DEPARTMENT OF ENERGY NOTICE 717 OF 2018





The Department of Energy hereby publishes a Discussion Document on the review of the Basic Fuel Price (BFP) structures for petrol, diesel and illuminating paraffin for public comment.

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The deadline for the submission of comments is 31 January 2019.





Version Two

1. Introduction

The Department of Energy has reviewed all the elements of the Basic Fuel Price (BFP) and would like to solicit comments and / or inputs from the stakeholders, namely Oil Companies, Independent Wholesalers, retailers, members of the public and other consumers of petroleum products. The Minister of Energy is empowered by the Petroleum Products Act of 1977, as amended to regulate the prices of Petroleum Products. In South Africa, although the wholesale prices of petrol, diesel and IP are not regulated, the pump prices (Retail prices) of all grades of petrol are regulated and Government also sets a Single Maximum National Retail Price (SMNRP) for illuminating paraffin (IP), a Maximum Retail Price for Liquefied Petroleum Gas (LPG) that is sold to households and a Maximum Refinery Gate Price for LPGas. Historically diesel was consumed largely by the commercial sector as there were very few diesel vehicles in the country at the time. The commercial consumers of diesel would negotiate discounts with the suppliers. This is still the situation today wherein big consumers of diesel enjoy favourable discounts. South Africa is a price taker because it imports crude oil and refined Petroleum Products and is a very small player in the global market. The regulation of the prices of Petroleum Products or some control of the prices is meant to protect the consumers against high prices and to ensure that the markets develop in an orderly manner.

At the time that the BFP was implemented, South Africa was a net exporter of refined petroleum products. Since 2006, there has been a dramatic change in South African fuel supply and demand balances where the emphasis changed South Africa's position from a net exporter to a net importer of refined product. The Basic Fuel Price is based on the Import Parity Pricing (IPP) principle. However, the total amount of imported products versus the total products manufactured locally is not factored into the pricing formula to determine the prices in South Africa. This is because the BFP is a deemed pricing mechanism, which assumes that there are no refineries in South Africa. The reality is that there are four (4) crude refineries and two (2) synthetic fuels refineries (CTL and GTL) in South Africa, which produce about 80% of petroleum products to meet local demand. The balance of 20% is met through importation.

2. Background

Prior to the establishment of a refining industry in South Africa in the early 1950's, regulated fuel prices were based on the import parity price principle and referred to as the In-Bond-Landed-Costs (IBLC). The IBLC-pricing methodology system was used to determine import prices of

fuels. The IBLC-structure consisted of the following:

- ✓ Free-on-Board (FOB) prices of refined petroleum products quoted at refining centres in the Mediterranean area, the Arab Gulf and Singapore. These prices were initially based on 100 percent term prices and later amended to be based on 80 percent spot (cash) and 20 percent term (contractual) prices.
- √ Insurance at an international used tariff;
- ✓ Freight from refining centres to South African import terminals based on the transport tariffs published by the Worldscale Freight Association, together with the application of a monthly Average Freight Rate Assessment (AFRA);
- ✓ Ocean Leakage as per international practice; and
- ✓ South African port charges determined by Transnet.

The IBLC determination mechanism was used since the establishment of a refining industry in South Africa in order to determine the refinery gate prices of regulated fuels. The Basic Fuels Price (BFP) was first introduced in 1999, as an alternative to the IBLC, as a formula to calculate prices of the petroleum products produced by the South African refining industry. The BFP does not take the true production and associated costs of refining locally but, rather takes the view of what the alternative costs would be to import refined product into South Africa, thereby establishing a deemed import parity price, ie. as if there were no refining capacity in South Africa. The BFP is a deemed import parity price used as a benchmark to determine domestic fuel prices.

In 2004 a revised BFP formula was implemented to reflect a "true import parity price." The major changes were:

- ✓ The FOB-values of products were based on the **spot** prices (100%) of products quoted at refineries in the MED, the Arab Gulf and Singapore, and the inclusion of the following items, namely:
 - Demurrage;
 - Stock costs; and
 - · Stock-financing.

