KEY CONTRACT TERMS
Between the Power Supplier (Seller) and the University (Buyer)

Note: The purpose of this Annex is to specify the Key Contract Terms of the Power Supply Agreement (PSA) that the UPLB and the Winning Bidder will sign after this Transaction. The PSA will be jointly drafted and finalized by the Parties during the negotiation. The price offer of the Winning Bidder shall be captured in the price structure of the PSA and shall not be a subject for negotiation.

A discussion will be done to establish the implementation arrangements and procedures and to identify and quantify the risks of both parties under the PSA in order to arrange the risk mitigation strategies. The Parties may decide to sign a separate Risk Mitigation Agreement based on agreed risk mitigation strategies from the PSA.

1. Contracting Parties

a. SELLER: Power Supplier (GENCO, IPP Administrator, Wholesale Aggregator)
b. BUYER: University of the Philippines Los Baños

2. Quantity and Contract Duration

Quantity per year	Duration period
4 MW	November 26, 2017- December 25, 2018
	December 26, 2018- December 25, 2019
	December 26, 2019- December 25, 2020
	December 26, 2020- December 25, 2021
	December 26, 2021- December 25, 2022

3. Obligations of Parties

a. SELLER to make available at all times, except during force majeure, sell and deliver, or cause to be delivered to the BUYER the Capacity of power supply with price variations based on CUF from 65% to 100%.
b. BUYER shall purchase the Capacity made available by the SELLER and shall be obligated to pay SELLER at contract price of the power supply.
c. BUYER shall be responsible for arranging with the Transmission Services Provider for the wheeling of the plant's output from point of delivery through the transmission system to the BUYER's substation.

4. Price and Payments

a. Major Components of Contract Price. The six (6) possible major components of the Contract Price, which are specified by the SELLER in its Bid, are as follows:
    i. Fixed Cost 1 – Capital Recovery Cost, including profits;
    ii. Fixed Cost 2 – Other Fixed Costs, such as fixed operation and maintenance costs;
    iii. Variable Cost 1 – Non-Fuel Variable Costs, such as variable operation and maintenance costs (local subcomponent to be indexed only to Philippine CPI and foreign subcomponent to be indexed only to US CPI);
    iv. Variable Cost 2 – Fuel Costs, including transportation and administration associated with the procurement and delivery of fuel to the power plant;

v. Variable Cost 3 – Non-Fuel Variable Costs, such as variable operation and maintenance costs indexed to a basket of Price Indices (other than Philippine CPI and US CPI); and

vi. Variable Cost 4 – Un-Indexed Non-Fuel Variable Costs, such as administration fees.

The PSA shall contain at least one and at most six (6) of these major components, based on the components specified by the SELLER in its Bid.

b. Local and Foreign Subcomponents. Each of the major components may have local and foreign subcomponents, which are specified by the SELLER in its Bid.

i. Local subcomponents are specified in PhP/kWh while foreign subcomponents are specified in USD/kWh. No other foreign currencies shall be allowed.

ii. All foreign subcomponents of these major components shall be subject to the foreign exchange rate.

iii. The foreign exchange rate to be used shall be based on the rate published by the Bangko Sentral ng Pilipinas. The reference date for the FOREX to be used in the PSA shall follow the option chosen by the SELLER in its Bid.

c. Indexation. The SELLER, in its Bid, shall specify the portion (in percentage, from a minimum of 0% to a maximum of 100%) of each subcomponent that will be indexed to a corresponding price index or fuel reference. Indexation shall be applied to the components of the Contract Price as follows:

i. Fixed Cost 1 and Variable Cost 4 shall NOT be indexed to any reference or CPI.

ii. The local subcomponents of Fixed Cost 2 and Variable Cost 1 shall be indexed only to Philippine CPI while their foreign subcomponents shall be indexed only to US CPI.

iii. Variable Cost 2 shall be indexed to the fuel reference from a reputable third party publisher specified by the SELLER in its Bid.

iv. Variable Cost 3 shall have subcomponents that are indexed to (1) US Producer Price Index, Capital Equipment, (2) Philippine CPI, NCR All Items, (3) Luzon General Wholesale Price Index, Manufactured Goods classified by Materials, (4) Luzon General Wholesale Price Index, Machinery and Transport Equipment.

