third parties arising out of the termination by notice in accordance with this clause.
		2. **Event of Default** – either Party shall have the right to serve notice to terminate this Agreement if the other Party fails to cure, or to take reasonable steps towards curing, an event of default within sixty (60) days of the date of written notice of such event. Such termination shall be without prejudice to any rights and obligations of the aggrieved Party..
		3. **Force majeure** – either Party shall have the right to terminate the agreement after three hundred and sixty-five (365) days following the occurrence of an event of force majeure, provided it is evident that there is no possibility of a cure.

# SELLER’S OBLIGATION TO SUPPLY OR PAY

The Seller, as a Developer or IPP, shall have the following obligations:

## CONSTRUCTION OF GENERATION FACILITIES

The Seller shall take all reasonable steps to obtain the permits and approvals required to ensure the licensing, financing, design, construction and commissioning of the Generation Facilities within the agreed specifications and estimated timeframe and cost. The Generation Facilities shall be designed to operate as Small Power Project interconnected to an Isolated Mini - Grid. The Seller shall obtain the approval of the Purchaser and the Regulator of the technical specifications and shall not vary them without their consent.

The Seller shall promptly notify the Purchaser and Regulator of any variations in time and cost that are likely to result in a significant impact on the estimated unit cost.

The Parties shall establish a Joint Operations Committee as soon as is practicable following the signing of this Agreement in order to facilitate coordination of all construction activities to avoid or minimise delays to the Commercial Operation Date.

## INTERCONNECTION AND STATISTICAL METERING FACILITIES

The Seller shall finance, design, construct and commission the Generation Facilities, Interconnection Facilities, the statistical metering plant and equipment to specifications to be agreed with the Purchaser and the Regulator. There shall be Main and Check meters capable of measuring active and reactive capacity and energy exported or imported with accuracy levels sufficient to allow the readings to be used as back up for billing purposes in the event of the failure of the Revenue Metering.

## OPERATION AND MAINTENANCE OF THE GENERATION FACILITIES

The Seller shall be responsible for operating and maintaining the Generation Facilities in accordance with prudent utility practice. Through the Operations Committee, the Purchaser shall be permitted to undertake audits or witness tests to confirm adequacy of the Seller’s operation and maintenance processes.

The Seller agrees to take all reasonable precautions in the operation of the Generation Facilities to ensure that there is no damage to the Purchaser’s Facilities or those of the customers connected to the Purchaser’s grid.

The Operations Committee shall be responsible for producing the technical diagrams and operating and maintenance procedures to be attached to this Agreement as Annex B and C. The Committee shall add as many annexes as are necessary to cover operational contingencies as they shall arise during the term of this Agreement.

## SUPPLY OF POWER AND ENERGY

For planning purposes the Seller shall, at times and in a format to be agreed by the Operations Committee, provide to the Purchaser annual, monthly and day ahead forecasts of available capacity and estimated energy output. These forecasts shall be consistent with prudent utility practice with respect to the availability, planned and forced outage of the Generation Facilities.

From the Commercial Operation Date actual power and energy readings shall be recorded and stored in accordance with procedures to be determined by the Operations Committee.

Mismatches between the forecast and actual supply shall be handled as follows:

* + 1. The Parties agree to accept a forecast tolerance level of plus or minus ten (10) percent.
		2. Where the mismatch is a shortfall outside the agreed tolerance level for reasons outside the control of the Seller, the Parties shall agree revised forecasts of dependable capacity and energy output.
		3. Where the mismatch is a shortfall outside the agreed tolerance level for reasons within the control of the Seller, the Seller shall pay the Purchaser a shortfall penalty related to the Seller’s selling price or the Purchaser’s cost of alternative supply options as the Parties shall agree.

## METER READING, BILLING AND COLLECTION

The Parties shall, on designated dates for each billing cycle, jointly read the billing and statistical meters. A reading shall not be invalid due to the absence of any Party. Bills for payment shall be based on the readings from the Main Revenue Meter. In the event that this meter is not available or is inaccurate when compared to the Check Revenue Meter and the Main and Check Statistical Meters, then the Check Revenue Meter reading shall be used. In the event of failure of both Main and Check Revenue Meters, the Statistical Meter readings shall be used pending rectification of the problem with the Revenue Meters.

