

IN THE COMPETITION TRIBUNAL OF SOUTH AFRICA

CASE NO: 101/LM/Dec04

In the large merger between:

SASOL LIMITED

Primary Acquiring Firms

ENGEN LIMITED

PETRONAS INTERNATIONAL CORPORATION LIMITED

And

SASOL OIL (PTY) LTD

Primary Target Firms

ENGEN LTD

With the following parties intervening:

BP SOUTHERN AFRICA (PTY) LTD

First Intervening Party

SHELL SOUTHERN AFRICA ENERGY (PTY) LTD and

SHELL SOUTHERN AFRICA MARKETING (PTY) LTD Second Intervening Party

CHEVRON SOUTH AFRICA (PTY) LIMITED Third Intervening Party

TOTAL SOUTH AFRICA (PTY) LTD Fourth Intervening Party

MASANA PETROLEUM SOLUTIONS (PTY) LTD Fifth Intervening Party

REASONS FOR DECISION

<u>IN THE COMPETITION TRIBUNAL OF SOUTH AFRICA.....</u>	1
<u>SASOL LIMITED Primary Acquiring Firms.....</u>	1
<u>ENGEN LIMITED</u>	1
<u>SASOL OIL (PTY) LTD Primary Target Firms</u>	1
<u>IN THE COMPETITION TRIBUNAL OF SOUTH AFRICA</u>	7
<u>SASOL LIMITED Primary Acquiring Firms</u>	7
<u>ENGEN LIMITED</u>	7
<u>SASOL OIL (PTY) LTD Primary Target Firms</u>	7
<u>Order 7</u>	
<u>The Transaction</u>	8
<u>3.The current ownership structure of the various parties is depicted in the diagram below:</u>	8
<u>6.The post merger ownership structure is depicted in the diagram below:</u>	9
The Merging Parties	12
Sasol Limited.....	12
PICL	16
Engen	16
Empowerment parties	17
The Intervening parties.....	17
BP.....	18
Caltex	18
Shell	18
TOTAL	18
Masana	18
Department of Minerals and Energy.....	19
The Hearings	20
Refining And Marketing White Fuels In South Africa – The Background	
22	
Introduction.....	22
The development of white fuel production capacity	23
Public Regulation	31
<u>61.The regulated prices are based upon import parity.</u>	31
The Development of Logistics Capacity.....	36
The Components Supply Agreement	46
Summary and Conclusion	54

Rationale For The Transaction.....	57
The counter factual – independent entry by Sasol into the retail market	65
The Relevant Markets 71	
The relevant product markets and market shares.....	71
<u>Downstream Sales of Petroleum Products in South Africa 2004.....</u>	<u>74</u>
The relevant geographic market and market shares.....	75
<u>Province.....</u>	<u>82</u>
<u>Uhambo 82</u>	
<u>Uhambo 83</u>	
<u>Uhambo 83</u>	
The Competition Analysis 85	
Introduction.....	85
Foreclosure – profitability and credibility 93	
<u>Market share.....</u>	<u>99</u>
<u>Diesel retail sales 99</u>	
<u>Prioritisation of transport 99</u>	
Rates of growth in the demand for white fuel products.....	106
Logistics – pipeline, rail and road.....	110
Introduction.....	110
Diesel and the Crude Oil Pipeline 117	
Rail and Road Logistics 140	
<u>(d) Driver capacity.....</u>	<u>150</u>
Road and Rail Logistics – conclusions.....	160
<u>The expansion of capacity in the DJP – the limits to foreclosure.....</u>	<u>161</u>
Expanding the DJP.....	163
De-bottlenecking the northern DJP 169	
Strategic Responses to Foreclosure – prioritisation and retaliation.....	173
Prioritisation.....	174
Retaliation 182	
<u>Owned.....</u>	<u>182</u>
Foreclosure – summary and conclusions 185	
A Substantial Lessening of Competition – our findings 190	
A substantial lessening of competition in the downstream market.....	191
A substantial lessening of competition in the upstream market 198	
Cartelisation and the fuel markets 203	

Efficiencies.....205

Public Interest 211

Remedies 212

A brief summary and conclusion 223

APPENDIX A 231

Competition Commission's Conditions 231

The following conditions shall apply until a new petroleum products pipeline from Durban to Johannesburg to Tshwane has been constructed and makes available to OOCs a transportation infrastructure capable of carrying their shortfall volumes: 231

1. Subject to 3 below, the merged entity shall, on written request by any OOC, and on terms that are commercially, financially and technically reasonable, supply such OOC with such shortfall volumes or part thereof as may be requested. 231

2. Without derogating from 1 above, the selling price to be charged by the merged entity for any such supply shall not— 231

3. In the event of the merged entity being unable to supply the full volumes of refined petroleum products requested by the OOCs as contemplated in 1 above, as well as the volumes required by itself and its subsidiaries and associated entities, the merged entity shall reduce its supply of each affected product to each such OOC and to itself and its subsidiaries and associated entities pro rata to the volumes of such product supplied to each such OOC and to itself and its subsidiary and associated entities during the preceding three months. 232

4. Upon the written request of any OOC aggrieved by any alleged specific failure or refusal of the merged entity to comply with the above conditions, the merged entity — in the event that it does not admit the alleged failure or refusal and remedy the same forthwith — shall, within ten days of the request, offer to that OOC in writing an expeditious arbitration procedure on reasonable terms for the determination of the dispute, and for the making of any consequent award to ensure compliance, which procedure shall be binding on the merged entity and on that OOC upon acceptance of the offer of arbitration in writing by the latter. While any dispute remains subject to arbitration as above, the merged entity shall, if the aggrieved OOC so requires, and subject to any necessary pro rata adjustment in volumes provided for in 3 above, continue to supply any refined petroleum products affected by the dispute on the same terms as such products were supplied to that OOC immediately before the dispute arose. 232

5. The provisions of 4 above are not intended to affect in any way the powers and duties of the Competition Commission or the Competition Tribunal, in terms of the Competition Act and the Rules in force thereunder, in dealing with any alleged non-compliance by the merged entity with the above conditions. 232

6. Reports to the Commission: 232

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REASONS FOR DECISION

Order

1. The proposed joint venture / merger between Sasol Limited, Engen Limited, Petronas International Corporation Limited and Sasol Oil (Pty) Ltd is prohibited. The reasons for this decision follow.

The Transaction

2. The parties to the proposed transaction are:
 - Sasol Limited ("Sasol Ltd");
 - Sasol Oil (Pty) Ltd ("Sasol Oil" or "Sasol")¹, also referred to as Sasol Liquid Fuels Business ("Sasol LFB"), of which 98% is held by Sasol Ltd and 2% is

¹ 'Sasol' is sometimes used to refer to either Sasol Ltd or Sasol Oil – the context makes clear which entity is being referred to. Where we have specifically wanted to distinguish Sasol Ltd or Sasol Oil or Sasol Synfuels then we have taken care to do so.

held by Sizanani Trust;

- Petroliam Nasional Berhad ("Petronas"), a Malaysian state oil company;
- Petronas International Corporation Limited ("PICL") is wholly-owned subsidiary of Petronas;
- Afric Energy Resources (Pty) Limited ("AER"), a wholly owned subsidiary of Worldwide African Investment Holdings (Pty) Limited ("Worldwide");
- Engen Limited ("Engen") of which 80% is held by PICL and 20% held by AER;
- Engen Holdings (Pty) Ltd, a wholly owned subsidiary of Engen;
- Engen Management Services (Pty) Ltd, a wholly owned subsidiary of Engen;
- Engen Petroleum Limited, a wholly owned subsidiary of Engen Management Services; and
- Leopont 512 Properties (Pty) Ltd which will change its name to Tshwarisano LFB Investment (Pty) Limited ("Tshwarisano").

3. The current ownership structure of the various parties is depicted in the diagram below:

4. The proposed transaction involves the conclusion of a share-for-share exchange

agreement which will regulate the formation of a JV to be named Uhambo Oil Limited (“Uhambo”). Engen will acquire the entire ordinary issued share capital of Sasol Oil. In consideration for this, Sasol Limited will acquire 37,5% of the entire enlarged issued share capital of Engen. PICL will retain 37,5% of Engen, AER (PICL’s BEE partner) will retain 12,5% and Leopont (Tshwarisano) will acquire the remaining 12,5% of Engen.²

5. According to the merging parties, neither AER nor Tshwarisano will acquire control over Engen. However, as a direct consequence of the acquisition by Engen of sole control of Sasol Oil and as consideration there for (and not as a separate transaction), PICL and Sasol Limited will acquire joint control over Engen.³
6. The post merger ownership structure is depicted in the diagram below:

7. The transaction will constitute a significant consolidation of the South African petroleum industry. Uhambo, the joint venture, will comprise the white fuels produced

² The merging parties stated that if, for any reason, the Competition Tribunal does not rule in favour of the merger, then Tshwarisano will become a 25% shareholder in Sasol’s liquid fuels business rather than a 12,5% shareholder in Uhambo.

³ See pages 11 (Para. 2) and 17 (Schedule 1) of the Merger Filing.

by Sasol Oil at Secunda,⁴ Sasol's 63,64% share of the Natref refinery in Sasolburg,⁵ as well as Enref, Engen's refinery in Durban. Uhambo's retail network will comprise those service stations controlled by Engen and those controlled by Sasol. Pre-merger Engen controls what is, by a significant margin, the largest petrol station network in the country. This will now be supplemented by the Sasol and Exel branded stations.⁶

8. Joint ventures are a standard form of operation in the oil industry globally as well as in South Africa. By way of two important South African examples, the Natref refinery is controlled by a Sasol/TOTAL joint venture and the Sapref refinery is controlled by a Shell SA /BPSA joint venture.
9. There have, in recent years, been several acquisitions in the marketing segment of the fuel supply chain. The target firms in these transactions have generally been relatively small, black-owned entrants into the industry, while the acquiring firms have been one or other of the much larger, vertically integrated oil companies. We refer particularly to Sasol's acquisition of Exel,⁷ Shell's acquisition of Tepco,⁸ and Engen's acquisition of Zenex.⁹ The pattern of these acquisitions has been for the black-owned target to receive, in compensation, equity in the acquiring company, the marketing branch of the oil company concerned. This is the mechanism through which empowerment shareholders have generally been drawn into partnerships with the major oil interests.¹⁰

4 An exceptionally complex agreement – the Components Supply Agreement (CSA) - governs the point at which Sasol Synfuels (owned by Sasol Ltd, and not part of the JV) ends, and at which Sasol Oil (and, hence, the JV) begins. Suffice for now to note that the fuel components are produced and owned by Sasol Synfuels and are then to be sold, on an exclusive basis for 10 years, to the JV. These components are then blended to produce the suite of white fuels which are the products at the centre of this transaction. The blending plant at Secunda is part of the JV. The purpose and implications of the CSA are elaborated more fully below.

5 Natref is owned as to 63,64% by Sasol Oil and 36,36% by Total SA.

6 The precise nature of the relationship between the oil companies and the petrol stations is complex and varied and will be examined more fully below. We are here referring to those service stations branded as Engen, Sasol and Exel, the latter a previously independent network of branded service stations acquired by Sasol in 2003.

7 Approved on the 10th of December 2003, Tribunal Case No.: 57/LM/Oct03.

8 Tribunal Case No. 66/LM/Oct01.

9 Tribunal Case No. 26/LM/Dec99.

10 We note here that the "Charter for the South African Petroleum and Liquid Fuels Industry on Empowering Historically Disadvantaged South Africans in the Petroleum and Liquid Fuels Industry" requires all the South African-based fuel companies to place 25% of the ownership in the Petroleum and Liquid Fuels Industry in the hands of empowerment entities. All the petroleum companies and the DME signed this empowerment charter in November 2000.

10. The evidence shows that Sasol has long sought a partnership with firms with significant refining and retailing capacities. It appears that the present transaction represents at least the third attempt to merge with Engen. Mr Oberholster – the current Managing Director of Sasol Oil – testified that Sasol had always considered that Engen represented the best fit with Sasol from a synergy and risk perspective.¹¹
11. Mr. Eric Reid, a witness at these hearings, provided testimony of a Sasol-initiated attempt (in the fourth quarter of 2000) at a JV with BP. Mr. Reid, who was the chief negotiator for BP, testified that Sasol had highlighted a number of benefits for the joint venture including cost savings and synergies, the prospect that a 20% retail market share would offer an excellent springboard for further aggressive growth, and the prospect that the deal would facilitate an increase in wholesale prices.¹²
12. On the 12th of May 2005, the Commission finalised its investigation of the Uhambo Joint Venture (“JV”). It found that the merger was likely to lead to a substantial lessening of competition. However it recommended to the Tribunal that the transaction be approved subject to the imposition of a condition which is intended to ameliorate the likely threat to competition. The recommended condition – essentially a behavioural condition requiring the merged entity to supply refined product to its downstream competitors – is appended to this decision and is discussed further below. However in its closing argument the Commission indicated that it had revised its position and decided to recommend prohibition.

The Merging Parties

Sasol Limited

13. Sasol Ltd, which shall acquire 37.5% of the JV, is a public company incorporated within the Republic of South Africa and listed on the JSE Securities Exchange and on the New York Stock Exchange. Shareholding in Sasol Ltd is widely spread with no single dominant shareholder.¹³

¹¹ See page 387 of the transcript.

¹² Pages 2124-25 of the transcript. Mr testified that the talks had been called off by BP who concluded that most of the benefits to be derived from the proposed deal would accrue to Sasol.

¹³ As at 30 June 2004, Sasol Limited’s shareholders whose shares exceeded 5% in aggregate were the Public Investment Corporation (13.3%), Sasol Limited’s wholly owned subsidiary: Sasol

14. Sasol is an integrated oil and gas group with substantial chemical interests. It is headquartered in South Africa and operates in numerous countries throughout the world. Sasol provides liquid fuels in South Africa and is an international producer of chemicals. Sasol also uses in-house technology for the commercial production of synthetic fuels and chemicals from low-grade coal and manufactures over 200 fuel and chemical products, which are sold in more than 90 countries. In addition, Sasol operates coal mines to provide feedstock for its synthetic fuel and chemical plants, manufactures and markets synthetic gas and operates, in partnership with TOTAL SA (TOTAL), the only inland crude oil refinery in South Africa. During 2004 Sasol began to supply Mozambican natural gas both to customers and to its petrochemical plants in South Africa. Sasol is also developing two gas-to-liquids fuel plants in Qatar and Nigeria in joint ventures with Chevron.
15. Sasol has sole control over Sasol Oil by virtue of its current shareholding of 98%, with the remaining 2% owned by Sizanani Trust.¹⁴ (“Sizanani”). Sizanani is the BEE entity of Sasol, holding shares of former Exel Petroleum (Pty) Ltd (“Exel”) shareholders. All of Sasol’s liquid fuel businesses are housed in Sasol Oil.¹⁵ Sasol Oil owns significant interests in a number of companies - most important for our purposes is its 63.64% share of Natref (Pty) Ltd. Apart from Sasol Oil and its sole ownership of Sasol Synfuels (Pty) Ltd, other significant Sasol subsidiaries include Sasol Chemical Industries Ltd, Sasol Technology (Pty) Ltd, Sasol Investment Company (Pty) Ltd, Sasol Mining (Pty) Ltd, Sasol Financing (Pty) Ltd and Sasol Holdings (Pty) Ltd. Sasol also holds a 1% preference share in Leopont, one of the empowerment participants in this transaction and which will be known as Tshwarisano post-merger.
16. Sasol Oil markets the Sasol group’s liquid fuels, lubricants and tar-derived products manufactured by Sasol Synfuels, Natref and other plants. Products

Investment Company (Pty) Ltd (9.0%), and the Industrial Development Corporation of South Africa Ltd (7.9%).

¹⁴ Sasol Oil is generally referred to as Sasol Liquid Fuels Business or Sasol LFB. The registered name of the company is Sasol Oil. These names are used interchangeably.

¹⁵ See page 585 of Commission’s Record.

include petrol, diesel, jet fuel, fuel alcohol, illuminating paraffin, fuel oils, cokes, creosote and other tar-derived products. It oversees Sasol's joint venture interests in the Natref oil refinery and the Tosas bituminous products manufacturer and marketer.

17. Since July 2003 Sasol Synfuels' main activity has been the manufacture of fuel components and chemical feed streams. Sasol Synfuels operates the world's only coal-based synfuels manufacturing facility which is located at Secunda. It uses unique Sasol Fischer-Tropsch technology to produce gas from coal and to convert this feedstock into petrol, diesel, liquefied petroleum gas, chemical feedstock and industrial pipeline gas. Sasol Synfuels produces most of South Africa's chemical building blocks, including ethylene, propylene, ammonia, phenolics and solvents.
18. Note that on 1 November 2004 Sasol Synfuels and Sasol Oil entered into the Components Supply Agreement – hereinafter referred to as the “CSA”.¹⁶ In essence, the CSA governs the arrangement by which Sasol Synfuels will sell a basket of components produced at the Secunda refinery to Sasol Oil and, post-merger, to Uhambo. These components are then blended into petroleum products in the pumps and tanks immediately adjacent to the synfuel facilities. The pumps and tanks are located on the Secunda refinery premises, but are currently owned by Sasol Oil and will be incorporated into the Uhambo JV. The pumps and tanks are a prerequisite for blending the components into petroleum products. Mr Oberholster, a Sasol witness in these proceedings, conceded in his evidence that it would be extremely difficult for any of the other oil companies to erect their own pumps and tanks to perform the same blending function as the pumps and tanks located on the Secunda premises. Pertinent aspects of this immensely complex agreement are elaborated below. It suffices now to note that it effectively specifies the boundaries between the assets of Sasol Oil – and hence to be part of Uhambo – and Sasol Synfuels, whose assets are not to be incorporated within the JV.
19. Sasol Oil thus includes all of Sasol's assets in the liquid fuels business,

¹⁶ See page 1217 of the Commission's Record.

encapsulating the entire value chain from crude oil procurement for Sasol's stake in the Natref refinery and procurement of fuel components from the Sasol Synfuels refinery at Secunda through to retail marketing of the various fuel and other products. All of Sasol's assets in the distribution, marketing and storage of fuel are also to be part of the Uhambo JV.

20. We should note here – and this is considerably elaborated below – that Sasol and the other oil companies (OOCs) operating in South Africa have until recently been party to an agreement dubbed the Main Supply Agreement (MSA) or the Sasol Supply Agreement (SSA). This agreement was brokered by government and has existed, in periodically amended form, since Sasol first started producing fuels in the 'fifties. In its barest essentials it provides that the inland marketing arms of the OOCs will, to the extent possible, satisfy their inland marketing requirements by uplifting Sasol's inland output in preference to conveying product from their coastal refineries. The price at which the product is to be purchased is based on a variant of the import parity price, currently referred to as the Basic Fuel Price. The quid pro quo for securing Sasol a market for its refined output, was a narrowly circumscribed limitation on Sasol's participation in the retail market. The MSA thus effectively provided for an allocation of markets between Sasol and the OOCs.
21. In 1998 Sasol gave the OOCs the stipulated five year notice necessary to terminate the agreement which duly ended in December 2003.
22. We will return to this pivotal agreement throughout this decision. Although it has not been in operation for over two years now, its consequences continue to permeate the industry and an understanding of the MSA is essential for an appreciation of the factors underpinning the transaction before us and its likely impact on competition.

PICL

23. Petroleum Nasional Berhad (Petronas) is the Malaysian national petroleum company and is wholly owned by the government of Malaysia. It is an

integrated international oil and gas company with business interests in 35 countries. The Group is engaged in a wide spectrum of petroleum activities, including upstream exploration for, and production of, oil and gas, downstream oil refining, the marketing and distribution of petroleum products, trading, gas processing and liquefaction, gas transmission pipeline network operations, the marketing of liquefied natural gas, petrochemical manufacturing and marketing, shipping, automotive engineering and property investment.

24. Petronas, through its subsidiary, PICL, and Worldwide African Investment Holdings (Pty) Ltd (“Worldwide”)¹⁷ respectively hold 80% and 20% of Engen. PICL shall acquire 37,5% of Uhambo.

Engen

25. Engen is a South African company controlled as to 80% by PICL with the remaining 20% held by a BEE firm, Worldwide.¹⁸ Engen owns and controls a number of subsidiaries including Engen Holdings (Pty) Ltd and Engen Management Services (Pty) Ltd.
26. Engen’s core business entails refining crude oil, marketing and retailing primary refined petroleum products and providing consumer convenience services through its retail network. In South Africa Engen has approximately 1 250 service stations and some 450 Quickshop convenience stores. Engen owns and manages a 125 000 barrel per day (bbl/d) crude oil refinery (Enref) and a state-of-the-art lubricants blending plant in Durban. Engen is represented in 13 other countries of sub-Saharan Africa.

Empowerment parties

27. There are two empowerment parties to the proposed JV, namely, AER (PICL’s BEE partner in the Engen business) and Tshwarisano (Sasol Limited’s BEE partner). AER is wholly owned by Worldwide African Investment Holdings, a black-owned and managed investment holding company founded in 1994. Tshwarisano is a broad-

¹⁷ Worldwide holds 20% of the share capital of Engen and 55% of the share capital of Afric Oil (Pty) Ltd through its wholly owned subsidiary AER. Engen owns the remaining 45% of Afric Oil (Pty) Ltd.

¹⁸ See page 585 of the Commission’s Record.

based consortium comprising many historically disadvantaged groups. Dr Penuell Maduna, Ms Hixonia Nyasulu and Mr Reuel Khoza¹⁹ will, through various businesses, collectively hold about 30% of equity in Tshwarisano, whilst other key shareholders will own the majority 70% of equity.²⁰ Tshwarisano and Worldwide will each own a 12,5% share of the Uhambo JV.

The Intervening parties

28. Prior to the commencement of the hearing of the proposed JV a number of other oil companies filed notices of intention to intervene in the merger proceedings. These were BP South Africa (“BP”), Shell Southern Africa Energy (Pty) Ltd and Shell Southern Africa Marketing (Pty) Ltd (collectively referred to as “Shell”), Caltex South Africa (“Caltex”), Total South Africa (Pty) Ltd (“TOTAL”) and Masana Petroleum Solutions (Pty) Ltd (“Masana”). The intervenors are collectively referred to as the “other oil companies” or “OOCs”. The merging parties did not oppose these intervention applications which were granted by the Tribunal.

BP

29. BP Southern Africa (BP) is a subsidiary of one of the world’s major oil companies. There are 790 BP branded service stations, 26 depots and other distribution sites, including three coastal installations. company has, in partnership with Shell, a 50% stake in, the South Africa Petroleum Refineries (Sapref) at Reunion, 16 kilometres south of Durban.

Caltex

30. Caltex, a joint venture between two of worlds major oil companies, Chevron Corporation and Texaco, Inc.²¹ Caltex owns the Calref refinery which is located in Cape Town. It controls a network of approximately 1000 service stations.

¹⁹ These three were promoters of Tshwarisano, and were responsible for facilitating and structuring the broad-based and representative BEE consortium comprising Tshwarisano.

²⁰ Amongst them are the previous Exel shareholders which will hold about 47% of the equity in Tshwarisano.

²¹ Caltex Oil’s BEE partners holding 25% therein comprise African Legend Investment Ltd (15%); Lithemba Investments Ltd (5%); SANTACO (3%); and the Caltex Employee Participation Plan (2%).

Shell

31. Shell is a global group of energy and petrochemical companies operating in over 140 countries and territories. Its South African subsidiary produces refined oil products at Sapref in Durban in a 50:50 joint venture with BP and distributes and markets those products to commercial and retail customers throughout South Africa. Shell has a total of 746 branded service stations.²²

TOTAL

32. TOTAL, which is controlled as to 50,1% by the eponymous French oil company, controls a national network of some 680 service stations. It holds 36,36% of the Natref refinery with Sasol holding the remaining equity.

Masana

33. Masana is a black empowerment energy company which entered the South African petroleum industry during 2005 when it acquired BP's commercial fuels business. Masana is 55% owned by historically disadvantaged South Africans and 45% owned by BP. It markets BP branded products in the commercial and industrial segment of the retail market.

Department of Minerals and Energy

34. On 6 June 2005, the Department of Minerals and Energy ("DME") filed its intervention application. The DME's concerns included, amongst others, fears that the merger would:

- Result in a need for government interference in product pricing between industry players. Oil firms supply each other's retail outlets in regions where they do not have refining operations;
- Impact on entry into the market by BEE players and small businesses; and
- "Undermine and compromise" the government's market liberalisation policy

²² See the Commission's Supplementary Report on "the relationship between the retail petrol service stations and the oil companies" from page 1729 of the Witness Statement bundle.

for the energy sector by raising the costs of doing business.

35. The DME was also concerned at the condition proposed by the Commission when it recommended approval of the deal. The recommended condition - which is discussed below - essentially provided that Uhambo continue supplying rival oil firms pending the commissioning of an expanded petroleum products pipeline conveying white fuel products between Durban and the inland market. The DME had said that this could oblige the parastatal, Petronet, to construct a pipeline of greater capacity than that necessitated by the aggregate shortfall for petroleum product in the inland region.²³ However, the DME subsequently withdrew its intervention application on 17 June 2005.²⁴ In withdrawing its application, the DME said it had since been assured that the Commission's condition included all logistical means, including road and rail, to move product inland.
36. During the hearing, the Tribunal was presented with evidence to the effect that the DME had, in drafting its intervention papers, been assisted by the attorneys of record for BP and Masana. The evidence revealed that the DME has communicated its misgivings regarding the proposed transaction to the then Competition Commissioner who suggested that it approach BP's attorneys for assistance in drafting its intervention application.
37. Further evidence suggested that DME's subsequent withdrawal was linked to several meetings between certain of its official and senior Sasol Oil executives. Both Mr Oberholster and Mr Gumede, Chief Director of Hydrocarbons, testified that the purpose of the meetings was to address the concerns raised by the DME in its intervention application. Evidence showed that Sasol had even prepared the DME's media statement explaining the department's revised position.
38. While the lobbying of government by the private sector is a legitimate activity, the degree of intervention by BP's attorneys and by the Sasol Oil management reduces the weight that we accord to the DME position on this transaction.

²³ The implications of this important insight are elaborated in our discussion of pipeline capacity.

²⁴ See page 1764 of the transcript.

The Hearings

39. The hearing took place over 19 days during the period 3-31 October 2005. Argument was presented on the 9th and 11th November 2005. During the hearing a number of witnesses testified. The merging parties led the following witnesses: Ernst Oberholster²⁵; Robert Stillman²⁶; Quinton Swart²⁷; Lourens Coetzer²⁸; Stephan Malherbe²⁹; and David Wright.³⁰ The intervenors led the following witnesses David Scheffman;³¹ Eric Reid³²; Deyar Natha;³³ Patrick Milner;³⁴ Simon Baker;³⁵ Simon Bishop;³⁶ Richard Fienberg;³⁷ and Sizwe Mncwango.³⁸ The Commission led two witnesses, viz. Lennie Moodley³⁹ as well as the Commission's Chief Economist, Geoff Parr. The Tribunal subpoenaed the DME, which in turn designated Nhlanhla Gumede to testify on its behalf. Mr Gumede is the Chief Director: Hydrocarbons of the DME.
40. The following person's statements formed part of the record but were not called upon to give oral testimony: Ian Baxter,⁴⁰ Salomon Millard,⁴¹ and Frans Kanfer for the merging parties;⁴² Robert Stewart,⁴³ Peter Linnegar,⁴⁴ Neil Biggs,⁴⁵ Kevin Baart,⁴⁶

25 Managing Director - Sasol Oil.

26 Economic expert: CRA (formerly Lexecon) retained by the merging parties.

27 Manager: Intelligence & Strategy – Sasol Oil.

28 Manager: Road Logistics – Sasol Ltd.

29 Economic Expert: Genesis Analytics retained by the merging parties.

30 General Manager: Corporate Planning – Engen.

31 Economic Expert: LECG retained by Caltex.

32 Independent Consultant – BP.

33 Management Consultant – BP.

34 Director - Shell.

35 Economic Expert: RBB retained by BP

36 Economic Expert: RBB retained by Shell.

37 Vice President: Marketing Operations – BP.

38 Managing Director - Masana.

39 Executive Business Manager of Petronet, a division of Transnet Limited

40 Refinery Strategic Planner - Engen.

41 Statistician from University of Pretoria retained by the merging parties

42 Statistician from University of Pretoria retained by the merging parties

43 Consultant: Petro-Logistics - Chevron

44 Director and General Manager: Commercial & Industrial Marketing - Caltex.

45 Area Manager: Property & Facilities Optimisation – Caltex.

46 Manager: Refining, Business, Support and Strategy – TOTAL.

Michael Holland,⁴⁷ Nicola Theron,⁴⁸ Etienne de Fortier,⁴⁹ Ellen Corrigan,⁵⁰ Anthony Twine,⁵¹ Tania Slabbert,⁵² Keshan Pillay,⁵³ and Cornelius Kramer⁵⁴ for the intervenors. While these statements have been considered they are given less weight than the evidence of witnesses who gave oral testimony and who were therefore subject to cross-examination.

Refining And Marketing White Fuels In South Africa – The Background

Introduction⁵⁵

41. This transaction cannot be evaluated without an understanding of certain critical background features. This requires a brief excursion into the history of the refining and marketing of white fuels in South Africa. A number of diverse factors are pertinent to this background. Primary amongst these are, firstly, the strategic significance that fuel products assume in all countries, compounded by the apartheid government's vulnerability to oil sanctions. Secondly, there is South Africa's historic reliance on imported crude oil and the consequent establishment of refinery capacity at the coast, some considerable distance from the country's inland industrial hub, the major market for fuel products.
42. These factors led the South African government to search for fuel sources that were not dependent on crude oil. That source was found in the country's abundant supplies of low-grade coal, which enabled the establishment of government initiated and funded synthetic fuel plants in the inland area adjacent to the coal fields. The upshot, we will show, is a fuel industry characterised by complex locational economics. These, in turn, have given

47 Economic Expert: PriceMetrics retained by TOTAL

48 Economic Expert: Econex retained by Masana

49 Geospace retained by BP.

50 Value Chain Manager – BP.

51 Econometrix, retained by BP.

52 Non-executive director – BP.

53 Non-executive director – BP.

54 General Manager – BP.

55 For the historical development of the South African oil industry see Mr. Deyar Natha's witness statement from page 943 onwards of the Witness Statement bundle and Mr. Richard Fienberg's witness statement from pages 895-922 of the Witness Statement bundle.

rise to a regulatory system and a logistical infrastructure that respond, in significant part, to these geographic features. These characteristics of the market are largely common cause and are extensively canvassed in the record. They are reproduced here insofar as they are required for a proper understanding of the transaction that is before us.

43. We should not lose sight of the fact that these industrial policies, underpinned by vast historical subsidies, have established a highly competitive domestic producer of fuels and chemicals. However, it appears that little of the competitive advantage that Sasol Synfuels, wholly owned by Sasol Ltd, enjoys, inures to the benefit of South African consumers of fuel products. We have already mentioned and will further examine the Components Supply Agreement, which precisely ring fences this advantage, with the shareholders of Sasol Ltd inside the ring and those who consume the product – starting with Uhambo and ending with the consumers of fuel products – firmly on the outside. It is our finding that a principal objective of the transaction, is to ensure that Sasol Ltd's multiple sources of competitive advantage – technological and locational – are withheld from South African consumers.

The development of white fuel production capacity

44. Caltex, Shell, Mobil and BP (then known as Atlantic) commenced downstream marketing of petroleum products in South Africa some 100 years ago. Until the commissioning in 1954 of Mobil's (now, Engen's) Genref (now Enref) refinery, South Africa did not have any refining facilities. Almost all petroleum product sold in South Africa was imported as refined product by the respective marketing companies who distributed this to their branded retailers and various commercial customers.⁵⁶ The pricing of the products to the end-user was based on import parity.
45. Government, with an eye to the strategic importance of petroleum products and the balance of payment implications of its reliance on imported product, investigated technologies that would help overcome the lack of indigenous

⁵⁶ A small volume of petroleum product was manufactured from shale oil at the South African Torbanite Mining and Refining Company (SATMAR) in Boksburg.

crude oil reserves. In the first half of the 1950s, the government-initiated project to produce oil from South Africa's abundant low-grade coal reserves saw the formation of the South African Coal, Oil and Gas Corporation Limited, later Sasol Limited, initially funded by the state-owned Industrial Development Corporation.

46. In 1955 the first oil-from-coal-synthetic fuel plant – Sasol One – was constructed. It was located in the heart of the inland market at Sasolburg, adjacent to the coal resources that are the most important input into the production process. We have already briefly noted that in 1954 government had secured the conclusion of agreements – dubbed the Sasol Supply Agreements (SSA) or the Main Supply Agreement (MSA) - between Sasol and the oil companies.⁵⁷ These agreements – effectively a government-brokered and sanctioned form of private regulation - obliged the oil companies to service their marketing requirements in the inland or 'Sasol supply area' by purchasing all of Sasol One's production volumes pro-rata to their market shares. The price of these volumes would be based on the 'in-bond landed cost' ('IBLC'), calculated on the basis of the import parity price for fuel products. This basis and its build-up to the wholesale and the retail prices are provided for in government regulation and are outlined below. The Sasol Supply Area is depicted on the map below:

Source: Petronet presentation

47. In return Sasol undertook to limit its entry into the retail market to the location of Sasol-branded 'blue pumps' on the forecourts of service stations belonging to other oil companies - hence that component of the MSA referred to as the 'blue pump agreement'. The principles of this market sharing agreement effectively underpinned the regulation of the petroleum products market until its termination, at Sasol's instance, in 2003. Note that Sasol One only produced some 250 million litres per annum and, hence, when the MSA initially came into effect, the inland marketers still relied on refined product brought in from the coast.

