



## **CONSULTATION DOCUMENT ON EVRAZ HIGHVELD STEEL AND VANADIUM'S MAXIMUM PRICES OF PIPED-GAS FOR THE PERIOD 1 DECEMBER 2020 TO 30 JUNE 2023**

This discussion document is based on information submitted to the National Energy Regulator of South Africa (NERSA) by EVRAZ Highveld Steel and Vanadium ('EVRAZ' or 'the Applicant') in its maximum gas price application. NERSA's discussion document is aimed at assisting stakeholders in engaging with the application meaningfully, and providing written input, which will enable NERSA to make a thorough evaluation of this application. The discussion document is compiled with reference to the principles adopted in NERSA's approved Methodology for Maximum Prices of Piped-Gas in South Africa, with the view to ascertain the extent to which this application complies with the Methodology, as well as the objectives of the Gas Act 2001 (Act No. 48 of 2001) and its associated Regulations.

NERSA is publishing this discussion document on the EVRAZ application for 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, 2001 (Act No. 48 of 2001). Members of the public who wish to submit written comments should do so before the deadline of 25 February 2021.

Written comments are to be submitted to the Energy Regulator at the following email address: [gpt@nersa.org.za](mailto:gpt@nersa.org.za) or delivered to the NERSA offices at Kulawula House, 526 Madiba Street, Arcadia, Pretoria by 25 February 2021.

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NERSA will conduct a public hearing on this application where oral representations may also be made. The public hearing will be held virtually through the Microsoft Teams platform and further details will be provided in due course.

## **1. APPLICABLE LAW**

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

## **2. BACKGROUND**

- 2.1 NERSA derives its mandate to exercise control over and regulate the gas maximum prices and gas transmission and storage tariffs from the Gas Act. Among the various functions set out in section 4 of the Gas Act, paragraph (g) empowers NERSA to 'regulate prices in terms of section 21(1)(p) in the prescribed manner'.
- 2.2 Section 21(1) states 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)'.
- 2.3 In line with this particular requirement, NERSA has developed the Methodology for Approving Maximum Prices for Gas in the Piped-gas Industry. However, the requirement to approve maximum prices and hence to use this methodology is contingent on NERSA determining that 'there is inadequate competition as contemplated in Chapters 2 and 3 of the Competition Act, 1998' as stipulated in section 21(1)(p) of the Gas Act. This determination forms part of a separate assessment by NERSA that will be performed on a periodic basis. The current determination of inadequate competition was approved by the Energy Regulator on 27 March 2019.
- 2.4 Complementary to the aforementioned sections 4(g) and 21(1)(p) of the Gas Act, the relevant portions of Regulation 4 of the Piped-Gas Regulations dealing with the 'Price Regulation and procedures' are discussed below.

### **Relationship to the Tariff Guidelines**

- 2.2 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'.

- 2.3 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 NERSA website at [www.nersa.org.za](http://www.nersa.org.za).
- 2.4 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).

### **The Piped-Gas Regulations**

- 2.5 The maximum price determination principles outlined in the Maximum Pricing Methodology are further informed by the Piped-Gas Regulations.
- 2.6 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.
- 2.7 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 the risk.
- 2.8 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.
- 2.9 Annexure A of the Regulations provides the definition of the classes of customers as classified by their annual gas consumption in gigajoules, as set out in

2.11 *Table 1.*

**Table 1: Customer category classes**

<b>CLASS</b>	<b>ANNUAL GAS CONSUMPTION</b>		
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	400 000 GJ pa
Class 5	400 001 GJ pa	to	4 000 000 GJ pa
Class 6	> 4 000 000 GJ pa		

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

### **Stakeholder questions**

1. Aside from the principles set out in sub-regulation 4(3) of the Piped-Gas Regulations, and the objectives set out in section 2 of the Gas Act, are there any other guiding principles and criteria for assessing the application for maximum price that the Energy Regulator must consider?

### **Approving Maximum Prices of Piped-Gas**

2.13 As the Maximum Pricing Methodology highlights, in approving maximum piped-gas prices:

- a) the Energy Regulator will not set prices, but will review maximum piped-gas price applications prepared by licensees or applicants;
- b) the Energy Regulator may request licensees or applicants to amend maximum prices; and
- c) the Energy Regulator may approve or decide not to approve maximum prices.

