NATIONAL ENERGY REGULATOR OF SOUTH AFRICA

SECOND CONSULTATION ON THE REVIEW OF THE ROLLED-IN TARIFF APPROACH USED IN DETERMINING TRANSNET SOC LIMITED'S TARIFFS FOR ITS PETROLEUM PIPELINES SYSTEM

DRAFT DECISION: REVIEW OF THE ROLLED-IN TARIFF APPROACH USED IN DETERMINING TRANSNET SOC LIMITED'S TARIFFS FOR ITS PETROLEUM PIPELINES SYSTEM

The National Energy Regulator of South Africa (NERSA) hereby publishes for public comment this draft decision on the review of the rolled-in tariff approach used in determining Transnet SOC Limited's tariffs for its petroleum pipelines system. This document sets out NERSA's provisional findings and proposes a hybrid, "rolled-in, but differentiated" tariff model as a potential evolution of the current approach.

However, before any final decision is taken, NERSA is committed to a transparent, inclusive, and rigorous public consultation process. The purpose of this consultation is not merely to inform stakeholders of NERSA's provisional views, but to actively solicit their expertise, evidence, and perspectives to ensure that the final decision is well-founded, legally defensible, and in the public interest.

The deadline for the submission of written comments is 5 August 2026**.**

Written comments are to be submitted to NERSA at:

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ABBREVIATIONS AND ACRONYMS

AR	Allowable Revenue
AVTUR	Aviation Turbine Fuel (Jet Fuel)
BFP	Basic Fuel Price
BPSA	BP Southern Africa (Pty) Ltd
CEF	Central Energy Fund
COP	Crude Oil Pipeline
CPI	Consumer Price Index
DJP	Durban-Johannesburg Pipeline
DMPR	Department of Mineral and Petroleum Resources
DCT	Differentiated COP Tariff
ER	Energy Regulator
FFC	Final Forecast Cost
FIASA	Fuels Industry Association of South Africa
FY	Financial Year
GDP	Gross Domestic Product
IATA	International Air Transport Association
LPG	Liquefied Petroleum Gas
LRP	Lead Replacement Petrol
MDZ	Magisterial District Zone
MPP	Multi-Product Pipeline
NATREF	National Petroleum Refiners of South Africa (The Natref Refinery)
NERSA	National Energy Regulator of South Africa
MPP	Multi-Product Pipeline
NOC	National Operating Centre
OPEX	Operating and Maintenance Expense
ORTIA	OR Tambo International Airport
PAJA	Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000)
The Act	Petroleum Pipelines Act, 2003 (Act No. 60 of 2003)
PRAX	PRAX Group (Co-owner of the Natref refinery site)
RAB	Regulatory Asset Base
SAPREF	Shell and BP Refinery (Durban)
SBM	Single Buoy Mooring
SCA	Supreme Court of Appeal
SDSA	Shell Downstream South Africa (Pty) Ltd
SEIAS	Socio-Economic Impact Assessment
TM1	Terminal 1 (coastal accumulation facility at Island View)
TM2	Terminal 2 (inland accumulation facility at Jameson Park)
TNPA	Transnet National Ports Authority
VA	Variation Agreement
VAT	Value Added Tax
ZD	Zone Differential

REQUEST FOR STAKEHOLDER COMMENTS

As part of the Energy Regulator's commitment to transparent and inclusive regulation, NERSA invites written comments from all stakeholders on the issues outlined in this second discussion document. To facilitate structured and meaningful engagement NERSA invites stakeholders to provide detailed comments, supported by evidence where possible, on the proposed review of the rolled-in tariff approach and the potential adoption of a differentiated (hybrid) tariff model. The questions below are structured to guide stakeholder inputs across key analytical areas, including tariff design, customer and market impacts, regulatory principles, and implementation considerations. These questions are intended to elicit objective and evidence-based stakeholder perspectives. Stakeholders are encouraged to review the full content of the document before responding to the questions.

1. General Views on Tariff Approaches

a) Do stakeholders agree with the need to review the current rolled-in tariff approach considering changes in the petroleum sector, including increased import dependency and changes in infrastructure utilisation?
b) Which tariff approach do stakeholders consider most appropriate going forward:

1. Rolled-in approach
2. Incremental (cost-reflective) approach
3. Hybrid (differentiated rolled-in) approach

c) What are the main advantages and risks associated with each approach from your perspective?
d) Do stakeholders agree with the proposed hybrid ("rolled-in but differentiated") approach as a potential evolution of the current methodology? Please provide reasons.

2. Quantitative Impact and Tariff Outcomes

a) Do stakeholders agree with the tariff outcomes presented in Table 15, including the magnitude of increases under the incremental and hybrid approaches?
b) Are the assumptions underpinning the quantitative analysis (e.g., volumes, cost allocation, demand) reasonable and reflective of market conditions?
c) How would the tariff increases indicated impact your operations or business decisions?

3. Customer Affordability and Cost Burden

a) To what extent would tariff increases under each approach affect customer affordability, particularly for:

1. Importers and marketers (MPP users)
2. Inland refiners (COP users)
3. Downstream distributors

b) What is the likely pass-through of pipeline tariff increases to final fuel prices?
c) Do stakeholders consider the hybrid approach to provide a reasonable balance between affordability and cost reflectivity?

4. Customer Behaviour and Demand

a) How are customers likely to respond to tariff increases under each approach?

1. Reduction in volumes
2. Shift to alternative transport modes (road/rail)
3. Changes in sourcing strategies

b) At what tariff levels would pipeline transport become uncompetitive relative to road or rail?
c) Do stakeholders anticipate demand destruction under the incremental approach? If so, please quantify where possible.

5. Market Structure and Competition

a) How would each tariff approach affect competition within the petroleum value chain, particularly between:

- Inland refiners (e.g., Natref)
- Import-based supply chains

b) Does the current rolled-in approach create competitive distortions or cross-subsidisation between users?
c) Would a differentiated tariff approach improve or distort competition? Please explain.
d) What are the implications of tariff differentiation for market entry, competition, and long-term industry structure?

6. Volumes, Utilisation, and Security of Supply

a) How would each tariff approach affect pipeline utilisation and throughput volumes?
b) What is the likely impact of tariff changes on the viability of the MPP as a strategic asset?
c) Could higher tariffs under the incremental approach lead to a “death spiral” (declining volumes and rising tariffs)?
d) How would each approach affect security of supply to inland markets?

7. Cost Reflectivity and Differentiation Criteria

a) Do stakeholders agree that material differences exist between the COP and MPP that justify tariff differentiation?

b) What criteria should be used to determine tariff differentiation, for example:

- Cost of service
- Operational complexity
- Product characteristics
- Pipeline function in the value chain

c) Is the proposed 11.5% differential between COP and MPP appropriate? Please justify with evidence.
d) Are there alternative methods to address cross-subsidisation without introducing tariff differentiation?

8. Regulatory Principles

a) How well does each tariff approach align with the following regulatory principles:

- Cost reflectivity and user-pays
- Non-discrimination and fairness
- Economic efficiency
- Public interest (affordability and macroeconomic stability)

b) In your view, which approach achieves the best balance across these principles?
c) Should greater weight be given to affordability or cost reflectivity in tariff setting?

9. Legal and Regulatory Considerations

a) Do stakeholders agree with the interpretation of Section 28 of the Act regarding:

- Tariffs being set “for a pipeline” vs. a “pipeline system”?

b) Is the hybrid approach legally defensible, particularly in addressing concerns related to discrimination and cost allocation?
c) What are the legal risks associated with maintaining the rolled-in approach or moving to a differentiated approach?

10. Implementation Considerations

a) How should a differentiated tariff approach be implemented in practice?
b) Which approach is preferred for applying differentiation:

- Direct tariff discount
- Adjusted cost allocation
- Alternative mechanism

c) What are the key risks in implementation, including:

- Complexity
- Transparency
- Risk of unintended precedent

d) How can transparency and consistency be ensured in the application of differentiated tariffs?

11. Transitional Arrangements

a) Should any transition to a differentiated tariff approach be phased over time?
b) What transitional measures would be required to mitigate impacts on customers?
c) Should differentiation apply prospectively only, or should historical adjustments be considered?

12. Future Review and Monitoring

1. How frequently should the tariff approach be reviewed to ensure continued relevance?
2. What monitoring mechanisms should be implemented to assess the impact of the chosen tariff approach?
3. What indicators (e.g., tariffs, volumes, competition, affordability) should be tracked going forward?

Stakeholders are encouraged to provide detailed, evidence-based responses to the above questions. Submissions should, where possible, include quantitative data, operational insights, and supporting analysis to assist the Energy Regulator in evaluating the practical implications of each tariff approach.

1. EXECUTIVE SUMMARY

Background and Purpose of the Review

1.1 On 29 March 2007, the National Energy Regulator of South Africa (NERSA issued a licence to Transnet for the operation of a petroleum pipeline system and its associated infrastructure. The petroleum pipeline system, as amended on 27 September 2012, includes:

1.1.1 Crude Oil Pipeline (COP) - 16 inch in diameter from Durban to Ingogo and 18 inch in diameter from Ingogo to Natref.

1.1.2 Multi-Product Pipeline (MPP) – 24 inch in diameter from Durban to Jameson Park.

1.1.3 Durban–Johannesburg Pipeline (DJP) (northern and southern parts).

1.1.4 Aviation Turbine Fuel (Avtur) pipeline – 6 inch in dimeter from Natref to Airport.

1.1.5 Accumulation facility in Jameson Park with combined capacity of 201 114m^3.

1.1.6 Pump stations in the Southern Section of the DJP, COP and Avtur pipelines.

1.1.7 A number of intermixture tanks and accumulator tanks at delivery depots in various locations.

1.2 In terms of condition 16 of Transnet's operation licence –
'16.1 The Licensee must charge tariffs as set by the NERSA that are consistent with section 28(2)(a) - (d) of the Act.
16.2 The Licensee must comply with section 28(6) of the Act.
16.3 The Licensee must submit to the NERSA a request for a tariff review, eight months before the desired implementation date'.

1.3 Section 28(6) of the Petroleum Pipelines Act, 2003 (Act No. 60 of 2003) ('the Act') states that '*A licensee may not charge a tariff for the licensed activity in question other than that set or approved by the Authority* [NERSA]'.

1.4 In line with the conditions of the licence, NERSA was to set tariffs for the Transnet Petroleum Pipeline System. In terms of 28(6) of the Act, the licensee may not charge tariffs other than those set or approved by NERSA, which means that the tariff charged by the licensee may not exceed the tariff set by NERSA.

1.5 During the tariff application processing period (in 2011), NERSA consulted on two tariff-setting approaches, namely the rolled-in approach and the incremental approach:

a) **Incremental tariffs -** An incremental tariff is a pricing approach where the tariff for using a specific pipeline is calculated based strictly on the attributable costs of that individual pipeline or a distinct section of the network. The resulting tariff is designed to ensure that the revenue generated from each pipeline precisely recovers the costs incurred to provide services on that line, thereby reflecting its unique economic and operational characteristics; and

b) **Rolled-in tariffs -** A rolled-in tariff is a pricing approach where a single, uniform tariff rate is applied across the entire network of pipelines, regardless of the

individual cost structures of the constituent lines. This is calculated by aggregating the total allowable revenue for the entire network and dividing it by the total projected volumes to be transported across all pipelines.

1.6 On 31 August 2009, a discussion paper on the 2009/10 Transnet Tariff Structure and Design (2009) was published by NERSA. This was followed by a workshop on tariff design with stakeholders on 18 September 2009.

1.7 Subsequently, NERSA published a document entitled *Discussion Document on certain matters pertaining to the application by Transnet Limited for the Setting of its 2010/11 Petroleum Pipeline Tariffs* for public comment on 9 February 2010. Written comments thereon were received from Transnet, Total South Africa (Pty) Ltd, Sasol Oil (Pty) Ltd and Petroline (Pty) Ltd.

1.8 At the NERSA public hearing held on 4 March 2010, Transnet, bpSA, Total, Sasol Oil and Petroline presented their views on the tariff application and the Discussion Document. Stakeholders submitted opposing views on an appropriate tariff structure for the industry. Broadly speaking, they were divided into two groups: one in favour of a rolled-in approach to tariff structure and the other in favour of an incremental approach.

1.9 In its decision on Transnet's 2010/11 tariff application, NERSA decided to continue its investigations and consultations on tariff structuring during 2010 with the intention of reaching a solution by the next tariff period (2011/12). NERSA investigated Transnet's pipeline system and tariff structure and reviewed previous comments submitted by stakeholders on this subject. The findings from the investigation were:

a) several (physical) connections exist between the different Transnet petroleum pipelines.
b) centralised planning and scheduling are conducted in the operation of Transnet's petroleum pipelines.
c) much of the product in Transnet's petroleum pipelines is fungible and interchangeable; and
d) Transnet's petroleum pipelines are functionally interdependent and are used to serve a common market.

1.10 NERSA was therefore of the view that Transnet's petroleum pipelines constitute and are operated as a system or an interdependent network of pipelines intended to serve a common market (i.e. principally the inland market). This view was supported by evidence given at the public hearing of 10 March 2011 to consider Transnet's tariff application for the 2011/12 FY.

1.11 On 28 January 2011, NERSA published its Draft Tariff Determination on Transnet's pipeline tariffs for 2011/12 for public comment. Tariffs based on both the rolled-in and incremental tariff options were provided.

1.12 In determining the appropriate tariff structure, NERSA considered a range of issues including the Act, the NERSA Act, the impact on existing and future pipeline customers, competition, and public interest. Some of the factors considered, include -

1.12.1 The impact of petroleum pipeline tariffs on petroleum product prices in the inland region is an important factor when considering pipeline tariffs from a public interest perspective, since the transport cost element attributed to the structure of the regulated petroleum product prices for the inland region as it has been for decades based upon the pipeline tariff from Durban to Alrode.

1.12.2 Transnet constructed its MPP, and some of the MPP project costs were admitted to the Regulatory Asset Base (RAB). In subsequent years, larger quantities of the MPP costs were expected to be admitted to the RAB. The impact of the approximate quadrupling of Transnet Pipelines' RAB on pipeline tariffs was material, whichever tariff structure was adopted.

1.12.3 Low-income households are the most vulnerable to fuel price increases as the indirect[1] and induced impacts[2] of the fuel price burden filters through somewhat disproportionately to their already low disposal income. A practical example of this impact is the fact that poorer household spend a much larger part of their disposal income on basic commodities such as food, which is largely produced by the agriculture sector, which in turn is very reliant on petroleum products such as diesel as energy source.

1.13 The inland market[3] accounts for approximately 60 per cent of South Africa's demand for petroleum products and generates approximately 60 per cent of the country's Gross Domestic Product (GDP) [with Gauteng contributing the largest single share at 33.9% annually. Petroleum products are vital intermediate inputs into modern industrial economies; the prices influence for both the cost base for economically productive activity and the cost of living of public and consumers.

1.14 The tariff increases using a rolled-in approach were considered to be less severe as compared to the tariff increases using an incremental approach. Macro-economic modelling conducted by NERSA indicated that the impact of the pipeline tariff increases on inflation, GDP, potential job losses and disposable income was more severe under the incremental tariff approach than under the rolled-in tariff approach[4].

1.15 The rationale for both the DJP and subsequently the MPP trunk line on the one hand and the Crude Oil Pipeline (COP) providing feedstock to NATREF on the other hand is

[1] The **indirect impact** on price levels throughout the economy refers to the second wave of increases in the prices of products and services due to the higher product prices caused by the initial increase in the prices of petroleum and petroleum products.

[2] The **endogenous/induced impact** refers to a third wave of price increases initiated by the pipeline tariff increase characterised by pressure from trade unions etc. on employers to raise salaries and

[3] The inland market, in this case, refers to the Free State, Northwest, Gauteng, Mpumalanga and Limpopo provinces.

[4] The impact of the pipeline tariff increase on all macro-economic aggregates is on average about 45% higher for the incremental tariff approach than for the rolled-in tariff approach.

ultimately the same - to serve the inland market with petroleum products. However, these pipelines were not built during the same period and are consequently on different investment cycles i.e. they require replacement at different times. Whichever one is newer will have higher incremental tariffs. Incremental tariffs will create substantial differences in tariffs between two routes delivering to the same destination because one route is utilising an older pipeline and the other route is utilising a newer pipeline; and this into a regulated market in which (regulated) retail prices will be the same. Therefore, users of the older pipeline will prefer incremental tariffs while users of the newer pipeline will prefer rolled-in tariffs, these views will reverse in future years when the older pipeline is replaced.

1.16 Rolled-in tariffs will ensure that customers within the same geographic area, served by the same pipeline destination, pay the same tariff based on volume distance, thus having synergy with the current retail price regulation approach used by Government (DMPR) on the Magisterial District Zone Model.

1.17 Competition can be described as allocating productive resources to their most highly valued use, thereby encouraging efficiency and offering products and services at the most favourable terms[5]&[6]. Competition should not be promoted simply for its own sake. Rather, competition should ultimately benefit the consumer and economy at large, for example, through lower prices. However, incremental tariffs would not benefit consumers as they would result in higher prices, even though the approach would be more attractive for pipeline competitors. Additional pipelines (competing for the same volumes) will come at the cost of higher tariffs. The incremental tariffs will also have ripple effects on the fuel price structure as regulated by the DMPR as pipeline costs adjustments by NERSA are passed through to consumer through regulated retail prices.

1.18 The large cost escalations in Transnet's MPP project are of such a magnitude that the resultant tariffs could create opportunity for competition under both the rolled-in and the incremental tariff approaches.

1.19 Incremental tariffs, being higher, will, according to NERSA estimates, be closer to road transport costs, which will increase the propensity for road transport of petroleum products to inland markets and correspondingly increase the health, safety on the road and environmental risks.

1.20 The Act requires that a pipeline's capacity must be shared among all current and prospective users thereof. Coastal refiners, inland refiners and importers of fuel are therefore potential customers and beneficiaries of Transnet's pipeline system.

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5 As a general proposition competition law consists of rules that are intended to protect the process of competition to maximise consumer welfare' - Richard Whish, 'Competition Law' page 1, 2009, Sixth Edition, Oxford University Press.

6 The Competition Act aims to achieve the traditionally accepted competition-law goals of lower prices and greater choice to consumers' - M Neuhoff (Smit), M Govender, M Versfeld, D Dingley, 'A Practical Guide to the South African Competition Act' page 13, 2006, LexisNexis Butterworths.

1.21 Moving from the current tariffs, with an unknown basis, will inevitably impact existing pipeline customers in some way or another, whichever tariff structure is adopted.

1.22 The fact that Transnet's petroleum pipelines constitute a system suggests that it would be appropriate to follow the rolled-in approach to tariff setting.

1.23 NERSA concluded that the burden on consumers (the public) of moving from the current tariffs, with an unknown basis, to rolled-in tariffs outweighs the burden on existing pipelines customers.

1.24 NERSA estimated at the time that the only existing customer were worse off as a result of a rolled-in approach to tariffs is Natref, but that the burden is a small percentage of Natref's profits. On the other hand, if an incremental approach was used, inland consumers would be worse off by more than R500 million in 2011/12 FY and more than R2 000 million per annum thereafter.