48. The international oil crisis of 1973 accelerated government's plans to expand the

⁵⁷ This agreement is referred to interchangeably as the 'MSA' or 'SSA'.

capacity of Sasol's oil-from-coal facilities. The UN's imposition – in 1977 - of a mandatory crude oil embargo underlined these concerns, as did the Iranian revolution of 1979. Sasol Two and Sasol Three were commissioned at Secunda, also in the inland region, in 1980 and 1982 respectively. Sasol Two and Three later combined to form Sasol Synfuels.⁵⁸

49. In 1987 when natural gas condensate was discovered off shore, the Government built a gas-to-liquids plant at Mossel Bay (now owned and operated by PetroSA). The Mossref plant commenced production in late 1992.⁵⁹
50. Government, in addition to its direct intervention through Sasol to secure indigenous sources of petroleum product, also encouraged private sector initiatives aimed at addressing these concerns. These included incentives to invest in local refining capacity.
51. The first crude oil refinery was commissioned by Mobil – later Engen - in 1954. It was established south of Durban. This is the Enref refinery. In 1962 a Shell-BP joint venture commissioned a second crude refinery in Durban. This is the Sapref refinery.⁶⁰ At about the same time Caltex also decided to establish a refinery in Durban but it was ultimately incentivised to locate its refinery in Cape Town. This is the Calref refinery which was commissioned in 1966.⁶¹ Government was also determined to establish a crude oil refinery in the inland region. To this end, in 1969

⁵⁸ Sasol Synfuels is a synthetic refinery 100% owned by Sasol, located in the inland region, close to Johannesburg. It produces white fuels using gas derived from coal. This technology also results in the production of proportionately more petrol than diesel when compared to a standard crude oil refinery.

⁵⁹ Mossref is a synthetic refinery 100% owned by PetroSA. It is located in the Cape region. It produces white fuels from natural gas, which is shipped ashore at Mossel Bay. This technology results in the production of proportionately more petrol than diesel as compared to a standard crude oil refinery. Its products are primarily used to serve customers in the Cape. PetroSA is not yet engaged in the marketing and retailing of fuels within South Africa and its output is supplied to consumers via the other fuel marketers and retailers.

⁶⁰ Sapref is a crude oil refinery 50% owned by Shell and 50% owned by BP, with each shareholder having rights to 50% of the capacity of the refinery. It is located on the coast close to Durban. Its crude oil is imported by tanker and its outputs are used to serve customers in KZN, and, insofar as transportation capacity or 'logistics' permit, the inland region as well as the Cape and other areas of Southern African.

⁶¹ Calref is a crude oil refinery 100% owned by Caltex. It is located on the coast close to Cape Town. Its crude oil is imported by tanker and its outputs are primarily used to serve customers in the Cape region.

government initiated the formation of a company whose shareholders were Sasol, TOTAL and the National Iranian Oil Company (NIOC) with the intention of establishing an inland crude oil refinery. Natref was commissioned in 1971 and is located at Sasolburg.⁶²

52. The MSA was regularly extended as new inland refining capacity was brought on stream. Hence, at the time of the establishment of Natref an agreement was struck which guaranteed purchase by the oil companies of Sasol and the NIOC's share of the new crude oil refinery. The price paid by the oil companies for this bulk supply was, as in the original agreement, also based on IBLC, the basis specified in public regulation. In 1976, in anticipation of the expansion of Sasol's oil-from-coal capacity, government again initiated discussions regarding the upliftment by the oil companies of the product of Sasol Two.

53. However, the context for the extension of the MSA after the commissioning of Sasol Two and Sasol Three differed in one significant respect from the earlier contexts – with a combined output from Sasol Two and Three of some 5,3 billion litres per annum, South Africa came to have surplus refining capacity. And the extension of the MSA now meant that the OOCs would henceforth source a considerably greater proportion of their inland requirement from Sasol's synthetic capacity than from their own coastal refineries. The upshot was the under-utilisation and subsequent decommissioning of some 30% of the coastal refineries' capacities.⁶³ Both the coastal refineries and Natref were compensated – in the shape of the payment of 'synlevies' – for the loss of refining margins on production volumes that were foregone in consequence of the operation of the MSA. Note too that the mothballing of refining capacity was also compensated by the introduction of the 'PAR' mechanism which effectively protects the oil companies' returns on investment in marketing assets. However, whereas the 'synlevy' was recovered by government through a levy

⁶² The NIOC's share in Natref was purchased by Sasol in 1989. Ownership of Natref – as well as shares of the refinery's output – is now shared as between Sasol (64,64%) and Total (33,36%). Note that TOTAL could have exercised an option that would have allowed it to increase its share of Natref to 50% but declined to do so because it could not reach agreement with Sasol on price.

⁶³ In the 'eighties – with demand for fuel products increasing by some 5% per annum over the decade – the coastal refineries re-commissioned or replaced the capacity that had been previously mothballed.

imposed on consumers, the PAR-based adjustments were recovered from consumers through a build-up of the wholesale margin which then fed in to an adjustment of the retail price.⁶⁴

54. The last of the MSA agreements was concluded between Sasol and the oil companies in 1988. In terms of this agreement the oil companies were obliged to purchase Sasol product up to a maximum of 7 740 million litres per year. Purchases by the OOCs thus accounted for some 90% of Sasol's white fuel output. For the rest, the principles of the original MSA were effectively retained – the Sasol volume uplifted by the individual oil companies was based on their respective market shares; the price was based on IBLC; and Sasol limited its retail presence to the so-called 'blue pumps', although the new agreement did afford Sasol certain marketing rights in the commercial and industrial sectors. The marketing of Sasol petrol through "blue pumps" at the oil companies' service stations was capped at a 9.23% market share. Sasol was also permitted to market 22.5 million litres of diesel into the commercial market.

55. In summary, then, there are, today, seven major oil companies operating in South Africa, namely BP, Caltex, Engen, PetroSA, Sasol, Shell, and TOTAL. All of these companies, except PetroSA, are vertically integrated in South Africa, that is, they operate at each stage of the supply chain, namely refining and production, storage, wholesale marketing and retail. South Africa has four crude oil refineries (Natref, Calref, Sapref and Enref), one synthetic refinery utilising natural gas (Mossref) and one synthetic refinery currently utilising coal (Secunda). The map below identifies the location of the refineries in South Africa:

⁶⁴ At around 1989 after Sasol and TOTAL acquired NIOC's interest in Natref, the PAR mechanism, which had been in place from 1984 to 1989, was changed to MPAR which only measured the profitability of marketing assets. The MPAR (which came into effect in 1990) was intended to confer a fair return on the replacement value of assets used in the marketing of petroleum products.

Source: Simon Baker Witness Statement

56. All six facilities produce a broad range of white fuels, as well as black fuels. Enref, Sapref, Calref and Natref use crude oil as an input while the synthetic fuel facilities at Secunda and Mossel Bay use coal and natural gas, respectively. Although synthetic fuel and crude oil refineries use different inputs and technologies in their production processes, they nevertheless produce similar products. The composition of the output of a refinery is, within fairly narrow limits, fixed by the technology used at the refinery and the composition of its raw materials. Coastal refineries typically produce a

balance of high value (or white fuels) and low value products (or black fuels), based on the need for bunker oil (a lower value product). The inland refineries typically produce more high value products than the coastal refineries.

57. The “white fuels” are petrol, , jet fuel,⁶⁵ illuminating paraffin and liquefied petroleum gas (“LPG”).⁶⁶ The “black fuels” are Bitumen,⁶⁷ Fuel oil products⁶⁸ and Lubricants.⁶⁹

South African fuel production facilities (2004)

Production facility	Input	Owner	Nominal Capacity (bbl/d)	Location
Enref	Crude	Engen	125 000	Durban
Calref	Crude	Caltex	100 000	Cape Town
Sapref	Crude	BP (50%)	90 000	Durban
		Shell (50%)	90 000	
Natref	Crude	Sasol Oil (64%)	69.120	Sasol Oil
		TOTAL (36%)	38.880	
Synfuels	Coal and Gas	Sasol Oil	150 000*	Secunda
PetroSA	Gas and Condensate	Central Energy Fund	45 000*	Mossel Bay

* Crude oil equivalent

Source: Swart witness statement (original source: SAPIA)

58. There is a locational disjuncture or ‘imbalance’ between production of white fuel and its consumption. This demand/supply imbalance is present from a national and regional (that is, sub-national) perspective but most particularly from the perspective of each of the oil companies. Natref (jointly owned by Sasol and Total) and Secunda (Sasol) supplies the inland area and some

65 Strictly speaking, the synthetic refineries do not produce jet fuel. Secunda produces a jet fuel component that needs to be blended 50% with crude oil derived jet fuel. Mossref does not produce a jet fuel component at all, but only illuminating paraffin.

66 LPG is butane and propane gas compressed into a liquid form. LPG is formed naturally or as a by-product from oil refining. It differentiates itself from other energy sources on the basis of portability, convenience, low sulphur, controllability and its clean burning nature. LPG is produced and sold to resellers in bulk and cylinders and distributed to end-users.

67 A substance used in the road-building industry.

68 Energy sources for heating and shipping purposes. They are a mixture of refinery residue and distillate and differ in their sulphur content and flowing properties at a given temperature. Fuel oils can be divided into light fuel oil, marine or bunker fuel oil and heavy fuel oil.

69 A distinct product group with varying degrees of similarity, lubricants are produced, blended and distributed to industrial and commercial users. There are auto, industrial, marine and aviation lubricants.

overland exports while Sapref (BP and Shell) and Enref (Engen) supply the eastern coastal areas, ship some product to the inland area, ship some product to the Western Cape area and export some product by sea to other countries. Calref (Caltex) and PetroSA supply the Western Cape area and also export some product.

Public Regulation⁷⁰

59. We have characterised the MSA as a form of government-sanctioned private regulation. As we have noted this agreement principally goes to the obligatory upliftment by the OOCs of Sasol product in the inland area, and Sasol's concomitant exclusion from all but a limited share of the retail market. Expressed in the lexicon of competition law, the MSA is concerned with the geographic allocation of the market for the production of refined fuel as well as the wholesale and retail markets for fuel. The price at which this product is exchanged is set by government regulation. We turn now to a brief description of those aspects of public regulation that have bearing on this transaction.

60. The two cornerstones of the present regulatory regime are the control of petrol retail prices and import control on certain products. Buttressed between these is the voluntary Service Station Rationalisation Plan ('Ratplan').

61. The regulated prices are based upon import parity.⁷¹

62. The IBLC ('in-bond landed cost') formula was introduced in the 1950s and was used as the basis for calculating retail fuel prices in South Africa up until April 2003. It was characterised as the international price element in the petrol price. It was calculated by taking the average of the Singapore spot price and the posted prices in (US cents per gallon) for diesel and for 93 and 87 octane gasoline, taken on the 15th day of each month, at the Caltex Refinery in Bahrain, and 3 refineries in Singapore, (the Esso, Singapore Petroleum Company and Mobil Jurong refineries), plus insurance

⁷⁰Our sources for this section on public regulation are: www.dme.gov.za; www.mbendi.co.za; <http://www.mbendi.co.za/sapia/index.htm>; <http://www.mbendi.co.za/indy/oilg/af/sa/p0010.htm>; <http://www.transportandconstruction.co.za/press/press200029.html>.

⁷¹ The power to regulate prices is given by the Petroleum Products Act of 1977 (as amended).

and shipping costs from these refineries, plus amounts for losses arising from evaporation and leakage en route, plus wharfage and landed charges for products deemed to have been shipped from Bahrain and Singapore. Retail prices were then derived by adding, as appropriate, the following elements to IBLC prices: retail margin, zone differential, service differential, Equalisation Fund levy, fuel tax, Customs and Excise duty, MVA levy, CRSF levy, and wholesale margin.

63. In April 2003, the Basic Fuel Price (BFP) was introduced to replace the IBLC component of the pump price. According to the DME, the formula change was necessary because an investigation by the DME in conjunction with the oil industry, found that the previous formula had become outdated because of changes in global markets.
64. Like the IBLC, the BFP is conceptually an import parity pricing formula and it was intended to establish a realistic estimate of what it would cost to import substantial volumes of refined fuel.⁷² The most important difference between IBLC and BFP is that BFP is based on the spot prices quoted daily in international markets whereas the IBLC was based mainly on certain refinery gate postings that have, to a large extent, fallen into disuse and are no longer reflective of actual market prices.
65. The other elements of the BFP are:
- Freight costs from these refining centres to South African ports;
 - Demurrage (loading and discharging waiting time for tankers at ports);
 - Insurance and minor shipping costs;
 - The allowed value for product loss through evaporation during marine transportation;
 - Wharfage (harbour landing charges);

⁷² Note that BFP is, and IBLC was, actually set somewhat higher than import parity. This is pointed out by Mr. Fienberg for BP who estimates that BFP is approximately 5c per litre higher than a true import parity price (see page 2957 of the transcript) and confirmed by Mr. Oberholster. At page 401 of the transcript Mr. Oberholster states: *'..where we import from, we import from mega or where the numbers come from, from mega refineries, huge cost efficient refineries, BFP relates to, if you do that on a consistent basis, large volumes, it's a true import parity price. However in fully competitive, tough competing environment with people like Pick n Pay in the market, importing spot cargos all over the place, we do believe that there could be a lower import parity price, which will reflect in those markets and that would be, as I've said earlier, in the order of some 5c a litre below the current BFP price, which in fact is that 1.3% of the price today.'*

- Coastal storage to cover the cost of providing storage and handling facilities; and
- Stock financing.

66. A comparison between the IBLC and the BFP from 1996 to September 2002 has shown that the BFP has on average been lower by 4 cents per litre on 93 leaded petrol, 7 cents per litre on diesel and 10 cents per litre on paraffin. The BFP is reviewed once a month based on the average over the prior month of the daily internationally quoted prices of petrol, diesel and paraffin. Since international prices are quoted in US\$, the Rand/US\$ exchange rate will always be a factor in determining local prices.⁷³

67. Working from the BFP, the pump price is built up as follows:

1. Basic Fuel Price +

2. Government taxes and levies 2. (Customs and Excise Duties, Fuel Levy, Equalisation Fund Levy, Road Accident Fund Levy, Illuminating Paraffin Marker Levy)
+

3. Wholesale Margin: (Cents per litre gross marketing margin set by an annual oil industry profitability review and subject to the approval of Minister)+

4. Service Differential: (Covers oil company depot operating costs and road delivery expenses (from depot to customer) This is determined annually, subject to ministerial approval) +

5. Zone Differentials: (Cents per litre costs of moving fuels from coastal port/refinery locations to inland distribution centres, by pipeline, rail or road. These are determined by individual Magisterial Districts and calculated by the oil industry, subject also to ministerial approval for inclusion in oil company wholesale price structures) =

⁷³ Sasol opposed the move from IBLC to BFP Sasol's misgivings are clearly intimately tied with the notion that this constituted the thin end of a wedge that would ultimately cause the authorities to review their acceptance of import parity pricing. Indeed a strategy document prepared by McKinsey for Sasol, opines that the 'move away from IBLC to BFP potentially shows willingness to by the oil companies to enter a destructive scenario'. This is elaborated below but suffice for the present to note that a 'destructive scenario' is one in which BFP or Import Parity no longer constitutes the basis for industry pricing. See page 583 of the transcript.

6. Wholesale Price: (The maximum price oil companies are permitted to charge service stations or wholesale customers for fuels). These are set each month and are the sum of all price structure elements except the petrol dealer margin) +

7. Dealer Margin: (Cents per litre which Service Stations are permitted to add to the petrol price. The dealer margin is updated regularly and is subject to the approval of the Minister for Minerals and Energy)+

8. Pump Rounding Factors (Ensures that oil companies do not gain or lose by charging wholesale price levels in whole cents and so that service stations recover the full dealer margin) =

9. Retail Price at the pump

68. The other major site of public regulation sets the framework for the opening, closing and operation of retail service stations. This was initially enshrined in the Service Station Rationalisation Plan or 'Ratplan'. The apparent purpose of the Ratplan was to regulate the growth of the retail market and to give smaller companies an advantage in terms of growth potential. It attempts to realise these objectives through the imposition of limits on the opening of new sites. In order to protect employment at retail service stations, the Ratplan prohibits self-service. It appears that the 'ratplan' was superseded by the Petroleum Products Amendment Act 58 of 2003 which will come into operation later in this year. The establishment of a retail petrol station site and the acquisition of a licence to operate as a fuel retailer, wholesaler or refiner is subject to an elaborate licensing regime. Note that a retail license is not transferable and is confined to a particular site. The license will lapse if a licensed retailer does not commence retailing from the designated site within six months of the date of issue of the license. It also lapses if the licensed activity is no longer a going concern. Section 2A(5)(a) provides that a wholesaler may not hold a retail license except for training purposes.

69. In December 1998 government published a White Paper outlining energy policy. Suffice to note that the White Paper commits government to wide-ranging deregulation of the white fuels industry. Of particular significance for

present purposes is the commitment to deregulate prices, including the retail pump price of petrol.

70. The Petroleum Products Act empowers the Minister of Minerals and Energy to prescribe *'the price, or a maximum or minimum or a maximum and minimum price, at which any petroleum product may be sold to any person'*. prices that were previously fixed by regulation are no longer regulated or only regulated as to the maximum price that may be charged. The structure of price controls is outlined in the table below:

Structure Of Price Controls⁷⁴

	Petrol	Diesel	IP	Jet Fuel	LPG
Wholesale Price	Maximum	Maximum	Maximum	None	Maximum
Retail Price	Fixed	None	Maximum	-	None
Commercial and Industrial	None	None	None	None	None

71. The most important price that remains fixed by government regulation is the retail pump price of petrol. Documentary evidence establishing Sasol's opposition to the deregulation of the retail price of petrol has been presented at these hearings and is discussed below. However we have already intimated – and will further elaborate – that Sasol's major pre-occupation (and, ultimately, the basis of its opposition to deregulation of the retail price) is with the protection of the Basic Fuel Price or BFP, the basis on which the retail pump price is calculated and the price at which Sasol volumes have been sold to the inland marketing arms of the OOCs.

72. It is, of course, recognised that important interest groups are implicated in this projected deregulation and that, accordingly, it will be necessary to implement deregulation in a series of phased steps. The stated objective is to achieve deregulation of pricing by 2010. We note that Mr. Gumede, the witness from the

74 Note that 'retail price' refers to those volumes sold from the forecourts of service stations. 'Commercial and industrial' sales are to large customer such as mines, local authorities and road haulage companies. These are also retail sales but are subject to a regulatory regime that differs in important respects from the regime applicable to service station retail sales.

Department of Mineral and Energy, indicated that this would probably be delayed, largely, it appears, because of limited progress in the introduction of black economic empowerment investors into the industry and in order to protect the returns of BEE players already invested in the industry.⁷⁵

The Development of Logistics Capacity

73. We have already referred to a number of factors clearly destined to impact significantly on the development of logistics capacity. The major market for fuel products is the inland region containing, as it does, the country's industrial hub. Until the 'fifties South Africa relied entirely on refined product shipped in through the ports of Durban and Cape Town which was then transported by rail and road to the inland markets. The 'fifties and 'sixties saw the development of considerable crude oil refining capacity in the coastal areas with, obviously, the continued requirement to move refined product to an expanding inland market. But the 'fifties also witnessed the development, in the shape of Sasol One, of some inland synthetic fuel capacity and then, some years later, in the shape of Natref, the development of an inland crude refinery. The inland capacity established at this time did not – especially when coupled with the growth of inland demand – relieve the necessity for the coastal importers, and, later, refiners, to move considerable volumes of refined product inland. And the establishment of Natref also meant that the crude oil feedstock required for this plant had to be moved from the coast to the inland region.
74. However, the commissioning, in the early 'eighties, of the Secunda capacity significantly changed the logistics requirements, particularly when placed in the context of the MSA. The supply-demand imbalance between the coastal and inland regions had been significantly reduced in consequence of the Secunda output – that is to say the inland requirement for refined product could be met by product from the inland refineries. However significant supply-

⁷⁵ See the exchange between Mr Manoim and Mr Gumede at page 1778-1779 of the transcript.

demand imbalances were maintained, indeed were exacerbated, in respect of each of the individual oil companies.

75. Sasol, with its Natref and Secunda capacity, was extremely long in inland supply and prevented, by the strictures on marketing contained in the MSA, from altering even the extent of this imbalance. TOTAL, with its share of the Natref capacity, was approximately balanced in the inland, but supply-short on the coast. The coastal refiners, were, demand-long in the inland region and were prevented by the MSA from using their long coastal supply position to rectify this – hence the requirement to mothball coastal capacity and the consequent compensating subsidy.
76. This was the logic of the MSA – the inland refiners will satisfy inland demand; and the coastal refiners will satisfy coastal demand. The means of achieving this was a government-sanctioned cartel – the MSA – that not only allocated markets and, effectively, reduced output from the coastal refineries and Natref, but which also effectively dictated the development of the logistical capacity which was patterned around the market sharing arrangement.
77. In the period up to the 'sixties refined product was moved from the coast to the inland by rail and road. However, there can be no doubt – and this is constantly affirmed by evidence submitted for this transaction – that the most cost-efficient mode of conveying petroleum products is via pipeline. The comparative costs of alternative logistics are discussed below. Note however that clearly the most cost effective mechanism for squaring demand-supply imbalances at the level of the individual oil companies with the distribution of demand and supply across the country is through product swaps. These are ubiquitously employed both in South Africa and in other oil markets throughout the world. This belies the notion that this market requires individual companies to be 'balanced' as between refining capacity and market demand. The use of product swaps illustrates that this is a highly efficient market quite capable of containing transactions costs without resorting to vertical integration.
78. In the early 'sixties the state-owned South African Transport Services (SATS)

commenced construction of a 12 inch diameter pipeline intended to convey refined product from Durban to Johannesburg. This pipeline – the Durban-Johannesburg pipeline or DJP – was commissioned in 1965. In 1972 in order to accommodate the steady growth in inland demand for fuel products, the DJP was extended to Pretoria West, Waltloo and Benoni from Alrode and to Klerksdorp via Potchefstroom from Sasolburg.

79. Government also decided to accumulate crude oil reserves in disused coalmines in the inland area at Ogies and at tank farms throughout South Africa. To this end an 18-inch diameter crude oil pipeline – the COP – was commissioned in 1969. Once Natref was commissioned in 1971, the COP was also used to convey the inland refinery's crude oil requirements. Also following the commissioning of Natref, a pipeline was constructed from Natref to Johannesburg Airport in 1973 for the conveyance of jet fuel.
80. Demand growth for refined oil product in the inland market resulted in the DJP becoming capacity constrained. In 1978, SATS commissioned the Durban-Witwatersrand Pipeline or DWP. This 16-inch white oil pipeline from Durban to Alrode via Ladysmith, Volksrust and Secunda and from Secunda to Witbank via Kendal was intended to augment the DJP's capacity in order to meet growing inland demand for white fuels.
81. However, as already noted, Sasol Two and Sasol Three were commissioned in the early 'eighties. The last of the MSA agreements was concluded between Sasol and the oil companies in 1988. In terms of this agreement the oil companies were obliged to purchase Sasol product up to a maximum of 7 740 million litres per year. This meant that the DWP and the DJP were significantly *under*-and so Petronet – the entity within Transnet (SATS' successor) responsible for the pipeline network – began to examine initiatives aimed at improving the utilisation of its pipeline network. It appears that the precise shape which this reconfiguration ultimately took was driven by Sasol's desire to transport methane rich gas (MRG) from Secunda to Durban. However, it is clear that Petronet did not envisage that this reconfiguration of the logistical capacity necessary for the transport of liquid fuels from the coast would

threaten inland supplies of white fuel products precisely because, as we elaborate below, its thinking was rooted in the assumption that the MSA would maintain in perpetuity.

82. While it is not, at this point, necessary to recount the precise detail of the pipeline reconfiguration the upshot was that a significant portion of the pipeline capacity that was previously available to all the oil companies for the transportation of refined product from the coast – the DWP - was now dedicated to conveying Sasol’s MRG, leaving a single 12 inch pipeline, the DJP, for the conveyance of refined product from the Durban refineries to the inland. The net result was a reduction in white fuel product pipeline capacity to some 35% of previous capacity.

83. Mr. Fienberg, a BP witness, testified that the OOCs opposed the reconfiguration of the DWP on the basis that this would severely limit the ability of the coastal refiners to supply their inland markets from their own coastal refineries. However, avers Fienberg,

Petronet’s response was to contend that the Sasol Supply Agreement would remain in force, which precluded the oil companies from supplying their inland market demand from their own refineries.⁷⁶

84. Fienburg testifies further that, despite Petronet’s assurances that adequate capacity for the conveyance of white fuels would be brought on when circumstances demanded it, in 2005, when the ratio of pipeline capacity to inland demand had fallen to 25%, the OOCs established that Petronet had concluded a further agreement with Sasol that reserved the DWP line for the conveyance of MRG for a further 17 years, the rest of the pipeline’s useful life, thus locking in the constraint.

85. The relationship between inland demand, inland refining capacity, inland demand and pipeline logistical capacity is clearly illustrated in the following diagrams submitted by Mr. Fienberg in the course of his oral testimony:

76 Page 914 of the Witness Statement bundle.

86. The first diagram shows the development of refining capacity. The yellow bar – that is the left hand bar – shows the development of inland refining capacity, while the green bar, the bar on the right hand side, shows coastal refining capacity. The blue line indicates inland demand. For our purposes the significant events indicated in this diagram are the commissioning of Natref in 1971 when, for a brief period inland refining capacity exceeded inland demand. By 1976 inland refining capacity stood at about 40% of coastal refinery capacity. In 1982 Secunda comes on-stream and the inland is significantly supply long. The commissioning of Secunda gives rise to excess refining capacity nationally, to such an extent that, in the same year, the green bar indicates that the coastal refiners reduced their capacity by approximately 30%. The supply-long position of the inland pertains throughout the decade of the 'eighties into the early 'nineties when a significant increase in inland demand brings the region into a demand-long position. The green bars for 1994 and 2004 indicate that the coastal refiners have re-commissioned the plant mothballed in 1982 or have commissioned new capacity.

87. The second diagram plots pipeline capacity and inland demand. In the early period inland demand was serviced by the relatively small Sasol 1 volumes and by rail and road conveyance from the coastal refineries. In the mid-sixties

the DJP, with an annual capacity, of 3.2 billion litres was commissioned and was, for a brief period, capable of meeting all inland requirement from the coast. The DWP was commissioned in the late 'seventies and this brought an additional 6 billion litres per annum pipeline capacity on-stream. Mr. Fienberg points out that with the commissioning of the DWP all inland demand could theoretically have been serviced from the coast. The graph shows that this pertained until the mid-'nineties. However, once Secunda came on-stream – a few years after the commissioning of the DWP – the pipeline system was significantly underutilised.

88. In 1995 – precisely when pipeline capacity was approximately equal to inland demand - Petronet turned the DWP over to Sasol for the exclusive conveyance of gas from Secunda to Durban. This is the step down of the product pipeline capacity line on the graph. At this stage the ratio of pipeline capacity to inland demand fell from approximately 100% to 30%. A few years later, with the extent of the logistics constraint climbing steeply, Sasol terminated the MSA.
89. By 2005 the ratio of pipeline capacity to inland demand had declined to 25%. Utilising the BP growth projections, Mr. Fienberg estimates that this would have fallen to 20% by 2010. The extended DJP is expected to be commissioned in the latter part of 2010. This is the final step-up of the pipeline capacity line on the diagram. Recall that it will replace the existing DJP and will provide total pipeline capacity of approximately 6 billion litres per annum. This means even after the commissioning of the expanded DJP total pipeline capacity for the conveyance of white fuels will still be significantly less than in the period from 1978 to 1995, that is the period from when the DWP was commissioned to when it was reserved for the conveyance of Sasol gas. This bears out the contentions examined later that argue that the relief offered by the expanded DJP will be for an extremely limited period at best.
90. Mr. Fienberg sums up the contents of the two diagrams as follows:

First of all we have Sasol's acquisition in special circumstances, if you like, of 80% of inland refining capacity and then there is a reconfiguration of the pipelines, which really has the consequence of creating dependence of the oil companies on the inland production capacity, and this would be passed on to Uhambo with very little solution or limited solution post 2010. I think it's the take-away from those two slides.⁷⁷

91. In summary then there are three pipelines that link the inland to the coast, namely:

- The 18-inch crude oil pipeline ("COP") from the coast to Natref (used, as the name suggests, to transport crude stock) and the crude oil strategic storage facilities at Kendal (near Secunda);
- The 12-inch Durban-Johannesburg Pipeline ("DJP") which links Durban to Sasolburg and then extends to areas north of Sasolburg and is used to transport white fuel products from the coast to the inland; and
- The 16-inch Durban-Witwatersrand Pipeline ("DWP") also referred to as the 'Lilly', which links Secunda to Durban and is used by Sasol to transport methane rich gas.

78

⁷⁷ See page 2954 of the transcript.

⁷⁸ A fourth pipeline also exists between Natref and the Johannesburg Airport for the transportation of Jet fuel.

xcii.The DJP is the most significant means of transporting refined product inland. There are two distinct sections of the DJP pipeline. The southern section of the pipeline runs north from Durban to Sasolburg and is used by the coastal producers to transport their product inland, off-loading their product at a series of terminals along the way. The northern section of the pipeline runs north from Sasolburg. Sasol and TOTAL inject Natref product into the DJP at Sasolburg from which point the pipeline is then used to convey this product plus product of the OOCs coastal refineries further north.⁷⁹ In other words, product is injected into the pipeline at Durban (by the OOCs) and at Sasolburg (by Natref). The DJP has 11 terminals where the refined products are removed and transported by road or rail to the relevant depots or service stations.

93. Allocation of pipeline capacity is done by Petronet, based on usage in the previous period, and allocated every six months. The price is uniform for all users and is specified in a Petronet published tariff.

94. We must reiterate – and logistics will be examined in depth when we discuss the likelihood of foreclosure – that pipeline conveyance is significantly more cost effective than its nearest alternatives, namely road and rail. Ms. Corrigan, a BP witness, whose witness summary is on record, sums it up thus:

“Moving product by rail and road is not only less efficient and safe than moving it by pipeline, but it is also more expensive. By way of example, the current pipeline tariff from Island View (BPSA’s depot at the Sapref refinery in Durban) to Pretoria is 12,661 cents per litre, whereas the cost of moving product by rail from **Island View** to **Pretoria** is approximately [**confidential: range from 18-21**] cents per litre.

⁷⁹ We refer later to the consequences of the bottleneck in the DJP that is created at this point.

Recent experience has shown that the average cost of moving product at short notice by road is [confidential: range from 32-35] cents per litre (excluding storage and handling costs). These figures will clearly increase as the crude oil price rises".⁸⁰

95. Note that road and rail is used all over the world to deliver product to customers and depots from the pipeline and ocean terminals, but in South Africa, because the pipeline is constrained, these relatively costly modes of transportation are also used to supplement pipeline transport.
96. After pipeline, long-haul rail is the most cost-effective means of transporting refined product to the inland region. Spoornet, a division of Transnet, administers rail logistics in South Africa. The OOCs submit that Spoornet is tightly constrained in the number of suitable tank wagons it can supply. Both BP and Caltex have stated that Spoornet cannot even meet their current rail requirements due to lack of sufficient rail tankers.
97. Long-haul road transportation of refined product is the least cost-effective way of transporting product to the inland area and is provided by a number of third parties to which the oil companies have outsourced the service as well as by oil company owned fleets.
98. Note too that storage facilities are also an important aspect of logistics capacity. These are located in the inland and at the coast, and are linked by the product pipeline. Depots are "shared" among all oil producers through so-called "hospitality agreements". We note that the mode of organising storage facilities in order to manage demand-supply imbalances is further evidence of the efficiency of this market and its ability to manage complex inter-company exchanges without vertical integration aimed at ensuring company level balance in refining and marketing. Jet fuel is stored at mobile dispensers at the airports, and is owned by the Johannesburg, Cape Town and Durban International Airports. These mobile dispensers are owned by a consortium of the six major oil companies.
99. The reconfiguration - or 'rationalisation' - of pipeline capacity that is described

⁸⁰ See Ms. Corrigan's witness statement at paragraph 3.1.5. These data were not challenged and their broad magnitudes are confirmed in Mr. Swart's witness statement.

above represented, from the perspective of the pipeline operator, the logic of the MSA. As we have already indicated, from Petronet's perspective, because the MSA provided that Sasol product was to be preferred in the inland area this would always limit the requirement to transport white products from the coast, and, hence limit the necessity to provide additional pipeline capacity. In the same vein the capacity of the jet fuel pipeline from Natref to Johannesburg International Airport was increased in 1995 thus entrenching Natref as the preferred inland provider of jet fuel, again predicated on the perpetual existence of the MSA.

100. However, in December 1998 Sasol gave the requisite five-year notice of its intention to terminate the MSA.

The Components Supply Agreement

101. We have already made mention of the CSA. It has proved difficult to locate this important agreement in the body of this decision. It does not have the lengthy history of the regulatory regime and the development of logistical capacity. Indeed it has only recently been concluded 'between' Sasol Synfuels and Sasol Oil which were themselves only until recently part of the same division of the same company, Sasol Ltd. Uhambo will post-merger become a party to this agreement in suitably amended form. It is clearly a critical aspect of the background to this transaction.

102. We are candid in acknowledging that our understanding of this agreement may be incomplete. In fact none of the witnesses who testified before us seemed willing to claim a complete understanding of all of its terms. Mr. Wright, the Engen witness, provided a halting explanation of the agreement. We were then advised that Mr. Oberholster, Sasol's principal witness, would be recalled in order to explain this agreement. Mr. Oberholster prefaced his attempted explanation with a candid acknowledgement that he had not read the entire agreement, although he professed to understand the underlying principles.⁸¹ However both Mr. Wright and Mr. Oberholster appear satisfied that the CSA does cater for the core requirements that

⁸¹ Page 2215-6 of the transcript.

the respective JV partners have from the transaction although Engen is, as we shall elaborate below, concerned that the agreement may be found wanting at competition law.

