

THE ELECTRICITY ACT
(CAP. 131)

ORDER No. 010-015

(Made under section 23)

**THE ELECTRICITY (ARTUMAS GROUP & PARTNERS (POWER)
LIMITED POWER TARIFF METHODOLOGY) ORDER, 2010**

- Citation **1.** This Order may be cited as the Electricity (Artumas Group & Partners (Power) Limited) (Power Tariff Methodology) Order, 2010.
- Commencement **2.** This Order shall take effect from 1st July 2010.
- Interpretation **3.** Unless the context otherwise requires:
- “Act” means the Electricity Act (No. 10 of 2008), Cap 131 of the laws of Tanzania;
- “AFUDC” means the allowance on equity funds used during construction calculated in accordance with item 16 of the Schedule;
- “AG&P (Gas) Ltd.” means Artumas Group & Partners (Gas) Limited, a company incorporated and existing under the laws of Tanzania, and the term shall include its successors and permitted assignees;
- “AG&P (Power) Ltd.” means Artumas Group & Partners (Power) Limited, a company incorporated and existing under the laws of Tanzania, and the term shall include its successors and permitted assignees;
- “agreed interest rate” means the interest compounded on a quarterly basis, at a rate per annum equal to the three month term London Interbank Offered Rate (LIBOR) for US\$ deposits, as published in London by Financial Times or, if not published, then by The Wall Street Journal, plus four percentage points, applicable on

the first business day prior to the due date of payment and thereafter on the first business day of each succeeding calendar year. If the aforesaid rate is contrary to any applicable usury law, the rate of interest to be charged shall be the maximum rate permitted by such applicable law;

"approval date" means the date of approval of an extension project by EWURA or an earlier date determined by EWURA for the purposes of calculating AFUDC for the extension project;

"average plant factor" means the aggregate for all hours in the period of, for each hour in the period, the total dispatched energy of the Plant during such hour divided by the number of generation units operated to produce such dispatched energy (and not, for the avoidance of doubt, operating on spinning reserve), divided by the total number of hours in such period;

"capacity payment" means the fixed monthly payment as a component of Tariff Payments (in TZS) sufficient to meet debt service payments, equity return, and fixed operating charges, as determined in accordance with item 6(1) of the Schedule;

"commercial operations date" means the date that the plant has been successfully commissioned, ready for commercial operations;

"correction factor" means, the amount representing an under or over-recovery of the revenue requirement during the franchise year, along with an appropriate interest accrued, as calculated in accordance with item 11 of the Schedule;

"dependable capacity" shall be as defined in the Power Purchase Agreement;

"development period" means the period commencing on the 23rd August 2003 to the commissioning date or in relation to the expansion project, the period commencing from the approval date to the relevant completion date;

"dispatched energy" means for any hour, the lesser of the electric power, measured in kW, requested by Umoja Light for such hour in the relevant dispatch instruction from Umoja Light or the electric energy delivered by AG&P (Power) Ltd. to the Interconnection Point, as the case may be, during such hour;

"energy payment" means the then prevailing amount (in TZS)

determined in accordance with item 15(1) of the Schedule hereto, payable for the dispatched energy delivered by AG&P (Power) Ltd. to Umoja Light at the interconnection point during the relevant month;

Cap. 414

"EWURA" means the Energy and Water Utilities Regulatory Authority established under section 4 of the Energy and Water Utilities Regulatory Authority Act and the term shall include its successors in title;

"EWURA Act" means the Energy and Water Utilities Regulatory Authority Act, Cap 414 of the laws of Tanzania

"exchange rate" means the average of the offer rates for the exchange of Tanzanian Shillings into dollars that are quoted by the four largest banks in Tanzania as measured by total deposits;

"expansion plant" means the gas-fired power generation facility to be built, owned, operated and maintained by AG&P (Power) Ltd. in Mtwara in addition to the base plant; there can be any number of expansion plants provided, however, that the aggregate Capacity of all the Expansion Plants shall not exceed 30 MW;

"expansion project" means the development, design, engineering, procurement, financing, construction, completion, testing, commissioning, ownership, operation and maintenance of an Expansion Plant by AG&P (Power) Ltd;

"force majeure event" means any event or circumstance or both beyond the reasonable control of Artumas AG&P (Power) that materially and adversely affects the performance by Artumas AG&P (Power) of its obligations, however, that such material and adverse effect could not have been prevented, overcome or remedied by Artumas AG&P (Power) through the exercise of diligence and reasonable care;

"franchise area" shall have the same meaning as prescribed in the Umoja Light Company Limited (Electricity Transmission, Distribution and Supply Licence) Exemption Order, 2010;