2.14 The piped-gas maximum price application process is as follows:

- a) The Energy Regulator has requested licensees or applicants to submit their maximum piped-gas price applications based on the Methodology approved by the Energy Regulator.
- b) To ensure consistency of applications and predictability of analysis of the applications, NERSA has specified the following:
  - i. prescribed sources of information that must be used for the input variables in the maximum price calculations;
  - ii. prescribed weights applied to energy price indicators; and
  - iii. the Methodology to determine trading margins.
- c) Applicants must provide information regarding the assumptions, as well as the details of the calculation.

2.15 This application must:

- a) be provided on an annual basis, although applicants are allowed to apply for approval of maximum prices for a longer or shorter period; and
- b) indicate the manner and frequency of price adjustments to be approved by the Energy Regulator.

2.16 The Methodology further states that ‘NERSA will periodically conduct reviews of approved prices to assess the impact and to verify whether the prices comply with the requirements of the Act and the Regulations’.

### **Stakeholder questions**

2. Is NERSA’s interpretation of ‘approving’ maximum prices – as having discretion to accept or reject prices proposed by licensees – appropriate? Which other interpretations should be considered?

## **3. THE APPLICANT**

3.1 On 7 November 2016, the Energy Regulator approved EVRAZ’s application for a licence to trade in gas in certain areas in the Mpumalanga Province.

3.2 Table 2 below provides a summary of information as submitted by EVRAZ in the maximum price application.

**Table 2: Summary of EVRAZ information**

Type of Application	Maximum GE Price Approval Application
Licence Number	Gala.tr.F1/1543/2016
Licence Area	Mpumalanga
Type of Activity	Gas Trading
Type of Gas	Methane Rich Gas
Approach Used in Application	Price Indicators Approach is Selected

3.3 EVRAZ was the second largest steel producer in the country until 13 April 2015, when it was placed under business rescue due to financial and market challenges. Subsequently, on 29 February 2016, all employees of EVRAZ were retrenched, which resulted in the loss of approximately 1,700 permanent jobs, excluding contractors.

3.4 In the 2015/16 financial year, EVRAZ signed an agreement with ArcelorMittal to enable it to restart its structural mill, which would result in the creation of 400 permanent jobs. EVRAZ has created a new company, Highveld Structural Mill

Pty (Ltd), in order to service the agreement with ArcelorMittal and operate the structural mill for steel production.

- 3.5 EVRAZ Highveld is currently under business rescue and under the control of the duly appointed Business Rescue Practitioner Mr Piers Michael Marsden. The Business Rescue Practitioner was appointed to oversee and supervise on a temporary basis the management, affairs and business of the company and to devise, prepare, develop and implement a business rescue plan.
- 3.6 EVRAZ purchases Methane Rich Gas (MRG) from Sasol Gas. EVRAZ applied for a trading licence in order to supply gas to the new company servicing the agreement of steel production with ArcelorMittal. In addition, the applicant plans to make excess gas available to the market within its licensed trading area. EVRAZ has a contract for about [REDACTED] GJ of methane rich gas with Sasol Gas and has committed to supply about [REDACTED] to the mill owned by Highveld Structural Mill. This means that EVRAZ still has over [REDACTED] of methane rich gas to trade to the market.

#### **4 ASSESSMENT OF THE ADEQUACY OF COMPETITION IN THE RELEVANT MARKETS IN WHICH EVRAZ OPERATES**

- 4.1 On 27 March 2019, the Energy Regulator conducted an assessment and made a determination that there is inadequate competition, as contemplated in section 21(1)(p) of the Gas Act, in the following relevant markets:
- a) a national market for the trading of piped-gas to traders;
  - b) a national market for the trading of piped-gas to industrial end-user customers *or* separate markets for the trading of piped-gas to industrial end-user customers in the Gauteng/Mpumalanga/Free State region and the KwaZulu-Natal region; in this regard, the Energy Regulator did not conclude whether the scope of the relevant market for the trading of piped-gas to industrial end-user customers is national or regional in nature, as competition was found to be inadequate in both delineations of these markets, whether or not they are regarded as national or regional; and
  - c) a market for the trading of piped-gas to vehicular customers in the Tshwane, Johannesburg and Benoni areas, including catchment areas around all of the vehicular gas traders Novo Energy and NGV stations, or separate markets for the trading of gas to vehicular customers in the catchment areas around each respective refuelling station. At the time of the conclusion of the 2019 assessment, NERSA noted Novo Energy's imminent commissioning of a CNG refuelling station in eMalahleni, Mpumalanga and concluded that this would lead to the broadening of the relevant geographic market for the trading of gas to vehicular customers in eMalahleni as well.