103. The intervenors are also clearly not well placed to fully comprehend this agreement. BP, the intervenor that has most fully considered the CSA, alleges that the agreement contravenes several of the provisions of Chapter 2 of the Act, precisely Petronas' and Engen's concern. We naturally make no finding in relation to this allegation here.

104. As already mentioned, the CSA essentially establishes the boundary between those assets that are part of Sasol Synfuels, on the one hand, and, on the other hand, Sasol Oil or, as it is sometimes referred to, Sasol Liquid Fuels Business. The former – Sasol Synfuels – will remain a wholly owned subsidiary of Sasol Ltd, that is, its assets do not form part of the JV. It is only the assets of Sasol Oil that are placed in the JV. What this means is that the ownership of the fuel components generated by Sasol's oil-from-coal technology and the synfuel plant is not part of the JV. Sasol Oil begins with the purchase from Sasol Synfuels of the fuel components and their conversion into refined fuel. The assets that are required to perform this latter task comprise a blending facility and a number of storage tanks that are, and must remain, physically integrated with Sasol's synfuel production plant. The CSA thus seeks to commercially separate that which cannot be physically separated, with synfuel production and output (the fuel components) remaining the property of Sasol Ltd through its wholly owned subsidiary, Sasol Synfuels, and the conversion of these fuel components into liquid fuels and the output thereof being the property of Sasol Oil and, hence, part of the JV.⁸²

105. Sasol provides a number of rationales for the existence of this agreement. It points out that the synfuel process does not only generate feedstock for the production of liquid fuels, but also generates an important chemical feedstock. It is also suggested

⁸² See page 2216-9 of transcript. Mr. Oberholster states at page 2218: '*...and the concept was how can we not include the refinery because of the difficulties mentioned, but how can we include the economic benefits of a refinery similar to a coastal oil company refinery so that the value of this is passed on to this liquid fuels business and hence in future also to any BEE participation in that business, but not pass on the hardware because of the issues mentioned. And that is where we came to the CSA, which included a virtual refining margin as part of the deal.*'

that because there are different BEE codes applicable to liquid fuels and to the chemicals industry, that these assets cannot be contained in a single corporate entity. Sasol also argues that, because new clean fuel regulations will ultimately require large capital investment in the synfuel plant, the separation of the plants avoids burdening the BEE investors with the requirement to make the necessary investments.⁸³

106. None of these explanations is particularly persuasive. On the face of it there would appear to be no greater reason why a separate entity, Sasol Synfuels, rather than the JV, should produce and market the chemical feedstock – it appears that until recently Sasol Oil was responsible for the marketing of all its and Synfuels products. We cannot understand the reference to the different BEE codes for liquid fuels and chemicals. There is, to our knowledge, no prohibition on a single act of empowerment extending over the ambit of more than one sectoral code – indeed, from this perspective, the argument smacks rather of Sasol Ltd empowering only those sections of its business where there is an operating code and hence a requirement to empower, while retaining sole control over those aspects of its business which it is not yet required to empower. As for the investment required in Sasol Synfuels, only some 25% of the burden will fall on the BEE partners – the remainder will be the responsibility of Sasol Ltd and Petronas – and, in any event, there is no reason why the BEE investors could not raise their required share of a potentially profitable investment.

107. We clearly need to dig deeper for an explanation for the existence of the CSA.

108. It appears that the core of the agreement is the requirement that Synfuels sells, on an exclusive basis for a period of 10 years, all of its output of fuel components to Uhambo. Uhambo is obliged to purchase all of this output. At the end of this 10-year period, Sasol Synfuel will sell a minimum of 3 billion litres to Uhambo, and Uhambo will be required to procure this minimum volume. The second period is also stipulated to be 10 years. The supply

⁸³ Page 2216-7 of the transcript.

agreement effectively guarantees a market for all of Synfuel's output, and it gives Uhambo security of supply thus meeting the two major objectives of Sasol and Engen respectively. In Mr. Oberholster's words:

Just maybe the salient features of the agreement if I can touch on that. Its got an exclusive period of ten years. Thereafter it is an evergreen agreement chairperson with a minimum sales volume to Uhambo of 3 billion litres. We aim to produce at the end of this period about 4,8 or 5 billion. So 3 billion of that would be a minimum that has to go to Uhambo, the rest is saleable to other parties. It covers all Sasol's liquid fuels components in South Africa. 84

109. It appears to be the element of exclusivity in the agreement that most concerns the intervenors. However it is also clear that Uhambo is the only party that possesses the requisite equipment and location to convert the synfuel components into liquid fuel. It appears to be common cause that the necessary blending equipment that will be part of Uhambo cannot be viably reproduced by the OOCs or anyone else who may have designs on entering this market.⁸⁵ This, of course, does not necessarily mean that Uhambo and Sasol Synfuels have to enter into an exclusive agreement for the supply and purchase of the synfuel components – other purchasers of the fuel components could presumably enter into toll blending arrangements with Uhambo. But what Uhambo gets from Sasol Ltd is the clearest possible realisation of Engen's desire to achieve security of supply: its get 10 years exclusive access to Sasol Synfuel's fuel components, that is, to all of the fuel output produced at Secunda. The combination of an inland monopoly of refined product and the largest inland retail market presence is the critical structural feature of the inland market that will enable the merged entity, Uhambo, to defend and expand its share of the inland retail market and to protect the wholesale price.

110. Having agreed to the exclusive sale and purchase agreement, the next question is of course the price at which the fuel components will be supplied. It should come as no surprise that the basis for the price at which the exchange of the synfuel components will take place is that which, as we are constantly reminded by Mr. Oberholster, is, in Sasol's view, 'fair', this being the import parity price or BFP. Again in Mr. Oberholster's words:

84 Page 2223 of the transcript.

85 This is acknowledged by Mr. Oberholster at page 2239 of the transcript and confirmed by Mr. Fienberg at page 3098 of the transcript.

It [the sale of fuel components] is based on the BFP or then import parity principle and it is in fact the BFP market price minus a derived virtual refining margin, which is a net refining margin for a typical coastal refinery at the coast and that is the price that we Uhambo would pay for the components and therefore we would earn that margin if we are able to sell it BFP. 86

111. Engen and its controlling shareholder, Petronas, were sufficiently concerned about the legal validity (at competition law) of this exclusive agreement that they insisted on the inclusion of a 'claw back' provision that would ensure that they were compensated for the value embedded in this exchange should the agreement be struck down for contravention of the Competition Act.⁸⁷ However, our understanding of the CSA, is that there would be no recompense, Uhambo will have no recourse against Sasol Synfuels, should the 'value' of the CSA not be realised because of the inability of Uhambo to transfer the product to the OOCs or their own inland marketing arms at a BFP-based price. Mr Oberholster confirms this:

If Uhambo is only able to sell at less than BFP, it would then cut into its margin like anybody else who had a margin and if it could not get the market price, would lose some of that margin Chairperson. On the side of Uhambo there is a significant risk Chairperson because it is a take and pay obligation. So Uhambo has to take all the components and pay for all those components.⁸⁸

112. In short, the CSA guarantees Uhambo security of supply and, as long as it on-sells at BFP, it 'guarantees' the 'virtual refining margin'; but it guarantees to Sasol Synfuels BFP as the basis for pricing its fuel components.

113. That is why we observe in our discussion of the rationale of the transaction that BFP is built into the pricing of Uhambo fuels from the point of the exchange of fuel components between Uhambo and Sasol's Synfuels. Sasol Synfuels – 100% owned by Sasol Ltd - has effectively immunised itself from any of the downside that may come from competition in the wholesale and

86 Page 2224 of the transcript (our emphasis).

87 This, we understand, is common cause. Note citation in BP head of argument Para 9.7, pg142 from Sasol document entitled 'Origin of, and Terms applicable to, the VRM Clawback, dated 13 September 2004 where it is clearly explained that the clawback was inserted because *'..concern was based on the fear that the CSA could be struck down for Competition Act reasons during the exclusivity period.'*

88 See page 2224 of the transcript.

retail fuel markets and, in so doing, has incentivised Uhambo to pass on the product at the BFP based price. If competition forces down the retail and wholesale prices from the BFP basis, all of the downside will be absorbed by Uhambo, in which, we note, Sasol Ltd's share is 37,5%; no downside arising from competition in the wholesale and retail markets is absorbed by Sasol Synfuels, in which, we note, Sasol Ltd's share is 100%.

114. The other side of this coin is that the competitive advantages that reside in Sasol Ltd's technologies and in the location of its synfuels plant are locked in its wholly owned subsidiary, Sasol Synfuels, and are not passed on to Uhambo much less to South African consumers of fuel products. We understand that Uhambo will purchase the fuel components at the equivalent price that a coastal refiner would pay for crude oil plus the cost of transporting the crude equivalent from the coast, that is at the inland import parity price for a crude oil feedstock even though Sasol Synfuels' Secunda plant utilises the highly competitive oil-from-coal feedstock and it is physically located in the inland. Note the following exchange between Mr. Oberholster, for Sasol, and Sasol's counsel, Mr. Cilliers:

ADV CILLIERS: Yes. Now the next point is some of the interveners witnesses', particularly Mr (inaudible) who read in [Fienberg] claim that Uhambo's dominant position arises from ... will arise from advantages, which it will so-called inherit from Sasol's so-called privilege position of so-called subsidies, so (inaudible) calls it. Now one of ... let's just deal with 3 of these briefly. One of the so-called subsidies is that which Petronet gives to NatRef on the basis of this NatRef neutrality principle. And the second of these alleged advantages is that inland advantage, which we've said to accrue to Uhambo. Would your response to saying those are benefits, which Uhambo would inherit from Sasol, who had historically acquired these benefits?

MR OBERHOLSTER: Yes Chairperson. These are pet subjects or these are pet 8 [hate] subjects if you want to call them that. But let's first deal with the one. The internal location advantage, which Uhambo I understand, is said to inherit from Sasol Limited, or then from Synfuels. Synfuels produces their components, which they sell to Uhambo, who then reworks those or blends those into marketable products. Synfuels will get the full locational advantage that they earn on those products. Uhambo will pay them for those products, let's be clear on that. The deal that we have with, or that Uhambo has with Sasol Synfuels, and we'll talk about the details thereof I guess later. But basically it is, we will pay them the market price, which is deemed as BFP in the contract, minus a virtual refinery margin, a net typical coastal refinery margin, plus included in the money pay them will be the locational advantage. So from Synfuels, from the components, which is about currently 6 billion litres, in future down to 5 billion litres, there'll be no locational advantage

for Uhambo whatsoever.⁸⁹

115. There is a revealing aspect to Sasol's loud proclamation that Uhambo will inherit none of the synfuel or locational competitive advantages. This is precisely what the OOCs, who are as little interested in robust competition as Sasol, want to hear and so Sasol proclaims it as an advantage, a 'selling point', of the CSA. The OOCs, as Mr. Fienberg's testimony establishes, profess difficulty in believing that Sasol would constrain itself in this manner. But Sasol is to be believed - passing these competitive advantages down through Uhambo to the consumer is equally anathema to Sasol Ltd because it risks triggering the downward spiral of the import parity price, a spiral that will end at export parity.

116. But without the synfuel and locational advantages what can Sasol Ltd bequeath to the purchasers of its fuel business in which it, Sasol Ltd, will still retain a substantial interest? It gives it a guaranteed coastal refining margin provided only that it on-sells the refined product at BFP and it gives it the incentive and the ability to protect this margin by guaranteeing it a monopoly of (upstream) inland supply through the CSA, and, through the merger, a dominant (downstream) inland retail position. This structure will then allow the merged entity, Uhambo, to protect and advance its 'inheritance' by deployment of its acquired inland market power, by, as the evidence shows, foreclosure and downstream pricing power.

⁸⁹ See page 368-9 of the transcript. Note also the following exchange between Mr. Snyckers, Sasol's counsel, and Mr. Fienberg, a BP witness: 'ADV SNYCKERS: But with respect Mr Feinberg, you touched on a number of topics and, for example, the exclusivity of the SCA and what that means and what it doesn't mean and so on. But I'm concerned at the moment only with this one rather prominent theme, which is that the advantages accruing to a Synfuel producer are not advantages that are passed on to Uhambo. In other words, to the extent that you have a subsidisation of Synfuels, to the extent that you have a cost advantage if your Synfuel production is such with respect to the crude oil prices that you are advantaged and so on. All of those things are insulated as a result of the virtual refining margins being a coastal margin. Do you understand that? MR FIENBERG: Well, I understand to the extent that the Synfuels advantages will stay with Sasol Limited that the Secunda transport tariff will stay with Sasol Limited. How they have then derived the formula for the VRM I don't know, but I understand it to that extent.'

117. However from the perspective of those mandated to protect and promote competition and who are therefore not concerned to ensure the welfare of either Sasol or the OOCs but rather of the end consumers, the prospect of Sasol using its competitive and locational advantages to penetrate the downstream market is an enticing one. The only possible objection to this prospect can be one that insists that Sasol secured its competitive advantages 'unfairly', through government subsidy and regulation. However if these past 'sins' are to be corrected, then it is not for us to address them by permitting the public distortions of the past to be corrected by the construction through a private agreement - the merger - of a reconstituted market power which, as we shall show, will likely take the form of a reconstituted cartel under Uhambo leadership. By terminating the MSA Sasol allowed the first tender shoots of competition to sprout. It gambled on stunting the growth of competition by merging its upstream fuel business with Engen's downstream retail business. Our mandate is precisely to nurture these tender saplings regardless of the anti-competitive designs of both Sasol and their reluctant competitors, the OOCs.

118. We will show then that from Sasol's perspective the critical objective of the merger is the protection of BFP pricing – it achieves this because the merger allows it to attain a major position in the retail market without the expedient of actually competing for this share, a process which, if it is to succeed, will likely necessitate it passing its competitive advantages from Sasol Ltd to Uhambo's fuel customers. And for Engen the merger provides security of supply and removes the competitive threat of an aggressive Sasol entry into the downstream market, a particularly daunting prospect if Sasol deploys its competitive advantages in forcing its way into the retail market. The Components Supply Agreement is the contractual realisation of these objectives.

Summary and Conclusion

119. From the perspective of competition law there can be no gainsaying the nature of the MSA. It constituted a market sharing and output limiting cartel between Sasol and the OOCs – Sasol agreed to limit its participation in the wholesale and retail markets; in exchange the OOCs agreed to uplift, at a price based upon import parity (viz. the IBLC, later BFP), the vast majority of Sasol's inland product, effectively accepting that they would not utilise their coastal refineries to meet their inland marketing requirements except to the extent of any inland shortfall between Secunda and Natref supply and inland demand. The essential nature of the MSA is common cause – indeed Sasol has consistently maintained, though not entirely convincing, that its reason for terminating the agreement was because it was advised that it would fall foul of the Competition Act.

120. The logic of this market-sharing cartel has structured the supply of the logistics capacity necessary to convey white fuels from the coastal refineries to the inland market. Although not much evidence has been led on the pre-'fifties logistics, this was the period in which refined product was imported by the fuel marketers and then conveyed to the inland by rail and road. Road and rail were also used to convey refined product to the inland immediately after the establishment in the late 'fifties of the Durban refineries. Once, from 1965, the DJP had been commissioned, the economics of conveying fuel products would have certainly favoured the pipeline although a certain amount of road and rail transport would still have been utilised in conveying product from the coast to the inland.

121. However, as already indicated, the commissioning of the Secunda plants seen in the context of the MSA drastically reduced the requirement for logistics capacity needed to convey fuel products from the coast to the inland. In fact, it led to the under-utilisation of even the preferred pipeline capacity. This was then rationalised to meet the requirements of a world where a minimum amount of logistics capacity was required to convey product from the coast to

the inland.

122. This is the prism through which this transaction must be viewed. In our view – and, we note again, this view is essentially uncontroverted - the South African fuel market, from the refinery level through to the level of the retail service station, was cartelised for many years. The MSA was in effect the market sharing agreement entered into by the participants in the cartel with the price of refined product based on import parity or BFP which was then used to build up to the wholesale price and the retail pump price.

123. In 1998 Sasol opted to exit from the cartel arrangement and so gave notice of its intention to terminate the MSA. The notice of termination became effective on the 31 December 2003. Sasol terminated the MSA for a variety of reasons, the most frequently cited of which was the fear that it would have been found wanting at competition law.⁹⁰ But there were clearly other, arguably more pressing, considerations. The new South African government clearly intended to limit its role in the setting of fuel prices. It had already, to Sasol's express dissatisfaction, changed the basis for calculating the regulated wholesale and retail prices from IBLC to BFP. It had stated its clear intention to de-regulate the retail market, also a measure resisted by Sasol, a measure that would likely have arraigned those members of the MSA-governed cartel with an inland retail presence – basically all the OOCs – against that cartel member, Sasol, whose overwhelming presence in the market was as a supplier of refined product to the OOC marketing arms in the inland region. The time was clearly ripe for a reconstitution of the market.

124. And, in the precise timing of the termination of the MSA, there was a significant carrot: with the reconfiguration of the pipeline network the logistical capacity to convey white fuel products was more constrained than ever before. It is clear that although other broader considerations may have influenced Sasol's decision to terminate the MSA, the opportunity was provided by the logistical constraints that bestowed inland market power upon Sasol.

⁹⁰ If this was indeed a major factor that prompted Sasol to terminate the MSA, it was notably prescient in its thinking – the new Competition Act only came into effect in 1999.

125. Cognisant of the impending regulatory changes and of the likely divergence in the interests of its erstwhile cartel partners, and emboldened by the existence of logistics constraints, which, the evidence clearly shows, it was actively planning to exacerbate, Sasol determined to strike pre-emptively. Hence, it terminated the MSA. This has led to an outbreak of intense competition - a phenomenon commonly experienced when a cartel is broken by one of its members. Competition predictably broke out in both upstream and downstream markets. In the upstream market, the coastal refiners were now free to market their product in the inland and this they attempted to do. In the downstream market Sasol was at liberty to expand its presence at the retail level, both its service station sales and footprint and its penetration of the commercial and industrial market, and this it attempted to do.
126. The principal weapon in this conflict is logistical capacity – the capacity of the OOCs to convey product from their coastal refineries to their inland marketing arms at commercially viable rates. By exploiting the logistical constraints Uhambo is able to maintain the wholesale price of fuel products in the inland market at supra-competitive levels. This, the most important element in the cost structure of the downstream retailers, will limit the prospect of downstream price competition in the diesel market and in the industrial and commercial markets, the only markets in which downstream price competition is feasible. When the downstream price of petrol is deregulated the maintenance of the wholesale price at supra-competitive levels will similarly circumscribe the possibility of price competition in that market. The logistical constraints – and the foreclosure strategy that it enables – will also enhance the ability of Uhambo to strengthen its already powerful position in the downstream retail markets without resort to robust price competition, precisely the mechanism that Sasol has, in large part, used to expand its penetration of the downstream markets and which required discounting the wholesale price, the most significant element in the retail price of petrol.

Rationale For The Transaction

127. With this background in mind, it is instructive to examine the stated objectives of this transaction. The parties have presented the following rationale:⁹¹

- The proposed merger will lead to the creation of a large manufacturer and marketer of liquid fuels in South Africa that is able to compete better with the other oil companies in South Africa.
- The proposed merger will lead to a materially better balanced business in terms of refining capacity and marketing operations and achieve synergies in manufacturing, supply and trading, marketing, the international business and corporate services.
- The proposed merger will enable the parties to comply with the petroleum industry's charter regarding ownership targets. It will also provide an opportunity for the previously disadvantaged groups to invest in a more balanced and competitive firm.

128. In the ordinary course, merger analysis does not draw heavily on the parties' stated rationale for the merger. This usually amounts to little more than a statement of intent and is generally expressed in anodyne terms that do little to advance understanding of the competition implications of a merger transaction. In this instance, however, it is instructive to juxtapose the stated rationale with the record.

129. We are not here concerned with the first and third of the bullet points listed above. The first may refer to any merger, anywhere. To the extent that it is meant to convey the image of the merged entity as a struggling David pitched against the Goliaths of the oil industry – a point injected by the merging parties into the hearings at every available opportunity – it is of little more than theatrical value. Suffice to point out that in the domestic fuel market, the market with which we are concerned, neither of the merging parties is

⁹¹ See Paras 10-11 of Mr Wright's statement at pages 285-6 of the Witness Statement bundle; as well as Para 15 of Mr Oberholster's statement at page 419 of the Witness Statement bundle.

accurately cast in these terms – the one is the largest refiner and the other the largest marketer of fuel product – and, as counsel for Shell noted in his opening address, to the extent that a powerful shareholder is a valuable weapon in competitive struggles in the South African market, Sasol, certainly, has received its share of largesse from its erstwhile shareholder, the South African government.

130. As to the third bullet point, empowerment is not merger specific. It is mandated by the petroleum industry charter and will take place regardless of whether the merger is approved.

131. It is the second bullet point that requires further examination. The reference to ‘synergies’ is standard merger-speak and, where relevant, is examined when efficiencies are considered. But the reference to the requirement for a *‘materially better balanced business in terms of refining capacity and marketing operations’* demands further attention.

132. The requirement of ‘better balance’ suggests that the successful competitive positioning of the merging parties necessitates the vertical integration of upstream activities, refining, and downstream activities, distribution and marketing. While, since Coase’s seminal work, we know that vertical integration may be preferred precisely because it permits of more efficient co-ordination than arms length market driven transactions, it would be difficult to make a case for ‘coasian’ efficiencies arising from the combination of refining and marketing and distribution.⁹² This was specifically put to Dr. Scheffman, the Caltex expert in these hearings, who persuasively dismissed these transactions costs efficiencies as a basis for vertical integration in this industry.⁹³ Mr. Reid, a BP witness, insisted that there was no particular virtue in balance and noted that BP in its global operations intentionally maintained a refining short/marketing long position, while other major oil companies took the opposite view.⁹⁴ We have already noted that the industry, both here and elsewhere, appears to be characterized by particularly efficient market based arrangements such as

⁹² R H Coase, *The nature of the firm* (1937).

⁹³ See pages 2076 – 2077 of the transcript.

⁹⁴ See pages 2126 – 2127 of the transcript.

product swaps and depot hospitality schemes for ameliorating the transactions costs implications of imbalance.

133. Finally, we note that depending upon one's geographic perspective, none of the oil companies is in balance. That is, all require product for marketing in regions of the country, where they have no refining capacity. Specifically what this transaction seeks to achieve is better balance for the merged entity in the inland region, the country's largest market for fuel, where, with the exception of TOTAL, no company is in balance.

134. An indicative sampling of the record that reveals the merging parties' true rationale – their actual intentions – is clearly presented in the BP heads of argument. But in truth the testimony of Mr. Oberholster, Sasol's principal witness, yields any number of statements that confirm that better 'balance' or a 'marketing presence' is sought in order to maintain the wholesale price of fuel products at the supra-competitive price level provided for in regulation – the import parity price or BFP - in respect of the merged entity's sales of bulk supply to the OOCs. In Mr. Oberholster's own words:

*The reasons for the deal, which I said from the Sasol side was this very fact that when there is a new pipeline and subsequently regulation (this should presumably read 'de-regulation'), we would be, as we are today, at the mercy of oil companies, even more so. And therefore it is our view that if we are better balanced, it's got significant advantages to us. Some of them, a large part is the synergies which we capture, but certainly also in our view it will make us better and that we can more ...we would have a better negotiating power to be able to negotiate fairer prices with our oil company friends. That's the point.*⁹⁵

135. On numerous occasions Mr. Oberholster made it clear that he regards BFP as the 'fair' price.⁹⁶

⁹⁵ See page 470 of the transcript.

⁹⁶ See, for example, page 391 of the transcript where, under cross examination, Mr. Oberholster responded: "...an import parity price, yes Sir,...that's the price we believe to be a fair market price and the price we wanted from BP.' And also transcript page 363 for a strident defense of import parity pricing: '..we regard import parity in the fuel industry as an appropriate market value price.....And that's currently used by government as part of the build up in the retail petrol price, which is legislated. It is the price used in the M-Par calculations where we calculate the marketing margins, as it were, as a transfer price from the oil companies' refining production to their marketing. We believe that to be a legitimate market value price and that is why we've applied that price."(our emphasis)

136. Any number of Sasol strategy documents reveal that the objective of 'better balance' or a 'marketing presence' is the maintenance of BFP as the base price.

137. In this vein then, note the following extract from a March 2002 Sasol document that is explicitly concerned to identify the strategic rationale for the development of a marketing infrastructure:

The objective is to establish and control a profitable, sufficiently large and effective marketing infrastructure on a national basis and focused in the main metropolitan areas in order to protect and influence the wholesale fuel product price of the Sasol Group of Companies.⁹⁷

138. Or, as stated in another internal Sasol document:

Primary objective: Create leverage in wholesale fuel price to other oil companies by creating alternative distribution and value.⁹⁸

139. Or, again, in a third Sasol document, an undated presentation headed 'Fuels Marketing':

(A) Main Objectives – To support the Sasol strategy to remain a wholesaler for the bulk of its Automotive Fuels, this business unit must develop a direct marketing infrastructure to be able to influence the market price of fuels and in this way to protect the wholesale price to the oil companies⁹⁹

140. And, significantly, in a draft minute of a Sasol Oil board meeting:

Business Charter [for motorfuels and lubricants]- ...to enable us to grow our business and to protect and influence the wholesale fuel price of the Sasol Group if required¹⁰⁰

141. Indeed so intent was Sasol upon maintaining the BFP price basis that it, ironically a company established precisely in order to reduce, for economic and strategic reasons, South Africa's dependence on foreign sources of fuel,

97 BP5 page 375.

98 BP4 page 229.

99 BP18 page 187.

100 BP4 page 396.

identified the following opportunity in order to maintain import parity pricing for fuel:

Take over the least economical coastal refinery and run it at its cost break-even point. This moves SA to be a net importer of liquid fuels'.¹⁰¹

142. This last statement is particularly revealing. It effectively proposes shorting the national market – through acquiring and then reducing the output of a low margin coastal refinery – in order to ‘legitimise’ import parity pricing. It is tantamount to an acknowledgement that import parity pricing of fuel – or BFP – in a fuel *exporting* economy can only be artificially maintained by administrative fiat (as has been the case to date), or by collusive agreement (which, through the MSA, has also played an important role in the maintenance of BFP), or by the unilateral exercise of market power (which is proposed here, and which, in our view, is Sasol’s actual rationale for the merger).

143. It appears that, for its part, Engen, with, by some considerable margin, the largest inland (and national) retail market share, was anxious to defend its market position, not only from aggressive independent entry by Sasol at the retail level – a strategy clearly in place as merger talks commenced – but also against the prospect of a foreclosure by Sasol, or worse, by a Sasol that had merged with one of Engen’s other competitors.¹⁰²

144. The first concern – aggressive entry by Sasol at Engen’s expense - is naturally neutralized by the merger. The second, the prospect of a supply squeeze, is dealt with by the important Components Supply Agreement, a centre-piece of the merger transaction, that effectively guarantees the merged entity – in which Engen’s controlling shareholder, Petronas, has a 37,5% share – exclusive access to the fuel components produced by Sasol Synfuels, which is not part of the merger. It is well put in a document prepared by Rand Merchant Bank, a transaction adviser to the Engen board, which identified *‘the elimination of uncertainty regarding Sasol’s role in the liquid fuels market and assurance on the sourcing of products for the inland market’* as *‘Engen’s biggest benefit’* from the transaction.¹⁰³ It is not surprising then

101 BP4 page 400.

102 BP 26 page 253-259.

103 BP7 page 226.

that Mr. Wright, Engen's project leader for the transaction and its witness at these hearings, characterized this outcome as the '*happily ever after scenario*' contrasted with the '*big bad wolf scenario*' which is Mr. Wright's characterization of Engen's prospects in the event of an independent entry by Sasol.¹⁰⁴

145. These, in our view the true rationale for the merger as revealed in pertinent strategy documents, do not, as we have already indicated, dispense with the requirement to examine whether or not the merger will provide the merged entity with the ability and incentive to realize these objectives. They do, however, put in proper perspective the rationalization that has been repeatedly offered for this transaction – the strategy documents reveal clearly that the overriding intent, certainly from Sasol's perspective, is the maintenance of an administered price which has been set at a level, the import parity level, that is manifestly supra-competitive in a competitively structured market.

146. The alternative mechanism for Sasol to achieve 'balance', its overriding stated rationale for undertaking this transaction, is through organic growth of its retail share. However this mode of entry would, as we elaborate below, have necessitated aggressive retail pricing by Sasol and the consequent feedback of pressure on to the wholesale price. This merger represents Sasol's efforts to counter these, the likely outcomes of a competitive entry into the retail market.

147. Aggressive retail pricing is, of course, the last thing that Engen, the country's largest fuel retail merchant wants to entertain particularly if its security of inland supply is threatened by an aggressive Sasol. It certainly has the most to lose from this mode of entry. Hence, although each of the parties may have their own particular reasons for merging, they coalesce to the extent that the merger grants retail pricing power to the merged entity – the retailer, Engen, to protect its retail margins and revenues; the refiner, Sasol, aptly characterized by Mr. Reid as a 'merchant refiner', to ameliorate feedback from aggressive

¹⁰⁴ BP28 page 417-9.

retail pricing to the wholesale price.

148. Thus the merger's rationale also has reference to the event that threatens to trigger aggressive retail pricing, this being government's commitment to deregulate the pump price of petrol. Again, one does not have to divine this from a complex reading of the merging party's commercial incentives and imperatives. It is stated with characteristic bluntness by Mr. Oberholster who testified that

Margins generally for the oil industry in a [regulated] environment tend to be higher than in a de-regulated environment ¹⁰⁵

149. And

*So therefore if de-regulation was to be postponed, it will be more profitable for Uhambo and for Sasol and for BP and for Shell and for all other intervenors.*¹⁰⁶

150. The link between the prospective deregulation of the retail market and the maintenance of BFP is also clearly at the forefront of Sasol's concerns. Note the following exchange between Mr. Norton, counsel for BP, and Mr. Oberholster:

MR NORTON: Could you read the last bullet point into the record please?

MR OBERHOLSTER: I will do that. "BP's drive to terminate BFP as a reference production price and aggressive marketing actions could lead to a earlier deregulation."

MR NORTON: Yes this was another issue about BP that you didn't particularly like, was that BP's insistence on a lower wholesale price might auger deregulation at an earlier date, correct?

*MR OBERHOLSTER: Well what we said is, I think there was 2 items there. It was ... what we said is, if BP's drive to terminate BFP. Now can I just deal with that? BFP is the government regulated build up price, which is regulated by government. So your attack or your drive to terminate that firstly, and secondly your aggressive marketing actions linked to that could, we believe at that point in time lead to earlier deregulation. And if that's the case then so be it sir.*¹⁰⁷

151. It is not surprising then that a Sasol/Engen presentation lists one of the objectives of the JV as being to

¹⁰⁵ See page 396 of the transcript.

¹⁰⁶ See page 396 of the transcript.

¹⁰⁷ Page 393-4 of the transcript.

*Actively lobby the postponement of deregulation.*¹⁰⁸

152. Clearly if a floor is placed under the OOCs critical cost driver, the wholesale price, it will ease the ability of the JV to enlist their support for lobbying for the postponement of a measure which is targeted at imposing downward pressure on the retail price, and thus a squeeze from both ends on retailing margins. The pressure to co-operate with Uhambo will be irresistible if accompanied by a credible threat to foreclose or to take the lead in initiating a price war.

The counterfactual – independent entry by Sasol into the retail market

153. There is considerable evidence of the counterfactual, that is, of the positive impact on competition of an *independent* attempt by Sasol to extend significantly its penetration of the wholesale and retail markets. While this is an insufficient basis for finding that the merger would substantially lessen competition – that the present structure promotes vigorous competition, does not necessarily establish that an alternate structure will stifle competition - it naturally bears on the evaluation of the transaction. Had the MSA still been in force and had government not committed itself to further deregulation, the merging parties might have argued that impact of the merger on competition would be neutral, an argument commonly advanced in mergers that take place in highly regulated markets.¹⁰⁹ In this instance however we have evidence of the functioning of the market *after* the removal of a major regulatory instrument, the MSA, and, as we shall presently elaborate, the evidence is clearly of robust competition. It is against this standard, the performance of the post-MSA market, that the merger's likely impact must be assessed.

154. The termination of the MSA – itself partly predicated on the expectation of relatively imminent deregulation - has clearly led to an outbreak of competition. And there is every reason to expect that robust competition will, but for the prospect of the merger that is before us, characterize the future of the various fuel markets, the more so if Sasol persists in its independent endeavour to

¹⁰⁸ BP2 page 463.

¹⁰⁹ Although previous decisions of the Tribunal have not viewed this argument favourably. See *Tongaat Hullet/TSB* [1999-2000] CPLR 127 (CT).

correct the imbalance between refining and marketing that it professes to find so disadvantageous. Indeed, it is on this basis, that Mr. Reid, a BP witness with an impressive experience of a wide range of oil markets across the world, argued that the structure of the South African fuel markets and that of its major participants portended particularly robust competition.

155. The most persuasive evidence of the vigour of post-MSA competition is provided by Sasol's principal witness, Mr. Oberholster. In short, the evidence establishes that Sasol made impressive inroads into the retail markets, capturing market share both in sales at service stations and in the industrial and commercial segment of the retail market. Sasol has downplayed its achievements and it is very likely that they did indeed undershoot Sasol's expectations and wishes. Certainly, they would not have met the expectations of a company intent upon rapidly establishing a market share large enough to support pricing power in the retail market as a mechanism for protecting the wholesale price, Sasol's avowed objective in establishing a marketing infrastructure.