"gas sales agreement" means the agreement between AG&P (Gas) Ltd and Tanzania Petroleum Development Corporation in one hand and AG&P (Power) Ltd on the other dated 12th December 2008, which term shall include such amendment as shall be made by

the parties thereto from time to time;

“GOT” means the Government of the United Republic of Tanzania;

“guaranteed heat rate” means the heat rate as per the manufacturer’s specifications for the plant;

“heat rate” means heat required to produce a kilowatt-hour of energy, expressed in BTU per kWh (on a higher value basis), of the base plant, while operating at the reference plant factor at the Reference Condition;

“interim PPA” means the Interim Power Purchase Agreement between AG&P (Power) Ltd. and TANESCO dated 12th March 2009, and shall include amendments made by the parties thereto from time to time, for the sale of electricity by AG&P (Power) Ltd. to TANESCO from the plant prior to the transfer date;

“major works” means the major overhaul or other such works on the Plant, as estimated or evidenced by AG&P Power and approved by EWURA;

“pass-through component” means the component of the Tariff Payments as determined in accordance with item 9(1) of the Schedule hereto;

“power purchase agreement” means the Power Purchase Agreement dated 12th December 2008, between Umoja Light and AG&P (Power) Ltd for the sale of electric capacity and electric energy from AG&P (Power) Ltd to Umoja Light and the term shall include all amendments made by the parties thereto from time to time;

“reference plant factor” means the average plant factor calculated for the preceding two years, provided, however, if such average plant factor is 5 percentage points or more lower than the reference plant factor for the previous year, the AG&P (Power) Ltd. shall provide explanation and reasons to the reasonable satisfaction of EWURA for such lower average plant factor. If EWURA is unconvinced with AG&P (Power) Ltd’s explanation and reasons and finds that such Average Plant Factor is unreasonably low, EWURA shall determine the Reference Plant Factor for the relevant year;

“regulatory year” means each period of three hundred and sixty-five

days (or three hundred and sixty-six days during a leap year) commencing on 1st of January;

“tariff payments” means the monthly payments for the sale of electricity generation capacity and net electrical energy output of the Plant by AG&P (Power) Ltd to Umoja Light as determined in accordance with item 13(1) of the Schedule hereto.

“TANESCO” means Tanzania Electric Supply Company Limited a company incorporated and existing under the laws of Tanzania, with its head offices in Dar es Salaam, and the term shall include its successors and permitted assignees;

"tax" or "taxes" means all sales taxes, levies, withholding taxes and similar revenue producing fees except corporate tax levied on, and paid by AG&P Power to GOT or any other relevant taxing authority in Tanzania;

“term” means the period commencing from the transfer date and expiring on the twentieth (20th) anniversary of regulatory years, unless terminated earlier in accordance with the provisions of the Power Purchase Agreement;

“tested heat rate” means the heat rate determined by an independent expert at the relevant commercial operations date or at the end of each quarter thereafter by conducting necessary tests on the base Pplant, operating at the reference plant factor, with the result of such tests confirming such heat rate should be submitted to EWURA within one week after the date of such test and an opportunity be given to EWURA for its representative to witness such tests by giving EWURA a written notice not later than 15 days prior to the conduct of the test;

“transfer date” means the first day of the month in which the provision of electricity service by Umoja Light begins in the franchise area and commercial operation date pursuant to Power Purchase Agreement;

“Umoja Light” means Umoja Light Company Limited, a company incorporated and existing under the laws of Tanzania, and the term shall include its successors and permitted assignees;

“weighted average cost of capital” means the rate of return required

by the providers of capital (both debt and equity) having regard to the risk characteristics inherent in the project determined in accordance with item 3(1) of the Schedule hereto; and

“US Dollar” or “US\$” means the currency that is a legal tender of the United States of America.

Power Tariff
Methodology

4. (1) The Power Tariff Methodology for AG&P (Power) Ltd shall be as set out in the Schedule to this Order;
- (2) The Power Tariff Methodology shall be applied over a period of 20-year effective from the transfer date in accordance with the Schedule to this Order;

Revenue
Requirement

5. (1) The revenue requirement for the first year shall be US Dollar five million seven hundred sixty nine thousand seven hundred ninety six (US\$5,769,796) only, calculated in accordance with item 2(1) of the Schedule;
- (2) The adjustment to the 2010 Revenue Requirement for the revised 2010 load forecast shall be approved by EWURA, in order to account for number of months remaining in 2010 following the transfer date;

Power Tariff

6. (1) The average power tariff for the first regulatory year is calculated at US\$0.1187/kWh using a load forecast of 48,608 MWh;
- (2) The tariff payment for each month in a given year shall be as set out in item 13(2) of the Schedule;
- (3) An automatic 10% adjustment to the approved 2010 rate base and revenue requirement cost overage in excess of the automatic 10% reconciliation for 2008, 2009 and up to the transfer date is disapproved.