- 4.2 EVRAZ trades gas to one trader in the Gauteng province [REDACTED], and to industrial end-user customers<sup>1</sup> located in the Mpumalanga province. As such, NERSA is of the view that EVRAZ operates in the following relevant markets: (i) the national market for the trading of piped-gas to traders; (ii) the national market for the trading of piped-gas to industrial end-user customers; or (iii) the separate market segments for the trading of piped-gas to industrial end-user customers in the Gauteng/Mpumalanga/Free State (inland) region.
- 4.3 However, as noted in the 2019 assessment, the relevant market for the national trading of piped-gas to traders has a peculiar situation where some resellers that are supplied by Sasol Gas, supply gas to other third-party traders as well. [REDACTED], who sources all of its gas supplies from Sasol Gas, is an example of this as it supplies gas to another third-party trader, namely [REDACTED]. Further, this trend has recently also extended to EVRAZ who is now supplying gas to [REDACTED], a third-party trader. However, as both [REDACTED] and EVRAZ are indirectly dependent on Sasol Gas for gas supplies, they are not considered to be direct competitors to Sasol Gas in respect of the supply of gas to traders. This is consistent with NERSA's analysis in its previous adequacy of competition assessments.
- 4.4 As such, and in line with the 2019 assessment, NERSA's assessment as to whether there is adequate competition in the relevant gas trading markets in which EVRAZ competes, will only be limited and focused on (i) the relevant market for the national trading of piped-gas to industrial end-user customers, and (ii) the relevant market for the trading of piped-gas to industrial end-user customers in the inland region. This assessment is conducted in the paragraphs below.
- 4.5 For the purposes of EVRAZ's current application for the approval of a maximum GE price, NERSA has conducted an assessment as to whether competition remains inadequate in the relevant markets in which EVRAZ competes, as outlined in the paragraph above. The purpose of this is to establish whether NERSA still has a mandate in terms of section 21(1)(p) to approve maximum prices for EVRAZ that would serve to mimic competitive market outcomes that are absent from markets with inadequate competition.
- 4.6 In this regard, the table below provides an estimation of market shares of the traders operating in the market for the trading of piped-gas to industrial end-user customers at national and inland regional level.

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<sup>1</sup> These include: (i) [REDACTED]

**Table 3: Estimated volume market shares in the relevant market for the trading of piped-gas to industrial end-user customers, FY 2018/192**

Name of trader	National market share for FY 2018/19	Inland market share for FY 2018/19
Sasol Gas	████	████
SLG/SL-CNG	████	████
EVRAZ	████	████
Tetra 4	████	████
Novo Energy	████	████
Egoli Gas	████	████
VGN/NGV	████	████
Total	100.00	100.00
HHI	7231.13	9236.04

Source: NERSA's own compilation using trader's sales data

4.7 Table 3 shows the market shares and concentration levels of the traders operating in the relevant market for the trading of piped-gas to industrial end-user customers at national and inland regional level. According to Table 1, EVRAZ has low market shares in both national and inland geographical areas at █████ and █████, respectively.

4.8 Although there are a number of other traders present in the relevant markets in which EVRAZ competes, Sasol Gas remains the irrefutably dominant firm, based on the definition of a dominant firm in terms of section 7 of the Competition Act.<sup>3</sup> Moreover, all of the relevant markets in which EVRAZ competes remain highly concentrated based on the United States (US) Department of Justice's (DOJ's) established thresholds for classifying markets according to their Herfindahl Hirschman Index (HHI) levels.<sup>4</sup>

4.9 It is therefore clear from the above that there is evidence of high concentration levels in the relevant markets in which EVRAZ competes. This means that a significant portion of market share in the relevant markets analysed herein is controlled by few traders, with Sasol Gas regarded as irrefutably dominant in all of the relevant markets in which EVRAZ competes.

<sup>2</sup> This refers to the period between July 2018 and June 2019. Further, NERSA has not included Columbus Stainless Steel (Pty) Ltd ('Columbus'). This is because Columbus is not considered as a competitor in the market for the trading of piped-gas to industrial end-user customers.

<sup>3</sup> The Competition Act provides useful definitions in terms of which to assess the market shares and dominance of firms in a relevant market. In this regard, in terms of section 7 of the Competition Act, a firm is dominant in a given market if: it has at least 45% of that market; it has at least 35% but less than 45% of that market, unless it can show that it does not have market power; or it has less than 35% of that market, but has market power. 'Market power' is defined in the Competition Act as 'the power of a firm to control prices, or to exclude competition or to behave to an appreciable extent independently of its competitors, customers or suppliers'.