The current composition of the BFP is as follows:

- ✓ Free-on-Board value / Reference Markets;
- ✓ Freight;

- √ Insurance;
- ✓ Ocean Leakage / Evaporation;
- ✓ Cargo dues;
- ✓ Demurrage;
- ✓ Stock-holding costs; and
- Stock financing costs.

These elements are discussed below and in some cases a proposal to adjust them is made as a basis for inputs.

3. Reference Markets

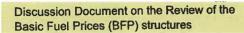
Although South Africa was a net exporter of fuels prior to 2006, from time to time fuels were imported to supplement local supply due to local refinery shutdowns. The Reference Markets are referred to as big refining centres which have huge storage facilities to supply the world with petroleum products. These centres are characterised by huge volumes of trading activities on a daily basis.

3.1 Current BFP position

Taking cognisance of the source of these imports, the reference markets used for the BFP for petrol and illuminating paraffin is currently based on the Mediterranean area (50% MED) and Singapore (50% Sing) and that of middle distillates (diesel and illuminating paraffin) on the MED (50%) and the Arab Gulf (50% AG).

3.2 New proposed position by the Department

Based on the actual import data from the South African Revenue Services (SARS), for 2010-2016, the DOE recommends that the reference markets be revised as follows: 70% FOB Singapore and 30% FOB Arab Gulf for (i) middle distillates (diesel and illuminating paraffin) and 60% FOB Singapore and 40% FOB Mediterranean for (ii) petrol. These combinations and weightings imply that the Mediterranean would no longer be a Reference market for diesel, thereby nullifying concerns relating to the absence of quotations for appropriate sulphur grades there. African markets and other markets are not liquid enough (limited trading



takes place), and also use the same international benchmarks to index their prices. For example, Mozambique uses AG to index prices for all products except petrol, in which case it uses the Mediterranean index and India uses the Singapore as a benchmark for the diesel price.

4. Free on Board value

The Free on Board (FOB) is the price of petroleum products on board the vessel and ready to depart. It is loosely referred to as the prices of petroleum products in the international markets in the fuel price media statements. FOB prices of refined petroleum products quoted at refining centres in the Mediterranean area, the Arab Gulf, Singapore and other refining centres. These prices were initially based on 100 percent term prices and later amended to be based on 80 percent spot (cash) and 20 percent term (contractual) prices.

5. Foreign exchange risk

Internationally petroleum products are traded in US Dollars. Similarly, crude oil is traded in US Dollars too. The timeframe between the deemed exchange rate that the BFP follows and the exchange rate refineries are exposed to when they have to import petroleum products could be many days apart. The current volatility between the US Dollar and other world currencies are ever fluctuating. This risk will remain a factor in the BFP and ultimately the pump price calculations in South Africa.

6. Freight

The freight component of the BFP formula is made-up of three elements, namely:

- ✓ Worldscale Flat Rate;
- ✓ Average Freight Rate Assessment (AFRA); and
- ✓ A 15% premium added to the AFRA rate

The Worldscale and AFRA rates are sourced from independent publications and are a reasonable proxi of rates applicable to South African ports. The Worldscale freight rate is adjusted annually in January and the monthly AFRA information is obtained from the London

Tanker Broker's Panel. Platts also publishes the freight rates as an independent source.

The size of vessels which can off-load product at local harbour facilities is restricted and, therefore, the Working Rules to administer the Basic Fuels Price (BFP) allows for fuels to be transported from external refining centres to South African ports in Medium Range (MR) vessels [39,999 Dead Weight Tonne (DWT)]. It is furthermore assumed that the cargoes will be loaded at the same port and combination cargoes would be delivered fully utilising the vessel's loading capacity, thus benefiting from economies of scale. The current change in global supply and demand demographics of the different products necessitates dedicated vessels per product and economies of scale.