Initial
Investment Cost

7. (1) Total initial investment (net of revenue received by AG&P (Power) estimated at US\$8,782,987 from TANESCO under IPPA) of US Dollar eleven million seven hundred five thousand eighty one (US\$ 11,705,081) only for 2004 through 2009 is hereby approved;

Approval of the
Power Purchase
Agreement and

8. (1) The request for approval of the Power Purchase Agreement between AG & P (Power) Ltd and Umoja Light is

the Gas Price
Cap. 131

referred back subject to meeting the requirement contained in Paragraph 15(c) hereinafter;

(2) The request for approval of the “Gas Price” as defined in the Gas Sales Agreement between AG & P (Power) Ltd and AG&P (Gas) Ltd. is referred back, subject to meeting the requirement under Paragraph 15 (e);

Investment Plan
Costs

9. The amount of US Dollar one million eight hundred fifty thousand eight hundred and three (US\$ 1,850,803) only, which excludes provision for minor and major overhauls as the Investment Plan costs for 2010 is hereby approved;

Approval of
Deferral
Accounts

10. The request for approval of the deferral accounts for (i) Operation, Maintenance and General Administration Costs (OMA); (ii) Final Project Costs Overrun for 2008, 2009 and up to the transfer date; (iii) correction factor; (iv) Inflation Adjustment; and (v) Realized Foreign Exchange Gains and Losses is disapproved;

Weighted
Average Cost of
Capital

11. The Weighted Average Cost of Capital shall be set at twelve percent based on the gearing of sixty percent;

12. The Operation, Maintenance and General Administration Costs for the first regulatory year at US Dollars one million eight hundred fifty one thousand one hundred seventy eight (US\$ 1,851,178) only is hereby approved;

Capital
Redemption
Period

13. The equity redemption period shall be twenty years and the debt repayment period shall be fifteen years depreciating using straight line method;

Allowance for
Funds Used
During
Construction

14. The Allowance for Funds Used During Construction (AFUDC) and/or Interest During Construction (IDC) to the project costs shall ceased to accrue at the commissioning date.

Conditions

15. Without prejudice to the provisions of foregoing paragraphs, the approved power tariff shall be subject to the following conditions:

(a) that any contracts entered into by AG&P (Power) Ltd. for goods or services related to the generation system, in which AG&P (Power) Ltd.’s obligations in any single contract exceeds US Dollar one million (US\$ 1.0 million), or

collectively in any one calendar year exceeds US Dollar five million (US\$ 5.0) million shall be procured competitively, unless justifications are given to the Authority on the contrary, and within thirty (30) days following execution of such contracts, AG&P (Power) Ltd shall provide EWURA with a copy for information; and amendments thereof, if they constitute a material change;

- (b) that within six months after coming into force of this Order, AG&P (Power) Ltd shall submit to EWURA for approval the firmed up debt financing terms;
- (c) that within six months after coming into force of this Order, AG&P (Power) Ltd shall amend all Mtwara Energy Project Agreements, by making sure that they comply with the Electricity Act, EWURA Act and other applicable law;
- (d) that any amendment or modification to Mtwara Energy Project Agreements thereafter that may have a material impact to the implementation of the MEP is permitted only if consent by EWURA is sought in writing within a reasonable time;
- (e) that given the high gas price negotiated under the Gas Sales Agreement, AG&P (Power) Ltd. shall, within six months after coming into force of this Order, submit to EWURA for approval the methodology applied in determining the Gas Price and/or the renegotiated price comparable with those applicable in the power sector in Tanzania;
- (f) that within three months after coming into force of this Order, AG&P (Power) Ltd shall submit to EWURA for approval the details and budget for planned Major Works;
- (g) that within three months after coming into force of this Order, Artumas Group and Partners (Power) Ltd shall submit to EWURA for approval all missing supporting documents of the disallowed expenses amounting to US Dollar four million three hundred seventy two thousand eight hundred thirty three (US\$4,372,833) and rationale for allocating affiliate charges on AG&P (Power).

SCHEDULE

1. Number of Months and Regulatory Years

For the purpose of any calculation made pursuant to this Power Tariff Methodology-

- (a) the number of full calendar months between any two dates of different months shall equal to the sum of-
 - (i) the number of full calendar months occurring during the period between these dates; and
 - (ii) the number of days in any partial calendar month occurring during such period divided by 30; and
- (b) the number of Regulatory Years between any two dates of different years shall be equal to the sum of-
 - (i) the number of full Regulatory Years occurring during the period between these dates; and
 - (ii) the number of days in any partial Regulatory Year occurring during such period divided by 365.

