

ANNEX G

Methods of Payment Calculations

This Annex G shows clearly the method used to calculate the Capacity Payments and Energy Payments. Worked examples on the calculation of Capacity Payments and Energy Payments are set forth in Annex J. (ok)

A. Calculation of Monthly Payments

$$\text{Total Monthly Payment} = \text{MCP} + \text{EP} + \text{TOP} + \text{SC} + \text{T} + \text{P}$$

Where:

MCP = Monthly Capacity Payment

EP = Energy payment

TOP = Take or Pay for Coal pursuant to Annex [27]

SC = Supplemental Charge

T = Taxes pursuant to Annex [x]

P = Penalties pursuant to Annex H

1. Calculation of monthly Capacity Payments

1.1 Payments effective after Completion Date

Capacity Payments, effective only after the Completion Date of the Plant and the Switchyard are to recover all expenses incurred by the COMPANY that is the depreciation of the debt, interests on the debt, fixed cost of the operation and maintenance of the Plant, fixed costs related to the unloading, handling and delivery to site of the Coal, all insurance covers (including insurance for loss during operation), administrative costs, and all taxes applicable to the project and the internal rate of return on investment.

As from Early Completion Date of First Unit, the Capacity Payment for a given month would be calculated in FSHILLINGS as follows:

$$\text{Monthly Capacity Payment} = \left[CFPL_i + \frac{X_i}{X_0} \times CFPD_i + \frac{IL_i}{IL_0} \times CFEML_0 + \frac{IF_i}{IF_0} \times \frac{X_i}{X_0} \times CFEMD_0 \right] \times PF_n$$

Where :

- CFPL_i: Local part of the fixed component of Capacity of year i in FSHILLINGS/kW/month in reference to figures given in Paragraph 9.1.2 and submitted by the COMPANY to Offtaker at the start of each Civil Year.
- CFPD_i : Foreign Currency part (exclusively in Euro) of the fixed component of Capacity of year i in FSHILLINGS/kW/month in reference to figures given in Section 9.1.2 and submitted by the COMPANY to Offtaker at the start of each Civil Year.
- CFEML₀: Fixed Costs in local currency for operation and maintenance at the Referenced Date in FSHILLINGS/kW/month in reference to the figures given in Section 9.1.2 and given by the COMPANY to Offtaker at the start of each Civil Year.
- CFEMD₀: Fixed costs in foreign currency (exclusively in Euro) for operation and maintenance at the Referenced Date in FSHILLINGS/kW/month in reference to the figures given in Section 9.1.2 and given by the COMPANY to Offtaker at the start of each Civil Year
- X_i: Rate of Exchange (FSHILLINGS/Euro) applicable for year i according to the yearly arithmetical mean value of the Franc SHILLINGS (FSHILLINGS) against the Euro (in FSHILLINGS per the Euro) calculated as from the published figures of the BCEAO (Central Bank for Western African Estates) during the year (i-1)
- X₀ : Rate of Exchange (FSHILLINGS/ Euro) applicable at the Referenced Date of the franc SHILLINGS (FSHILLINGS) against the Euro (in FSHILLINGS per Euro) as published by the Central Bank for Western African Estates X₀ which is equal to [xxxx]
- IL_i : Price Index applicable to year i according to the arithmetical mean of the actual consumption price index calculated from the published figures in Ghana as set out by the Ministry of Economy Forecast and Statistical Department during year (i-1)
- IL₀ : Price Index applicable to the Reference Date according to the arithmetical mean of the actual consumption price index calculated from the published figures in Ghana as set out by the Ministry of Economy Forecast and Statistical Department during year (i-1) is equal to xxxx
- IF_i : Price Index applicable for year i according to the arithmetical mean of the actual consumption price index for all households, excluding the price of tobacco, calculated from the figures published on a monthly basis by the National Institute of Statistics and Economic Affairs (INSEE) in France during year (i-1)
- IF₀ : Price Index applicable at the Reference Date according to the arithmetical mean of the actual consumption price index for all households, excluding the price of tobacco, calculated from the figures published on a monthly basis by the National Institute of Statistics and Economic Affairs (INSEE) in France IF₀ is equal to xxxx.