<sup>4</sup> The United States (US) Department of Justice (DOJ) established thresholds for classifying markets according to their Herfindahl Hirschman Index (HHI): (i) Un-concentrated markets: HHI below 1500; (ii) Moderately concentrated markets: HHI between 1500 and 2500; (ii) Highly concentrated markets: HHI above 2500. See, NERSA (2016), The adequacy of competition in the gas sector in South Africa; Pretoria, South Africa.

- 4.10 In addition to the above, barriers to enter and expand into the relevant markets in which EVRAZ competes remain high, which means that dominant traders operating in those markets have the ability to unilaterally increase gas prices profitably as there is unlikely to be significant entry and expansion by traders to increase gas supply. The key barrier to entry and expansion in the relevant markets in which EVRAZ competes is the lack of gas and alternative suppliers of gas, together with the infrastructure required to enable the importation and delivery of additional gas volumes to customers in South Africa.
- 4.11 The South African gas supply chain is also characterised by a high degree of vertical integration throughout the supply chain. To this end, Sasol Gas still has a monopoly/irrefutably dominant position at all levels of the supply chain. This means that it has an incentive to engage in input (gas supplies) and infrastructure foreclosure, which further increases the barriers to entry and expansion in the relevant markets in which EVRAZ competes.
- 4.12 In addition to the above, the lack of sufficient gas resources and suppliers in South Africa means that customers are unable to readily switch or threaten to switch to other traders, which limits the countervailing power of gas customers in the relevant markets in which EVRAZ competes.
- 4.13 Based on the above, the Energy Regulator is of the view that the relevant markets in which EVRAZ competes are still characterised by inadequate competition. As such, this warrants NERSA's approval of EVRAZ's application of a maximum GE price.

### **Stakeholder Questions**

3. Do you consider EVRAZ Highveld Steel and Vanadium Ltd as a competitor to Sasol Gas (Pty) Ltd in the national market for the trading of piped-gas to traders? Please motivate your answer.
4. Do you agree that the market for the trading of piped-gas to industrial end-user customers at national or (Free State/Mpumalanga/Gauteng) inland regional level is characterised by inadequate competition? Please motivate your answer.

## 5. EVRAZ APPLICATION FOR MAXIMUM GAS PRICE

- 5.1 On 14 December 2020, EVRAZ submitted its third maximum price application to the Energy Regulator. The maximum price application is for the period 1 December 2020 to 30 June 2023.
- 5.2 EVRAZ's maximum gas price application is made in terms of the pass-through approach. In terms of the methodology; the pass through of costs will be used by third-party traders and by importers of Liquefied Natural Gas (LNG).
- 5.3 EVRAZ is applying for a single maximum price of R163.43/GJ. Table 4 below provides a summary of the calculations used by EVRAZ to determine its maximum price.

**Table 4 : EVRAZ Maximum Price summary**

<b>Maximum Price R/GJ</b>	<b>163.43</b>

### *Maximum Price Adjustment Mechanism*

- 5.4 EVRAZ applied for discounts on its single maximum price to arrive at class maximum prices for each customer class. The applicant is applying for NERSA to approve class maximum prices in respect of the classes of consumption based on volume, as provided for in regulation 4(5) of the Piped-Gas Regulations. These class maximum prices are derived after EVRAZ has applied discounts on the single maximum price of R163.43/GJ. Table 4 below provides the class maximum prices applied for by EVRAZ across the classes of customers according to the consumption patterns.
- 5.5 EVRAZ has [REDACTED] at this stage. According to the applicant, the discounts provided may be reassessed when EVRAZ has increased its customer base.



price of gas in the new owners refers to the price of gas from the seller plus any pass-through costs already levied.

**Table 7: Maximum Price comparative**

Details	NERSA	EVRAZ	Variance
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<b>Maximum Price (R/GJ)</b>	<b>161.90</b>	<b>163.39</b>	<b>-0.9%</b>

6.3 NERSA assessed the information submitted by the applicant. Table 7 above shows that the difference between NERSA’s assessment and EVRAZ’s maximum price application is fundamentally in the calculation of the trading costs.

**Stakeholder questions**

- 5 In calculating the benchmark price is it fair to use a standardised calendar period or a licensee’s financial period?
- 6 How does the Maximum price influence investment and consumption decisions related to natural gas?

