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**ENERGY REGULATOR OF SOUTH AFRICA**

In the matter regarding

**TRANSNET LIMITED'S TARIFF APPLICATION FOR:**

**A 74.42% TARIFF INCREASE FOR THE PETROLEUM PIPELINES NETWORK FOR 2009/10 (AS REVISED ON 26 FEBRUARY 2009)**

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**THE DECISION**

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On 30 April 2009 the Energy Regulator amended Transnet Limited's licence to operate its petroleum pipeline network by setting tariffs, as a condition of that licence, as follows:

- (a) the following maximum tariffs will apply as set out in Table 1 subject to the following paragraphs of this decision;

**Table 1: Transnet Petroleum Pipeline Network tariffs**

| Route                    | Tariffs maximum cents/litre |
|--------------------------|-----------------------------|
| <b>Sasolburg to</b>      |                             |
| Alrode                   | 2.13102                     |
| Klerksdorp               | 3.65534                     |
| Langlaagte               | 2.50677                     |
| Pretoria West            | 3.25383                     |
| Rustenburg               | 4.91317                     |
| Tarlton                  | 2.88075                     |
| Waltloo                  | 3.41639                     |
| Airport (avtur pipeline) | 2.64268                     |
| <b>Secunda to</b>        |                             |
| Alrode                   | 3.19254                     |
| Coalbrook                | 4.24073                     |

| Route  | Tariffs maximum cents/litre |
|--|-----------------------------|
| Langlaagte                                   | 3.41639                     |
| Pretoria West                                | 3.94226                     |
| Rustenburg                                   | 5.67444                     |
| Tarlton                                      | 3.73973                     |
| Waltloo                                      | 4.09238                     |
| Witbank                                      | 2.41972                     |
| <b>Durban via Coalbrook to</b>               |                             |
| Alrode                                       | 10.94560                    |
| Airport (OR Tambo)                           | 11.14990                    |
| Klerksdorp                                   | 11.66689                    |
| Langlaagte                                   | 11.18544                    |
| Rustenburg                                   | 13.11393                    |
| Tarlton                                      | 11.61715                    |
| Waltloo                                      | 11.88008                    |
| <b>Durban to</b>                             |                             |
| Bethlehem                                    | 8.21764                     |
| Coalbrook (refined products excluding avtur) | 8.50722                     |
| Coalbrook (avtur)                            | 11.66689                    |
| Coalbrook (COP diesel)                       | 8.50722                     |
| Kroonstad                                    | 9.81035                     |
| Ladysmith                                    | 4.98512                     |
| Coalbrook (COP crude oil)                    | 7.42705                     |

- (b) the tariffs in Table 1 are exclusive of VAT and will apply from 6 May 2009 to 31 March 2010;
- (c) the tariffs in Table 1 represent a year on year reduction in allowable revenue of 12.49% and an average tariff reduction of 11.17% after adjusting for lower projected volumes and the spread of the allowable revenue over 11 months instead of 12 months;
- (d) the tariffs in Table 1 are the product of across-the-board percentage adjustments without further tariff restructuring. The Energy Regulator will consult the public on tariff restructuring during 2009;
- (e) the tariffs in Table 1 will be adjusted, if necessary, after applying the claw-back mechanism contemplated in the Tariff Methodology for the Petroleum Pipelines

Industry adopted by the Energy Regulator (the 'methodology') at the next tariff review;

- (f) the Energy Regulator has used the applicant's inflation adjusted 2006 modern equivalent asset value (MEAV) Regulatory Asset Base (RAB) for this tariff period only and on an interim basis. The starting RAB (SRAB) will be determined in due course and these tariffs may be adjusted thereafter if warranted;
- (g) the Energy Regulator has used the applicant's estimated depreciation for this tariff period only. The applicant's depreciation will be determined during the SRAB study. The depreciation amount allowed may change depending upon the outcome of the SRAB verification;
- (h) the applicant's operational expenses will be investigated during the current tariff period and any non-prudent expenses will be clawed back at the next tariff review.

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## Reasons for Decision

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### The application

1. Transnet Limited applied for increases in its petroleum pipeline tariffs in an application received by the Energy Regulator on 12 November 2008. The application is for tariff increases for its petroleum pipeline system (licenced for operation by the Energy Regulator on 29 March 2007 under licence number PPL.p.F3/20/2006). This tariff application was revised by the applicant in its representations at the NERSA public hearing held on 26 February 2009 and clarified in its letter to NERSA dated 9 March 2009. This tariff application was made in terms of section 28 of the Petroleum Pipelines Act, 2003 (Act No. 60 of 2003), (hereinafter referred to as 'the Act').

### The applicant

2. Transnet Limited (hereinafter referred to as 'the applicant' or Transnet), is a public company registered and incorporated as such in terms of the company laws of the Republic of South Africa pursuant to the Legal Succession to the South African Transport Services Act 1989 (Act No 13 of 1989). The applicant's company registration number is 1990/000900/06 and its registered head office is at 47<sup>th</sup> Floor, Carlton Centre, 150 Commissioner Street, Johannesburg. Transnet operates the country's rail network (Transnet Freight), its ports (National Ports Authority) petroleum and gas pipelines (Transnet Pipelines) and other operations such as the South African Ports Operations and Transwerk. Transnet has total assets of R98 895 million<sup>1</sup>. Transnet Pipelines a division of Transnet that operates petroleum and gas pipelines, has a regulatory asset base of R4702 million<sup>2</sup> that is 4,75% of Transnet's total assets.

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<sup>1</sup> Transnet Annual Report 2008.

<sup>2</sup> Tariff application

3. Transnet Limited was granted a combined licence to operate a petroleum pipelines system on 29 March 2007 (Licence Number PPL.p.F3/20/2006).
4. Transnet Limited is a diversified transport and logistics group wholly owned by the South African Government.
5. Through its Transnet Pipelines division the applicant operates approximately 2775 km of pipelines conveying gas, refined petroleum products and crude oil as well as a storage facility at Tarlton near Krugersdorp. It is the dominant pipeline operator in South Africa and has a *de facto* monopoly of the pipeline conveyance of petroleum from Durban to inland destinations. This decision concerns only its petroleum pipelines activities.
6. On 12 September 2007, Transnet Limited was granted a construction licence (Licence Number PPL.p.F1/74-75/2007) to construct a 24” diameter petroleum products pipeline from Durban to Jameson Park and pipelines from Jameson Park to Alrode / Langlaagte and from Kendal to Waltloo, inclusive of accumulation facilities at Durban and Jameson Park. The applicant has named this project the New Multi Products Pipeline (NMPP). At the time that the construction licence was granted these new pipelines were scheduled to commence operations in the third quarter of 2010. However, in the course of making its revised tariff application on 26 February 2009 the applicant stated that, “The project schedule has been revised due to various project challenges, however, the NMPP will be delivered within the licence condition timelines”. These delays in the implementation of the licensed construction contributed to the revised tariff application and to a reduction in the allowable revenue sought.

### **The decision making process**

7. A public version of the initial tariff application received on 12 November 2008 was published on the NERSA website on 12 December 2008. This version excluded certain information that the Energy Regulator had decided was confidential.

