PUBLIC UTILITIES REGULATORY COMMISSION (PURC) PUBLICATION OF ELECTRICITY TARIFFS

In accordance with the statutory duty to publish rates approved by the Public UtilitiesRegulatory Commission under Section 19 of the Public Utilities Regulatory Commission Act, 1997 (Act 538), this publication is made this 15th February 2011.

- 1. The Volta River Authority (VRA) and Sunon Asogli Power (Ghana) Ltd., (Asogli) shall charge the rates provided for in the First Schedule as the Bulk Generation Charge (BGC) and Generation Charge (GC) respectively to take effect from 1st March 2011.
- 2. The Ghana Grid Company Limited (GRIDCo) shall charge the rates provided in the Second Schedule as the Transmission Service Charge (TSC) to take effect from 1st March, 2011.
- 3. The Electricity Company of Ghana Limited (ECG) and Northern Electricity Department (NED) of the VRA shall charge the rates provided for in the Third and Fourth Schedules as the Distribution Service Charge (DSC) and End-User Tariffs to take effect from the March, 2011 billing cycle.
- 4. The rate's are denominated in Ghana Pesewas.
- 5. The projections used in the computation of the rates are provided for in the Fifth Schedule.
- 6. These approved rates shall remain in force until they are changed by the Public Utilities Regulatory Commission.
- Until the next major tariff review, electricity and water tariffs shall be adjusted as per the automatic adjustment (indexation) formula provided in the Sixth Schedule.
- 8. The rates approved by the Public Utilities Regulatory Commission to take effect from 1st June, 2010 for VRA, Schenzhen/Sunon Asogli, GRIDCo, ECG and NED as published in *Gazette* No. 38 of 28th May 2010, the automatic adjustment (indexation) formula and its related projections as published in *Gazette* No. 35 of 26th July, 2002 are hereby accordingly revoked and replaced with the following:

DEFINITIONS

BGC	Bulk Generation Charge
GC	Generation Charge
TSC	Transmission Service Charge
DSC	Distribution Service Charge
SLT-LV	Special Load Tariff—Low Voltage
SLT-MV	Special Load Tariff—Medium Voltage
SLT-HV	Special Load Tariff—High Voltage
kWh	Kilowatt-Hour
kVA	Kilovolt Ampere
AAF	Automatic Adjustment Formula

FIRST SCHEDULE

Tariff Category		Effective 1st March, 2011	
BGC VRA -	-(GHp/kWh)	7.4362	
GC Asogli-	(GHp/kWh)	15.3759	
Composite BGC- VRA & Asogli (GHp/kWh)		8.8576	

SECOND SCHEDULE

Tariff Category		Effective 1st March, 2011	
	•	×	
TSC	(GHp/kWh)*	2.2615	

THIRD SCHEDULE

Tariff Category		Effective March 2011 Billing Cycle	
DSC	(GHp/kWh)	8.8949	

FOURTH SCHEDULE

Tariff Category	TOO.	Effective March 2011 Billing Cycle
Residential	The state of the s	Effective March 2011 billing Cycle
	ive) (GHp/kWh)**	9.50
51-300	(GHp/kWh)	15.95
301 – 600	(GHp/kWh)	20.70
601+	(GHp/kWh)	23.00
Service Charge (GHp/		150.00
Non-Residential	monun	150.00
0-300	(GHp/kWh)	22.93
301 – 600	(GHp/kWh)	24.40
601+	(GHp/kWh)	38 50
Service Charge	(GHp/month)	250.00
Tariff Category	(Grip/month)	Effective March 2011 Billing Cycle
SLT-LV		Effective March 2011 Billing Cycle
Max. Demand (GH	n/kVA/month)	1400.00
Energy Charge	(GHp/kWh)	23.90
Service Charge	(GHp / month)	1000.00-
Service Charge	(GTIP / MOREII)	1000.00
SLT-MV		A 2
Max. Demand	(GHp/kVA/month)	1200.00
Energy Charge	(GHp/kWh)	18.50
Service Charge	(GHp/month)	1400.00
8	(0.1)	1100.00
SLT-HV		
Max. Demand	(GHp/kVA/month)	1200.00
Energy Charge	(GHp/kWh)	17.00
Service Charge	(GHp/month)	1400.00
<u> </u>		
SLT-HV MINES		
Max. Demand	(GHp/kVA/month)	1400.00
Energy Charge	(GHp/kWh)	27.00
Service Charge	(GHp / month)	1400.00

