

Preliminary Assessment of Maximum Price of Piped-Gas for NOVO Energy (Pty) Ltd for the period 01 July 2013 to 30 June 2014.

This preliminary assessment of the maximum price of piped-gas is based on information supplied by NOVO Energy (Pty) Ltd (“NOVO Energy”) in its maximum price application and NERSA’s assessment is as per the Methodology to Approve Maximum Prices of Piped-Gas in South Africa.

The Energy Regulator is publishing this preliminary assessment of the maximum price for public comments. In providing comments, stakeholders may consider the published Methodology to Approve Maximum Prices of Piped-Gas in South Africa and the Regulations as well as the provisions of the Gas Act.

Members of the public wishing to submit comments should do so in writing. The deadline for comments is **06 November 2013**.

Written comments are to be submitted to the Energy Regulator at the following email address: gpt@nersa.org.za or to the NERSA offices at Kulawula House, 526 Madiba Street, Arcadia, Pretoria by 06 November 2013.

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In addition, NERSA will conduct a public hearing on this application where oral representations may also be made. This public hearing is scheduled to be held at NERSA’s offices at 526 Madiba Street, Arcadia, Pretoria, South Africa on 07 November 2013.

1. INTRODUCTION

- 1.1 The Energy Regulator is mandated in terms of the National Energy Regulator Act, 2004 (Act No. 40 of 2004) (“NERSA Act”) to regulate the electricity, piped-gas and petroleum pipeline industries in terms of the Electricity Regulation Act, 2006, the Gas Act, 2001 and the Petroleum Pipelines Act, 2003.
- 1.2 Section 21(1) prescribes that the Energy Regulator, may impose licence conditions within the following framework of requirements and limitations: “(p) maximum prices for distributors, and all classes of consumers must be approved by the Gas Regulator where there is inadequate competition as contemplated in Chapters 2 and 3 of the Competition Act, 1998 (Act No. 89 of 1998).”
- 1.3 In line with this requirement, the National Energy Regulator of South Africa (“NERSA”) has given a notice in the media that it has made a preliminary assessment of the maximum price of piped-gas for NOVO Energy for the period 01 July 2013 to 30 June 2014. This preliminary assessment is done as per the Methodology to approve maximum prices of piped-gas in South Africa.
- 1.4 This consultation document provides background information to the preliminary assessment of the maximum price of piped-gas for NOVO Energy for the period 01 July 2013 to 30 June 2014. The application is published on the NERSA website.
- 1.5 Interested parties are invited to provide written comments to the Energy Regulator, which will be considered before taking a final decision on this matter. The deadline for submitting comments is 06 November 2013.

2 APPLICABLE LAW

- 2.1 The legal basis for the Energy Regulator to regulate prices of piped-gas is derived from the National Energy Regulator Act, 2004 (Act No. 40 of 2004) ('the NERSA Act'), read with the Gas Act, 2001 (Act No. 48 of 2001), ('the Gas Act').

3 BACKGROUND

a) The Methodology to Approve Maximum Prices for Piped-Gas in South Africa (2011)

- 3.1 Section 21(1) of the Gas Act prescribes that the Energy Regulator, may impose licence conditions within the following framework of requirements and limitations: "(p) maximum prices for distributors, reticulators and all classes of consumers must be approved by the Gas Regulator where there is inadequate competition as contemplated in Chapters 2 and 3 of the Competition Act, 1998 (Act No. 89 of 1998)."
- 3.2 In line with this particular requirement, NERSA has developed the Methodology to Approve Maximum Prices of Piped-gas in South Africa, 2011 ("the Maximum Pricing Methodology" or "the Methodology"). The Methodology is available on the NERSA website at www.nersa.org.za.
- 3.3 The Maximum Pricing Methodology also provides for the determination of a trading margin, which is referenced to the Tariff Guidelines.
- 3.4 Approving maximum prices and the use of the Methodology are contingent on NERSA determining that "there is inadequate competition as contemplated in Chapters 2 and 3 of the Competition Act, 1998 (Act No. 89 of 1998)."
- 3.5 Therefore, for NERSA to regulate maximum prices of piped-gas, it must be of the view that there exist market conditions or market features indicating inadequate competition in line with the provisions of Chapters 2 and 3 of the Competition Act.