In the unlikely but possible event of a failure of all metering, bills shall be based on agreed estimates until the repair, test and re-commissioning of the meters.

Payments due shall be calculated in terms of the tariffs for the agreed capacity and associated energy supplied recorded in Annex A. Bills shall be prepared and submitted to the Purchaser within five (5) working days of meter reading. All payments shall be made into a bank account to be designated by the Seller.

## INDEMNITIES AND DEFAULT LIABILITIES

The Seller shall indemnify the Purchaser for any damage, injury or loss to life and property, including that belonging to the Purchaser’s customers and other third parties, as a direct consequence of an event of default, act of commission or omission attributable to the Seller. Unless an extension of time has been agreed, the Seller shall also pay liquidated damages to the Purchaser for each day there is a delay to the anticipated Commercial Operation Date for reasons within the control of the Seller.

Liabilities shall be limited to a financial limit to be agreed by the Parties in accordance with prudent utility practice and shall exclude claims for consequential damages of any nature, except as otherwise provided for in terms of this Agreement.

# PURCHASER’S OBLIGATION TO TAKE OR PAY FOR SUPPLY

The Purchaser shall have the following obligations:

## CONSTRUCTION OF OFF-TAKE, INTERCONNECTION AND REVENUE METERING FACILITIES

The Purchaser shall take all reasonable steps to obtain the permits and approvals required to ensure the licensing, financing, design, construction and commissioning of the transmission and distribution and other power off-take facilities as well as the Purchaser’s interconnection and revenue metering plant and equipment (“the Purchaser’s Facilities”) within the agreed specifications and estimated timeframe and cost.

The Purchaser shall charge the Seller a capital contribution for the Purchaser’s Facilities that shall be reduced in proportion to the expected utilisation of the Purchaser’s Facilities by other customers.

The Revenue Metering shall consist of Main and Check Meters which shall be used for purposes of billing and capacity exports and imports. The Purchaser shall carry out, and meet the cost of, periodic tests of the meters in the presence of the Seller’s designated representatives. The Seller shall meet the cost of any additional meter tests undertaken at the request of the Seller. The Seller shall not pay for the tests if they confirm that the Purchaser’s meters are faulty or inaccurate.

## OPERATION AND MAINTENANCE OF PURCHASER’S FACILITIES

The Purchaser shall be responsible for operating and maintaining the Purchaser’s Facilities in accordance with prudent utility practice. Through the Operations Committee, the Seller shall be permitted to undertake audits or witness tests to confirm adequacy of the Purchaser’s operation and maintenance processes.

## DISPATCH AND PAYMENT

The Purchaser agrees to dispatch all the available capacity and net energy output delivered by the Generation Facilities. The Purchaser shall take or pay for an agreed level of available capacity and associated energy on the basis of the tariff calculation methodology and shall either bank surplus energy on behalf of the Seller or pay for the surplus energy at spot market prices.

The Purchaser shall settle all monthly bills in full within ten (10) working days of receipt of a bill. All payments not made by due date shall attract a penalty interest rate equivalent to the overdraft interest rate of the Seller’s bank. The Seller shall also be entitled to issue a notice of an event of default where payment remains outstanding for more than thirty (30) days beyond due date.

If necessary as a security requirement to providers of finance and other services, the Purchaser agrees to comply with written requests by the Seller, subject to the Seller obtaining all the relevant approvals, to remit payments into an escrow account or directly to Lenders or other third parties.

In the event of disputed bills requiring the full dispute resolution process to be followed, the Purchaser shall continue to make payments but without prejudice to the recovery of any overpayments, together with interest.

## INDEMNITIES AND DEFAULT LIABILITIES

The Purchaser shall indemnify the Seller for any damage, injury or loss to life and property as a direct consequence of an event of default attributable to the Purchaser. Unless an extension of time has been agreed, the Purchaser shall also pay liquidated damages for each day there is a delay to the anticipated Commercial Operation Date for reasons within the control of the Purchaser.

Liabilities shall be limited to a financial limit to be agreed by the Parties in accordance with prudent utility practice and shall exclude claims for consequential damages of any nature, except as otherwise provided for in terms of this agreement.