8. Notices inviting the public to comment on the tariff application were placed in the Sowetan and Business Day newspapers on 12 December 2008.
9. The following stakeholders commented on the initial Transnet tariff application: BP Southern Africa (Pty) Ltd. (BPSA), Petroline Holdings, and Shell. Their comments included the following:
  - (a) the Transnet application contravenes fundamental requirements of the Act, the Regulations made in terms of the Act<sup>3</sup> (hereinafter referred to as 'the Regulations') and the methodology. These are:
    - (i) cross subsidisation between assets, volumes and, in the case of COP, services;
    - (ii) cross subsidisation between licences (inclusion of the F-factor allowances for the NMPP pipeline that is still under construction in the current tariff application); and
    - (iii) the economic impact of the tariffs and in particular the impact on the locational advantage enjoyed by inland refiners and the differential impact that the tariffs Transnet has applied for would have on competitors in the oil industry.
  - (b) the current tariff application may only relate to the Transnet's operating licence with licence number PPL.p.F3/20/2006 and not to Transnet's other licence to construct the NMPP (Licence Number PPL.p.F1/74-75/2007);
  - (c) The Energy Regulator 's tariff decision should be aligned with the regulation of petroleum products by the Minister of Minerals and Energy;
  - (d) the expenses as applied for should be verified; and
  - (e) the forecasted indices used in the application should be updated.
10. The above-mentioned comments were forwarded to Transnet under cover of a letter dated 15 January 2009 and Transnet in turn commented on these comments.

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<sup>3</sup> GN R342 Government Gazette No. 30905 of 4 April 2008

11. On 29 January 2009, the Energy Regulator published its Draft Tariff Determination for public comment. This additional step was included in the transparent and consultative process usually followed by the Energy Regulator because of its recognition of the complexities involved in this tariff determination and because of the proposed deviation from the tariff methodology. Comments on this document were received from BPSA (extensive), Chevron, Petroline, SAPIA, SASOL, Shell, Total, and Transnet.
12. On 29 January 2009, the Energy Regulator published notices in the *Sowetan* and the *Business Day* newspapers inviting interested and affected parties to a public hearing on 26 February 2009.
13. In a letter dated 12 February 2009, BPSA requested a comprehensive list of documents and information considered by the Energy Regulator in making the draft determination. After due consideration of the confidentiality claims of the applicant regarding the documents and information, the Energy Regulator provided BPSA with the documents and information that the Energy Regulator regarded as not confidential.
14. At the public hearing held on 26 February 2009, Transnet, BPSA, Chevron and iPayipi requested and were given an opportunity to make presentations. Transnet requested copies of all the submissions received by the Energy Regulator.
15. After obtaining the consent of those who presented at the public hearing, except BPSA, the Energy Regulator forwarded copies of all presentations to Transnet and also placed them on NERSA's website. BPSA only agreed to have its presentation made at the public hearing placed in the public domain and not its extensive written submission. Instead BP proposed that its written submission, which it regarded as confidential, be made available to Transnet on condition that Transnet reciprocates and make available to it the information that Transnet regarded as confidential. However, Transnet refused to exchange the said information with BPSA.

16. The applicant revised its application whilst making its presentation to the public hearing held on 26 February 2009. Following two letters from the Energy Regulator (dated 27 February 2009 and 3 March 2009 respectively) seeking clarification, Transnet responded in a letter dated 9 March 2009. The Energy Regulator published the revised application in the form of these three letters for public comment on its website on 03 April 2009 and called for public comment thereon by means of advertisements in the press on 07 April 2009.
17. In response to the call for public comment on this revised application the Energy Regulator received written comments from BPSA, Benhove Investments (Pty) Ltd., and Shell.
18. A second public hearing was duly advertised and subsequently held on 16 April 2009 at which representations were made by BPSA, Chevron and Transnet.

### **Applicable law**

19. The Energy Regulator derives its mandate to set tariffs for petroleum pipelines from the Act.<sup>4</sup>
20. The manner in which tariffs must be set is prescribed by regulation (see GN R342 Government Gazette No. 30905 of 4 April 2008).
21. In terms of section 28 of the Act, tariffs set by the Energy Regulator to be charged by licensees must be based on a “systematic methodology applicable on a consistent and comparable basis”<sup>5</sup>. To this end the Energy Regulator approved a Tariff Methodology for the Petroleum Pipelines Industry (hereinafter ‘the methodology’) that outlines the approach taken in this decision. On 18 June 2008, the

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<sup>4</sup> See for example sections 4(f) and 28 of the Act.

<sup>5</sup> Section 28(2)(a) of the Act

methodology was revised after following the appropriate administrative processes. The methodology is available on the NERSA website.<sup>6</sup>

### **Overview of the application**

22. In its initial application, Transnet applied for an average tariff increase of 82.5%. This figure was subsequently reduced in its revised application to 74.42%. However, even the revised figure is a very substantial increase considerably larger than the inflation rate. Much of the increase is attributable to the need Transnet has to finance its NMPP project.
23. In implementing its NMPP project, Transnet Pipelines is seeking to quadruple its asset base by adding new assets worth R12.6 bn to its existing assets of R4.7bn “from internally generated cash resources and borrowings, on the strength of its own balance sheet and without utilising government guarantees.”<sup>7</sup> It is not expecting any new injections of equity or to enter into any ship or pay agreements with its customers that would lower its risk profile nor to make use of project financing.
24. The consequence of Transnet’s approach to financing the NMPP is that it seeks to place a significant burden of risk and financing on tariff increases and thus ultimately upon motorists. Transnet concedes that its financing approach results in higher tariff increases in the short term<sup>8</sup>. Transnet’s approach to financing and its proposed higher tariffs in the shorter term also has other consequences.
25. First, in the shorter term, the proposed larger tariff increases could cause pipeline tariffs to approximate those of road and rail transport. This approximate parity of transport mode costs could in turn create an incentive to move fuel transport from pipelines to road and rail and thereby increase the public safety and environmental risks.

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<sup>6</sup> [www.nersa.org.za](http://www.nersa.org.za)

<sup>7</sup> Transnet letter to NERSA dated 11 July 2008.

<sup>8</sup> Letter from Transnet to NERSA dated 10 March 2009, pg 9.

26. Second, higher tariffs in the shorter term would increase the “locational advantage”<sup>9</sup> of inland refiners. This “locational advantage” would have the effect of increasing the transfer of motorists funds to inland refiners without any corresponding pipeline benefit. As much as 58% of additional funds paid by motorists as a result of higher tariffs could flow to inland refiners.
27. Considering all of these economic impacts collectively, it can be concluded that Transnet’s approach to financing its NMPP project is not optimal from an economic and social impact point of view and therefore not in the public interest.
28. It therefore raises the question of potential solutions or alternatives. The Energy Regulator has identified a number of alternatives. Each of the following alternatives, or a combination thereof, would have a lower economic and social impact and therefore better serve the public interest. These are: an injection of new shareholder equity; the utilization of ship or pay agreements and the introduction of a levy on fuel sales that could be used to fund security of supply elements of the project<sup>10</sup>.
29. The Energy Regulator is aware that the Government is investigating this latter option as an alternative means of financing. There are doubtless other alternatives as well. However, such matters are beyond the remit of the Energy Regulator and must be considered by the appropriate authorities. The Energy Regulator must consider the application before it.
30. The remainder of this document deals with the details of the application, how the Energy Regulator has treated it and the reasons therefore. The applicant applied for a quantum of allowable revenue and not for particular tariffs. In arriving at its

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<sup>9</sup> “Locational advantage” refers to the fact that inland refiners that compete in the inland market do not have to incur the costs of transporting their refined products from the coast. However in the prices that they receive they are deemed to have done so.

<sup>10</sup> This is contemplated in the “Energy Security Master Plan – Liquid Fuels” Gazetted by the Minister of Minerals and Energy, GN 859, 12 September 2007.

proposed allowable revenue the applicant made use of the methodology, although it deviated from that methodology in certain respects.