3.6 The determination of inadequate competition contemplated in section 21(1) (p) of the Gas Act is made by the Energy Regulator outside of this methodology from time to time. The first determination of inadequate competition was approved by the Energy Regulator on 08 February 2012.

b) Relationship to the Tariff Guidelines

3.7 According to section 4(h) of the Gas Act, the Energy Regulator has a duty to “monitor and approve, and if necessary regulate, transmission and storage tariffs and take appropriate actions when necessary to ensure that they are applied in a non-discriminatory manner as contemplated in section 22.”

3.8 In order to implement this mandate, NERSA developed The Guidelines for Monitoring and Approving Piped-gas Transmission and Storage Tariffs in South Africa, 2009 (the “Tariff Guidelines”). The Tariff Guidelines are available on the website at www.nersa.org.za.

3.9 Hence, the Tariff Guidelines give guidance on tariff-related activities, which are charges for gas services and which must be added to the piped-gas energy price(s).

c) The Piped-Gas Regulations

3.10 The maximum price determination principles outlined in the Maximum Pricing Methodology, are further informed by the “Price Regulation Procedures and Principles” prescribed in the Piped-Gas Regulations, promulgated in terms of the Gas Act, Gazette No 29792, 20 April 2007, (“the Regulations”). The following are pertinent to this methodology.

3.11 Sub-regulation 4 (3) prescribes that the Energy Regulator must, when approving the maximum price in accordance with Section 21 (1) (p) of the Act, :-

- a) be objective i.e. based on a systematic methodology applicable on a consistent and comparable basis;
- b) be fair;
- c) be non-discriminatory;
- d) be transparent;
- e) be predictable; and
- f) include efficiency incentives.

3.12 Sub-regulation 4 (4) prescribes that the maximum prices referred to in sub-regulation 4 (3) must enable the licensee to:

- a) recover all efficient and prudently incurred investment and operation costs; and
- b) make a profit commensurate with risk.

3.13 Sub-regulation (4) (13), provides that, when ownership of gas changes, the price of gas in the new owner's hands refers to the price of gas from the seller plus any tariffs charged by that seller.

3.14 Sub-regulation 4 (6), then requires that, when gas is sold, the accompanying invoice must itemise the constituent elements of the total price reflected on the invoice, including at least the cost of gas, and transport tariffs and any other charges.

3.15 Annexure A of the Regulations provides the definition of the classes of customers as classified by their annual gas consumption in Gigajoules as follows:

CLASS	ANNUAL GAS CONSUMPTION		
Class 1	Less than 400 GJ pa		
Class 2	401 GJ pa	to	4 000 GJ pa
Class 3	4 001 GJ pa	to	40 000 GJ pa
Class 4	40 001 GJ pa	to	400000 GJ pa
Class 5	400 001 GJ pa	to	4 000 000 GJ pa
Class 6	> 4 000 000 GJ pa	to	

3.16 These legislative aspects, as prescribed by the Gas Act and the NERSA Act are essential in defining the scope and nature of the Maximum Pricing Methodology of Piped-gas developed by NERSA.

4 THE APPLICANT

4.1 NOVO Energy (Pty) Ltd (registration number 2006/038598/07) is a company incorporated in terms of the companies Act of 1973 and wholly owns the following subsidiaries:

- i. NOVO Assets Holdings (NOVO Mcfarlane (Pty) Ltd is a subsidiary of this;
- ii. NOVO Gas (Pty) Ltd (NOVO Sebenza (PTY) Ltd and NOVO Lincoln (Pty) Ltd are subsidiaries of this company;
- iii. NOVO Turnkey Solutions (Pty) Ltd;
- iv. NOVO Operations (Pty) Ltd; and
- v. NOVO Investments (Pty) Ltd.

4.2 NOVO Energy obtained a license in 2009 to operate gas storage and distribution entities in South Africa. NOVO Energy's business model is to be involved in sourcing, processing, compressing, distributing and supplying natural gas or compressed natural gas to various private and public dispensing sites (industrial users).