1.25 Since there are limited adverse effects on existing pipeline customers or other pipelines, NERSA further concluded that all factors considered and in the current circumstances, it appears that a strong argument can be mounted in support of a rolled-in approach to tariff setting, as it best serves the public interest through lower increases in pipeline tariffs, which will in turn:

a) reduce the health, safety and environmental risks as pipelines offer a safer and environmentally less risky mode of transporting petroleum products; and
b) most importantly, promote access to affordable petroleum products as dictated by the Act.

1.26 The rolled-in basis of tariff structure has as a fundamental basis the equal treatment for all users from the same point of departure to the same destination. This means that the cost at a certain destination/take-off point in the system should trigger the same tariff irrespective of the route by which the product is transported.

1.27 In March 2011, NERSA took a decision to set tariffs for the Transnet's Petroleum Pipelines System using the rolled-in approach. The reasons for adopting this approach, as opposed to the incremental approach, were the following:

1.27.1 NERSA investigated Transnet's Petroleum Pipeline System and tariff structure. Findings from the investigation resulted in the view that Transnet's Petroleum Pipelines constitute and should be operated as a system because:

a) interconnections (physical connections) exist between Transnet's petroleum pipelines.
b) centralised planning and scheduling are conducted in the operation of Transnet's petroleum pipelines.
c) most of the products in Transnet's petroleum pipelines are interchangeable; and

d) Transnet's petroleum pipelines are functionally interdependent and used to serve a common market.

1.27.2 The rolled-in tariffs would ensure that customers in the same geographic area served by the same pipeline destination pay the same tariff based on volume.

1.27.3 The incremental approach has a negative impact on tariffs set for newer pipelines, with a higher Regulatory Asset Base (RAB) and lower volumes.

1.27.4 The impact on inflation measures, such as the Consumer Price Index (CPI), is lower under rolled-in tariffs. For example, the total CPI impact is 0.12 percentage points in 2011/12 for rolled-in tariffs, compared to 0.15 percentage points for incremental tariffs. This suggests that rolled-in tariffs would lead to less inflationary pressure on the economy and consumer in general.

1.27.5 The impact on Gross Domestic Product (GDP) was expected to be less severe with rolled-in tariffs. Since the inland market accounts for a significant portion of South Africa's GDP, the lower tariffs under the rolled-in approach would help mitigate potential GDP losses.

1.27.6 The analysis suggested that rolled-in tariffs would result in fewer potential job losses, as they would not significantly increase production costs that could lead to reduced economic activity and layoffs.

1.27.7 The analysis indicated that low-income households would be less affected by rolled-in tariffs, as these tariffs would not lead to substantial increases in fuel prices, which are a significant burden on vulnerable consumers and motorists.

1.27.8 By encouraging the use of pipelines over road transport, rolled-in tariffs could reduce health, road safety, and environmental risks associated with the road transport of petroleum products.

1.27.9 The rolled-in tariff approach aligns with the objective of the Act which seeks to promotes access to affordable petroleum products, which is a key consideration for NERSA.

1.27.10 The overall macroeconomic impact was on average about 45% higher for the incremental tariff approach than for the rolled-in tariff approach, indicating that rolled-in tariffs are more economically stable and sustainable.

1.27.11 The cost of energy in South Africa was very high and as a result rolled-in tariffs would reduce financial burden to the consumers and public at large.

1.28 In summary, NERSA's analysis suggested that rolled-in tariffs would lead to a more favourable economic environment/outlook, with lower inflation, less impact on GDP, increased consumer spending and lower unemployment rate, and better protection for

vulnerable groups, compared to the incremental tariff approach. The tariff increases using a rolled-in approach will be less severe than the tariff increases using an incremental approach.

1.29 TotalEnergies Marketing South Africa (Pty) Ltd ('TotalEnergies') and Sasol Oil (Natref Shareholders at the time as currently Prax Group has replaced TotalEnergies as the new shareholder in Natref) opposed the use of the rolled-in approach and were in favour of the incremental approach, as it allowed Natref to continue to enjoy its locational advantage[7] (Natref Neutrality Agreement) and to avoid having its crude oil volumes subsidise other pipeline customers.

1.30 Most of the stakeholders/licensees that commented on NERSA's rolled-in approach were in support of the rolled-in approach, as they were of the view that the approach had a positive effect on the tariffs determined, which benefited the economy of the country.

1.31 Based on the considerations mentioned above, NERSA decided to adopt the use of the rolled in tariff approach in the determination of Transnet's tariffs for its petroleum pipelines system.

2. APPROACHES

The Rolled-In Tariff Approach

Description and Application

2.1 The rolled-in tariff approach is a cost-averaging approach where the costs of a new pipeline project undertaken by the licensee are combined, or "rolled in," with the costs of the operator's existing pipeline system. The total cost of service for the entire, now-enlarged system is then calculated and spread across all transported volumes, resulting in a single, uniform tariff for all system users, regardless of whether they are served by the new or the legacy infrastructure. This approach is typically applied in regulated environments where the pipeline is considered a utility, with the goal of expanding system-wide capacity for the benefit of a broad customer base. It is often justified for projects deemed to provide general system reinforcement or to meet aggregated future demand, thereby treating the expansion as an integral part of the unified network.

Advantages and Benefits

2.2 The primary advantage of the rolled-in approach is its tariff/rate stability and predictability. For existing shippers, it mitigates the risk of significant tariff "rate shocks"

[7] NATREF, which is located in Sasolburg and protected through the neutrality principle because of its location, is much closer to major markets for refined products that are located in the Gauteng Province. Therefore, the tariff that was set through the Variation Agreement will give NATREF a locational advantage, which will result in unfair discrimination against coastal refineries and impact on inland end-users.

that could occur if new, higher-cost infrastructure were priced separately. This stability is seen as beneficial for long-term energy planning and market certainty.

2.3 Furthermore, it promotes the economic feasibility of new projects by lowering the apparent cost to the specific shippers committing to the new capacity, as the higher costs are subsidized by the broader user base. This can facilitate the financing and development of infrastructure considered to be in the broader public interest, such as projects enhancing regional energy security or supporting a fuel transition, by effectively socializing the costs and benefits across all ratepayers.

Disadvantages and Criticisms

2.4 The rolled-in approach faces significant criticism on grounds of economic efficiency and equity. Stakeholders argue it creates cross-subsidization, where existing shippers pay higher tariffs to subsidize the cost of new infrastructure from which they derive no direct benefit, violating the "user-pays" principle. This can lead to demand distortion by masking the true, higher cost of new capacity, potentially encouraging over-investment in new pipelines while underutilizing existing ones.

2.5 Regulators and economists often criticize the approach for lacking cost causality; the tariff does not reflect the specific cost drivers of serving a particular shipper. This inefficiency can place rolled-in tariff systems at a competitive disadvantage compared to systems with more cost-reflective tariffs, ultimately burdening consumers with potentially higher aggregate costs.

The Incremental Tariff Approach

Description and Application

2.6 The incremental tariff approach, often referred to as the "incremental pricing" or "greenfield" method, isolates the costs of a new pipeline project and allocates them exclusively to the shippers who specifically contract for capacity on that new infrastructure. The tariff is calculated based solely on the cost of service for the new project, without blending it with the costs of any pre-existing systems. This approach is typically applied for market-driven pipeline expansions, where a discrete group of shippers (e.g., LNG facility operators or power plants) require new, dedicated capacity to serve a specific new market or project. It treats the new pipeline as a standalone commercial venture.

Advantages and Benefits

2.7 The core strength of the incremental approach is its economic efficiency and price signals. It adheres strictly to the "user-pays" principle, ensuring that the shippers who benefit from and cause the need for the new investment bear its full cost. This eliminates cross-subsidies and promotes fairness between new and existing shippers. By revealing the true, stand-alone cost of new infrastructure, it provides transparent market signals about the economic viability of proposed projects, ensuring they proceed only if

supported by users willing to pay their full cost. This helps prevent overbuilding and ensures that existing infrastructure is used optimally before new capital is deployed, leading to a more efficient allocation of resources.

Disadvantages and Criticisms

2.8 The main disadvantage of the incremental approach is that it can result in high, project-specific tariffs that may threaten the commercial viability of otherwise beneficial infrastructure. The high cost assigned to a limited number of shippers can be prohibitive, potentially stalling projects that offer broader system or societal benefits (e.g., enhancing supply diversification or reducing emissions). Critics argue it fails to account for the indirect benefits and system synergies that new infrastructure can provide to all network users over time. Furthermore, it introduces greater financial risk and volatility for the project's anchor shippers, who must shoulder the full capital burden, which can increase financing costs and complicate final investment decisions for large-scale energy projects.

The Differentiated (Hybrid) Tariff Approach

Description and Application

2.9 The differentiated tariff approach, also referred to as a "hybrid" or "refined rolled-in" model, represents a combination of the rolled-in and incremental approaches. Under this model, the licensee's total allowable revenue for the system is determined on a rolled-in basis, ensuring full cost recovery across the network. However, this aggregate revenue is then apportioned through differentiated final tariffs that reflect material differences in the cost of service, operational characteristics, and functional use of individual pipelines within the system. This approach is applied in regulated environments where certain pipelines serve distinct markets, have significantly divergent capital or operational cost profiles, or provide specialised services, but where the licensee operates an integrated network with shared overheads and system benefits. It allows for targeted cost-reflectivity where justified, while preserving the stability and equity benefits of averaging for the broader network.

Advantages and Benefits

2.10 The primary advantage of the differentiated approach is its regulatory precision and balance. It enables the regulator to correct acute cross-subsidies and address fairness concerns in specific parts of the network such as where a dedicated, low-cost pipeline subsidises a new, high-cost one without dismantling the entire rolled-in framework. This enhances legal defensibility by demonstrating that tariffs are set with due regard to the factors in Section 28(2) of the Act, including fairness, non-discrimination and the promotion of affordable petroleum products.

2.11 Furthermore, this model preserves system-wide benefits such as tariff predictability, security of supply, and network stability for the majority of users, while

introducing efficient pricing signals where they are most needed. It can support the long-term viability of strategic assets (like a dedicated refinery supply line) by ensuring their tariffs are cost-reflective, thereby preventing economic distortion and potential disinvestment.

Disadvantages and Criticisms

2.12 The main challenge of the differentiated approach is its implementation complexity. It requires clear, objective criteria for determining when differentiation is warranted and for calculating the appropriate differential, which must be transparent and consistently applicable. This can increase regulatory administrative burden and requires robust data from the licensee.

2.13 Critics may also argue that it introduces an element of regulatory discretion that could be perceived as arbitrary if not firmly grounded in verifiable evidence. There is a risk that granting differentiation for one pipeline could lead to claims for similar treatment from other users, potentially eroding the benefits of the rolled-in approach over time. Therefore, its application must be carefully circumscribed and based on materially justifiable grounds.

3. RATIONALE FOR REVIEWING THE ROLLED IN TARIFF APPROACH

3.1 The decision to adopt a rolled-in tariff approach in 2011 was centered on a specific assessment of the pipeline network as an interdependent system and a definitive conclusion that the rolled-in approach best served the public interest. However, the sustained and substantive legal, economic, industry landscape changes and operational challenges necessitate a formal review. This section outlines the core rationale for reviewing the prevailing tariff approach for determining Transnet's pipeline tariffs, detailing how evolving circumstances, persistent stakeholder disputes, and critical assessments of the approach's consequences compel NERSA to review whether the pure rolled-in approach remains fully aligned with the mandates of the Act, principles of regulatory equity, and current economic realities.

Regulatory Need for Reassessment

3.2 The regular review of regulatory methodologies, tariff structures, and associated approaches is essential to ensure they remain fair, competitive, and responsive to prevailing market conditions. In dynamic sectors such as petroleum, periodic reviews are critical to maintain alignment with industry shifts, stakeholder needs, and economic imperatives.

3.3 In the 2022/23 financial year, NERSA resolved to initiate a project to evaluate the viability of the rolled-in tariff approach. This decision was influenced by a regulatory mandate for NERSA to conduct periodic reviews of tariff methodologies, approaches, and related frameworks to ensure that they remain economically efficient, and responsive to

prevailing market and economic developments. Furthermore, key stakeholders such as Sasol Oil, and the Airline Industry Association raised concerns regarding the fairness of the rolled-in tariff approach, indicating that it might not accurately reflect the cost structures and market dynamics.

3.4 In assessing the appropriateness of the rolled-in approach, NERSA considered a number of significant developments within the petroleum sector that have reshaped the underlying assumptions of the rolled-in approach. These developments, which include changes in refinery operations, shifts in supply chain dynamics, and evolving infrastructure utilisation patterns, have introduced new challenges that the existing approach may no longer fully accommodate. It became necessary for NERSA to examine whether the rolled-in approach continues to promote equitable, efficient, and cost-reflective outcomes under these changed conditions. The following section outlines the key sectoral and structural developments that served as catalysts for this review.

Changes in landscape

3.5 South Africa's transition to being a net importer of refined petroleum products driven by the closure or mothballing of several local refineries (Sapref, Engen, and PetroSA Refineries) has significantly altered the supply and demand dynamics within the national petroleum value chain. Historically, Transnet’s pipeline infrastructure, particularly the COP, was designed to facilitate the inland movement of crude oil to support domestic refining operations, such as those at the Natref. With Natref and Astron Energy (Pty) Ltd. (Astron) are the only remaining operational crude oil refineries (Sasol Secunda being a coal to liquid plant), the demand for crude oil transportation has decreased, while the need for transporting finished refined products, particularly from coastal import terminals to inland markets has increased.

3.6 The shift to a net importer status has fundamentally reconfigured the nation's logistics and infrastructure requirements. With the decommissioning of the Durban-Johannesburg Pipeline (DJP) Southern network, a critical artery for moving refined products from the coast to the economic heartland, but also with delivery depots along the route at Ladysmith, Bethlehem, Kroonstad, was no longer available. Some of the volumes to these destinations are now supplied by road and rail.

3.7 In response to this new landscape, the roles and strategies of key industry players have undergone a dramatic transformation. Multi-national oil companies (e.g., Shell, bpSA) and local players (e.g., Engen) have pivoted from being local manufacturers to traders and marketers of imported fuels, focusing on securing reliable supply chains from international sources. Most products for the inland market are imported via Port of Durban.

3.8 The narrative shifts from pure refinery closures to potential re-purposes such as Engen’s Wentworth refinery site being converted to a Terminal. The SAPREF was formerly the largest crude oil refinery in Southern Africa, situated in Durban, until it stopped operations in 2022 following flood damage and was sold to the state-owned Central Energy Fund (CEF) in May 2024 for R1. It now operates as a specialized terminal for

importing fuel. This move solidifies the long-term import dependency model and increases the country's import capacity and threatens security of supply.

3.9 The Astron Energy refinery in Cape Town (formerly Calref) has successfully restarted after a devastating explosion in 2020. More significantly, the company is conducting feasibility studies to repurpose the facility to produce sustainable aviation fuel (SAF), aligning with global decarbonization trends.

3.10 To optimize production output, Sasol Oil constructed a pipeline transporting components/products form its Sasol Synfuels refinery in Secunda to Natref. These volumes previously were transported via the TPL northern network. Sasol Oil Secunda refinery in recent years has also been experiencing quality issues in its coal feedstock, affecting output.

3.11 This environment has also intensified the focus on strategic stockholding and supply security, prompting discussions between government and industry about the need for a mandated strategic stock for refined products to mitigate the risks of this new, refined product import-dependent paradigm.

Termination of the variation agreement (VA)

3.12 Following World War II, South Africa faced growing demand for refined petroleum products, which exceeded the capacity of existing coastal refineries. To strengthen energy security and support regional development, the government sought to establish \ refinery inland, in Sasolburg. However, potential investors, including Total, were initially reluctant due to the higher transport costs and distribution risks associated with inland refining compared to coastal locations. Globally, refineries are typically situated near ports for economic efficiency, making the inland proposal unattractive without financial or contractual assurances.

3.13 To address these concerns, the government introduced the "neutrality solution", a mechanism designed to neutralize the cost disadvantage faced by inland refineries by equalizing transport tariffs between coastal and inland locations. This approach was implemented through various arrangements from the 1960s to the 1980s. In 1991, the Variation Agreement (VA) was introduced, formalizing the neutrality principle by setting a clear formula: increases in the COP tariff would not exceed the average percentage increases of petrol, diesel, and jet fuel tariffs. This agreement ensured cost parity and successfully discouraged Natref from building its own pipeline, committing it instead to continued use of the national pipeline infrastructure.

3.14 The original differential between the COP and white fuel tariffs was set at 21%, based on prevailing yields and infrastructure risks at the time. This was considered necessary due to several factors: the lower historical yields at inland refineries, the inability of inland refineries to pass through cost increases like their coastal counterparts, and their structurally weaker bargaining position in the wholesale market. Inland refiners were more exposed to operational and regulatory risks, had limited access to geographically diverse markets, and were more reliant on local demand.

3.15 The variation agreement was terminated validly and ended on 13 September 2020. Notice of termination was given by Transnet to Sasol Oil and Total in September 2017 in compliance with clause 5 of the variation agreement which provides that "each party shall give the other at least three years notice of any intention to disregard the contents of this letter of agreement subject to the arrangement that a full agreement of conveyance for crude oil is being prepared and that such agreement will embody the contents of this letter and supersede this letter".

3.16 The termination of the Variation Agreement on 13 September 2020 removed the contractual tariff differential that had previously shielded Natref from higher crude oil transport costs. As a result, Natref was now subject to the rolled-in tariff approach without a historical discount.

Litigation by Sasol Oil (Natref) vs Transnet

3.17 The long-standing dispute between Transnet, Sasol Oil, and TotalEnergies South Africa (TotalEnergies) over the Variation Agreement has been the subject of extensive litigation across multiple courts, including the South Gauteng High Court, the Supreme Court of Appeal (SCA), the Commercial Court, and the Constitutional Court.

3.18 The Commercial Court had previously ruled that Transnet was bound by the 1991 variation agreement and could only terminate it through proper notice. Transnet's 2017 termination attempt was challenged by Sasol Oil and TotalEnergies, who argued that the cancellation was procedurally defective.

3.19 However, in a decisive ruling delivered on 16 November 2022, the Constitutional Court upheld Transnet's appeal, finding that the variation agreement was terminable and that it had been validly terminated on 13 September 2020 via a notice in accordance with Clause 5 of the agreement. This effectively removed the variation agreement as a binding framework for pipeline tariff determination going forward.

3.20 Despite this ruling, Sasol Oil and TotalEnergies SA continued to reject the tariffs approved by NERSA from January 2021 onward, insisting instead on VA-linked pricing. This dispute escalated further legal claims and counterclaims.

3.21 Between December 2020 and May 2023, Transnet instituted legal action against Sasol Oil and TotalEnergies in the Johannesburg Commercial Court to recover what it alleged were underpayments totaling more than R1.3 billion.