## The Application

31. Transnet's application (as revised) is summarised below.

### *Tariff period*

32. The applicant requested that the new tariffs be applicable for the period 01 April 2009 to 31 March 2010.

### *Regulatory Asset Base*

33. The applicant submits that its revised operating non current assets (V-d) are R4,247.30 million based on the 2006 modern equivalent asset valuation (MEAV) done by AD Little adjusted for inflation using South African inflation indices by an independent consultant engaged by Transnet.

34. During the year, CAPEX projects to the value of R1,090 million will be taken into operation, which are parts of the New Multi-Product Pipeline (NMPP).

35. The applicant estimates its working capital (w) during the tariff review period to be R455.10 million (R436.7 million for pipelines and R11.87 million for its refractionator).

36. The applicant therefore submits that its average Regulatory Asset Base (RAB) is R4,574.23 million (R4,4447.29 million for pipelines and R126.94 million for the refractionator) (see Table 2 below).

**Table 2: Transnet estimate of RAB (R million)**

| <b>Network Component</b>                      | Value (V-d)<br>a | Working Capital (w)<br>b | Operating Cash (w)<br>c | Total w<br>d=b+c | Total RAB<br>f=a+d |
|---|------------------|--------------------------|-------------------------|------------------|--------------------|
| Transnet Pipelines as per Letter 9 March 2009 | 4010.59          | 108.72                   | 327.98                  | 436.7            | 4447.29            |
| Refractionator                                | 115.07           | 8.87                     | 3.00                    | 11.87            | 126.94             |
| <b>Total</b>                                  | <b>4125.66</b>   | <b>117.59</b>            | <b>330.98</b>           | <b>448.57</b>    | <b>4574.23</b>     |

### *Cost of Equity*

37. The applicant used the Capital Asset Pricing Model (CAPM) to estimate the cost of equity and requested a nominal value of 11.10%.
38. The applicant's estimate of the real after tax risk free rate is 0.15% over 25 years (1983 to 2007).
39. The applicant calculated an average real Market Risk Premium (MRP) over the same period of 10.12%.
40. The applicant estimated a beta of 1.11. This is based on an average of proxy companies beta of 0.78 plus an adjustment of 0.15 for size, 0.15 for its large capital expansion programme and 0.03 for instruments for obtaining capital.

### *Cost of debt*

41. The applicant has forecast a nominal cost of debt for 2009/10 of 11.33%. The applicant estimated its cost of debt ( $K_d$ ) as the actual weighted average interest charged on all its outstanding (existing) debt.
42. Transnet stated that the allocation of the cost of debt to the different divisions within Transnet is based on the risk profile of the respective projects within each division. Currently the divisions with the larger investment programs - pipelines and freight rail - are considered to have a higher risk because of the magnitude of the investment programs in these divisions.
43. The applicant stated that the cost of debt allocated by Transnet to a division reflects only the direct costs of that division. It also stated that additional costs involved in the raising of debt are reflected and recorded in a transparent manner and recovered as part of the "Corporate Costs" expense item in the application.
44. The applicant has previously stated that it raises debt in the market on a group basis. Debt obtained in this fashion, it states, is usually at a lower cost due to the strength of the group's balance sheet. Consequently, funds for new projects will only

be raised for Transnet Pipelines as a separate ring-fenced business if debt can be obtained on more favourable terms than on a group basis.

#### *Weighted Average Cost of Capital*

45. The applicant has calculated the Weighted Average Cost of Capital (WACC) but in a manner that is not consistent with the methodology. In its revised application Transnet estimated its gearing at 58.55% and arrived at a nominal WACC of 11.28%.

#### *Depreciation*

46. The applicant stated that its depreciation is calculated using International Financial Reporting Standards (IFRS). It requested depreciation of R269.3 million after taking into account a lower depreciation charge due to the write-off of the DJP pipeline being delayed to 2010/11 and a correction from its original application of the capitalisation of the 16 inch pipelines from Kendall to Waltloo and from Jameson Park to Langlaagte from R1.1 million to R1.1 billion.

#### *Expenses*

47. The applicant requested R425.7 million for operating expenses and R84.1 million for corporate costs.

#### *Tax*

48. In its application, the applicant used the current tax formula and International Financial Reporting Standards (IFRS) rather than notional taxation to estimate its tax charge of R225.2 million.

#### *Revenue addition to meet debt obligations (F-Factor)*

49. The applicant stated that in a normal business environment – without the stresses experienced during years when it is undertaking large investment programmes - it would require an interest cover ratio similar to that needed to keep its current ratings status. This implies an interest cover ratio of 4 times.

## *Tariffs*

50. The applicant's average calculated tariff increase of 74.42% is based on its revised estimate of allowable revenue of R2,043.4 million. In its initial application the applicant requested the Energy Regulator to increase the tariffs by 82.5% in 2009/10 and by 73.5% in 2010/11.

## **Discussion**

### *The methodology*

51. In considering this tariff application, the Energy Regulator was guided by the Act, the Regulations and the methodology. The Energy Regulator has adopted rate-of-return (ROR) type regulation for the regulation of the petroleum pipelines industry. ROR requires the determination of the allowable revenue and then the use of this figure to set tariffs such that the total revenue received does not exceed the allowable revenue. The methodology provides the following allowable revenue formula:

$$\text{Allowable Revenue} = (\text{RAB} \times \text{WACC}) + \text{E} + \text{T} + \text{D} + \text{F} + \text{C}$$

#### **Where -**

RAB = Regulatory Asset Base or  $(V - d + w)$

WACC = Weighted average cost of capital

E = Maintenance and operating expenses

T = Notional tax payable for the tariff period under review

D = Depreciation charge for the tariff period under review

F = Approved revenue addition to meet debt obligations

C = Claw back adjustment

### *Deviation from the tariff methodology*

52. As a matter of necessity, certain deviations from the currently approved methodology had to be made in the course of processing this application. They are given in summary in this section and explained more fully at each appropriate point in this document.
53. In its published draft tariff determination, the Energy Regulator invited the public to comment on these proposed deviations from the tariff methodology. The Energy

Regulator received comments from some stakeholders. These comments were considered by the Energy Regulator in arriving at this decision.

54. In summary the deviations made in this decision are:
- two different risk-free rates are replaced by a single risk-free rate of interest ( $R_f$ ) calculated over 300 months (25 years). Specifically the  $RF_1$  based on a 12 month average is changed to a 300 months (25 years) average.
  - the effective WACC formula, a mixture of real and nominal values, is replaced with real after tax values only WACC formula. Specifically the cost of debt calculation required by the current methodology (nominal and pre-tax value) is replaced by a real and post-tax value. The reason for this decision is to ensure that inflation is not double counted. Inflation is included in determining the regulatory asset base by inflating the original cost (trended original cost basis) and should therefore be excluded from the yield so as to avoid double counting. A 12 months forecast for the consumer price index (CPI) is used to convert the nominal projected cost of debt ( $K_d$ ) to real cost of debt; and
  - the methodology states that the deferred tax liability in the balance sheet of the applicant will be treated as equity and be eligible for a return (paragraph 7.3). Instead it is deducted from the determined RAB as the applicant received this deferred tax as allowable revenue in the past and thus double counting is avoided.
55. Additional explanation regarding these deviations is provided where necessary below.
56. In addition there are two phrases in the methodology that may require some clarification. The phrases “notional tax expense” (paragraph 3.2) and “estimated accounting tax” (paragraph 7.1) mean the estimated normalised tax expense for the tariff period under review.