4.3 NOVO Energy commenced by operating its demonstration plant in Germiston in 2010. In November 2012, NOVO Energy began operating its first commercial plant in Benoni and its current customers are vehicle fleet owners. Any internal combustion engine diesel or petrol can use the NOVO energy solutions including forklifts, trucks, locomotives, buses, and public transport vehicles among other users.

4.4 NOVO also plans on having industrial customers whereby it takes gas to customer's industrial sites using specialized gas transportation trucks. However the company has not yet acquired these trucks and is still in the business development phase.

4.5 NOVO's current model is essentially similar to operating petrol filling stations, only differing in that its station will dispense natural gas not petrol. The current application is for its two licensed facilities, one in Benoni and another in Germiston.

5 NOVO ENERGY'S APPLICATION

5.1 NOVO Energy first lodged a maximum price application with NERSA on 15 January 2013. On 26 March 2013, the Energy Regulator decided that NOVO Energy must amend and re-submit the application. The Reasons for the Decision (RfD) are available on the NERSA website.

5.2 On 12 September 2013, the Energy Regulator received an amended application for a maximum price of piped-gas from NOVO Energy for the period 01 July 2013 to 30 June 2014 that conforms to the Energy Regulator decision of 26 March 2013 as articulated in the RfD.

5.3 NOVO Energy indicated that it did not calculate a Gas Energy Price (GEP) but rather opted to use the "Pass-Through Approach", which is allowed in the Methodology, and used its actual purchase price that will be charged by Sasol Gas Ltd ("Sasol Gas") during the maximum price period. To this figure it will add the trading margin and pass through tariffs as prescribed in the maximum pricing methodology.

5.4 NOVO Energy is applying for a maximum price as summarised in table 2 below:

Table 1: Summary of itemised maximum price

Component	R/GJ
Cost of Gas Purchases for resale, (GEP) <i>plus</i>	██████
Trading Margin	██████
Total Price	249.44

- 5.5 NOVO indicated that because of its current business model described in paragraphs 4.2 to 4.5 above, it will charge one price to all customers.
- 5.6 NOVO's maximum price application is for its two operations in Germiston and Benoni. However in its application, NOVO only submitted data relating to Benoni, its commercial operation and would like the Energy Regulator to approve this price which will then be the maximum price for its Germiston operation as well.
- 5.7 The justification is that the Germiston station was a "demo" model; therefore the costs incurred to set it up and run it are too exorbitant and will distort the prices by pushing them up. Thus NOVO has only used data regarding Benoni, its first commercial dispensing unit. This will also be advantageous to customers as the maximum price that they can be charged will be lower than using the "demo" model figures.

6. NERSA ASSESSMENT OF THE NOVO ENERGY APPLICATION

Assessment Of The Gas Energy Price

- 6.1 According to the Methodology, applicants are required to submit a piped-gas price application for approval 3 to 4 months prior to implementation. To calculate GEP, the licensee should use either the price indicators approach or the alternative pass through approach. The alternative pass through approach may be used where the licensee deems the price determined using the Price Indicators approach to be materially lower or higher and negatively impacts on the business ability to compete and/or recover efficiently and prudently incurred costs and make a profit commensurate with risk. This approach will become the systematic methodology to be consistently applied throughout the licence period for such a licensee electing to use this 'pass-through' approach.
- 6.2 NOVO Energy opted to use the "Pass-Through Approach" justifying that such an approach is more reflective of their operations as they buy gas from Sasol Gas at a given cost and then build on their costs from this purchase price.

6.3 NOVO Energy used [REDACTED] as the GEP. This is the company's projected cost price of gas purchased for resale from Sasol Gas in the maximum price period. NERSA used the same projected gas purchase price of [REDACTED] as a pass through in assessing the application.

Assessment Of The Elements Of The Trading Margin

6.4 Section 3.6.3 of The Methodology states that:

“The trader’s margin (as a percentage) will be calculated in nominal terms. The nominal Weighted Average Cost of Capital (WACC) of the trader will be the trading margin (%), since all other expenses are allowed to the licensee as a pass-through. In so doing, the Energy Regulator will ensure the return on investment as derived in the cost of capital calculation explained below is achieved.

Gas trading margins will be applied to the sum of ‘Cost of Sales’ plus ‘Trading RAB’ of that trader plus ‘Working Capital’.