The indices to be applied shall use the actual value as published by the relevant agency or entity – the Philippine Statistics Authority for price indices in the Philippines, the US Bureau of Labor Statistics for price indices in the USA, or a reputable third party publisher for fuel price indices.

d. Capacity Utilization Factor. The Capacity Utilization Factor (CUF) shall be computed as follows:

$$\boldsymbol{CUF = \frac{Q}{CC \times (H_T - EH_F - EH_T)} \times 100\%}$$

where, Q = Energy delivered by the SELLER for the Billing Period, in kWh;
CC = Contract Capacity, in kW;
HT = Total number of hours in the Billing Period;

EHF = The sum of the duration, in Equivalent Hours, of Events of Force Majeure; and

EHT = The sum of the duration, in Equivalent Hours, of Events of Transmission System Failure.

The CUF shall be computed for each Billing Period in percentage points up to two decimal places (for example, 67.89%).

e. Minimum Hourly Nomination. The minimum hourly nomination in each Trading Interval shall be zero (0) MW.

f. Contract Price Equation.

i. The SELLER shall provide with its Bid the following: (1) a table that shows the CUF values and the corresponding values for Fixed Cost 1 and Fixed Cost 2, and (2) the equation to arrive at this table. If the computed CUF for a Billing Period is expressed as a whole percentage point, then the table of values will be used. Otherwise, the equation will be used. Except for differences due to rounding off by truncation, the equation and the table shall result in similar values for Fixed Cost 1 and Fixed Cost 2.

ii. If the computed CUF is less than 65%, then the price for Fixed Cost 1 and Fixed Cost 2 shall use the corresponding value for CUF of 65%.

iii. For each Billing Period, the Basic Charge shall be computed as follows:

$$
\begin{aligned}
BC = {} & FC_1^L(CUF) + FC_2^L(CUF) \times \left[A \times \left(\frac{PHCPI_y}{PHCPI_0}\right) + (1-A)\right] + VC_1^L \\
& \times \left[B \times \left(\frac{PHCPI_y}{PHCPI_0}\right) + (1-B)\right] + VC_2^L \times \left[C \times \left(\frac{FI_n^L}{FI_0^L}\right)\right] + VC_3^L \\
& \times \left[D \times \left(\frac{NCPI_n}{NCPI_0}\right) + E \times \left(\frac{LWPIM_n}{LWPIM_0}\right) + F \times \left(\frac{LWPIP_n}{LWPIP_0}\right) + (1-D-E-F)\right] \\
& + VC_4^L \\
& + \left\{FC_1^F(CUF) + FC_2^F(CUF) \times \left[G \times \left(\frac{USCPI_y}{USCPI_0}\right) + (1-G)\right] + VC_1^L \right. \\
& \times \left[H \times \left(\frac{USCPI_y}{USCPI_0}\right) + (1-H)\right] + VC_2^L \times \left[J \times \left(\frac{FI_n^F}{FI_0^F}\right)\right] + VC_3^L \\
& \left. \times \left[K \times \left(\frac{USPPI_n}{USPPI_0}\right) + (1-K)\right] + VC_4^L\right\} \times FOREX
\end{aligned}
$$

where,

BC	=	Basic Charge, in PhP/kWh;
CUF	=	Capacity Utilization Factor;
FC L,1 (CUF)	=	Local subcomponent of Fixed Cost 1, a function of CUF, in PhP/kWh;
FC L,2 (CUF)	=	Local subcomponent of Fixed Cost 2, a function of CUF, in PhP/kWh;
VC L,1	=	Local subcomponent of Variable Cost 1, in PhP/kWh;
VC L,2	=	Local subcomponent of Variable Cost 2, in PhP/kWh;
VC L,3	=	Local subcomponent of Variable Cost 3, in PhP/kWh;
VC L,4	=	Local subcomponent of Variable Cost 4, in PhP/kWh;
FC F,1 (CUF)	=	Foreign subcomponent of Fixed Cost 1, a function of CUF, in USD/kWh;

