Corporate Office:
Songas Limited
R Square Building
Plot No. 274, Mezzanine Floor,
Cnr Haile Selassie/Kaole Roads
Kinondoni
PO Box 6342
Dar es Salaam
Tanzania

Ubungo Power Plant:
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T: +255 764 701 000/1

Director General
EWURA
EWURA House, Plot 3, Block AD
Medeli West, P.O. Box 2857
Dodoma

RECEIVED
EWURA HEAD OFFICE
03 MAY 2021
ENERGY AND WATER UTILITIES
REGULATORY AUTHORITY

29 April 2021,

Dear Director General,

We refer to the letter received from EWURA on 17th November 2020, reference: **DA.509/515/01/Vol.IV/26**.
Please find attached the Songas Tariff Application which requests the following regulatory action:

- The methodology for Revenue Requirement and GPTT calculation for the three Financial Years (FY) 2021-2023 proposed within this application is approved.
- The proposed aggregate Revenue Requirement of $10.2mm and GPTT of $0.72/mcf for FY 2021 is approved.
- The Clawback calculation used within this application and Clawback addition to the GPTT for FY 2021 to 2023 is approved.

The following documents are attached:

- Songas EWURA Additional Gas Processing and Transportation Multi Year Tariff Application 2021 (including Songas business plan)
- Appendix 1: Forms G1, G2, G4, G6 and EG1
- Appendix 2: Songas Audited Financial Statements (AFS) for 2018, 2019 and 2020.
- Appendix 3: Gas Processing and Transportation Agreement (GPTA)
- Appendix 4: Gas Agreement
- Appendix 5: Implementation Agreement
- Appendix 6: EWURA Order No.011-007
- Appendix 7: Customer Service Charter
- Appendix 8: Excel Tariff Model (supplied Electronically)

We look forward to working with EWURA throughout the application review process and related enquiries.

Yours faithfully,

Sebastian Kastuli
For Managing Director

Songas EWURA Additional Gas Processing and Transportation Multi Year Tariff Application 2021

1. Top Sheet

Legal name of applicant:

Songas Limited

Full address of the applicant to which communications in the matter will be sent:

Songas Limited
R Square Building
Plot No. 274, Mezzanine Floor
Cnr Haole Selassie/ Kaole Roads
Kinondoni
P.O. Box 6342
Dar es Salaam

Full name, title and contact information of the applicant's chief executive officer or authorized person:

Name: Anael Samuel
Title: Managing Director
Email: anael.samuel@songas.com

Verifiable reference of an applicant's license by EWURA (or a preceding Authority) to provide a regulated service:

Electricity Licence issued to Songas Limited on 11th October 2001 by the Ministry of Energy and Minerals

A succinct statement of the regulatory action being requested:

Songas Limited requests that:

- The methodology for Additional Gas Processing & Transport Tariff (GPTT) calculation for the three Financial Years (FY) 2021-2023 proposed within this application is approved.
- The proposed GPTT for FY 2021 is approved.
- The Clawback calculation used within this application and Clawback addition to the GPTT for FY 2021 to 2023 is approved.

Capital Structure of the Licensee:

Songas Shareholders are as follows:
Globeleq – 54.10%
TPDC – 28.69%
TDFL – 7.65%
TANESCO – 9.56%

The signature of the chief executive officer or a duly authorized officer of the applicant

Contents

2. Introduction and Summary

2.1 Application Context

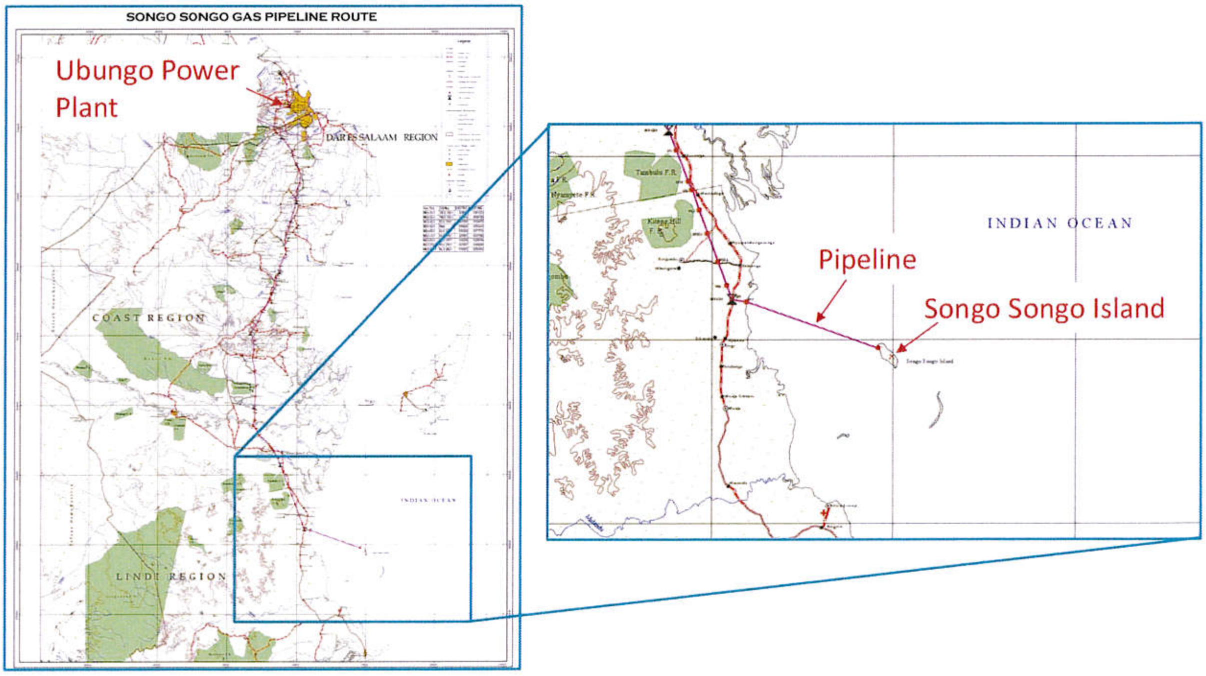
On 17th November 2020, Songas Limited (Songas) received a letter from EWURA (ref: DA.509/515/01/Vol.IV/26) stating that "in order to align with the Petroleum (Natural Gas Pricing) Regulations, 2020, you [Songas] are required to submit your tariff application consistent with EWURA (Tariff Application and Rate Setting) Rules, 2017".

2.2 Tanzania Political and Economic Overview

The ruling political party, CCM, won the Tanzanian October 2020 general election by a landslide victory with over 90% of counted votes reflecting a remarkable achievement and people's trust in their government. On 17 March 2021, the country received shocking news of the sudden death of the president Dr. John Pomble Magufuli. Samia Suluhu Hassan (Vice- President) was immediately sworn into office on 19 March 2021, sending a positive message to the global market for achieving this peaceful transfer of power.

The COVID-19 pandemic has had a short-term negative impact on the gas and power demand in the country and consequently Songas continues to see lower than expected capacity utilization of the gas processing plant, transportation pipeline and power plant in the short term with recovery to historical levels expected in the medium term. Songas will continue to monitor the political and economic developments and make necessary adjustments to its business plan.

2.3 Business Overview



Map 1 – Location of Songo Songo Island

The Songo Songo Gas-to-Electricity Project (SSGEP) comprises gas wells, flow lines, a gas processing plant and a 25km marine 12-inch pipeline and 200 km onshore 16-inch pipeline to the Ubungo Power Plant (UPP) in Dar Es Salaam. UPP has 6 Open Cycle Gas Turbines (OCGT) with PPA contracted capacity of 178MW. Songas will continue with its mission to provide clean, reliable and affordable power and gas processing and transportation services in Tanzania.