**Determination of the Elements of the Trading Costs**

5.4 Section 5 of the Methodology states that:  
*to determine the trading costs elements of the maximum price, the Energy Regulator will use the tariff Guideline to ensure that there is consistency in the decision making taken by the Energy Regular.*

5.5 The formula for trading costs provided to customers of a trading licensee is:

$$\text{Allowable Revenue}_{(\text{trading})} = \{(\text{Trading Assets} + \text{Working Capital}) * \text{WACC} + \text{OPEX} + \text{TAX} \pm \text{C}\}$$

Where:

- Trading Assets** = approved historical trading assets less accumulated depreciation
- Working Capital** = approved 45-day-average trading working capital
- Opex** = approved efficient trading operating expenses including depreciation
- WACC** = Trader’s weighted average cost of capital (%) determined in nominal WACC terms
- T** = Corporate tax expense for the period
- C** = Claw back (+/-) on volumes

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

### Trading Assets

5.7 In terms of section 5.1 of the Methodology:

*Investments in limited and trading-specific pipes-gas network assets, which are ordinarily required in the normal course of a piped-gas trading business, plus the general plant used for piped-gas trading will be recovered through the trading cost. The trading RAB will be referenced to the Tariff Guidelines.*

5.8 However, the return on investments in such limited and trading-specific piped-gas network assets, which are ordinarily required in the normal course of a piped-gas trading business (plus the general plant used for piped-gas trading), will be earned through a nominal return.

5.9 The asset value is a historical amount, which is not trended. The formula for this is as follows:

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

5.10 EVRAZ submitted regulatory assets of [REDACTED] comprising buildings and equipment. The majority of its assets are depreciated over a range of between 10 and 5 years, with one of its assets [REDACTED] acquired in February 1969. All of the asset are used for the gas trading business.

5.11 NERSA noted that EVRAZ does not intend to add any additional assets in this maximum price period to its existing gas trading assets. The same assets accepted by the Energy Regulator in its previous decision are used for the 1 December 2020 to 30 June 2023 maximum price application.

5.12 According to section 4.4.3 of the Guidelines of Monitoring and Approving Piped-Gas Transmission and Storage Tariffs in South Africa, 'Depreciation can be calculated on the historical (original) cost of the asset'.

5.13 When assessing EVRAZ's trading assets, NERSA noticed that EVRAZ's Trading assets were not the net of accumulated depreciation as required by the tariff guidelines. When NERSA applied the above principles and recalculated the asset value for the period 1 December 2020 to 30 June 2023, removing the accumulated depreciation, the resultant value was [REDACTED]

5.14 In terms of assessing whether the RAB was prudently acquired, NERSA is satisfied that assets included in the RAB are necessary, used and useful and enable EVRAZ to render its gas trade services to its customers. Final amounts will be verified through annual audits.

Working Capital

5.15 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:

$$\text{Net working capital} = \text{inventory} + \text{receivables} + \text{operating cash} + \text{minimum cash balance} - \text{trade payables.}$$

5.16 Operating cash refers to investor-supplied funds needed to bridge the gap between the time expenditures are made to provide a service, and the time collections are received for that service. The measurement of required operating cash must be based on the licensee’s standard practice subject to a maximum 45 days’ operating expenses, excluding depreciation and deferred taxes.

5.17 EVRAZ applied for working capital of [REDACTED]. The working capital was made up of [REDACTED] trade receivables, [REDACTED] operating cash [REDACTED] trade payables and zero balance for inventory. The trade receivables are based on annual revenue of [REDACTED], while operating cash is determined using annual operating expenses and trade payables is based on cost of sales of [REDACTED].

5.18 The two tables below show the calculations of EVRAZ’s estimated cost of sales and estimated revenues respectively.

**Table 8 : EVRAZ estimated cost of sales calculation**

Component	Value
Estimated Average Purchase Price from Sasol Gas	[REDACTED]
Volume Expected to be purchased in maximum price year	[REDACTED]
<b>Estimated Cost of Sales</b>	[REDACTED]

**Table 9 EVRAZ estimated revenue calculation**

Component	Value
Estimated Average Selling Price to customers	[REDACTED]
Volume Expected to be purchased in maximum price year	[REDACTED]
<b>Estimated Revenue</b>	[REDACTED]

5.19 NERSA assessed the working capital balances as submitted by EVRAZ using the 45/365 ratio to test the limit of each balance. On recalculation, it was determined that the working capital balances applied for by EVRAZ were all

determined using a 45-day cap. Table 10 shows a comparison between EVRAZ's and NERSA's calculations.