## Allowable Revenue Calculation

57. From this point on, the application of the methodology to the Transnet tariff application is discussed.

### *Regulatory Asset Base*

58. In terms of the methodology, the value of the RAB is the inflation-adjusted historical cost or “trended original cost” (“TOC”) of plant, property and equipment less the accumulated depreciation for the period under consideration plus net working capital. The formula for this is as follows:

$$\text{Regulatory Asset Base} = \text{Trended Original Cost of Property, Plant \& Equipment (v)} - \text{Accumulated Depreciation (d)} + \text{Net Working Capital (w)}$$

59. The relevant Regulations regarding Regulatory Asset Base are Regulations 4(6) and 4(7). The relevant paragraph of the methodology is paragraph 4.

### *Valuation of property, plant and equipment (v)*

60. Transnet states in its application that its non-current assets have been in use for a long period of time and the original historical costs cannot be verified. Therefore the values derived from its MEAV study performed in March 2006 are used as the vesting value. It argues further that even if the historic cost values were verifiable it is highly unlikely that they could be used to calculate a reasonable RAB as indexing errors over large periods (up to 43 years) will compound, resulting in values that have no bearing on “fair value”.
61. The Regulations require the Energy Regulator to use the inflation adjusted historical costs less accumulated depreciation to determine the RAB. There is no requirement in the Regulations or in the methodology that the TOC must have a bearing on “fair value” as the applicant suggests.

62. According to Transnet's application, non-plant assets (i.e. assets that are not directly part of the pipeline network) have been stated at historic cost and are not revalued, due to the relatively short lifespan of these assets.
63. Paragraph 4.1.2 of the methodology states that non-current assets are to be valued using the trended original cost basis or in accordance with Regulation 4(7)(b) of the Regulations.
64. The Regulations require the Energy Regulator to use the inflation adjusted historical costs less accumulated depreciation to determine the RAB<sup>11</sup>, failing which, an estimated value that the Energy Regulator accepts as closely approximating historical cost must be used<sup>12</sup>. Revaluing assets to a MEAV as Transnet does, is not consistent with Regulation 4(6)(e). In short, Transnet has not provided verifiable historical costs of its assets.
65. The Energy Regulator thus finds itself in the same situation that it confronted when considering Transnet's previous tariff application in July 2008. In the reasons for that decision the Energy Regulator, after considering various alternatives came to the conclusion that:

*"28. The only remaining option available in the short term is to use the results of another evaluation of the applicant's assets using the MEAV approach which was conducted by Arthur D Little<sup>13</sup>. This MEAV data is contrary to the requirements of the Regulations. But it is the best of the poor data options available to the Energy Regulator at this time. Consequently, the Energy Regulator has used this data to set tariffs in the interim until a proper RAB can be determined. The Energy Regulator will, before the next tariff review, conduct a verification of the applicant's records and determine a suitable RAB. Upon the conclusion of that verification and determination of the RAB, any over or under recovery in the current tariff period will be offset in the next tariff period."*<sup>14</sup>

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<sup>11</sup> Regulation 4(6)(e)

<sup>12</sup> Regulation 4(7)(b)

<sup>13</sup> "November 2006 Update of Petronet's Transmission Pipelines and Intake, Pump and Delivery Station" Arthur D Little, February 2007

<sup>14</sup> National Energy Regulator Of South Africa In The Matter Regarding The Tariff Application For Petroleum Pipelines For 2008/09 By Transnet Limited, 31st July 2008.

66. The verification exercise to determine a suitable RAB has not been completed and therefore the Energy Regulator must make another interim decision regarding the RAB similar to the one it made in July 2008 effectively carrying over any over or under-recoveries.
67. Regulation 4(1)(3) states that inflation adjustments must be based on appropriate inflation indices. In the circumstances described above the Energy Regulator regards the indices developed in the KPMG report<sup>15</sup> supplied by Transnet as appropriate and they are utilised for the purposes of this decision.

*Depreciation accumulated (d)*

68. Paragraph 4.2.1 of the methodology provides that accumulated depreciation (d) is the cumulative depreciation against plant property, vehicles and equipment in service (collectively denoted by the letter 'v' in the methodology). Since (v) will be the dated MEAV value of Transnet's petroleum pipelines, the accumulated depreciation (d) cannot be determined. Consequently, the Energy Regulator has used the values provided by Transnet in its tariff application. Once a verification of the applicant's records has been carried out and a suitable RAB determined, an appropriate value for accumulated depreciation will be determined. Any over or under recovery in the current tariff period will be offset in the next tariff period. Table 3 sets out the computation of the RAB.
69. The Energy Regulator reduced the RAB by the average deferred tax liability balance of R230.15 million as reflected in Table 3 below.

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<sup>15</sup> The KPMG report updates the Transnet 2006 MEAV values using South African based inflation indices instead of international indices.

**Table 3: Regulatory Asset Base (R million)**

|                             | Total pipelines | Refractionator | Total as per revised application | NERSA decision | Difference |
|-----------------------------|-----------------|----------------|----------------------------------|----------------|------------|
| Regulated Asset base (V-d)  |                 |                | 4125.66                          | 4,125.66       | 0          |
| Deferred taxation           |                 |                |                                  | (230.15)       | (230.15)   |
| Working Capital (w)         |                 |                | 448.57                           | 182.76         | (265.81)   |
| Operating Cash              |                 |                | 330.98                           | 65.17          | (265.81)   |
| Working Capital (w)         |                 |                | 117.59                           | 117.59         | 0          |
| Regulatory Asset base (RAB) |                 |                | 4574.23                          | 4,078.27       | (495.96)   |

**Net Working Capital (w)**

70. According to the methodology, net working capital is to be determined by the following formula:

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

71. In Transnet's application, current taxes are also included in the operating cash element of the working capital shown in column (c) of Table 4. This is not consistent with the methodology, which does not allow current taxes to be included in the net working capital.

**Table 4: Transnet's Regulatory Asset Base Groups and allocation of working capital (R million)**

| Network Component               | Value (V-d)<br>a | Working Capital (w)<br>b | Operating Cash (w)<br>c | Total w<br>D=b+c | Deferred taxation<br>e | Total RAB |
|---------------------------------|------------------|--------------------------|-------------------------|------------------|------------------------|-----------|
| Northern Network                |                  |                          |                         | 120.22           |                        |           |
| Southern Network                |                  |                          |                         | 244.53           |                        |           |
| Avtur                           |                  |                          |                         | 22.15            |                        |           |
| Crude Oil Pipeline              |                  |                          |                         | 49.80            |                        |           |
| Pipelines (revised application) |                  |                          |                         | 436.7            |                        |           |
| Refractionator                  |                  |                          |                         | 11.87            |                        |           |
| Total                           | 4125.66          | 117.59                   | 330.98                  | 448.57           |                        | 4574.23   |

72. The Energy Regulator has applied the methodology and determined that the operating cash should be R65.17 million (see Table 5 column (c)), in contrast to the Transnet determined R330.98 million (see Table 4 column (c)). Paragraph 4.3.4 of the methodology provides that operating cash must be based on the licensee's standard practice subject to a maximum 45 days' operating expenses, excluding depreciation and deferred taxes and this has been used by the Energy Regulator.
73. The Energy Regulator has allocated the correct values for working capital to each of the 5 asset groups (see Table 5).