Cost of Sales and operating expenses that are allowable in the piped-gas trading business are those determined in terms of the prescribed Volume 1 and Volume 3 of the Regulatory Reporting Manuals for the piped-gas industry.”

6.5 The formula for trading services provided to trading customers of a trading licensee is:

$$\text{Allowable Revenue}_{(\text{trading})} = \{\text{Expenses} + ((\text{Cost of Sales} + \text{RAB} + \text{Working Capital}) * \text{Margin} + T \pm C)\}$$

Where:

RAB = approved historical cost trading services RAB less accumulated depreciation

Working Capital = approved 45-day-average trading working capital

Expenses = approved efficient trading operating expenses including depreciation

Cost of Sales = Opening inventory of gas held for sale + Purchases of gas for sale - Closing inventory of gas held for sale

Margin	= Trading margin (%) determined in nominal WACC terms
T	= Corporate tax expense for the period
C	= Clawback (+/-) on volumes

6.6 The paragraphs below provide an analysis of each component of the trading allowable revenue formula.

Trading Regulatory Asset Base (RAB)

6.7 According to section 3.6.1 of the maximum pricing methodology, trading licensees would normally not have piped-gas network assets, and if they do they would be insignificant. It also provides that such assets, referred to as piped-gas trading plant in service plus limited amounts of non-network assets referred to as the piped-gas general plant would form the RAB. The investment in RAB would be recovered through a nominal trading margin.

6.8 The RAB value is at historical cost and is not trended because the investment is recovered through a nominal margin. The formula for this is as follows:

Regulatory Asset Base = Original Cost of Property, Plant & Equipment (v) - Accumulated Depreciation (d)

6.9 NOVO Energy applied for a RAB of [REDACTED]. NOVO Energy's Benoni plant is still relatively new as it started operating in November 2012. The submitted RAB figure is comprised of property, plant and equipment that will be used in the trading activity. NOVO Energy complied with the Regulatory Reporting Manuals (RRMs) and separated trading from storage assets. The applicant excluded storage assets valued at [REDACTED] from the trading RAB.

6.10 NOVO Energy also complied with the RfD's by capitalising a proportion of its costs in the maximum price application. In capitalising costs, NOVO Energy was guided by the Regulatory Reporting Manuals (RRMs) Volume 3: Piped-gas section 1.3 (30) that describe regulatory assets/debits: "They are assets that arise from tariff setting/approval actions/decisions of the Energy Regulator. Regulator assets/debits arise

from specific revenues, expenses, gains or losses that would have been included in net income assessment in one period under the general requirements of the RRM. However, due to the Energy Regulator Decision, such items are deferred and instead will be included in a different period for purposes of developing the tariffs the licensee is authorised to charge for its regulated service”.

6.11 NOVO correctly used the RRM principle of direct allocation of costs and capitalised a proportion of expenses that correspond to the capacity to be sold in the maximum price period. NOVO Energy capitalised [REDACTED] out of [REDACTED] of total expenses.

6.12 The total RAB used by NOVO Energy in this maximum price is [REDACTED] which is comprised of the capitalised expenses of [REDACTED] plus the trading RAB of [REDACTED].

6.13 NERSA assessed the RAB using the methodology and RRM for compliance and reasonableness. NERSA used [REDACTED] as the trading RAB that excludes storage assets. This is the same figure that was used by NOVO in its calculations.

Depreciation

6.14 In accordance with section 2.2 of the maximum pricing methodology, reference was made to the Tariff Guidelines which provide that accumulated depreciation (d) is the cumulative depreciation against plant property, vehicles and equipment in service and it should be calculated on a straight line basis over the economic life of the asset.

6.15 Since the original cost and the remaining economic life of assets could be determined, NERSA used the original/historical value to calculate the straight line depreciation and amortisation cost. The capitalised costs are being amortised at the same rate as the assets.

6.16 NERSA used the straight line method and arrived at an amount of [REDACTED] which is 2.5% less than the [REDACTED] used by the

applicant. The difference in amounts arose because NERSA used summarised asset values and depreciated per asset class, in terms of the RRM's, whilst the applicant depreciated per each asset.

Operating Costs

6.17 According to section 3.6.2 of the maximum pricing methodology, all operating costs, including depreciation for the application year, that are efficient and prudently incurred by the piped-gas trading licensee shall be allowed as a pass-through in the trading margin.