PFn : Contractual Capacity in kW determined by Capacity Tests in conformity to Paragraph 8.3.1 and 12.2, but due to the formula requirements should be less or equal to two hundred and thirty thousand kilowatts (230,000 kW))

1.2 Proration

If the Plant Capacity established pursuant to the provisions of Article 12 of the Agreement is re-established pursuant to such Article 12 during any calendar month, the Plant Capacity applicable to such month shall be determined based upon a weighted average Plant Capacity for such month. Additionally, the Capacity Payments applicable to the month in which the Completion Date of the Plant occur, and to the final month during the Term, shall be prorated.

2. Calculation of the Monthly Energy Payments

Energy Payments are intended to cover variable expenses related to the operation of the Power Plant including the variable costs of Fuel, the variable costs of unloading, handling and delivery of coal, used chemicals, consumables, lubricants, water and maintenance expenses and excluding items already included in Capacity Payments.

They are calculated at the nth Billing Period in FSHILLINGS as follows :

$$\text{Energy Payments} = [CVC_n + CVEM_n]$$

Where:

CVCn: Variable Component of fuel at the nth payment period in FSHILLINGS is equal to:

$$CVC_n = E_n * T_g * (CH_n + FT_n + BT_n)$$

With

2.1.1 Net Energy

En: Net energy measured at the Electrical Terminal Point (taking into account the energy received by the Company from Offtaker grid) for the nth payment period in kWh.

2.1.2 Coal Consumption

Tg: Coal Consumption in tons of coal per kWh of energy delivered to Offtaker according to Csg and a net calorific value of coal is calculated as follow

$$Tg = \frac{1}{1000} \times \frac{1}{PCI} \times \frac{Cs_g}{Cc_j}$$

Where :

PCI : is the low heating value of the coal in kcal/kg fixed to 5,624 for the tariff of this Contract

Ccj : is the conversion coefficient of calories in joules, equal to 4.1855

Csg is the Net Guaranteed Heat Rate.

Schedule of Partial Heat Rates for the Plant

PARTIAL HEAT RATES		
Plant Load (MW)	% of Load	Net Plant Heat Rate (HHV, kJ/kWh)
		Csg
Over... upto...	>100%	
	100%	9,728
	95%	
	90%	
	85%	
	80%	
	75%	
	70%	
	65%	
	60%	
	55%	
	50%	
	45%	
	40%	

2.1.3 Coal Cost

CH_n: Coal Cost applicable for the nth billing period per metric ton of coal including the vendor margin applicable, expressed in FSHILLINGS.

$$CH_n = \left[\frac{X_n}{Y_n} \times (API 4_n) \times \frac{PCI}{6000} + Mo \right] \text{ API4 (in USD / ton): } \quad \text{Monthly API4 Index for the month preceding lading date of each vessel to RBCT}$$

published in Argus / McCloskey 's Coal Price Index Report. The API4 index (FOB RBCT) is the average of the Argus fob Richards Bay Index published by Argus Coal Daily International and Argus Coal Daily every Friday (as of next business day), the index is equal to [[xxxUS\$/ton]]

McCloskey's fob Richards Bay published by McCloskey's Fax every Friday (dated Friday) and McCloskey's Coal Report (dated every other Friday), the SACR Europe Spot Price Indicator published monthly by the Indonesian Coal Report and every week on Monday by From The Coal Face. The monthly average is calculated from the weekly average published every Friday of the month or in case of holiday, the weekly average published on the previous working day. X_n: Exchange Rate (FSHILLINGS / Euro) applicable for the billing month as the arithmetic mean of the SHILLINGS franc (FSHILLINGS) against the euro (FSHILLINGS per Euro) calculated from the values published by the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO) during the billing month.