**Table 5: NERSA's Regulatory Asset Base Groups and allocation of working capital (R million)**

| <b>Network Component</b>        | Value (V-d)<br>a | Working Capital (w)<br>b | Operating Cash (w)<br>c | Total (w)<br>d=b+c | Deferred taxation<br>e | Total RAB<br>f=a+d+e |
|---------------------------------|------------------|--------------------------|-------------------------|--------------------|------------------------|----------------------|
| Northern Network                |                  |                          |                         | 65.63              |                        |                      |
| Southern Network                |                  |                          |                         | 42.14              |                        |                      |
| Avtur                           |                  |                          |                         | 20.41              |                        |                      |
| Crude Oil Pipeline              |                  |                          |                         | 43.39              |                        |                      |
| Pipelines (revised application) |                  |                          |                         | 171.57             |                        |                      |
| Refractionator                  |                  |                          |                         | 11.19              |                        |                      |
| <b>Total</b>                    | <b>4125.66</b>   | <b>117.59</b>            | <b>65.17</b>            | <b>182.76</b>      | <b>(230.15)</b>        | <b>4,078.27</b>      |

*Matters relating to Regulatory Asset Base*

74. For the purposes of determining the RAB an average of the opening balance and the closing balance has been used. This decision is consistent with regulations 4(2) and 4(6) of the Regulations and paragraph 4 of the methodology.
75. The treatment of non-current assets (R758.60million) expected to become used and usable during the tariff period under review has been included in the RAB as per paragraph 4.1.8 of the methodology. These assets are assumed to become usable in September 2009.
76. In its initial tariff application Transnet did not submit proposed pipeline tariffs. It only submitted a proposed allowable revenue. In its 2008/9 tariff decision the Energy Regulator divided Transnet's petroleum assets into the following components:

- (a) Northern Network (including refractionator)
- (b) Southern Network
- (c) Avtur – Jet Fuel Network
- (d) Crude Oil Pipeline (COP)

77. For purposes of this tariff determination the Energy Regulator requested Transnet to provide a breakdown of its regulatory asset base according to the 4 components mentioned above. The breakdown provided by Transnet is reflected in column (a) of Table 4.

### **Cost of Capital**

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

78. Paragraph 5.1 of the methodology requires that the following formula must be used to determine the WACC:

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

Where:

**E** = equity

**Dt** = debt

**Ke** = the cost of equity derived from the Capital Asset Pricing Model (CAPM)

**Kd** = the cost of debt

79. It further requires that a real cost of equity and a nominal cost of debt be used to arrive at a WACC.

80. The Energy Regulator has used a real post tax cost of debt and acknowledges that this is a deviation from the published methodology. This deviation was deemed necessary because the MEAV value of the RAB already includes an adjustment for inflation. The magnitude of this double counting of inflation has a material effect and is therefore adjusted by using a real cost of debt.

81. Gearing used to calculate the WACC should be relative to the RAB as defined by the methodology. Capital work in progress (CWIP) has been specifically excluded from the RAB in accordance with the Regulations.
82. WACC is the weighted cost of capital applied to the RAB excluding CWIP. The gearing and the WACC are therefore calculated using the RAB excluding CWIP and not using the assets reflected on the balance sheet nor the gearing determined from the balance sheet.
83. In Transnet's revised application the debt ratio in its balance sheet excluding CWIP was 21.88%.
84. A gearing of 30% was applied by the Energy Regulator to the Beta levering and the WACC calculation. This yielded a real WACC of 4.67%.
85. The methodology states that a minimum gearing of 30% must be assumed but that this is not applicable to core assets during the last 10 years of their service life during which time the 30% will be reduced on a straight line basis (paragraph 5.5 of the methodology). The Energy Regulator is aware that some assets fall into this latter category but it does not yet have the applicant's detailed asset composition. It is thus not possible to accurately apply this element of the methodology. As a substitute therefore the Energy Regulator has made an estimate and added R2.33 million to allowable revenue. The estimate was made as reflected in Table 6:

| <b>Table 6: Estimate of additional allowable revenue due to the effect of the DJP assets having a shorter than 10 year lifespan</b> |          |   |  |
|---|----------|---|--|
|   | Total    | Southern Network<br>(Assumed to have less than 10 years lifespan) | Balance of assets<br>(assumed longer than 10 years life) |
| Assets (V-d) (Rmil)   | 4,125.66 |   |  |
| Working Capital (w) (Rmil)  | 182.76   |   |  |
| Deferred taxation liability (Rmil)  | (230.15) |   |  |
| RAB (Rmil)  | 4,078.27 |   |  |
| Debt (Rmil)   | 1,157.56 |   |  |
| Equity (Rmil)   | 2,920.71 |   |  |
| RAB (Rmil)  | 4,078.27 |   |  |
| Debt ratio to be applied to assets with lower than 10 years lifespan  |          | 21.88%  |  |
| Minimum Debt ratio  |          |   | 30.00%   |
| Combined Debt ratio   | 28.38%   |   |  |
| Equity Ratio  | 71.62%   | 78.12%  | 70.00%   |
| Ke  | 5.43%    | 5.43%   | 5.43%  |
| Kd  | 2.89%    | 2.89%   | 2.89%  |
| WACC  | 4.71%    | 4.87%   | 4.67%  |
| Additional WACC % due to lower than 30% gearing for DJP assets  |          | 0.04%   |  |
| Additional WACC earnings (Rmil)   |          | 1.67  |  |
| Notional tax thereon (Rmil)   |          | 0.65  |  |
| Estimate of additional allowable revenue due to the effect of the DJP assets having a shorter than 10 year lifespan                 |          | 2.33  |  |

86. The WACC formula applied is as follows:

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

**Eq** = equity = RAB - Dt

**Dt** = debt = RAB x 30%

**Ke** = the real after tax cost of equity derived from the capital asset pricing model (CAPM)

**Kd** = the real after tax cost of debt

**RAB** = regulatory asset base less deferred tax liability

*Cost of Equity (Ke)*

87. The cost of equity was determined by using the following capital asset pricing model formula:

$$Ke_{real} = \left( \frac{\sum_{m=1}^{300 \text{ months}} [Rf]_m}{300 \text{ months}} \right) + \left( \frac{\sum_{month=1}^{300 \text{ months}} [Rm - Rf]_{month}}{300 \text{ months}} + CRA \right) * \beta$$

Where:

**Ke** = after tax allowable real cost of equity. The Consumer Price Index is used to convert nominal to real values.

**Rf** = the real risk-free rate of interest. This is the marked-to-market risk-free rate for the preceding 300 months for all Government bonds as published by the South African Reserve Bank with at least 10 years maturity as at two months before the commencement of the tariff period under review and calculated by using the following formula: -

$$\frac{1 + [(Rf_{nom}) * (1 - t)]}{1 + CPI} - 1$$

**t** = prevailing corporate tax rate for the licensee

**Rm** = the real market return. The proxy used for the market is the JSE All Share Index, converted from a nominal to real value by using the following formula: -

$$\left[ \frac{1 + Rm}{1 + CPI} \right] - 1$$

**CRA** = country risk adjustment for assets in another country outside South Africa that are an integral part of the same assets within South Africa. The adjustment is for the other country concerned.

**CPI** = Consumer Price Index

**β** = 'beta', the systematic risk parameter for regulated entities providing pipeline, storage and loading facility services<sup>16</sup>. The beta must be

<sup>16</sup> Beta reflects the estimated variability of returns of an entity relative to the returns of the market.

determined by proxy. As a proxy the average of six (6) pipeline companies chosen by the Energy Regulator and listed on stock exchanges must be used. The methodology to be used to determine the beta is set out in Note 3 on page 26 of the methodology.