2. Determination of Revenue Requirement

(1) The Revenue Requirement for any year 't' shall be determined in accordance with the following formula:

$$RR_t = (WACC \times RAB_t) + O_t + D_t + PTC_t + MWC_t + K_t$$

(2) For the purpose of to item 2(1) of this Schedule-

“ RR_t ” means the Revenue Requirement expressed in US\$ for year 't' and approved by the Authority;

“WACC” means the weighted average cost of capital or rate of return determined as per item 3(1) of this Schedule;

“ RAB_t ” means the Average of the Opening and Closing Regulatory Asset Base in US\$ for year 't' determined as per item 4(1) of this Schedule;

“ O_t ” - means Fixed and Variable Operation, Maintenance and General Administration Cost for year 't' including Energy Payments expressed in US\$ determined as per item 5(1);

“ D_t ” means the Regulatory Depreciation amount for year 't' determined as per item 8(1) of this Schedule;

“ PTC_t ” means Pass-Through Component including taxes (except for corporate tax), levies expressed in US\$ for year 't' determined as per item 9(1);

“MWC_t” means the Major Works Pre-recovery Component for year “t” expressed in US\$ and determined as per item 10(1) of this Schedule; and

“K_t” means the Correction Factor for any year ‘t’ due to revenue shortfall/over-recovery during year “t-1” calculated in accordance with item 11(1) of this Schedule.

3. Determination of the Weighted Average Cost of Capital

(1) The Weighted Average Cost of Capital after tax, applicable to the Regulatory Asset Base (RAB) shall be determined upfront using the formula-

$$WACC = \left(\frac{E}{D + E} \times K_e \right) + \left[\frac{D}{D + E} \times K_d \times (1 - T_c) \right]$$

(2) For the purpose of item 3(1) of this Schedule-

“WACC” means the rate of return, expressed as percentage, required by the providers of capital (both debt and equity) which is approved by the Authority;

“E” means the market value of equity expressed in US\$;

“D” means the market value of debt expressed in US\$;

“K_e” means the weighted average cost of equity approved by the Authority and expressed as percentage;

“K_d” means the weighted average cost of debt or interest rate determined through negotiations between the lenders and the loan recipients, expressed as percentage; and

“T” means applicable statutory corporate income tax rate expressed in percentage.

4. Determination of Regulatory Asset Base

(1) The Average Regulatory Asset Base (RAB_t) or Regulatory Asset Value (RAV) for the year ‘t’ shall be calculated using the Roll-Forward Optimal Deprival Value (ODV) method in accordance with the following formula:

$$RAB_t = \frac{RAB_{opt} + RAB_{clt}}{2}$$

(2) For the purpose of item 4(1) of this Schedule:-

“RAB_{opt}” means the opening balance for year “t” of Regulatory Asset Base value expressed in US\$, determined on 31st December of the year ‘t-1’;

“RAB_{clt}” means the closing-balance of Regulatory Asset Base value expressed in US\$.

determined on 31st December for year ‘t’ as calculated in 4(3);

(3) The closing-balance of Regulatory Asset Base shall be determined using the following formula-

$$RAB_{clt} = RAB_{opt} + PCE_t - D_t - ADW_t$$

(4) For the purpose of item 4(3) of this Schedule

“ RAB_{opt} ” means the opening balance for year “t” of Regulatory Asset Base value expressed in US\$, determined on 31st December of the year ‘t-1’;

“ PCE_t ” means Prudent Capital Expenditure for the year ‘t’ expressed in US\$;

“ D_t ” means the forecast Regulatory Depreciation Expense for the year ‘t’, expressed in US\$ and calculated in accordance with item 8(1) of this Schedule; and

“ ADW_t ” means forecast Asset Disposals and Write-Offs during the year ‘t’, expressed in US\$.

(5) Grants, Government subventions and subsidies, and the contributions made by customers in advance, such as Major Works Pre-recovery Component shall be excluded from Regulatory Asset Base calculations.

5. Determination of Operation, Maintenance and General Administration Component

(1) Operation, Maintenance and General Administration for any year ‘t’ shall be calculated using the formula-

$$O_t = OMC_{fixt} + OMC_{vart} + EP_t$$

(2) For the purpose of item 5(1) of this Schedule-

“ O_t ” means Operation, Maintenance and General Administration Component for any year ‘t’ expressed in US\$;

“ OMC_{fixt} ” means the Fixed Operation, Maintenance and General Administration Component for the year ‘t’ expressed in US\$ calculated in accordance with item 6(1) of this Schedule;

“ OMC_{vart} ” means the Variable Operation, Maintenance and General Administration Component for the year ‘t’ expressed in US\$ calculated in accordance with item 7(1) of this Schedule; and

“ EP_t ” means the Energy Payment for the year “t” payable in US\$ determined according to item 17(1).