**Table 10: EVRAZ and NERSA Working Capital**

Items		EVRAZ – R	NERSA - R	Comment
1	Receivables	██████████	██████████	45 days to Revenue
2	Operating Cash	██████████	██████████	45 days to Expenses
3	Inventory	██████████	██████████	N/A
	Total Current Assets	██████████	██████████	45 days totals
4	Payables	██████████	██████████	45 days to CoS
	<b>Working Capital</b>	██████████	██████████	<b>45 days totals</b>

5.20 NERSA has accepted the working capital value of ██████████ in the allowable revenue.

Depreciation (d)

5.21 The cost of the capital invested in acquiring the trading assets will be recovered as part of the cost of providing the trading service as depreciation.

5.22 In accordance with section 4.4.3 of the 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.

5.23 NERSA used the original/historical value to calculate the straight line depreciation cost. EVRAZ applied for ██████████ as depreciation on its assets that is expected to be used for 10 years. NERSA recalculated the depreciation using a RAB cost of ██████████ less the accumulative depreciation of ██████████ over the remaining useful life of the trading assets and determined the depreciation to be ██████████

5.24 The difference between two values is that EVRAZ's depreciation value is not the net of accumulated depreciation, meaning that the Trading Assets that EVRAZ is applying for include accumulated depreciating. The actual figure will be verified through annual audits.

### Operating Costs (E)

- 5.25 According to section 5.2 of the Methodology, all operating costs, including depreciation for the application year, that are efficiently and prudently incurred by the piped-gas trading licensee shall be allowed as a pass-through in the recovery of operational cost. The operating expenses shall be grouped and reported to the Energy Regulator in accordance with the Regulatory Reporting Manuals (RRM). In considering EVRAZ's expenses, NERSA also referred to section 4.2 of the Tariff Guidelines, which stipulates that each expense item should be assessed using principles such as whether the expense was 'prudently incurred', as well as its controllability and efficiency.
- 5.26 EVRAZ applied for operating expenses of ██████████ for the period of 1 December 2020 to 30 June 2023. The expenses comprise insurance, maintenance, labour, administration and facility usage costs.
- 5.27 NERSA assessed the operating expenses in line with section 4.2 of the Tariff Guidelines, which provides examples of expenses that NERSA may disallow based on whether they are incurred for the benefit of rendering a service.
- 5.28 NERSA is of the view that the expenses as applied by EVRAZ are reasonable to enable EVRAZ to render the gas trading service to the customers and have since accepted them in the allowable revenue. NERSA further tested the reasonability of the expenses and determined that the ██████████ represents a ██████████ average increase on the expenses used in the 30 June 2018 application.
- 5.29 NERSA considers the increase to be reasonable and has accepted the expenses of ██████████ as applied by EVRAZ.

### Tax (T)

- 5.30 In estimating tax, reference was made to section 4.3 of the Tariff Guidelines, which provides that the flow-through tax approach is the Energy Regulator's preferred tax methodology. NERSA allows the licensee a choice between the flow-through and normalised tax approaches. However, once a licensee has chosen an approach, it is not permitted to change.
- 5.31 Under this approach, only the current taxes payable are factored into the allowable revenue and recovered during the period under review. EVRAZ applied for ██████████ as the estimated taxation expense for 2020. NERSA recalculated the estimated taxation based on its estimated EBITDA calculation to ██████████. NERSA does not agree with EVRAZ's tax calculation outcome, given the major differences in RAB.

5.32 The above taxation figure for 2020 is an estimate and will be subject to +/- claw-back in a subsequent period as per the Methodology.

#### Weighted Average Cost of Capital (WACC)

5.33 The Methodology requires that the nominal WACC of the trader be used to establish the return on assets for the trading business. The Appendix of the Methodology (**Appendix – Determination of WACC**) illustrates the preferred NERSA method of determining the WACC.

5.34 The formula to determine the WACC is as follows:

$$WACC_{(nominal)} = \left[ \left( \frac{E}{Dt + E} \right) * Ke_{(nominal)} \right] + \left[ \left( \frac{Dt}{Dt + E} \right) * Kd_{(nominal)} \right]$$

Where:

**E** = equity

**Dt** = debt

**Ke<sub>(nominal)</sub>** = nominal cost of equity derived from the Capital Asset Pricing Model (CAPM)

**Kd<sub>(nominal)</sub>** = the post-tax nominal cost of debt

5.35 The risk-free rate represents the return an investor can achieve on the least risky asset in the market. Generally, the spot prices of 10 or more years' Government of South Africa bonds are used for the expected risk-free return when estimating the cost of equity capital.

