



Invitation to comment on Petroleum tariff applications:

The National Energy Regulator (**NERSA**) is a regulatory authority established as a juristic person in terms of Section 3 of the National Energy Regulator Act, 2004 (Act No. 40 of 2004). NERSA's mandate is to regulate the electricity, piped-gas and petroleum pipelines industries in terms of the Electricity Regulation Act, 2006 (Act No. 4 of 2006), Gas Act, 2001 (Act No. 48 of 2001) and Petroleum Pipelines Act, 2003 (Act No. 60 of 2003).

Invitation to comment on the Engen Petroleum Limited 2011 Petroleum Storage Facilities Tariff Application

The applications are available on the NERSA website at http://www.nersa.org.za/Consultation>Documents>Petroleum_Pipelines. Stakeholders and members of the public are invited to comment on the applications in writing. Requests for confidential treatment of information contained in the comments must be made in accordance with rule 4 of the Petroleum Pipelines Act Rules, 2009 (GN R. 1072 in GG 32704 of 13 November 2009). The Rules are also available on the NERSA website at http://www.nersa.org.za/Petroleum_Pipelines>Legislation>Petroleum_Pipelines_Rules.

The deadline for comments is **14 November 2011**.

Written comments must be sent to Mr Ruvengano Mandebvu at:

Post: Petroleum Pipelines Tariffs Department
The National Energy Regulator
PO Box 40343
Arcadia
Pretoria, 0007

Email: pipelines@nersa.org.za

Fax: (012) 401-4700

SCHEDULE 1

ENGEN PETROLEUM LTD NERSA TARIFF METHODOLOGY - 2011 PERIOD (1st APRIL 2011 – 31st DECEMBER 2011)

According to Section 28 (1) of the Petroleum Pipelines Act, 2003 (Act No. 60 of 2003): “The Authority must set as a condition of license the tariffs to be charged by a licensee in the operation of a petroleum pipeline and approve the tariffs of storage facilities and loading facilities.”

Engen has adopted the following tariff methodology, based on NERSA’s “Tariff Methodology for Petroleum Loading Facilities and Petroleum Storage Facilities” (“tariff methodology”) dated 25 March 2010 and any subsequent amendments to this document, in order to calculate storage tariffs, as required by the National Energy Regulator of South Africa (NERSA).

The following formula reflects the methodology which the Energy Regulator is going to use to evaluate the application for storage and loading facilities’ tariffs.

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

Where:

AR = Allowable Revenue

RAB = Regulatory Asset Base

WACC = effective weighted average cost of capital

E = Expenses: maintenance and operating expenses for the tariff period under review

T = Tax: estimated tax expense for the tariff period under review

D = Depreciation and amortisation of inflation write-up: the charge for the tariff period under review




C = Claw back adjustment (to correct for differences between actual and forecasts in formula elements as well as efficiency gains and volume differences) from a preceding tariff period in relation to the latest estimates for that tariff period

Weighted average of cost of capital (WACC):

WACC of [redacted] is post tax, real rate that is used for calculation purposes in this submission. The WACC rate started with the nominal rate (see below), and deduction of the inflation from the nominal rate. Below, follows the detailed calculation method of Engen weighted cost of capital.

<u>COST OF EQUITY & WACC</u>		Value - R	Percent
<u>Engen Book Equity</u>	<u>Aug-09</u>	<u>Million</u>	
Shares Issued	[redacted]	[redacted]	[redacted]
Book Value	Aug-09	[redacted]	[redacted]
Add / (Subtract): Net Interest Bearing Debt / (Cash)		[redacted]	Target of Equity 25.00%
		[redacted]	[redacted]
Equity	[redacted]	Before Tax	
Debt	[redacted]	After Tax	(current year tax rate)
Total tax rate		28.00%	
Engen L/Term Cost of Borrowing		[redacted]	
RF = Risk Free Investment For 10 Years Government Stock			
RM = Margin Above Risk Free			
B = Beta	(0 = risk free) (1.0 = average) (0.6 = low risk) (1.4 = high risk)		
RF =	8.65%		
RM =	6.00%		
B =	0.10-2.20		
	= (RF + (Beta x ((RF + RM) - RF)))		
	OR		
	= (RF + (Beta x RM))		
<u>Engen Cost Of Equity</u>		[redacted]	After Tax
<u>Engen Weighted Average Cost Of Capital (WACC)</u>		[redacted]	

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	<u>Types of Returns</u>		<u>Notes</u>
Engen WACC rate	Nominal/Post tax		From our previous submission.
Inflationary expectation	Forward	<u>5.90%</u>	Standard Bank's forecast in Sept 2010 for 2011 is 4.8%. However the most recent Dec 2010 PPI is showing 5.8%. So we caution on the upside
Engen WACC rate - Arithmetic	Real/Post tax		
Engen WACC rate - Geometric	Real/Post tax		