6. Fixed Operating, Maintenance and General Administration Costs

(1)The Fixed Operation, Maintenance and General Administration Component for any year ‘t’ shall be calculated using the formula-

$$OMC_{fixt} = ADC_t \times TOMC_{fixt}$$

(2)For the purpose of item 6(1) of this Schedule-

“ OMC_t ” means the Fixed Operation, Maintenance and General Administration for any year ‘t’ expressed in US\$;

“ ADC_t ” means the Average dependable Capacity during the year ‘t’ expressed as kilowatt (kW); and

“ $TOMC_{fixt}$ ” means the Target Fixed Operation, Maintenance and General Administration Rate for the year ‘t’ and shall equal US\$ 4.00/kW or any other rate approved by the Authority.

7. Determination of Variable Operation, Maintenance and General Administration

(1) The Variable Operation, Maintenance and General Administration for any year shall be calculated using the formula-

$$OMC_{vart} = NDE_t \times TOMC_{vart}$$

(2) For the purpose of item 7(1) of this Schedule-

“ OMC_{vart} ” means the Variable Operation, Maintenance and General Administration Component for any year ‘t’ expressed in US\$;

“ NDE_t ” means the total Net Despatched Energy during the year ‘t’ expressed as megawatt-hour (MWh); and

“ $TOMC_{var}$ ” means the Target Variable Operation, Maintenance and General Rate for the year ‘t’ and shall equal at US\$ 9.15/MWh or any other rate approved by the Authority.

8. Determination of Regulatory Depreciation Expense

(1)The Regulatory Depreciation, in which the salvage (scrap or residual) value of the asset is estimated strictly following the “Principle of Used and Useful Asset” shall be calculated using the Straight Line Depreciation Method-

$$D_t = \sum_{i=1}^{i=t-1} \frac{PCE_{t-1}}{RP - (t - 1)}$$

(2) For the purpose of item 8(1) of this Schedule-

“ D_t ” means the Regulatory Depreciation Expense for the year ‘t’;

“ PCE_{t-1} ” means Prudent Capital Expenditure for the year ‘t-1’ expressed in US\$;

“RP” means the Redemption Period of equity or debt as the case may be;

(3) For the purpose of this project, the salvage (scrap or residual) value will be zero at the end of the project.

9. Determination of Pass-Through Component

(1) The Pass-Through Component shall be calculated using the formula-

$$PTC_t = T_t + L_t$$

(2) For the purpose of item 9(1) of this Schedule-

“ PTC_t ” means the Pass Through Component for year ‘t’ expressed in TZS;

“ T_t ” means taxes, duties or other statutory charges paid during year ‘t’ or due to be paid in TZS; and

“ L_t ” means levies, other charges and imposts remitted to the Government Entities during year ‘t’ or due to be paid in TZS. For the purpose of this component, the regulatory levy and rural electrification fund levy shall not form part of this component.

10. Determination of Major Works Pre-recovery Component

(1) The Major Works Pre-recovery Component for any month ‘m’ shall be approved by the Authority as a last resort means of financing the major overhaul works, paid to AG&P (Power) Ltd. by the customers, and calculated using the formula-

$$MWC_m = \frac{1}{12} \times [1,000 \times NDE_t \times SFR_t]$$

(2) For the purpose of item 9(1) of this Schedule-

“ MWC_m ” means the Major Works Pre-recovery Component for the month ‘m’ expressed in US\$;

“ NDE_t ” means the total Net Despatched Energy during the year ‘t’ expressed as megawatt-hour (MWh); and

“ SFR_t ” means the Major Works Pre-recovery Rate applicable for the year ‘t’ expressed in US\$/kWh and shall be determined in accordance with item 10(3) of this Schedule.

(3) The Major Works Pre-recovery Rate for any year 't' shall be determined in accordance to the formula-

$$SFR_t = \frac{TMW_3}{TLF_3}$$

(4) For the purpose of item 10(3) of this Schedule-

“SFR_t” means the Major Works Pre-recovery Rate applicable for the year 't' expressed in US\$/kWh;

“TMW₃” means Target Amount Required by the end of three years to finance the Major Works, expressed in US\$; and

“TLF₃” means the Total Load Forecast for the next three years expressed in kWh.

(5) All revenue collected by AG&P (Power) Ltd. from the Major Works Pre-recovery Component pursuant item 10(1) of this Schedule shall be deposited monthly into an interest-earning escrow account in Tanzania.