FC F,2 (CUF)	=	Foreign subcomponent of Fixed Cost 2, a function of CUF, in USD /kWh;
VC F,1	=	Foreign subcomponent of Variable Cost 1, in USD /kWh;
VC F,2	=	Foreign subcomponent of Variable Cost 2, in USD /kWh;
VC F,3	=	Foreign subcomponent of Variable Cost 3, in USD /kWh;
VC F,4	=	Foreign subcomponent of Variable Cost 4, in USD /kWh;
A	=	Portion of FC L,2 to be indexed;
B	=	Portion of VC L,1 to be indexed;
C	=	Portion of VC L,2 to be indexed;
D	=	Portion of VC L,3 to be indexed (to corresponding index);
E	=	Portion of VC L,3 to be indexed (to corresponding index);
F	=	Portion of VC L,3 to be indexed (to corresponding index);
G	=	Portion of FC F,2 to be indexed;
H	=	Portion of VC F,1 to be indexed;
J	=	Portion of VC F,2 to be indexed;
K	=	Portion of VC F,3 to be indexed;
PHCPI0	=	Philippine CPI, All Items (2010 = 100) for reference year;
PHCPIy	=	Philippine CPI, All Items (2010 = 100) for year prior to Billing Period;
FI L,0	=	Fuel price index (local component) for reference month;
FI L,n	=	Fuel price index (local component) for month of Billing Period;
NCPI0	=	Philippine CPI, NCR All Items (2006 = 100) for reference month;
NCPIn	=	Philippine CPI, NCR All Items (2006 = 100) for month of Billing Period;
LWPIM0	=	Luzon General Wholesale Price Index, Manufactured Goods classified Chiefly by Materials (1998 = 100) for reference month;
LWPIMn	=	Luzon General Wholesale Price Index, Manufactured Goods classified Chiefly by Materials (1998 = 100) for month of Billing Period;
LWPIP0	=	Luzon General Wholesale Price Index, Machinery and Transport Equipment (1998 = 100) for reference month;
LWPIPn	=	Luzon General Wholesale Price Index, Machinery and Transport Equipment (1998 = 100) for month of Billing Period;
USCPI0	=	US CPI, All Items (2010 = 100) for reference year;
USCPIy	=	US CPI, All Items (2010 = 100) for year prior to Billing Period;
FI F,0	=	Fuel price index (foreign component) for reference month;
FI F,n	=	Fuel price index (foreign component) for month of Billing Period;
USPPI0	=	US Producer Price Index, Capital Equipment (2010 = 100) for reference month;
USPPIn	=	US Producer Price Index, Capital Equipment (2010 = 100) for month of Billing Period; and
FOREX	=	Foreign exchange rate for month of Billing Period, in PhP/USD.

Note: In this equation, the superscripts denote whether the component of the variable is local or foreign; that is, superscripts do not denote exponents. To remove all doubt, this equation contains <u>no</u> exponentiation.

iv. For this procurement, the reference year is 2016 and the reference month is August 2016.

v. The equation for the Contract Price may be further simplified in the PSA by combining terms or eliminating terms which have zero value. The simplification of this equation shall not result in any change in the computed price.

vi. All price components and portions to be indexed shall be taken directly from the Bid submitted by the SELLER. Changes are permitted if they will result in reduction to the computed price.

All price index values and the foreign exchange rate shall be obtained from third party sources.

5. Billing and Payment

a. A Billing Period shall be a one-month period that starts on the 26th day of a calendar month and ends on the 25th day of the succeeding calendar month.
b. The SELLER shall calculate the total price of energy consumed per month for UPLB in each billing interval and provide all the computations that led to the declared price of the billing. For capacity—based contracts, the energy consumed per Billing Interval is the full contracted capacity multiplied to the number of hours incurred for that period.
c. Calculation of Settlement Quantities and Settlement Amounts and billing of UPLB shall be performed monthly for the preceding Billing Period.
d. Within five (5) days from the end of the Billing Period, the SELLER shall make available to UPLB the Metered Quantities and Adjusted Metered Quantities of that Billing Period and shall issue a final billing statement to UPLB
e. UPLB shall pay to the SELLER all amounts due under a Final Settlement Statement for a Billing Period in cleared funds, no later than 1500H of the fifteenth (15th) day of the month following the end of the Billing Period.
f. If any of the stated under this Section do not fall on a Business Day, the due date shall be the next Business Day
g. All statement of accounts, notices, demand or request by the Parties to this Contract shall be deemed properly served if transmitted by registered mail with return card, postage, prepaid, or delivered personally to the signatories or their duly authorized representatives. It shall be sent to the Vice Chancellor for Planning and Development of UPLB

6. Allowed Outages and Replacement Power

a. SELLER will have NO plant outage allowance.
b. SELLER shall be responsible for the replacement power during plant outages.
c. BUYER shall pay for replacement power at the contract price to the SELLER.
d. If the SELLER arranges for Replacement Power, Line Rental to be charged subject to the condition:
    i. In case of plant outage any positive difference between the Line Rental incurred from other generating facilities and the Line Rental that would have been incurred if power were sourced from the original facility shall be for the account of the SELLER.

7. Availability Declaration, Nomination and WESM Offers

a. SELLER guarantees supply of 4MW for capacity—based contracts per year.
b. SELLER and BUYER will agree on the schedule and forms for the following:
    i. Year-Ahead Availability Declaration of SELLER and Nomination of BUYER

ii. Month-Ahead Availability Declaration of SELLER and Nomination of BUYER
iii. Day-Ahead Availability Declaration of SELLER and Nomination of BUYER

c. Any portion or all Capacity Contracted is assignable to any UP Campus and its institutions.
d. BUYER has the right to sell any unused power.