The SSGEP is an integrated gas and power business such that there is great interdependence between the two segments for the project to be economically viable. Most of the Songas' income comes from selling power to TANESCO under a 20-year PPA with the remainder (<8%) arising from processing and transportation of Additional Gas (AG) for Tanzania Petroleum Development Corporation (TPDC) and Pan African Energy Tanzania (PAET) as agreed under the Gas Processing and Transportation Agreement (GPTA).

PAET was contracted by Songas under a long-term Operatorship Agreement in line with the GPTA until the end of initial PPA period (31 July 2024) to operate Songas' processing plant and production wells on a no profit nor losses basis and thus Songas have a contractual obligation to reimburse PAET for such prudently incurred costs approved by Songas. It is worth noting that Songas are also still responsible for running and managing the transportation pipeline to Dar es Salaam.

Songas buys Protected Gas (PG) at the PG Contract Price from TPDC under the Gas Agreement (GA) and delivers PG to i) the Ubungo Power Plant (UPP) to generate electricity and ii) to the Tanzania Portland Cement Company (TPCC) at Wazo Hill in accordance with the TPCC GSA. According to the TPCC GSA, Songas sells the PG to TPCC (on behalf of TANESCO) for a higher price than the price Songas pays TPDC.

Songas bills TANESCO for a monthly Capacity Charge for the Complex Dependable Capacity, an Energy Charge for the Net Electrical Output and Miscellaneous Charges (if any). The monthly capacity charge is adjusted/discounted by an amount equal to i) the revenues derived from PG sales to TPCC Plant less the amount paid to TPDC for the PG sold to TPCC and ii) 85% of the processing and transportation revenues derived by Songas from Gas Developers for Additional Gas (AG) and only 15% of AG Gas Processing and Transportation Tariff revenue is retained. It is important to note that GPT tariffs are paid for AG volumes but not for PG volumes.

Diagram 1 shows a simplified summary of key transactions and relationship among the main stakeholders in the project.

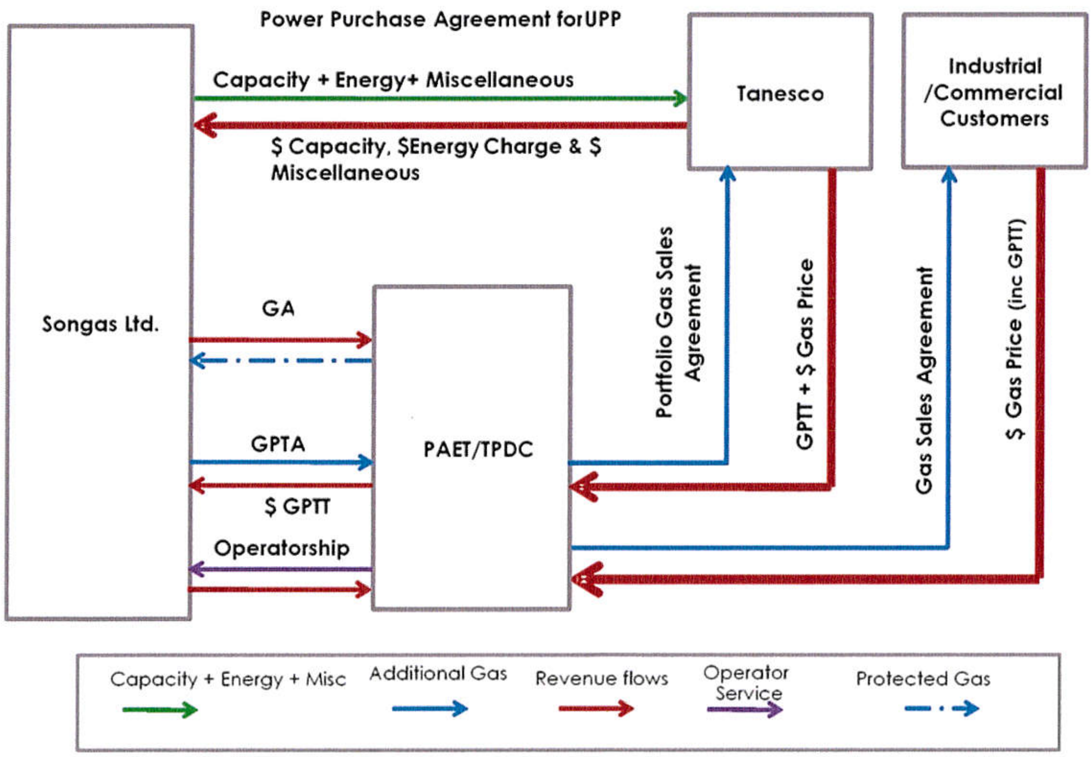


Diagram 1, Key Transactions and Stakeholder Relationships

2.4 Gas Supply and Pricing

Gas supply at UPP is categorised as PG, 80.5% and AG, 19.5% respectively. The balance of other gas is supplied to other users as PG to Wazo Hill and AG to the power sector and industrial consumers. The GPT tariff will apply to AG only and is added to the wellhead price (WHP) to create a delivered gas price for power consumers including TANESCO and Songas. Protected Gas pricing does not include processing and transportation cost.

The changes in AGP for power consumers is directly proportional to GPTT and WHP.

AGP = WHP + GPTT

2.5 Overall Methodology

The tariff methodology proposed by Songas is to adopt a conventional Revenue Requirement approach as outlined in the Energy and Water Regulatory Authority (EWURA) Tariff Application and Rate Setting Rules, 2017 (the "EWURA Rules, 2017") and the Tariff Application Guidelines for Regulated Utilities in the Electricity and Natural Gas Subsectors, 2017 (the "EWURA Guidelines"). The Revenue Requirement is the annual aggregate tariff required by Songas to cover both its regulation compliant expenses and to earn a fair rate of return on investment.

The proposed GPTT is unbundled into two components: (i) gas processing and (ii) gas transportation, with each tariff representing the Revenue Requirement (RR) for that respective component. It is important to note that Songas receives a net 15% of the GPTT revenue, with the remaining 85% passed to TANESCO as explained in Section 2.3.

2.6 Regulatory Action Requested

Songas Limited requests that:

- The methodology for Revenue Requirement and GPTT calculation for the three Financial Years (FY) 2021-2023 proposed within this application is approved.
- The proposed aggregate Revenue Requirement of **$10.2mm** and GPTT of **$0.72/mcf** for FY 2021 is approved.
- The Clawback calculation used within this application and Clawback addition to the GPTT for FY 2021 to 2023 is approved.

3. Summary of Business Plan

3.1 Songas Objectives and Strategies

Strategic Objectives	Strategies
1. PPA extension ensures the business continuity of the power plant, processing plant and transportation pipeline. No plans to expand the capacity of gas facilities considering long-term demand forecast and excess available market capacity.	• Discussions between Songas & TANESCO or Govt to start early (1/08/21) before the end of initial PPA (31/07/24) on a win-win situation basis. • Leveraging the use of Songas' owned processing plant to ensure competitive gas price at WHP (without charging GPTT) for UPP compared to other gas fired plants.
2. Work with other stakeholders to restore and maintain gas deliverability as demand increases and SSI field reservoir pressures continue to drop due to depletion of gas reserves/ageing of facilities.	Work with other stakeholders to facilitate the following: • Installation of refrigeration system (completed) and upgrading compression system (in progress 2021) at SSI processing plant will increase and maintain the required pressure in the transportation pipeline. • Decoupling of commingled lines (completed) from SS4/SS10 & SS3/SS11 and increasing the size of flowline to SSI processing plant from 4-inch to 6-inch had increased the flow of gas to the plant. • The planned SS3/SS4 well workover or sidetracking in 2021.
3. Full revenue requirement recovery for the gas processing and transportation regulated activities from the last effective order date to date, ensuring funding for major maintenance of the aged gas facilities. Consequently, this is to achieve high availability for the processing plant and pipeline.	• Gas processing and transportation tariff application in line with existing laws, regulations, rules, and guidelines planned in 2021.
4. Maintaining high level of HSE standards for gas processing and transportation activities.	• Risk assessment and mitigations measures for all works. • Work permits controls. • Emission & spillage measurement and controls. • Pipeline pigging. • Cathodic protection of pipeline. • Effective and well-functioning MLVs. • Village security for wayleave.