156. However other witnesses are clearly impressed by Sasol's achievements in the retail markets and offer persuasive evidence to back up this rosier assessment. Hence when it was put to Mr. Fienberg, the BP marketing executive, that Sasol had only been able to post 1.1% 'organic growth' – that is growth that is not accounted for by acquisitions – in 2004, he responds:

Which still is not just 1.1%. That kind of market share movement is pretty impressive and probably unprecedented, and again I don't say that with a hint of criticism. It's very well done. But it's just what surprised me from Mr Oberholster's witness statement was that it's impossible to grow and all the good locations have gone. I mean it may surprise you to know that Exel and Sasol have got more franchised sites, those are [more] sites with shops than BP has at this point, which again is well done. It's quite impressive, but it doesn't stack up against the conclusion that they're unable to grow and compete in this market. They're competing very effectively.¹¹⁰

157. Mr. Fienberg is pressed further by the merging parties counsel, Mr. Snyckers.

¹¹⁰ See page 3093 of the transcript.

However Mr. Fienberg persists in his view that Sasol's achievements in the downstream markets are impressive. Note the following exchange:

ADV SNYCKERS: Well they've lost ground in 2005 in commercial. You don't have the commercial figures on their own?

MR FIENBERG: I'm afraid that I don't.

ADV SNYCKERS: And they have gained only 1.2% in 2004 and 1.4% in retail in 2005 and that is a function of the limited number of sites that are available?

MR FIENBERG: Mr Snyckers I'll tell you we took 10 years to get that kind of market share movement, which is the nature, I guess, of a regulated market and to be clear we don't state it as a criticism. Actually it's a compliment. It's been very significant growth. If we take the inland market, inland retail market, sorry that's gasoline, Mossgas, retail volume growth inland, the industry volume change in the first 7 months of '05 versus the first 7 months of '04, the market grew by 89 million litres. Sasol's volume change was 92 million litres. So they captured the entire volume growth in the inland market and I think that's pretty good going. I would've liked to have done that.

ADV SNYCKERS: The ceiling is still very low Mr Feinberg because of the fact that you can't have new sites when the best sites have been taken.

MR FIENBERG: Well I'll tell you that they've got more franchise sites in South Africa than BP has and they've done it in 18 months. It's seriously an impressive piece of work actually, and that's great. It doesn't stack up against life's so difficulty they can't compete. They're a very effective competitor.¹¹¹

158. And further:

MR FIENBERG:.. And just by way of comparison, and I stand to be corrected here by your clients, but I seem to recall a number of 61 new sites this year. Last year we did all of 4, and I again I don't want to put that in as sort of sour grape, not at all, but it just doesn't stack up against, there's no locations left, it's all terribly difficult and we can't compete. They can compete and they are.

ADV SNYCKERS: And you are aware of the difficulty they encountered with the 3-kilometre radius and the fact that they got knocked back on that?

MR FIENBERG: Yes we all are, but again I go back to the point. I think it would be a fair argument if they've managed to build 4 sites and 3 sites. They're actually ... and I'll tell you something else about the sites, is that the throughput, the average throughput through their sites is 1.5 times higher than the average of anyone else out there, because they're all new sites, they're all franchise sites, they're doing very well. So the refrain that it's impossible to compete and every decent site is gone is just patently not true.¹¹²

159. Mr. Fienberg's assessment of Sasol's marketing achievements is persuasive.

We stress that it may not meet the ambitions of a merchant refiner intent on establishing the retail market share required to protect its wholesale price, to

¹¹¹ See page 3095-6 of the transcript.

¹¹² See page 3096-7 of the transcript.

give it, in other words, pricing power in a potentially deregulated retail market, but it is clearly an impressive achievement, that speaks to the existence of robust and effective competition in the retail markets. This is, in fact acknowledged in Mr. Oberholster's witness statement:

In both the commercial and retail markets there is significant competition between the merging parties, oil companies and other independent resellers.¹¹³

160. However, from the perspective of those interested in promoting competitive markets, what is most impressive is that Sasol appears to have achieved these marketing gains through robust competition on the merits.

161. Mr. Oberholster explains that Sasol has secured its sights and incentivised the retailers marketing its brands by the provision of generous discounting of that holy of holies, the wholesale price of petrol. Mr. Oberholster suggests that the discounting of the wholesale price is a method of compensating a dealer-owner for the capital investment necessary to establish the site.

You have oil company owned and controlled sites and you have dealer owned and controlled sites. Dealer owned and controlled sites, which many of those sites are Exel sites, the dealer in many cases puts up the capital to build the site. He dishes out all the capital. And to get a remuneration on that, they get a discount from the oil company on the wholesale price for a payback on that capital.¹¹⁴

162. This may be so, but, money being fungible, it – that is, the discount - is clearly the mechanism for gaining retail sites and hence retail market share and this is clearly acknowledged by Mr. Oberholster:

MR NORTON: Well let me put the proposition very simply to you Mr Oberholster. Exel wouldn't be giving discounts off the wholesale price to its dealer owned sites, unless it thought there was something in it for Exel.

MR OBERHOLSTER: Unless there was something in it for Exel, yes that's true.

MR NORTON: Correct. What I'm trying to explore with you is what is the something in it for Exel?

MR OBERHOLSTER: To be able to obtain that site.

MR NORTON: Correct. So in other words, it's to be able to ensure that that is a captive Exel site. Correct?

¹¹³ Mr. Oberholster's witness statement, p6, cited in the transcript, page 479.

¹¹⁴ Page 459 of the transcript.

*MR OBERHOLSTER: I'm so careful when I listen to you. To ensure it's a captive Exel site? It depends sir. There are some of these agreements, which are month-to-month agreements. There are some. There are some, which are longer-term agreements. So if you can give me the example of which specific agreement it is, then I can help you with that. But when you say captive, certainly to obtain that site's business, as it were, that would be the case that there would be competition in the market and whoever were to offer a larger discount to that wholesaler, could potentially be more likely to obtain the site. That is correct.*¹¹⁵

163. We should emphasise that this discounting of the wholesale price is taking place in the context of a regulated end price for the product. That is, we infer that if the discount were capable of being passed on to the end consumer as a mechanism for achieving greater throughput at branded service stations (that is attracting customers away from OOC sites to Sasol sites) rather than merely a mechanism for acquiring additional branded service stations, then the incentive to discount the wholesale price would be even greater for a firm intent on capturing market share 'organically'.

164. Sasol also achieved its inroads into the industrial and commercial segment of the retail market by robust discounting, indeed by what Mr. Oberholster at one stage referred to as 'dumping':

*However, our threat to dump product in the commercial/retail diesel markets is real and would hurt the oil companies on the marketing side.*¹¹⁶

165. There is unchallenged evidence to the effect that Sasol's weighted rebates and discounts were considerably higher than Engen's.¹¹⁷

166. Indeed, Mr. Oberholster acknowledges that were he compelled to accept an export parity based price from the OOCs then his rational response would be to aggressively discount in the wholesale market:

MR NORTON: It says, "EPP Incentive to grow commercial market."

MR OBERHOLSTER: Correct.

MR NORTON: What does that mean?

MR OBERHOLSTER: That at the time, but there is a lot of explanation behind that and if you want to I can take you through that. At the time that meant when we

115 Page 460-1 of the transcript, our emphasis.

116 Citation from Sasol document 'Sasol Horizon – summary of comments/themes from Friday 14/03 meeting' cited in the transcript, page 473.

117 Page 515 of the transcript.

*looked at our marketing ambitions we said, if the oil companies were to give us an export parity price for our production, as it were, specifically on the diesel side, it would be more beneficial for us to try to aggressively take that market because we would be able to discount significantly and still be better off, as it were.*¹¹⁸

167. The evidence clearly points to robust competition for retail, including commercial and industrial, business, and this in the context of a still regulated pump price for petrol. As is to be expected, the principal instrument in this competitive battle is discounting of the wholesale price. This, combined with the prospect of deregulation of the retail petrol price, is the standard against which the merger must be judged.

The Relevant Markets

The relevant product markets and market shares

168. The identity of the product markets implicated in this transaction is clear-cut and common cause. It is agreed that the merging parties are both active in a wide range of these markets. Moreover, when regard is had to the voluminous argument and evidence submitted at these hearings, it appears to be acknowledged that the most important of these product markets are those for that broad category designated 'white fuels' – comprising petrol, diesel, jet fuel, liquefied petroleum gas and illuminating paraffin - and, within that category, the markets for petrol and diesel.

169. Our analysis of the merger confirms that the merger is likely to lead to a substantial lessening of competition in the markets for petrol and diesel without countervailing consequences for efficiency or the public interest. On this basis we have decided to prohibit the transaction. We have – following the bulk of evidence and argument submitted to us – elected not to undertake an examination of the large number of other product markets involved in this transaction reasoning that, even were the transaction to pass competition muster in those other markets, this would not alter our finding of a substantial

¹¹⁸ See page 499 of the transcript.

lessening of competition in petrol and diesel or our decision to prohibit the transaction.

170. The supply chain activities for petroleum products – the generic term that will be used to refer to petrol and diesel - are generally grouped in two broad categories, the first consisting of oil exploration, extraction and transportation, the second consisting of refining, marketing and distribution. This transaction is clearly concerned with the latter category of activities. Within that category, the parties to this transaction (and, indeed, the intervenors, with the exception of Masana) are involved at each link in the supply chain, that is, in the refining of petroleum product – which we will refer to as the ‘upstream market’ - as well as in the wholesale and retail marketing and distribution of these products, the ‘downstream markets’.

171. In the upstream market liquid fuels are produced from crude oil, coal and/or natural gas. Crude oil is supplied by tanker from a number of sources worldwide to the coastal crude oil refineries and conveyed via pipeline – the ‘crude oil pipeline or ‘COP’ - from the Durban terminal to the inland Natref crude oil refinery. The synthetic fuel refineries at Secunda use domestic coal as well as natural gas obtained via pipeline from Mozambique. PetroSA in Mossel Bay uses primarily natural gas from its offshore fields and some imported feedstock.

172. The products produced in the refineries may be grouped into two broad categories, namely ‘high value’ products and ‘low value’ products. It is these high value products that are referred to as ‘white fuels’, the component products of which are listed above.

173. Each of the refineries in South Africa (including those belonging to the merging parties) produces petrol, diesel, illuminating paraffin and, with the exception of the synthetic refineries, jet fuel, the various refineries do not generate the white fuel products in identical proportions.

174. **Petrol** is a form of fuel used in spark ignition or internal-combustion engines for motor vehicles. Two types of petrol can be distinguished; leaded and unleaded. However, government is in the process of phasing out the use of leaded petrol by January 2006. In any event, leaded petrol can be substituted for unleaded petrol with minor mechanical adjustments. Thus, for these purposes we will accept the definition of a broader product market for petrol.
175. **Diesel** is a petroleum-based fuel used in engines that are ignited by compression rather than spark. Diesel is commonly used for heavy-duty engines including buses and trucks. There are different grades of diesel depending on sulphur levels, but all diesels within the standards set out by the South African Bureau of Standards are interchangeable to a large degree. Unlike petrol, there is no regulated price for diesel at the retail level and retailers are free to discount.
176. **Illuminating paraffin (“IP”)** is used as a source of energy for heating purposes. IP is manufactured and supplied as “Illuminating Kerosene” and is extensively used in South Africa in lamps, stoves and heaters. The demand for IP in South Africa is high because a substantial segment of the population has limited access to affordable electrical connections and appliances or other forms of energy. IP is also used as an industrial heating fuel as well as for non-fuel applications.
177. **Jet fuel** is a special grade of kerosene that is sold almost exclusively to airlines. The synthetic refineries do not produce jet fuel. Secunda produces a jet fuel component that needs to be blended 50% with crude oil derived jet fuel. Mossref does not produce a jet fuel component at all.
178. **Liquefied petroleum gas (“LPG”)** is butane and propane gas compressed into a liquid form. LPG is formed naturally or as a by-product from oil refining. It differentiates itself from other energy sources on the basis of portability, convenience, low sulphur, controllability and its clean burning nature. LPG is produced and sold to resellers in bulk and cylinders and distributed to end-users.
179. The national data confirms that the merged entity will – by a significant margin – be the largest participant in both the upstream and downstream markets.

The tables below are drawn from the Pricemetrics report commissioned by TOTAL:

Upstream Production in South Africa 2004

Company	Diesel	Petrol	Jet Fuel	IP
BP	15.7%	10.6%	12.9%	9.7%
Caltex	15.0%	11.9%	16.0%	11.4%
Shell	15.7%	10.6%	12.9%	9.7%
Total	5.9%	6.1%	14.4%	0.0%
PetroSA	5.2%	7.3%	0.0%	16.5%
Sasol	24.2%	39.2%	28.9%	41.5%
Engen	18.1%	14.4%	14.8%	11.2%
Uhambo	42.3%	53.6%	43.8%	52.6%

Source: IMSS (Industry Market Share Statistics)

Downstream Sales of Petroleum Products in South Africa 2004

Company	Diesel	Petrol	Jet Fuel	IP	LPG
BP	14.7%	16.3%	17.6%	12.1%	17.6%
Caltex	15.8%	16.9%	17.0%	15.2%	23.4%
Shell	18.3%	18.1%	19.8%	20.1%	24.8%
Total	15.7%	14.8%	13.5%	13.4%	3.1%
Sasol	8.3%	6.2%	10.3%	5.9%	14.6%
Engen	27.3%	27.8%	21.8%	33.3%	16.4%
Uhambo	35.6%	34.0%	32.1%	39.2%	31.0%

Source: IMSS/TOTAL

179. These tables reveal that in the upstream refining market, the market share of the merged entity will be significantly larger than double that of the next largest producer. It will account for over half of the petrol produced in South Africa and for over 42% of the diesel produced. In the downstream markets the merger of the Engen and Sasol brands as well as a number of smaller brands that belong to one or other of the merging parties will result in the JV controlling 34% of petrol sales and 36% of diesel sales in South Africa, slightly smaller than double the market share of the next largest competitor.

The relevant geographic market and market shares

180. The identification of the geographic markets, though massively distorted by the particular history of the development of refining and logistical capacity and the corresponding regulatory regime, is also relatively straightforward.
181. As already elaborated, the MSA was, in essence, a market sharing arrangement. It provided firstly that the downstream marketing arms of the oil companies uplift the vast bulk of refined fuels produced by the inland refineries. One of the OOCs – TOTAL – was effectively able to supply its own inland downstream requirements from its share of the output of the Natref refinery. TOTAL's supply and demand were thus, to all intents and purposes, balanced in the inland region.
182. Although each of the remaining OOCs – BP, Caltex, Engen and Shell – controlled significant refining capacity at the coast, they controlled no inland refining capacity. Historically they satisfied their inland marketing requirement with product conveyed from the coast. Hence, they held a 'long' supply position at the coast – long, that is relative to their coastal demand - in order to meet their long demand requirements in the inland. Thus a critical component of the operational requirement of the coastal refiners was the logistical capacity required to convey refined product from the coast to the inland, by a significant margin the most important market for refined fuel products in the country.
183. The MSA was concluded in order to provide the inland refiners with a secure, guaranteed market for their product. In the initial years of the MSA regime the inland marketing requirements of the OOCs considerably exceeded the output of the inland refineries. Accordingly, notwithstanding the preference accorded the inland refiners, the OOCs were still obliged to maintain considerable logistical capacity in order to convey the lion's share of their inland marketing requirement from their coastal refineries.
184. This changed dramatically with the commissioning, in the early 'eighties, of Sasol's synthetic fuel plants which are located in the heart of the inland region.

With the commissioning of the Secunda refineries, the inland (and the country as a whole), became supply long. The upshot of this was that the logistical capacity used for the conveyance of refined product from the coast to the region was considerably in excess of the demand for that capacity. This ultimately led to the reconfiguration of the pipeline network, the largest and most cost effective source of logistical capacity.

185. With the commissioning of Secunda the *country* had excess supply of refined product. Because the MSA effectively excluded product refined at the coast from entering the inland market, the country's excess supply of refined product was reflected in overall long supply positions for the coastal refiners. The upshot of this was the decommissioning of approximately 30% of coastal refining capacity.

186. The quid-pro-quo provided by the MSA to the OOCs for their agreement to prefer the output of the inland refiners – expressed otherwise, for the coastal refiners agreeing not to compete in the inland market for refined fuels – was that Sasol's entry into the downstream market, in all regions of the country including the inland, was narrowly circumscribed. The upshot was that Sasol was massively supply-long in the inland region. In the other regions of the country it was demand-long, that is to say, for its relatively small coastal marketing requirements it relied upon supply from the coastal refiners.

187. The geographic market imposed by the MSA is clear. It imposed, by agreement, an inland geographic market for refined fuels, that is, it provided that inland purchasers of refined fuel had no alternative but to source their inland marketing requirement from the inland refineries. Even if the price of the inland refined product exceeded the price that would have prevailed under competitive conditions, the terms of the MSA did not allow the 'importation' of product from the coast. We know, of course, that this is precisely what happened. Had the coastal refiners been able to compete with the inland refiners for a share of the inland market for refined fuels, the effective reference or base price of the product would have been *export* plus the cost of transporting product from the coast. Instead the reference price imposed was *import* plus the cost of transport from the coast.

188. Sasol's decision to terminate the MSA notionally 'frees' the market for refined product from these constraints insofar as the inland fuel marketers are now permitted to source product from the coastal refineries. The base price for this product would be that of the next best alternative price – the deep sea export price – plus the cost of transporting the product from the coast to the inland market. However what was previously constrained by agreement, is now constrained by logistical capacity – the inland marketers may product from the coast, but because of inadequate logistical capacity they are only able supply a portion of their needs. And, as we have already observed, precisely part of the reason why they do not have adequate logistical capacity is because the long period of the MSA rationally led to the de-mobilisation of much of the logistical capacity that was previously utilised to convey product from the coast, notably pipeline capacity, the most efficient form of logistics.

189. The upstream geographic market for refined product is thus bounded by the constrained logistics that, even in the face of an exercise of market power by the inland refiner, will prevent the inland participants in the downstream market from replacing product refined inland with product conveyed from the coastal refineries. The market shares in this market are obvious. Sasol, and Uhambo post-merger, will dominate:

2004 Inland Actual production figures for Petrol, Diesel and Kerosene

Company	Facility	Actual Production				Market
		Petrol	Diesel	Kerosene	Total	
Sasol Oil	Synfuels	4.02	1.41	0.58	6.01	57%
Sasol Oil	64% of Natref	1.04	0.90	0.61	2.59	25%
TOTAL	36% of Natref	0.76	0.89	0.29	1.94	18%

Source: Mr. Swart's witness statement¹¹⁹

190. It is common cause that there is a certain amount of logistical capacity available through the pipeline network and via road and rail. This potentially complicates the definition of the geographic market since it raises the question of whether that portion of the output of the coastal refiners that can be readily

¹¹⁹ At page 16 of the Witness statement bundle.

imported into the inland should not be included in the relevant geographic market. Indeed, although the merging parties have ultimately contended for the inland market as the relevant geographic market, their experts in their first report suggested that,

the ability of the Durban refineries to increase sales in the inland area means that the relevant market for determining prices at the production level in the inland area must include the Durban refineries. 120

191. This would serve to introduce a horizontal dimension into the merger at the upstream level, which, on this version of the relevant market, would incorporate the merging of Sasol's inland refining capacity with Engen's large coastal refinery. This may assume additional significance when the logistical constraint is relaxed by the introduction of additional pipeline capacity. Caltex has contended precisely for this wider definition of the relevant geographic market.

192. However, we note that the Caltex expert, Dr. Scheffman, conceded that, were logistics found to be the binding constraint, he too would concur with the definition of the inland market accepted by the Commission, the merging parties and his fellow intervenors. This is clearly articulated in Caltex's heads of argument:

The determination of the relevant markets is in essence a factual question that must be resolved by considering the scale and durability of the logistical constraints that limit the volume of refined product that the oil companies can transport into the inland area from Durban. To the extent that the intervening parties are correct that currently there is a limit to the amount of product that can be transported from Durban to the inland area, then there is an inland market. 121

193. Although all agree that some logistics capacity exists, there remains a significant shortfall, that is a significant amount of product in respect of which additional logistics capacity would have to be found in order to prevent an exercise of market power on the part of the inland refiner. Indeed it is common

120 November 2004 Lexecon Report at pages 1909 of the Commission's record.

121 Paras 14-15 of Caltex Heads of Argument.

cause that, even on the most optimistic view of available logistics, there will remain a certain portion of inland demand that will have to be procured from Uhambo. In short, the state of available logistics dictates that the inland marketing arms of the OOCs are obliged to purchase a certain volume of product from Uhambo – these are what are referred to as the ‘must-have’ volumes.

194. The vast bulk of the factual evidence in the evaluation of this transaction goes to determining the quantum of available logistics. The OOCs and the Commission contend for highly circumscribed logistical capacity (and thus for significant ‘must-have’ volumes). By contrast, the merging parties insist that the ‘must-have’ volumes, to the extent that there are any, are narrowly limited because they contend for considerable untapped logistical capacity that can, in the event of an attempt by the merged entity to exercise market power in the inland, be deployed to convey refined product from the coast.

195. Moreover, the merging parties and the Commission contend that to the extent that logistical constraints characterise the current period, these will be eliminated with the commissioning – in late 2010 or early 2011 – of an expanded DJP. However, the OOCs insist that this four-year window is sufficient time for foreclosure to do its work. In any event, they argue that the expansion of the DJP will bring only temporary relief, at best, from logistical constraints that, with the growth of inland demand, will re-appear shortly after the commissioning of this new logistical capacity.

196. It is our view – and the factual position will be examined at length – that there are indeed significant logistical constraints in the current period and that the relief provided by the expansion of the DJP is temporary at best. The presence of these logistical constraints determines the boundaries of the upstream geographic market, the market for refined product, as the inland. On this version of the geographic market, the competitive harm potentially wrought by the post-merger structure is foreclosure and it is this prospect that

is interrogated at length in the paragraphs that follow and which comprise the vast bulk of factual evidence presented at these hearings.

197. Accordingly, we do not need to examine the Scheffman position, which contends that, in the absence of logistical constraints – and only in the absence of these constraints – for a wider geographical upstream market, one that takes in the both the coastal Durban refineries as well as the inland refineries. On this version of the upstream geographic market, the horizontal merging of the parties' respective refining capacities takes centre stage in the enquiry and the theory of competitive harm posited focuses on the putative ability of the merged entity to exercise control over divertible capacity, to, in other words, control supply to the inland market by diverting capacity from the Enref refinery to the deep sea export market. Dr. Scheffman's theory is by no means unpersuasive and should the commissioning of the expanded DJP relax the logistics constraint, an examination of the implications of the merged entity's control of Enref's capacity – which the merging parties clearly indicate will be used as their swing refiner – is clearly pertinent.

198. However because of the clear evidence of a logistics constraint we do not need – even in Scheffman's own view - to examine the implications of this alternative version of the relevant market and its related theory of competitive harm. We repeat: available logistics constitute the boundaries of the relevant upstream geographic market as the inland, the old Sasol supply area.

199. On this version of the geographical market we are, at the upstream level, dealing with a vertical merger, pure and simple. The fact that the merged entity will include the Enref refinery at the coast has considerable implications for the ability of the OOCs to resist a foreclosure attack mounted in the inland market, but it does not impact on the share of the upstream inland market which, though an impressive 82% before the merger, is not enhanced by the formation of the JV.

200. However, what does change is that this, the only inland refinery capacity, is merged with the considerable share of the inland and national downstream markets controlled by Engen. The tables below confirm Engen's powerful position in the downstream retail markets, both sales through its branded service stations as well as in the industrial and commercial market. These national downstream market shares are mirrored at the provincial level. The table below reveals that Engen commands the largest share of service station sales in Gauteng province, the core of the inland market. The addition of the Sasol share of this market will give the JV a 40% share of sales of Gauteng service stations and equally impressive shares of the other provincial markets that fall within the boundaries of the inland geographic market, these being the Free State, North West, Limpopo and Mpumalanga provinces, as well as areas of significant demand in the border areas of the Northern Cape and Kwazulu Natal provinces.

Sale of petrol through service stations¹²²

Province	BP	Caltex	TOTAL	Shell	Engen	Sasol/Exel	Uhambo
Eastern Cape	17	18	16	18	28	3	31
Free State	11	21	8	24	24	12	36
Gauteng	17	15	12	16	29	11	40
KZN	19	19	12	23	26	1	27
Limpopo	10	18	21	15	24	12	36
Mpumalanga	9	14	24	13	28	12	40
North West	11	17	12	16	29	14	43
N Cape	13	36	6	20	21	4	25
W Cape	19	21	11	20	27	1	28

201. As shown above, Uhambo will have significantly high market shares in all nine provinces. In the all-important Gauteng market, Uhambo will enjoy 40% of the market for the sale of petrol at service stations.

Sale of petrol to commercial and industrial customers¹²³

Province	BP	Caltex	TOTAL	Shell	Engen	Sasol/Exel	Uhambo
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¹²² Page 1927 of the Commission's Record.

¹²³ Page 1928 of the Commission's Record.

Eastern Cape	12	5	37	18	20	8	28
Free State	11	8	24	17	25	14	39
Gauteng	20	3	25	7	24	21	45
KZN	18	4	36	9	29	3	32
Limpopo	6	5	45	12	19	12	31
Mpumalanga	18	5	36	15	19	8	27
North West	24	14	19	9	27	7	34
Northern Cape	38	5	21	19	12	6	18
Western Cape	17	5	24	15	23	16	39

202. Uhambo's market shares in all provinces range from 18% to, in Gauteng, 45%.

Sale of diesel through service stations¹²⁴

Province	BP	Caltex	TOTAL	Shell	Engen	Sasol/ Exel	Uhambo
Eastern Cape	20	17	15	18	28	2	30
Free State	18	19	09	26	23	4	27
Gauteng	16	16	15	16	29	8	37
KZN	20	14	13	23	28	1	29
Limpopo	09	13	20	25	23	9	32
Mpumalanga	12	15	26	16	25	6	31
North West	13	17	12	17	31	9	40
N Cape	07	36	07	26	22	1	23
W Cape	22	16	16	21	24	1	25

203. As with petrol, Uhambo will enjoy very high shares in the Gauteng market as well as the other inland provinces. Its market shares range from 23% to 40%.

Sale of diesel to commercial and industrial customers

Province	BP	Caltex	TOTAL	Shell	Engen	Sasol/ Exel	Uhambo
Eastern Cape	11	14	18	22	28	7	35
Free State	5	28	11	17	33	8	41
Gauteng	13	11	10	20	36	10	46
KZN	15	13	20	21	29	3	32
Limpopo	14	20	19	21	18	8	36
Mpumalanga	8	13	13	24	29	13	42
North West	15	14	13	12	26	19	45
N Cape	16	18	27	16	14	9	23
W Cape	18	24	13	19	20	6	26

204. As with the other markets above, post merger Uhambo will enjoy significantly high market shares ranging from 23% in the Northern Cape market to 46% in

¹²⁴ Page 1931 of the Commission's Record.

the all-important Gauteng market.

205. The discussion, in these hearings, of the *downstream market* has proceeded on the basis that it is made up of a large number of fragmented local markets. The basis for this argument is that substitution takes place within a narrow geographical range, the geographical range within which consumers would, in the event of a price increase at Service Station X, transfer their custom to Service Station Y. However, the intuitive sense of this proposition disguises the incontrovertible fact that all decisions pertinent to competition at the retail level are made not at the level of the individual service station but at the level of the national brand.¹²⁵ The most important element in this decision is the wholesale price which is overwhelmingly the largest retail cost driver.

206. We accept that in the downstream market there is interplay between the local markets – usually defined at the magisterial district level – and the national market. But because the market shares of the participants and their footprints are in approximate equivalence – and because of the key role played by the wholesale price in retail pricing decisions – it is our view that competitive strategy will be formulated and initiated at the national level. It is, of course, likely that, given the geographic insulation of the inland market for bulk supply, price competition at the retail level may well take a particular form in that region. However, our view remains that competitive strategies will be formulated and initiated by the national brand managers, albeit that they may adopt distinctive strategies appropriate to the conditions pertaining in the various regions.¹²⁶

207. In summary then we find that the geographic upstream market (the market for bulk supply of petroleum products) is the inland, what used to be called the ‘Sasol supply area’. The geographic downstream market (the retail market) is

¹²⁵ Note page 2987 of the transcript where Mr. Fienberg of BP argues ‘*But I think at the end of the day the brands, what tends to happen though in markets is that the brands tend to work in unison because a brand has a position in the market and they get seen. If you go to all these markets, what tends to happen, in my experience and the way that I’ve understood it, is that one brand in a market gets seen as the price leader that everyone looks to and then follows.*’

¹²⁶ We have previously held that regardless of the fact that substitution decisions are made by consumers within a narrow local market, the fact that competitive strategy is controlled by national chain branded chain stores, the geographic market is thus national. See *JD-Elleries Case No [1999-2000] CPLR 53 (CT)* and followed in subsequent decisions.

national, although we emphasise that this does not preclude the possibility that the national competitors will, in devising their retail strategies, take heed of particular sub-national features.

The Competition Analysis

Introduction

208. This transaction embodies both horizontal and vertical dimensions. Both parties control refining capacity - Secunda and a majority share of Natref for Sasol and Enref for Engen – and both control wholesale and retail capacity in the form of a network of depots and other distribution assets as well as a network of retail service stations and a share of the commercial and industrial retail market. These are, on the face of it, the horizontal dimensions of the transaction.

209. However, given our finding on the relevant upstream market, there is no horizontal merging at this level – the Natref and Secunda refineries are not in the same relevant market as the Enref refinery. In the downstream market both nationally and in the inland, the Engen marketing and distribution networks will merge with the Sasol marketing and distribution networks.

210. From a vertical perspective the transaction represents the merging of substantial refining capacity, on the one hand, with significant wholesale and retail capacity, on the other. Uhambo will control some 82% of the output of refined fuel products in the inland geographical market and its retail network will account for 40% inland fuel sales. This structure immediately portends the prospect of input foreclosure which is the focus of our competition analysis.

211. We know that the inland wholesaling and retailing arms of the OOCs have, since the commissioning of the Secunda synthetic fuel plants in the early 'eighties, procured the vast bulk of their fuel requirements from Sasol. The only other inland refiner – TOTAL through its share of the Natref refinery – is approximately balanced in the inland and is thus not a potential alternative

source of supply for the inland OOCs. We know too that Sasol's position as the monopoly inland fuel supplier was enshrined in the MSA, the very purpose of which was to provide a secure market for Sasol's output.

212. However, although the OOCs were dependent upon Sasol for their supplies of product, the MSA effectively constructed a powerful *mutual* inter-dependence. The MSA limited Sasol's participation in the retail market and so constrained the development of an internal market for Sasol. In other words the MSA effectively limited Sasol's ability to integrate vertically, to enter the downstream wholesale and retail markets. Accordingly Sasol was dependent on the OOCs as a source of custom for the vast bulk of its considerable output of fuel. And, of course, in the coastal markets Sasol's limited, although by no means trivial, wholesale and retail requirements were dependent on supplies sourced from the coastal refineries controlled by the OOCs.

213. The termination of the MSA changed the rules of game. Sasol is permitted to enter the downstream market. This it has done, to some degree through organic growth and, now, through the proposed merger with Engen, the largest inland retailer. The merger immediately and drastically reduces Uhambo's dependence upon the OOCs as a source of custom. And the inclusion of the Engen refinery in the merged entity reduces Uhambo's dependence on the coastal OOCs as a source of supply in the coastal regions.

214. However, from the perspective of the OOCs, the change in the mutual dependency that characterised the MSA era is asymmetric. As outlined above, the OOCs argue that Sasol chose its moment for terminating the MSA with considerable care, because, although the OOCs are no longer legally obliged to uplift product from Sasol in order to meet their inland requirements, limited logistical capacity constrains their ability to source product from the coast and, so, their actual dependence on Sasol's successor, Uhambo, as a source of supply remains intact. However, the merger of Sasol and Engen to form Uhambo will significantly reduce Uhambo's dependence on the remaining OOCs. The OOCs apprehend that Uhambo will utilise this uneven shift in the

power balance previously imposed by the MSA to foreclose the downstream inland market, to deny them the amount of product they require and/or to impose supra-competitive prices on the product that they are effectively compelled to procure from the merged entity. This will permit the merged entity to expand its already considerable downstream market share, and it will serve to protect the supra-competitive wholesale price.

215. This brief summary should serve to dispel one of the contentions advanced on behalf of the merging parties and that is that the threat of foreclosure arises from the fact of upstream market power which *Sasol* already commands and which is not supplemented by the merger. On this version, the ability to foreclose is not merger specific, is not brought about by the merger, but has always been within *Sasol*'s power. There is no merit in this argument. There are numerous ways in which the merger enhances the ability of the merged entity, relative to *Sasol* acting alone, to foreclose. Most obviously, it does not have to foreclose Engen, *Sasol*'s largest inland customer. And a foreclosing *Sasol* will not have the benefit of the Enref refinery or of Engen's extensive depot network, key assets that will limit effective retaliation on the part of the OOCs. It is also clear that foreclosure is, in significant part, driven by the objective of capturing, or, at least, credibly threatening to capture, increased downstream market share – the Engen retail network will be a significantly more effective springboard for downstream growth than the *Sasol* network.

216. Nor are we persuaded by the argument that the organic growth of *Sasol*'s downstream retail network will ultimately result in a structure similar to the Uhambo structure and will, thus, afford similar opportunities for foreclosure. Organic growth, no matter how aggressive and successful, will not result in remotely the same downstream market share for *Sasol* as that acquired through a merger with Engen. Uhambo's inland retail share is 40% while *Sasol*'s own most optimistic estimate is a market share of the order of 15% through organic growth. In addition organic growth is gradual, not immediate, and, hence, will not disturb the balance of power in the same dramatic and immediate manner as the acquisition - as *Sasol* gradually grows its retail base in the country, its dependence upon the OOCs to supply its gradually growing *coasta* network will increase and it will do so without the benefit of the Enref refinery as an integrated source of supply.