NERSA TARIFF CALCULATION for REFINERY ISLAND VIEW B&C FOR 2011/2012 PERIOD

<i>Input data</i>	<i>Rand value or Percentage</i>		<i>Input Source / Comments</i>
Value of the Regulatory Asset Base (RAB)	72 352 951	- 212 844 377	(Formula as per NERSA Storage tariff methodology)
Trended Original Cost - TOC	26 506 189.60	- 210 958 346.40	Used Trended Original Cost (TOC) method - inflation adjusted
Net working capital	0.00	- 14 738 864.70	No Operating cash, cash balance, inventories and trade payables at depot level.
WACC - effective weighted average cost of capital			Engen Treasury = Engen WACC - Geometric: Real/Post tax rate
Expenses (E) : maintenance and operating expenses	45 019 378.40	- 130 902 482.50	Total Maintenance plus Operating expenses, based on 2011FY Plan. Expenses: maintenance and operating expenses for the tariff period under review.
Maintenance			SAP Marketing expense : Depot Maintenance
OPEX			SAP Marketing Expense : Total expenses minus Depot Maintenance, Depreciation, Income (S&H income, Rental income, Other credits) + Support cost allocations
NPBT excluding tax allowance	2 396 734.10	16 060 769.70	NPBT = {(RAB*WACC)+E+D+/-C} - tax deductible expenses and allowances
Tax (T)	0.00	- 10 208 748.70	@28% corporate tax rate. Tax: estimated tax expense for the tariff period under review. Formula, as per NERSA tariff methodology, section 7.
Depreciation (D)	1 386 370.80	- 9 757 156.20	SAP Marketing expense : Depreciation, based on 2011FY Plan. Depreciation and amortization of inflation write-up: the charge for the tariff period under review.
Claw back adjustment - C		0.00	Clawback adjustment: to correct for differences between actuals and forecasts in formula elements as well as efficiency gains and volume differences from a preceding tariff period in relation to the latest estimates for that tariff period (as per NERSA tariff methodology)
Allowable Revenue (AR)	57 932 517.70	- 116 536 990.50	(RAB x WACC) + E + T + D + C (Formula as per NERSA tariff methodology)
Total Forecasted throughput volume			Engen Refinery Sales ex Island View B & C (projected)
Engen forecasted throughput volume			Engen Refinery Sales ex Island View B & C (based on 2011FY-end data)
NERSA tariff calculation			
Total Allowable Revenue (Rand)	53 888 762.00	- 114 497 693.60	X
Total litres for full year			Y
Tariff per litre throughput (cents)		3.65	(X*100)/Y

NERSA TARIFF CALCULATION for REFINERY SOUTH TANK FARM FOR 2011/2012 PERIOD

<i>Input data</i>	<i>Rand value</i>		<i>Input Source / Comments</i>
Value of the Regulatory Asset Base (RAB)	10 775 677.90	- 53 782 533.40	(Formula as per NERSA Storage tariff methodology)
Trended Original Cost - TOC	5 753 258.90	- 38 041 674.70	Used Trended Original Cost (TOC) method - inflation adjusted
Net working capital	0.00	- 40 828 066.87	No Operating cash, cash balance, inventories and trade payables at depot level.
WACC - effective weighted average cost of capital			Engen Treasury = Engen WACC - Geometric: Real/Post tax rate
Expenses (E) : maintenance and operating expenses	1 259 561.50	- 79 940 199.10	Total Maintenance plus Operating expenses, based on 2011FY Plan. Expenses: maintenance and operating expenses for the tariff period under review.
Maintenance			SAP Marketing expense : Depot Maintenance
OPEX			SAP Marketing Expense : Total expenses minus Depot Maintenance, Depreciation, Income (S&H income, Rental income, Other credits) + Support cost allocations
NPBT excluding tax allowance	955 578.30	- 3 093 920.50	NPBT = {(RAB*WACC)+E+D+/-C} - tax deductible expenses and allowances
Tax (T)	0.00	- 1 687 252.10	@28% corporate tax rate. Tax: estimated tax expense for the tariff period under review. Formula, as per NERSA tariff methodology, section 7.
Depreciation (D)	148 525.50	- 1 152 473.00	SAP Marketing expense : Depreciation, based on 2011FY Plan. Depreciation and amortization of inflation write-up: the charge for the tariff period under review.
Claw back adjustment - C	-	0.00	Clawback adjustment: to correct for differences between actuals and forecasts in formula elements as well as efficiency gains and volume differences from a preceding tariff period in relation to the latest estimates for that tariff period (as per NERSA tariff methodology)
Allowable Revenue (AR)	6 578 753.70	- 97 996 623.40	(RAB x WACC) + E + T + D + C (Formula as per NERSA tariff methodology)
Total Forecasted throughput volume			Engen Refinery Crude Thruput (projected)
Engen forecasted throughput volume			Engen Refinery Crude Thruput (based on 2011FY-end data)
NERSA tariff calculation			
Total Allowable Revenue (Rand)	3 321 679.20	- 92 640 411.10	X
Total litres for full year			Y
Tariff per litre throughput (cents)		0.94	(X*100)/Y