3.22 In response, Sasol Oil and TotalEnergies filed counterclaims, alleging that Transnet had overcharged for crude transportation by failing to apply the correct variation agreement -linked formula. The matter was heard from 15 April to 3 May 2024 in the High Court of South Africa, Gauteng Division. On 18 June 2024, Judge Wepener ruled in favour of Sasol Oil and TotalEnergies, ordering Transnet to pay:

- R2.126 billion (excluding interest and costs) to TotalEnergies SA, and
- R3.889 billion (excluding interest and costs) to Sasol Oil.

3.23 Transnet filed for leave to appeal on 8 July 2024, with the registrar acknowledging receipt on 12 July 2024.

3.24 Following further negotiations, Transnet and Sasol Oil reached a settlement in their ongoing legal disputes, with Transnet agreeing to a net payment of R4.3 billion (excluding VAT) to Sasol Oil. The agreement was signed on May 18, 2025, and became effective on May 23, 2025. This settlement ends the financial and legal disputes between the parties arising from the Variation Agreement and subsequent tariff differences.

Rise in Multi-Product Pipeline (MPP) Costs

3.25 On 12 September 2007, Transnet applied for a licence (licence number PPL.p.F1/74-75/2007) to construct a 24-inch diameter petroleum product pipeline from Durban to Jameson Park and three 16-inch diameter pipelines as follows: (a) from Jameson Park to Alrode; (b) from Alrode to Langlaagte; and (c) from Kendal to Waltloo, inclusive of accumulator facilities in Durban and Jameson Park. Transnet named this project the New Multi-Product Pipeline (NMPP, which later changed to MPP).

3.26 According to Transnet, long-term projected demand for pipeline capacity and inherent integrity issues with the DJP necessitated the construction of the MPP. On 20 December 2007, NERSA approved Transnet's application for a licence to construct the MPP. The project has been plagued by schedule delays. Consequently, the licence conditions had amended, and the final forecasted cost for completion escalated.

3.27 The following MPP project assets have been completed and have been brought into operation as per notification to NERSA at the time:

a) A 16-inch pipeline from Jameson Park to Alrode (25 May 2011)
b) A 16-inch pipeline from Alrode to Langlaagte (25 May 2011)
c) A 16-inch pipeline from Kendal to Waltloo (30 April 2011)
d) A 24-inch MPP trunkline from Durban to Jameson Park and its 3 associated pump and metering stations (9 January 2012)
e) Close-out on pipelines and pump stations (operationalised on 1 March 2016)
f) Coastal accumulation facility (TM1) in Tightlining mode[8] at Island View Durban (8 August 2017)
g) An inland accumulation facility (TM2) at Jameson Park (operationalised on 15 December 2017)
h) Close-out of Tightlining and TM2 (operationalised on 26 June 2018)
i) Deferred scope (operationalised on 26 June 2018)
j) SAPREF R Tanks (operationalised on 25 May 2023).

3.28 The remaining infrastructure currently under construction as part of the original MPP Phase 1 project scope comprises of:

a) The TM1 Tank farm of the coastal accumulation facility in Island View (forecast to be operationalised on 30 November 2027[9]).

[8] TPL's customers uses their transfer lines to inject directly into the TM1 manifold, by-passing the accumulation tanks.
[9] Estimated forecast date for completion.

3.29 The MPP programme was structured into Phase 1a and Phase 1b. Phase 1a was primarily focused on achieving a multi-product-based operation at the full Phase 1 designed flow rate of 1080 m^3/h, the construction of SAPREF R Tanks and the finalisation of the outstanding land matters. Phase 1b relates to the completion of the coastal terminal accumulator tanks.

3.30 The project was initially projected to cost about R11 137 million and the latest final forecast cost (FFC) of the MPP project (in the 2026/27 tariff application) is R28 217 million[10]. The initial scheduled completion date was the third quarter of 2010, and Transnet's latest projections show that the project will be completed on 30 November 2027. The timelines and cost escalations on the MPP project are highlighted in Table 1 below.

Table 1: MPP actual and FFC by Transnet over the calendar years

Application Period	Total Actual	Total Forecast	Total MPP
	R 'million		
2010	713	11 594	12 307
2011	-	-	-
2012	-	20 000	20 000
2013	13 632	9 768	23 400
2014	11 653	11 723	23 375
2015	11 652	11 748	23 400
2016	11 652	14 559	26 211
2017	11,652	16 889	28 541
2018	11 652	14 559	26 211
2019	13 899	15 778	29 677
2020	24 102	5 229	29 331
2021	24 403	3 361	27 764
2022	24 403	4 210	28 613
2023	24 403	4 210	28 613
2024	24 403	3 941	28 344
2025	24 403	4 116	28 519
2026	24 860	3 357	28 217

3.31 The impact of NERSA's implementation of a rolled-in tariff approach, which restructured the entire tariff system, ensured that tariffs were the same per kilometre for a litre of petroleum product, regardless of the source or destination. This change aimed to move away from the historic "rail taper" tariffs, which had higher per-kilometre costs for shorter distances due to fixed logistical costs at the start and end of the journey. The rolled-in approach aimed at creating a more equitable tariff structure.

3.32 The rolled-in tariff approach does not inherently contribute to increased costs in the MPP. Instead, it is designed to ensure that customers within the same geographic area pay the same tariff based on volume distance, aligning with the current retail price regulation approach used by the Government (DMPR). This approach promotes

[10] This is made up of the current capitalised MPP assets value, SAPREF R Tanks operationalised on 25 May 2023 and TM1 tanks forecast to be operationalised by 30 November 2027 (i.e. the 2026/27 tariff period).

fairness, transparency, and equality among users, as it averages out the costs across all customers, regardless of the specific pipeline route utilized.

3.33 However, the implementation of the rolled-in tariff approach may result in some customers experiencing a tariff increase, while others may see a decrease, depending on the volume weighted average distances and the inclusion of new pipeline assets into the RAB. For example, if a new pipeline with higher costs is added to the system, the average tariff may increase to account for the additional costs. This could be the case with the inclusion of some of the MPP assets into the RAB, which would lead to an increase in tariffs to recover the costs associated with these new assets.

4. DESCRIPTION OF TRANSNET'S PETROLEUM PIPELINE SYSTEM

4.1 Transnet is a diversified transport and logistics group wholly owned by the South African Government. 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). Its company registration number is 1990/000900/06, and its registered head office is at 138 Eloff Street, Braamfontein, Johannesburg. Transnet operates the country's rail network, through its Transnet Freight Rail Division (TFR); ports, through its Transnet National Ports Authority Division (TNPA); petroleum pipelines system, petroleum storage facility and a gas pipeline, through its Transnet Pipelines Division (Transnet Pipelines); and other businesses through divisions such as the Transnet Ports Terminals (TPT) and Transnet Engineering (TE).

4.2 Transnet operates approximately 3,116 km of high-pressure petroleum and gas pipelines and an interconnected storage facility for petroleum products in Tarlton near Krugersdorp. It is the dominant pipeline operator in South Africa and has a de facto monopoly on the pipeline conveyance of petroleum from Durban to inland destinations. The petroleum pipeline system operated by Transnet includes the Durban to Johannesburg Pipeline (DJP), the Avtur Pipeline, COP and the MPP.

The Multi-Product Pipeline – MPP

4.3 This is the largest and most strategic asset in the pipeline network.

a) **Route:** Runs from Island View in the Port of Durban (connected to import terminals) to the inland demand hub of Johannesburg (Alrode).
b) **Length:** Approximately 555km.
c) **Capacity:** Critical for supplying up to 90% of Gauteng's fuel requirements and a significant portion of inland South Africa.
d) **Technology:** A multi-product pipeline, meaning it can transport different types of refined products (Unleaded Petrol (ULP93/95), diesel (50ppm), jet fuel) in sequential batches within the same pipeline. Sophisticated scanning and

separation techniques are used to minimize mixing at the interfaces between products.

e) **Infrastructure:** The original trunkline design includes multiple pumping stations (3 operational currently) and a Coastal Accumulation facility (TM1) and Inland Accumulation facility (TM2), from where it feeds into the northern network (forming a refined products system).

The Crude Oil Pipeline (COP)

4.4 This is a separate, fundamentally different pipeline in terms of design, product, direction of flow, and users (clients).

a) **Primary Function:** Transports crude oil (unrefined petroleum) from Durban to inland refinery (Natref).

b) **Direction of Flow:** The flow of crude oil product is received through the industry owned (multiple owners) single buoy mooring (SBM) loading facility and pumped directly to the Natref Durban Operations Prospecton site (Old Airport). From the Prospecton site, crude oil is pumped to the Island View Fynnlands Site 2 to be further pumped into the Transnet owned Crude Oil Pipeline While the MPP takes finished products inland, the COP takes raw material inland for further processing.

a) **Key Clients & Route:** It primarily serves the Sasolburg-based Natref refinery, which was a joint venture between Sasol and TotalEnergies [since 2025 PraxSA acquired TotalEnergies' shares).

- The main line runs from the Single Buoy Mooring (SBM) offshore of Durban (where crude oil tankers offload) and the Island View crude oil tanks to the Natref refinery in Sasolburg.
- A secondary spur runs from the main COP to the Enref refinery in Wentworth, Durban, KwaZulu-Natal (near Empangeni).

b) **Strategic Importance:** It is the sole supplier of crude oil to the only remaining inland crude refinery in South Africa (Natref). The closure of other coastal refineries (like the Astron refinery) has increased its relative importance, though South Africa's refining landscape has shifted towards imports.

c) **Operation:** By design, it is a single-product pipeline, transporting different grades of crude oil in batches. Its operation is completely separate from the refined white products networks. In 'emergency' situations, it can be reconfigured to transport refined products. Natcos does some scheduling activities, which is then entered into the TPL planning system.

The Avtur Pipeline

4.5 This is a critical piece of infrastructure for national aviation and a key part of the northern network.

a) **Primary Function:** Dedicated to transport **Aviation Turbine Fuel** ('Avtur', also known as Jet A-1).

b) **Why a Dedicated Pipeline?**

- **Product Integrity:** Jet fuel has extremely stringent purity and safety specifications. Transporting it in a dedicated pipeline eliminates any risk of contamination from interface mixing with other products (as can happen in the MPP).
- **Security of Supply:** It guarantees a separate, reliable supply line for the country's busiest airports (King Shaka in Durban and OR Tambo in Johannesburg), which is a matter of national economic security and international aviation compliance.

c) **Route:** Intake at TPL Coalbrook Depot. Runs to the delivery depot at ORTIA and into tank at ACSA ORTIA storage facility.

d) **Operation:** It operates as a single, continuous "batch." Jetfuel ex-Natref is pumped to ORTIA with no other products handled in the line.

e) **Infrastructure:** It has its own pumping station at TPL Coalbrook and is monitored separately, though it is controlled from the same National Control Centre (NCC).

4.6 On 29 March 2007, NERSA issued a licence to Transnet for the operation of a petroleum pipeline system and its associated infrastructure. The conditions of this licence have been amended seven times with the last amendment approved on 31 March 2017. The pipeline system is described in detail in **Annexure B** to the licence conditions and can be summarised as shown in Table 2 and Table 3 below. A diagram of the pipeline system showing the depots, distances and flow directions is attached hereto as **Annexure 1** (noting that it is confidential).

Table 2: Transnet pipeline system details (Southern Section)

	Old DJP	COP	MPP
Licensed to carry	Petroleum Products	Crude	Petroleum Products (refined/'white products')
Intake	Island View	Fynnlands, Island View, (separate from TM1)	Island View – through tightlining
Delivery Points	• Ladysmith* • Bethlehem • Kroonstad	Coalbrook	Jameson Park
Diameter	12 inch	16 inch (Durban to Ingogo) and 18 inch (Ingogo to Coalbrook)	24 inch
Length	634.6 km	587.58 km	556.1 km

*Highlighted text – indicates decommissioned sections.

Table 3: Transnet pipeline system details (Northern Section)

	Old and New Pipelines	Avtur
Licensed to carry	Petroleum Products	Jet Fuel
Intake	Sasolburg (Natref), Jameson Park, and Secunda (Sasol)	Sasolburg (Natref)
Pipelines	• Sasolburg to Alrode (12 inch - old) * • Sasolburg -Klerksdorp (8 inch – old)	Sasolburg – Alrode – Airport (6 inch -old)

	Old and New Pipelines	Avtur
	• Sasolburg – Jameson Park – Kendal (18 inch -old) • Secunda – Kendal (20 inch – old) • Secunda – Kendal (12 inch – old) • Kendal - Witbank (12 inch – old) • Kendal – Waltloo (16 inch – new) • Secunda – Jameson Park (12 inch – old) • Jameson Park – Alrode (16 inch – old) • Jameson Park – Alrode (16 inch – new) • Alrode – Langlaagte – Tarlton (12 inch – old) • Alrode – Langlaagte (16 inch – new) • Tarlton – Rustenburg (8 inch – old) • Alrode – Airport - Elardus Park - Waltloo – Pretoria West (12 inch – old) • Elardus Park – Pretoria West (8 inch – old)	
Delivery Points	• Klerksdorp • Jameson Park • Alrode • Waltloo • Witbank • Langlaagte • Tarlton • Rustenburg • Pretoria West	OR Tambo International Airport
Accumulation Facilities	• Island View - Coastal (TM1) – 210 724m^3 (Petrol, Diesel, and Jet Fuel) – not constructed. • Jameson Park - Inland (TM2) – 201 114m^3 (Petrol, Diesel, and Jet Fuel) • Witbank – 17 373m^3 (Diesel and Petrol) • Alrode - 19 850m^3 (Diesel and Petrol) • Ladysmith – 7 135m^3 (Diesel and Petrol) • Langlaagte – 3 984m^3 (Petrol) • Waltloo – 3 978m^3 (Diesel and Petrol)	None
Intermixture	• Alrode – 3 256m^3 • Bethlehem – 90m^3 • Klerksdorp – 339m^3 • Ladysmith – 2 559m^3 • Langlaagte – 3 257m^3 • Rustenburg – 750m^3 • Sasolburg – 100m^3 • Waltloo – 1 083m^3	None

*Highlighted text – indicates decommissioned sections.

Interchangeability of the different pipelines

Technical

4.7 The interconnected nature of the pipeline systems requires a detailed technical assessment. To accurately map these connection points, NERSA requires current Process Flow Diagrams (PFDs) and Piping and Instrumentation Diagrams (P&IDs). As the owner and operator, Transnet is best positioned to provide this documentation to verify the physical configurations.

4.8 Current information available to NERSA suggests the following:

a) No direct physical connection exists between the 24-inch Multi-Product Pipeline (MPP) and the Crude Oil Pipeline (COP).
b) There is no direct physical link between the COP and the Avtur line.
c) The COP can be connected to the MPP using valves and certain procedures, in the event of an emergency.
d) Scheduling activities are done by Natref and then processed in the TPL order system.
e) Consequently, under normal operational conditions the COP functions as a physically independent pipeline that does not utilize shared infrastructure or equipment.

Transportation of crude and petroleum products

4.9 During normal operations, the COP functions as a dedicated pipeline exclusively for crude oil transportation[11]. These operations are straightforward as they involve a single product grade. Since crude oil requires further refining, quality management requirements during transit are minimal (noting there are different types of crude transported that does create some interface, but this is handled by Natref). Consequently, Transnet does not provide intermixture tanks, handling services, or accumulation facilities for crude oil; such infrastructure is reserved for refined petroleum products, primarily diesel and petrol, and jet fuel at Jameson Park.

4.10 Similarly, the Avtur pipeline is dedicated solely to transporting jet fuel from the Natref refinery to OR Tambo International Airport. Jet fuel is also transported via the MPP to Jameson Park and from Jameson Park to the airport, either directly or via Natref.

4.11 Due to the geographical location of the Natref refinery and the design and normal operational philosophy of the MPP, crude oil is not transported through the MPP. MPP from inception was not designed nor licensed by NERSA to transport crude oil. Furthermore, there is no operational requirement to transport crude oil through the northern section of the Transnet pipeline network.

[11] The SBM, NATCOS storage tanks and transfer pipeline handles and transfers crude to the TPL Fynnlands intake manifold.

4.12 The remaining consideration is whether the COP can transport other petroleum products. While historical evidence shows the COP was used to transport diesel when the Durban-Johannesburg Pipeline (DJP) was constrained to ensure security of inland supply. Post the MPP commissioning in multiproduct operation, petrol/diesel has not been transported. It is a historical need and whilst the MPP utilisation remains at the current level, it is not likely to happen again. This is one of the key "changes" to be considered as part of the review process. NERSA's site visit to Natref confirmed this was an inefficient, emergency measure rather than a standard operation. The refined product transported has to be reprocessed at Natref and recertified before it can be released to the market. Ultimately, the COP's technical capability to carry other products as licensed does not change its primary, intended function as the pipeline dedicated to supplying crude oil to sustain Natref operations.

5. KEY STAKEHOLDER SUBMISSIONS

5.1 On 21 July 2025, NERSA published a Discussion Document on the review of the rolled in tariff approach used in determining Transnet's tariffs for its petroleum pipelines system on its website for public comments. Written comments were received and in addition to the comments received from the stakeholders, NERSA also conducted stakeholder engagements with the following key stakeholders:

a) Sasol Oil (Pty) Ltd.

b) International Air Transport Association (IATA)

c) Transnet SOC Ltd (Transnet Pipelines division)[12]

d) Central Energy Fund (CEF)

e) ENGEN Petroleum (Pty) Ltd

f) Fuel Industry Association of South Africa (FIASA)

g) Shell Downstream South Africa (Pty) Ltd

h) Vopak South Africa Developments (Pty) Ltd

i) Astron Energy (Pty) Ltd

j) Department of Mineral and Petroleum Resources (DMPR)

k) bp Southern Africa (Pty) Ltd

5.2 **Transnet,** technical meeting was held by NERSA with Transnet Pipelines to clarify the operational and physical relationships between the COP and the MPP networks. The key finding was that, while the pipelines are physically connected via valve manifolds at the Colebrook depot, meaning they are not completely independent systems, they are

[12] Transnet Pipelines was engaged by NERSA to confirm the technical operations of the Pipeline System.

operated separately under normal conditions to transport distinct products (crude vs. refined fuels). Transnet confirmed that the historical practice of moving diesel through the COP for emergency supply has not occurred since the full commissioning of the MPP and remains a highly inefficient, last-resort contingency due to complex coordination needs and significant product contamination issues. Furthermore, it was clarified that product losses occur during the refining process, not during transportation in the pipelines.

5.3 **Sasol Oil** Initially opposed the current rolled-in tariff approach, arguing that it contravenes Section 28 of the Act by setting a single tariff for all pipelines instead of individual tariffs as required. Sasol Oil contend that the approach unfairly cross-subsidizes the MPP through COP users, despite significant differences in infrastructure, operational costs, and services provided. Sasol Oil argues that this results in discriminatory and inequitable pricing, harming Natref's sustainability. Sasol Oil propose a refined approach where tariffs are differentiated based on actual product yield, suggesting at least an 11.5% differential between COP and MPP tariffs to reflect cost differences while maintaining some cross-subsidization for affordability.