(6) From time to time, AG&P (Power) Ltd. may withdraw necessary amounts from the Major Works Pre-recovery Escrow Account only to fund minor or major overhaul or other such works on the power plant, as approved by the Authority.

(7) Notwithstanding the aforesaid, the Major Works Pre-recovery Component shall be applied subject to meeting the requirement under paragraph 15(f) of the Order.

11. Determination of Correction Factor

(1) The Correction Factor for any year 't' due to revenue shortfall/over-recovery during year t-1 calculated using the following formula:

$$K_t = (ActTP_{t-1} - ReqTP_{t-1}) \times (1+I_t) + Adj_{m_t} - OI_t$$

(2) For the purpose of item 11(1) of this Schedule-

K_t means the Correction Factor for the year 't';

$ActTP_{t-1}$ means the amount of Tariff Payments as determined in accordance with (a) above for the Franchise Year 't-1';

$ReqTP_{t-1}$ means the amount of Tariff Payments as determined in accordance with (b) above for the Franchise Year 't-1'; I_t means the Agreed Interest Rate as determined as of the first day of the franchise year 't'; provided however, that the Correction Factor for any month occurring during the first fifteen months following the Transfer Date for the Base Project shall be zero;

Adj_{m_t} means Adjustment for the year 't' to cover inflation adjustment and the foreign currency gains or losses and other income; and

OI_t means other income of AG&P(Power) Ltd from the Insurance claims from

Insurers liquidated damages, penalties, claims, late payment charges, proceeds from the sale or disposal of any asset, and compensation in relation to events of default from the contractors of the AG&P(Power) Ltd, for the regulatory year “t”.

12. Determination of the Average Monthly Tariff Payment

(1) The Average Power Tariff payable to AG&P (Power) Ltd. by Umoja Light shall be calculated using the formula-

$$APT_t = \frac{RR_t}{LO_t}$$

(2) For the purpose item 12(1) of this Schedule-

“APT_t” means the Weighted Average Power Tariff expressed in US\$/kWh of which may be maintained for a period of one year;

“RR_t” means the Revenue Requirement for year ‘t’ determined in accordance with item 2(1) of this Schedule; and

“LO_t” means the Load Forecast for year ‘t’ expressed in kWh, and approved in advance by the Authority.

13. Determination of Monthly Tariff Payment

(1) The Seller shall invoice that include a take-or pay or similar obligation, and the Purchaser shall make a Monthly Tariff Payment.

(2) The Purchaser shall pay the Seller monthly in arrears, in accordance with the invoicing and payment terms and conditions of the Power Purchase Agreement, a Monthly Power Tariff for month ‘m’ calculated using the formula-

$$TP_m = CP_m + EP_m + PTC_m + MWC_m$$

(3) For the purpose of item 13(2) of this Schedule-

“TP_m” means the Monthly Tariff Payment for the month ‘m’ payable in US\$;

“CP_m” means the Capacity Payment for the month ‘m’ calculated in accordance with item 14(1) of this Schedule,

“EP_m” means the Energy Payment for the month ‘m’ calculated in accordance with item 15(1) of this Schedule, payable in US\$;

“PTC_m” means the Pass-Through Component for the month ‘m’ calculated in accordance with item 16(1) of this Schedule ;

“MWC_m” means the Major Works Pre-recovery Component for the month ‘m’ expressed in US\$;

14. Determination of Monthly Capacity Payment

(1) The Capacity Payment for any month 'm' shall be calculated using the formula-

$$CP_m = \frac{DC}{RC} \times \left[\frac{1}{12} \times \{ (WACC \times RAB_t) + OMC_{fixed} + OMC_{var} + RDE_t \} \right]$$

(2) For the purpose of item 14(1) of this Schedule-

“CP_m” means the Capacity Payment for the month 'm' payable in US\$;

“DC” means the Weighted Average Dependable Capacity prevailing during the month 'm', expressed in megawatt, where each Dependable Capacity is weighed by the fraction whose numerator is the number of days of the month during which such Dependable Capacity prevails and denominator is the total number of days in the month;

“RC” means the Required Capacity for the quarter in which month 'm' falls, expressed in megawatt;

“WACC” means the Weighted Average Cost of Capital, also referred to as the “rate of return” calculated in accordance with item 3(1) of this Schedule and expressed as percentage;

“RAB_t” means the Regulatory Asset Base for year 't', calculated in accordance with item 4(1) of this Schedule, and expressed in US\$;

“OMC_{fixed}” means the fixed portion of annual Operation and Maintenance Cost calculated in accordance with item 6(1) of this Schedule and payable in US\$;

“OMC_{var}” means the Variable Operation and Maintenance Costs determined in accordance with item 7(1) and payable in US\$ and TZS; and

“RDE_t” means the Regulatory Depreciation Expense for the year 't' calculated in accordance with item 8(1) of this Schedule.