88. The variation from the methodology is the use of a single risk free rate calculated from 300 months of data. This is instead of the  $Rf_1$  used in the methodology which specifies 12 months. Utilizing a period of 300 months (25 years) for  $Rf_1$  matches the periods used to determine the  $Rf_2$  and the market return specified in the tariff methodology.
89. A short 12 month time span exposed this value to large short term fluctuations and negative values in an increasing inflationary environment or an unusually high real  $Rf_1$  in a declining inflationary environment. This phenomenon is compounded in the current global economic circumstances where there is considerable volatility in markets as a result of the USA sub-prime crisis which appears to have brought about much economic uncertainty. There was also criticism of the Energy Regulator's approach by the applicant, among others, on methodological grounds where it was argued that it was conceptually logical to have matching risk-free rates.
90. Further,  $Rf_1$  is required to be an after tax percentage and CPI is already taken into account as tax. This reduces the "gap" between post tax  $Rf_1$  and CPI thus sometimes creating a negative value for real  $Rf_1$  for short periods.
91. The Energy Regulator calculated both  $Rf_1$  and  $Rf_2$  over 300 months (25 years). This results in a real after tax risk-free rate for both  $Rf_1$  and  $Rf_2$  of 0.57%.

#### *Inflation*

92. The applicant used an historical 25 year average inflation figure of 9.77% in its application. Using 300 month data up to February 2009 the Energy Regulator calculated the average inflation to be 9.21%.

*Market Risk Premium (MRP)*

93. The applicant used a real market risk premium of 10.12% based on the JSE All Share Index over the last 25 years.
94. The market return ( $R_m$ ) was calculated by the Energy Regulator using the JSE All Share Index, converted from a nominal to real value for the previous 300 months (March 1984 to February 2009). This yielded a result of 17.04%. The average month-to-month CPI over the same period (March 1984 to February 2009) is 9.21%. The CPI data used is sourced from the Bureau of Economic Research (BER). The average real market risk premium (MRP) over 300 months is 7.25%.

*Beta ( $\beta$ )*

95. The Beta was calculated using the procedure set out in Note 3 of the methodology.
96. To determine the beta, the following companies were used as proxies:
- (a) El Paso Energy Corporation;
  - (b) Enbridge Inc;
  - (c) EQT Corporation.
  - (d) Magellan Midstream Holdings, Limited Partnership
  - (e) Plains All American Pipeline, Limited Partnership; and
  - (f) Provident Energy Trust;
97. These proxy companies are all North American pipeline companies that are in the petroleum transportation industry.
98. For the purposes of determining the beta, the applicant's gearing was assumed to be 30% (actual balance sheet reflects debt as 21.88%).
99. The levered (industry) beta is calculated to be 0.52 .
100. To account for South African business conditions, a risk component of 0.15 was deemed to be appropriate to add to the industry beta. The risk components are set out in Table 7. The resultant real cost of equity is 5.43%.

**Table 7: Risk Components**

| <b>Risk Component</b>   | <b>Value</b> |
|---|--------------|
| <b>Industry beta</b><br>- Calculated industry beta – using 6 proxy North American firms as determined by the ER as prescribed in the methodology.   | 0.52         |
| <b>Size of company.</b><br>- A beta factor adjustment is proposed to accommodate the fact that Transnet Pipelines excluding CWIP is considered to be relatively small in comparison to the proxy companies. | 0.15         |
| <b>TOTAL BETA</b>   | 0.67         |

*Consumer Price Index (CPI)*

101. The CPI used in calculating the MRP is the month-to-month CPI from March 1984 to February 2009 (9.21%). The CPI used in calculating the real cost of debt is a forecasted CPI for the next 12 months (5.12%).

102. The CPI information used in these calculations is sourced from the Bureau of Economic Research (BER).

*Cost of Debt (K<sub>d</sub>)*

103. The applicant initially applied for a 11.41% (nominal) cost of debt but in its revised application forecast a cost of debt of 11.33% for financial year 2009/10. This latter value meets the tariff methodology's test for reasonableness. This 11.33% yielded a real post tax cost of debt of 2.89% using the BER's 5.12% inflation forecast for 2009/10.

104. Paragraph 10.5.1 of the methodology provides that:

*'If there is a difference between the estimated cost of debt in the Allowable Revenue and the actual cost of debt for that period then the Allowable Revenue must be recalculated using the actual cost of debt and the difference added to or subtracted from the claw back adjustment. The following formula must be used to determine the Debt cost adjustment -*

*Debt cost adjustment = Allowable Revenue recalculated with actual cost of debt - Allowable Revenue projected.*

105. If an adjustment is required as per paragraph 10.5.1 of the methodology, the required adjustment will be made in the next tariff review period.

#### *Expenses (E)*

106. The Energy Regulator has provisionally accepted Transnet's estimated expenses of R441.47 million and its corporate cost estimate of R87.16, a total of R528.63 million compared to the total latest estimate of expenses of R 505.50 million 2008/09. This is a 4.58% increase. The Energy Regulator will conduct an in-depth analysis of expenses and claw-back non-prudent expenditure in the next tariff review period.

#### *Tax*

107. As required by paragraph 7.1 of the methodology taxation was calculated using a normalised tax expense for the tariff period under review.<sup>17</sup> The deferred tax balance is deducted from the RAB.

#### *Depreciation*

108. The depreciation expense of R273.11 million requested by the applicant is used for purposes of this application as the starting RAB is not yet available. Consequently, the Energy Regulator has to use the applicant's asset and depreciation estimates until the starting RAB is available.

#### *Working Capital*

109. The applicant applied for a working capital of R455.1 million inclusive of R335.58 million operating cash. The Energy Regulator recalculated the operating cash balance using the 45 day provision as per methodology. A reduced operating cash of R65.17 million was allowed. The total allowed working capital (w) allowed was R182.76 million.

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<sup>17</sup> In its application Transnet used a flow through methodology.

*F factor (approved revenue addition to meet debt obligations)*

110. The methodology provides for an addition to the allowable revenue to put an entity in a position to meet its debt obligations.
111. This provision of the methodology is in accordance with regulation 4(1)(c) of the Regulations according to which the Energy Regulator **may**, when setting tariffs for petroleum pipelines:
- “consider funding requirements and debt service requirements of the licensee by adjusting the licensee’s allowed revenue to enable the licensee’s debt service ratio to be maintained at a reasonable level...”*
112. Considerable legal argument was presented at the two public hearings (and through written submissions) on whether or not the law permitted the Energy Regulator to approve an addition to the allowable revenue that will increase tariffs for purposes of funding the construction of the NMPP.
113. The Energy Regulator is of the view that section 28 of the Act, prevents it from using the f-factor to increase tariffs so as to increase Transnet’s allowable revenue for purposes of funding the construction of the NMPP. This interpretation is consistent with the rest of the Act, its objects and the Regulations.
114. Section 28(1) of the Act directs the Energy Regulator to *“set tariffs to be charged by a licensee in the operation of a petroleum pipeline”*. The Energy Regulator is therefore prevented from setting tariffs to be charged by a licensee in the **construction** of a petroleum pipeline.
115. Section 4(f) of the Act instructs the Energy Regulator to set these tariffs in a manner prescribed by regulation. Regulation 4(4) is consistent with section 28 and provides that:
- “The tariffs set by the Authority must relate to investment in, operation and maintenance of and profits arising only from those parts of a licensed activity for which tariffs are being set.”*

116. The meaning of regulation 4(4) (read with section 28(3) of the Act is clear. It prevents the Energy Regulator from setting tariffs for the operation of Transnet's petroleum pipelines network (licenced under licence number PPL.p.F3/20/2006) that do not relate to investment in, operation and maintenance of and profits arising only from the operation of Transnet's petroleum pipelines network. The construction of the NMPP is a separate licenced activity and is licenced under licence number PPL.p.F1/74-75/2007.
117. The f-factor is only applicable for the existing operational licence. Therefore, matters relating to Transnet's NMPP project cannot be taken into account when setting the tariffs under consideration here.