6.18 In considering the NOVO Energy expenses, NERSA also referred to the tariff guidelines section 4.3 that stipulate that each expense item should be assessed using principles such as whether the expense was “prudently incurred”, its controllability and efficiency.

6.19 NOVO Energy applied for operating expenses of [REDACTED]. The figure was bundled including taxation and depreciation. NERSA used the above principles and assessed each expense item as provided by NOVO Energy. NOVO Energy is currently not yet required to comply with the Regulatory Reporting Manuals (RRM's) hence no Cost Allocation Manual (CAM) is available from NOVO Energy for NERSA to use on how these costs are separated between operating expenses and capital projects/non –operational expenses.

6.20 However NERSA applied the RRM principles to ensure the expenses line items are in accordance with those provided for in regulatory reporting requirements and used the expenses, excluding depreciation and taxation, figure provided by the applicant of [REDACTED].

Net working Capital (w)

6.21 According to the methodology, the net working capital refers to the various regulatory asset-base funding requirements other than utility plant in service. This is determined using the below formula and it should be on a 45 day basis:

Net working capital = inventory + receivables + operating cash + minimum cash balance – trade payables.

6.22 NOVO Energy applied based on the prescribed 45 day working capital allowance for an amount of [REDACTED]. NOVO Energy has not yet operated a full financial year cycle because this is its first year in operation and used an estimate of its annual cost of gas pro-rated to match a 45 day cycle. NERSA accepted the method used to estimate the working capital and used the same figure as the applicant. However, in its next application, NOVO Energy will be expected to use the NERSA formula prescribed in the tariff guidelines.

Tax (T)

6.23 In calculating tax, reference was made to section 4.4 of the Tariff Guidelines that provides that the flow-through tax approach is the Energy Regulator's preferred tax methodology. Under this approach, only the current taxes payable are factored into the allowable revenue and recovered during the period under review. However this application being a forward looking, the actual taxes payable for the tariff period under review will only be known after the end of the tariff period.

6.24 NERSA therefore used the flow-through tax approach to determine the estimated tax payable figure in the allowable revenue. The applicant used [REDACTED] (which was bundled in the expenses figure) whereas NERSA used [REDACTED].

6.25 To estimate tax, NERSA used the following formula:

$$\text{Taxation} = \{(\text{NPBT}) / (1 - \text{Tax Rate})\} * \text{Tax Rate}$$

Where:

$$\text{Net Profit Before Tax (NPBT)} = \{ \text{Exp} + \text{Dep} + ((\text{Cost of Sales} + \text{RAB} + \text{Working Capital}) * \text{Margin} + \text{C}) \} \text{ less } \{ \text{Expenses} + \text{Depreciation} \}$$

6.26 The NERSA tax estimation is 38% lower than the NOVO estimation. The difference arises because NERSA subtracted expenses and depreciation (because these are tax deductible) from the revenue used to estimate tax whereas NOVO deducted the margin.

6.27 The difference in the tax calculation is illustrated in the table below. The NOVO figures are taken as they appear in the maximum price application

Table 2: Summary of NOVO Energy Tax Calculation

	Component	NERSA (Rands)	NOVO (Rands)
a	RAB		
b	WACC		
c= a*b	Margin		
d	Expenses		
e	Depreciation		
f=c+d+e	NPBT		
	<i>Less</i>		
g	<i>Expenses</i>		
h	<i>Depreciation</i>		
i	<i>Margin</i>		
j=f-(g+h+i)	NPBT		
	Taxation {NPBT/(1-tax rate)}*tax rate		

6.28 The difference between this estimated flow-through tax and the actual flow-through tax will be subject to +/- claw-back in subsequent tariff period as per the methodology.