5.36 The Market Risk Premium (MRP) was calculated using the Johannesburg Stock Exchange (JSE) All Share Index for the previous 30 years up to February 2018.

5.37 The beta ( $\beta$ ) is determined by proxy. As a proxy, the average of six gas pipeline companies chosen by the Energy Regulator and listed on stock exchanges must be used as per the Methodology. The following United States (US) companies are used by NERSA as proxies:

- a) Southern Co Gas;
- b) UGI Corporation;
- c) South Jersey Industries;
- d) WGL Holdings Inc.;
- e) The Laclede Group; and
- f) Northwest Natural Gas Company.

5.38 However, WGL Holdings Inc, has been acquired and delisted.

- 5.39 EVRAZ applied for a nominal WACC of [REDACTED] which according to the applicant, is determined by taking into account the cost of equity of [REDACTED] and after tax cost of debt of [REDACTED]. The cost of equity was calculated as follows:
- a) The mark-to-market risk-free rate of a selected 10 years' or more Government of South Africa bonds were used for the expected risk-free return ( $R_f$ ) in the estimation of cost of equity. This yielded a nominal risk-free rate of 10.56% calculated over 30 years as required by sources of information approved and published by NERSA.
  - b) The **equity beta** is the covariance between return on the firm's equity and the returns from the Tradeable Indices JSE Resource 20 Index. EVRAZ applied for a beta of [REDACTED]
  - c) The **market risk premium** is the additional expected return investors require to invest in equity rather than risk-free instruments. The market return for the period to June 2020 (30 years) yields a market risk premium of 3.59% per NERSA sources.
  - d) The applicant requested a **small stock premium** of [REDACTED]

#### NERSA's calculation of WACC

- 5.40 In assessing the WACC using the Methodology, NERSA computed the nominal WACC of [REDACTED] based on after tax  $K_d$  of [REDACTED] and  $K_e$  of [REDACTED] applied on the EVRAZ minimum structure of 70% equity and 30% debt. When calculating the  $K_e$ , NERSA also included the small stock premium of [REDACTED] as outlined in section 4.4.5 of the Tariff Guidelines.
- 5.41 According to the Methodology, the beta is the parameter used to measure systematic risk for regulated entities providing gas trading services and facilities. For licensees that are not publicly listed and where there are insufficient publicly listed competitors, the equity beta must be determined by proxy. As a proxy, six international companies listed on stock exchanges and approved by the Energy Regulator must be used. However, one of the proxy companies has been acquired and delisted, therefore NERSA only used 5 proxies in its beta calculation.
- 5.42 NERSA determined a beta of [REDACTED] using the above method that is stated in the Methodology. In comparison, EVRAZ calculated a beta of [REDACTED]. One of the differences in the calculation emanated from the number of proxies used, albeit the same proxies. EVRAZ used 6 proxies while NERSA used only 5. The effects resulted in a difference of 0.29 in the beta determined by NERSA and EVRAZ. The other difference can be attributed to timing differences between NERSA and EVRAZ. The differences are material, but this is mitigated by the differences in the proposition of equity used in the two calculations.

5.43 NERSA assessed the small stock premium in line with the Tariff Guidelines. According to section 4.4.5 of the Tariff Guidelines:

*This premium is allowed for all companies that fall into the size bands for which small stock premiums are allowed by practitioners as noted in the latest available PwC Valuation Methodology Survey. The size of the company should be based on the total value of the assets for the regulated activity of the licensee (covering all countries in which the regulated entity has assets relating to the regulated activity). The awarded premium should be the average used by practitioners surveyed in the PwC survey for the particular company size band applicable to a particular licensee. The small stock premium should be added to the cost of equity component of the post-tax WACC calculated based on the approach outlined above.*

5.44 The maximum small stock premium of [REDACTED] was used, which applies to companies whose value is between [REDACTED] according to the PwC valuation report of 2016/17. NERSA determined that EVRAZ's revenue is expected to be [REDACTED] (using the maximum price) and as such it qualifies for the [REDACTED] small stock premium.