^{*} The TSC of GHp 2.2615/kWh includes a regulatory levy of GHp 0.2/kWh of electricity transmitted which is payable to the Public Utilities Regulatory Commission

^{**} Residential Consumption between 0-50 units per month will attract a Service Charge of GHp 100.00

Methodology

FIFTH SCHEDULE

PROJECTIONS USED IN TARIFF COMPUTATION

Variable	Year 2010	March 01, 2011-May 31, 2011
Average Consumer Price Index	338.3573	337.5400
Average Exchange Rate (Ghana Cedi-US\$ Rate)	1.5000	1.4403
Generation Mix:		
Hydro (%)	62.7	60.5
Thermal (%)	37.3	39.5
Light Crude Oil:		
Price (US\$/bbl)	80.0	90.0
Premium & Handling Charges (US\$/bbl)	2.5	2.5
Natural Gas Price:		
VRA-Takoradi (US\$/mmbtu)	0.0	6.6
VRA-Tema (US\$/mmbtu)	0.0	6.7
Asogli-Tema (US\$/mmbtu)	0.0	7.05

SIXTH SCHEDULE

COMPUTATION OF PROJECTED GENERATION TARIFF USING AAF

Cost Item		Methodology	
Total Local Cost (Excluding Labour Cost) (GHp/kWh)		$GT_t[(LoC_t)^*(1+(A_1^*(\alpha))]$	
Labour Cost (GHp/kWh)		$GT_{t}[(LaC_{t})^{*}(1+(A_{2}^{*}(\alpha)))]$	
Local Depreciation (GHp/kWh)		$GT_{t}[(LDepn_{t})^{*}(\alpha))]$	
Foreign Depreciation (GH	(p/kWh)	$GT_{t}[(FDepn_{t})^{*}(\beta))]$	
RoRANFA (GHp/kWh)		GT_t [(RORANFA _t)*(α))]	
Fuel Cost (GHp/kWh)		GT, [(FuC _i)*(FP)*(β))]	
Where:		$\mathcal{L}_{\mathcal{L}}^{(n)} = \mathcal{L}_{\mathcal{L}}^{(n)} = \mathcal{L}_{\mathcal{L}}^{(n)}$	
GT_t	Base Generation Tariff/Charge (GHp/kWh) as Ga	zetted by PURC (June 01, 2010)	
LoC_t	Base Total Local Cost (Excluding Labour Cos Generation Charge	t, Depreciation & RoRANFA) as Proportion of	
LaC_t	Base Labour Cost as Proportion of Generation Ch	arge	
FuC_t	Base Fuel/Water Cost as Proportion of Generation	n Charge	
FP	Projected Average LCO Index for Next Quarter		
LDepn _t	Base Local Depreciation as Proportion of Generation Charge		
FDepn _t Base Foreign Depreciation as Proportion		ration Charge	
RoRANFA _t	Base Return on Re-valued Average Net Fixed Ass	sets as Proportion of Generation Charge	
α	Projected Average Inflation for Next Quarter		
β	Projected Average Exchange Rate Index for Next	Quarter	
A_{i}	Decision Variable for All Other Costs (Excluding	Labour Cost, RORANFA and Depreciation)	
A ₂	Decision Variable for Labour Cost		
Hence: GT _{t+1} (GHp/kWh) which is Methodology	s Defined as Projected Generation Tariff for Ne	ext Quarter is the sum of the results of above	

2. COMPUTATION OF PROJECTED BULK GENERATION CHARGE (BGC_{Adjust}) USING AAF

Projected Bulk Generation Charge, (BGCt+1) is computed as follows:

