

EWURA –NARUC PARTENERSHIP

Pricing and Tariff Setting Methodology for Gas Trans & Distribution-

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Introduction

- ❑ In year 2009, the capacity of natural gas dehydration (Dew Point Control (DPC) trains) units and associated accessories) on Songo Songo Island reached their maximum design capacity of 70 (MMscfd).
- ❑ Huge investments made in expanding gas-based power generation capacity from 185MW to above 400MW in Dar es Salaam;
- ❑ Forecast daily peak demand for natural gas during 2009 was almost 90 MMscfd.

Introduction (cont..)

Alternative Solution to Expansion Project

- **re-name plating or overstraining non-moving segments of the existing natural gas processing plant.** This option was limited to 90 MMscfd on temporary basis;
- **de-bottlenecking the existing two DPC units by modifying Joule-Thompson's Valve.** This option was limited to increasing the capacity up to **100 MMscfd**; and
- **relaxing temperate operations parameters to suit tropical operations,** and thence allow injection of raw natural gas (with condensates) into processed natural gas. The lenders' consent was to be pre-requisite

Introduction ... cont

- ❑ Installation of additional two trains with the capacity of 35 MMscfd each was necessary;
- ❑ Songas Limited submitted an Application for Multi-Year Tariff Adjustment Mechanism (MYTAM) for natural gas processing and transportation tariff.
- ❑ MYTAM was designed to guarantee realization of targeted annual cost recovery in addition to revenue retained by Songas as consideration for services rendered to third party customers using Songas gas facilities.

Approval of Tariff Setting Methodology

- In April 2011, EWURA approved a Gas Processing and Transportation Tariff Adjustment Methodology for computing the applicant's revenue requirement for Expansion of existing Gas processing plant,

Referenced to Schedule for Discussion

- Revenue Requirement for Gas Processing was set (**Item 2.8**)
- Revenue Requirement for Gas Transportation was set (**Item 2.21**)

Gas Processing and Transport charges

Referenced to schedule for discussion

- The monthly natural gas processing charge formula (Item 2.4)
- The monthly natural gas transportation charge formula (Item 2.17)

Provision for Incentives

The formula included incentives and performance factors for processing and transportation

Referenced to Schedule for discussion

- Incentives for processing (**Item 2.10**) of the Schedule subject to Performance factor (**see item 2.12**) of the Schedule

Provision for incentives..(cont)

- For Transportation the Revenue Requirement formula (Item 2.21)
- incentives (**Item 2.23**) of the Schedule subject to Performance factor (**see item 2.25**) of the Schedule-

Pricing Issues

- Different pricing methodologies:
 - Power: Wellhead price.
 - Industrial Customers: Netback calculation based on alternative fuel (landed HFO, coal etc);
- EWURA establishes only infrastructure tariffs:
 - Processing;
 - Transportation;
 - Distribution; and
 - Other charges.

Gas Price for Power

- The Current Natural Gas price for Power generation has been categorized into Additional and Protected Gas prices
- Additional Gas Prices stands at 3.56 US\$/MMBTU i.e Wellhead price is 2.97 US\$/MMBTU plus processing and transportation tariff of 0.59 US\$/MMBTU
- Protected Gas Price at Songas Gas Plant stands at 0.65 US\$/MMBTU
- M&P Gas Price is fixed at 5.36 US\$/mcf

Gas Price for Industrial use cont...

- Service provider categorized all industrial customers according to their consumption capacity
- Those with large consumption are charged low per unit (discounted)
- The nature of fuel to be replaced and its market cost will determine the Gas price

Gas Price for Industrial use

- The Current Average Industrial Natural Gas Price is 8.27US\$/mcf
- Gas consumers negotiate gas prices by referring to the existing fuel cost to be replaced by Gas and the amount expected to take e.g. 20% -30% cheaper than HFO, LPG, Coal...
- The Distribution tariff for Ring Main distribution line approved by EWURA is 0.52US\$/Giga Joule(GJ)

Challenges - Natural Gas Sector

1. Enactment of Gas Supply Act, to eliminate grey areas under existing contract arrangements;
2. Establish a reasonable Pricing Principles, that equitably safeguard the interest of all parties.

Thanks.