217. Above all, though, organic growth – by contrast with growth through acquisition - presupposes mechanisms that will promote robust competition. As outlined above, this is clearly evidenced by Sasol's recent – and largely successful - attempts to expand its share of the downstream market, a process that has been characterised by aggressive discounting in the commercial and industrial segments of the retail market and, even, it appears, instances of discounting the wholesale price. We also reject the contention, frequently advanced in these hearings, that we should view investment in additional retail capacity as somehow wasteful. The competitive process is precisely animated by new investment and the process that must follow if it is to realise an adequate return. This is precisely what has happened in the fuel market. The current extent of regulation obviously limits the extent to which competition has broken out in consequence of Sasol's attempts to grow its downstream market share. But it offers a taste of what is to come in the event of de-regulation.

218. The argument that asserts that it has never been the intention of the merging parties to foreclose is equally unpersuasive. Subjective intent plays little or no role in merger evaluation which is concerned to examine objective structural change and to predict the consequential evolution of the capacities and incentives of the merged entity. We have yet to hear a merging party proclaim its intent to exploit its soon to be acquired market power. Indeed Sasol may come closest in its candid embrace of foreclosure.

219. There is in fact a startling volume of documentary evidence that illustrates, in the most graphic terms, the extent to which Sasol has contemplated and actively planned for foreclosure. One example – and there are many available - will suffice. A position paper submitted to the Sasol board dealing with the company's post-MSA strategy states:

Since road, rail and pipeline capacity determine the volumes that the oil companies cannot supply from the coast, it is expected that the oil companies will endeavour to increase this capacity. It is thus in Sasol's interest to absorb as much of the

*potential logistics capacity as possible. Sasol would, however, have to demonstrate that such initiatives hold economic benefit for Sasol.*¹²⁷

220. This not only accurately portrays the predatory content of a foreclosure strategy and Sasol's clear willingness to pursue it, it also indicates that the authors knew that it was in potential contravention of the law, hence the need for an 'alibi'. It would clearly not be difficult to demonstrate the 'economic benefit for Sasol' though it may have been more difficult to square with the provisions of the Competition Act. However predation of the sort contemplated here would have been extremely difficult to detect and prosecute. We note that it has been contended that this all reflected, at most, strategising on *Sasol's*, and therefore cannot be said to represent the views of *Uhambo's* and management. This too falls into the category of assessments of subjective intent which, as we have already emphasised, play no role in merger evaluation.

221. In that vein we are not persuaded by the argument that there are, in the event of a merger actually enabling anti-competitive conduct on the part of the merged entity, competition remedies available as well as powers at the disposal of the Minister of Mineral and Energy that would safeguard consumers against any anti-competitive post-merger conduct. Were this argument to be accepted there would be no purpose in merger regulation which is specifically designed as a pre-emptive measure aimed at maintaining competitively structured markets. The conduct remedies available in Chapter 2 of the Act and the administrative remedies available to the Minister are, for a variety of reasons, difficult to apply and, hence, even if the merged entity was in breach of the Competition Act or of any of the duties imposed by other statutes, the consumer and the national economy would be obliged to endure lengthy and costly periods of anti-competitive conduct before the perpetrators were brought to book. We repeat, merger regulation is an *ex antem* mechanism precisely designed to maintain structures conducive to competition. An appeal to the existence of *ex post* remedies in the event of anti-competitive conduct is simply beside the point.

222. The likelihood of foreclosure then hinges on a single, objective enquiry: *In the event*

¹²⁷ BP19 page 311. Our emphasis. Also see page 435-8 of the transcript where documentary evidence of Sasol's plans to identify '*ways in which we can block or limit road and rail capacities*' is put to Mr. Oberholster in cross-examination. On page 439 of the transcript Mr. Oberholster states '*..if we could increase the cost for the oil companies that would suit our purposes. It we were able to limit the logistics, it would again suit our purposes.*'

that Uhambo attempts to deny or reduce supplies of product to its downstream competitors, will the OOCs be able to replace Uhambo product with product brought in from their coastal refineries?’

223. The OOCs insist that they cannot mobilise sufficient logistical capacity to replace all of Sasol product. Indeed it is probably common cause that not all of Sasol’s product can be replaced. However, the OOCs insist that the scale of available logistics capacity is such as to ensure that their downstream marketing arms will depend on Uhambo for a large portion of their requirements. Should Uhambo foreclose this volume, the OOCs would lose considerable downstream market share to the merged entity. Alternatively Uhambo could utilise the credible threat of foreclosure to raise the price of its inland product or maintain the price at supra-competitive levels. This would raise the costs of the OOCs relative to Uhambo thus giving the latter a downstream competitive advantage that will have been acquired through an exercise of market power.

224. For their part, the merging parties insist that the OOCs have significantly understated the amount of available logistics. On the merging parties estimate of logistical capacity, a foreclosing Uhambo would be left with significant unsold product. It would then either have to reduce output from its inland refineries and so forego the refining margins.¹²⁸ Or it would have to accept the lower margins available on export markets.

225. The merging parties also argue that even if there is a logistics constraint, this will be relaxed once the extended DJP is commissioned. They insist that should they attempt to foreclose in this window period before the new pipeline capacity comes on stream, there are strategic responses available to the OOCs that would ensure that any market share lost as a result of foreclosure would be immediately recoverable. For all these reasons, they conclude that foreclosure would be an unprofitable, and, hence, irrational strategy.

¹²⁸ Note that the CSA obliges Uhambo to purchase all of Synfuel’s output of liquid fuel component so any reduction in inland refining capacity would have to be borne by the high margin Natref refinery.

226. Before turning to a detailed consideration of the evidence regarding the viability of foreclosure, a word about the general approach adopted by the merging parties is apposite.

227. Much of the evidence submitted by the merging parties appears to proceed, firstly, on the premise that if it can be shown that it is technically feasible for the OOCs to convey product to the inland region then it will have been established that foreclosure cannot be pursued successfully by the merged entity. Secondly, the merging parties cast foreclosure as a monopolisation strategy and, hence, if it can be shown that the foreclosing entity will not succeed in removing the targets of foreclosure from the market, then it will have been established that foreclosure will not be rationally pursued.

228. We do not accept either of these premises. The possibility of foreclosure is not rejected by an argument that demonstrates the technical feasibility of overcoming siege-like conditions. If, in order to overcome input foreclosure, the OOCs are forced to resort to manifestly uneconomic methods of conveying product from the coast, then the foreclosure must be judged a success. In fact, the objective need not even be the elimination of competitors and the capture by the foreclosing entity of ever greater shares of the downstream market. Indeed the merged entity may well forebear from acquiring significantly greater market share if other objectives are achieved. In this case, the evidence shows that the principle objective of foreclosure is to impose BFP pricing on the OOCs shortfall or 'must have' volumes and to impose the highest level of 'must have' volumes possible.¹²⁹

¹²⁹ In similar vein, note Paras 54 of Shell's Heads of Argument points out that even if it were shown that the OOCs were capable of physically bringing in supplies from the coast, the additional costs entailed thereby may reduce their ability to compete with Uhambo thus still enabling Uhambo to achieve the objective of gaining, through foreclosure, additional downstream market share. Shell also points out – persuasively we believe – that 'the refusal-to-supply strategy need not take the form of the immediate cessation of all supplies on day one. Instead Uhambo might selectively, but repeatedly, deny the OOCs supply at certain depots for limited periods, sufficient to disrupt the OOCs supplies to dealers in the vicinity of those depots, causing the OOCs to be seen as unreliable. This in turn would permit Uhambo to target those dealers, promising more reliable supplies than the OOCs could offer.' Shell goes on to argue that such a selective foreclosure strategy would make considerable sense if Uhambo's marketing network was not immediately capable of immediately absorbing all of the volumes supplied by the OOCs. See Para 55 of the Shell Heads of Argument.

229. We repeat: the OOCs would not continue to utilise manifestly uneconomic means for conveying product from the coast even if technically feasible. At some stage – as we have been constantly told by the merging parties – ‘rationality’ would prevail and the OOCs would agree to pay the BFP price on that portion of its inland requirement which it is not commercially viable to convey from the coast, that portion of their requirement subject to a credible threat of foreclosure. BFP will, as under the MSA regime, be the industry accepted pricing norm for the lion’s share of the Uhambo product and, to boot, it will have established its ability to punish those participants in the industry that attempt to question this norm.

Foreclosure – profitability and credibility

230. The merging parties contend that foreclosure would be an unprofitable and ultimately self-defeating strategy. They argue that the OOCs are capable of mobilising logistics capacity that will enable them to replace a significant proportion of their inland requirement that is currently purchased from Sasol, with product conveyed from their coastal refineries. Essentially the merging parties argue that the OOCs would be able to convey sufficient product from the coastal areas to service their core requirements and that, at best, the merged entity may acquire, temporarily, a small part of their rivals’ market share. Moreover, the merging parties insist that this gain in market share will, given a rational strategic response by the OOCs to foreclosure, be temporary and will revert to the OOCs once the expansion of the DJP lifts the logistics constraint.

231. The upshot of this attempt at foreclosure, argue the merging parties, is that the merged entity would be left with significant excess supply in the inland region. It would then be obliged to reduce output from its relatively high margin Natref refinery or, failing that, it would have to place its excess product on lower margin export markets. These would either be the limited overland export markets or they would be overseas markets in which case the merged entity

would have to convey the product to the coast. The merging parties also contend that, in the event of foreclosure, the OOCs would utilise their coastal production capacity and their storage capacity to retaliate and that the costs imposed on the merged entity would also have to be factored into the profits – or, in the merging parties contentions, the losses – entailed in foreclosure.

232. A number of models of the commercial consequences of foreclosure were constructed. The merging parties' model was presented by Dr. Robert Stillman, their expert witness. Shell's expert, Mr. Simon Baker, also presented the fruits of his modelling exercise as did Mr. Simon Bishop on behalf of BP.

233. Each of these models arrived, as might be expected, at widely divergent outcomes. The parties' model (henceforth 'the Stillman model') demonstrated that, under most assumptions, foreclosure turned out to be unprofitable. BP's model ('the Bishop model') found significant profit in foreclosure. The Shell model ('the Baker model') found that foreclosure was clearly profitable, although less so than the findings of the Bishop model.

234. It is, for present purposes, most fruitful to compare the results of the Stillman and Baker models. Mr. Baker self-consciously adopted the design and variables of the Stillman model while Bishop's model is less easily compared to the others. This does not mean that we believe that all of those aspects of Bishop's model that part company with those of his counterparts are incorrect.¹³⁰ However, clearly the Stillman model represents the merging parties' best case. Mr. Baker, by adopting the model of the merging parties, has placed himself on his opponent's chosen terrain but has nevertheless arrived at conclusions that are hostile to the parties' case. Because

¹³⁰ Note particularly the unilateral effects built into the Bishop model. These essentially reflect the rents to be derived from the supra-competitive prices charged by the merged entity as its foreclosure strategy yields increasing downstream market power. These rents are not incorporated in the Baker model or the Stillman model. However while it would be extremely difficult to quantify the rents so earned and so a 'pragmatic' model, such as the Baker model, omits reference to these unilateral effects, this does not mean that they should be ignored. In order for unilateral effects to present themselves, foreclosure need not *increase* the price of the product; it may merely maintain the supra-competitive BFP over a larger volume of output than would be the case in a non-foreclosure situation. Unilateral effects account for a significant portion of the profit found in the Bishop model. However, while the concept is easy to defend, the number is not and is accordingly difficult to build into a defensible modelling exercise.

the respective models are identically constructed, the debate is then reduced to the validity of the data and the underlying assumptions. This then becomes an evidence-based enquiry rather than one over the merits of the respective models' designs. What emerges is that the merging parties are unable to sustain their case on the basis of their own model design. There is then no need to debate the merits of the Stillman model versus the Bishop model.

235. Before turning to a high-level comparison of the two outcomes modelled by Mr. Stillman and Mr. Baker, a word about the evidence presented by the parties is apposite. A pattern of the empirical evidence presented by the parties is how over time, over the successive refinements of their model (and the same is broadly true of the data presented on efficiencies), the data utilised grew increasingly favourable to the outcome sought by the merging parties. Indeed Dr. Stillman candidly acknowledged that on the first run of his model the conclusions indicated that foreclosure was indeed a profitable strategy. He advised the parties of this outcome and other data – data more favourable to establishing that foreclosure was not profitable - was placed at Stillman's disposal. In fact certain major determinants of the model's ultimate conclusions – for example, the conveyance of diesel in the crude oil pipeline – had not been considered at all in the initial run.

“DR STILLMAN: Let me break that into pieces. I absolutely reject the suggestion that I have given instructions or told the parties that they need to go find logistics. That I reject. What is correct is that in doing the work in March I was surprised when one actually ran the number in the manner we did, that foreclosure was a closer call than I had assumed it would be in working in that section of the report in November. The November report was more qualitative. It talked about the kinds of effects and it is accurate to say that in doing the work on actually running the numbers, I personally was surprised at how that foreclosure was not the absolute losing proposition that it seemed to me that it was in November.

ADV ROGERS: And was that an impression or view, which was conveyed to your clients?

DR STILLMAN: I am sure that, we certainly had phone calls. We had various kinds of exchanges. It is certainly possible.

ADV ROGERS: And it was after that that these additional logistics came to the fore. I am not putting it to you that you told them to go and dredge them up, but it is after this, at least as a matter of time that these additional logistics came to the fore.

DR STILLMAN: The logistic certainly, there are certain changes in the model that take place after March and the people who put them together presumably have basis for their

numbers.¹³¹

236. From March to August 2005 additional work had been done on various issues, including logistics. This resulted in “*the new logistics with expandable logistics [which] made foreclosure look less profitable*”.¹³² The Shell heads of argument calculate that the additional logistical capacity ‘discovered’ between the preparation of the merging parties’ expert report of March 2005 and the subsequent report of August 2005 permitted the conveyance of an additional 2,06 billion litres of fuel. These are broken down between the utilisation of the crude oil pipeline whose projected logistical capacity increased from zero in March to one billion litres in August, additional road and rail logistics of 0,56 billion litres, 130 million litres from the de-bottlenecking of the Durban-Johannesburg Pipeline, and an additional 400 million litres of annual capacity from logistics capacity freed-up by Engen.¹³³

237. While we do not put the credibility of Dr. Stillman (or Mr. Malherbe, who submitted evidence on efficiencies on behalf of the merging parties) at issue – they worked with data provided by representatives of their clients – this pattern is noteworthy and does cause us to view some of the data with scepticism. And there is, in several cases, evidence additional to the fortuitous movement in the data that corroborates our scepticism. For example, as we shall elaborate below, Sasol itself initially argued – in documents and presentations that were prepared before the filing of this merger – that it was not technically feasible to put diesel up the COP. This view is presumably reflected in the merging parties’ initial failure to mention this as a possible means by which the OOCs could challenge a foreclosure strategy on the part of the merging parties. However, once Dr. Stillman’s initial conclusions directed the parties to re-think the availability of logistics capacity, they not only reversed their reasoning regarding the technical limitations of conveying diesel up the COP, they found an additional 1 billion litres per annum logistics capacity in this pipeline. ‘Garbage in; garbage out’ is the caution customarily urged upon

131 Page 828-9 of the transcript

132 See page 928 of the t.

133 Para 119 of Shell’s Heads of Argument.

those who rely on econometric and other statistical techniques and while not all of the data used in the parties' model is to be so characterised, some of it does appear sufficiently contrived to warrant that description.

238. The following table is derived from a high level comparison of the Stillman and Baker models. Recall that Mr. Baker adopted Stillman's model design. Where they part company is in certain of the assumptions incorporated in their respective models, notably demand growth projections, logistics and margins. Many of the elements referred to here are only examined in length when we turn to a detailed appraisal of foreclosure. However it may help to guide the reading of the fact intensive review of the foreclosure arguments.

239. A further difference relates to the assumptions made by Dr. Stillman and Mr. Baker about how the parties would probably respond to foreclosure and non-foreclosure respectively. These assumptions concern, in particular, the marketing behaviour they would adopt in the two hypothetical scenarios.

Assumption		Stillman (CRA) (Merging parties)	Baker (Revised) (Shell)
Inland demand of OOCs		7.56 billion litres	7.56 billion litres
Growth in demand		Uhambo business plan Petrol - 1% Diesel - 3.5%	Shell's estimates Petrol - 2% Diesel - 4.9% 134
Logi	Diesel in COP	1 billion litres pa	No diesel brought up COP
	OOCs existing DJP capacity	2.83 billion litres pa ¹³⁵	2.83 billion litres pa ¹³⁶
	Debottlenecking northern DJP	Yield additional road logistics of 0,3 billion litres	Yield additional road logistics of 0,148 billion litres pa
	Timing of DJP expansion capacity	1 January 2010	1 January 2011
	Divertible logistics (AOL)	0.27 billion litres	0.27 billion litres ¹³⁷

134 He later adjusted his projections for the anticipated effects of the taxi recapitalisation programme ("TRP") which in effect reduced petrol demand and increased diesel demand.

135 The merging parties assume an operational capacity of 3.2 billion litres and retention of 370 million litres by Uhambo.

136 Mr. Baker accepts CRA's figure.

137 Shell questions whether the OOCs would be contractually free to discontinue supplying their African Overland (AOL) clients. Shell also submits that it has not been established that the product

	Existing road/rail	1.95 billion litres (Swart) + additional 270 million diverted AOL logistics = 2.22 billion litres ¹³⁸	1.350 billion litres ¹³⁹
	Growth in road/rail	15% pa further logistics of 1.16 billion litres up till 2008 ¹⁴⁰	No expansion in rail capacity but additional road logistics of 250m annually.
	Freed up Engen	0,17 billion litres	0,128 billion litres
	Gantry capacity at Durban	CRA does not consider gantry constraints	Total capacity of 4.049 billion ¹⁴¹ litres with additional 3 bays in 2007 (4.716 billion litres) and another 3 bays in 2008 (5.431 billion litres). ¹⁴²

currently transported to the AOL markets is physically moved from the coast. If the product was purchased from Sasol in the inland and then transported from Gauteng to the AOL markets, it is not self-evident that these same logistics would in a foreclosure scenario be available to the OOCs on the coast. But Mr. Baker nevertheless uses CRA's figure.

¹³⁸ 1.39b allocated to road and 560m to rail. See Mr. Swart's Table 38 at page 54-5 of the witness statement bundle.

¹³⁹ 1 billion litres for rail and 350million for road – but OOCs submit that actual figure is 1.085, therefore Mr. Baker's figure, though lower than the merging parties contention, is more generous to the merging parties than that contended for by the OOCs.

¹⁴⁰ 340 million in 2006, 380 million in 2007 and 440 million in 2008. Expansion would cease after 2008 in view of the impending commissioning of the new DJP in 2010. Paragraph 75 of Dr Stillman's witness statement at page 107 of the witness statement bundle.

¹⁴¹ There are 7 bays for BP/Shell at Island view (one other bay is used to load heavy furnace fuel and white spirits), 4 bays for TOTAL at Island view and 8 bays for Engen at Wentworth. During August 2005, the 7 bays at BP/Shell's facilities loaded 227 million litres per bay. Shell assumes that with some additional effort a further efficiency of about 5% could be achieved. Mr. Baker adds this and assumes a capacity of 238 million litres per bay per annum. He then adjusts downwards TOTAL's capacity by 10% for and Engen's by 20% to take account of the assumed inefficiency which would be experienced if the TOTAL and the Wentworth facilities were, in consequence of foreclosure, to be used by more outsiders and if Uhambo was not fully co-operative in regard to the use of Wentworth. The total 4.049 billion therefore = 238 x 7 for BP/Shell; 238 x 4 x 90% for TOTAL; 238 x 8 x 80% for Wentworth. See Shell's heads of argument from paragraph 237.

	Market share	Assumes instantaneous recovery of market share by the OOCs upon supplies becoming available again	Assumes an irreversible gain in retail market share of white fuels
	Diesel retail sales	Does not factor this in	Includes diesel retail sales
	Prioritisation of transport	Prioritise OOCs shortfall volumes	Prioritise all transport capacity without leaving inland short of diesel.
	Deregulation	Petrol retail deregulated by 2009 Petrol retail margin will decrease to 31 cpl	Initially 2010, changed after Gumede's testimony to 2011. petrol retail margin reduce to 16 cpl (for the period 2011-2015)
	Discount sales to OOCs	15 cents per litre below inland BFP	15 cents per litre below inland BFP
Margin	Uhambo's margin on inland BFP sales ¹⁴³	41 cents per litre	28 cents per litre ¹⁴⁴
	Margin on AOL sales	15 cents per litre above export parity	4 cents per litre above export parity ¹⁴⁵
	Cost of transporting to Durban for export - foreclosure scenario	21 cents per litre	26 cents per litre ¹⁴⁶
	Margin on retail petrol sales for period 2006-2008	42 cpl on retail petrol sales	42 cpl on retail petrol sales
	Combined Uhambo margin on captured downstream sales ¹⁴⁷	16 cents per litre ¹⁴⁸	16 cents per litre ¹⁴⁹

142 When Mr. Baker deducts the KZN, Swaziland and Lesotho demand figures from the total gantry capacity, he arrives at a net amount of gantry capacity available for loading vehicles destined for the inland market. Comparing the results for 2006-2010 with the available inland tanker capacity for the same period, he finds that gantry capacity is the binding constraint in all years except in 2008. Shell submits that if one holds Mr. Baker's gantry capacity assumptions constant but adjusts the tanker capacity downwards by eliminating the de-bottlenecking effect of additional 148 million road logistics and by assuming that tanker expansion would cease after 2008, one finds that tanker capacity is the binding constraint in all years except 2007. Shell submits that even if the merging parties were to show that tanker capacity is greater, it would not help since on Mr. Baker's generous tanker capacity assumptions, the binding constraint is not tanker capacity but gantry capacity.

143 Coastal BFP plus 11 cents per litre locational advantage.

144 Assumed initial Lexecon model's differential of 15 cents per litre but assumed the locational advantage was 13 cents per litre.

145 Mr. Baker used initial Lexecon model's assumption.

146 Baker based this on the estimated cost of a front-haul trip and Swart appears to have accepted this figure as the cost of contracted services from road haulers. See page 55 of the witness statement bundle. Stillman's figure is an average based on the assumption that Uhambo would use 50% contracted transport capacity (at 26cpl) and 50% back-haul capacity (at 16cpl).

Total	LOSS R1 billion - R2 billion ¹⁵⁰	PROFIT R3.435 billion
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240. In addition to the expert economists we have heard much detailed evidence and much argument from technical experts who were, for the most part, employees or former employees of the merging parties or the intervenors. Many of the differences of both sets of experts are not susceptible to definitive judgement. We understand that foreclosure would not be rationally pursued if it appeared manifestly unprofitable, if, in other words, it appeared that the product denied by the foreclosing entity was easily substitutable with similar products or, as is pertinent to this case, with the identical product supplied from elsewhere. However, the decision can rarely be assisted by the accounting-type treatment in which these hearings have become mired.

241. Merger analysis is inherently predictive. That reality cannot be denied by attempting to ascribe a veneer of absolute certainty to matters that, by their very nature, cannot be known in advance with absolute clarity. Hence, and by way of just one example, it is widely acknowledged in these hearings that the future rate of growth of demand for petrol in the inland impacts significantly on the profitability of foreclosure. And yet legions of highly trained economists repeatedly get more easily predicted estimates than this hopelessly wrong.

242. The merging parties have been candid in acknowledging this while, as is to be expected, they simultaneously attempt to prod the Tribunal in their direction. Hence, after an elephantine attempt by the merging parties to construct the foreclosure balance sheet, all that is brought forth is the following timid mouse:

The conclusion to be drawn from the foregoing is that it is not (at) all clear or likely

147 Shell expressed doubt about the accuracy of this figure as it is supposed to be a "volume weighted average marginal margin" applicable to the combined commercial markets of Engen and Sasol. Mr Swart puts Sasol's commercial margin at 18cpl and Mr Wright puts Engen's at 16,8cpl. The 16cpl can't possibly be an average of the two.

148 Mr. Baker uses the merging parties' figures.

149 Mr. Baker uses the merging parties' figures.

150 Page 108 of the Merging parties Heads of argument. See also paragraph 113 Table 5 of Dr Stillman's statement at page 120 of the witness statement bundle.

*that foreclosure will be profitable; on the contrary, it will probably be unprofitable.*¹⁵¹

243. There can be no doubt whatsoever that the intervenors could, on a reading of the same evidence, make the opposite claim in the same highly qualified terms. Indeed an examination of the evidence leads us to conclude that those who apprehend foreclosure could make a considerably more emphatic claim than that made on behalf of the merging parties.

244. This is why the *credibility* of a threatened foreclosure is so important. Neither the Tribunal, nor the Commission, nor the merging parties, nor the intervenors, can decide with absolute certainty – beyond all reasonable doubt – whether or not foreclosure will be profitable. We can however say with confidence that it is a credible threat. There can be no gainsaying that, on its face, a vertical transaction such as this one, between parties who hold powerful positions in both the markets in question – in one a near monopoly, in the other the significantly largest market share – portends the very real prospect of the merged entity pursuing foreclosure in its rational commercial interest. The numbers may conclude that the prospects for a profitable actual foreclosure are uncertain. However given the certain reality of the structural change wrought by the merger, and the numbers, which, on the very best reading for the merging parties, are equivocal, it would be an extraordinarily bold business person who did not take the threat of foreclosure seriously. Whether Uhambo will win a foreclosure war with the OOCs may not be beyond all doubt; but its clear ability to mount a major campaign and to cause considerable damage is confirmed again and again by the evidence and argument presented at these hearings.

245. We will examine the ‘big ticket’ issues in the debate, those ‘silver bullets’ that will determine whether or not Uhambo has the capacity to mount a powerful campaign and so confirm the anti-competitive promise of the structural change or, conversely, whether the OOCs have the capacity to resist foreclosure aimed at increasing downstream market share and maintaining the BFP wholesale price over as large a portion of petroleum product as possible.

¹⁵¹ Page 113 of Merging Parties’ Heads of argument.

246. Hence robust rates of growth in the inland market for white fuels will, in a foreclosure environment, permit the foreclosing entity to rapidly acquire market share, and thus significantly strengthen the credibility of the foreclosure threatened by the structural opportunities afforded by the merger. This then warrants close examination.

247. Access to a major new logistics resource will, on the other hand, significantly blunt the threat of foreclosure. The prospect of utilising the COP for the conveyance of diesel is the only major new logistic resource contended for by the parties that would make a major difference to the ability of the OOCs to resist foreclosure.¹⁵² Were this feasible, it would be the logistical basis for the resistance to foreclosure. This issue is examined as are several other issues relating to pipeline capacity.

248. While we do examine the more significant arguments around road and rail capacity, scrabbling for extra road tankers, marginally reducing the voyage times of long haul carriers, and increasing gantry productivity are important in the normal course of business and competition in competitive markets, but they do not add up to much as mechanisms for resisting an attempted foreclosure and hence do not reduce the credibility of the threat of foreclosure that is implicit in the structural change. We do not examine some of the more exotic claims. For example, while the claim that the de-bottlenecking of the northern DJP will release additional pipeline capacity is examined, the contention that this will then have a knock-on effect on the distances that long haul trucks will have to travel and hence on their turnaround times, does not warrant detailed consideration. These esoteria may well entertain competing micro-economists, but they do not, we are certain, weigh heavily in a strategic business

¹⁵² Note that of the 2,06 billion litres of new capacity that the merging parties unearthed between the March and August 2005 expert reports, 1 billion is derived from the use of the COP for the conveyance of diesel.

decision to embark on or resist foreclosure.¹⁵³

249. Finally a strategic response capable of drastically limiting the duration of the foreclosure and one that enables the targets of the foreclosure to rapidly regain lost market share may also constitute one of those weapons that weaken the credibility of a threat of foreclosure. This too receives detailed consideration.

250. These are, in our view, the critical issues on which to focus - the utilisation of the COP for the conveyance of white fuels as well as aspects of road and rail logistics; the rate of growth of demand; and a possible strategic response on the part of the OOCs that will enable them to regain lost merger share when the extended DJP limits Uhambo's foreclosure armoury. They are the critical items not merely because their impact on the outcomes of the various models is most powerful but because they alone have the potential to severely dent the credibility of a threatened foreclosure. We will, for the sake of completeness, mention a number of other, less significant issues raised in the foreclosure debate, but they, are in our view, not dispositive of the main question before us: *does the merger credibly threaten to underpin successful foreclosure of the inland retail (including the commercial and industrial) market?*

153 A witness, who clearly understood this fundamental point, was BP's Mr. Fienberg. In the course of a lengthy exchange under cross-examination, in which Mr. Snycker's, counsel for the merging parties, attempted to cast the alleged absence of documentary evidence of the OOCs search for alternative logistics as proof of their lack of belief in the actual prospect of foreclosure, Mr. Fienberg responded as follows: *'You know, at the end of the day I don't fill my bath with a teacup. I open a tap and water comes out the end of a pipe and I think what we are trying to do here is to say somehow we'll find some way of transporting billions of litres of product by truck and by all sorts of manner and means. You know that's why the focus has been on the big infrastructural debate. I think that the persistence around where is this foreclosure strategy, where is our response to it, the response is in this room, because it's a strategic response.'* At page 3013 - 4. Mr. Snyckers dismissed this response as 'preposterous' and even used the occasion to remind Mr. Fienberg that he was testifying under oath. We do not agree with Mr. Snyckers. We understand Mr. Fienberg to be arguing, with the aid of an apt analogy, that major strategic interventions, like foreclosure, can only be met by major strategic responses, such as the construction of significant new infrastructure or by an attempt to prevent a merger which is considered to be the basis for a successful strategy of foreclosure. Fienberg does not consider it adequate to respond by a lengthy contemplation of the prospect of reducing long haul vehicle turnaround times from X hours to X-N hours – this, in Fienberg's estimation, is precisely an attempt to fill a bath with a teacup. The hearings, we repeat, have become mired in these issues that do not, either singly or collectively, have much, if any, bearing on the large question of foreclosure. We have examined some of these and they are discussed in this decision - mostly they serve to confirm our view of their essential irrelevance.

i. The merging parties provide the following table showing the extent of the road and rail transportation constraints on the OOCs. The table assumes that TOTAL is balanced in its inland production and demand and therefore relates to only BP, Shell and Caltex. The table further relates to 2006, and has accepted Mr. Baker's figures of growth in demand for petrol and diesel.

(a	Inland demand of OOCs	7,56 billion litres
)		
(b	DJP capacity available to OOCs (assuming an operational capacity of only 3,2 billion litres, and a retention of 0,37 litres by Uhambo)	2,83 billion litres
)		
		4,73 billion litres
(c)	Admitted actual road and rail capacity of OOCs	<u>1,043 billion litres</u> 3,687 billion litres
(d	Additional sources of transportation available to OOCs	
)		
	Additional capacity in DJP if scheduling inefficiencies give way to transporting only petrol, or large slugs of petrol and diesel	0,3 billion litres
	Increase in road capacity due to de-bottlenecking of DJP in October 2005- [This is the figure contended for by the OOCs; the merging parties contend this figure should be 0,3 billion litres]	0,148 billion litres
	Road and rail capacity freed up by Engen as result of merger- [This is the figure contended for by the OOCs; the merging parties contend this figure should be 0,17 billion litres]	0,128 billion litres
	Growth in road and rail capacity in 2005 and 2006 [This is Baker's figure, though he reduces it to 0,43 due to alleged gantry constraints)	0,5 billion litres
	Diversion of AOL transports	0,27 billion litres
	Aggregate	1,346 billion litres

(e Shortfall in transportation capacity:)	2,341 billion litres
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251. The above figure of 2,341 billion litres is close to Mr. Baker's figure of a shortfall of 2,4 billion litres, and shows the extent, in absolute figures, of the transportation constraints of the OOCs.

Rates of growth in the demand for white fuel products

252. This factor exercises a major influence on the results of the various models. In the face of logistical constraints, the higher the rate of growth in demand, and particularly *inland* demand, the greater the dependence of the inland OOCs on Uhambo.

253. Each of the intervenors and the merging parties has submitted projections for the growth of demand for petrol and diesel. The Uhambo and the Engen estimates for petrol growth are the lowest estimates recorded – the Engen estimate of 0,2% growth is a notable outlier. The Shell estimate for petrol growth of 2% per annum which is the estimate used in the Baker model is in the middle range of the estimates and slightly higher than the Uhambo, Engen and the Sasol estimates (the Stillman model uses the lower Uhambo forecast of 1%). The Shell estimate of 4,9% for diesel growth (growth, note, off a significantly lower base volume than petrol) is at the upper end of the spectrum of estimates although not markedly so and is close to Engen's estimate of 4,7% annual growth. Uhambo and Sasol's estimates of diesel growth – 3,5% and 3,4% respectively – are the lowest of any of the oil companies' estimates of growth in diesel demand.

Estimates of Growth rates in PETROL demand

Source	Rate
BP Bishop	3%
BP Twine	2.2%
TOTAL (for years 2005 – 2014)	2.2%
Shell	2.0%
TOTAL (for years 2004 –2014)	1.6%
Sasol 2006 budget	1,4%
Uhambo business plan	1%
Engen Business plan	0.2%

Estimates of Growth rates in DIESEL demand

Source	Rate
BP Bishop	6%
BP Twine	5.6%
Shell	4.9%
TOTAL 2005 – 2014	4.8%
Engen Business plan	4,7%
TOTAL 2004 –2014	4.5%
Uhambo business plan	3.5%
Sasol 2006 budget	3,4%

254. It is common cause that the impact of the various demand growth estimates is highly significant.

255. We have been presented with bald estimates by the participants in these hearings – many of whom appeared to rely on independent experts – but surprisingly few have attempted to explain the underlying basis for their estimates. A notable, if somewhat unfortunate, exception is Mr. Swart of Sasol who indicated that Sasol had used an observed correlation between the Consumer Price Index and petrol demand to estimate demand growth. However, there is no discernible causal relationship between these variables and despite persistent cross-examination and questioning by the Tribunal, Mr. Swart was not able to provide a convincing explanation of the relationship or any reason why the projected movement of the CPI should be utilised in projecting future demand for petrol.