5.45 Table 11 below provides a summary of NERSA and EVRAZ's comparative calculation of WACC.

**Table 11: WACC calculation summary**

		NERSA	EVRAZ	Diff
	<b>Cost of Equity <math>Ke=Rf+(MRP*\beta)+ssp</math></b>			
a	Market Risk Premium (MRP)	4.14%	3.59%	0%
b	Risk free rate (Rf)	10.51%	10.56%	0%
c	Beta	[REDACTED]	[REDACTED]	-0.29
d	Small Stock Premium	[REDACTED]	[REDACTED]	0%
f	<b>Nominal Cost of Equity (Ke) = ((b+(a*c)+d+e))</b>	[REDACTED]	[REDACTED]	<b>-0.81%</b>
	<b>Cost of Debt</b>			
g	Nominal Cost of Debt (kd)	[REDACTED]	[REDACTED]	0%
h	Kd (nom) post tax	[REDACTED]	[REDACTED]	0%
i	<b>Post tax nominal cost of debt (kd)</b>	[REDACTED]	[REDACTED]	<b>0%</b>
j	Debt ratio	[REDACTED]	[REDACTED]	-10%
k	Equity ratio	[REDACTED]	[REDACTED]	10%
l	<b>Nominal WACC = ((e*i)+(g*h))</b>	[REDACTED]	[REDACTED]	<b>0.49</b>

5.46 The above table shows the comparison of EVRAZ and NERSA's WACC calculations used to determine the trading margin below. The differences arise from the beta calculations and the debt to equity proposition.

## Stakeholder questions

- 6 Stakeholders are requested to comment on NERSA opting to use five instead of six companies as proxy in the beta determination and the impact that this may have on beta determination and the WACC calculations.

### *Trading Cost*

- 5.46 Table 12 below illustrates the cumulative impact of the differences in the trading costs as determined by NERSA and EVRAZ, as explained in the paragraphs above. NERSA recalculated the trading cost to be R [REDACTED], while EVRAZ had applied for a trading cost of [REDACTED] for the period 1 December 2020 to 30 June 2023.

**Table 12: Trading Cost Comparison Between NERSA and EVRAZ**

	<b>Trading Cost Calculation</b>		<b>EVRAZ '000</b>	<b>NERSA '000</b>	<b>VAR %</b>
	<b>(Trading Assets +Working Capital)* WACC) + Opex+ Dep + Tax +/- clawback)</b>				
A	Trading Regulated Asset	A	[REDACTED]	[REDACTED]	87%
D	Net Working Capital	W	[REDACTED]	[REDACTED]	0%
<b>E</b>	<b>RAB (v - d + net working capital)</b>	<b>RAB</b>	[REDACTED]	[REDACTED]	45%
F	WACC	WACC	[REDACTED]	[REDACTED]	0.16%
G	Return on Assets	RAB x WACC	[REDACTED]	[REDACTED]	43%
H	Operating Expenses	E	[REDACTED]	[REDACTED]	0%
I	Depreciation	D	[REDACTED]	[REDACTED]	66%
J	Taxation	T	[REDACTED]	[REDACTED]	48%
K	<b>Total Trading Cost (TTM) = sum(g:i)</b>		[REDACTED]	[REDACTED]	10.6%
I	Volume	V	[REDACTED]	[REDACTED]	0%
	<b>Trading Cost (R/GJ) = k/i</b>		[REDACTED]	[REDACTED]	10.6%

- 5.47 The difference between NERSA's and EVRAZ's calculations is 10.6% and is due to differences in the WACC and total assets as explained above.

- 5.48 According to section 3.2.1 of the Guidelines for Monitoring and Approving Piped-Gas Transmission and Storage Tariffs in South Africa:

*Licensees would need to motivate any gas volume projections lower than the latest actual volumes pertaining to a full year. In the absence of reasonable motivation the Energy Regulator will accept the latest actual volumes as the minimum volumes or projection for the tariff.*

5.49 Table 13 below shows EVRAZ’s historical annual sales volumes trend over the past 3 years and its estimated sales volumes for the year 2020.

**Table 13: EVRAZ historic and projected Sales Volumes**

Details	2017	2018	2019	2020
Volumes (GJ)	████████	████████	████████	████████

5.50 EVRAZ applied for the projected volumes of ██████████ in the financial year ending June 2021 and the average volumes over the past three years has been the financial year ending June 2018 was ██████████. The current volume projection represents a ██████ increase from the average volumes over the past three years. EVRAZ has provided NERSA’s with its updated off taker contract for the projected period in support of its estimated volumes.

**Stakeholder questions**

7 Comment with reasons on this approach to checking reasonableness of the trading margins and in ensuring a licensee makes a profit commensurate with the investment risk

**7 CONCLUSION**

7.1 Stakeholders are requested to comment on the discussion document. Written comments are to be submitted to the Energy Regulator at the following email address: [gpt@nersa.org.za](mailto:gpt@nersa.org.za) or to the NERSA offices at Kulawula House, 526 Madiba Street, Arcadia, Pretoria by 25 February 2021.