X_n: Exchange Rate (FSHILLINGS / Euro) applicable for the billing month as the arithmetic mean of the SHILLINGS franc (FSHILLINGS) against the euro (FSHILLINGS per Euro) calculated from the values published by the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO) during the billing month.

Y_n: Exchange Rates (USD /Euro) applicable for the billing month as the arithmetic mean of the U.S. dollar (USD) against the Euro (in USD per Euro) calculated from the values published by the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO) during the billing month.

Mo : Margin equal to 2.8,] USD/MT

2.1.4 Freight Cost

FT_n: Freight cost applicable for the nth period per metric ton of coal expressed in FSHILLINGS.

$$FT_n = \frac{X_n}{Y_n} * [(FT_0 + (PS - 580) * 0,02539 + (MS - 810) * 0,00059]$$

FT ₀ and BT ₀ : the Basic feight rate per metric ton at the Reference Date are defined as the following table.Minimum Dispatch		Ocean Transportation (FT ₀)	Coastal Service (BT ₀)
Quantity	Price Range	Freight Rate(\$/MT)	
677,333	80%	1 ~ 677,333	36.46
		677,334 ~ 800,000	0.99
			10.03
			0.33

Note: FT₀ and BT₀ will be defined according to Minimum dispatch guarantee of Section 9.2.2.2 and BT₀ does not include Taxes related to coastal business between local coastal Company and ship Onwer.

PS: Bunkers price in Indonesia for the Intermediate Fuel Oil (IFO) published by AXSMarine (on www.axsmarine.com) or Platt's for the lading date of each shipment or the earliest date prior to lading of each shipment in the case prices are not available for this date.

MS: Bunkers price in Indonesia for the Marine Diesel Oil (MDO) published by AXSMarine (on www.axsmarine.com) or Platt's for the lading date of each shipment or the earliest date before the lading date for each shipment in the case where prices are not available for this date.

BT_n: The cost of the barge applicable for the nth period per metric ton of coal expressed in FSHILLINGS.

$$BT_n = [BT_0 \times \frac{IF_n}{IF_0} \times \frac{X_n}{Y_n} + (MD - 810) * 0.00196]]$$

MD: Marine Diesel Oil price at the Port of Dakar based on the date of starting discharge of coal from the OGV(Ocean Going Vessel) to the Shuttle.

MD: Marine Diesel Oil price at the Port of Dakar based on the date of starting discharge of coal from the OGV(Ocean Going Vessel) to the Shuttle.

IF_n: Price indices applicable for the billing month as the arithmetic mean of the consumer price for all households, excluding tobacco prices, calculated from the values published monthly by the National Institute of Statistics and Economic Studies (INSEE) in France during the twelve months preceeding the billing month.

IF₀: Price Index applicable to the Reference Date as the arithmetic mean of the consumer price index for all households, excluding tobacco prices, calculated from the values published monthly by the National Institute of Statistics and Economic Studies (INSEE) in France. IF₀ is equal to xxxx (basis 100 in 1998).

X_n: Exchange Rate (FSHILLINGS / Euro), applicable for the billing month as the arithmetic mean of the SHILLINGS franc (FSHILLINGS) against the euro (FSHILLINGS per Euro) calculated from the values published by the Central Bank of Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO) during the billing month.