3.2 Implications of Proposed Tariff to Business Objectives

The proposed AG processing and transportation tariff will incentivise and enable Songas to reinvest back into gas facilities ensuring high availability and utilization of the processing plant and transportation pipeline which in return increases the availability gas to both UPP and indeed all gas consumers.

Further, the GoT objectives to the Songo Songo Gas-to-Electricity Project include 'To develop power facilities and produce cheap electricity for industrial and residential use and sell to TANESCO the Complex Dependable Capacity and all of the Net Electrical Output'. Considering that 85% of the GTTP will be used to reduce TANESCO's electricity cost, this will also have further reaching community benefits by reducing the cost of electricity.

3.3 Songas' Financial Plan 2021-2023

INCOME STATEMENT ($M)					
	2020 Budget	2020 FYF	2021 AOP	2022 AOP	2023 AOP
Capacity Revenue	53.91	52.82	49.65	37.14	35.34
Energy Revenue	42.46	34.87	37.48	38.85	39.59
Other Revenue	5.05	5.35	5.16	5.24	5.25
Total Revenue	**101.42**	**93.04**	**92.29**	**81.23**	**80.18**
Fuel	20.56	17.29	17.50	17.75	17.91
O&M Costs	2.79	2.80	2.58	2.50	2.52
Contract Services	5.10	5.10	5.65	5.70	5.76
Insurance	3.11	3.11	3.42	3.38	3.39
People Costs	5.70	6.30	6.03	5.83	5.97
Admin Costs	5.63	5.67	5.43	5.34	5.28
Total Operating Costs	**42.90**	**40.27**	**40.60**	**40.49**	**40.84**
EBITDA	**58.51**	**52.77**	**51.69**	**40.74**	**39.34**
Depreciation	25.46	25.35	25.80	25.37	25.05
Finance and Other	2.07	1.91	3.79	4.29	3.58
Profit before Tax	**30.99**	**25.51**	**22.10**	**11.07**	**10.71**
Tax	7.07	6.04	5.21	2.63	2.75
Net Profit	**23.92**	**19.47**	**16.89**	**8.44**	**7.96**

The proposed tariff will contribute to mitigate the risk of potential gas supply interruption by enabling funding for major maintenance program and operation for the processing plant and transportation pipeline.

4. Demand Forecast

Analysis of the the utilisation of the Songas gas infrastructure over the period July 2011 – February 2021 was carried out. Natural gas utilising the Songas infrastructure is categorised as PG or AG. PG and AG volumes show separate and distinct time series characteristics:

- PG volumes demonstrate a clear seasonal component with hydrological variability but are broadly flat on an annual basis.
- AG volumes also demonstrate a strong seasonal component but show long term declines over the period 2013 – 2016. This is attributed to the availability of new competing gas supply from 2015 and the readiness of new alternative gas infrastructure providing an additional route to market for certain quantities of gas from the Songo Songo field.

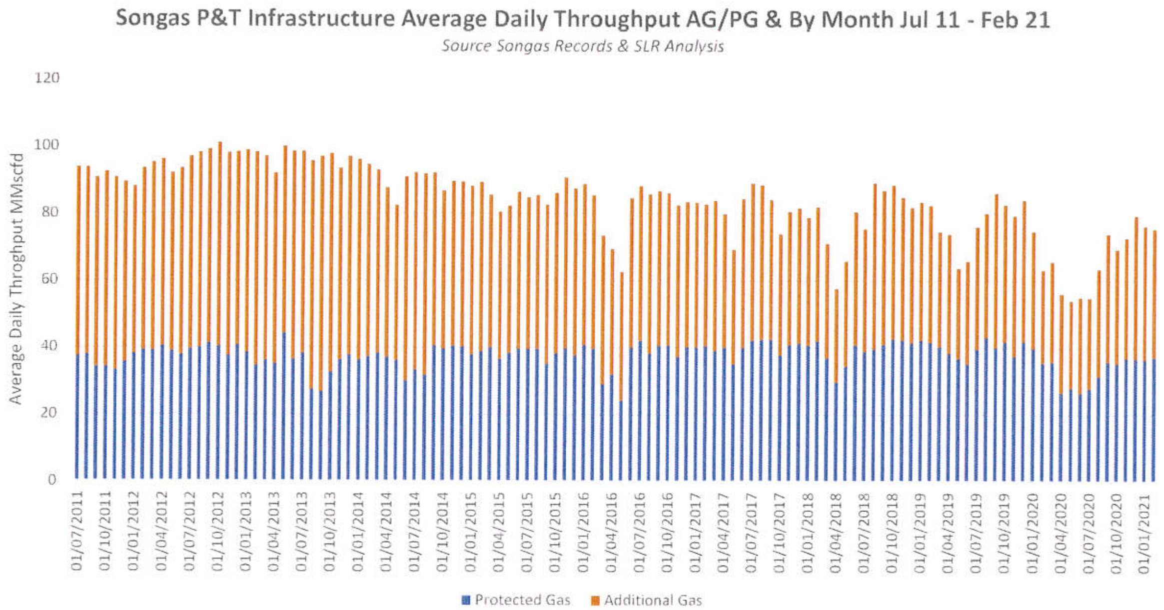


Chart 1, AG and PG actual data 2011 - 2021

AG volumes have on an annual basis broadly remained steady since the middle of 2016. Songas proposes the use of four-year historical averages (2016-2020) to forecast future throughputs for the next three years (2021-2024). It is proposed that the volume forecast for FY2021 is approved alongside the FY 2021 GPTT.