8. Events of Force Majeure and Transmission System Failure

a. Force Majeure Events shall be defined as events which disable the production, delivery, and/or utilization of electricity beyond the control of the SELLER and/or the BUYER, as the case may be, such as:

i. acts of God;
ii. acts of war or the public enemy whether war be declared or not, terrorism, invasion, armed conflict or act of foreign enemy, blockage, embargo, revolution, and public disorders, including insurrection, rebellion, civil commotion, sabotage, riots and violent demonstrations;
iii. accidents, explosions, fires, earthquakes, typhoons, tidal waves, storm surges, flooding in any of the areas served by either party, or other natural calamities;
iv. adverse geological or underground conditions which were not discovered and would not have been discovered by a reasonably prudent exploratory drilling program;
v. exceptionally severe weather conditions the effects of which could not have been avoided by the exercise of reasonably prudent precautions;
vi. strikes or lockouts or other industrial action by workers or employees of the SELLER, or of any contractor, any operation and maintenance contractor or any subcontractor of any contractor or any operation and maintenance contractor; and
vii. Force Majeure events defined under the WESM Rules [Rules 6.7.1 and 6.7.2 of DOE DC2016-06-0008].

e. Transmission System Failure shall be defined as any outage in the transmission network and facilities, transmission failure, transmission constraints, or transmission service disruption that affects the ability of:
i. the SELLER to supply and/or deliver; and/or
ii. the BUYER to receive and/or utilize the contracted capacity.

f. Events of Force Majeure or Transmission System Failure shall suspend the obligations of both the SELLER and the BUYER
i. If SELLER is unable to supply the Contracted Capacity due to an occurrence of an Event of Force Majeure or Transmission System Failure, BUYER shall be charged only for the actual electric energy delivered to the Point of Delivery during the applicable Billing Period.
ii. If BUYER is unable to receive the Contracted Capacity due to an occurrence of an Event of Force Majeure or Transmission System Failure, BUYER shall not be obligated to pay for the Contract Price and all Associated Charges.

g. Parties shall give timely notice and details of the Events of Force Majeure or Transmission System Failure to be excused from their respective obligations.

h. For Events of Transmission System Failure, party that seeks to be excused from their respective obligations shall provide certification from the Transmission Services Provider.
i. Prolonged Force Majeure (120 days) may lead to termination.

9. Defaults

a. Events of Default Applicable to Both Parties
    i. Material breach or violation by a Party (the "Party in Default") of any covenant, representation, warranty or obligation under this PSA, unless such breach is cured within cure period after the date of notice (a "Notice of Default") to the other Party.
    ii. A receiver or liquidator or trustee is appointed for either Party (the "Party in Default") and such appointment is not discharged within the cure period; or such Party is adjudicated bankrupt or insolvent or any substantial part of the property of such Party is sequestered, and such decree continues undischarged and unstayed for some period after the entry thereof, or a petition to declare bankruptcy or to reorganize such Party pursuant to any of the provisions of applicable bankruptcy laws or any other similar statute is filed and not dismissed within some number of calendar days after such filing.
    iii. Either Party (the "Party in Default") files a voluntary petition in bankruptcy under any provision of any bankruptcy law or consents to the filing of any bankruptcy or reorganization petition against it under any similar law; or such Party files a petition or answer or consent seeking relief or assisting in seeking relief in a proceeding under any of the provisions of applicable bankruptcy law or any other similar statute, or an answer admitting the material allegations of a petition filed against it in such a proceeding; or such Party makes a general assignment for the benefit of its creditors; or admits in writing its inability to pay its debts generally as they become due.
b. "BUYER Event of Default"
    i. Failure to pay any amount due and payable under the PSA after the lapse of one hundred twenty (120) calendar days from Due Date thereof and to remedy within the cure period
c. "SELLER Event of Default"
    i. Failure to deliver supply in accordance with the PSA and/or to provide Replacement Power
    ii. Failure to pay any amount that may be due to the Buyer

10. Risk Mitigation

a. The BUYER and the SELLER will agree on risk mitigation arrangements on plant outages and defaults of Parties.

11. Termination

a. Parties shall arrange Replacement Contracts. Party in Default shall pay the price difference of the PSA and the Replacement contract.

b. Existing supplier shall be liable for the positive difference of the replacement contract price and the PSA price, or WESM price and the PSA price for one year upon termination of the contract.
c. Buyer shall be liable for the positive difference

12. Other Terms and Conditions

a. Other terms and conditions including dispute resolution, change in law and other miscellaneous provisions shall be defined during negotiation