5.4 **Shell Downstream South Africa (Shell)** acknowledges that the rolled-in approach has helped cushion high tariffs for the MPP investment but has not made pipeline tariffs competitive with road transport, leading to volume losses. Shell support maintaining the rolled-in approach for its simplicity and system-wide view but recommend adapting it to modern supply patterns and regularly benchmarking against other modes of transport. Shell cautions that an incremental tariff model could lead to tariff shocks, reduced pipeline competitiveness, and threaten the viability of the MPP and future capital projects.

5.5 **BP Southern Africa (bpSA)** expresses concern that shifting to an incremental tariff approach could result in a 68% increase in MPP tariffs, diverting volumes to road transport and creating a vicious cycle of rising tariffs and falling pipeline use. bpSA argue this would conflict with national objectives such as reducing road congestion, improving safety, lowering emissions, and ensuring affordable fuel. bpSA recommends a socio-economic impact assessment before any tariff approach change.

5.6 **International Air Transport Association (IATA)** supports the rolled-in tariff approach for promoting inclusivity, security of supply, and supplier competition, which are critical for aviation. They note that rolled-in tariffs help stabilize revenues and support infrastructure development but acknowledge risks such as diluted cost-reflectivity and fairness concerns. IATA suggests implementing safeguards like cross-subsidy caps and transparency measures and supports hybrid models where rolled-in tariffs apply to system-wide benefits and incremental tariffs for project-specific cases.

5.7 **Engen Limited** advocates for retaining the rolled-in tariff approach, citing its legal basis under the Act, constitutional alignment, and support for national strategic objectives such as fuel security, road decongestion, and emission reduction. Engen warns that an

incremental approach would increase costs, shift transport to road, and undermine the MPP's viability. They recommend an independent socio-economic impact study before any changes and emphasize the legal and policy rationale for rolled-in tariffs.

5.8 **Department of Mineral and Petroleum Resources (DMPR)** did not express a preference for either approach but notes that any change will increase petroleum product prices. The department requests ongoing communication with NERSA regarding tariff changes due to their direct impact on fuel pricing and their implementation work.

5.9 **Dr Roderick Crompton** criticized NERSA's discussion document as biased toward Natref's interests, arguing that NERSA has overstepped its regulatory mandate by considering subsidies for Natref through tariff manipulation. The Dr Crompton contends that subsidizing Natref via pipeline tariffs would disproportionately benefit Sasol Oil's Secunda operations at the expense of inland consumers. Dr Crompton asserts that subsidy decisions are policy matters for government, not NERSA, and warns against regulatory capture. Dr Crompton recommends that NERSA focus on its regulatory role and refer any subsidy issues to government.

5.10 **The Fuels Industry Association of South Africa (FIASA)** During stakeholder engagements, FIASA members, including Engen, suggested the commissioning of an independent socio-economic impact assessment that could assist the Energy Regulator in arriving at a more comprehensive and well-informed decision on the tariff approach. In this regard, Engen indicated that such a study could provide additional analytical insight into the broader economic and distributional impacts of potential tariff outcomes. Engen further suggested that, should the Energy Regulator consider commissioning such a study, it may be appropriate for the process to be undertaken in collaboration with FIASA, following engagements between NERSA and FIASA members.

Oral Presentations from the Public Hearing

5.11 On 30 October 2025, NERSA held a public hearing on the review of the rolled in approach used to determine Transnet's pipelines tariff. The hearing, chaired by the Full-Time Regulator Member (FTRM) primarily responsible for Petroleum Pipelines Regulations (PPR).

5.12 The public hearing centred on a contentious debate over the approach for setting tariffs for Transnet's petroleum pipelines, primarily the COP and the MPP. The core issue was whether to use a "rolled-in" tariff for the network or an "incremental" approach. The hearing featured presentations from key stakeholders, followed by internal NERSA deliberations.

Key Stakeholder Presentations

5.13 **Sasol Oil:** Presented a nuanced legal and economic case against the pure rolled-in approach. Sasol Oil argued that NERSA's current pipeline tariff methodology does not legally prescribe a single rolled-in tariff, and that Section 28 of the Act requires a tariff to be set *for a pipeline*, considering material differences in cost, service, and function. They highlighted that the MPP is three times more capital intensive and offers different services than the COP. To address this, Sasol Oil proposed a "refined" or "differentiated rolled-in" approach: using a rolled-in calculation for total system revenue but then differentiating the final tariffs to reflect pipeline-specific realities. Sasol Oil proposed the COP tariff should be at least 11.5% lower than the MPP tariff to ensure fairness and avoid discriminating against their crude-based supply chain.

5.14 Sasol Oil presented a detailed legal, economic, and operational case against the continued application of a pure rolled-in tariff. Their core contention is that the current approach is unlawful, unfair, and economically distortive.

5.15 Sasol argued that Section 28(1) of the Act requires NERSA to set a tariff *for a pipeline*. They asserted that applying a single, system-wide average tariff to fundamentally different pipelines specifically the COP and the MPP violates this mandate. They emphasized that the Act does not prescribe a rolled-in methodology; rather, it requires tariffs to be fair, non-discriminatory, and reflective of the specific service provided. Sasol referenced a High Court judgment that set aside a NERSA tariff decision, fortifying their view that the current approach is legally flawed.

5.16 Sasol Oil highlighted profound disparities between the COP and MPP that justify tariff differentiation. Table 4 below shows the key differences between the COP and the MPP.

Table 4: key differences between the COP and the MPP submitted by Sasol Oil

Feature	COP	MPP
Supply Chain Role	Upstream (supplies crude feedstock to refinery)	Downstream (delivers finished products to market)
Product	Single product (crude oil)	Multiple products (petrol, diesel, jet fuel)
Customers	Single customer (Natref)	Multiple customers
Infrastructure	Accumulation and scheduling owned and paid for by Natref	Accumulation, tightlining, and refractory owned and paid for by Transnet
Operational Complexity	Low – bulk, single-grade slugs	High – complex scheduling, intermixture management, density metering

Feature	COP	MPP
Capital Cost	Low (legacy infrastructure, largely depreciated)	High (new infrastructure, R28.2 billion final forecast cost)

5.17 Sasol Oil further provided detailed information on the complications of transporting white products (e.g., diesel) via the COP:

- **Contamination Risk:** White product conveyed in the COP becomes contaminated with crude oil residues, containing unwanted additives, metals, and other contaminants. The contaminated product requires full reprocessing at Natref.
- **Reprocessing Time:** The estimated time to reprocess contaminated product is **4-6 months**, as the blend-back ratios depend on contaminant properties, concentration levels, and the presence of additives.
- **Historical Instance:** Sasol Oil confirmed **one instance** of diesel conveyance on the COP in late 2017. This was necessitated by a Crude Distillation Unit (CDU) shutdown at Natref, creating an emergency need to meet contractual obligations. The diesel conveyed could not be sold immediately; it required a petrol "header" to clean the pipeline and full re-refining at Natref.
- **Not Feasible for Regular Use:** Sasol Oil stated unequivocally that regular or continuous conveyance of white products on the COP is not feasible from an economic or operational perspective. The pipeline and tankage are not configured for dual (crude and refined) product operation.
- **Legal Implication:** Sasol warned that requiring refined fuel conveyance on the COP would compromise Natref's continued operation and violate **Section 20(f) of the Act**, which requires that there be *"sufficient pipeline capacity for crude oil to enable the uninterrupted operation of the crude oil refinery located at Sasolburg."*

5.18 Sasol Oil submitted that the current rolled-in tariff approach creates a 'Transport Yield Problem', a concept distinct from the refinery's internal 'Refining Process Yield.' Sasol Oil explained that while Natref achieves an 88.5% Refining Process Yield (i.e., 100 litres of crude yields 88.5 litres of white product), the Transport Yield Problem arises because Sasol Oil must pay pipeline tariffs on approximately 113 litres of crude to deliver 100 litres of white product to market. In contrast, an importer using the MPP pays tariffs on only 100 litres of white product.

5.19 Sasol Oil argued that this differential treatment charging the same per-litre tariff for fundamentally different volumes of effective throughput constitutes de facto discrimination against the inland refinery. To resolve the Transport Yield Problem, Sasol proposed an 11.5% tariff differential (COP at 88.5% of MPP), which directly offsets the volume disadvantage created by the refining process yield.

5.20 Sasol Oil does not advocate for a full incremental cost-based model, which it acknowledges would cause severe MPP tariff inflation. Instead, it proposes a hybrid model. NERSA would continue to calculate Transnet's total Allowable Revenue (AR) on a rolled-in basis (complying with Section 28(3)) but would then differentiate the final tariffs for individual pipelines to comply with Section 28(2). Sasol calculates that, based on cost, service, and yield differences, the COP tariff should be at least 11.5% lower than the MPP tariff. This differential is presented as a balanced solution that corrects unfair discrimination while preserving some cross-subsidization to protect consumer affordability and MPP viability.

5.21 Sasol Oil clarified that the 11.5% differential is not a "gain" but a correction of existing prejudice. Benefits to end-users include supporting the long-term sustainability and security of supply from the inland Natref refinery. Sasol Oil firmly rejected the notion that Secunda's coal-to-liquids operations are relevant to the pipeline tariff debate, as Secunda's products are not transported in the COP or MPP.

5.22 **Dr. Roderick Crompton:** Presented an argument in favour of the rolled-in tariff approach. Dr Crompton framed the pipelines as an interdependent network crucial for security of supply, arguing that a rolled-in tariff ensures intergenerational equity given the assets' different lifespans. Dr Crompton strongly opposed the incremental approach, labelling it a hidden subsidy for the Natref refinery and a source of "windfall" profit for Sasol Oil, as Sasol Oil would recover the higher MPP tariff in the regulated fuel price without actually using that pipeline. Dr Crompton also criticized NERSA's prior legal defence and discussion document for containing errors and advised the regulator to appeal the recent court decision that challenged its Rolled-in approach.

5.23 Dr. Crompton's submission was a robust defense of the rolled-in approach, characterizing Sasol Oil's campaign as a quest for an unjustified subsidy that would harm the public interest.

5.24 Dr. Crompton's central argument is that Sasol's entire legal and lobbying effort is an attempt to secure a hidden cross-subsidy for Natref through tariff manipulation, a policy matter he asserts is outside NERSA's regulatory mandate. Dr Crompton argues that subsidizing an individual company, especially one whose major shareholder (Sasol Oil) would also gain a "windfall" at its Secunda operations, is not within the "public interest" as defined by law.

5.25 He challenged Sasol's attempt to decouple the COP from the broader pipeline system. Noting that the COP is physically connected to other pipelines at both ends, he argued it is part of an interdependent network crucial for national security of supply. The rolled-in approach, he contends, ensures intergenerational equity by averaging costs across assets at different lifecycle stages, preventing "cherry-picking" and maintaining stable, predictable tariffs for the system as a whole.

5.26 Dr. Crompton warned that implementing a lower COP tariff would trigger a "vicious cycle" of negative consequences:

a) **Common Carriage Risk:** Other shippers (e.g., diesel importers) would invoke

their legal right to use the lower-cost COP, leading to operational complexities.

b) **MPP Death Spiral:** As volumes shift to the COP, MPP tariffs would have to rise to recover fixed costs, making road transport more competitive, further reducing MPP volumes, and necessitating even higher tariffs.

c) **Consumer Harm:** The ultimate result would be higher fuel prices for inland consumers, contradicting the affordability objective.

5.27 Dr. Crompton urged NERSA to:

a) Appeal the High Court judgment against the rolled-in methodology to clarify its legal standing.

b) Reject any tariff-based cross-subsidy for Natref. If a subsidy is deemed necessary as a matter of industrial policy, the request should be directed to the government, which could implement it via a transparent levy mechanism under the Central Energy Fund Act.

5.28 **Vopak:** Representing a downstream user perspective, implicitly supported the rolled-in approach by arguing against any tariff increase. Vopak emphasized demand-side realities, stating that high pipeline tariffs make road transport more competitive, leading to negative externalities like accidents and road damage. Vopak's core argument was that lower tariffs would increase pipeline volumes, ultimately generating more revenue for Transnet through efficient asset utilization, while promoting safety and security of supply.

Conclusion

5.29 The public hearing revealed a complex regulatory dilemma balancing legal compliance (Section 28), economic principles (cost reflectivity), and public interest goals (affordability, security of supply, network stability). While the pure rolled-in approach has defenders arguing for systemic stability, the legal challenge and Sasol Oil's counterproposal have forced NERSA to seriously consider a hybrid, differentiated model of the rolled-in approach. Sasol accepts that the rolled-in approach can be used to determine Transnet's AR, but then NERSA must consider the relevant differentiation features of the COP to set its tariff (effectively a discount from the rolled-in tariff amount). The regulator's immediate path involves intensive technical, economic and competition analysis, strategic stakeholder engagement, and internal capacity building to construct a legally defensible and economically sound decision that manages the competing interests of pipeline users, refiners, and the South African public.

6. MACRO-ECONOMIC AND SOCIO-ECONOMIC IMPACT

Incremental approach

6.1 Table 5 below shows the different tariffs for the COP, the MPP and the Avtur/Jet Fuel Pipeline based on the information submitted by Transnet in its 2025/26 FY tariff application. Each tariff is calculated based on the allowable revenue (AR) and projected

volumes approved by the Energy Regulator in Transnet's 2025/26 application, ensuring cost recovery while maintaining fairness across the pipeline network.

Table 5: Crude Oil, MPP, and AVTUR tariffs-based Transnet's 2025/26 application

	Crude Oil	MPP	AVTUR
Tariff c/l (incremental)	7.04	* 123.23	3.40
Approved tariff c/l	64.16	** 73.23	72.52
% difference	-89%	68%	-95%

*Alrode tariff based on the incremental approach for the MPP excluding COP and Avtur volumes and AR.
** Currently approved Alrode tariff based on the Rolled in approach for the MPP including COP and Avtur volumes and AR.

6.2 NERSA assessed the economic impact of a significant incremental tariff increase for the Transnet petroleum pipeline from Durban to Alrode for the 2025/26 and 2026/27 financial years. The core objective is to evaluate the macroeconomic and socio-economic consequences of the proposed hikes on indicators including inflation, GDP, employment, household income, government revenue, and the Balance of Payments. The analysis utilises the Leontief Price Model to gauge effects on the aggregate price level and a Partial General Equilibrium model to capture the broader direct, indirect, and induced effects on the economy.

6.3 The pipeline network is a vital component of South Africa's energy infrastructure, supplying about 65% of the petroleum products needed for the inland economy. The pipeline tariff is an input cost that features in the final price of petroleum products, making any increase a matter of significant economic concern. The regulator faces a dilemma: a substantial pipeline tariff increase could negatively impact on the entire economy and hamper efforts to alleviate poverty and unemployment, yet failing to grant a justifiable increase could have even direr consequences for pipeline operations and economic stability.

6.4 For the 2025/26 financial year, the Alrode tariff is proposed to rise by 68.29%, from a rolled-in base of 73.23 cpl to an incremental tariff of 123.24 cpl, a change of 50.01 cpl For the 2026/27 financial year, a 62.48% increase is proposed, from 77.03 cpl to 125.16 cpl, a change of 48.13 cpl This would lead to an estimated increase in the average retail petroleum price of 2.31% in 2025/26 and 2.23% in 2026/27 as shown in table 6 below.

Table 6: **Data used for Calculating the Impact of Durban-to-Alrode Petroleum Pipeline Incremental Tariffs for 2025/26 and 2026/27 Financial Years**

	Incremental Tariffs 2025/26 FY	Incremental Tariffs 2026/27FY
	MPP	MPP
Incremental tariff (cpl)	123.24	125.16
Alrode tariff based on rolled in approach (cpl)	73.23	77.03
Movement/change in Alrode tariff (cpl)	50.01	48.13
Movement/change in Alrode tariff (%)	68.29	62.48
Average Current Retail Petroleum Price (excl. new pipeline tariff) (cpl)	2 163.00	2 163.00
Average Retail Petroleum Price (including new pipeline tariff) (cpl)	2 213.01	2 211.13

% Change in Petrol price (retail price) Due to proposed pipeline tariff increase	**2.31**	**2.23**
% Change in petrol price (ex-factory price, only for purposes of modelling) Due to proposed pipeline tariff increase	**47.80**	**43.74**
Percentage of petroleum uses on the pipeline	**70**	**70**
Forecasted inflation rate (CPI): 2025 - 2027 (%)	**4.30**	**4.60**
Forecasted PPI: 2025 – 2027 (%)	**4.20**	**4.20**

Source: NERSA (2025) own analysis

6.5 The macroeconomic impacts of this incremental tariff scenario are profound and uniformly negative. The inflationary impact is significant. The total CPI is projected to rise by 0.44% in 2025/26 and 0.42% in 2026/27 due to the tariff increase as shown in Table 6. As with the first report, the effect is highly regressive. The CPI for low-income households is expected to increase by 0.48% in 2025/26, compared to 0.39% for high-income households, a difference that translates to the low-income group's cost of living rising by approximately 9% more than that of the high-income group (Table 5, analysis). The PPI is projected to increase by 0.50% and 0.48%, respectively, feeding into higher export prices (increases of 0.51% and 0.49%) and eroding South Africa's international trade competitiveness.

Table 7: Price Effects of Pipeline incremental Tariff (Total Impact)

	Incremental tariffs 2025/26 FY	**Incremental tariffs 2026/27 FY**
	MPP	**MPP**
Incremental tariff (cpl)	**123.24**	**125.16**
Incremental tariff (% increase)	**68.29%**	**62.48%**
CPI: Total	**0.44%**	**0.42%**
CPI: Low Income Group	0.48%	0.46%
CPI: High Income	0.39%	0.37%
PPI	0.50%	0.48%
Exports	0.51%	0.49%

Source: NERSA (2025) own analysis

6.6 The impact on economic growth and investment is severe. GDP is projected to contract by R6.639 million in 2025/26 and R6.390 million in 2026/27 as shown in table 8 below. Capital formation is expected to plummet by R15.468 million and R14.887 million over the two years, as heightened upstream costs for fuel-intensive industries like manufacturing, mining, and transportation erode profitability and deter investment.

Table 8: Macroeconomic Impact on RSA Economy due to the Durban-to-Alrode Petroleum Pipeline Tariff increase for (2025/26 and 2026/27 FY)

Macroeconomic Impact: National	**Incremental Tariffs– 2025/26 FY**	**Incremental Tariffs- 2026/27 FY**
Impact on Gross Domestic Product (R million)	-6,639	-6,390
Impact on capital formation (R million)	-15,468	-14,887

Total impact on employment [job opportunities]	-18,116	-17,435
Skilled impact on employment [job opportunities]	-4,584	-4,412
Semi-skilled impact on employment [job opportunities]	-8,515	-8,195
Unskilled impact on employment [job opportunities]	-5,017	-4,828
Impact on Households (R million)	-4,289	-4,128
Low Income Households (R million)	-682	-656
Medium Income Households (R million)	-1,389	-1,336
High Income Households (R million)	-2,218	-2,135
Fiscal Impact (R million)	-1,882	-1,811
Impact on the Balance of Payments (R million)	-3,382	-3,255

Source: NERSA (2025) own analysis

6.7 It is estimated that there will be a total loss of 18,116 job opportunities in 2025/26 and 17,435 in 2026/27 as shown in table 8 above. Job losses are concentrated among semi-skilled workers (estimated losses of 8,515 and 8,195) and unskilled workers (5,017 and 4,828), which should be a "major concern for decision-makers" in a country with high unemployment. Household income is projected to suffer a massive total decline of R4.289 million in 2025/26 and R4.128 million in 2026/27. Low-income households alone would lose an estimated R682 million and R656 million over the two years, drastically affecting poverty levels and living standards.