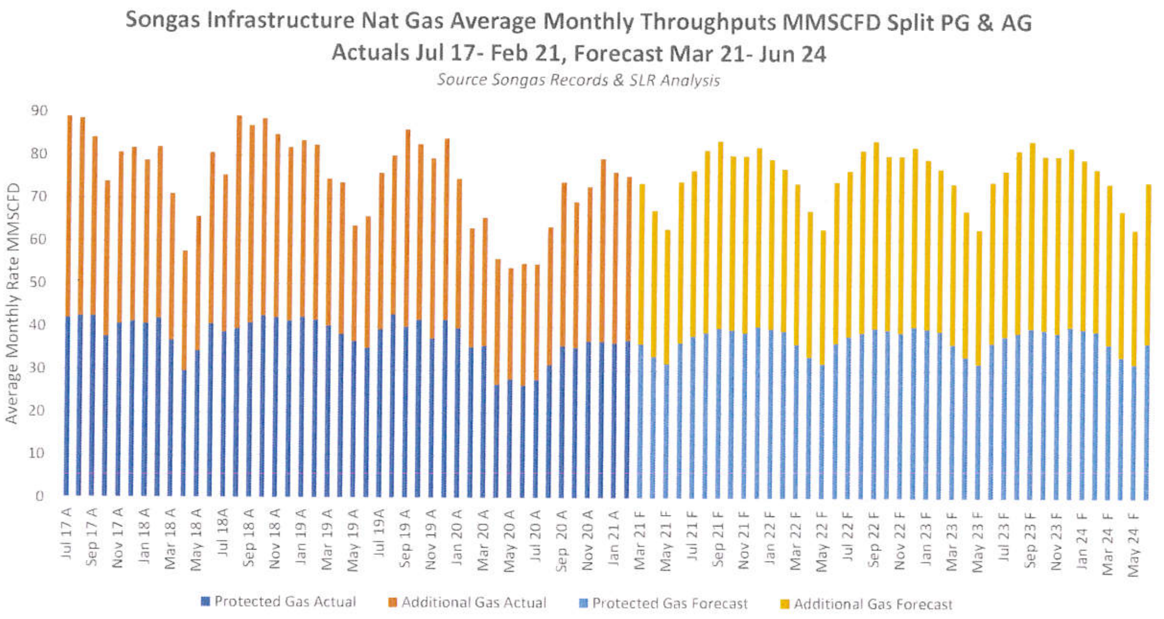


Chart 2, AG and PG 3 Year Forecast

5. Revenue Requirement (RR)

5.1 Methodology Overview

The GPTT Methodology proposed to be used by Songas is that which is consistent with the EWURA Rules, 2017, and the EWURA Guidelines. Where possible, inputs are compared with those included in the previous Songas GPTT Application, submitted in November 2010.

The EWURA Rules, 2017 require that tariff applications need to follow a 'Revenue Requirement Methodology framed on the principles that revenues of the regulated utilities have to cover their operating and maintenance expenses, depreciation, taxes and shall ensure a fair return on assets employed in rendering regulated services'.

The EWURA Rules contemplate separate tariffs for transportation and processing, and this application unbundles the RR to split it between these two elements. Further, this Tariff Application splits RR into an Additional Gas (AG) share and Protected Gas (PG) share. Only the AG share is included in the net RR figures. The methodology requires that gas processing and transportation tariffs are to be calculated using the Revenue Requirement (RR) method. Revenue requirement is calculated using the following formula:

$$RR = O\&M + D + T + (WACC \times RAB)$$

Where:

RR = Revenue Requirement for the Financial Year

O&M = Operation and Maintenance Expenses

D = Depreciation Charge

T = Corporate Taxes

WACC = Weighted Average Cost of Capital

RAB = Regulatory Asset Base, assets of the licensee which are used and useful in the provision of regulated services to customers

The RR is then charged to the Additional Gas volume which is processed and transported so that the service provider can recover the required revenue.

5.2 Operation and Maintenance (O&M) Expenses

The EWURA Guidelines state that allowable operating expenses relates to all expenditure just and reasonable incurred wholly and exclusively for generation, transmission, distribution, and supply of electricity or for natural gas processing, transmission, distribution and supply and marketing activities.

In the RR calculation, Songas has adhered to these principles by only including costs which are incurred in the normal operation of providing regulating services. Songas believes that these are reflective of arms-length terms and include only reasonable repair and maintenance cost.

Gross O&M costs for 2021 are approximately \$6.7mm, which compares with approximately \$12mm for 2010 application. This is driven by a reduction in Staff and Security costs of \$1.6mm, a reduction in insurance costs of \$2.8mm and a reduction in Operations and Maintenance costs of \$1mm.

O&M expenses have been divided between AG and PG throughput based on past data and the future forecast, consistent with the throughput forecast used in the unit tariff calculation. The AG net O&M costs are shown in Chart 3, below:

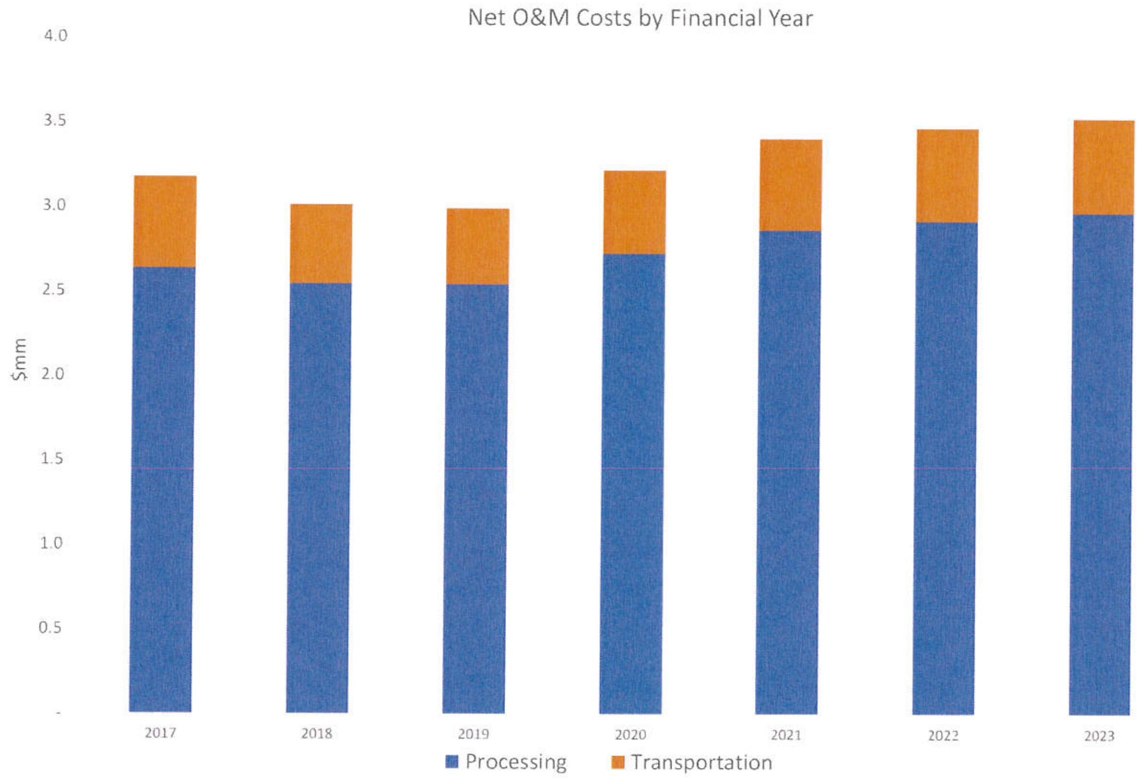


Chart 3, AG net O&M Costs by Year

5.3 Regulatory Asset Base and Depreciation

The Regulatory Asset Base (RAB) of an asset is the total cost to be depreciated over the economic life of the asset and shall include Capital Costs, lenders fees and commissions, interest during construction, the initial debt service reserve account value, development costs and any withholding tax applied and grossed up on interest paid. We have taken the view that Songas has the right to operate the assets through July 2024. There is currently no certainty as to whether Songas will retain economic benefit from the assets following this. We have therefore taken the view that economic life is equal licence life, and should the licence be extended, Songas would propose a revision of the depreciation policy and this would in turn flow through to a revision to the forward looking RAB.

The RAB represents a current value of the asset which is then depreciated. Under the EWURA Guidelines, licensees are entitled to receive a return on the RAB at rate of the Weighted Average Cost of Capital (WACC) and also charge the yearly depreciation to the GPTT.

The Songas RAB was constructed using the latest asset register, dated November 2020. The current RAB represents the current Net Book Value, which is the sum of the original cost of the assets ("Current Cost") minus the Accumulated Depreciation for the assets.

The assets have been split between Processing and Transportation and future depreciation has been forecast based on the same basis used in the past. The full asset register and depreciation schedule, along with relevant calculations can be found in the accompanying Tariff Model.

The RAB for 2021 is approximately $26mm, split $17mm Processing and $9mm Transportation. Depreciation for 2021 is approximately $7.8mm, split $5.3mm Processing and $2.5mm Transportation. This compares with a RAB of $121mm in the previous application in 2010, which can be explained by having a lower amount of accumulated depreciation in 2010 compared with today.