256. In our view, common sense would suggest a high degree of correlation between income growth and rates of growth in fuel consumption.¹⁵⁴ It may also reasonably be hypothesised that changes in the distribution of income would correlate with shifts in demand for fuel products.

257. Fuel products are widely consumed in most areas of economic activity and it is

¹⁵⁴ This hypothesis was put by the Tribunal to Mr. Baker who concurred. We note too that Mr. Swart has used GDP growth as his explanatory variable for diesel growth but failed to explain why he did not employ the same basis for estimating petrol growth – the inference that we draw is that the results of what would have been a perfectly obvious exercise to undertake did not suit his case.

axiomatic that the higher the rate of economic growth, the higher the rate of growth of demand for fuel products, although this will naturally be influenced by the sectoral distribution of this increase in overall economic activity – that is to say, certain sectors are clearly more fuel intensive than others. However, to hypothesise a positive correlation between growth in output and growth in fuel demand appears eminently reasonable. We note that Shell's bases its estimates of a 2% rate of growth in petrol demand and a 4,9% rate of growth in diesel demand (adjusted upward to 5,1% to take account of the taxi re-capitalisation programme) on a predicted GDP growth rate of 3,5% per annum which appears reasonable, even conservative. In other words, most predictions of future economic growth rates exceed those achieved in the last several decades and, accordingly, one may reasonably hypothesise that the rate of growth of fuel demand will also increase over the rates of the recent past. Note too that we are here concerned with the inland region – the industrial engine of the economy – whose growth rates can reasonably be expected to exceed the national rates.

258. Income distribution will also impact on fuel demand growth because it will, *inter alia*, influence the purchase of motor vehicles. So too, of course, will the interest rate. The latter has declined significantly and no forecasters are estimating a foreseeable return to the years of punitively high interest rates. It is widely accepted that there has been an important change in distributional patterns in the past decade and that this is manifest in the significant growth of a middle class out of the historically disadvantaged population.¹⁵⁵ These factors undoubtedly help explain why persistently buoyant motor vehicle sales have been a significant feature of the consumer led boom of the past several years. These factors then also suggest an increase in the rate of growth of demand for fuel products over recent historic trends.

259. We also heard lengthy technical argument concerning the impact of fuel efficiency on demand growth. These relate to the taxi re-capitalisation programme, which will usher in the replacement of petrol by diesel in the nation's taxi fleet and to predicted advances in vehicle and fuel technology. While the impact of the taxi re-capitalisation is relatively clear – although we

¹⁵⁵ This issue and its impact on consumer behaviour and pattern is comprehensively dealt with in *Ellerines/Relyant* Case No. 56/LM/Aug04

note that the project is proving immensely difficult to implement – it is also relatively neutral in the foreclosure debate because the decrease in petrol demand will be replaced by an increase in diesel demand albeit not in a one-to-one ratio.

260. The merging parties also argued that the movement towards diesel-powered vehicles and the improvement of diesel engine and fuel efficiency will depress the rate of growth of demand for white fuels.¹⁵⁶ These arguments were contested by the intervenors who suggested that regulation aimed at lowering the sulphur content of diesel may actually increase diesel consumption. The arguments around fuel and engine efficiency appear highly speculative. In any event the direction of the impact of the various predicted efficiencies on fuel demand is not consistent and their net impact is therefore likely to be low

261. In summary, it appears eminently reasonable to expect a correlation between fuel demand growth and income growth as well as changes in the distribution of income. Both of these explanatory variables suggest an increased rate of growth for fuel demand over growth rates experienced in the recent past. There is no discernible reason to predict petrol growth rates on the basis of movements in price variables in the manner suggested by Mr. Swart which apparently represents the reasoning underlying the Sasol and Uhambo projections.

262. We can arrive at few definitive findings in this regard. Under the circumstances the most prudent path would appear to lie in following the herd many of whom, we note again, have relied on independent experts such as Econometrix and the Bureau of Economic Research. We note that the Shell estimates which are used in the Baker model are, particularly for petrol demand growth, at the lower end of the cluster and, given particularly that the estimates used in the Stillman model are low outliers and that the variable

¹⁵⁶ During Mr. Swart's evidence-in-chief, Mr. Cilliers for the merging parties put it thus: "*The picture here Chair is that there has been a swing away from the use proportionately, away from the use of petrol towards the use of diesel and then on top of it the diesel vehicles, like the petrol vehicles, but even more so, have increased efficiencies although you proportionally use more diesel, you use less diesel than you would have used with the old type model.*"

used by Mr. Swart to predict petrol demand growth is plainly wrong, it appears reasonable to accept the assumptions incorporated in the Baker model.

Logistics – pipeline, rail and road

Introduction

263. As already noted, the MSA required the OOCs to purchase Sasol product preferentially to the extent of some 7 billion litres per annum representing approximately 90% of Sasol's annual refined output from Secunda and Natref. These purchases were made at BFP. The OOCs shortfall was conveyed by pipeline, rail and road from their Durban refineries to their inland marketing arms.

264. The scale of the logistics problem is laid out in the merging parties heads of argument.¹⁵⁷ There – based on actual 2004 requirements and utilising the growth figures of the Baker model – the inland requirement of the OOCs is set at 7,56 billion litres for 2006.¹⁵⁸ Utilising certain of the key assumptions of the Baker model – though at times drawing on the merging parties assumptions – available DJP capacity, the road and rail capacity admitted by Mr. Baker and additional sources of transportation accepted by Mr. Baker are deducted from the requirement of 7,56 billion litres leaving a shortfall in transportation capacity for 2006 of 2,341 billion litres. This – representing slightly in excess of 30% of their 2006 inland requirement – is, in the absence of additional logistics, the extent of the OOCs dependence on Uhambo in respect of which the OOCs fear foreclosure.

265. The merging parties contend that there is sufficient additional logistics capacity available to the OOCs to convey this shortfall from Durban to the inland. The merging parties insist further, that even if Uhambo successfully foreclosed on this product or part thereof and, in the process gained market share from its downstream rivals, their rational accommodation – which is argued to consist of a careful prioritisation among their inland customers – will ensure that the

¹⁵⁷ Page 79 of the Merging parties' Heads of Argument.

¹⁵⁸ This represents the requirement of BP, Caltex and Shell. Total, through its share of Natref output, is assumed to be balanced in the inland.

losses of market share would be immediately recouped when the expanded DJP relieves the logistics constraint. This would limit any gains derived from foreclosure to the period up until the expanded DJP is commissioned.

266. As already noted, prior to the commissioning, in the mid-'sixties, of the first pipeline – the DJP - the OOCs used road and rail to convey product from the coast to the inland. The pipelines were put in place to facilitate the conveyance of product including white fuels as is evidenced most strongly by the subsequent commissioning of the DWP. This changed with the development of Natref and, most especially, Secunda and, critically, with the successive extensions of the MSA to cover the rapidly growing inland product.

267. The clear signal conveyed to the key providers of logistics – namely, Petronet (pipeline), Transnet (rail) and the coastal OOCs (road) – by the massive development of inland-produced refined product and the extension of the MSA was that henceforth the product produced inland would be used to satisfy inland demand. This significantly reduced the requirement for logistics capacity to convey white fuels from the coast to the inland.

268. Petronet responded to this signal – although with a significant time lag - by converting the critical DWP into a gas pipeline reducing, by close to 70%, the pipeline capacity for the conveyance of white fuels.

269. Rail capacity is, like pipeline capacity, ultimately controlled by Transnet. If Transnet's pipeline operator responded to the market allocation arrangement provided for in the MSA by reducing its capacity to transport white fuel to the inland, then we may infer that Transnet's rail division would have responded similarly. That is, even if it could not, as with the DWP, convert the rolling stock capacity to alternate uses, we can readily infer that, using the same reasoning as Petronet, it would not have invested in the expansion of this capacity. This squares with the difficulties to which the OOCs have attested in getting additional rail capacity out of Transnet.

270. Although not much evidence has been led on the history of logistics there is every reason for assuming that the OOCs would, rationally, have responded in the same way, that is, that they would have significantly 'liquidated' much of their own logistics capacity. This refers primarily to road capacity. Indeed, in response to Secunda and the extended MSA, the OOCs took the drastic step of mothballing significant coastal refinery capacity. It is then reasonable to infer that they would have done the same with respect to their logistics capacity. The independent trucking operators who operated the long haul petrol tanker fleets would also have been cognisant of the reduction in demand for their services and so, they too, would have had no incentive to maintain their own capacity.

271. Sasol then gave notice of termination of the MSA. We have shown above that the timing of the termination of the MSA coincides with the high point of the logistics constraint. Sasol announced its intention to invest aggressively in new retail capacity. Although this would have undoubtedly concentrated the minds of the OOCs on future Sasol strategies, including the possibility that they may have to ramp up logistics capacity, on its own even the termination of the MSA and the entry by Sasol into the retail market did not, of itself, portend a radically new situation insofar as logistics requirements were concerned. That is to say, Sasol's solo entry into the retail market portended a gradual build-up in its retail activity across the country. In the inland region it would still have relied for the foreseeable future on the OOCs to take much the lion's share of its inland supply off its hands and it would have relied on the OOCs for product in the coastal areas. In short Sasol on its own, even without the envelope of the MSA, was in a substantively unchanged bargaining position.

272. The merged entity will not be similarly constrained. A Sasol merged with Engen's inland retailing capacity, Uhambo, in a word, will have far less inland supply to dispose of to the OOCs and it will control a major coastal refinery on which it could rely for its coastal requirements – that is, Uhambo's dependence

on the OOCs both as customers in the inland and suppliers at the coast is much reduced relative to that of pre-merger Sasol.

273. However even after the merger Uhambo will still have significant, albeit much reduced, inland supply to get rid of; and the OOCs, despite mobilising additional logistics capacity, will still have considerable inland demand that it will need to satisfy. The post-merger bargain is over price. This is foreshadowed in the current post-MSA, pre-merger situation with Sasol, by its own admission, intent upon maintaining BFP over as large a volume as possible. The OOCs could only obtain a reduced price for its shortfall volumes if it weakened Sasol's monopoly of inland supply and this could only be done by bringing in product from the coast. And for this, the OOCs had to persuade Uhambo of their logistics capacity to bring this product into the inland. They had, in other words, to demonstrate to Sasol that they could procure sufficient, commercially-viable logistics capacity to replace inland Sasol product with that shipped from their own coastal refineries.

274. However there is already evidence that this new situation has not influenced the investment decisions of two of the major logistics producers, Petronet and Spornet.

275. Petronet's investment planning is explicitly – and there is testimony from Mr. Moodley to this effect - driven by a 'rational bargaining' assumption. That is, its plans assume that whatever is produced inland, will be consumed inland.

If you've got product in that particular area you [would] consume that product first before you bring product from any other area.¹⁵⁹

276. This is why the planned expansion of the DJP cannot have been predicated on 'irrational' bargaining. That is, Petronet, given its stance and, crucially, given its commercial interests, could not have agreed to expand the DJP because it foresaw a situation of long term 'irrationality'. Indeed, it has just confirmed that

¹⁵⁹ Page 207 of the transcript and also see pages 331-3 of the transcript.

all capacity in the DWP pipeline – initially a refined product line that was, in the face of the MSA, converted to a gas line – has, until the end of its life, been contractually reserved for the exclusive use of Sasol's gas requirements. Petronet permitted this conversion because it assumed that under conditions of rational bargaining the capacity in the DWP would not be required to convey white fuel from the coast. By the same token it has now decided to expand the DJP because it believes that demand growth in the inland will imminently justify the necessary investment. By expanding the DJP it has not thrown its adherence to a 'rational bargaining' norm out of the window.

277. The significance of this observation is that even if the expansion of the DJP assists the OOCs in overcoming foreclosure in the first years of its expanded existence, it will ultimately not do so because the expansion has been predicated on demand growth under conditions of 'rational bargaining'. The expansion of the DJP from a 12-inch to 16-inch pipeline is predicated on expected expansion in inland demand, not on expected 'irrationality'. That is, it is predicated on the calculation that the capacity of the expanded pipeline will be fully utilised. For this reason an expansion above 16 inches – to which Moodley understandably refused to commit – is extremely unlikely. If the decision to expand the DJP from 12 to 16 inches was predicated – as it must have been - on Petronet's view of demand growth in circumstances of rationality, it is difficult to see why it should agree to expand the DJP beyond 16 inches unless its inland demand projection has changed and there is no evidence for this. Indeed 'irrationality' would be an extremely risky basis for Petronet's investment decision making because, as pointed out in the hearings, as soon as capacity to overcome foreclosure becomes available, the incentive to rational bargaining, including the agreement to price competitively, is overwhelming and Petronet will then immediately be burdened with excess capacity.

278. This is clearly borne out in Mr. Moodley's testimony.¹⁶⁰

¹⁶⁰ See preceding footnote for reference to Mr. Moodley's views. It is also well understood by the

279. Similar considerations apply to the likely expansion of rail capacity. It seems, in any event, to be common cause that expansion of rail capacity for this purpose is not on the cards. But even if expansion of that rail capacity necessary to convey white fuel was feasible, then similar considerations as those outlined above would apply. That is, Spoornet, already constrained and with considerable demand for new investment already imposed on it, is hardly likely to invest in new rail capacity dedicated to the conveyance of fuel if that investment is predicated on 'irrationality'. Like Petronet it will look at the overall balance of inland demand and supply and if there is sufficient capacity to bring shortfall into the region it will assume that existing capacity will be 'rationally' deployed to this end.

280. Where then does this leave us with respect to logistics capacity?

281. The above analysis suggests that Petronet will not rescue the OOCs from a foreclosure strategy. From Petronet's perspective foreclosure approximates a rational outcome. After all foreclosure may simply – or simplistically - be construed as an effort to enforce the core maxim of rationality that holds 'inland product to be consumed inland'. It abstracts from another set of realities, viz. first, the fact that inland production is thoroughly dominated by a company that will attempt to extract a price commensurate with its market power; and second, that, after the merger the largest inland wholesaler and

Department of Mineral and Energy Affairs, at least as the position is represented in its intervention application, the DME contended that it is difficult to establish the rationale for the transaction, given the regulatory framework that it, the DME, is responsible for implementing in the industry. It submitted that: *"The reasons that are put forward in the Commission recommendations are either not valid or go against the provision of the statutes governing the sector...If the merger is allowed on this basis, **will Government not be obliged to provide additional pipeline capacity to other players, in order to ensure a more levelled playing field?**"*

The DME went further to say that: *"The DME is also concerned that the conditions proposed by the Commission are entirely dependent on the construction of a pipeline by the third party, Petronet. As we understand it, Petronet is not a party to these proceedings and **its commercial imperatives to construct a pipeline may or may not coincide with the requirements of a competitive environment. For commercial reasons, Petronet may find it unprofitable to construct a pipeline that will have more capacity than was immediately required, since its shareholders would, like all other shareholders in similar circumstances, want a reasonable return on their investment within a reasonable time.**"*

network of retail outlets will be tied to the company that monopolises inland refinery capacity.

282. Similar considerations apply to the expansion of rail capacity.

283. Where pipelines are concerned, we are largely left with the possibility of bringing diesel up the under-utilised COP. The DWP is out of the equation because it has been signed over to Sasol in perpetuity; further extension to the DJP (that is, above 16 inches) in the immediate future (that is, to deal with foreclosure) is, for reasons outlined above, highly unlikely. There are other less significant pipeline related possibilities posited by the merging parties that we will consider and then we must consider the prospect for expanded rail and road haulage logistics.

Diesel and the Crude Oil Pipeline

284. We have noted that in 1969 a pipeline was commissioned in order to convey crude oil from Durban, its port of entry, to storage facilities in disused coal mines at Ogies, in the inland area. This was essentially an attempt to counter looming threats to South Africa's oil supply. It was also designed with the construction of an inland crude refinery, Natref commissioned in 1971, in mind. It is an 18-inch diameter crude oil pipeline that runs from Durban to Kendal via Richards Bay and Sasolburg. The government began using the COP for the storage of crude oil at Ogies in March 1969.¹⁶¹ The COP is currently used to transport crude oil from Durban to Natref. It is not used to transport white product.¹⁶² The COP's current capacity runs at 134 million litres per week (mlpw), its current average usage is around 99 mlpw, and Petronet has budgeted in the region of 98 mlpw for this financial year.¹⁶³ In order to place Natref in an identical position with respect to its crude oil procurement as its coastal counterparts, tariffs were not levied on the use of the COP until 1987. Instead tariffs raised in respect of the DJP cross-subsidized the cost of the use of the COP.

285. The contention that this pipeline can be utilised to convey diesel together with crude

¹⁶¹ See page 3 of Annexure "A" of BP's Heads of Argument.

¹⁶² See pages 247 and 291 of the transcript.

¹⁶³ See page 204 of the transcript.

oil is a cornerstone of the merging parties' efforts to demonstrate that the OOCs have at their disposal sufficient logistics capacity to convey product from their coastal refineries to the inland and so break any attempt at foreclosure. The OOCs, for their part, insist that there are massive obstacles to be overcome – obstacles that may well prove insurmountable – if the COP is to be utilised for the conveyance of diesel. At least they insist that there are massive unresolved questions concerning the use of the COP for this purpose, which questions cannot be resolved in time to counter a foreclosure strategy. Note – and this is elaborated below – that the only previous occasion on which the COP was used to convey diesel was when, in 2001-2, a fire caused a long shutdown at Natref. However, on this occasion, because Natref was not able to use any crude, diesel alone was conveyed through the COP. As we shall see, even under these circumstances, considerable quality problems were experienced.

286. Before considering the various technical arguments, we should comment on the reliability of the evidence in the light of the opportunism displayed by both Sasol and the OOCs regarding the conveyance of diesel in the COP. We should also comment on certain statutory stipulations regarding the utilisation of the COP.

287. The OOCs and Sasol have not always adhered to the respective viewpoints for which they have contended in these hearings. In the committee stage of the parliamentary process through which the Petroleum Pipelines Bill was obliged to pass, the OOCs and Sasol took diametrically opposed positions to those taken for the purposes of the present inquiry. At issue in the parliamentary hearings was the mooted introduction of a provision in the Act – a provision that found its way into the original draft of the Bill - reserving the COP for crude oil. This position was supported by Sasol and vehemently opposed by the OOCs. Each invoked technical arguments in support of their respective positions, technical arguments that are for the most part diametrically opposed to those presented at these hearings. The reasons for these dramatic shifts in position are plain – the OOCs were anxious to prevent a statutory bar on the utilisation of the COP as a multi-product pipeline; Sasol

was intent on reserving the COP for crude oil. Indeed this may well be counted as one of the earliest skirmishes in the inland supply war that has been described in such considerable detail in these hearings, with the OOCs anxious to keep open all available options for overcoming possible foreclosure and Sasol equally intent upon shutting them down.

288. In our hearings, each side – that is, the merging parties and the OOCs – has made much of the extent to which their opponents have departed from their original positions on the feasibility of conveying diesel in the COP. Clearly we cannot draw definitive conclusions from these mutual shifts in position, although we can understand why, even if the OOCs did honestly harbour serious doubts regarding the technical feasibility of bringing diesel up the COP, they would nevertheless have vehemently opposed a statutory bar on this possibility, a bar that, given the vicissitudes of the legislative process, would then likely have prevailed even in the event that the technical difficulties proved to be surmountable. Sasol's position was that it was not technically feasible to convey diesel up the COP, although even then it sought statutory protection of its position.¹⁶⁴

289. We will then draw our conclusions from the evidence and argument presented at these hearings, ignoring, for the most part, the opportunism displayed by both sides. It is however noteworthy, particularly given the immense importance that the issue of the conveyance of diesel in the COP has assumed in the case against foreclosure, that the merging parties' damascene conversion to the view that this is indeed feasible has come at the last possible moment. Hence in the merging parties' November 2004 submission to the Commission there is no mention of the possibility of conveying diesel in the COP. They were similarly silent in their March 2005 submission and this

¹⁶⁴ The transcript of Mr. Oberholster's cross-examination at pages 443-453 details the evidence of Sasol's continuing efforts to prevent the COP from being used for the conveyance of diesel including enlisting the support of the government and the motor vehicle manufacturers. At page 443 Mr. Norton for BP puts the following Sasol documentation to Mr. Oberholster: 'And then it says here "*Johan, Pieter, please see attached document package as a substantiated position statement on the unacceptable risk of using the COP to transfer both diesel and crude*". It then goes on to say "*I have spoken to Daimler Chrysler, BMW and to Barloworld about this issue*". I presume it should be 'issue'. "*All indicated that they are willing to state their disapproval for the proposal to bring diesel up the COP. All still remember the pain of the previous incidence*". The next paragraph "*I could forward certain portion of this document to them for information. However, I do not think that we need to give them incentive to do something with it. If you could give them concrete evidence that Petronet is wanting to go down this route, then I believe we could get some response out of them. Do we have something in writing to this effect? Comments. Regards Dow*".

supposed logistical capacity is canvassed for the first time in CRA's August 2005 foreclosure model.¹⁶⁵

290. Before turning to the technical evidence, evidence which is focused on the capacity of the COP and critical issues surrounding the safeguarding of the quality of product conveyed in a multi-product line, we should also note that the eventual outcome of the abovementioned dispute in the parliamentary process, while stopping short of legislating in favour of a single-product COP, manifestly favours Sasol's preferred position by explicitly giving Natref first call on the capacity of the COP and on its mode of utilisation.

291. Section 20(1)(f) of the Petroleum Pipelines Act 60 of 2003 ("PPA") provides:

"a petroleum pipeline may be licensed for either crude oil or petroleum products, or both, as long as sufficient pipeline capacity is available for crude oil to enable the uninterrupted operation of the crude oil refinery located at Sasolburg, to operate at its normal operating capacity at the commencement of this Act and for so long as that refinery continues as a going concern"

292. In our view then the Act expressly entrenches a statutory preference that the COP must be used to convey crude as opposed to white product. It therefore envisages that Sasol and Total (as the joint shareholders of Natref) will enjoy a privileged position when it comes to use of the COP, since their interests will be served before those of the OOCs.

¹⁶⁵ This was put to Dr. Stillman who offered the following, rather lame, response: "...The issue of diesel in the crude oil pipeline was pointed out to us in about June or July, June roughly I would say more likely, of this year. And when it was presented, of course as an outside economist, we asked questions about it. Not that we could evaluate the technical merit of it, but a more fundamental question, which is where did this come from. And the answer that we received is that this was an issue, the issue of the diesel in the crude oil pipeline is something that has been in the industry for some time, but that in the course of working on Uhambo's business plan and trying to analyse ... not the business plan, but on really the operations of Uhambo on a going forward basis, the planning teams had spent more time working on this issue of designer crude and the ability to use the crude oil pipeline for other purposes rather than simply crude oil. The statement to us is that it was really in the course of realising that there were technical solutions and that this designer crude was a feasible way of using the crude oil pipeline, that there was a revisiting of the feasibility of using the crude oil pipeline for diesel. Again, the technical merits are something that I cannot address, but that's a background to the diesel and the crude oil pipeline in our analysis." From page 768 of the transcript.

293. An e-mail message from Mr Moodley describes the statutory preference in the following fashion:

*Petronet will have to guarantee Natref crude continuity of supply and therefore crude will take priority in the crude oil pipeline. Only the balance of the capacity of the COP that Natref does not utilise, can be utilised for refined products.*¹⁶⁶

294. Mr Wright, the witness from Engen described Moodley's formulation as "an obvious industry truism".¹⁶⁷

295. This is confirmed in the following exchange between Mr. Moodley and the Tribunal:

CHAIRPERSON: Does the Act require you to prioritise the use of crude in this pipeline?

MR MOODLEY: It merely says that we need to continuously supply NatRef and what continuously means is again up for discussion.

CHAIRPERSON: It will be on Natref's terms how ... they will be the client and it will be on their terms that you will supply them, however frequently they want it or in whatever size slugs they want it. That is what the relationship will be that will dominate the pipeline, the use of the, the operations of the pipeline.

MR MOODLEY: My understanding is as long as you do not compromise the output of Natref in your operation.

CHAIRPERSON: And that will be, whether the Natref operations are compromised or not, will be a decision that the Natref Management or owners will take and will convey to you.

*MR MOODLEY: Will engage with Petronet.*¹⁶⁸

296. In our view then the Petroleum Pipelines Act makes it clear that the party that controls the operational requirements of Natref, whose majority shareholder is Sasol and will be Uhambo, is given statutory confirmation of its dominance in relation to the utilisation of the COP. In our view, this – a classic example of the proverbial fox being placed in charge of the henhouse – is, on its own, sufficient basis to conclude that the COP cannot be relied upon to convey diesel.

297. Nor is this the only instance in which the successful conveyance of diesel

¹⁶⁶ Annexure DN4 to Natha's supplementary affidavit.

¹⁶⁷ P1713 – 1714 of the transcript.

¹⁶⁸ Page 299 – 300 of the transcript.

through the COP will depend upon the co-operation of the Natref shareholders. For example:

(a) Interface¹⁶⁹ and crude tankage¹⁷⁰ would have to be built at Natref.¹⁷¹ Given that Uhambo – Natref’s majority shareholder - would naturally not undermine its own attempted foreclosure, any co-operation would have to come from TOTAL. It is not readily clear how TOTAL could be persuaded that to build such tanks would be in its best interests.

(b) TOTAL would also have to be persuaded to process the interface. The CRA report submitted on behalf of the merging parties assumes that the interfaces would be processed utilizing TOTAL’s share of Natref refining capacity.¹⁷² Although Mr Natha suggested in his statement that a processing fee of at least 15cpl would be charged (based on the 2001/2002 experience), there would seem to be no reason why TOTAL would be willing to process the interface for the OOCs at all.

(c) The coastal refineries would thus have to sell the interface to TOTAL (with TOTAL keeping the refined product). A price would have to be negotiated, but on the face of it - as Shell argues – TOTAL would presumably wish to buy the interface as crude (since this is what it displaces). The OOCs would thus be refining crude into diesel at its coastal refineries, transporting it to Natref and selling it as crude, thereby losing the refining margin on the diesel.

(d) TOTAL’s willingness to buy the interface (even at crude prices) will depend on its own production requirements. The interface would refine predominantly into diesel, whereas crude would typically yield 40% petrol, 40% diesel and 20%

169 The ‘interface’ issue is critical and is elaborated below. It refers to the ends of each ‘slug’ or batch of diesel that will, to a certain volume all agree, be contaminated by the adjacent crude batch. This interface will have to re-processed at Natref and storage tanks will have to be constructed to hold this contaminated diesel prior to its re-processing.

170 Additional crude storage capacity will have to be build in order to hold the additional crude stock that will be required for the period that the COP is utilized to convey diesel.

171 Note page 454 of the transcript cites document from Sasol Oil Technical Services that states “*when the [Natref] refinery is operated under normal production conditions, no tanks would be available to handle intermixtures*”.

172 See Para 65 at page 105 of the Witness Statement bundle.

kerosene. Accordingly, Total would only agree to purchase the interface if it was willing to skew its production towards diesel.

298. These problems are crisply summed up by Mr. Natha:

...TOTAL is petrol short in the inland market and diesel and jet surplus. So if they process this diesel rich mixture through their refinery, they will be limited on the amount of crude they can run, because the amount of diesel they can make is determined by the hardware facilities that they have. Therefore, they will not be able to earn the full margin that they would earn by processing the normal crude diet where they would make petrol, diesel and jet, amongst other things, and under a full margin.

So, under those circumstances, given that they are short of petrol capacity, they would not be interested in us processing the diesel through there, because it affects their profitability and the ability to meet their market demand in the inland market.

So, that's part of the problem. I understand that capacity on the conversion units is tight. Now what could they do to be friendly and kind? They would have to change their crude diet, which would have less diesel in it so that this would allow it to balance. And it's not a simple issue, because I understand that for every one litre of diesel it would have an implication of three-in-one to the crude that they process of four-in-one in the ratios.¹⁷³

299. Shell contends – and it is correct - that there is no evidence to establish that TOTAL would be prepared to incur the opportunity cost involved in the reprocessing of the interface. It is further contended that in the absence of such evidence, diesel cannot be transported in the COP since there is no practical alternative to using Natref for the reprocessing of interface.

300. We should also note that it is common cause that the feasibility of conveying diesel in the COP can only be confirmed by extensive testing and, moreover, that significant capital expenditure and time is required to conduct the necessary tests.

301. For example Mr. Moodley, Petronet's witness, who generally occupied the middle ground in this debate, made it clear that while he believed that it may ultimately prove possible to convey diesel in the COP, was nevertheless careful to emphasise that the

¹⁷³ Page 2274 of the transcript.

conveyance of white fuel and crude oil required the prior resolution of “specific quality issues”¹⁷⁴ and that these were related to the possibility that the white fuel conveyed in the COP may prove to be “off-spec”¹⁷⁵ as a result of contamination. Moodley testified:

*And as much as we are confident that it can be done, it's not proven by ourselves yet. We engaged the industry with regards to a program to get a test done and until we do the test and we look at what the constraints are with regards to that, we will not be able to say for sure that we can put diesel in the crude line or not. However our view is that we can, but we need to identify or let's say quantify the risks that we believe are there and how we can mitigate them.*¹⁷⁶

302. On the question of risk, Moodley appeared to suggest that, given the under-utilisation of other Petronet facilities, there was not a business case for Petronet to assume any of the risk for the conveyance of diesel in the COP.¹⁷⁷

303. The importance of testing was confirmed by Mr. Wright from Engen who testified it would be necessary for testing and pilot studies to be done in order to investigate the feasibility of transporting diesel in the COP and that such studies have not yet been performed. In Mr. Wright's own words:

Nobody has really tried to find a solution for the crude oil pipeline issue...both in practice or in real life.¹⁷⁸

304. Mr. Wright also testified that in order to undertake the necessary ‘test run’ capital expenditure which he estimated to range from R160m-R340m would have to be undertaken.¹⁷⁹

*..if we' re going to make this system work, one would have to put facilities in place*¹⁸⁰

174 See page 229 of the transcript as well as page 328 of the transcript.

175 See page 229 of the transcript.

176 Page 229 of the transcript.

177 Mr Moodley put it this way: “So as much as we prove technology or we do not prove it, we don't believe that it will be utilized at this point in time, because I've indicated figures to you showing that the other lines that we thought would be constrained and the deep water leaking are not being fully utilized at this point in time.” See pages 229-230 of the transcript.

178 Page 1707 of the transcript.

179 Exhibit 42.

180 Page 1674 of the .

305. The extent of what Mr. Wright referred to as the 'hardware solution' that would be required to re-engineer the COP for multi-product use was spelt out at length by Mr. Natha:

You also have to ... this is a routine operation, install equipment to detect the interfaces. So, you would have to install instrumentation that would measure density differences, sound effects, all that sort of equipment on the line so that you could reasonably accurately identify the interface between the two.

Next, the pipeline itself will have to be examined for its design. Are there any dead legs? By dead legs we mean that if a product that's moved before the diesel coming, it might be stuck somewhere or the valve locations might cause it to stick and then when the diesel come through it would pick up the crude. So you want to avoid that kind of problem.

Now experience overseas and here would tell you that when you design a line to carry crude oil, you're not that careful, because it's got a single purpose, single product carried. So there may be a need to modify the line to remove these so-called obstacles. Then because you are carrying two distinct products, one being a refined product and the other being crude, at hour (this should probably read 'every') inlet and outlet you're going to have to have positive isolation in the manifolds between the pipelines to make sure that there is no contamination. So you would have to put in things like double block and bleed valves, proper positive isolation valves to ensure that that mixing doesn't take place.

Then if you have pumps along the line, as we have with the crude line, we have 5 booster pump stations between Durban and Ingogo. I think the last one is at Fort Mistake, but somewhere there. These pump stations and the way we operate them and the sequence in which you operate them, would have to be very thoroughly worked through to avoid causing problems when we run this pipeline.

Despite putting all this fancy equipment and valves and positive isolation, you also are going to have a system to detect leaks, because you don't want the one product to go into the other product. So you are going to have to install equipment for that.

Finally, on this part of what you have to do with the line ... it's not the end of the story, but at this point, when the product reaches Sasolburg, we are going to have to have proper lab facilities to test for all the specifications of diesel. This gets even more tricky come 2006 when we switch to the Euro specs for diesel and unleaded gas, etc. So the testing would have to be done."181

181 Pages 2266-2268 of the transcript.

306. Shell submits that there is no dispute with regard to the two aspects of the “hardware solution” that would be necessary to enable the COP to be used for the conveyance of diesel. Firstly, it will require significant capital investment to effect the hardware solution. The capital costs would have to be incurred by Petronet and by the OOCs. Secondly, it will take a considerable period of time to implement the hardware solution. Although the merging parties appear ultimately to contend that 6 months would be sufficient, Mr Wright testified that it could take 18 to 24 months to effect the necessary changes.¹⁸²

307. On the assumption that the new DJP will come on-stream in 2010, it follows that the necessary capital expenditure would have to be recouped in a window period of some 2 years. Shell submits that it is extremely unlikely that any institution would be prepared to invest in the required “hardware solution” in circumstances where it would have no more than 2 years in which to recoup its investment. Mr Natha testified that such an investment would make no business sense:

Then you have to go to the economics, the cost benefit and you have to say to yourself if I spent all that money and there is another line coming on in 2010, am I going to be able to justify the expenditure? With the help of one of my guys, we did a discounted cash flow analysis of what would it be if you had to recover this over two or three years and we got a negative NPV and a negative IRR. Now as a businessman I think I would find it very hard to justify that expenditure. ¹⁸³

308. In light of the above, Shell submits that there is no evidence to show that either Petronet or the OOCs would be prepared to incur the capital costs that would be necessary in order to make the COP suitable for the conveyance of diesel.

309. The merging parties counter that Mr Natha’s assertion that the DJP would become constrained again by 2012-2013 self-evidently necessitates the use, in future years, of additional logistics including the COP. They submit that if the DJP does become constrained then it is inappropriate to do the NPV and IRR over the limited period allowed for in Mr. Natha’s calculations because, on his own evidence, the need for use of spare capacity in the COP would again arise and continue onwards from 2012-2013. They further submitted that the investment also, at minimum, ensures

¹⁸² Page 1710 of the transcript.