6.8 The fiscal and external accounts are also heavily impacted. Government revenue is expected to fall by R1.882 million (2025/26) and R1.811 million (2026/27), with potential knock-on effects for public service budgets. The Balance of Payments is projected to deteriorate by R3.382 million and R3.255 million, respectively, due to worsening trade competitiveness.

6.9 Socio-economically, the proposed hikes would exacerbate South Africa's deep-seated challenges. With a poverty rate estimated at 68% (affecting 44-45 million people) and extreme income inequality, the regressive nature of the tariff increase is a critical flaw. Low-income households, which spend a larger share of their budgets on essentials and transport, would see their real incomes and purchasing power severely eroded. It should be noted that the national minimum wage is already a "poverty wage," and further tariff-driven price increases will "simply drive the country further into poverty."

6.10 Detailing the context of refinery closures (Sapref, Enref, PetroSA) which have reduced local refining capacity by an estimated 63%, increasing import dependency. While demand for most petroleum products is projected to grow from 2025 to 2028 see table 9 below, this raises throughput requirements for Transnet's infrastructure, amplifying operational and maintenance pressures.

Table 9: Projected National demand for Petrol, Diesel, Illuminating Paraffin, Jet Fuel and LPG (Millions of Litres)

Year	Petrol	Illuminating Paraffin	Diesel	Jet Fuel	LPG
Million Litres					
2024	8 763	1 195	11 807	1 754	243

2025	8 920	1 161	12 045	1 822	304
2026	8 964	1 137	12 341	1 895	364
2027	8 971	1 124	12 608	1 961	419
2028	8 984	1 121	12 853	2 022	471

Source: *BER, April 2025*[13] *& Afriforesight, 2025*[14]

Rolled-in approach

6.11 The data and assumptions used for the estimation of the impact of the rolled-in tariff approach (pipeline tariff increases) on the price of petroleum products are depicted in Table 10 below, based on various sources such as the Department of Mineral Resources and Energy (DMRE) database, NERSA, FIASA Annual Report 2023, and Transnet Integrated Report 2023.

Table 10: Data used for Calculating the Impact of Durban-to-Alrode Petroleum Pipeline Tariff increase for 2025/26 and 2026/27 Financial Years

	Scenario 1	Scenario 2	Scenario 3	Scenario 4
	2025/26FY TRANSNET Application	2025/26FY NERSA Determination	2026/27FY TRANSNET Application	2026/27FY NERSA Determination
Proposed Pipeline Tariff (cents per litre)	81.34	75.41	80.76	74.86
Current Pipeline Tariff (cents per litre)	68.00	68.00	81.34	75.41
Change in pipeline tariff (cents per litre)	13.34	7.48	-0.58	-0.24
% Increase in tariff from current to 2026/27 FY	19.61%	11.00%	-0.71%	-0.32%
Average Current Retail Petroleum Price (excl. new pipeline tariff) (cents per litre) (2022/23 FY)	1 974.82	1 974.82	1 974.82	1 974.82
Average Retail Petroleum Price (including new pipeline tariff) (cents per litre) (2023/24 FY)	1 988.15	1 983.35	1 974.24	1 974.28
% Change in Petrol price (retail price) Due to proposed pipeline tariff increase	0.68	0.43	0.03	-0.03
% Change in petrol price (ex-factory price, only for purposes of modelling) Due to proposed pipeline tariff increase	0.91	0.58	-0.04	-0.04
Percentage petroleum that uses pipeline	70	70	70	70

[13] Bureau for Economic Research (BER). (April, 2025). Petrol Scenarios Tables April 2024

[14] Afriforesight. (2024). National Energy Regulator of South Africa – South Africa Petroleum Product Volume Forecasts

Forecasted inflation rate (CPI): 2025 - 2027 (%) *	4.80	4.80	4.80	4.80
Forecasted PPI: 2025 – 2027 (%) **	4.20	4.20	4.20	4.20

Source: NERSA (2024) own analysis

6.12 Further, the estimation of the economic impact covers macroeconomic impact assessment, which contains the Transmission Mechanism of Pipeline Tariff (filter through the economy); impact on Petroleum and Petroleum Products; impact on General Price Level (Inflation); impact on South Africa's International Trade Competitiveness; and impact on macroeconomic aggregates; and possible socio-economic impact.

6.13 The transmission mechanism of a pipeline tariff increase on the South African economy can be described in simplified terms as follows:

6.13.1 The increase in pipeline tariffs will increase the price of petroleum and petroleum products.

6.13.2 This increase will lead to an increase in the general price level.

6.13.3 An increase in South African product prices relative to that of its trading partners will impact negatively on its exports and positively on imports, which translates into a decrease in domestic production; and

6.13.4 Naturally this in turn will have a negative effect on economic growth, job creation and income distribution.

6.14 The pipeline forms part of a transportation network catering for petroleum products of different levels of beneficiation moving on their way to end-users. Therefore, the pipeline tariff forms a pivotal part of the cost build-up of petroleum products that ultimately comes to bear on the final consumer. However, before any deductions are made, it has to be borne in mind that the pipeline tariff constitutes only a relatively small portion of the total cost of the production and distribution of petroleum and petroleum products. Therefore, if the pipeline tariff increases by 1% it cannot be assumed that the petrol price, for example, will increase by 1%. Based on the present study, a 13.34 cents per litre increase in the pipeline tariff in 2025/26FY (Scenario 1: increases from 68.00 to 81.34 cents per litre) will lead to an increase in the retail petroleum price of only 0.68%.

6.15 Although the pipeline tariff constitutes only a small portion of liquid fuel prices, these tariff increases will, in the end, increase the inflation rate. As depicted in the table below, the cost of the consumer basket for the low-income household group will be relatively greater compared to the impact for the high-income household group. This has a significantly greater negative impact on the purchasing power of low-income households' group.

Table 11: The Impact on Inflation Rate Due to a Price Change in Pipeline tariff for (2025-2027) FY

Economic Indicators	Current	Inflation Including Pipeline tariff

	Expectation of Inflation Rate 2025-27	SC1: 2025/26FY TRANSNET Application	SC2: 2025/26FY NERSA Determination	SC3 2026/27FY TRANSNET Application	SC4 2026/27FY NERSA Determination
Proposed Alrode Tariff (cpl)		81.34	75.41	80.76	74.86
CPI: Total (%)	4.80%	4.92%	4.88%	4.79%	4.79%
CPI: Low-income Group (%)	4.80%	4.94%	4.89%	4.79%	4.79%
CPI: High income (%)	4.80%	4.91%	4.87%	4.80%	4.80%
PPI (%)	4.20%	4.34%	4.29%	4.19%	4.19%
Exports Prices (%)	4.80%	4.94%	4.89%	4.79%	4.79%

Source: NERSA (2024) own analysis

6.16 The various levels of inflationary impacts (of the Transnet Tariff Applications scenario of a 19.61% increase or 13.34cpl inflation) as shown in Tables 12 and 13 below, illustrate that:

6.16.1 The low-income household group will be relatively worse off as compared to the high-income household group, for an increase in pipeline tariffs (by 0.130 percentage points for the low-income group and 0.105 percentage for the high-income household group, respectively). This difference in the impact on CPI between low and high-income household groups translates to approximately 25%, which means that the cost of the basket of the low-income group will be 25% higher than the high-income group.

6.16.2 In terms of the price increase interpretation, if the inflation rate is 4.80% and the cost of the basket increases by 0.0119% (Total impact), then the inflation rate will increase to 4.92% after the implementation of the tariff increase. The 0.119% increase seems not that significant, but it contributes to a 2.60% increase in the level of inflation, which is quite noticeable (See Table 12 below).

6.16.3 The overall impact of the increase in petroleum product prices on low-income households (0.130%) is greater than the impact on high-income households (0.105%). This is primarily because low-income households spend a higher proportion of their income on basic food items compared to other goods. Most basic food products are produced by the agriculture sector, which heavily relies on petroleum as an energy source. Additionally, low-income households are more dependent on public transportation, such as buses and taxis, that also use petroleum.

Table 12: Inflationary Impacts for 2025/26 FY (direct, indirect and induced)

Economic Indicator	Direct	Indirect	Direct and Indirect	Induced	Total Impact (Direct, Indirect, and Induced)
CPI: Total (%)	0.016%	0.037%	0.052%	0.067%	0.119%

CPI: Low-income Group (%)	0.017%	0.043%	0.060%	0.070%	0.130%
CPI: High income (%)	0.014%	0.029%	0.043%	0.062%	0.105%
PPI (%)	0.000%	0.064%	0.064%	0.071%	0.135%
Exports (%)	0.000%	0.067%	0.067%	0.071%	0.138%

Source: NERSA (2024) own analysis

Table 13: The Impact on Inflation Rate due to the Durban-to-Alrode Petroleum Pipeline Tariff increase – Scenario 1

Economic Indicator	Current Expectation of Inflation Rate (2025 -2027)	Total Impact (Direct, Indirect, and Induced)	Inflation Including Pipeline tariff	Percentage increase in inflation rate
CPI: Total (%)	4.80%	0.119%	4.92%	2.60%
CPI: Low-income Group (%)	4.80%	0.130%	4.94%	2.84%
CPI: High income (%)	4.80%	0.105%	4.91%	2.29%
PPI (%)	4.20%	0.135%	4.34%	3.36%
Exports Prices (%)	4.80%	0.138%	4.94%	3.01%

Source: NERSA (2024) own analysis.

6.17 It is thus evident that the pipeline tariff represents an input cost that will feature in the prices of a variety of petroleum products and, consequently, in overall price levels in the South African markets. The following aspects of the macroeconomic impacts (of tariff increases based on the rolled-in approach) can be highlighted:

6.17.1 Although it can be argued that the increase of the pipeline tariffs leads to an increase of the Transnet annual revenues, there still exists a strong argument that the increase of the pipeline tariff has an adverse effect on the general price level/inflation. Ultimately an increase on inflation leads to a negative effect on the cost of living (purchasing power), production level and economic growth, among other macroeconomic factors.

6.17.2 In terms of the price effects, it is estimated that upon implementation of the proposed tariff increase in 2025/26 FY, the CPI and the level of inflation will consequently increase. Thus, adversely affecting the general price levels.

6.17.3 The direct, indirect, and induced impacts from tariff increases are relatively higher for the low-income household group as a result of the fact that these household groups spend more on necessity goods and services relative to high income households. Most necessity goods are produced by the agriculture sector that is very reliant on petroleum products as an energy source. Furthermore, low-income households are also much more dependent on public transport (buses and taxis) that use petroleum products as an energy source.

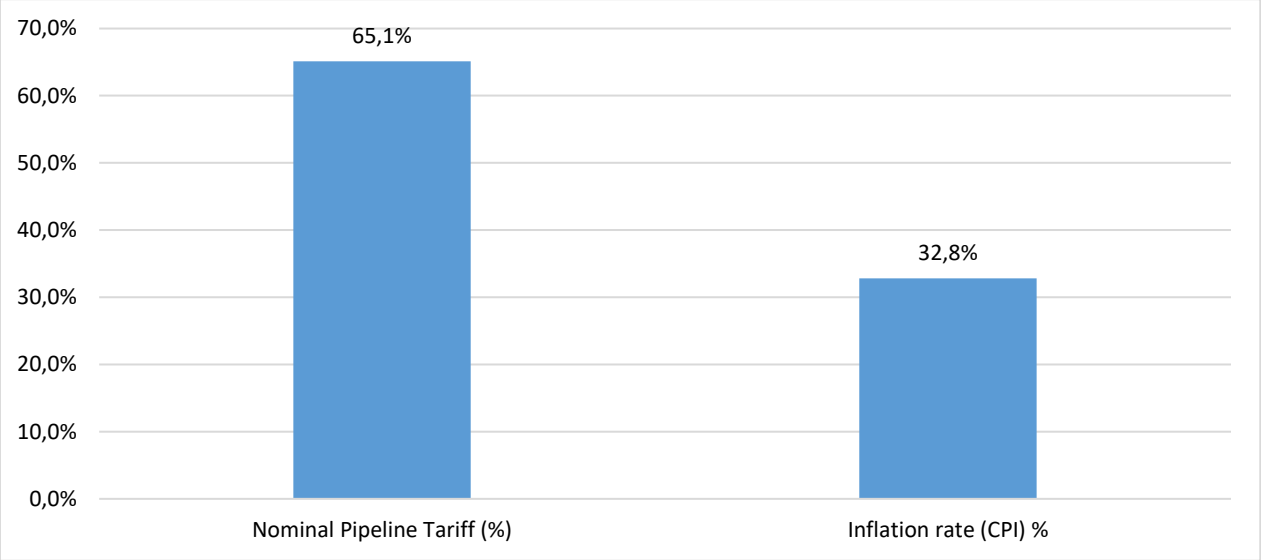
6.17.4 It is also important to note that South Africa's export prices are expected to also increase in response to petroleum pipelines tariff increases. There is no doubt

that export-oriented firms will produce goods and services that are relatively more expensive compared to competitive international products, which will have a negative impact on South Africa's competitive position in international markets.

6.17.5 Amidst South Africa's prevailing labour market slack, characterised by elevated unemployment rates, the anticipated employment losses stemming from the petroleum pipeline tariff hikes considered warrant paramount consideration from policymakers.

6.17.6 Furthermore, it is important that the historical pipeline tariff applications should be considered while making decisions to further increase the tariff. It has been observed that the pipeline tariff increased by 65.1% while the inflation rate (CPI) increased by 32.8% between 2018/19 and 2024/25FY. The fact that the pipeline tariff has increased more than double relative to the inflation can result in a severe impact on the low-income household group in terms of purchasing power and cost of living. The comparative illustration of the aggregate increase in the pipeline tariff versus the aggregate increase in inflation over the last seven years is provided in Figure 1 below.

Figure 1: Aggregated Increase in Pipeline Tariff vs Inflation for the last seven years (2018/19 to 2024/25)



Source: NERSA and SARB Quarterly Bulletin (September 2024).

6.18 In conclusion, NERSA's economic impact assessment explicitly recommends against the full incremental tariff application. It states that while the Energy Regulator acknowledges the pipeline's importance and the negative effects of any increase, the scale of the proposed hikes (68.29% and 62.48%) would have excessively damaging consequences. Instead, it recommended that the Energy Regulator approve a significantly lower tariff: 75.87 cpl for the 2025/26 financial year and 75.99 cpl for the

2026/27 financial year. This alternative is presented as having the "least overall negative impact on the economy," balancing the interests of Transnet with the need to mitigate harm to economic growth, employment, and household welfare, thereby aligning with the requirements of the National Energy Regulator Act for a reasonable balance between customer and investor interests.

7. KEY REGULATORY PRINCIPLES FOR TARIFF SETTING (COST REFLECTIVITY, AFFORDABILITY, NON-DISCRIMINATION, FAIRNESS, ECONOMIC EFFICIENCY, PUBLIC INTEREST)

7.1 In applying the Sections of the Act, it is imperative to consider the broader objectives and principles embedded in the Act, which provide the foundational framework for any tariff determination. These principles must be balanced to achieve a lawful, equitable, and sustainable outcome.

Cost Reflectivity and the User-Pays Principle

7.2 Section 28 of the Act and NERSA's Tariff Methodology establish that tariffs must enable licensees to recover their prudently incurred costs and earn a reasonable return. This foundational principle suggests that where material differences exist in the use of infrastructure and services, cost-reflective tariffs may necessitate a degree of differentiation. The user-pays principle further reinforces this, position that those who derive benefit from, or are the primary cause of, specific infrastructure costs should bear them in a proportionate manner.

7.3 The rolled-in tariff approach was historically adopted to achieve important public interest objectives, including tariff stability and geographic uniformity. However, from a strict cost-reflective perspective, applying a single, uniform tariff to pipelines with vastly different capital intensities and operational profiles can present challenges. This approach, while administratively simple, may not fully align with the user-pays principle, as it averages costs across the entire system rather than attributing them to the specific services and assets used.

Cross-Subsidisation and Economic Fairness

7.4 It is recognised that a measured degree of cross-subsidisation can be a legitimate tool for advancing national objectives, such as ensuring geographic equity or serving a broader public interest. The Act, however, does not endorse cross-subsidisation that is not transparent, justified, or that leads to undue discrimination. The current structure, where the Crude Oil Pipeline (with its significantly lower Regulatory Asset Base and simpler operational profile) is integrated with the high-cost Multi-Product Pipeline infrastructure, invites a necessary examination. The question for the regulator is whether

the current model appropriately balances the goal of geographic price uniformity with the principle of equitable treatment among different classes of pipeline users.

Efficiency of Costs

7.5 The core objective of the Act is to promote the efficient use of petroleum pipelines infrastructure. A tariff structure that does not adequately reflect the underlying cost of service can generate pricing signals that may lead to a sub-optimal allocation of resources or create disincentives for efficient investment over the long term. While the rolled-in approach provided crucial short-term stability, a more differentiated tariff structure could enhance economic efficiency by providing clearer cost signals, encouraging cost discipline, and promoting the optimal use of the entire pipeline network.

Public Interest and Socio-Economic Impact

7.6 The "public interest" is a central tenet of NERSA's mandate. This principle encompasses a range of factors, including:

a) **Affordability for End-Users:** The impact of tariff structures on the final price of petroleum products for consumers and industries, particularly low-income households who are most vulnerable to fuel price increases.
b) **Security of Supply:** Ensuring the continued, reliable operation of critical national infrastructure, such as the MPP and the Natref refinery, which are vital for inland supply stability.
c) **Macro-Economic Stability:** The broader impact on inflation, GDP, and employment, recognising that the inland market accounts for a significant portion of the national economy.

7.7 The regulatory challenge lies in balancing these public interest components. The rolled-in approach has historically prioritised consumer affordability and macro-economic stability. However, this must be weighed against the public interest in maintaining a fair and competitive market, ensuring the long-term sustainability of strategic assets, and upholding the rule of law through a tariff structure that is legally defensible.

7.8 The review of the rolled-in approach is not merely a technical tariff exercise. It is a necessary process to align the tariff methodology with the core principles of the Act. A move towards a more cost-reflective and differentiated structure appears necessary to satisfy the requirements of fairness, non-discrimination, and economic efficiency. The paramount task is to manage this transition in a manner that mitigates negative socio-economic impacts and continues to serve the broader public interest.