Weighted Average Cost of Capital (WACC)

6.29 NOVO Energy used the method articulated below in its WACC calculations:

$$WACC = \left[\left(\frac{E}{Dt + E} \right) * Ke \right] + \left[\left(\frac{Dt}{Dt + E} \right) * Kd \right]$$

Where:

WACC = nominal weighted average cost of capital

E = equity

Dt = debt

$K_{e(nominal)}$ = the nominal cost of equity

$K_{d(nominal)}$ = the post-tax nominal cost of debt

6.30 In its application, [REDACTED]. To calculate its WACC, NOVO Energy complied with the RfD and [REDACTED].

6.31 NERSA assessed the NOVO Energy WACC. The methodology prescribes a minimum debt ratio of 30% in the capital structure. NOVO Energy applied for WACC based on 0000000. Debt is a cheaper form of capital therefore NERSA will use the WACC figure [REDACTED]. NOVO Energy explained that its balance sheet reflects [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Claw-back

6.32 Since this is NOVO Energy's first maximum price application, there was no claw back calculated on the trading margin.

6.33 The table 3 below summarises the NERSA calculation and the figures as presented in the application by NOVO Energy for the trading margin. The NOVO Energy figure of [REDACTED] is taken as it was submitted in the application. The difference in the NERSA and NOVO trading margins are due to differences in the depreciation and taxation figures as explained in paragraphs above.

Table 3: NOVO Energy Trading Margin Calculation Summary

	Maximum Price Calculation	NERSA Rands (R)	*NOVO Rands (R)
a	Deferred Expenses	██████████	██████████
b	Trading Assets	██████████	██████████
c	Working Capital	██████████	██████████
d	Cost Of Sales	██████████	██████████
e	Total RAB = sum (A:D)	██████████	██████████
f	WACC	██████████	██████████
g	RAB*WACC	██████████	██████████
h	Expenses	██████████	██████████
i	Depreciation	██████████	██████████
j	Taxation at 28%	██████████	██████████
k	Storage Cost	██████████	██████████
l	Claw back	██████████	██████████
m	Total AR = sum(F:L)	██████████	██████████
n	Volume	██████████	██████████
o	Trading Margin = M/N	██████████	██████████

*NOVO figures were not recalculated but taken as they were submitted on the application

7 TOTAL PIPED-GAS PRICES INCLUSIVE OF TARIFFS

7.1 After determination of the pass-through GEP and the trading margin as explained above, the Methodology provides for the gas trader to recover the storage tariff as a pass through.

7.2 NOVO Energy will add a storage tariff to the maximum price of R249.44/GJ to arrive at the total maximum price that it can charge its customers.

7. IMPACT ASSESSMENT

8.1 NOVO Energy indicated that their business model is currently to substitute petroleum fuels with natural gas. It was further highlighted that their strategy is to ██████████ price for all their customers. NOVO Energy’s customers are predominantly ██████████. Its strategy is to target a market that was using ██████████ as a substitute fuel and

differentiating itself from other gas traders such as Sasol Gas that has pipeline assets.

8.2 The actual fuel prices of [REDACTED] of the NOVO Energy product.

8.3 Therefore a comparison of the actual prices charged by conventional petroleum fuel products and the maximum gas price is a helpful indication of the price incentive for consumers to move to natural gas as a substitute fuel. The comparative table is for indicative purposes only as there are other factors such as security of supply and capital costs of switching to another fuel among other issues that a consumer considers before switching fuel.

Table 4: Comparative retail prices of petroleum fuels and gas

	Petrol at R13.27 per litre	Diesel at R12.67 per litre	LPG at R22.58 per kg
Rands per Gigajoule	358.29	342.09	425.63
Maximum Price of piped-gas in Rands per Gigajoule	249.44	249.44	249.44
% Difference	44%	37%	71%

8.4 The maximum price of R249.44.75/ GJ converts to R9.32/ litre. Therefore the maximum price applied for by the applicant is [REDACTED] the current petrol and diesel prices of 13.27/litre and 12.67/litre respectively. The petrol and diesel prices are the current retail prices for inland ULP 93 petrol and wholesale 0.05% sulphur diesel which are the [REDACTED] with NOVO Energy because it is currently [REDACTED]. The applicant is achieving the objective of setting a price that attracts customers to [REDACTED].

9 CONCLUSION

9.1 Stakeholders are requested to comment on this Preliminary Assessment. Written comments are to be submitted to the Energy Regulator on the following email address: gpt@nersa.org.za or to the NERSA offices at Kulawula House, 526 Vermeulen Street, Arcadia, Pretoria by Wednesday 06 November 2013.