*Claw Back Adjustment (C)*

118. According to paragraph 10.1 of the methodology, the following formula must be used to determine the claw back adjustment:

$$\text{Claw back adjustment} = \text{VA} + \text{OEA} + \text{Fa} + \text{DCA} + \text{GA}$$

Where:

- VA** = volume adjustment
- OEA** = operating efficiency adjustment (only if positive). (This means "only if the efficiency is better than forecast").
- Fa** = approved revenue addition to meet debt obligations (F) adjustment
- DCA** = debt cost adjustment
- GA** = general adjustment for any remaining differences between projected Allowable Revenue and actual Allowable Revenue not resulting from efficiency gains.

*Volume Adjustment (VA)*

119. Paragraph 10.2 of the methodology allows for compensation arising from differences in projected and actual volumes.

120. The projected volumes for the 2008/9 Transnet tariff application were 17.827 billion litres. The latest estimated volumes for 2008/09, taking into account the actual volumes for the period 01 April 2008 to 31 October 2008 as well as the projection for the period 01 November 2008 to 31 March 2009 is 17.016 billion litres. The difference is 0.811 billion litres.
121. Transnet in its tariff application provided reasons for the difference – as per the requirements of paragraph 10.2.5 of the methodology. The reasons given were:
- the growth in the market for transporting refined products in the 2008/2009 tariff application did not materialise;
  - there were several interruptions to supply;
  - there was an extended Natref shutdown; and
  - the diesel tank at Natref was out of commission.
122. These reasons were accepted because differences between future forecasts and actual volumes are provided for in the methodology. Furthermore, the other reasons given were actual events that occurred.
123. The Energy Regulator, in its 2008/09 tariff decision, used an Allowable Revenue of R1.250 billion. Transnet's latest estimate of tariff revenue is R1.223 billion. The volume adjustment in the claw back is therefore R27.4 million.
124. Transnet in its tariff application requested that a “product reconciliation” of R114 million be clawed-back to its customers. According to Transnet<sup>18</sup> this is because a 9 million litre over delivery was made in the 2008/9 tariff period.
125. The methodology is silent on product reconciliation. The Energy Regulator views these delivery reconciliation differences as timing differences between one accounting period and another. They are likely to reverse in future tariff review periods. The litres over or (under) delivered are paid for by customers or received

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<sup>18</sup> Letter from Transnet to NERSA dated 19 December 2008.

from customers at the prevailing prices. Product reconciliation arises from over or under deliveries against what was contracted. It is an operational and contractual matter between Transnet and its customers, for both parties to ensure that they do not experience gains or losses. It therefore appears that product reconciliation is a matter to be resolved between Transnet and its customers and is not a pipeline tariff setting matter. For these reasons they should not be allowed in the tariff determination.

126. However, if a pipeline operator should consistently enjoy revenue in excess of the Allowable Revenue because of product reconciliation then the Energy Regulator will investigate that matter.
127. The R114 million product reconciliation credit in the claw back is therefore not included in the tariff determination.

#### *Operating Efficiency Adjustment (OEA)*

128. The formula in paragraph 10.3 of the methodology to be used to determine the operating efficiency adjustment is:

$$\text{OEA} = (\text{AaOC} - \text{EaOC}) \times \text{actual volumes} \times 50\%$$

Where:

**OEA** = Operating Efficiency Adjustment

**AaOC** = Actual average operating cost (actual operating expenditure ÷ actual volumes)

**EaOC** = Estimated average Operating Costs (estimated operating expenditure ÷ estimated volumes)

129. Transnet applied the operating efficiency adjustment incorrectly and requested a claw back from its customers of R22.1 million. The methodology only rewards

improvements in efficiency, which did not occur, and therefore this claw back is disallowed.

#### *F-Factor adjustment (Fa)*

130. The Fa adjustment caters for differences between the approved revenue adjustment to meet debt obligation projections made when the Allowable Revenue was determined for the previous review period and the actual debt obligations payments made for that period.
131. As explained on pages 29 to 30, the law prevents the Energy Regulator from utilising the f-factor to increase Transnet's allowable revenue in order to enable it to fund the construction of the NMPP. Consequently, the f-factor amount of R35 million allowed for the 2008/9 tariff period is clawed-back in this tariff period.

#### *Debt Cost Adjustment*

132. Paragraph 10.5 of the methodology allows for an adjustment if there is a difference between the estimated cost of debt in the Allowable Revenue and the actual cost of debt for that tariff.
133. The formula used to determine the debt cost adjustment is:  
**Debt cost adjustment = Allowable Revenue recalculated with actual cost of debt - Allowable Revenue projected**<sup>19</sup>
134. The calculation for the debt cost adjustment of R19.1 million is based on the difference between an allowance of R187.7 million for 2008/09 and a latest estimate of R206.8 million.

#### *Asset Variance Claw Back*

135. The asset variance claw back of R3.6 million is based upon the difference between an allowance of R201.1 million for 2008/09 and a latest estimate of R204.7 million.

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<sup>19</sup> Note: All other factors and quantum in estimated Allowable Revenue remain the same.

### *Depreciation Claw Back*

136. The Energy Regulator accepts Transnet's latest estimate for its depreciation (R258.6 million) compared to what it estimated in its 2008/9 tariff application (R251.7 million). The difference of R6.9 million will be clawed back.
137. However, since these values are based on the applicant's MEAV asset values and not the correct RAB values, this amount will in future have to be reconsidered and possibly adjusted when the RAB verification exercise is complete.

### *Taxation*

138. Transnet estimated its tax give back at R2.5 million. The Energy Regulator did not allow the tax claw back, due to the inclusion of taxation (claw back) in the notional tax calculation.

### *Time Value of Money*

139. Transnet received less revenue than estimated and should therefore be compensated for the time value of money. The Energy Regulators latest estimate of the real WACC of 10.96% (see Table 8) multiplied by the net claw back (R57.0 million) is used to calculate a time value of money of R6.25 million (see Table 8).

**Table 8: Latest Estimate of 2008/09 WACC**

| <b>Description</b>                              | <b>Percentage</b> |
|---|-------------------|
| Cost of equity (Ke)                             | 10.52%            |
| Average gearing latest estimate for 2008/09 (G) | 48.37%            |
| Cost of debt latest estimate for 2008/09 (Kd)   | 11.44%            |
| Latest estimate of WACC = $Ke (1-G) + Kd (G)$   | <b>10.96%</b>     |

### *Claw Back Summary*

140. The notional tax is excluded from the time value of money. Tax payment will only be made in the coming financial year and therefore does not suffer any time value of money losses.