X0:	Exchange rate (FSHILLINGS / Euro), applicable at the Reference Date, of the SHILLINGS franc (FSHILLINGS) against the EURO (in SHILLINGS francs per euro) as published by the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO). X0 is equal to 655.957.
2.1.4 Variable O&M Costs	
CVEMn: Variable Component of Operation and Maintenance for the nth payment period in FSHILLINGS.	
$CVEM_n = \left(\frac{IL_n}{IL_0} * CVEML_0 + \frac{IF_n}{IF_0} * \frac{X_n}{X_0} CVEMD_0 \right) * E_n$	
With	
En:	Net energy measured at the Electrical Terminal Point (taking into account the energy received by the Company from Offtaker grid) for the nth payment period in kWh.
ILn:	Price indices applicable for the billing month as the arithmetic average of the harmonized consumer price index calculated from the values published monthly in Ghana by the Agence Nationale de la Statistique et de la Démographie (ANSD) for the twelve months preceding the billing month.
IL0:	Price index applicable to the Reference Date of the harmonized consumer price index from the value published in Ghana by the Agence Nationale de la Statistique et de la Démographie (ANSD). IL0 is equal to xxx (basis 100 in 2008).
CVEML0:	Local part of Operating and maintenance costs in FSHILLINGS/kWh at the Reference Date given in Section 9.1.2. They are confirmed by the Company to Offtaker at the beginning of each calendar year.
IFn:	Price indices applicable for the billing month as the arithmetic mean of the consumer price index for all households, excluding tobacco prices, calculated from the values published monthly by Institut National de la Statistique et des Etudes Economiques (INSEE) in France during the twelve months preceding the billing month.
IF0:	Price Index applicable to the Reference Date as the arithmetic mean of the consumer price index for all households, excluding tobacco prices, calculated from the values published monthly by the Institut National de la Statistique et des Etudes Economiques (INSEE) in France. IF0 is equal to xxxx (basis 100 in 1998).
Xn:	Exchange Rate (FSHILLINGS / Euro), applicable for the billing month as the arithmetic mean of the SHILLINGS franc (FSHILLINGS) against the euro (FSHILLINGS per Euro) calculated from the values published by the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO) during the billing month.
X0:	Exchange rate (FSHILLINGS / Euro), applicable at the Reference Date, of the SHILLINGS franc (FSHILLINGS) against the EURO (in SHILLINGS francs per euro) as published by the Banque Centrale des Etats de l'Afrique de l'Ouest (BCEAO). X0 is equal to 655.957.
CVEMD0:	Part in Foreign Currency of Operating and maintenance in FSHILLINGS/kWh, at the Reference Date given in Section 9.1.2. They are confirmed by the Company to Offtaker at the beginning of each calendar year.

3. Minimum Take for Coal Supply

Minimum Take on Coal Supply : Any amounts payable annually under the Minimum Take Requirement not covered in the Fuel Charge at the end of each Operating Year based on the approved Coal Supply Agreement(s). If Offtaker makes a Minimum Take Requirement payment to the Company in accordance with PPA (a "Minimum Take Requirement") and in the immediately succeeding year the Coal Supplier deliver Coal pursuant to the Coal Supply Agreement condition referred to Annex 27, then the Additional Charge in such immediately succeeding year for the Minimum Take Requirement not covered in the Fuel Charge shall be decreased by an amount equal to the Minimum Take Payment made in the previous year multiplied by the ratio of the amount of Coal delivered in month n that is delivered pursuant to the condition referred to in Annex and the amount of Coal paid for under the Minimum Take Requirement in the previous year.

4. Supplemental Tariff Charge

The Additional Charges in respect of month to compensate the Company for:

- (a) Any other costs or refund to Offtaker which the Company may have incurred or collected in the Operating Year including costs or refunds associated with inaccurate meters or errors of measurement in the system.
- (b) With regard to any late payment of any invoices
- (c) Additional fuel cost due to Offtaker
 - Start up : the cost of hot, warm and cold start-up for the plant during the Operation Period
 - Emergency Products
 - Others

5. Taxes

Any taxes, levies, duties or other public charges imposed by any Competent Authority other than the taxes, levies, duties or other public charges set forth in Annex [**] (Rate and Calculation Methods) shall be calculated and reimbursed separately from the formulae set forth in this Annex G. The rates and application of the taxes set forth in Annex [**] shall be verified separately and the separate reimbursement of such taxes or adjustments in tariff to reflect such taxes shall be agreed upon by the Parties.