The 15% premium on freight could not be justified during the investigations and discussions with international pricing, namely Platts and Argus. The freight rate includes all the costs associated with transporting products from the international markets to their respective destinations. The Department recommends that **the 15% premium should be removed** from the freight rate and actual Freight costs be obtained from the relevant international pricing agencies.

7. Insurance

The insurance cost is currently included in the calculations of the Basic Fuel Prices because, of the risk involved in transporting the different petroleum products from the international markets to the different destinations. Therefore, the department recommends that insurance cost should continue to be included in the BFP calculations. *The status quo should remain.*

8. Ocean Loss / Evaporation

Some hydrocarbons molecules are lost during the transportation of petroleum products due to evaporation. The advancement in technology has reduced evaporation or ocean loss significantly. The Gibson Shipbrokers have recommended that evaporation should be about 0.1%. The BFP Working Rules make provision for 0.3% ocean loss currently. The Department recommends that evaporation or ocean loss *be reduced from 0.3% to 0.1%* as recommended by Gibson Shipbrokers.

9. Cargo Dues

The tariff for the utilisation of local harbour facilities when fuel products are discharged from vessels are determined by the National Ports Authority of South Africa and the Department incorporates the latest applicable tariff in the Basic Fuel Price calculations. Therefore, the Department recommends that cargo dues continue to be included in the BFP calculations using the tariff published by National Port Authority of South Africa. *The status quo should remain.*

10. Demurrage

The demurrage period, outside the responsibility of the Oil Company or importer of petroleum products, is 3 days in the current Basic Fuel Price calculations. The Department obtained data from the Transnet National Port Authority (TNPA) which indicated that the average demurrage is 1.5 days to dock or berth and offload petroleum products at the Durban Port. However, it may take longer than 3 days during adverse weather conditions. The BFP Working Rules make provision for the recovery of demurrage costs up to 3 days. The Department recommends that the demurrage days should *be reduced from 3 to 2 days* based on the information from the Transnet National Port Authority which shows that it takes, on average, 1.5 days to dock and offload petroleum products vessels at their harbours.

11. Coastal Storage Stockholding Costs

The coastal storage is one of the deemed elements of the BFP because, the majority of the importers utilise their tankage within the refineries and not stand alone storage facilities. The only exception is in Island View in Durban, where most of the storage tanks are owned by local oil companies, exceptions include storage facilities owned by Island View Storage and VOPAK who primarily serve the chemical industry. However, they do offer limited storage to the local oil industry.

11.1 Current BFP position

Currently the Basic Fuel Price formula caters for 25 days storage and none of the refiners keep stock for 25 days because, it is in their interest to get the products into the market as quickly as possible. It is very unlikely that the Independent Wholesalers (IW) would keep products for 25

days. In fact, none of the oil companies have coastal storage except the storage tanks that are integrated to their refineries. This item was included in the BFP formula because, it is a deemed pricing mechanism which assumes that all the petroleum products that are consumed in South Africa are imported and, therefore, would require storage at the harbour. In fact, it was not part on the IBLC formula that was replaced by the BFP.

11.2 New proposed position by the Department

The Department recommends that the coastal storage element should **be reduced from 25 days to between 10-15 days** based on the fact that oil companies normally keep commercial stock of petroleum products that would last for 10-15days during unplanned shutdowns. The actual number of days will be determined once the Department has obtained submissions from the stakeholders.

12. Stock Financing Costs

Most of the Oil Companies obtain financing at an interest rate below the prevailing prime rate, ie. at prime rate minus 2. The Department recommends this element should be retained in line with 11.2 above.

13. Conclusion

The Department had engagements with SAPIA members, Deputy Harbour Master, Platts, Argus and Thompson Reuters, as part of the investigations. It is envisaged that the revised BFP formula will be implemented in 2019 after extensive consultation with all the stakeholders. The Department will consolidate all the comments and / or inputs from all the stakeholders and conduct a workshop before finalising its position on the BFP review. The Department is of the view that the import parity principle should be maintained for imported petroleum products but, the BFP should be un-deemed to reflect the actual cost of landing products at South African ports.