¹⁸³ Pages 2272-2273 of the transcript.

back-up capacity and would not be redundant.¹⁸⁴ While there is undoubtedly an element of truth in these counter-arguments, there nevertheless remain an extraordinary number of unknowns to justify an essentially defensive, though substantial, investment. In our view, it is precisely when hard-nosed business people are called upon to make this sort of investment that they would begin contemplating the relative benefits of co-operation over competition.

310. There is, to be sure, significant argument regarding the precise scale of the necessary expenditure and the time necessary to confirm the contending hypotheses. But, the fact is that no one – not even the merging parties – was able to testify unequivocally that diesel *can*, in the absence of testing, be conveyed in the COP. At best the supporters of this untested proposition are able to state a claim that their technical arguments are likely to be confirmed by the necessary tests. Given the depth of technical dispute and the paucity of experience with respect to multi-product pipeline conveyance (at least, multi-product conveyance involving crude oil and white fuels), given the importance of this claim with respect to the overall profitability or otherwise of foreclosure and, last but not least, given the importance of the product markets relevant to this merger, accepting allegedly certain outcomes of tests that, all agree, must still be conducted, is asking for greater latitude than any adjudicator should be willing to extend.

311. We will nevertheless examine the various technical arguments advanced during the hearing and placed on the record. As will be elaborated, our review of the technical debate confirms the conclusions reached on the basis of the statutory position, namely that the COP cannot be construed as a logistics resource available to those who have an interest in conveying diesel to the inland, much less to those who have an interest in overcoming attempts on the part of Natref's largest shareholder to foreclose the inland market.

312. The technical arguments are voluminous and complex. The arguments that reject the possibility of using the COP to convey diesel are clearly and comprehensively outlined in Shell's heads of argument and in the testimony of Mr. Natha. They, and the counter arguments presented by the merging

¹⁸⁴ Page 262 of the parties' Heads of Argument.

parties, are reproduced in some detail here because the claim regarding the logistical opportunities afforded by converting the COP to multi-product use is, arguably, the most important made in support of the merging parties arguments against the profitability of foreclosure. The arguments focus on questions of quality and volume.

313. It is common cause that when the COP was used to pump refined products during 2001 – 2002 in the wake of the Natref fire, this led to major quality problems. In particular, problems were caused by particulate contamination, a rise in sulphur levels and water in diesel.¹⁸⁵ *These quality problems arose in the circumstances where the COP was being used exclusively for the transportation of refined products.* They have not yet been resolved. On the contrary, they are likely to be exacerbated in circumstances where the COP is used to convey crude and diesel in “blocked operation” in the manner envisaged by the merging parties.

314. The potential quality problems identified by the OOCs are summarised under five headings: water and particulate matter contamination, sulphur contamination, wax contamination, lubricity additive and the potential impact on the quality of product carried in the northern DJP.

Potential water and particulate matter contamination

315. Mr. Natha testified that during the Natref shutdown in 2001 and 2002 problems were experienced due to water and particulate matter in diesel transported via the crude oil pipeline even though, in that period, diesel tanks at Natref were available to allow for settling to occur and for the removal of the water and particulate matter. He testifies further that during 2002 diesel was pumped directly into depot storage tanks in which it was necessary for the diesel to stand for a period of time so as to allow the water and particulate matter to settle. This affected the ability of the OOCs to timeously meet their respective inland customer demands.

¹⁸⁵ See page 1524 of the transcript. See also Exhibit 42.

316. In support of his views, Natha cited the following passage from a report prepared by Angus Quayle of Engen in which the following issues were raised:

(2) The extent of the contamination of the first diesel through the line was greater than anticipated. Some 8 million litres at the interface with the crude oil were “off-specification” on corrosion. Another 10 million litres were contaminated with particulate matter, apparently asphaltenes picked up from the old section of the COP between Ingogo and Coalbrook. It was necessary to install a jump over to enable contaminated diesel ex the COP to be segregated in Natref tankage for subsequent disposal. All this took time and, in addition, essentially the entire 75m ton diesel import was used for the initial line fill or downgraded. It was therefore the end of July before product ex the COP started reaching inland depots.¹⁸⁶

317. Natha submits that the presence of water in the diesel and/or particulate matter has dire consequences for customers. They must be removed before diesel is supplied to customers, and doing so results in delays and additional costs.

Potential sulphur contamination

318. Mr. Natha’s testifies that the sulphur entrained in the COP would cause diesel transported via the COP to be “off-specification”. Thus removing excess sulphur would require the reprocessing of additional volumes of contaminated diesel at a suitable refinery. As already noted Natref does not have available capacity to remove the sulphur concerned. TOTAL requires its entire share of capacity to meet its inland demand. Hence, even if the necessary capacity existed at Natref, it would be costly and only available from Sasol. In a foreclosure scenario, Sasol would be unwilling to provide capacity at Natref for the reprocessing of “off-specification” diesel so as to remove sulphur.

319. He notes further that in 2006, the permissible sulphur content in diesel will be reduced from 0,5% mass per kilogram to 0,05% mass per kilogram.

Potential wax contamination

320. A further concern relates to the contamination of diesel due to potential wax

¹⁸⁶ Annexure D2 of Natha’s supplementary witness statement.

precipitation from crude oil which could result in the “*uncontaminated*” diesel being “*off-specification*”. Mr. Natha cites an e-mail prepared by a Technical Adviser at Shell Global Solutions addressed to Shell SA:

One slight technical detail which crossed my mind handling your query: the ‘white’ product contamination with crude could be originating from wax precipitation by the gas oil and hence crude/wax traces are experienced for a longer period than anticipated. We could assist in carrying out a desk study (incl. Some lab tests) whether this is likely for the system you have run and confirm this effect. In other words, care should be taken what product you put next to crude!”¹⁸⁷

321. Mr Moodley also raised concern about the potential contamination of diesel by wax precipitation from crude oil:

With regular switching between crude and refined products there is a greater risk of contamination. Maintaining product quality poses significant challenges and the following issues need resolution:

- *Effect of waxes on refined products;*
- *Pick-up of particulates by the refined product;*
- *Trace element contamination;*
- *Discolouration of product.*¹⁸⁸

Lubricity additive

322. Mr. Natha testifies that the new specification for diesel will require a lubricity additive at the time of, or after, blending which could further complicate the reprocessing of contaminated and “*off-specification*” diesel. Natha submits that this is caused by the fact that the additive which would be present in the diesel could potentially damage the refining equipment used to reprocess contaminated diesel. It is Natha’s view that any of the above contaminants which could cause the “*uncontaminated*” diesel to be “*off-specification*” would pose significant problems for consumers with potentially substantial financial implications for those marketing and utilizing the contaminated product.

Potential impact on northern DJP

¹⁸⁷ See Mr. Natha’s annexure DN3.

¹⁸⁸ Email from Moodley to Shell reproduced in Natha annexure DN4.

323. According to Mr. Natha, the quality risks would not be limited to volumes of diesel transported via the crude oil pipeline, since the diesel would be pumped at Sasolburg into the northern section of the DJP to supply the inland market with white fuel products. Should this diesel be “off-specification”, it could cause the entire white fuel product inventory in the northern DJP to be “off-specification”.

324. Indeed it appears that Sasol shared this concern about contamination problems and sought assurances from Shell with regard to the transportation of diesel in the COP.¹⁸⁹

325. Mr. Natha submits that these concerns appear to be based on evidence of the failure of diesel engines due to particulate matter in diesel transported in the COP during the Natref shutdowns in 2001 and 2002. We are told that this matter caused costly damage to engine filters and injectors as well as to diesel engine fuel management instrumentation. Natha indicated that due, at least in part, to these diesel engine failures, the National Association of Automotive Manufacturers of South Africa insisted on the need to introduce a specification, which is now in force, regarding the absence of particulate matter in diesel.

326. While the merging parties have presented an alternative view of the feasibility of conveying diesel in the COP, at best they are entitled to a finding that the technical questions are unresolved. They have certainly not succeeded in dispelling the considerable array of doubt generated by the evidence submitted in support of their opponents’ contentions.

327. The merging parties have tended to rely on the views taken by some of the OOCs in the parliamentary debates surrounding the Petroleum Pipelines Act. We have already indicated that we do not intend according much weight to the views presented there, but that we do understand why, even if the OOCs

¹⁸⁹ Natha’s Annexure DN5.

harboured genuine doubt about the utilization of the COP, they would nevertheless have been justified in arguing against a statutory foreclosure of that option. The merging parties have also placed reliance on industry discussions that appear to confirm the willingness of the oil companies to test the COP for the purposes of utilizing it for the conveyance of crude. In particular they refer to a meeting of the industry association's (SAPIA) technical committee held in November 2004 which, following a presentation by Petronet, concluded that,

*..industry had accepted the use of the COP for diesel pending the execution of an industry agreed process prior to the intended use.*¹⁹⁰

328. The merging parties' submit that Mr Wright stated in his report that the merging parties believe that with the necessary quality controls, technical guidance, infrastructure and capital that would need to be spent (to, for example, deal with particulates and free sulphur) a permanent solution to the known problems could be implemented within a period of approximately six (6) months, assuming an EIA can be obtained in a short time period and an appropriate location is selected. Mr Wright stated that the most likely option would be that the diesel is taken into the Durban Natcos tanks, pumped up the COP in sequential slugs between crude oil, the interfaces would be re-processed as would the diesel (filtered and additised) before being certified and released into the market.¹⁹¹ Mr Wright conceded that it is not common practice to convey diesel by crude or pipeline due to concerns with sulphur contamination in the handling of the interface between the crude and diesel. He did, however, testify that these problems have been overcome in respect of a Canadian pipeline where white products and crude are transported with additional infrastructure and the effective use of additives. And as such, he concluded that it is very probable that with the correct infrastructure (that has not been available in previous South Africa situations) diesel could be conveyed with crude through the COP and could be marketed without problems. As a result, the merging parties submit that Mr Wright's evidence is aligned with the position advanced by all of the coastal refineries before the Parliamentary Portfolio Committee.

¹⁹⁰ Exhibit 42, page 16, Para 4 (our emphasis).

¹⁹¹ See Exhibit 42, page 1, Para 5.

329. The fact is that the merging parties evidence is hedged with massive qualification as is demonstrated by the underlined passages in the previous paragraph. And at no stage is it contested that 'industry processes' – testing – would have to precede the utilization of the COP for the conveyance of diesel. Indeed this is specifically conceded. Note that these industry processes would have to involve all industry participants including, of course, the merged entity, which will also be the majority shareholder of Natref and which will have an interest in delaying and derailing an outcome that allowed the COP to be used for the conveyance of diesel.¹⁹²

330. The merging parties have also attempted to call into question the credibility of Mr. Natha's evidence. His evidence is impugned as unduly 'negative' and it is pointed out that he is a former senior executive of BP's local subsidiary. We, by contrast, found Mr. Natha to be a particularly credible and well-informed witness whose substantive contentions were – in their entirety – maintained under rigorous cross-examination. While his previous employment at BP is, of course, noted, this is no more a basis for a far-reaching finding on credibility than would be warranted by Mr. Wright's current position with Engen.¹⁹³

331. Finally, contend, the OOCs, even if we are of a mind to conclude that the COP is a potential source of logistical capacity for the conveyance of diesel, the merging parties have nevertheless significantly overstated the available capacity of the COP. Bear in mind the absolute statutory preference accorded to the conveyance of crude oil.

332. The merging parties submissions on the capacity of the COP commence with the observation that there is spare capacity in this pipeline. This is undoubtedly accurate

¹⁹² Note Mr. Oberholster's candid acknowledgement of his interest in obstructing the utilisation of the COP and of his willingness to be uncooperative: '*If the oil companies do not purchase the from Sasol, if they are able to use the crude oil pipeline, it would in fact further diminish the amount of volumes that they would want to purchase, as it were, from Sasol. So, if I can make it technical difficult from my point of view to do that at this stage, saying that I will not ... well, not saying that I will not supply my technical knowledge to do this, but at least not being participative in that.*' At page 444 of the transcript.

¹⁹³ Note too that Mr. Wright's own credibility is called into question by his massive, inexplicable overstatement of his own company's (Engen's) use of road and rail capacity. This is dealt with below.

and is common cause.¹⁹⁴ The merging parties point out that if the spare capacity of 1,18 billion litres were utilized to transport diesel at a hypothetical 8,5 cents per litre, it would translate to income of R120 million per annum for Petronet. They added that as long as the project was feasible and in Petronet's interest, Petronet would want to run the project. It was a fair assumption that if the calculations showed that Petronet (as a profit-making commercial entity) could make money out of it, then it would happen.¹⁹⁵

333. The contention that there is 1.18 billion litres per annum spare capacity in the COP relies upon the calculations of Mr. Swart, a Sasol witness who nevertheless conceded that technical work would need to be done to ensure the quality of the diesel.¹⁹⁶ In CRA's analysis, Mr Swart's calculations were repeated and relied upon and the additional transport capacity in the COP of just under 1.2 blpa of diesel was reduced by CRA by a service factor of 85% resulting in an estimated volume of diesel that the OOCs could transport in the COP of around 1 blpa.¹⁹⁷

334. The merging parties further submit that Mr Moodley of Petronet confirmed that the nameplate capacity in respect of the flow rate is 840 m³ per hour and that using a rate of 800 m³ per hour would be a conservative assumption.¹⁹⁸ Mr Moodley was taken to Mr. Swart's calculation of spare capacity in the COP of 135 m³ per hour which translates into spare capacity of 1,18 blpa. The merging parties submit that Mr Moodley did not dispute the calculation but said that the 135 m³ per hour spare capacity was a theoretical capacity. In fact, Mr. Moodley clearly testified that it would be *incorrect* to conclude that the spare capacity in the COP would permit the conveyance of 1 billion litres per annum of diesel.

194 It is the merging parties' submission that the CEO of Petronet, Mr Moller, on 22 March 2005 said that Petronet's model assumes a full COP whilst it "...has become common knowledge that the DJP line is running at high levels of capacity and the crude line at much lower levels. This is exactly the opposite of what we had assumed in our model but the statement that there is still spare pipeline capacity available is and remains true". (See also Annexure "DN1" to Mr Natha's supplementary statement.)

195 See page 257 of the transcript.

196 See Mr. Swart's Witness Statement, page 47, footnote 62.

197 CRA Report, page 104-105, Para. 66.

198 See page 245 of the transcript.

I think one must be careful of saying if one just does a pure number calculation and one looks at a billion. Operationally if one puts the plan into operation, you might not be able to achieve a billion. And due to the particular intricacies of the network and some of the intricacies one must be aware of is that the booster stations were used to boost up the flow rate to the 840 level. The booster stations are not able to handle multi-products. So if one has to look at multi-products going through that system, you would have to discount the booster stations in your calculation, which will significantly reduce that capability. There is a capability, but it's not correct to draw a conclusion that it will be a billion litres.¹⁹⁹

335. Shell argues that there are at least 3 reasons why it is incorrect to conclude that 1 billion litres of diesel might be transported in the COP.

336. Firstly, the pumping rate in the COP is reduced when it is used to convey multi-products as opposed to a single product.

- **If there are multi-products in the COP, it would be necessary to turn off the boosters. What this means is that, whereas the COP runs at full flow when there are single products in the line, it runs at a reduced flow rate when there are multi-products²⁰⁰**
- **Mr Moodley estimated a pump rate of 650-680 cubic metres per hour as a result of the need to turn off the booster pumps.²⁰¹**

337. Secondly, the flow-rate in the COP depends on the rate at which diesel is injected into the COP in Durban.

- For diesel to be transported in the COP at the rate predicted by the merging parties, the diesel transfer into the COP would have to occur at the same rate that crude is transferred in the COP. The reason is obvious: the COP can only pump as fast as the rate at which product is delivered into it.
- **The evidence establishes that it is not possible to deliver diesel in the COP at the assumed rate of 800 cubic metres per hour that forms of the basis of the merging parties' estimate. According to Mr Moodley, diesel is currently**

¹⁹⁹ Page 256 of the transcript.

²⁰⁰ P284 of the transcript.

²⁰¹ P285 of the transcript.

injected *into the DJPat* at a rate of 400 cubic metres per hour. If diesel were to be injected into the COP at the same rate, it would reduce the pumping rate of the whole line.²⁰² Shell submits that if diesel were to be injected into the COP at a rate of 400 cubic metres per hour, this would of itself reduce the amount of diesel that may be conveyed to approximately half of the merging parties' estimate.

338. Thirdly, difficulties will be experienced when it comes to storing the diesel that the merging parties envisage will be conveyed in the COP.

- **Mr Wright's illustrative figures assumed the use of diesel slugs of 60 million litres in the COP. However, Mr Wright conceded that the coastal refiners do not currently have tankage facility to receive 60 million litres of finished product.²⁰³**

- **Contaminated diesel would need to be taken out of the COP and stored at Sasolburg. The only storage facilities in Sasolburg are Natref's operational tanks. These tanks would not be available for the storage of contaminated diesel since they would be in ongoing use to store crude oil.²⁰⁴ It would accordingly be necessary to build tank facilities at Sasolburg to store interface and diesel. Mr Natha estimated that the cost of this would be approximately R100 million.²⁰⁵**

339. What then are we to conclude from this welter of conflicting evidence?

340. We should be careful to clarify from the outset that there is no question of onus involved here. That is to say, there is no onus on the merging parties to prove that diesel can be conveyed in the COP, just as there is no onus on their opponents to establish the opposite. However, if we are to permit the COP to be factored into the logistical capacity potentially available to overcome foreclosure, then we must be satisfied that, on a balance of probabilities, it is likely that diesel can be so conveyed.

202 P286 of the transcript.

203 Page 1613 of the transcript.

204 Supplementary witness statement of Natha, Para 3.5.

205 Page 2270 of the transcript.

We are not persuaded that this is the likely probability. Nor, as we have already emphasized, can anyone be so persuaded in the absence of the testing and the necessary 'industry processes' which all witnesses agree is a pre-requisite to conveying diesel in the COP. All concede that to convey diesel in the COP without the certainty that rigorous testing will bring to the process cannot be entertained – the consequences of error, all concur, would be potentially disastrous.²⁰⁶

341. We note too that all concur that, even if testing was to confirm the contentions of the merging parties, significant time and capital investment would be required to turn these hypotheses into reality. Indeed it is agreed that time and investment would be required simply to undertake the tests, investment that could not be recouped should the tests fail.

342. In our view, the merging parties submissions on the question of the COP illustrate the faulty premise underlying their conceptual approach to the question of overcoming foreclosure. They have dealt with the question of the COP – as with many of their other contentions regarding the availability of logistical capacity – as if it were a purely technical problem susceptible to purely technical solutions. While we concede that in times of war nations often relegate economic considerations to second place, the same cannot be said of firms, even under conditions of commercial war. We cannot, in other words, lose sight of the essentially *commercial* nature of this conflict. It is our

²⁰⁶ Mr. Norton for BP put documentation to Mr. Oberholster that graphically illustrates Sasol's appreciation of the risks involved in conveying diesel in the COP: *'MR NORTON: and it says here "crude oil pipeline conversion to multi-product operation – product quality and market risk implications considerations position statement". Do you see that? MR OBERHOLSTER: Correct. MR NORTON: If I could just read what the summary of that document says "the proposed usage of the crude oil pipeline as a dual crude and diesel product supply infrastructure is not technically advisable. During both instances that the COP has been used to supply crises a number of very costly market incidents occurred. Considering the technical challenges presented to the stakeholders in the proposed COP fuel supply chain and the current inability to manage these, as was demonstrated during the 2001/02 supply crises, provides conclusive prove as well as firsthand experience of the unacceptable risk of this diesel supply option". And then going to the bottom of the paragraph "there is no reasonable evidence that corrective action programs have been developed by either Petronet and/or the oil companies wanting to make use of this option. And thus the overall risk is still unacceptably high". And then it goes on to say "there is little doubt that the proposed conversion of the crude oil pipeline from its current function to supply crude only to convey multi-products and more specifically crude and diesel, does present very significant product quality challenges and would introduce additional risk to the diesel consuming customer base in the South African Highveld region". Do you see that? MR OBERHOLSTER: And all three points were accurate.'* Page 446-7 of the transcript.

strongly held view that rational commercial considerations would not justify the OOCs relying on the COP to convey diesel – expressed otherwise, the credibility of the threat of foreclosure is not reduced by the presence of the COP as a potential additional source of logistics capacity.

343. In this vein, we should also record our concern at the statutory preference that crude oil – and, by extension, those parties interested in conveying crude oil – is accorded in the Petroleum Pipelines Act. We note the legal tactics employed by Sasol in resisting efforts by Petronet to reconfigure the pipeline between Natref and Secunda.²⁰⁷ While we do not necessarily question the legitimacy of the litigation, we, above all, would be naïve to deny the opportunities for lengthy and costly filibuster implicit in the statutory preference that is effectively accorded to the interests of the merging parties. In this vein we have noted Mr. Oberholster’s candid acknowledgement of his interest in obstructing the process of using the COP for the conveyance of diesel in the COP.

344. We find, then, that the incorporation in the Stillman model of the assumption that the OOCs will, in the event of foreclosure, utilise the COP for the conveyance of diesel cannot be defended.

Rail and Road Logistics

345. We emphasise that pipeline is, by a considerable margin, the most cost efficient mean of transporting fuel over long distances. While the inland location of the Sasol refineries will always give the inland refiners a cost cushion vis-a-vis their coastal counterparts, it appears to be generally accepted that where pipeline capacity is available the differential is sufficiently narrow to allow for effective competition between the two sources – one coastal, the other inland – of refined product. This does not appear to be the case with respect to rail and, particularly, long haul road conveyance.²⁰⁸ Accordingly much of the discussion of mechanisms to increase road and rail capacity falls into two overlapping categories.

²⁰⁷ See discussion of the section on the de-bottlenecking of the DJP.

²⁰⁸ A Sasol document discussing the logistics constraint acknowledged that “the cost of bringing product inland on new trucks with front haul only would be 22 to 24c a litre and as such significantly higher than current means of transportation” and hence that “in order to bring this additional product inland economically, the marginal margin on the respective coastal refineries will have to exceed 11 to 13c a litre”. BP19, page 315.

346. Firstly, there are proposals that essentially go to improving the productivity of the existing rail and road networks. Decreasing trip times and loading times fall firmly into this category. In respect of these proposals we are compelled to ask why, if these significant improvements in productivity are easily available and economically efficient (as they must be if they are to defeat foreclosure), are they are not already in operation? Surely, the haulage operators and the oil companies are always concerned to operate at the highest attainable levels of productivity. We suspect that the correct answer is that all of these are crisis-related measures that could be sustained for a relatively brief period, if at all. This was, indeed, confirmed, by Mr. Coetzer, the merging parties' logistics expert, who constantly referred to these as responses to crisis.

347. Secondly, there are proposals for the expansion of existing road and rail capacity. These are manifestly designed to deal with foreclosure because, absent the foreclosure, had there been a business case for investment in expanded capacity, the investments would have been made. These measures immediately confront a query raised by the counsel for Shell early in the hearings. On the parties' case, it is 'irrational' to bring in product from the coast when there is available product inland. The parties predict a return to 'rationality' once the competing interests have tested their respective strengths and weaknesses. Once 'rationality' is restored there will be no further need for this additional logistics capacity. But, if these investments are *not* made, there is, even on the parties' version, a strong case for foreclosure because the OOCs will not have put in place the capacity to defeat foreclosure. And, in any event, the merging parties insist that in 2010 the expanded capacity in the DJP will eliminate the logistics constraint. That is, there will be no use for the additional rail and road capacity. This calls into question the commercial sense of considerable investment in additional capacity – frequently investments that will have to be made by independent logistics providers – which will have only a limited productive life, which indeed may have no life beyond their coming into being.

348. These observations bring into sharp relief a basic premise that underlies many of the merging parties' contentions regarding the scale of available logistics, a premise to which we have already referred but which bears repetition. The

merging parties seem to assume that as long as they can prove the technical feasibility of bringing additional product from the coast, their task with regard to establishing the futility of foreclosure is complete. This abstracts from the commercial viability of the new investments proposed and from the sustainability of crisis measures to increase productivity. These observations are particularly pertinent to road and rail because it is common cause that these, and especially road, are particularly costly modes of conveyance even before the additional and highly costly investments in unsustainable productivity increases and commercially non-viable logistics equipment.

349. We note, however, that the merging parties have a definite short-term interest in driving up the marketing expenditure for the OOCs: through the operation of the M-PAR mechanism, these considerable investments in marketing capacity will ultimately raise the regulated price even though all the costs of the additional investment will be borne only by those subject to foreclosure. However the increased price will reverberate to the benefit of all fuel marketers, including the foreclosing entity who will not have had to undertake any increased expenditure but which will nevertheless receive the increased price giving Uhambo an immediate gain from engaging in foreclosure.

Road logistics

350. Liquid Fuels are highly flammable and accordingly specialised tankers are required to transport liquid fuels by road. In terms of the National Road Traffic Act, petroleum-based flammable liquids are classified as “dangerous goods” and may only be transported in vehicles that meet certain prescribed standards.²⁰⁹

351. Road transportation of petroleum-based flammable liquids is divided into long haul transportation and secondary distribution. Road transportation into the inland market entails loading product into the tankers at the refineries in Durban, driving the product inland and unloading the product at the inland depots. However tankers are used not only to transport fuel to the inland areas

²⁰⁹ Regulation 275 of the Regulations promulgated in terms of the National Road Traffic Act.

but also within the KZN coastal region and for conveyance of fuel to Lesotho and Swaziland. The duration of a round trip depends on the distance involved, the gradient from the coast, the amount of driving hours allowed to ensure the safety of the driver, and the loading and discharging operations, state of roads, topography and health and safety and environmental considerations.

352. Oil companies in the main employ their own fleets of tankers for the purposes of secondary distribution – i.e. transport of fuel from depots to retail outlets. Some oil companies outsource the secondary distribution function to transport companies. They engage transport contractors to undertake long-haul and point-to point fuel haulage. The oil company would typically haul a maximum load of fuel based upon the legal limits, which are based on gross vehicle mass, the standard being 56 tonnes as well as the axle masses as stipulated in the Road Traffic Act.

353. Long-haul fuel tankers typically comprise a ‘tractor’ (the truck component) and a tanker combination conveyed by this truck tractor. The tanker combinations for long-haul typically comprise two units (a so-called interlink or semi and pup combination).²¹⁰ Tankers typically comprise autonomous compartments – usually 5 in a large unit, and 3 in the smaller units. The maximum volume of such a compartment is 6500 litres, the typical volume is about 5000 litres. The compartment sizes vary between 4500 and 6500 litres. These compartments may be regarded as mini-tankers for the purposes of loading product – different products may be loaded in each compartment, and 4 compartments may be loaded while one is left empty, which is a safe way of transporting heavier product in a tanker designed to convey the maximum volume of a lighter product.

354. The volume that can be hauled depends upon the product mass, the mass of the vehicle and the configuration of the tanker i.e. compartment numbers and sizes. Diesel, petrol and kerosene can be conveyed in the same tankers. Because diesel is heavier than petrol (800 to 850 grams/litre as compared to 750g/l), a tanker designed to convey the maximum volume of petrol (which

²¹⁰ Mr. Coetzer’s witness statement.

tends to be 44,000 litres) would exceed the specified mass limit were it to be filled with diesel instead. Kerosene is heavier than petrol and lighter than diesel, i.e. about 780g/l.

355. No washing or treatment of the tanker is necessary to prepare it for carrying a diesel load after a petrol load. Some transport companies do however insist on washing between loading diesel and petrol, to avoid any chance of contamination. Washing entails going to a wash-bay, either owned by the transport company itself or by a third party operator, and having the tanker washed at an average of about 2 to 3 hours for the exercise, and at a cost of about R600 to R800.

356. The merging parties submit that there are a number of avenues through which road haulage capacity could be efficiently increased.²¹¹ We will address a number of the most important contentions here and indicate the responses of the OOCs.

Tanker Capacity

357. According to Mr. Coetzer, there is currently tanker capacity totalling 2408 combinations. Of these 1608 combinations are generally available for primary long-haul fuel transport, and 800 combinations belong to the OOCs as part of their own fleets for secondary distribution.

358. The merging parties submit that in the event of a foreclosure strategy by

²¹¹ Though, once again, we note that Sasol's privately held views contrast markedly with the more expansive claims made for the purposes of the merger hearing. See the following citation at page 427 of the transcript, BP19, page 315: *"Furthermore, practical issues around fleet financing, loading capacity and congestion in Durban and environment concerns, would have to be overcome. It is hence not likely that a significant addition of road capacity could happen in the short term"* at page 431 of the transcript: *"investing in road infrastructure now would tie the particular oil company up contractually for 3 to 5 years. Any oil company tied up in such logistics, which would be more expensive than the pipeline cost, would also be at a competitive disadvantage to Sasol Marketing or other companies with whom Sasol may swap and would then have to lower transport costs."* at page 431-2 of the transcript: *"we have so far based our strategy on rational behaviour and having a strategic marketing presence to protect our wholesale price. If we believe in irrational behaviour and that the oil companies will invest in 1.7 million metres cubed of extra road capacity for a relatively small reward and high risk, then we must be prepared to use our marketing strategy against them. We cannot simply accept their irrational actions and not take counter action"*.

Uhambo, the OOCs would be able to overcome the logistical constraints by:

- Increasing tanker capacity through further investment;
- Decreasing journey turnaround times;
- Utilising chemical tankers to convey petroleum products;
- Training additional drivers;
- Utilising excess storage capacity and gantry capacity.

359. We will examine each of these in turn:

(a) Increase in tanker capacity

360. Based on a June 2004 investigation into the 'prospects of manufacturing additional tanker capacity for road haulage of fuel,'²¹² Mr. Coetzer found that South African tanker builders had the annual capacity to build 312 combinations for fuel distribution – and therefore the ability to transport 3,4 billion litres annually.

... tanker builders already had a capacity (if using only single shifts, whereas most of them indicated that double shifts could be accommodated if the demand for more tanker units were sufficient) to build at least 62 new tanker units per month, of which at least 53 (i.e. 26 combinations of 44,000 litres capacity) were for use in fuel transportation...²¹³

361. During the hearing, Mr. Coetzer testified that the lead-time between ordering a tanker and receiving a built tanker from a South African tanker builder was between 3 to 6 months. The cost of a tanker excluding a tractor was between R800 000 and R900 000. Including the tractor would double this figure.

362. Assuming a life-span of 10 years per vehicle and an annual scrapping rate of about 10%, i.e. 240 combinations, per annum, Mr. Coetzer concludes that 72 new combinations would be available annually for expansion. Mr. Coetzer states that since 91 combinations have the capacity to transport 1 billion liters

²¹² Page 434 of the witness statement bundle - As part of this investigation Mr. Coetzer conducted several "telephone interviews" with the "four major road tanker manufacturing companies in the country."

²¹³ Mr. Coetzer's Witness statement.

annually from Durban to the inland, 72 combinations would be able to transport 0,79 billion litres per annum. This capacity, he reminds us, exceeds the 15% growth estimates on current road and rail capacity assumed in the CRA model by a factor greater than two.

363. According to Mr. Coetzer, the estimate of 15% is however reasonable (and indeed conservative) and it is realistic to expect such increases in tanker capacity up to 2008 if the DJP is expanded in 2010. He assumes that the expansion will stop in 2008 in anticipation of the new pipeline becoming available in 2010. Furthermore Mr. Coetzer finds it entirely reasonable to assume that new tankers would continue to come into use until 2008, or even later, because of the ability of tanker operators (who would lease these tankers to the OOCs until the DJP expansion) to divert these tankers to other uses once they are no longer needed for fuel transport.²¹⁴

²¹⁴ In Mr. Coetzer's view the additional tanker capacity created before the DJP could be diverted to the chemical industry. Furthermore, the excess long haul tankers could be used for shorter haul i.e. from the depots to customers.

- According to Shell, significant additions have already been made to the amount of road capacity available for the transportation of oil products, as oil companies have sought to expand their transportation options following the termination of the MSA, and further additions, whilst possible, are likely to be limited.
- Shell further argues that assuming everything else in Mr Coetzer's favour (and in particular that South African industry can and will produce new combinations at the rates alleged), Mr. Coetzer has overlooked the effect of ordinary economic growth in all the markets served by the existing fleet of 2 408 combinations. The assumption by Mr Coetzer that all of the 2408 combinations would be used for the transportation of fuel, is patently unrealistic and overstates the available tanker capacity for fuel transportation, even on the merging parties own version contained in the CRA report. Furthermore, he assumes that all tanker capacity will transport fuel to the inland and makes no allowance for distribution to KZN, Lesotho and Swaziland. Shell submits that:

Given the GDP and fuel rate projections of the various parties in the present case, it is not unreasonable to assume that the markets served by the existing fleet of combinations will grow at 3% per year. At that rate, 72 new combinations will be needed just to meet the demands of existing markets. It should be observed that fuel bridging from Durban to the inland market would seem to be only a small part of the market served by the national fleet of 2 408 combinations. On Mr Coetzer's capacity formula, 2 408 combinations could deliver 26.7b of fuel from Durban to the inland market. Since CRA's (inflated) base road figure is no higher than 1.67b (2.23b minus 560m of rail), a maximum of about 6% of the fleet of 2 408 combinations would serve that particular market).²¹⁵

364. Ms. Corrigan, a BP logistics executive, points out that refined oil products are highly hazardous products which pose significant health, safety and environmental risks.²¹⁶ Hence a significant increase in the road transportation of these products is highly undesirable. Indeed concern has already been expressed about the volume of bulk product which is currently being moved by road. A further increase in road

²¹⁵ Page 222 of Shell's Heads of Argument.

²¹⁶ Corrigan's witness statement.

transportation increases the risk of additional road fatalities as well as increasing the wear and tear on the road network. It should be borne in mind that many of the depots are situated in urban areas, where increased use of road tankers will be limited by congestion.