 $BGC_{t+1} = GM_x(HyGT_{t+1} + TapGT_{t+1} + TicGT_{t+1} + TemGT_{t+1} + SiemensGT_{t+1} + AsogGT_{t+1} + ImP_{t+1})$

Where:

BGC_{t+1} is Projected Bulk Generation Charge for Next Quarter

GM_X is Defined as Projected Proportion of Each Plant's Electricity Generation in Total Generation Mix

 $HyGT_{t+1}$, $TapGT_{t+1}$, $TicGT_{t+1}$, $TemGT_{t+1}$, $SiemensGT_{t+1}$ and $AsogGT_{t+1}$ represent Projected Hydro, TAPCO, TICO, Tema1, Siemens and AsogIi Generation Tariffs. ImP_{t+1} is Defined as Import Price of Electricity.

3. COMPUTATION OF PROJECTED TRANSMISSION SERVICE CHARGE (TSC Adjust) USING AAF

Projected Transmission Service Charge, (TSC_{t+1}) is computed as follows:

$$C_{t+1} = TSC_t * (LoC_t) * (A_1 * (\alpha)) + (TSC_t * (LaC_t) * (A_2 * (\alpha)) + TSC_t * ((LDepn_t) * (\alpha)) + (FDpen_t) * (\beta)) + (TSC_t * (RoRANFA) * (\alpha)) + (TSC_t * (RoRANFA) * (RORANFA) * (RORANFA) + ($$

Where:

TSC_{t+1} is Projected Transmission Service Charge (GHp/kWh) for Next Quarter

TSC_t is Base Transmission Service Charge (GHp/kWh) (PURC Gazetted TSC)

All Other Variables are as Previously Defined in This Case With Respect to Transmission Service Charge

4. COMPUTATION OF PROJECTED DISTRIBUTION SERVICE CHARGE (DSC_{Adjust}) USING AAF

Projected Distribution Service Charge, (DSC_{t+1}) is computed as follows:

$$DSC_{t+1} = DSC_t \star (LoC_t) \star (A_1 \star (\alpha)) + (DSC_t \star (LaC_t) \star (A_2 \star (\alpha)) + DSC_t \star ((LDepn_t) \star (\alpha) + (FDpen_t) \star (\beta)) + (DSC_t \star (RoRANFA) \star (\alpha)) + (DSC_t \star (RoRANFA) \star (RoRANFA) + (RoR$$

Where:

DSC_{t+1} is Projected Distribution Service Charge (GHp/kWh) for Next Quarter

DSC_t is Base Distribution Service Charge (GHp/kWh) as Gazetted by PURC (June 01, 2010)

Other Variables are as Previously Defined in This Case With Respect to Distribution Service Charge

5. COMPUTATION OF PROJECTED END-USER TARIFF (EUT) UNDER AAF

Projected End User Tariff (EUT_{t+1}) is Computed as follows:

 $EUT_{t+1} (GHp/kWh) = BGC_{t+1} (GHp/kWh) + TSC_{t+1} (GHp/kWh) + DSC_{t+1} (GHp/kWh)$

Dr. Emmanuel K. Annan

Chairman, Public Utilities Regulatory Commission

PUBLIC UTILITIES REGULATORY COMMISSION (PURC) PUBLICATION OF WATER TARIFFS

In accordance with the statutory duty to publish rates approved by the Public Utilities Regulatory Commission under Section 19 of the Public Utilities Regulatory Commission Act 1997 (Act 538), this publication is made this 15th February 2011.