The average RAB for each year is then calculated by summing the RAB at the end of the year and the start of the year and dividing by two. The RAB is then split between AG and PG based on throughput, with the AG share shown in Chart 4 below:

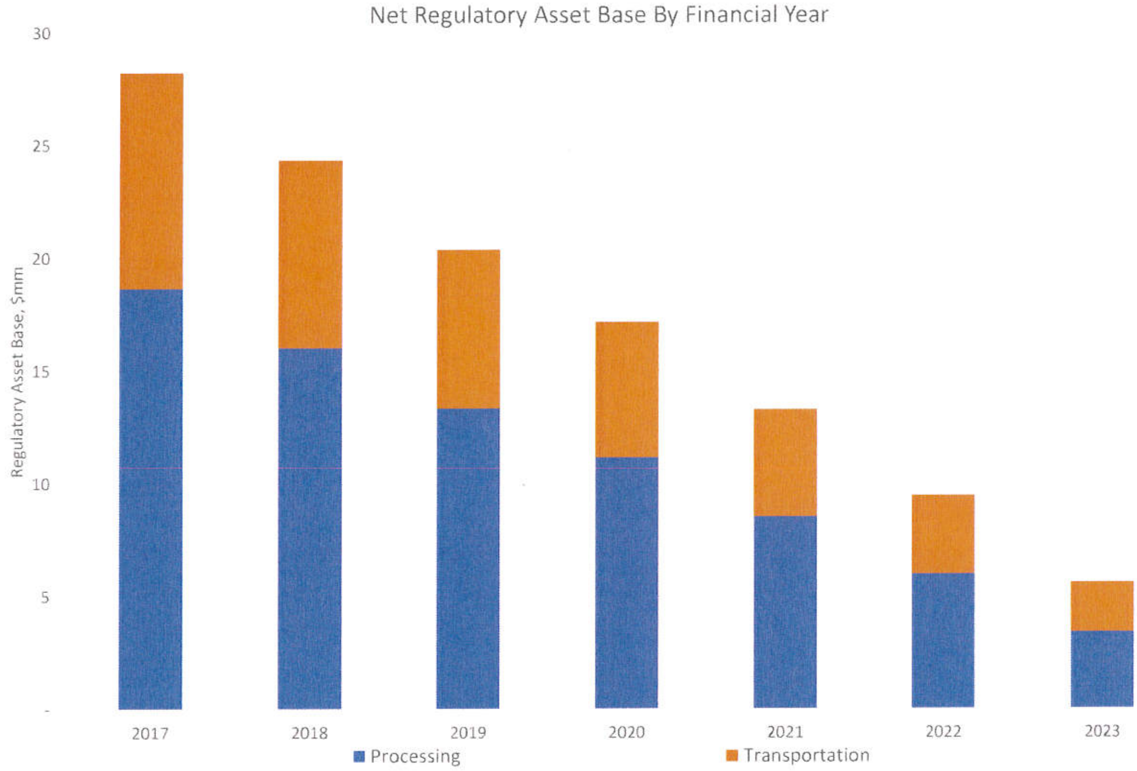


Chart 4, AG net RAB by Year

5.4 Weighted Average Cost of Capital (WACC)

The EWURA Guidelines state that the WACC should be calculated using the Capital Asset Pricing Model (CAPM) and should be composed of two main components: The Cost of Equity, and the Cost of Debt.

Further, the EWURA Rules, 2017 outline the following formula for WACC:

$$WACC = \left(\frac{E}{D+E}\ x\, Ke\right) + \left[\frac{D}{D+E}\ x\, Kd\ x\ (1\ - T)\right]$$

Where:

E = Market Value of Equity

D = Market Value of Debt

Ke = Cost of Equity (%)

Kd = Cost of Debt (%)

T = Corporate Tax Rate

The Cost of Equity is calculated by:

$$\text{Ke} = Rf + Be\,x\,[Rm\ - Rf]$$

Where:

Ke = Cost of Equity

Rf = Risk Free Rate

Be = Equity Beta

Rm - Rf = The market risk premium (The return over the Risk-Free Rate that investors would expect)

The total Market Value of Songas debt is **$268mm**. The Market Value of Songas Equity was calculated by using a market analogue company, Contour Global, and calculating the Equity to EBITDA ratio of that company which was 2.3. This was multiplied by the Songas EBITDA for 2020, which was $54mm, giving a Songas Equity of **$127mm**. This gives a debt-to-equity ratio of approximately 70%, which would be considered to be in the reasonable range for companies of this nature.

The Weighted Average Cost of Debt, based on loan interest rates, is **12%, based on the following Songas Loan information:**

Description	**Principle ($mm)**	**Interest Rate**
Long Term Debt-IDA Loan	112	7.1%
Long Term Debt-EIB Loan	60	6.0%
Loan Notes - Somanga	24	22.0%
Loan Notes - Tanzania	71	22.0%
Weighted Average		**12%**

The Risk-Free Rate was calculated using the 10 Year Tanzanian Bond Yield at the time of writing, of approximately 11.4%, minus Tanzanian inflation of 3.5% (World Bank data) and minus 2.2% TZS depreciation against the US Dollar (calculated using past data). This gives a USD risk free rate of **5.8%.**

The Asset Beta was calculated using a peer group of companies, which are required to be listed on a stock exchange to ensure that data is available. The peer group companies are: Golar, Engie, and Aggreko. The average Asset Beta from these companies was **1.19**.

The estimated Market Risk Premium for Tanzania is **5.3%** (Stern School of Business, Country Default Spreads and Risk Premiums online database, 8th January 2021).

These assumptions give an estimated Cost of Equity of **25.5%**.

The Corporate Tax Rate used in the calculation is **30%**.

These assumptions result in a WACC of **14%**

This compares with a WACC for the previous (2010) tariff application of 15.75%. See below for analysis of the changes:

	2010 Application	2021 Application	Justification
Risk-Free Rate	4.6%	5.8%	Market changes
Asset Beta	0.8	1.2	Better analogues, and market changes
Market Risk Premium	4.5%	5.3%	Market changes
Country Risk Premium	10%	-	Not included in current guidelines
Small Company Risk Premium	4%	-	Not included in current guidelines
Debt to Equity	50:50	70:30	2010 value was a high-level estimate, 2021 uses market data
Cost of Equity	22%	25.5%	See above for individual components
Cost of Debt	9.5%	12%	Previous application included indicative terms, 2021 includes actual loan terms

5.5 Taxes

Taxation was calculated by taking the pre-tax Revenue Requirement, minus allowable expenditure and depreciation to calculate Taxable Income, and multiplying by the current 30% Tanzanian Corporate Tax Rate.

5.6 Clawback

Prior to the EWURA Rules, 2017, tariff applications could include a Clawback mechanism whereby past under-recovered revenue could be recovered in future years resulting in a higher tariff. Conversely, if there is an over-recovery of revenue, then this would see a reduced tariff in the following year.

Songas has calculated RR going back to 2011 and identified a total of $59mm of under-recovered revenue. Songas proposed including Clawback from 2018 onwards in the GPTT, which amounts to $10mm. Songas proposes that this is recovered in yearly equal instalments in the three-year period following 1 July 2021 as an addition to the GPTT. Please see the Tariff model, which is included as Appendix 8, for the workings behind the Clawback calculation.

5.7 Summary

The calculated Songas Net Revenue Requirement for FY 2017 to FY 2023 is shown in Chart 5, below and the net RR including Clawback is shown in Chart 6.