Table 14: Comparative Assessment of Tariff Approaches Against Regulatory Principles

Regulatory Principle	Rolled-In Approach	Incremental (Cost-Reflective) Approach	Hybrid Model (Differentiated)
Cost Reflectivity & User-Pays	**Low Alignment.** Applies a uniform, system-wide average cost. Does not link tariffs to the specific cost of providing service on each pipeline, resulting in cross-subsidisation between users.	**High Alignment.** Fully aligns with this principle. Tariffs are based on the attributable costs of each pipeline, ensuring users bear the cost of the specific infrastructure they use.	**Moderate to High Alignment.** Aims to correct major cross-subsidies by differentiating tariffs. Moves significantly closer to cost-reflectivity than the rolled-in model while being more manageable than a full incremental shift.
Economic Fairness & Non-Discrimination	**Promotes Geographic Equity.** Designed to ensure customers in the same destination pay the same tariff, supporting uniform retail pricing. However, this can create disparities between pipeline user groups (e.g., COP vs. MPP).	**Promotes Service-Based Equity.** Treats each pipeline as a distinct service. Ensures users of low-cost infrastructure are not burdened with costs of high-cost infrastructure. May be perceived as inequitable to users of new, essential pipelines.	**Seeks Balanced Equity.** Aims to balance geographic and service-based fairness. Recognizes material differences between pipelines to reduce cross-subsidies, while mitigating severe impacts on any single user group.
Economic Efficiency & Pricing Signals	**Limits Short-Term Price Shocks.** Provides stable, predictable pricing. However, we can distort long-term market signals by underpricing high-cost infrastructure and over-pricing low-cost infrastructure.	**High Economic Efficiency.** Provides accurate, long-term price signals for infrastructure use and investment. Carries a high risk of demand destruction and volume loss for high-cost pipelines in the short term.	**Improves Signal Clarity.** Introduces more efficient pricing signals than the rolled-in approach, encouraging better resource allocation, while managing the transition to avoid immediate demand shocks.
Public Interest: Affordability & Macro-Economic Stability	**High Alignment (Short-Term).** Highly effective at containing end-user fuel prices and mitigating inflationary pressures, which was the primary rationale for its original adoption.	**Low Alignment (Short-Term).** It is likely to result in significant fuel price increases for the inland market, with negative knock-on effects on inflation and economic activity.	**Managed Alignment.** aims to balance the need for tariff reform with affordability concerns. Seeks to implement necessary changes in a phased manner to cushion the macroeconomic impact.
Public Interest: Security of Supply	**High Alignment (for MPP).** By maintaining lower tariffs on the critical MPP, it ensures high utilization and viability of this strategic inland	**High Risk to MPP Viability.** The sharp tariff increase could divert volumes to road transport, potentially undermining the MPP's utilization	**Managed Risk Mitigation.** Designed to protect the MPP's strategic role by setting its tariff at a sustainable level that retains volume

Regulatory Principle	Rolled-In Approach	Incremental (Cost-Reflective) Approach	Hybrid Model (Differentiated)
	supply artery.	and long-term financial sustainability.	while allowing for necessary cost recovery.
Public Interest: Sustainability of Strategic Assets	**Challenges Inland Refining.** The cost structure can place inland refiners like Natref at a competitive disadvantage versus coastal importers, potentially impacting their long-term sustainability.	**Supports Inland Refining.** It would restore a cost-advantage for inland refiners by charging a tariff reflective of the low-cost COP, supporting their competitiveness.	**Strategic Balance.** Explicitly addresses competitive distortions to support the sustainability of key assets like Natref, within a system-wide view.
Legal & Regulatory Defensibility	**Historically Justified by Public Interest.** Its original adoption was justified under a specific macroeconomic context. Current market and legal challenges highlight tensions with cost-reflectivity and non-discrimination principles.	**High Defensibility on Principle.** Legally robust on grounds of cost-reflectivity and non-discrimination. Its weakness lies in the potential severity of its economic consequences.	**Prudent and Balanced.** The most defensible path forward. It addresses legal shortcomings of the rolled-in model by using "objectively justifiable grounds" for differentiation, while demonstrating a managed approach to public interest.

7.9 In summarizing having consideration of Table 14 above:

7.9.1 The **Rolled-In Approach** was a necessary tool at the time, chosen for its undeniable strength in preserving macroeconomic stability and consumer affordability in the face of the high-cost MPP investment. Its primary trade-offs were against long-term cost-reflectivity and creating unintended market distortions.

7.9.2 The **Incremental Approach** is principled and legally sound but represents a high-risk option due to its severe potential to disrupt the market, threaten the MPP's viability, and inflict economic harm—the very issues the rolled-in approach was designed to prevent. A pure Incremental approach is thus not ideal.

7.9.3 The **Hybrid Approach** ("differentiated rolled-in tariff") is recommended as the strategic evolution. It seeks to retain the system-wide stability of the rolled-in philosophy while incorporating the fairness and cost-discipline of the incremental approach. It is not a repudiation of the past decision but a necessary adaptation to current legal, market, and equity realities.

7.10 Table 15 presents a quantitative comparison of the three tariff approaches considered in this review, namely the rolled-in, incremental, and hybrid (differentiated rolled-in) approaches. The table provides a numerical illustration of the tariff outcomes based on the approved Transnet pipeline tariff decision for the 2025/26 and 2026/27 financial years, including the absolute changes and percentage variations relative to the current rolled-in baseline. This quantitative assessment complements the qualitative analysis presented in table 14 by demonstrating the practical implications of each approach in terms of tariff levels and economic impact, thereby enabling a more evidence-based evaluation of the trade-offs associated with each regulatory option.

Table 15: Comparative Assessment of Tariff Approaches of the Transnet pipeline tariff decision for the 2025/26 and 2026/27 FYs

	Transnet tariffs 2025/26 FY	**Transnet tariffs 2026/27 FY**
	MPP	**MPP**
Alrode tariff based on rolled in approach (cpl)	73.23	77.03
Incremental tariff (cpl)	123.24	125.16
Alrode tariff based on 11.5% differential on the COP (cpl)	90.47	95.17

Customer and Market Impact Assessment

7.11 While the quantitative analysis shown in Table 15 above presents the tariff outcomes under the rolled-in, incremental, and hybrid approaches, the implications of these tariff structures extend beyond quantitative price changes to materially affect customer behaviour, market dynamics, and the overall functioning of the petroleum value chain. This section therefore assesses how each tariff approach is likely to impact Transnet's customers including refiners, importers, and downstream distributors as well as broader market outcomes such as demand for pipeline services, modal shifts, and competitive positioning within the industry.

Impact on Customer Affordability and Cost Burden

7.12 The tariff outcomes presented in Table 15 indicate significant differences in the cost burden imposed on customers under each approach. Under the incremental approach, tariffs increase sharply by approximately 62–68%, representing a substantial rise in transportation costs for users of the Multi-Product Pipeline (MPP). Such increases are likely to place considerable financial pressure on importers and marketers, who rely heavily on the MPP to supply inland markets. Given that pipeline costs are a pass-through cost component of fuel pricing, these increases would be transmitted to end consumers, thereby reducing affordability and increasing the overall cost of doing business in fuel-dependent sectors.

7.13 In contrast, the rolled-in approach maintains relatively low and stable tariff levels, thereby minimising the immediate financial burden on customers. However, the uniform tariff structure results in cross-subsidisation, particularly affecting crude oil pipeline (COP) users who effectively bear a share of the higher costs associated with the MPP. While this approach supports affordability in the short term, it introduces inequities in cost allocation that may undermine the competitiveness of certain customer groups, particularly inland refiners.

7.14 The hybrid (differentiated rolled-in) approach moderates these effects by introducing targeted tariff differentiation. As shown in Table 15, the hybrid model results in more moderate tariff increases of approximately 23.54% in 2025/26 and 5.20% in 2026/27. These increases are more likely to be absorbable by customers, thereby reducing the risk of significant price shocks while improving cost alignment between different pipeline users.

Impact on Customer Behaviour and Demand for Pipeline Services

7.15 The magnitude of tariff increases under each approach is expected to influence customer behavior, particularly in terms of demand for pipeline services. Under the incremental approach, the sharp increase in tariffs significantly raises the cost of pipeline transport, thereby incentivising customers to explore alternative logistics options such as road and rail transport. This behavioral response, commonly referred to as demand destruction, could result in reduced volumes transported via the pipeline network, undermining asset utilisation and potentially triggering a negative feedback loop of rising

tariffs and declining throughput. Consequently, the efficacy and viability of the pipeline transport infrastructure will be significantly reduced.

7.16 Under the rolled-in approach, stable and relatively low tariffs provide strong incentives for customers to continue utilising pipeline infrastructure, thereby supporting high utilisation levels and maintaining system efficiency. However, the absence of cost-reflective pricing signals may lead to inefficient usage patterns and suboptimal investment decisions over time.

7.17 The hybrid approach is expected to produce a more balanced behavioral response. By avoiding excessive tariff increases while still introducing some level of cost differentiation, the hybrid model reduces the likelihood of significant demand shifts away from pipeline transport. At the same time, it provides improved pricing signals that encourage more efficient utilisation of infrastructure without imposing prohibitive costs on customers.

Impact on Market Structure and Competition

7.18 The tariff approach adopted also has important implications for competition within the petroleum value chain, particularly between inland refiners and import-based supply chains. Under the rolled-in approach, the averaging of costs across the system places inland refiners at a relative disadvantage, as they effectively subsidise higher-cost infrastructure used predominantly by importers. This may distort competitive dynamics by favouring imported fuel over domestically refined products.

7.19 Conversely, the incremental approach would significantly reduce tariffs for COP users while increasing costs for MPP users, thereby reversing this dynamic and potentially providing a competitive advantage to inland refiners. However, this shift would come at the expense of significantly higher costs for importers and downstream distributors, with broader implications for fuel supply and pricing in inland markets.

7.20 The hybrid approach seeks to balance these competing effects by introducing a differentiated tariff structure that partially corrects cost distortions while maintaining overall system stability. By providing some relief to COP users without imposing excessive costs on MPP users, the hybrid model supports a more level competitive environment and reduces the risk of market imbalances.

Impact on Volumes, Utilisation, and Security of Supply

7.21 A critical aspect of the customer and market impact assessment relates to the expected impact on volumes transported through the pipeline system and the associated implications for security of supply. Under the incremental approach, the significant increase in tariffs is likely to result in reduced pipeline throughput, as customers shift to alternative transport modes or reduce demand. This reduction in volumes could compromise the financial sustainability of the MPP and increase the risk of underutilisation, thereby threatening the long-term viability of this strategic asset.

7.22 Under the rolled-in approach, lower tariffs support stable or growing volumes, thereby ensuring high utilisation of pipeline infrastructure, and supporting security of supply to inland markets. However, this outcome is achieved at the cost of continued cross-subsidisation and reduced cost efficiency.

7.23 The hybrid approach is expected to maintain relatively stable volumes while introducing moderate tariff adjustments. By limiting the extent of tariff increases, it reduces the likelihood of significant modal shifts and preserves pipeline utilisation levels. This is critical for maintaining the role of the pipeline network as the primary and most efficient mode of transporting petroleum products, thereby supporting national objectives related to safety, environmental sustainability, and security of supply.

7.24 The customer and market impact assessment demonstrates that the three tariff approaches have materially different implications for affordability, customer behavior, market dynamics, and system utilisation. The rolled-in approach prioritises affordability and stability but at the expense of fairness and efficiency. The incremental approach achieves cost reflectivity but imposes significant financial burdens on customers, with likely adverse effects on demand, competition, and economic activity. The hybrid approach provides the most balanced outcome, mitigating extreme tariff impacts while improving cost alignment and preserving market stability.

7.25 Accordingly, when assessed from a customer and market perspective, the hybrid (differentiated rolled-in) approach is the most sustainable option, as it supports affordability, maintains pipeline utilisation, promotes fairer cost allocation, and ensures the continued stability of the petroleum supply system.

8. THE LEGAL INTERPRETATION OF A "PIPELINE SYSTEM" VS. INDIVIDUAL PIPELINES

8.1 The distinction between a "pipeline system" and an "individual pipeline" is fundamental to understanding large-scale energy infrastructure like Transnet's pipeline network. An “individual” pipeline is a single, continuous conduit designed to move a specific product from point A to point B. The Avtur Pipeline transporting jet fuel from Natref to ORTIA is an example. It operates as an independent asset with its own operational parameters, maintenance schedule, and hydraulic characteristics. In contrast, a pipeline ‘system’ represents an integrated network of multiple pipelines, storage facilities, pump stations, and control mechanisms working in concert to achieve strategic supply objectives. This system, like Transnet's MPP and northern (refined product) network, functions as a unified whole, where components are interconnected and interdependent, managed from a central control that optimizes flows, balances inventories, and ensures reliability across the entire network. Critical here, is the principle that the product (molecules)

owned by the shippers in the MPP network, is fungible and to manage this, it must be treated as one “system.”

8.2 The operational implications of this distinction are profound. Where an individual pipeline requires monitoring of pressure and batch sequences for that specific line, a pipeline system demands solving complex, multi-variable equations: how to use the entire network including the MPP, Avtur line, storage tanks, and distribution spurs to meet regional demand while accommodating maintenance schedules, mitigating theft impacts, and responding to disruptions. This systemic approach transforms how maintenance is orchestrated, security is managed, and contingencies are planned. One cannot simply shut down parallel pipelines simultaneously; system-wide planning creates coordinated maintenance windows that preserve overall functionality. Similarly, a disruption on one line triggers system-wide responses, leveraging alternative pathways and strategic storage to maintain supply a capability impossible with isolated pipelines.

8.3 This systemic perspective extends to commercial and regulatory frameworks. Individual pipelines have specific tariffs and operational rules, but pipeline systems require holistic economic models that consider cross-subsidization and network effects. The profitable northern network system helps sustain less-utilized components of the national network, as regulators oversee Transnet as a system operator rather than a collection of discrete assets. This approach recognizes that the true value lies not in individual pipes but in their interconnected operation where redundancy, flexibility, and coordinated control create resilience far beyond what any single pipeline could provide. The planned MPP exemplifies this systemic thinking: it represents not merely pipe replacement but strategic augmentation of the entire Durban-Johannesburg corridor to secure national energy infrastructure for decades.

8.4 Ultimately, where individual pipelines represent engineering assets, pipeline systems constitute critical socio-economic lifelines. Transnet operates not merely a collection of pipes but South Africa's integrated circulatory system for liquid fuels a complex network where the whole is vastly more significant than the sum of its parts. This systemic understanding informs everything from national energy security planning and investment decisions to crisis response and regulatory oversight. It reminds us that while pipelines transport products, pipeline systems sustain economies, making their reliable operation not just a technical matter but a national imperative.

9. MARKET AND TECHNICAL ANALYSIS

Market Definition

9.1 The key question from a competition perspective that this section seeks to answer is whether the COP, AVTUR, and the MPP pipelines are close substitutes from a customer or demand-side perspective. In other words, would a customer that uses any of the above-mentioned pipelines to convey its product (i.e., crude oil or refined petroleum products) be indifferent as to which pipeline to use, to the extent that the closeness of

substitutability that exists between them largely in terms of tariff, characteristics, and intended purpose?

9.2 The answer to the above question is critical in determining whether COP, AVTUR and MPP should be treated as distinct pipelines such that a differentiated approach in determining the tariff for each pipeline is not only plausible but rather a requirement insofar as the NERSA (hereafter referred to as "NERSA") petroleum pipeline tariff regulation is concerned.

9.3 As noted above, there are three elements (i.e., tariff, characteristics and intended purpose) that are critical for determining whether COP, AVTUR and MPP do not fall within the same relevant service market – thus providing for a justification to apply a differentiated tariff regulatory treatment for each pipeline. these three elements are borrowed from the market definition principle that is usually applied in competition law cases, particularly cases related to mergers and abuse of dominance – where market definition exercise plays a key role, given the requirement to prove market dominance or power.

9.4 Before analysing each of the three principles, it is useful to first discuss three important concepts, namely closeness of substitutability, complement service and the cellophane fallacy.

Closeness of substitutability

9.5 It is important first to define what is meant by a substitute service. A substitute service is one that reduces a customer's willingness to pay for another service, as both services provide the same level of satisfaction from the customer's perspective.[15] Substitutability includes whether the substitutes or substituted product can technically serve the same purpose, and whether it will do so in a way that is cost effective enough for sufficient customers to consider it a realistic alternative.[16]

9.6 In terms of the closeness of substitutability, services may be substitutes to each other but that does not necessarily mean they are close substitutes. For instance, a bicycle may be a substitute for a car, but these two products are not close substitutes. In as much as they are both modes of transport (the broader intended purpose), they fall short in being close substitutes from a price and characteristics perspective – such that it is possible for a hypothetical monopolist of cars to profitably increase the price of cars above the competitive level in a non-transitory way, say 5 – 10%.[17]

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[15] Harvard Business School Online. (2022, December 6). *Complements vs. substitutes: What's the difference?* HBS Online Blog. https://online.hbs.edu/blog/post/complements-vs-substitutes

[16] Competition & Consumer Authority. (2014, December). *Market definition guidelines*. https://www.competitionauthority.co.bw/sites/default/files/MARKET%20DEFINITION%20GUIDELINES.pdf

[17] Motta, M. (2004). *Competition policy: Theory and practice* (p. 102). Cambridge University Press.

Complement service

9.7 A complement service is a service that increases a customer's willingness to pay for another service – since they are used together rather than substitutes.[18] AVTUR is a classic example, in that it is useless without the COP and MPP, so customers of the COP and MPP are willing to pay more for AVTUR. This is against the backdrop that AVTUR is connected to and depends on both COP and MPP for feedstock (i.e., jet fuel), whereas COP does not rely on MPP. In other words, the existence of the AVTUR pipeline is justified by the presence and/or usage of COP and MPP. However, neither COP nor MPP justifies the usefulness of the other to the extent that they do not complement each other from a customer point of view.

9.8 It is convenient here to exclude AVTUR pipeline from the substitutability assessment, as it is clearly a complement to both MPP and COP rather than a substitute for each of these pipelines.

Cellophane fallacy

9.9 Cellophane fallacy is a reference to a mistake that can be made when assessing market power and the substitutability of products. The relevant market is often determined in part by reference to economic modelling of consumer demand in response to price increases, i.e., observing whether consumers shift to a substitutable product. However, the cellophane fallacy is a warning that consumer demand may shift to a non-substitutable product because the price level is already considerably above competitive levels. For example, if the price of bicycles is already high, and a further price increase brings it closer to the price of cars, bicycle customers may switch to cars, thereby falsely suggesting that cars and bicycles belong to the same relevant product market.

9.10 The cellophane fallacy warns competition and/or regulatory authorities against over-reliance upon current price levels in the market where there might be an undertaking with considerable market power. Authorities should try to ensure that relevant market definitions are determined with reference to competitive price levels so that only substitutable products are included in the relevant market definition.[19]

9.11 Having defined the three key terms, let us now turn to the key market definition principles to the extent that they help determine the closeness of substitution between COP and MPP.