- 1. The applicable tariffs for Ghana Water Company Limited (GWCL) to take effect from the March 2011billing cycle are as provided in the First Schedule hereto.
- 2. The rates are denominated in Ghana Pesewas.
- 3. The projections used in the computation of the rates are provided for in the Second Schedule.
- 4. These approved tariffs shall remain in force until they are changed by the Public Utilities Regulatory Commission.
- 5. Until the next major tariff review, electricity and water tariffs shall be adjusted as per the automatic adjustment (indexation) formula provided in the Second Schedule.
- 6. The rates approved by the Public Utilities Regulatory Commission to take effect from 1st June 2010 for GWCL as published in Gazette No. 38 of 28th May 2010, the automatic adjustment (indexation) formula and its related projections as published in Gazette No. 35 of 26th July, 2002 are hereby accordingly revoked and replaced with the following:

FIRST SCHEDULE

Category of Service		Monthly Consumption (1000 Litres)	Approved Rates in GHp/ 1000 Litres Effective March 2011 Billing Cycle	
(a)	Metered Domestic	0-20	79.05	
1-7		21 and above	118.50	
(b)	Commercial/Industrial	Flat Rate	168.45	
(c)	Public Institutions /Govt. Departments	Flat Rate	152.00	
(d)	Unmetered Premises-Flat rate per house p	er month	514.50	
(e)	Premises without connection (Public stand pipes) per 1000 litres		78.15	
(f)	Special Commercial per 1000 litres		479.00	

NOTE:

Special Commercial refers to bulk customers who use GWCL treated water as the main raw material for bottling water for resale.

SECOND SCHEDULE

PROJECTIONS USED IN TARIFF COMPUTATION

Variable	Year 2010	March 01, 2011-May 31, 2011
Average Consumer Price Index	338.3573	337.5400
Average Exchange Rate (Ghana Cedi-US\$ Rate)	1.5000	1.4403

2. COMPUTATION OF PROJECTED WATER TARIFF (WT_{Adjust}) USING AAF

Projected Water Tariff, (WT_{t+1}) is computed as follows:

 $WT_{t+1} = WT_t^*(LoC_t)^*(A_1^*(\alpha)) + (WT_t^*(LaC_t)^*(A_2^*(\alpha)) + (WT_t^*ECF) + (WT_t^*(WTCC_t)^*(\beta) + WT_t^*((LDepn_t)^*(\alpha) + (FDpen_t)^*(\beta) + (WT_t^*(RoRANFA)^*(\alpha)) + (WT_t^*(RoRANFA)^*(\alpha))$

Where:

 WT_{t+1}

is Projected Average Water Tariff (GHp/m³) for Next Quarter

 WT_t

is Base Average Water Tariff (GHp/m³) as Gazetted by PURC (June 01, 2010)

ECF

is Projected Electricity Cost Factor for Next Quarter

WTCC,

is Base Water Treatment Chemicals Cost as Proportion of Average Water Tariff

LoC_t

is Base Total Local Cost (Excluding Labour Cost, Depreciation & RoRANFA) as Proportion of Average

Water Tariff

LaC,

is Base Labour Cost as Proportion of Average Water Tariff

LDepn_t

' is Base Local Depreciation as Proportion of Average Water Tariff

FDepn_t

is Base Foreign Depreciation as Proportion of Average Water Tariff

RoRANFA,

is Base Return on Re-valued Average Net Fixed Assets as Proportion of Average Water Tariff

α

is Projected Average Inflation for Next Quarter

B

is Projected Average Exchange Rate Index for Next Quarter

 A_1

is Decision Variable for All Other Costs (Excluding Labour Cost, RORANFA and Depreciation)

 A_2

is Decision Variable for Labour Cost

Dr. Emmanuel K. Annan

Chairman, Public Utilities Regulatory Commission

	GHANA GAZETTE, 25th FEI	BRUARY, 2011	263
DR. E.K. ANDAH	COMMISSIONER	/ hnaudlich	-
HON. MOSES ASAGA	COMMISSIONER	m.A. In	
MR. DAVID AMETEFE	COMMISSIONER	The state of the s	-
DR. Y. ADU-GYAMFI	COMMISSIONER	7/) }
MR. SAMUEL SARPONG	COMMISSIONER	Jum	_
MR. ALEX BONNEY	COMMISSIONER	The solution	J
MR. WILLIAM TEWIAH	COMMISSIONER	WYIN	_
MR. STEPHEN ADU	COMMISSIONER		_