# RISK MANAGEMENT

The Parties agree to the principle of mitigating Project risks by allocation to the Party that is best able to manage the risk. Subject to periodic review to ensure fairness and equity, the Parties shall allocate the risks of the Project as follows:

## SOVEREIGN RISK

Where possible the Parties agree to mitigate sovereign or country risk by ensuring that all required Government consents, permits and licenses are granted, and purchasing appropriate insurance. The Parties also agree to recommend to the Regulator appropriate equity risk and debt risk premiums that reflect prudent utility practice.

## CONSTRUCTION RISK

The Parties shall be responsible for mitigating construction risk by employing technically and managerially qualified, experienced and competent personnel, consultants and contractors. Where possible the Parties shall mitigate the risk by using fixed price turnkey Engineering, Procurement and Construction contractors with adequate technical and financial capacity and experience. A Party shall be paid by the defaulting Party liquidated damages for proven losses arising from failure to abide by the agreed technical specifications, timescale and budgets.

## HYDROLOGICAL RISK

In the case of a Small hydro power project, the Seller shall mitigate hydrological risk by designing the Generation Facilities using the maximum amount of historical hydrological data available. The Parties also agree to re-negotiate periodically on the basis of experience the power and energy output to minimise the mismatch between forecast and actual to within agreed tolerance levels.

## OPERATING RISK

The Parties shall mitigate operating risk by employing technically competent personnel, consultants and contractors as necessary to operate their respective Project facilities to the expected plant availability levels in accordance with prudent utility practice. Each Party shall not pass on to the other cost increases due to operational inefficiency, the extent of which shall be determined using benchmarks approved by the Regulator.

Each Party shall be entitled to disconnect its facilities in emergency circumstances where continued parallel operation would endanger its personnel and plant. Such action shall not be deemed to be an event of default provided the Parties take all reasonable steps to resolve the emergency situation within the shortest possible time.

## FISCAL POLICY RISK

Each Party shall be responsible for duties, levies and taxes that may be imposed by legislation. The Parties agree to negotiate appropriate amendments to this Agreement where changes in legislation impose cost impacts that have an adverse impact on financial viability.

## MONETARY POLICY RISK

The Seller shall, to the extent possible, arrange project finance with adequate provisions to minimise cost impacts due to variations in interest, inflation and foreign currency rates. Unavoidable cost changes shall be passed on to the Purchaser using the automatic tariff adjustment formula approved by the Regulator.

## MARKET RISK

The Seller shall be obliged to supply or pay and the Purchaser shall be obliged to take or pay for an agreed level of power and energy subject to an agreed tolerance level for variations between actual and notified quantities. Payment shall be in accordance with a cost-reflective tariff established in accordance with an agreed methodology. The minimum duration of the PPA shall be determined by the cash flow requirements for fulfilling debt service and return on equity.

The Parties have agreed to a set of tariffs, including an escalation clause, as laid out in Annex A..

## PAYMENT RISK

The currency for invoicing and payments shall be the legal tender of the country and which is used by the Purchaser to bill its own customers.

The Purchaser shall be liable to pay the Seller notwithstanding failure to collect from its own customers. If necessary the creditworthy customers of the Purchaser shall pay directly into an escrow account for the benefit of the Seller and its Lenders.

Where necessary, the Parties agree to seek appropriate Government guarantees for currency convertibility and remittances of foreign currency payment for foreign debt service, dividend payments and other financial obligations for imported services.

# ANNEXES

The Parties shall provide details of the technical and commercial arrangements in Annexes which shall be attached to and form part of this Agreement. The Annexes shall include but not be limited to the following:

1. Annex A: Agreed Tariffs for the Term of the PPA
2. Annex B: Technical diagrams and descriptions of the generating plant and interconnection facilities;
3. Annex C: Operational and maintenance arrangements and procedures;

IN WITNESS WHEREOF the Parties have executed this Agreement on the dates indicated before in the presence of the witnesses indicated:

FOR THE SELLER: *[Name of Seller or Developer or IPP]*

AUTHORISED REPRESENTATIVE ....................................................................

TITLE .....................................................................

SIGNATURE ....................................................................

WITNESS ....................................................................

DATE .....................................................................

FOR THE PURCHASER: *[Name of Purchaser]*

AUTHORISED REPRESENTATIVE ....................................................................

TITLE .....................................................................

SIGNATURE ....................................................................

WITNESS ....................................................................

DATE .....................................................................