141. A summary of the claw back adjustment is presented in Table 9 below.

**Table 9: Summary of the Claw Back Adjustments**

|   | As per application<br>(R million) | As per NERSA<br>(R million) |
|---|-----------------------------------|-----------------------------|
| Volume                                  | 27.40                             | 27.40                       |
| Product reconciliation                  | (114.00)                          | 0.00                        |
| Operating efficiency                    | 22.10                             |                             |
| Cost of debt                            | 19.10                             | 19.10                       |
| Cost of Equity /asset variance          | 3.60                              | 3.60                        |
| Depreciation                            | 6.90                              | 6.90                        |
| Subtotal before Time value of money     | (34.90)                           | 57.00                       |
| Time value of money @10.96%             | (4.10)                            | 6.25                        |
| F factor                                | 0.00                              | (35.00)                     |
| Taxation (Including notional total tax) | (2.50)                            |                             |
| <b>Claw back</b>                        | <b>(41.50)</b>                    | <b>28.25</b>                |

### Allowable Revenue

142. Data as supplied by Transnet was for the most part used. Where this is not the case the reasons for not using the applicant's data are supplied throughout the assessment.

143. The values of several of the components in the allowable revenue formula provided in the methodology had to be calculated for the purpose of assessing the applicant's tariffs. A summary of the determination of allowable revenue is presented in Table 10 below.

**Table 10: Allowable Revenue (R million)**

|   | Total Pipelines | Refractionator | Total as per revised application | NERSA Decision | Difference   |
|---|-----------------|----------------|----------------------------------|----------------|--------------|
| RAB   |                 |                | 4,574.23                         | 4,078.27       | (495.96)     |
| Debt  |                 |                | 2,678.21                         | 1,223.48       | (1,454.73)   |
| Equity  |                 |                | 1,896.02                         | 2,854.79       | 958.77       |
|   |                 |                | 4,574.23                         | 4,078.27       | (495.96)     |
| Return on Equity funding  |                 |                | 210.34                           | 155.02         | (55.33)      |
| Return on Debt funding  |                 |                | 305.58                           | 35.35          | (270.23)     |
| Total Return on investment/RAB  |                 |                | 515.92                           | 190.37         | (325.55)     |
| Operational Expenditure   |                 |                | 441.44                           | 441.47         | 0.03         |
| Corporate costs   |                 |                | 87.16                            | 87.16          | -            |
| Depreciation  |                 |                | 273.11                           | 273.09         | (0.02)       |
| F Factor  |                 |                | 539.90                           | 0.00           | (539.90)     |
| <b>Claw back</b>  | <b>(41.35)</b>  | <b>0.00</b>    | <b>(41.40)</b>                   | <b>28.25</b>   | <b>69.65</b> |
| Volume  | 27.40           | 0.00           | 27.40                            | 27.40          | -            |
| Product reconciliation  | (114.00)        | 0.00           | (114.00)                         | 0.00           | 114.00       |
| Operating efficiency  | 22.10           | 0.00           | 22.10                            |                | (22.10)      |
| Cost of debt  | 19.10           | 0.00           | 19.10                            | 19.10          | -            |
| Cost of Equity /asset variance  | 3.60            | 0.00           | 3.60                             | 3.60           | -            |
| Depreciation  | 6.95            | 0.00           | 6.90                             | 6.90           | -            |
| Subtotal before Time value of money   | (34.85)         | 0.00           | (34.90)                          | 57.00          | 91.90        |
| Time value of money @10.96%   | (4.00)          | 0.00           | (4.00)                           | 6.25           | 10.25        |
| F factor  | 0.00            | 0.00           | 0.00                             | (35.00)        | (35.00)      |
| Taxation (Incl in notional total tax)   | (2.50)          | 0.00           | (2.50)                           |                | 2.50         |
|   |                 |                |                                  |                | -            |
| Allowable revenue before notional tax   | 1,779.35        | 36.96          | 1,816.13                         | 1,020.34       | (795.79)     |
| Notional Tax  | 225.18          | 1.47           | 226.67                           | 71.27          | (155.40)     |
| Notional Tax on refractionator  | 38.90           | (38.90)        | 0.00                             | -              | -            |
| Estimate of additional allowable revenue due to the effect of the DJP assets having a shorter than 10 year lifespan |                 |                |                                  | 2.33           | 2.33         |
| Total Allowable revenue   | 2,043.42        | (0.47)         | 2,042.80                         | 1,093.93       | (948.87)     |
| As per application  | 2,043.40        | -              | 2,043.40                         |                |              |

**Volume risk**

144. The methodology at paragraph 10.2.2 provides that the volume adjustment will only apply if the actual volumes shipped by a pipeline in a tariff period differ from the projected volumes for that tariff period to the extent that the difference exceeds

parameters to be determined by the Energy Regulator. In this decision no parameters are set.

145. Any adjustment in Allowable Revenue due to volume will be applicable in the next tariff period.

### *Tariffs*

146. Tariffs are partially a function of volumes. Transnet has forecast 1.4% lower volumes for 2009/10 than its latest estimate for 2008/09. It believes that volumes have been in a “declining phase” for the 9 months prior to the application and it expects this trend to continue in 2009/10.

147. The national sales data for refined products transported by pipeline show that volumes in calendar 2008 were 3% lower than in 2007. This confirms a part of Transnet’s “declining phase” argument. The GDP forecast for 2009 made by BER is 0.3% which suggests that a significant increase in fuel sales would be unexpected. The domestic economy appears to be enduring uncertainty making forecasting even more challenging than usual. Vehicle sales have declined in the past two quarters. On balance, it is reasonable to accept the volume forecasts made by Transnet. Any difference between forecasts and actual volumes transported will result in a claw-back adjustment in the next tariff period.

148. The applicant requested an across the board tariff increase of 74.42%. There was considerable debate at the public hearings on the tariff structure. The Energy Regulator is of the view that a desirable state for tariffs is one in which competition would not be inhibited by any tariff. This suggests that the tariff for each pipeline should reflect its actual cost. In the previous tariff decision the Energy Regulator went some way towards correcting the imbalances in the inherited historical tariffs given the information limitations it had to work within. At this point in time the Energy Regulator does not possess sufficient information about the applicant’s assets to proceed beyond the tariff restructuring embodied in the previous tariff decision.

149. Transnet argued that there should be wider consultation with stakeholders before further tariff restructuring takes place and this was supported by some stakeholders. The impact of fully cost reflective tariffs, particularly on the refined products and crude oil pipelines from Durban both now and in the future has significant implications for the locational advantage of inland refiners and in turn on the relative competitive positions of various oil companies. Furthermore, in the tariff period under review *de facto* pipeline competition will not arise on routes from the coast to the inland market – the major bone of contention.
150. For these reasons the Energy Regulator will not make further tariff restructuring in this decision but will instead set across-the-board tariff adjustments. It will convene consultations on tariff structuring with stakeholders during 2009 with the intention of being in a more informed position before the next tariff review period by which time pipeline competition may be a more real prospect.
151. The year on year allowable revenue comparison yields a tariff reduction of 12.49%. However, because lower volumes are projected for 2009/10 compared to the previous year, the average tariff reduction is only 10.38% for the 12 months ending 31 March 2010. Due to the fact that tariffs remained unchanged for the first month of the financial year the decrease has to be adjusted to 11.17% over the remaining 11 months to compensate for this.
152. The tariffs will apply from 6 May 2009, this being the date on which the Department of Minerals and Energy will implement the May price for regulated petroleum products.
153. All tariffs are VAT exclusive.
154. The tariffs as approved by the Energy Regulator are the maximum level of all tariffs and tariff classes.

## **Conclusion**

155. On the conspectus of the facts and evidence, it will be appropriate and in compliance with the requirements of the National Energy Regulator Act, 2004 (Act No. 40 of 2004) to make the decision set out above. It finds a reasonable balance between the interests of customers on the one hand and the interests of investors on the other hand.

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