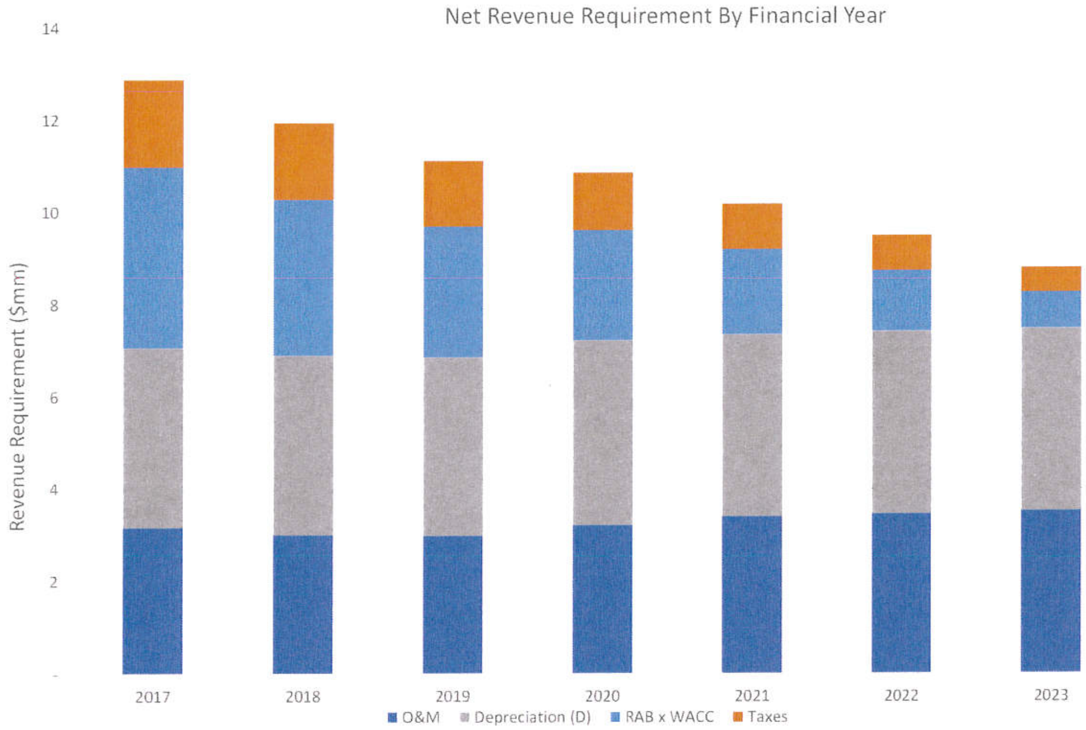


Chart 5, RR Components by Year

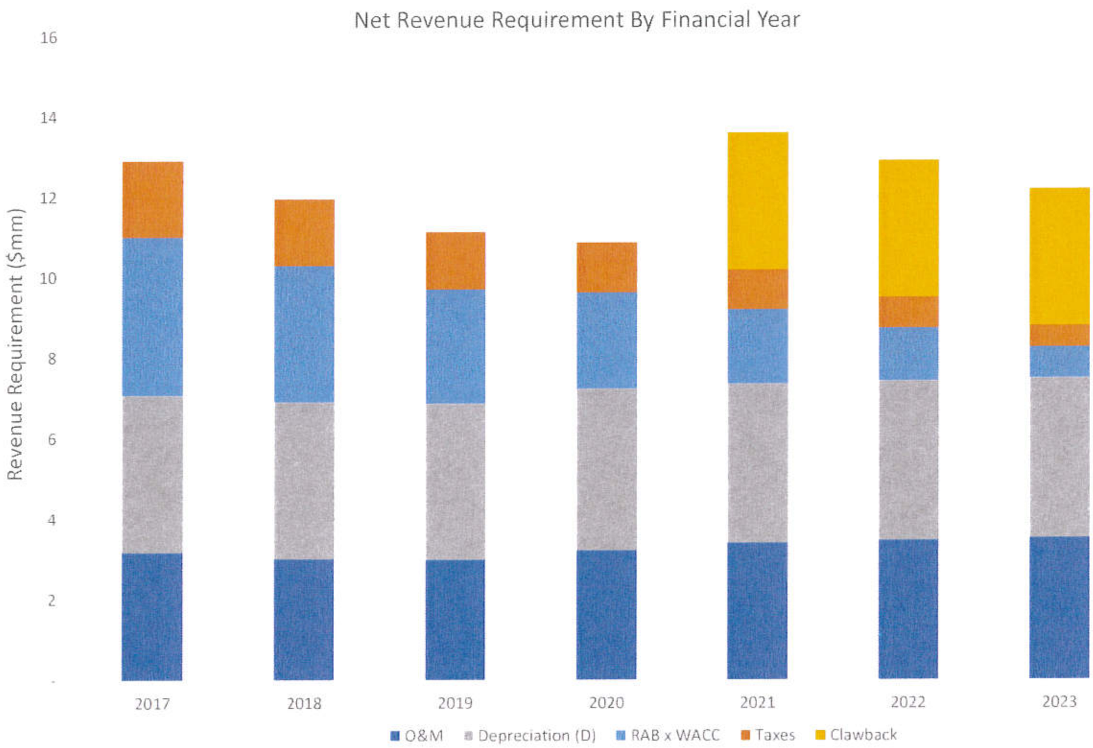


Chart 6, RR Components by Year

5.8 KPI Adjustment Mechanism

The EWURA Guidelines state that Approved tariffs will be linked to quality-related Key Performance Indicators which will be monitored during the tariff period. For each KPI, there is the potential for Songas to be penalised for underperforming, but equally an opportunity to be rewarded for overperforming. It is proposed that the GPTT will be linked to a KPI for 'availability' for both Transportation and for Processing,

The target values will be as follows:

	Processing	Transportation
Availability	96%	96%

For the avoidance of doubt, planned maintenance is not included in the availability figures and would be allowable when calculating penalties.

It is proposed that the KPI adjustment mechanism is calculated as follows:

$$AF = [\, 50\% * (1 - g) * WACC * RAB \,] * PF$$

Where:

AF = Adjustment Factor

g = Gearing

WACC = Weighted Average Cost of Capital

RAB = Regulatory Asset Base

PF = Performance Factor

Assuming Gearing of 70% as per **5.4** and a WACC of 13.9%, the AF would be equivalent to 2% of RAB multiplied by the Performance Factor (approximately $0.3mm * PF).

The performance factor will be calculated as follows:

$$PF = \frac{T - A}{T}$$

Where:

T = Target

A = Actual Performance

For the avoidance of doubt - if A is higher than T (i.e., a positive PF), Songas receive a bonus equivalent to the AF. If A is lower than T (i.e., a negative PF), AF will be negative which represents a penalty to Songas.

There shall be a tolerance such that if 95% < PF < 100%, then PF will be deemed to be 100%.

Underperformance as a result of planned maintenance and force majeure shall not be included in the KPI Adjustment Mechanism.

6. Current and Proposed Tariff

To calculate the GPTT per mcf, past actuals for gas throughput for both PG and AG were used, along with a forecast of gas volumes for 2021 onwards based on past data. The actuals and forecast are shown in Chart 2, in Section 4.

The current approved EWURA tariff is $0.59/mcf, to cover both Processing and Transportation.