An assessment of the key principles of market definition

Overview

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[18] Harvard Business School Online. (2022, December 6). *Complements vs. substitutes: What's the difference?* HBS Online Blog. https://online.hbs.edu/blog/post/complements-vs-substitutes

[19] LexisNexis UK. (n.d.). *Cellophane fallacy*. In LexisNexis legal glossary. Retrieved 17 November 2025, from https://www.lexisnexis.co.uk/legal/glossary/cellophane-fallacy

9.12 This section provides an assessment of the key principles of market definition to determine the extent to which COP and MPP are close substitutes – from a demand-side (customer) perspective. To conduct this assessment, NERSA relied on submissions from the customers of COP and MPP and internal documents sourced from licensees during applications.

9.13 Before we conduct this assessment, it is important to first define a relevant service market – to understand the purpose served by its principles and how they are applicable to the assessment of the closeness of substitution between COP and MPP.

9.14 A relevant service market comprises all services that are closely substitutable to the customer (i.e., demand-side) by reason of tariff, characteristics and intended purpose[20] – the three key principles against which the closeness of substitutability between COP and MPP will be assessed. Put differently, a relevant service market is defined as the service market or a group of service markets to which Transnet (the monopolist) would be able to successfully apply a small but significant non-transitory increase in tariffs, profitably – owing to a lack of sufficient switching by customers required to render the increase in tariffs unprofitable.

9.15 In simple terms, if Transnet can increase tariffs by, say, 5 – 10% in COP without incurring losses significant enough to render such an increase unprofitable (due to a lack of customers switching to MPP), then COP is a separate service market, as it does not offer the kind of service that COP customers require – thus rendering COP a separate and distinct service from MPP. Similarly, if Transnet can increase tariffs by, say, 5 –10% in MPP without incurring losses significant enough to render such an increase unprofitable (due to a lack of customers switching to COP), then MPP is a separate service market, as it does not offer the type of service that MPP customers require – thus rendering MPP a separate and distinct service from COP.

9.16 Considering the above, the subsections below provide an assessment of substitutability between COP and MPP, from a customer perspective – using the three key market definition principles identified above.

Tariff: closeness of substitution between COP and MPP

9.17 In this section, NERSA assesses the extent to which the COP and MPP are closely substitutable by customers, (pipeline users) from a tariff perspective. Specifically, we consider whether Transnet could profitably raise COP tariffs by approximately 5 – 10% without inducing customers to switch from the COP to the MPP. To evaluate this, NERSA compares the respective tariffs of the two pipelines and applies the SSNIT[21] test to determine whether such an increase would make customers indifferent between the

[20] Competition & Consumer Authority. (2014, December). *Market definition guidelines*. https://www.competitionauthority.co.bw/sites/default/files/MARKET%20DEFINITION%20GUIDELINES.pdf

[21] Small but significant non-transitory increase in tariffs

pipelines on tariff grounds alone. The analysis relies on information submitted by licensees through tariff applications and complaints.

Table 16: Tariff Comparison for COP and MPP

Year	COP (c/l)	MPP (c/l)	Difference (%)	SNNIT (c/l - 5% increase)	SSNIT (c/l - 10% increase)
2020/21	32,57	41,92	22,30	34,20	35,83
2021/22	36,34	47,78	23,94	38,16	39,97
2022/23	37,21	47,90	22,32	39,07	40,93

Source: NERSA licensees

9.18 The tariff comparison between COP and MPP over the 2020/21 to 2022/23 period shows a consistent and substantial price gap between the two pipelines. In each year, COP's tariff remains significantly lower than that of MPP, with the percentage difference ranging between 22% and 24%. Applying a hypothetical tariff increase of 5% and 10% to COP illustrates that, even under these higher tariff scenarios, COP continues to be cheaper than MPP by a considerable margin. For instance, in 2022/23, a 10% increase would raise the COP tariff to 40.93 c/l, which remains well below MPP's tariff of 47.90 c/l. This pattern holds across all three years. The results of this SNNIT assessment indicate that COP customers are unlikely to switch to MPP in response to a 5 – 10% tariff increase, as MPP remains the more expensive option in all cases. Consequently, Transnet could profitably increase tariffs on COP without inducing significant switching behavior. This outcome demonstrates limited demand-side substitutability between COP and MPP, particularly from a tariff perspective thereby supporting the conclusion that COP constitutes a separate and distinct service market.

Characteristics: closeness of substitution between COP and MPP

9.19 In this section, NERSA assesses the extent to which COP and MPP are closely substitutable by reason of characteristics. To conduct this analysis, NERSA relied on submissions from Sasol. The summary of the difference in characteristics between COP and MPP is provided in Table 17 below.

Table 17: Difference between COP and MPP in terms of characteristics

MPP	COP
Provides multiproduct service	Straightforward dedicated pipeline
Services multiple customers	Single customer – Natref
Requires synchronized scheduling and mixing management with Northern network	Single product – crude oil
Includes additional infrastructure components	COP does not require tightlining assets in Durban or a refractory in Tarlton
MPP is downstream of refining and transports product to the market	COP is upstream of refining and supplies feedstock to the refinery
MPP users need only transport 1000 L of	Sasol must transport approximately 1130 L

refined fuel to sell 1000 L of refined fuel.	crude oil to produce 1000 L final product for sale in the market.
To transport 1000 L from Durban to Alrode, it costs R522,05	To transport 1000 L from Durban to Alrode, it costs R584,28

Source: Sasol

9.20 Overall, COP and MPP differ substantially in their operational characteristics, indicating limited substitutability from a customer (pipeline user) perspective. MPP is a multiproduct pipeline serving multiple customers and requires complex scheduling, mixing management, and supporting infrastructure, as it transports refined fuels downstream to the market. In contrast, COP is a dedicated, single-customer crude oil pipeline supplying feedstock upstream to the refinery and does not require the additional infrastructure associated with the MPP system. Moreover, COP users must transport more crude oil (approximately 1,130 litres) to obtain 1,000 litres of final product, whereas MPP users transport only the final refined volume they intend to sell. While the cost of transporting 1,000 litres from Durban to Alrode is higher for COP (R584.28) than for MPP (R522.05), this difference reflects the inherent structural and functional distinctions between crude-oil transport and refined-product transport. Taking together, these characteristics suggest that COP and MPP do not offer comparable services or equivalent services and are therefore not close substitutes.

Intended use or purpose: closeness of substitution between COP and MPP

9.21 In this section, NERSA assesses the extent to which COP and MPP are closely substitutable by reason of intended purpose or use. In service market definition (as in product markets), intended purpose or intended use refers to how consumers use or plan to use a service – the function or end-use that the service is designed or perceived to fulfil. To conduct this assessment, NERSA relied on submissions from Sasol and internal information sourced from licensees such as Transnet. **Figure 2** below shows the Transnet Pipelines network that includes the COP and MPP refined network. This is key to understanding their respective locations, technical constraints and uses.

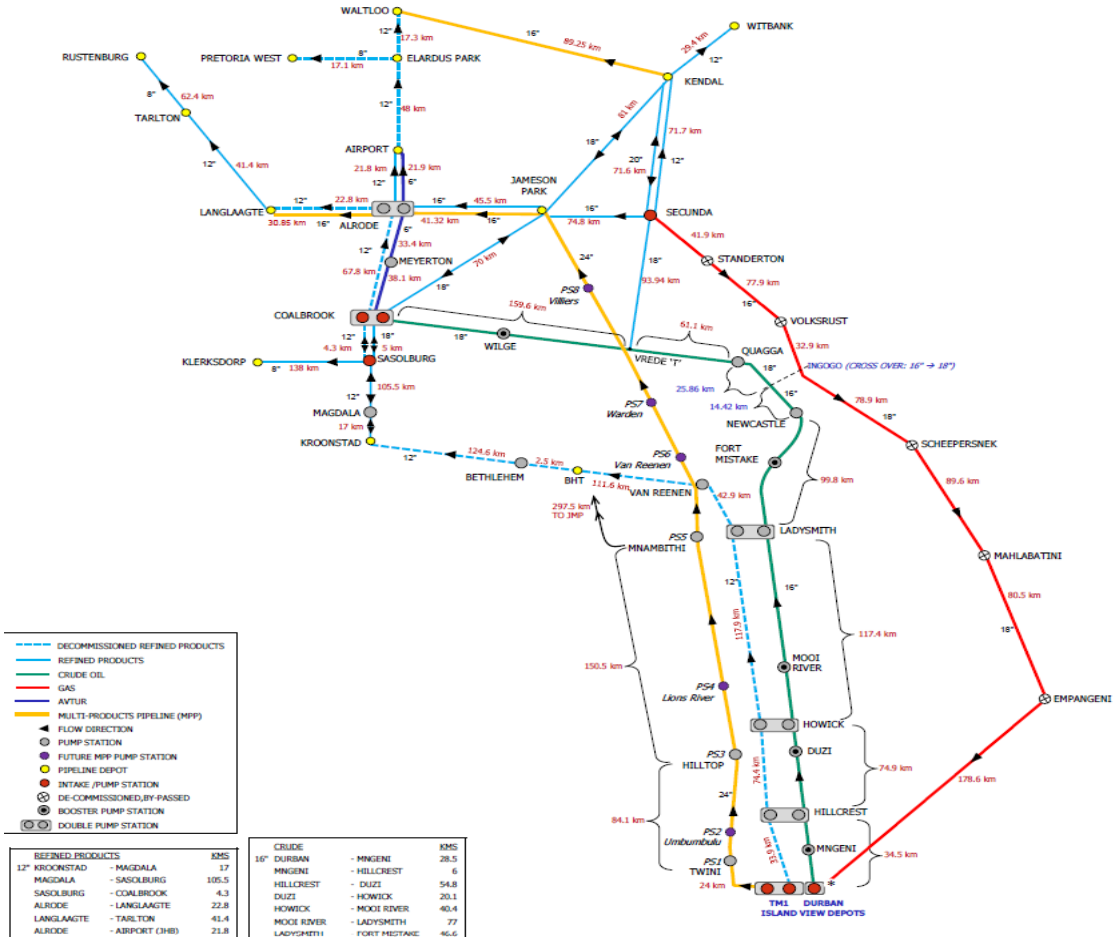

Figure 2: Transnet Petroleum Pipelines Map

Source: Transnet (Confidential)

9.22 Based on the network configuration shown in **Figure 2**, the COP is purpose-built to transport crude oil from Island View to Sasolburg, where the inland refinery is located. Crude oil is an upstream input that Sasol Oil and Prax (which acquired TotalEnergies's refining operations on 1 December 2023)[22] process into a range of refined petroleum products. The COP therefore performs a single-purpose, midstream logistical function, namely supplying crude oil feedstock to the inland refinery.

9.23 In contrast, the MPP is designed to transport multiple refined petroleum products, such as petrol, diesel, and jet fuel, for downstream distribution to various inland markets. Although both pipelines originate at Island View, their endpoints differ entirely: the COP terminates in Sasolburg at the refinery, while the nearest MPP terminal is Alrode, approximately 67 km away, which serves as a distribution hub rather than a refining hub.

9.24 The difference in transported products (crude oil versus refined products), functional role in the value chain (upstream input supply versus downstream product distribution), and physical destination (refinery versus inland depots) reflects a fundamental divergence in

[22] See, https://totalenergies.com/news/press-releases/south-africa-totalenergies-signs-agreement-divest-its-minority-stake-natref

intended purpose. These systems are designed for different customers, different operational needs, and different stages of the supply chain.

9.25 From a market-definition perspective, services with such distinct intended uses are not demand-side substitutes. A customer (pipeline user) requiring crude-oil transport to a refinery cannot switch to a pipeline that carries only refined products to distribution depots, and vice versa. As a result, the COP and MPP do not impose effective competitive constraints on each other under the intended-purpose criterion used in competition analysis.

Conclusion

9.26 Considering the above, the AVTUR pipeline functions as a complementary pipeline service to both the COP and the MPP. Moreover, the COP and MPP are unlikely to be viewed as closely substitutable by customers when assessed against the standard market definition criteria of tariff, characteristics, and intended use. These distinctions indicate that the COP constitutes a separate and distinct pipeline service from the MPP.

10. NERSA CONSIDERATIONS

10.1 During the formal review and public consultation process, NERSA's regulatory team engaged thoroughly and critically with all stakeholder submissions. The key considerations are guided by the principles of fairness, legality, transparency, and the broader public interest mandate. Key concerns emerged across several critical dimensions:

a) **Sasol Oil proposal for 11.5% deferential on the COP**

10.2 An alternative pathway proposed during the consultation is the differentiated or "refined rolled-in" approach. This model retains the rolled-in methodology for calculating the licensee's total allowable revenue across the system but applies differentiated final tariffs to individual pipelines where material differences in cost, service, and function exist. The approach was formally advanced by Sasol Oil, which argued that such differentiation is necessary to comply with Section 28 of the Act, which requires tariffs to be set for a pipeline in a fair and non-discriminatory manner. Specifically, Sasol Oil highlighted that the capital intensive MPP serves a different function than the dedicated COP and proposed that the COP tariff should be at least 11.5% lower than the MPP tariff to correct cross-subsidisation and account for refining yield loss.

10.3 Sasol Oil proposed that the COP tariff should be set at 88.5% of the MPP tariff – an 11.5% discount. This figure was derived from Natref's average Refining Process Yield of 88.5% over the last five years. Sasol clarified the distinction between:

a) **Refining Process Yield:** The technical efficiency of the Natref refinery (output volume / input volume), which is at 88.5% due to substantial investment in complex conversion units (RCD, DHC, Hydrogen Reformer) that coastal refineries do not possess.

b) **Transport Yield Problem:** The comparative pipeline cost disadvantage arising from this yield. Because Sasol Oil must transport approximately 113 litres of crude oil via the COP to produce 100 litres of white product for sale, while an importer using the MPP transports only 100 litres, applying the same per-litre tariff imposes a 13% higher unrecoverable transport cost on Natref.

10.4 The primary advantage of this model is its potential to address acute fairness and legal concerns without triggering the severe macroeconomic impacts of a full incremental shift (which NERSA's modelling shows would cause a 68% MPP tariff increase, 0.44% CPI inflation, and over 18,000 job losses). It preserves the tariff stability and security-of-supply benefits of the rolled-in approach for the broader network, while introducing cost-reflective signals where disparities are most pronounced. This balances the principles of cost causality and systemic equity.

10.5 However, the model introduces implementation complexity, requiring clear, objective criteria for differentiation to avoid perceptions of arbitrariness or a bespoke solution. It also risks establishing a precedent that could lead to multiple claims for special treatment, potentially undermining the simplicity and unity of the tariff system over time. Furthermore, it raises questions about the scope of regulatory authority when factors such as refinery yields are considered in pipeline tariff setting a concern addressed in sub-section (c) below.

10.6 NERSA also considered Sasol Oil's operational evidence regarding the infeasibility of white product conveyance on the COP. Sasol confirmed only one instance of diesel conveyance (late 2017), which was an emergency measure necessitated by a CDU shutdown. The diesel required a petrol "header" to clean the pipeline and took 4-6 months to reprocess at Natref. NERSA accepts that regular dual-product use of the COP is not operationally or economically feasible and would violate Section 20(f) of the PPA, which requires sufficient crude oil pipeline capacity for the uninterrupted operation of the Natref refinery.

b) **Principle of Non-Discrimination and General Applicability**

10.7 A primary concern was the imperative to ensure that any revised tariff approach does not create a perception of being tailor-made for a single entity. NERSA must base any new structure on objective, verifiable, and generalizable criteria that could, in principle, apply to any pipeline user under materially similar circumstances. This is fundamental to preventing a precedent that could trigger a cascade of bespoke tariff claims from other customers, each citing unique operational or economic circumstances.

10.8 NERSA therefore scrutinized whether a differential would be derived from intrinsic pipeline characteristics (cost, service type, function) or from user-specific commercial factors (refinery yield), with the latter posing a higher risk of being deemed discriminatory.

10.9 After careful analysis, NERSA concludes that any differential would have to be grounded in intrinsic pipeline characteristics for the following reasons:

Table 18: Grounds for Natref deferential considered by NERSA

Factor	Intrinsic to Pipeline?	Explanation
Transport Yield Problem	Yes	Arises from the location of the refinery (inland vs coastal) and the function of the pipeline (upstream crude supply vs downstream product delivery). Any inland refinery supplied by a dedicated crude pipeline would face the same problem.
Refining Process Yield	Partially	While the specific 88.5% figure is Natref's operational data, the concept of yield loss is intrinsic to all crude oil refining. Any inland crude refinery would have a yield less than 100%, requiring a differential. The precise percentage may vary, but the principle is generalizable.
Cost of Service	Yes	The COP has a significantly lower Regulatory Asset Base, lower operating costs, and fewer embedded services. These are pipeline-specific, not user-specific.

10.10 NERSA notes that the Supreme Court of Appeal in *Transnet v Total* (2017) held that *"differentiation based on sound reason does not amount to discrimination."* The Transport Yield Problem constitutes a "sound reason" grounded in the physics of refining and the geography of South Africa's energy infrastructure. Accordingly, the proposed differential is not discriminatory but rather a correction of a discriminatory outcome under the pure rolled-in approach.

c) **Regulatory Scope and Jurisdictional Boundaries**

10.11 A pointed and recurring question pertained to the limits of NERSA's regulatory mandate. This questions whether NERSA's authority, which is expressly over pipeline transportation, legitimately extends to accounting for inefficiencies or economic losses incurred in a downstream manufacturing process (i.e., refining). Compensating for refinery yield loss through a pipeline tariff could be seen as indirectly subsidizing an industrial operation, potentially blurring the line between regulating a natural monopoly infrastructure and influencing broader industrial economics a domain typically reserved for fiscal and industrial policy instruments.

10.12 NERSA considered the counterargument raised by Dr. Roderick Crompton that the differential would constitute a "hidden subsidy" for Sasol Oil, including its Secunda coal-to-liquids operations. Sasol Oil rebutted this, stating that Secunda's products are not transported on the COP or MPP, and there is no operational or financial linkage between the pipeline tariff and Secunda.

d) **Technical and Evidentiary Rigour**

10.13 In response to submissions that relied on percentage-based figures, NERSA explicitly requested that these be translated into clear, absolute monetary terms (e.g., cents per litre). Assumptions underlying all calculations, including the impact of varying crude oil slate characteristics (heavy vs. light), refinery utilization rates, and product yield profiles, were required to be fully and transparently disclosed.

10.14 The specific derivation of the 11.5% figure was subjected to intense scrutiny. NERSA notes that this figure was often misinterpreted as a physical "pipeline loss" (i.e., product lost during transportation). Sasol clarified that it is a "yield-adjusted cost recovery" factor i.e., the volume adjustment required to equalise transport costs between Natref and importers.

10.15 Sasol Oil provided the following supporting data, which NERSA has verified to the extent possible:

Table 19: Analytical data provided by Sasol Oil

Metric	Value	Source
Natref White Product Yield (5-year average)	88.5%	Sasol SAP system data (FY22-FY25)
COP volume required to produce 100L white product	113L	Calculated (100 / 0.885)
Current COP tariff (2022/23, c/l)	51.73	NERSA approved tariff schedule
Current MPP trunk tariff (2022/23, c/l)	51.73	NERSA approved tariff schedule
Proposed COP tariff (11.5% discount, c/l)	48.57	Calculated
Proposed MPP tariff (c/l)	54.89	Calculated (revenue-neutral)
Retail petrol price impact (Zone 9c)	+3.16 c/l (+0.18%)	Genesis analysis (**Annexure C**)
Reduction in COP→MPP cross-subsidy	R152 million	Calculated

10.16 NERSA also requested and received confirmation that the 88.5% yield figure is a long-run average and that using an annually adjusted yield would be inappropriate, as it could compensate for temporary operational inefficiencies. Sasol Oil agreed that a fixed percentage (e.g., 88.5%) should be used, subject to review every 3-5 years. NERSA accepts this approach.