15. Monthly Energy Payment

(1) The Energy Payment for any month 'm' shall be calculated using the formula-

$$EP_m = \left[\left(\frac{1}{2} \times GP \times HR \times NE \right) + \left(\frac{1}{2} \times ActGSA \right) \right]$$

(2) For the purpose of item 15(1) of this Schedule-

“EP_m” means the Energy Payment for the month 'm' payable in US\$;

“GP” means the weighted average Gas Price for the month 'm' in US\$ per British

Thermal Unit (BTU) on a higher heating value basis determined under the provisions of the Gas Sales Agreement, where each Gas Price is weighted by the fraction whose numerator is the quantity of gas supplied at such Gas Price and denominator is the total quantity of gas supplied in the month;

“HR” means the lesser of the Guaranteed Heat Rate and the Tested Heat Rate as per the latest tests performed prior to the end of the month ‘m’ at the Reference Plant Factor, expressed in BTU/kWh;

“NE” means the Energy Generation required to meet Busbar Sales during the month ‘m’ expressed in kWh; and

“ActGSA” means the actual payments made or due to be paid in US\$, under the terms and conditions of the Gas Sales Agreement for purchase of gas consumed by the plant during the month ‘m’.

16. Determination of Pass-Through Component

(1) The Pass-Through Component shall be calculated using the formula-

$$PTC_m = T_m + L_m PTC_m = T_m + L_m$$

(2) For the purpose of item 16(1) of this Schedule-

“PTC_m” means the Pass-Through Component for the month ‘m’ expressed in TZS;

“T_m” means taxes, duties or other statutory charges paid during the month ‘m’ or due to be paid in TZS; and

“L_m” means levies, other charges and imposts remitted to the Government Entities during the month ‘m’ or due to be paid in TZS. For the purpose of this component, the regulatory levy and rural electrification fund levy shall not form part of this component

17. Energy Payment for Regulatory Year

(1) The Energy Payment for any year “t” shall be calculated using the formula-

$$EP_t = \left[\left(\frac{1}{2} \times GP \times HR \times NE \right) + \left(\frac{1}{2} \times ActGSA \right) \right]$$

(2) For the purpose of item 17(1) of this Schedule-

“EP_t” means the Energy Payment for the year ‘t’ payable in US\$;

“GP” means the weighted average Gas Price for the year ‘t’ in US\$ per British Thermal Unit (BTU) on a higher heating value basis determined under the provisions of the Gas Sales Agreement, where each Gas Price is weighted by the fraction whose numerator is the quantity of gas supplied at such Gas

Price and denominator is the total quantity of gas supplied in the month;

“HR” means the lesser of the Guaranteed Heat Rate and the Tested Heat Rate as per the latest tests performed prior to the end of the year ‘t’ at the Reference Plant Factor, expressed in BTU/kWh;

“NE” means the Energy Generation required to meet Busbar Sales during the year ‘t’ expressed in kWh; and

“ActGSA” means the actual payments made or due to be paid in US\$, under the terms and conditions of the Gas Sales Agreement for purchase of gas consumed by the plant during the year ‘t’.

18. Determination of Allowance for Funds Used During Construction

(1) In the event that AG&P (Power) Ltd. finance any future project with equity, the Allowance of Funds Used During Construction shall be calculated using the formula-

$$AFUDC = \sum_{i=1}^P \left[EQ_i \times \left\{ (1 + R_e)^{\frac{M}{12}} - 1 \right\} \right]$$

(2) For the purpose of item 18(1) of this Schedule-

“AFUDC” means the Allowance of Equity Funds Used During Construction expressed in US\$;

“EQ_i” means the amount of ith draw of equity in US\$ during the development period ‘p’ supported by the Equity Drawdown Schedule;

“R_e” means the cost of equity expressed as percentage, determined by the sponsors in this case it shall be nominal 20.5% per annum, approved in advance by the Authority; and

“M” means the number of months between the date of the ith draw of equity and the Commercial Operations Date, provided, however, that if the date of the ith draw of equity occurs after the Commercial Operations Date, ‘M’ shall be zero.