The updated GPTT would be $0.72/mcf for 2021 excluding Clawback, and $0.96/mcf including Clawback. Please note that if Clawback from 2011 to 2020 was recovered, the GPTT including Clawback for 2021 would be $2.10/mcf. The proposed tariff is split between Transportation and Processing as follows:

2021 GPTT, $ / mcf	Excluding Clawback	Including Clawback
Processing	0.52	0.69
Transportation	0.20	0.26
Total	**0.72**	**0.96**

The proposed schedule of tariffs is as follows, and is also shown in Chart 8, below:

Start Date	End Date	Aggregate GPTT, $/mcf	Notes
1 July 2021	31 June 2022	0.96 (firm)	For approval
1 July 2022	31 June 2023	0.91 (provisional)	To be finalised Q1 2022
1 July 2023	31 June 2024	0.86 (provisional)	To be finalised Q1 2023

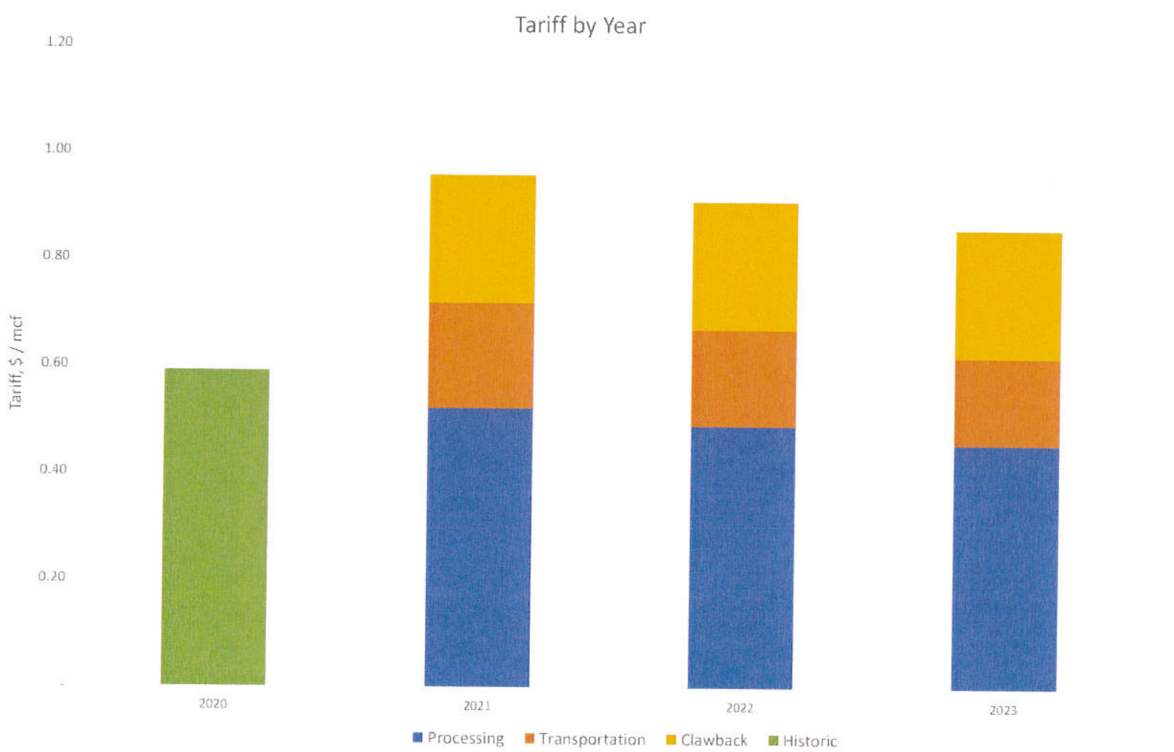


Chart 8, GPTT per mcf

It is proposed that the rate of return and tariff methodology are fixed until 31 June 2024 and that the Revenue Requirement, historical cost, projected future costs, gas throughput forecast, and proposed tariff are updated annually.

7. Financial Implications if the Proposed Tariff is Not Approved

The calculation of the updated GPTT has indicated that the current GPTT of $0.59/mcf is not sufficient to allow to Songas to recover its point forward costs. Calculations show that the GPTT of $0.59/mcf would under-recover the RR by approximately **$3mm** in FYs 2021-2023. Songas is entitled to recover its costs to allow the existing facilities defined in the Songo Songo Project to be operated efficiently and safely and to allow an appropriate return on investments. Furthermore, calculations based on past data from 2011 to 2020 indicate that Songas has in the past not recovered the appropriate level of cost. It is important to note that Songas receives a net 15% of the GPTT revenue, with the remaining 85% passed to TANESCO as explained in Section 2.3.

In the event that the requested changes to the GPTT are not approved, Songas may not recover the necessary point forward and past costs, and it may restrict the ability of Songas to invest in future projects or optimisations with regards to the Transportation and Processing infrastructure. As mentioned in Section 3.2, 85% of the GTTP will be used to reduce TANESCO's electricity cost, which will also have further reaching community benefits by reducing the cost of electricity. If the requested changes to the GPTT are not approved, this benefit would not be realised by the community.

8. Implementation Status of Conditions Imposed in the Previous Order

The following conditions were imposed by EWURA as part of the 2010 Tariff Order. Comments as to their status are included. There are no actions remaining for Songas with respect to these:

Condition	Comment
Any amendment or modification to the Gas Processing and Transportation Agreement and the Gas Agreement of material and adverse impact on regulatory and/or competition matters is permitted, provided that the consent by the Authority is sought within a reasonable time and obtained in writing.	No amendments were made.
Any further amendment or modification to the Gas Processing and Transportation Agreement, the Gas Agreement, and the Implementation Agreement pursuant to Paragraph 4(1)(I) of this Order, shall only be permitted provided that the consent by the Authority is sought within a reasonable time and obtained in writing.	No amendments were made.
Any contract entered into by Songas for goods or services related to natural gas processing and transportation facilities, under which Songas' obligations in any one-year exceeding $5mm shall be produced competitively, unless justifications acceptable to the Authority are made, and within 30 days following execution of such contracts, Songas shall provide the Authority with a copy for information; and amendments thereof, if they constitute a material change.	Songas have a long-term operations contract with PAET for gas production and processing in line with the signed Gas Agreement entered between Government of Tanzania, the gas developers (PAET and TPDC) and Songas. The Songo Songo Gas to Electricity Project, including all its relevant contracts, were approved by Government of Tanzania and accepted by EWURA to date.
Within 12 months from the commencement data of this order, Songas shall review and revise a development plan based on the draft already furnished to the Authority with respect to further development of its gas infrastructure.	The previously planned Songo Songo expansion project was not implemented.
Within 12 months from the commencement date of this order, Songas shall launch its customer service charter to cover performance targets and handling of consumer complaints and shall be subject to approval by the Authority.	The Charter was developed in 2011 (Appendix 7). Note: being amended per EWURA recommendation to comply with Natural Gas Service Provider Customers Service Charter Guideline 2019.

9. Statement of Benefits to Customers of Proposed Tariff

The proposed adjustment of the current GPTT will provide the following benefits:

- The proposed GPTT will contribute to mitigate the risk of potential gas supply interruption by enabling funding for maintenance of the processing plant and transportation pipeline thus increases the reliability and availability of gas supply for consumers.
- The proposed GPTT will bring a cost reflective tariff thus ensuring fair competition in the industry for the best interest of customers.
- It will allow Songas to recover past under-recovered Revenue Requirement and allow Songas to recover the appropriate level of future revenue, re-balancing the division of revenue between stakeholders in the Tanzanian Gas Sector in a fair manner.
- It will be aligned with the latest EWURA methodology as outlined in the EWURA guidelines and the EWURA Rules, 2017, whereas the previous GPTT was calculated on a different methodology.
- It will increase regulatory certainty in the Tanzanian Gas Sector and tariff transparency.