10.17 The regulator insists on auditable, primary data to support all inputs. Sasol has committed to sharing Natref's yield information with NERSA as required. NERSA will include a condition in any tariff determination that the differential is contingent on continued verification of the underlying yield data.

e) **Operational Feasibility and Implementation Mechanics**

10.18 The practical application of a differentiated tariff was rigorously examined. NERSA considered three potential implementation mechanisms:

Table 20: Practical application of a differentiated tariff

`	Description	Advantages	Disadvantages
Direct Discount	NERSA sets a lower COP tariff and higher MPP tariff in the tariff schedule.	Transparent; applies to all users.	May create perception of preferential treatment.
Factored Adjustment	NERSA sets a single rolled-in tariff but applies a confidential formula to adjust COP and MPP tariffs.	Preserves simplicity of published schedule.	Lacks transparency; may be legally vulnerable.
Private Conveyance Contract	Transnet and Sasol Oil negotiate a discounted rate under a private contract, within NERSA's maximum tariff.	Flexible; avoids setting precedent.	Raises common carriage concerns (other users may claim right to same discount).

10.19 NERSA has provisionally concluded that the Direct Discount mechanism is the most appropriate, provided that:

- The differential is published transparently in the tariff schedule.
- The rationale is clearly explained in NERSA's reasons for decision.

- The differential is available to any pipeline user who can demonstrate materially similar circumstances (i.e., an inland refinery supplied by a dedicated crude pipeline).

10.20 On the issue of retroactivity, NERSA has concluded that any differentiated tariff will apply prospectively only – i.e., from the effective date of the new tariff determination. This avoids reopening or invalidating historically approved tariffs, which would create extensive, multi-year legal disputes and financial instability for the licensee. The R4.3 billion settlement between Transnet and Sasol Oil (May 2025) resolved all historical claims arising from the Variation Agreement period. Forward-looking tariff setting is now the sole focus.

10.21 NERSA also considered common carriage implications. Section 21 of the PPA prohibits discrimination between customers. If a differentiated COP tariff is published, any other customer could in principle request the same discount. However, NERSA notes that the COP currently has only one user (Natref). Should another user emerge with materially similar circumstances (e.g., a new inland refinery requiring crude oil transport), NERSA would assess whether the same differential applies. This is a manageable risk.

f) **Transparency, Public Perception, and Holistic Impact Assessment**

10.22 Recognizing that the final decision must withstand intense public and legal scrutiny, NERSA recognizes the necessity of absolute transparency. A specific concern was the need to address perceptions of interconnected benefits within corporate groups. This refers to the perceived linkage between proposed pipeline tariff relief and benefits accruing to other group operations (notably, Sasol Oil's Secunda coal-to-liquids plant). This was to dispel any notion that tariff adjustments were being leveraged to confer an indirect advantage on an asset entirely unrelated to the regulated pipeline service. The scrutiny extended to ensuring that all socio-economic impact assessments considered not only the direct effect on the disputing parties but also the broader systemic consequences, including potential impacts on fuel prices, modal shift from pipeline to road, and long-term infrastructure investment signals.

g) **Scrutiny of All Stakeholder Arguments**

10.23 This rigorous analytical framework was applied uniformly to all substantive submissions:

a) **Proponents of the Rolled-In Approach:** Stakeholder arguments regarding system interdependence, security of supply, and macroeconomic stability were tested against evidence of actual physical and operational connectivity, and against updated economic models reflecting the current landscape of refined product imports.

b) **Proponents of a Pure Incremental Approach:** NERSA critically assessed the severe projected impacts on MPP tariffs and inland fuel prices, demanding robust sensitivity analyses and contingency plans to mitigate the risk of a "death spiral" for the MPP.

c) **Hybrid Model Advocates:** Proposals like Sasol Oil's were subjected to the deepest scrutiny on the points above, particularly regarding the objectivity of the differentiation criteria and the management of common carriage implications.

h) **Legal Defensibility and Adherence to Statutory Mandate**

10.24 Throughout the process, every potential regulatory pathway was evaluated against the core mandates of the Petroleum Pipelines Act. NERSA continuously interrogated whether proposals would fulfil the simultaneous requirements of Section 28: enabling cost recovery for the licensee (Section 28(3)) while ensuring tariffs are fair, non-discriminatory, and promote access to affordable petroleum products (Section 28(2)). The legal vulnerability of the existing rolled-in approach, as highlighted by recent litigation, was weighed against the potential legal risks of any new model, particularly concerning the principles of administrative justice.

i) **Conclusion of the Scrutiny Process**

10.25 This multi-faceted and intensive regulatory scrutiny demonstrates NERSA's commitment to a principled, evidence-based, and legally sound decision-making process. By subjecting all stakeholder assertions, not only those of Sasol Oil, to this high level of critical examination, NERSA has ensured that the subsequent recommendations are founded on a comprehensive analysis of legal compliance, economic efficiency, operational practicality, and the overarching public interest.

11. RECOMMENDED DECISION AND RATIONALE

11.1 NERSA as an economic regulator in terms of its mandate, is tasked with reconciling three often-competing imperatives: strict legal compliance with the promulgated tariffs (Section 28 of the Pipelines Act), sound economic principles (primarily cost reflectivity and efficiency), and overarching public interest goals including affordability, security of supply, and systemic network stability. The debate between the pure rolled-in approach and alternatives like Sasol Oil's counterproposal forces a delicate balancing act among these pillars.

11.2 To simultaneously uphold the law, adhere to sound regulatory economics, and safeguard public interests, the regulator must now consider the appropriateness of the three options as outlined under the prevailing circumstances. Furthermore, for the reasons provided, consider a sophisticated hybrid model ('rolled-in, but differentiated approach'). Such a model would likely seek to:

a) **Integrate Cost Reflectivity:** Incorporate legally compliant, cost-reflective principles for direct costs of specific pipelines or routes.
b) **Preserve System Benefits:** Retain some element of shared or "rolled-in" costs for common system-wide functions, overheads, and network resilience that benefit all users, thereby supporting security of supply and stability.
c) **Manage Transitional Equity:** Include mechanisms, such as phased implementation or negotiated settlements, to ensure the shift does not cause undue disruption or destabilize the market in the short term.

11.3 This complex nexus of legal, economic, and public interest factors defines the core regulatory task. The outcome will set a critical precedent for how South Africa funds and manages its critical petroleum logistics infrastructure, determining whether the primary weight falls on unified system solidarity or on economically discrete and legally precise cost allocation.

11.4 Confronted with the irreconcilable tensions of the pure rolled-in approach, a hybrid or differentiated model has emerged as the most viable, albeit complex, solution to NERSA's regulatory dilemma. This model seeks a pragmatic middle ground by disaggregating the monolithic rolled-in average into distinct components, each aligned with a specific regulatory imperative. It is designed to legally satisfy Section 28's requirement for cost-attributable tariffs, uphold economic principles of cost reflectivity, and yet preserve core public interest benefits of a unified system.

11.5 A compelling and pragmatically focused application of the hybrid model involves applying differentiation specifically to the COP tariff, with tailored provisions that account for the unique economic and operational circumstances of the Natref refinery. This targeted approach acknowledges that a uniform, system-wide rolled-in tariff creates acute inequities and inefficiencies for specific, high-value assets and their users, and that a nuanced solution can address these without dismantling the entire system.

The Core Problem: The Natref Anomaly

11.6 The Natref refinery, a strategic national asset, sits at the end of the COP. Under a pure rolled-in tariff:

a) **Natref bears a disproportionate cost:** It pays a tariff averaged across the entire multi-product pipeline network, despite the COP being a dedicated, single-product asset with its own distinct cost profile. This means Natref effectively subsidizes the costs of the newer, multi-product pipelines (like the NMPP) it does not use.

b) **Violates Cost Reflectivity:** The tariff paid by Natref does not reflect the true, lower cost of providing the dedicated crude oil transportation service.

A Differentiated COP Tariff: Structure and Rationale

11.7 The most operationally coherent and politically viable resolution to the Natref dilemma may lie not in dismantling the rolled-in system, but in augmenting it with a carefully crafted, limited exception. This approach maintains the rolled-in approach as the default for the multi-product pipeline network preserving its benefits for systemic stability and security of supply while applying a differentiated, cost-reflective tariff specifically for the COP based on the unique circumstances of the Natref refinery. This creates a two-tiered structure within the rolled-in philosophy.

The Rationale for a "Rolled-In, But Differentiated" Model

11.8 This approach is driven by the recognition that the COP-Natref relationship is a special case that, if left unaddressed, threatens the legitimacy and effectiveness of the entire rolled-in system. The rationale is threefold:

a) **Correcting a Critical Distortion Without Systemic Overhaul:** The pure rolled-in tariff forces Natref to pay for multi-product infrastructure it does not use.

b) **Preserving the Core Rolled-In Benefits:** By keeping the rolled-in approach for the rest of the network (especially for the newer MPP and the integrated product distribution system), NERSA continues to:

- **Ensure stability** through averaged, predictable "postage stamp" tariffs for the vast majority of shipments.
- **Prevent cherry-picking and asset stranding** on the multi-product network by avoiding location-specific tariffs that could destabilize the network.
- **Uphold the public interest** in a unified, resilient national logistics system for refined products.

c) **Legal and Economic Pragmatism:** This approach directly answers the Section 28 legal challenge where it is most acute. It acknowledges that applying a multi-product network average to a dedicated, single-product pipeline serving one refinery is a problematic over-extension of the rolled-in principle. By creating a justified exception, NERSA demonstrates regulatory flexibility and a commitment to reasonable and attributable tariffs where the case is overwhelmingly clear, thereby strengthening the legal defensibility of the rolled-in system overall.

Mechanics of the Differentiated COP Tariff

11.9 Implementing this model involves a clear, two-step calculation:

I. **Calculate the System-Wide Rolled-In Tariff:** Proceed as normal, determining the total allowable revenue for the entire pipeline system (including the COP) and dividing it by total system throughput to establish the standard rolled-in tariff per ton-kilometer.

II. **Calculate a Differentiated COP Tariff:** In parallel, perform a cost-of-service study for the COP in isolation. This would determine the standalone cost of providing the dedicated crude transportation service to Natref, based on the COP's specific regulatory asset base, operational expenses, and a reasonable return.

III. **Apply the differentiation to Natref Shipments:** All crude oil shipments on the COP destined for Natref would be charged at the lower of the two rates: the system-wide Rolled-In Tariff (RIT) or the Differentiated COP Tariff (DCT).

- In practice, the DCT would almost certainly be lower. Natref would therefore pay the DCT.
- All other system users (on the MPP) would continue to pay the standard RIT.

Strategic Implications and Benefits

11.10 This model achieves a complicated balance:

a) **For Natref/Sasol Oil:** It provides immediate and justified relief, eliminating the

punitive cross-subsidy. This makes using the COP the rational economic choice, securing the pipeline's utilization and supporting the refinery's viability.

b) **For System Stability:** It protects the rolled-in principle for the interconnected product network, where its benefits for preventing bypass and ensuring stability are most critical.

c) **For NERSA's Mandate:** It demonstrates a pragmatic and evidence-based regulatory approach. It shows an ability to uphold the public interest goals of the rolled-in system while applying legal and economic precision where a one-size-fits-all model creates an unambiguous and damaging inequity.

11.11 In conclusion, the proposed model of maintaining a rolled-in tariff for the integrated MPP network while applying a differentiated, cost-reflective tariff for the COP represents a principled and proportionate regulatory response. It upholds the core objectives of the rolled-in approach, systemic stability, security of supply, and equitable cost-sharing across the interconnected network while making a legally and economically justified exception for a distinct, dedicated asset.

11.12 This approach recognizes the COP's unique function as a single-product, point-to-point infrastructure serving a single end-user, a circumstance that renders the full application of a MPP network average tariff both economically distortive and legally fragile. By calibrating the tariff for this specific corridor to its attributable costs, the regulator corrects a material inefficiency that actively discourages the use of strategic national infrastructure. Simultaneously, it preserves the benefits of the rolled-in model for the broader, complex web of product pipelines where shared costs and network effects are paramount.

11.13 Therefore, this tailored solution achieves a multi-faceted balance: it enforces cost-reflective pricing where the case is singularly compelling, corrects a market distortion that undermines strategic infrastructure, and actively promotes key socio-economic objectives. It demonstrates regulatory agility in addressing a specific anomaly, thereby strengthening the overall legitimacy, fairness, and effectiveness of the national pipeline tariff regime. By doing so, it reconciles legal compliance and economic efficiency with the imperative to foster a resilient energy sector that supports broader socio-economic stability.

11.14 To assist the Energy Regulator in evaluating the available regulatory pathways, table 21 below provides a high-level comparative assessment of the three primary tariff methodologies under consideration: the existing rolled-in approach, a pure incremental (cost-reflective) approach, and the proposed differentiated rolled-in (hybrid) model. The comparison is structured against key regulatory principles, including legal compliance, economic efficiency, public interest outcomes, and implementation feasibility.

Table 21: Comparison of Rolled-In, Incremental, and Differentiated Rolled-In Approaches

Criteria	Rolled-In Approach (Current)	Incremental Approach	Differentiated Rolled-In Approach (Hybrid Model)
Description	Single uniform tariff applied across entire pipeline network, calculated as total allowable revenue divided by total system volumes.	Separate tariffs for each pipeline, based on specific attributable costs of that pipeline.	Allows revenue determined on rolled-in basis, but final tariffs are differentiated to reflect material differences between pipelines (e.g., COP vs MPP).
Legal Compliance (S28)	**Challenged**. Does not differentiate between materially different pipelines, raising fairness and non-discrimination concerns.	**High**. Strictly cost-reflective per pipeline, aligns with "tariff for a pipeline" requirement.	**Moderate to High**. Addresses S28(2) by differentiating based on objective criteria (cost, service, yield), while retaining rolled in for shared costs.
Cost Reflectivity	**Low**. Averages costs across all assets; users of low-cost pipelines subsidize users of high-cost pipelines.	**Very High**. Tariff reflects actual cost of service for each specific pipeline.	**Moderate to High**. Introduces cost-based differentiation for key pipelines (COP), while maintaining averaging for shared network benefits.
Economic Fairness	Promotes geographic equity (same destination, same price) but creates cross-subsidies between user groups.	Promotes service-based equity—users pay for infrastructure they use—but may penalize users of new, high-cost pipelines.	Seeks balanced equity corrects extreme cross-subsidies (e.g., COP/MPP) while preserving system stability.
Public Interest: Affordability	**High (Short-Term)**. Keeps tariffs lower for high-cost pipelines (MPP), containing fuel price inflation.	**Low**. Likely leads to sharp MPP tariff increases, raising inland fuel prices significantly.	**Managed**. Aims to moderate impact—COP discount partly offset by smaller MPP increase than under full incremental.
Public Interest: Security of Supply	**High for MPP**. Maintains MPP viability through lower tariffs, ensuring inland supply.	**High Risk to MPP**. Sharp tariff hikes could divert volumes to road, undermining MPP utilization.	**Protective**. Seeks to keep MPP tariff at sustainable level, preserving its strategic role.
Macro-Economic Impact	Least negative impact on GDP, employment, and inflation; promotes stability.	Severely negative: high risk of inflation, GDP contraction, job losses, and regressive household impact.	Moderate impact: aims to balance corrective fairness with managed economic disruption.
Implementation Complexity	Simple, stable, predictable.	Complex, requires detailed cost allocation and may cause tariff shock.	Moderately complex; requires clear rules for differentiation but builds on existing rolled-in framework.

Criteria	Rolled-In Approach (Current)	Incremental Approach	Differentiated Rolled-In Approach (Hybrid Model)
Stakeholder Reaction	Supported by most downstream users, importers, aviation; opposed by Natref/Sasol.	Supported by Sasol; opposed by most other stakeholders due to economic impact.	Potential compromise: addresses Sasol's legal grievance while preserving system benefits for broader market.
Long-Term Sustainability	Vulnerable to legal challenge and distortive cross-subsidies; may discourage efficient investment signals.	Economically efficient but risks underutilization of high-cost assets; may destabilize network economics.	Adaptive and legally defensible; introduces efficiency where most needed while preserving system integrity.

IMPLEMENTATION AND WAY FORWARD

11.15 To give effect to the decision to adopt a hybrid tariff model maintaining a rolled-in approach for the integrated multi-product network while applying a differentiated, cost-reflective tariff for the COP the Authority outlines the following implementation process, timelines, and oversight requirements.

11.16 NERSA will initiate a formal regulatory process to amend the prevailing Tariff Approach. This process will involve:

a) **Drafting of the Amended Approach:** NERSA will prepare a detailed draft incorporating the **two-step tariff determination framework** (system-wide rolled-in and asset-specific calculation) and the specific **parameters for differentiation** as resolved.
b) **Consultation with Licensed Operators:** The draft amended approach will be shared with the relevant licensed Pipeline Operator(s) for formal written comment, focusing on the technical and operational feasibility of implementation.
c) **Public Consultation:** In line with principles of transparent regulation, a concise public consultation process will be conducted. This will involve publishing the draft approach for stakeholder comment, with specific attention given to the rationale for the COP differentiation and its impact on system-wide stability and pricing.
d) **Final Review and approval:** Following consideration of stakeholder inputs, the Authority will finalize the amended Tariff Approach as approved by the Energy Regulator.

12. CONCLUSION

12.1 After comprehensive consideration of all facts and evidence available to NERSA, legal arguments, and socio-economic imperatives, NERSA finds that a rigid adherence to a pure rolled-in tariff approach is no longer legally sustainable. The specific circumstances

surrounding the COP and the Natref refinery present a clear and compelling case for a more nuanced regulatory approach.

12.2 The proposed hybrid model maintains the stability of a rolled-in tariff for the integrated MPP network while instituting a differentiated, cost-reflective tariff for the dedicated COP strikes a necessary and defensible balance. This model directly addresses the legal challenge posed by Section 28 of the Act by ensuring tariffs are attributable to the specific service provided where the evidence is unequivocal. It corrects critical market distortion that currently penalizes a strategic national asset, thereby promoting economic efficiency and infrastructure utilization. Critically, it also advances key socio-economic objectives by supporting industrial sustainability, employment, and downstream price moderation.

12.3 The implementation of this refined framework, through the structured process outlined herein, represents a mature evolution of the petroleum pipeline regulation in South Africa. It demonstrates NERSA's commitment to principled, evidence-based decision-making that is both compliant with the law and responsive to the complex realities of the national energy landscape. By adopting this model, NERSA safeguards the resilience of the wider pipeline system while ensuring fairness and efficiency at its most critical nodes, ultimately fulfilling its mandate to regulate in the public interest.