19. Determination of the Interest During Construction

(1) In the event that AG & P (Power) Ltd. finance any future project with debt, the Interest on Debt During Construction shall be calculated using the formula-

$$IDC = \sum_{i=1}^P \left[DE_i \times \left\{ (1 + R_d)^{\frac{M}{12}} - 1 \right\} \right]$$

(2) For the purpose of item 19(1) of this Schedule-

“IDC” means the Allowance of Equity Funds Used During Construction expressed in US\$;

“DE_i” means the amount of ith draw of debt in US\$ during the development period ‘p’ supported by the Loan Drawdown Schedule;

“R” means the cost of debt expressed as percentage, determined by the lenders, in this case it shall be LIBOR plus four and one half (4½) percentage points per annum, approved in advance by the Authority, and

“M” means the number of months between the date of the ith draw of debt and the Commercial Operations Date, provided, however, that if the date of the ith draw of equity occurs after the Commercial Operations Date, ‘M’ shall be zero.

20. Annual Tariff Adjustment

- (1) AG&P (Power) Ltd. shall at least ninety (90) days prior to the start of each Regulatory Year ‘t’, submit the Annual Information Return to EWURA.
- (2) In the Annual Information submitted to EWURA in accordance with item 20 (1) of this Schedule to the Order, AG&P (Power) Ltd shall-
 - (a) set forth the generation forecast for the Regulatory Year ‘t’;
 - (b) set forth the estimated Revenue Requirement for the Regulatory Year ‘t’ in accordance with item 2(1) of this Schedule;
 - (c) set forth the Tariff Payments recommendation for the Regulatory year ‘t’ using the data from items 20(2)(a) and (b) of this Schedule as evidence for such Tariff Payments recommendation;
 - (d) state in detail, actual load demand, net electric energy dispatched, electric energy for own use and the costs of each component (energy, non-fuel operation, maintenance and general administrative, and total sum of adjustments) for the preceding Regulatory Year ‘t-1’;
 - (e) demonstrate using simple Microsoft Office Excel spreadsheet that uploading the data and information provided in item 20(2)(a)(b) (c) of this Schedule provide a fair and true assessment of business at the end of the Regulatory Year ‘t-1’;
 - (f) ensures that the Annual Information Return contains a description of the methodologies, estimates and calculations contained in the proposal in reasonable detail with specific references to this Retail Tariff Methodology and other agreements, where applicable;
 - (g) Investment Plan Implementation Status Report detailing the actual costs incurred in the due course of implementation of the Plan; and
 - (h) Any other information deemed necessary as required by Tariff Application Guidelines, 2009.
- (3) EWURA shall agree, or if it disagrees with the Annual Information made by

AG&P (Power) Ltd. in respect of the Revenue Requirement Tariffs for Regulatory Year 't' shall modify the submission and publish an Order on its determination in the Government *Gazette* within ninety (90) days of Umoja Light' submission of the Annual Information.

- (4) Where EWURA does not make any decision on the Annual Information submitted by AG&P (Power) Ltd. prior to the start of Regulatory Year 't', the prevailing Tariffs for Regulatory Year 't-1' shall apply until such time as a decision on the estimated Revenue Requirement and Tariff is made by EWURA. Tariffs and Revenue Requirement approved shall not be used retrospectively.
- (5) Notwithstanding the information contained in item 20(1), AG&P (Power) Ltd shall provide all financial information required by the Authority in a form prescribed by the Authority which information shall include-
 - (a) a quarterly report on its financial and commercial performance not later than forty five (45) days after the end of each quarter; and
 - (b) auditor's report on financial statements for each financial year together with the Management letter not later than thirty (30) days after six months following the end of each financial year,

21. Force Majeure

In the event that AG & P (Power) Ltd. is affected by any Force Majeure Event in connection with the development, construction or commissioning of the Project, it shall use all reasonable efforts to mitigate the effects of such Force Majeure Event, including incurring reasonable and necessary additional costs to be recovered from applicable insurance policy cover.

22. Miscellaneous

- (1) The Power Tariff may be revised pursuant to section 24 of Cap.131 by written communication to AG&P (Power) Ltd, provided that any revision to the Power Tariff shall not modify the rate of return, redemption period, financing structure, or methodology for calculating, applying and distributing the revenue requirement, from that which is used in this Power Tariff Methodology.
- (2) The Power Tariff Methodology and the factors contained therein are based on the specific facts and circumstances relevant to the application made by AG&P (Power) Ltd. accordingly, no precedent is set for any other applicant or for any future application by AG&P (Power) Ltd of any of the decisions taken in this Order.
- (3) This Order shall be read together with the AG&P (Power) Ltd (Electricity

Generation License) Exemption Order, 2010 and in the event of a conflict between the two, the Power Tariff Methodology Order shall prevail.

- (4) AG&P (Power) Ltd shall always maintain an up to date Asset register in the format and manner prescribed by the Authority in order to assist assets audit and verification failure of which shall cause the value of assets not included in the register to be disallowed in the rate base.



Dar es Salaam
28th May 2010

Haruna Masebu
Director General
Energy and Water Utilities Regulatory Authority