10. Status of Project Documents

The following contractual agreements are relevant to the proposed tariff:

Project Document	Parties	Appendix no.
Gas Processing and Transportation Agreement (GPTA)	Songas, PAET	Appendix 3
Gas Agreement	GoT, TPDC, Songas, PAET	Appendix 4
Implementation Agreement	Songas, GoT, PAT, CDC Group, GGL, & Actis infrastructure Fund 2 (AI2)	Appendix 5
Complex Additional Gas Agreement (currently under negotiation)	Songas, PAET, TPDC	N/A
The Energy and Water Utilities Regulatory Authority (Songas Limited Natural Gas Processing and Transportation Tariff Adjustment Mechanism) Order, 2011 (EWURA Order No. 011-007)	Songas, EWURA	Appendix 6

Please note that the Complex Additional Gas Agreement is currently under negotiation and therefore cannot be included in this application at the current time.

Appendices

Appendix 1: Forms G1, G2, G4, G6 and EG1

Appendix 2: Songas Audited Financial Statements (AFS) for 2018, 2019 and 2020

Appendix 3: Gas Processing and Transportation Agreement (GPTA)

Appendix 4: Gas Agreement

Appendix 5: Implementation Agreement

Appendix 6: EWURA Order No.011-007

Appendix 7: Customer Service Charter

Appendix 8: Excel Tariff Model (supplied Electronically)

Appendix 9: Glossary

Appendix 1 – Forms

FORM G1: NATURAL GAS PROCESSING PLANT BASIC DATA (TZS in millions)

Name of Natural Gas Processing Plant	SSI Gas Production and Processing Plant
Location	Songo Songo Island
Operational Status	Operational

Financial Year		2017 Year N-3	2018 Year N-2	2019 Year N-1	2020 Year N	2021 Year N+1	2022 Year N+2	2023 Year N+3
Installed Capacity	mmscfd	110	110	110	110	110	110	110
Number of trains	No.	2	2	2	2	2	2	2
Date of Installation	Year	2004	2004	2004	2004	2004	2004	2004
Plant Economic life	Years	20	20	20	20	20	20	20
Efficiency rate		0.96	0.96	0.96	0.96	0.96	0.96	0.96
Available Capacity mmscfd								
Plant Own Use %	%	0.001	0.001	0.003	0.003	0.008	0.007	0.006
Planned Maintenance %	%	81.24	80.17	80.23	84.09	85.11	84.3	81.22
Forced Maintenance %	%	9.19	10.05	9.41	7.91	7.21	7.51	8.2
Plant Utilization Factor %	%	99.6	99.12	97.8	98.9	98.5	98.7	98.2
Volume of Gas Processed per day	mmscfd	78.2	79.9	73.1	71.0	77.7	77.6	78.0
Volume of Gas Transmitted	mmscfd	77.8	79.2	71.5	70.3	76.6	76.6	76.6
Flared and vented gas	mmscfd	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Employees								
Total employees	No.	90	90	90	90	90	90	90
Part-time	No.	10	10	10	10	10	10	10
Financing Data								
Total Investment Cost	TZS	90,787	80,490	68,417	56,695	44,809	33,150	21,496
Sources of Financing:								
Licensee's equity	TZS	11,503	11,503	11,503	11,503	11,503	11,503	11,503
Commercial/Concessional loan	TZS	148,870	148,870	148,870	148,870	148,870	148,870	148,870
Grant / Subsidies	TZS	-	-	-	-	-	-	-
Other Sources	TZS	-	-	-	-	-	-	-
Operation and Maint. Expenses								
Fixed O&M Expenses	TZS	1,295	1,347	1,434	1,569	1,600	1,615	1,608
Variable O&M Expenses	TZS	10,686	10,475	10,452	10,847	11,481	11,711	11,945
Other expenses	TZS							

FORM G2: TRANSMISSION FACILITIES (TZS in millions)

Financial Year		2017 Year N-3	2018 Year N-2	2019 Year N-1	2020 Year N	2021 Year N+1	2022 Year N+2	2023 Year N+3
Length of pipeline	km	220	220	220	220	220	220	220
Installed Capacity mmscf/d	mmscfd	105	105	105	105	105	105	105
Diameter inch (Subsea)	No.	12	12	12	12	12	12	12
Diameter inch (Underground)	No.	16	16	16	16	16	16	16
Total Investment Cost	TZS	46,307	41,534	35,860	30,324	24,567	18,791	13,014
Source of finance:								
Licensee's equity	TZS	11,503	11,503	11,503	11,503	11,503	11,503	11,503
Commercial/Concessional loan	TZS	148,870	148,870	148,870	148,870	148,870	148,870	148,870
Grant / Subsidies	TZS	-	-	-	-	-	-	-
Other Sources	TZS	-	-	-	-	-	-	-
Utilization Factor	%	76	76	76	76	76	76	76
Volume of Gas Transmitted	mmscfd	78	79	71	70	77	77	77
Unaccouted for gas	%							
Operation and Maint. Expenses								
Fixed O&M Expenses	TZS	1,226	1,255	1,242	1,287	1,309	1,330	1,351
Variable O&M Expenses	TZS	1,225	918	862	957	1,160	1,177	1,194
Other expenses	TZS							
Employees								
Total employees	No.	90	90	90	90	90	90	90
Part-time / STE	No.	10	10	10	10	10	10	10

FORM G4: REGULATORY ASSET BASE (TZS in millions)

Financial Year		2017 Year N-3	2018 Year N-2	2019 Year N-1	2020 Year N	2021 Year N+1	2022 Year N+2	2023 Year N+3
PROCESSING PLANT								
Historical Cost	TZS	209,969	214,292	214,767	216,167	216,464	216,775	216,787
Revaluation	TZS	-	-	-	-	-	-	-
Capital Additions	TZS	-	161	146	304	614	626	653
Disposals	TZS	-	-	-	-	-	-	-
Accumulated depreciation	TZS	-107,105	-121,636	-134,116	-147,277	-160,014	-171,973	-183,647
Depreciation - current year	TZS	-12,078	-12,326	-12,380	-12,499	-12,256	-12,278	-12,296
Impairment charge	TZS	-	-	-	-	-	-	-
Net Assets - Processing Plant	TZS	90,787	80,490	68,417	56,695	44,809	33,150	21,496
TRANSMISSION SYSTEM								
Historical Cost	TZS	102,378	104,486	104,639	105,328	105,397	105,397	105,397
Revaluation	TZS	-	-	-	-	-	-	-
Capital Additions	TZS	-	-	-	-	-	-	-
Disposals	TZS	-	-	-	-	-	-	-
Accumulated depreciation	TZS	-50,459	-57,225	-63,044	-69,232	-75,053	-80,830	-86,606
Depreciation - current year	TZS	-5,611	-5,727	-5,735	-5,773	-5,776	-5,776	-5,776
Impairment charge	TZS	-	-	-	-	-	-	-
Net Assets - Transmission	TZS	46,307	41,534	35,860	30,324	24,567	18,791	13,014

FORM G6: DISTANCE OF VALVE STATIONS FROM SONGO SONGO PROCESSING PLANTS

		Songo Songo Island
BV-1	km	23.6
BV-2	km	44.21
BV-3	km	78.05
BV-4	km	105.8
BV-5	km	135.7
BV-6	km	167.15
BV-7	km	198.6
BV-8	km	217.58
BV-n	km	233.48

FORM EG 1: LONG TERM DEBT SCHEDULE

Description of Debt	Type of Debt	Date of Issue	Maturity Date	Principle Amount	Currency	Interest Rate	Carrying Value
Long Term Debt-IDA Loan	Long term	01-Jun-05	30-Nov-21	112,419,648.00	USD	7.1%	15,091,254.25
Long Term Debt-EIB Loan	Long term	01-Dec-05	30-Nov-21	60,352,535.00	USD	6.0%	5,911,784.93
Loan Notes - Somanga	Long term	01-Aug-04	31-Jul-24	23,709,900.00	USD	22.0%	1,833,212.26
Loan Notes - Tanzania	Long term	01-Aug-04	31-Jul-24	71,129,700.00	USD	22.0%	5,326,545.20