# ANNEX A: Agreed Tariffs for the Term of the PPA

The offtaker will be billed according to the following tariff schedule for energy and capacity, with the relevant indexation provisions. Tariffs for small projects will only have energy charges.

**Part A:**

**Energy Charges**

1. **Calculation of Energy Charges**

For the purposes of Clause 7.3, Purchaser shall pay to Seller Energy Charges in respect of the Net Electrical Output of the Plant in each month calculated as follows:

MEC = NEO \* ECR

Where:

MEC is the aggregate amount of Energy Charges ($) payable in respect of that month

NEO is the aggregate Net Electrical Output (kWH) of the Plant in that month

ECR is the Energy Charge Rate (expressed in US$/kWh) prevailing in accordance with paragraph 2 below on the last day of that month.

1. **Energy Charge Rate**

The Energy Charge Rate for the Plant during each month shall be calculated as follows:

ECRp = X + Y

where

ECRp = the Energy Charge Rate for month p (expressed as US$/kWh)

and X = (S1 x OPIp-I) + (S2 x FPIp-I)

 OPIb ( FPIb )

 (the fuel component of the Energy Charge Rate)

where

S1 = value agreed with Seller as the Base Fuel Price FOB Component (expressed as US$/kWh)

S2 = value agreed with Seller as the Base Fuel Transport Cost Component (expressed as US$/kWh)

OPIp-1 = [ ]fuel price index for the month ended 3 months prior to the beginning of month

OPIb = [ ]fuel price index for September 1998, namely, [ ]

FPIp-1 = [ 2] freight price index for the month ended 3 months prior to the beginning of month p

FPIb = [ 2] freight price index for September 1998, namely, [ ]

and

Y = T x CPIp-I

 CPIb

(the non-fuel component of the Energy Charge Rate)

where

T = value agreed with Seller as the Base Variable O & M Component (expressed as US$/kWh)

CPIp-1 = the Consumer Price Index for the month ended 3 months prior to the beginning of month p

CPIb = the Consumer Price Index for September 1998, namely, [ ]

**Part B:**

**Capacity and Availability Payments**

1. **Calculation of Energy Charges**

The Capacity Charge Rate for the Plant during each month shall be calculated as follows:

CCRp = A + B

where

CCRp = the Capacity Charge Rate for month p, (expressed as US$/kWh)

and

A = F (the non-escalable component of the Capacity Charge Rate)

 12

where

F = value agreed with Seller as the fixed component of the Base Capacity Charge Rate (expressed in US $ / kW/year)

and

B = E x CPIP-1 (the escalable component of the Capacity Charge Rate)

 12 CPIb

where

E = value agreed with Seller as the escalable component of the Base Capacity Charge Rate US $ / kW/year)

CPIp-1 = the Consumer Price Index for the month ended 3 months prior to the beginning of month p;

CPIb = the Consumer Price Index for September 1998, namely ●

1. **Calculation of Capacity Payments**

Seller shall be entitled to Capacity Payments in respect of Capacity in each month calculated as follows:

CPp = CCRP x CC

where

CPp = the Capacity Payment for month p (expressed in US $);

CCRp = the Capacity Charge Rate for month p (expressed in US$/kW);

CC = the Contracted Capacity (expressed in kW).

# ANNEX B: Technical Diagrams and Description of Generating Plant and Interconnection Facilities

 *[To be inserted for each project and shall include but not be limited to the following information:*

1. *Diagrams of the electrical connections identifying the interconnection, synchronising and metering points.*
2. *Size of generating unit or units and transformers*
3. *Normal status of switchgear]*

# ANNEX C: Operation and Maintenance Arrangements and Procedures

*[To be inserted for each project and shall include but not be limited to the following information:*

1. *Composition, terms of reference and meeting procedures for the Operations Committee.*
2. *Safety rules and regulations to be followed.*
3. *Procedures for normal and emergency control and operation.*
4. *Procedures for maintenance during planned and forced outages.*
5. *Calibration, testing and maintenance of meters]*
1. The template for this PPA was prepared as part of an EUEI project for the Regional Electricity Regulators’ Association of Southern Africa (RERA) to establish a framework for attracting increased investment in mini-grids employing renewable and hybrid generation in SADC. This project was financed under the Africa-EU Renewable Energy Cooperation Programme (RECP), an integral part of the Africa-EU Energy Partnership (AEEP). [↑](#footnote-ref-1)