(b) Journey turn-around times

365. According to Mr. Coetzer, the turnaround time for an average journey from the inland to the coast and back is 34 hours:

ADV COCKRELL: You say "when it comes to the number of journeys involved, the following facts are to be taken into account"... "a slow loading time would be 3 hours. You say Sasol contracts for 2 hours loading, journey time one way of 10 hours, offloading of 3 hours²¹⁷ equals 16 hours and with 8 hours rest, one has 34 hours return". Now the way I understand it is the figure you've left out is the 10 hours for taking the truck back.

MR COETZER: Yes.

ADV COCKRELL: So it's the total of 24 hours plus the 10 hours for the return and that gives you the estimate of a round trip of 34 hours.

MR COETZER: Correct.

ADV COCKRELL: Have I understood your evidence correctly?

MR COETZER: That's on a shuttle basis. ²¹⁸

366. Mr. Coetzer then calculates that on a 34 hours turnaround time each vehicle does 21 journeys per month (number of hours a month divided by 34) or 0,92 million litres per month (21 journeys multiplied by the 44000 litres in every vehicle) or 11.1 million litres annually.

367. While TOTAL did not dispute the fact that a round trip *could* be done in 34 hours, it did dispute whether such a turnaround time could be achieved consistently. Corrigan for BP, also states that the average turnaround time for tankers from Island view to the Pretoria depot is 2,5 to 3 days.²¹⁹

368. Milner for Shell testified that based on an analysis of 50 vehicle tacographs, the

²¹⁷ Mr. Coetzer admitted under cross-examination, that loading times at Secunda can take as long as 8 hours, but hastened to add that that was not "...definitely not the norm or the average of [loading] at Secunda under exceptional circumstances" - At Page 1234 of the transcript.

²¹⁸ Page 1224 of the transcript.

²¹⁹ Paragraph 3.6.2 of Corrigan's witness statement.

average trip time was 2,7 days (about 68,4 hours). This would translate to 11 trips per month, yielding a figure of only 418 million as the deliverable capacity of 72 new combinations. According to Shell,²²⁰ this means that all (or nearly all) of the new combinations have to be available for fuel transportation from Durban to the inland market in order to achieve the expansion assumed by CRA.

369. During the hearing, counsel for TOTAL brought to Mr. Coetzer's attention a document submitted by the merging parties to the Commission,²²¹ in which the merging parties had indicated that "...each tanker makes 100 sets of 3-day round trips from the coast to the inland area per annum." While Mr. Coetzer did not agree with the "3 day round trip" view, he did acknowledge that the estimate one makes of the turnaround time would have significant implications for the calculations of how much product can be moved by road inland. It was demonstrated that if the turnaround time provided by TOTAL, and indeed the merging parties in their earlier submission to the Commission, were used this would amount to just over 5,3 million litres annually – significantly less than Mr. Coetzer's estimate. Mr Coetzer's assumption of 34 hours was indeed surprising given that the figure of 3 days was submitted by both the merging parties and TOTAL. This does appear to be a further instance of belatedly discovered logistical capacity.

370. In response to questioning from the Tribunal, Mr. Coetzer conceded that his 34 hours round trip time was based on what could be done in response to a crisis situation.

CHAIRPERSON: But your numbers for 34 hours, and Mr Snyckers used the word a few times and you've used the word a few times, is in response to crisis.

MR COETZER: Yes.

(c) The dual use of chemical tankers

371. Mr. Coetzer averred that the OOCs experts had overlooked the fact that a truck traveling from the inland to Durban carrying chemicals for Sasol could return to the inland with petroleum products.

²²⁰ At paragraph 221 of its Heads of Argument.

²²¹ Page 2411 of the Commission's Record.

372. However, under cross-examination it was pointed out that in such a case, the tanker would need to be washed out, a process which would take some 2-3 hours. It was also pointed out that a certificate of cleanliness would be required after the tanker had been washed out, and before it could accept petroleum products. Mr Coetzer confirmed that this was so. Mr Coetzer also conceded that not every tanker used to convey chemical products could also carry petroleum products.

(d) Driver capacity

373. Mr. Coetzer testified that there are sufficient numbers of heavy goods drivers that can be trained to become hazardous goods drivers in order to meet a significant increase in demand for such drivers. He claimed that a single month's training is more than sufficient for the purpose.²²²

374. However Shell submits that it has already faced difficulties in finding qualified drivers and vehicles that meet its safety standards and this is unlikely to get any easier over the short to medium term. Shell contacted the Road Freight Association to ascertain the availability of quality long distance drivers within South Africa and was advised that there is a critical shortage of skilled drivers. South Africa is losing approximately 3000 drivers a year due to incapacity, retirement and HIV-Aids, the latter being the biggest cause of attrition.²²³

(e) Additional storage facilities

375. According to Mr. Coetzer VOPAK and IVS have, respectively, 0,15 and 0,5 billion litres additional storage capacity in Durban. IVS also has a facility of some 0,05 bn

²²²Coetzer however, confirmed under cross-examination by Mr. Norton for BP, that a hazardous goods driver requires a minimum of 3 years prior experience as a heavy goods vehicle driver before he's allowed to drive a hazardous vehicle and also confirmed that this was a requirement of most of the oil companies. It was put to Mr Coetzer by Mr Norton that Lobtrans, one of the companies Mr Coetzer had referred to in his evidence in chief, had confirmed that only 1 to 2 out of 50 applicants are suitable to become a hazardous goods driver. Mr. Coetzer agreed that that was a fair statistic. Mr Coetzer added that after Lobtrans has employed these drivers they are able to transport fuel within 2 months.

²²³ The impact of HIV/Aids on drivers is a key concern both in terms of safety impacts and the number of available drivers. This problem is expected to exacerbate in the short term until population infections stabilise.

litres in Richards Bay. According to Mr. Coetzer it is also possible to transfer fuel from either the refinery or the berth at the harbour to the third party storage facilities by pipe. These additional facilities do not necessarily use the same entry and exit points as the existing loading facilities, and so their utilization would not entail increased congestion around Sapview – the loading facility operated by Sapref on behalf of Shell and BP at Island View, Durban.

376. Shell points out that there is no indication in Mr. Coetzer's affidavit of the extent to which this capacity was already being used by others.

(f) Gantry capacity

377. CRA's report on behalf of the merging parties did not deal with gantry constraints. However, Mr Baker on behalf of Shell submits that even if the hurdle of tanker capacity is overcome, there are constraints on the *gantry capacity* available at the Durban loading facilities. According to Mr. Baker, the eight-bay gantry at Island View used by Shell and BP is already operating at virtually full capacity. Even though the gantry is already operating around the clock, there is inevitably a queue of tankers waiting to be loaded. Shell concedes that operational changes at its gantry may increase capacity but by no more than 5%. Currently, the gantry has a throughput of 1,700 MI per annum. The best that could therefore be achieved at the Shell gantry without new investment is a throughput of 1,785 MI (or 223 MI per bay). Applying the same per bay volumes to the Total four-bay gantry at Island view and the Engen eight-bay gantry at Wentworth gives an overall maximum capacity of 4,463 MI per annum at the Durban depots. However, even this figure would appear to significantly overstate the amount of capacity actually available. Companies utilising the gantry capacity of their competitors would be required to go through a lengthy documentary process further reducing capacity. Shell's estimate for overall gantry capacity in Durban is 4,016 MI.

378. This gantry capacity is, however, not available exclusively for the transportation of product inland. The bulk of the capacity of the gantries at Durban is used to load road tankers delivering to Kwazulu Natal. Only the remainder can be used for deliveries into the inland region. Currently,

therefore, around 860 Ml per year would be available for transportation to the inland region prior to any new investments.

379. The merger parties, in response to Shell, argue that there was unchallenged evidence from Mr Coetzer of the availability of gantry capacity of 1.8b (or 0.9b on a “conservative” approach) at IVS and Vopak in Durban.²²⁴

ADV SNYCKERS: Thank you. I'd like you to say Mr Coetzer, whether there is any other kind of exaggeration or admission in the treatment of supposed crisis management logistics in the OOC statements that you'd like to refer the Tribunal to?

MR COETZER: Ja I think the issue of gantry in congestion and loading facilities could be addressed by looking at Island view storage and VOPAC, it's third-party storage company in Durban, based in Durban.... in terms of the possibility in a foreclosure scenario to utilise their storage and gantry facilities to store fuel and then convey it by road up to the inland area. there is 3 loading points with about 14 rail loading points, which could be converted in the crisis situation to load road vehicles as well....And in my calculation to transport ... to load one hour per vehicle it would be easy to use the VOPAC and Island view facility in a region of 1.8 billion litres. If one has a conservative calculation and utilise 2 hours loading, it gives you a number of .9 billion litres.²²⁵

380. In response to this, Shell argues that firstly, Mr. Coetzer assumes that the loading points would in effect be devoted to the OOCs and secondly, it is not apparent how Mr. Coetzer arrived at a figure of 1.8b. On Shell's calculation and using Mr. Coetzer's assumption that one could load one vehicle per hour and do so on a 24 x 7 basis for 365 days a year and that all three road loading bays would be inclusively available to the OOCs, one would still arrive only at 1.155b (44 000 litres x 24 x 365 x 3).

381. In an attempt to rebut Shell's assertions, the merging parties argue that it was demonstrated during the cross-examination of Milner for Shell that internal assessments conducted by Shell in 2003²²⁶ (before any expansions of gantries) of the ability to bridge product inland through the available gantry capacity (in anticipation of the termination of the MSA) concluded that only four bays at Shell's Island view facility had a maximum capacity of over 40 million litres per week (which

²²⁴ Page 80 Para 3.2.2 of the merging parties' heads of argument.

²²⁵ Page 1200 of transcript.

²²⁶ Exhibit 64 page 72, which contains an exchange of emails between Ken Hands (Distribution Advisor at Shell South Africa Marketing) and Sydney Dlamini also of Shell during March 2003.

exceeds 2 billion litres annually), which would mean that, on the 8 bays to be immediately available to Shell and the four bays at TOTAL's facility, there would be more than 6.6bn litres of gantry capacity available annually. The merging parties argue that the assessment also showed that *all* Shell requirements at the time amounted to some 12.6m litres per week, so that the four bays left a *spare* net maximum capacity annually of 1.4bn litres per road alone out of only the 2bn litres yielded by the 4 bays (i.e. not taking into account the other bays available to the OOCs).

382. Shell explained that the assessment referred to occurred when Shell was exploring all logistical possibilities in the light of the impending termination of the MSA. At the time in question (March 2003) Shell and BP were (because of the MSA) not using the Island View gantries for inland transportation. Island View was not operating at full capacity in March 2003, since the facility was *only* required for loading vehicles for the KZN coastal market. According to Shell, the assessment suggests a theoretical loading capacity of 40 320 000 litres per week, leaving "*surplus*" capacity of 27 673 275 litres per week (40 320 000 – 12 646 725). A further email contained in Exhibit 64 notes that

this may be a very optimistic view based on a desk top exercise but does at least give another viewpoint on the IV capacity.

383. Shell submits that Mr. Milner's evidence of Shell's actual experience in 2004 and 2005, once the Island View gantries began to be used for loading inland bridging vehicles as well as the pre-existing coastal KZN fleet, shows that capacity has only been able to be increased from 164m to a current 227m, which has been further increased (in Mr Baker's model) to 238m for further efficiency gains.

i. The merging parties also refer to the fact that TOTAL had indicated that as far back as the fuel crisis in 2001, before any expansion projects, TOTAL's four bays had in reality managed to effect bridging into the inland area of 100m litres per month – i.e. 1.2bn litres annually. ²²⁷ If this were to be applied to 12 bays such as immediately available to the OOCs at Island view Shell/BP and TOTAL, it would give in excess of 3.5bn litres annually. Shell submits that this argument is based on a theoretical projection that this capacity could be doubled if TOTAL operated 24/7 and staggered its shifts. Furthermore, TOTAL clearly stated that it experienced early morning congestion and although there was space for an additional gantry at a cost estimated to be R1,9 million, TOTAL has no plans to extend its facilities.

384. Shell submits that a further problem arises from the fact that it uses the JD Edwards computerised information management system *inter alia* to manage the loading of product at Island View. The use of a third party's loading facilities on a continuous basis would presumably thus involve effectively setting up a permanent infrastructure (incorporating the JD Edwards system) on the third party's premises. There are complexities involved in trying to schedule vehicle arrivals and the availability of various products and grades across three different facilities, particularly facilities that are not available to the each of the OOCs exclusively.

385. According to Mr. Baker, even if Shell and BP were prepared to invest in new loading bays at the Island View gantry, due to severe space constraints, they are likely to only be able to add one new bay. A ninth loading bay could be added with a lead-time of 3 months to the Island View gantry. Two new bays could plausibly be added to the TOTAL gantry at Island View within a similar time. Within 3 months a further 625 MI of gantry capacity could therefore be added, bringing the total to 4,641 MI. Any additional increase in gantry capacity over and above the three further bays referred to above would involve significant additional investments and would take at least *two years* to complete - an Environmental Impact Assessment and significant additional

²²⁷ Page 74-75 of Exhibit 64. The information is contained in emails between Colin Alonzo (Distribution Strategy Manager at TOTAL) to Ken Hands (Distributor Advisor).

demolition and building work would be required. However, even then, Shell estimates that only an additional three bays could be added at Island View.

386. In addition, unloading capacity would need to be made available at the receiving depots. This would likely involve investment in additional handling facilities that would probably only be needed until the opening of the new pipeline, which would in turn significantly increase the cost of these investments.²²⁸

387. The debate over turnaround times at the loading facilities contributed one of the few comic moments in this lengthy hearing. Mr. Coetzer reported on a study that he claimed to have supervised into tanker turnaround at the large Island View depot in Durban. Without recording the gory details here, suffice to say that this piece of 'research' was comprehensively and persuasively destroyed in a review conducted by Shell's team of experts, in the process, and not for the only time, severely calling into question Mr. Coetzer's credibility.²²⁹

Actual usage of Road and Rail Logistics

388. According to Mr. Swart the OOCs actual usage of road and rail logistics for 2004 amounted to 1.95b of which 1.39b was allocated to road and 560m to rail.²³⁰ This was however derived by Swart using fourth quarter data and then annualised.

389. Shell points out that this methodology is susceptible to considerable error in that errors in the fourth quarter will, through the annualisation exercise, be quadrupled.

390. During the hearing, Mr Swart acknowledged an error in his Table 38 namely the omission of a Petronet swap of 120m which would have to be added to the DJP utilisation and thus reducing the derived road and rail figure by this amount. According to Mr Swart, 50m of this swap occurred in the fourth quarter, thus overstating the annualised road and rail figure by 200m.

²²⁸ The cost of these investments may be increased if their useful life is short because assets that would normally be depreciated over a long period may have to be depreciated over just five years (i.e. the period until the expanded pipeline becomes available).

²²⁹ Page 2609-2612 of the transcript .

²³⁰ Swart Table 38 Witness Statement Bundle (WSB) Page 54-5.

According to Shell, Swart's table also understates Sasol's sales to Shell.

391. Shell submits on behalf of the OOCs that the actual figure for road and rail usage is 1.085 billion litres per annum in total of which 344 million is allocated to road and 741 million litres is allocated to rail.²³¹

392. Below is table showing the OOCs road and rail usage:

	Road	Rail
Shell	232	390 ²³²
BP	25	249
TOTAL	46	40 ²³³
Caltex ²³⁴	41	62
	344	741

Source: Shell's Heads of Argument

393. CRA on behalf of the merging parties assumes that rail and road will grow annually at 15% per annum but would cease after 2008 in view of the impending commissioning of the new DJP in 2010. According to CRA this results in the addition of the following further logistics of 340m in 2006, 380m in 2007 and 440m in 2008, amounting to 1.16b in all.

394. The OOCs, for their part, submit that there are several factors which constrain growth in road logistics:

- The quantities which can be moved;
- Safety and environmental issues - significant amounts of additional road capacity would raise environmental and safety issues which may well cause local residents, other road users and safety and government agencies to seek to limit the amount of road haulage of hazardous oil products;
- Limiting loading and off-loading facilities (gantry facilities) - even if more tankers were commissioned, according to the OOCs, there are currently severe constraints on the gantry capacity available at the ports. According to Mr. Baker,

²³¹ Paragraph 198 of Shell's Heads of Argument.

²³² Page 2 Exhibit 73.

²³³ Page 3 Exhibit 71.

²³⁴ Page 2 Exhibit 70. Caltex hadn't provided separate figures for rail and road. The table therefore allocates 82 million of Caltex's petrol and diesel equally to road and rail.

teight-bay gantry at Island View used by Shell and BP is already operating at virtually full capacity. Even though the gantry is already operating around-the-clock, there is almost always a queue of tankers waiting to be loaded. ²³⁵

- The cost of acquiring additional tankers and expanding gantry capacity; and the number of tankers which can physically move up and down the N3 and other routes: Mr. Milner submits that the incentive of road haulage contractors to invest in new capacity is significantly undermined by the expectation that a new pipeline will be constructed around 2010;
- According to Mr. Milner, Shell has already faced difficulties in finding vehicles and qualified drivers that meet its safety standards and this is unlikely to get any easier over the short to medium term.
- There are limits on the number of road tankers that can be loaded at the Durban refineries. According to the OOCs this is partly due to the limited capacity of the access roads, which run through the port to accommodate road tankers. This is exacerbated by the fact that Island View is a “National Key Point” with strict access control for safety and security reasons.²³⁶

Growth in Rail

395. Shell submits that there is little prospect of any expansion in rail logistics over the next few years. According to Mr. Milner,²³⁷ the available rail capacity is almost fully utilised. Corrigal for BP submits that there is insufficient rail capacity to support a substantial increase in the volume of product to be conveyed from the coast to the inland markets.

396. The PriceMetrics report, refers to recent discussions between TOTAL and Spoornet, during which Spoornet admitted to poor service delivery with a decline in volumes moved over the last four years.²³⁸ TOTAL reports that Spoornet expects current inefficiencies in the operation of rail tank cars to persist for at least a year although in the longer-term increased capacity between Durban and Johannesburg will be

²³⁵ Page 10 of Mr. Baker's report.

²³⁶ Page 1674 of the Witness Statement bundle.

²³⁷ At page 1673 of the Witness Statement bundle.

²³⁸ At page 1284 of the Witness Statement bundle.

available through reduced turnaround times. Spoornet indicated to TOTAL that its major priority over the next 3-5 years is to improve the performance of its locomotives after which it will focus on rail tank cars.

397. The RBB report notes that Spoornet has indicated to Shell that any significant increase in rail capacity would take 5 to 6 years to implement as a consequence of major new investments in track and rolling stock that would be required, including the feasibility studies and budgetary approvals that would be necessary. In May 2004, Spoornet announced a five-year programme in which Spoornet would invest R14 billion in its railway network, 90% of which would “*go to the rehabilitation and renewal program for infrastructure, locomotives and wagons.*”

398. The OOCs ability to optimize its use of the railway network is, however, dictated by Spoornet’s operational requirements (including where and when it is able to make rail tank cars available). Ms. Corrigan, in her witness statement, cites BP’s experience in trying to increase the amount of product sent by rail. In 2004, BP’s orders for capacity from Spoornet amounted to 672 million litres whereas Spoornet in fact only loaded 600 million litres. The primary reason for Spoornet’s inability to satisfy BP’s transportation requirements was the unavailability of sufficient rail tank cars. Again in mid 2004, BP requested additional transportation services from Durban to Ladysmith and Kroonstad.

399. In August 2004, Spoornet advised that “due to existing constraints” it would not be able to meet this additional demand. According to Corrigan, Shell had also experienced problems in increasing its rail usage. In 2004, Shell was advised by Spoornet that the commitment which had been made to transport 800 million litres of its products via Spoornet’s railway network could not be honoured and that the aggregate volumes would have to be reduced to 600 million litres. Spoornet had apparently advised Shell that it had “over-committed” to the various oil companies.

Road and Rail Logistics – conclusions

400. What are we to conclude from the welter of detailed evidence submitted on road and rail?
401. The merging parties have burrowed deep to find additional sources of logistics in modes of conveyance that are costly under the best of circumstances. The paths that they choose – whether through the construction of new capacity or raising the efficiency of existing capacity – are undoubtedly even more costly. Moreover it is clear that the OOCs have cast significant doubt on each one of the contentions of the main witness for the merging parties and this alone must indicate the substantial risk involved in opposing foreclosure on the basis that additional tanker or gantry capacity or vastly improved driver performance will enable the conveyance of sufficient alternatively sourced product at commercial viable rates.
402. We are satisfied that rail capacity is unlikely to substantially increase from present levels in the near future. It is also clear that Spoornet intends prioritising the refurbishment and upgrading of existing infrastructure, as opposed to the acquisition of new locomotives and/or rail tank cars. Consequently, additional supplies of product from the coast will need to be transported by road.
403. Under cross-examination, it became manifestly clear, that Mr Coetzer's assumptions and calculations on the tanker capacity, journey turn-around times, dual use of chemical tankers, driver capacity, storage facilities and gantry capacity were not based on direct experience but consisted of hypothetical projection in response to a crisis. His assumptions on tanker capacity clearly overstated the case and his research on loading facilities and turn-around times was questionable to say the least. No reasonable explanation was provided by him for his gantry capacity calculations. Indeed Mr Coetzer himself conceded that his calculations had been done as an exercise in "response to a crisis," Hence we are unable to place much reliance

on Mr Coetzer's evidence. In any event, even if Mr Coetzer's calculations were to be found to be credible, none of the increased road capacity could be achieved without significant investment and over a considerable period of time.

The expansion of capacity in the DJP – the limits to foreclosure

404. It has been widely asserted – although not rigorously established – that a foreclosure scheme, to the extent that it is at all feasible, cannot extend beyond late 2010, the point at which Petronet expects to commission additional pipeline capacity by way of the replacement of the current 12 inch diameter pipeline with a 16 inch pipe. The assumption that this would eliminate the logistics constraint certainly underpinned the condition recommended by the Commission. However on closer examination this assumption is called into question.

405. In the era of the MSA, the section of the DJP between Durban (the coast) and Sasolburg, was historically under-utilised and primarily used for supply to depots south of Sasolburg. Post MSA, however, Petronet recorded a "definite shift in movement". While prior to the termination of the MSA, Sasol's Secunda and Natref plants supplied the inland (with some 11 billion litres) and the shortfall (approximately 1 billion litres) was transported up the DJP from the coast, according to Mr Moodley, the Petronet witness at these hearings, the scenario that prevailed once the MSA was terminated went against its basic assumption that:

*"...if you've got product in that particular area... you [would] consume that product first before you bring product from any other area."*²³⁹

406. Petronet found instead that the DJP immediately became over-subscribed, with the coastal oil companies wanting to bring as much product as possible from their coastal refineries into the inland area. Petronet saw that the DJP would be close to full capacity (transporting an average of 64 million litres per week or 3,328 billion litres a

²³⁹ Page 207 of the transcript.

year).²⁴⁰

407. Although the validity of its assumption of ‘rationality’ was tested by the behaviour of the OOCs, the decision to expand the DJP was predicated on a study conducted in 2002, which revealed that the inland would soon become supply constrained. That is, Petronet’s ‘business principles’ – essentially the assumption of ‘rationality’ – dictated the decision to expand the DJP and the extent of that expansion:

The process that we follow in doing the studies is we have an independent person visiting the different clients of ours to get a view of their production capabilities going forward and what their projection would be, to get a view of what the market demand would be and to do a supply balance and look at what the capacity constraints of the network would be and what would hamper the movement of product to the inland area. ²⁴¹

408. On an assumption that demand in the inland would exceed 14.5 billion litres in 2014, Petronet’s 2002 study revealed, firstly that the section between Durban and Sasolburg – ‘the southern DJP’ - would be constrained in 2014 and secondly that the section of the DJP running between Sasolburg and Alrode – the ‘northern DJP’ - would be constrained in 2005. A further round of discussions between Petronet and its clients confirmed that while the constraint in the northern DJP would indeed kick-in in 2005, the southern DJP – Durban-Sasolburg – would be constrained by 2010, some 4 years earlier than originally anticipated.

409. Petronet had to evaluate how it could deal with the constraints. According to Mr Moodley, their evaluation was done from a purely “business opportunity” perspective:

From our perspective if we analyse this and we look at it, it becomes a business opportunity to invest in de-bottlenecking. There is an opportunity to get more volumes into the network and therefore it is a business decision now to go forward. And in terms of this, this study indicates the risks are now low in

²⁴⁰ Page 207 of the transcript.

²⁴¹ Page 208 of the transcript.

*term of investment of capital into the network. So we then take decisions based on these scenarios, whether we invest in the network and what kind of returns we can then get from the network, purely again based on business decisions.*²⁴²

410. We will firstly deal with the constraint in the southern section of the DJP.

Expanding the DJP

411. With regard to the looming constraints in the Durban-Sasolburg section of the DJP, that is the southern DJP, Petronet considered various options including reconfiguring the DWP or Lilly line for refined product usage as well as the possibility of replacing the DJP with a wider diameter pipe.

412. Recall that the DWP had originally been commissioned in 1978 in response to the growing inland product demand. It was envisaged that the DWP would augment the DJP and facilitate the movement of refined product from Durban. However, when the Secunda plants came on-stream and the MSA was extended to cover the Secunda output, the DWP (and indeed the DJP) were under-utilised. In 1995 Petronet decided to reconfigure the DWP and the crude oil pipeline (COP) in order to improve utilisation. The southern portion of the DWP was connected to the northern portion of the old COP at Ingogo to supply crude oil to the Natref refinery at Sasolburg. The southern portion of the COP was coupled to the northern portion of the DWP and converted into a methane rich gas pipeline, dedicated to the sole conveyance of Sasol gas from Secunda to Durban.²⁴³

413. Recall too, that this decision reduced, in one fell swoop, white fuel pipeline capacity in the DJP and DWP from to 68 and 115 million litres per week respectively to the DJP's capacity of 68 million litres per week. Opposition from the OOCs to this decision to convert the DWP into a gas pipeline was met by an assurance from Petronet that additional pipeline capacity would be provided when circumstances demanded it.

²⁴² Page 209 of the transcript.

²⁴³ This made the old crude oil pipeline from Coalbrook to Kendal redundant.

414. The obstacles in the way of converting the DWP back to its originally intended function as a conveyor of white fuel ran into immediate and predictable obstacles. Firstly, the notice period in Petronet's agreement with Sasol meant that the DWP would only become available to Petronet in 2011. And once it became available, it would have taken Petronet a further two years to re-convert the line back to a refined product line. In other words, the Lilly line would only be available for use in 2013, and that as Mr Moodley put it, would be "*hopelessly too late*".²⁴⁴ Recall that Petronet has recently concluded an agreement with Sasol that effectively reserves the DWP for gas for the rest of the pipeline's useful life.

415. Petronet then decided to replace the DJP. This not only offered Petronet the opportunity to convey more product from the coast to the inland area, it also allowed them to replace a line that, technical studies indicated, was approaching the end of its useful life.²⁴⁵ After examining a range of options Petronet decided to replace the current 12-inch DJP with a 16-inch pipeline in its current format and configuration. The Transnet board approved the construction of a new 16-inch line for completion by 2010.

416. In terms of the project, the diameter of certain sections of the DJP will be expanded.

The diagram below illustrates the option chosen:²⁴⁶

417. Petronet

has

completed

"pre-

feasibility"

studies, is

currently in

the routing

and

environmental impact phase, and will, in due course, move into the feasibility

244 Page 227 of the transcript.

245 Page 212 of the transcript.

246 Mr. Moodley's presentation.

stage. We will proceed on the basis that all the necessary regulatory approvals have been obtained, that the feasibility has been proven, and that the line will actually be commissioned in the latter half of 2010, although experience with large engineering and construction projects would probably view these assumptions as heroic in the extreme.

418. According to Mr Moodley, on the assumption of 2% annual growth in inland demand, the capacity of the new line would be fully utilised by 2019-2020. If 3% annual growth was predicted, the 16-inch line's capacity will be fully utilised by 2013 –2014.²⁴⁷

419. Mr Moodley confirmed under cross-examination that Petronet was also looking at possibilities ranging from 16 inches to 20 inches:

ADV SNYCKERS: And we know that currently you have approval for a 16-inch pipe, but you are looking also at the possibility of using a 20-inch pipe.

MR MOODLEY: I think there are various possibilities. It ranges from a 16-inch to a 20-inch. So it's 16, 18 and 20. Those are the options at the moment.

ADV SNYCKERS: Yes. So if you have a high demand such as 3% on the pool and you have a 16-inch line or an 18-inch line, that will be constrained earlier than if you have a low demand with a 20-inch pipe.

MR MOODLEY: That's correct.

420. Mr. Moodley emphasized that Petronet was under no legal obligation to increase the size of the pipeline above the 16-inch diameter already approved by the Transnet. If there was to be a re-evaluation of the capacity required on the line, it would be dictated by purely business considerations, that is, the assessment would cover an evaluation of the returns to be earned from investing in increased capacity and the risk incurred in pre-investing in capacity.

421. Shell argues there is no reason to believe that even an 18-inch pipeline will be built.²⁴⁸ Mr Moodley confirmed that the additional capex would be of the order of R500 million, and that the question of expanding beyond the board-approved 16 inches had not yet been considered.

²⁴⁷ Page 215 of the transcript

²⁴⁸ Para 131 of Shell's Heads of Argument.

422. The considerable additional expenditure aside, Mr. Moodley also alluded to a number of uncertainties that would have to be resolved in deciding whether or not to expand the DJP beyond 16 inches. A new pipeline regulator has just been established and its attitude to further expansion would have to be considered. Mr. Moodley also acknowledged that the possibility of a pipeline being constructed from Maputo into South Africa might also potentially affect the commercial viability of Petronet's new pipeline. However, all of these concerns are a function of the overriding commercial criteria that Mr. Moodley insisted would be applied in deciding on further expansion, in other words the commercial risk inherent in pre-investing in assets which would, for lengthy periods into the future, be under-utilised.

423. In our view no reliance can be placed on the prospect of an expansion of the DJP beyond the 16-inch line already approved by the Transnet board.

424. We must then ask how long it will be before the expanded southern DJP becomes constrained again. Projections as to precisely when the OOCs will again become logistically constrained naturally differ depending on the assumptions made.

425. Shell submits that in assessing this question it is crucial to bear in mind that logistical constraints post-2010 are vitally affected by whether or not there has been foreclosure in the period 2006 – 2010. If such foreclosure has taken place, then on Mr Baker's base case and on his assumption of an irreversible loss of retail market share, Shell argues that the OOCs' logistical requirements post-2010 are significantly less than they would have been without foreclosure. Mr Baker's base case also shows that the OOCs again revert to being logistically constrained as from 2014, their absolute dependence on Uhambo in 2014-2015 being 460m and 1.04b. 249 However, if one assumes that there is no foreclosure (because of an imposed supply condition or a voluntary five-year supply agreement) over the period 2006 – 2010, the OOCs' inland requirements over the period 2011 – 2015 (and thus their absolute

249 See annexure to Shell's supplementary heads of argument.

logistical deficit) are greater. From Mr Baker's base case model if there is no initial foreclosure, the OOCs' absolute dependence on Uhambo over this period will be as follows: 400m (2011); 790m (2012); 1.14b (2013); 1.6b (2014); and 2.11 b (2015).

426. In other words, Shell argues:

"...if the new supply condition is imposed and precludes foreclosure until the end of 2010, the OOCs will as from January 2011, be immediately constrained and immediately dependent on Uhambo for substantial volumes. It is no answer to say that if this be so Petronet would build a bigger pipeline. Petronet's business approach is to focus on total inland deficit rather than the constraints of particular oil companies. And the simple fact is that Petronet has neither resolved nor budgeted to build a bigger pipeline and the termination of the new condition is not dependent on the construction of a bigger pipeline (cf clause 17.1 Sasol heads p 292). It is also no answer to contend that the OOCs will have enough time to plan for and overcome the logistical constraints. Mr Baker's model already makes unrealistically generous assumptions about gantry capacity and annual road tanker expansion of 250m per year.

It is not within the OOCs' power to build their own new pipeline since the pipeline would need to be licensed and Petronet would be adversely affected by a new pipeline which diverted volumes from its infrastructure (Moodley T280-281). It is thus not readily apparent that any amount of long-term planning would resolve the logistical constraint, and it is doubtful in any event whether, from a competition-law perspective, it is acceptable to expect rivals to ward off foreclosure by costly capital investment."²⁵⁰

427. During the hearing, Mr. Moodley stated that Petronet had commissioned a further study in 2005. The preliminary results from that study showed that when Petronet considered the realities of the period (2002-2005) viz. a 2,6% growth in demand as well as the restrictions in supply from Secunda and Natref, the constraint in the pipeline moved from 2010 to 2007.²⁵¹

MR MOODLEY: What I indicated was, the summary of evidence was based on the 2002 study. And in the interest of looking at what has happened in the industry from 2002 to 2005, we commissioned a new study and that's the preliminary results. And that has indicated that that date changes when a physical requirement for capacity to move product from the coast to the inland area, moves now from 2010 to 2007, putting all the realities into place. The more bullish growth use and

²⁵⁰ Paragraph 60-61 of Shell's supplementary Heads of Argument

²⁵¹ In the 2002 study, Petronet had used a 2% growth in demand for petrol, diesel and jet. According to Mr Moodley, if one looks at when a 20-inch pipeline will become constrained using a 2,6% demand growth, the pipeline only becomes constrained in 2023. However, his model is very sensitive to changes and if demand is increased by 1%, the pipeline becomes constrained in 2018.

*the restriction in terms of supply from Secunda and NatRef, that moves into 2007.*²⁵²

428. However, it would appear that this would not cause Petronet to hasten the completion of the new pipeline:

*MR MOODLEY: ...That, however, doesn't [alter] our planning horizon and our ability to commission the new pipeline anymore. That planning horizon is fixed in terms of that 5-year. It is not much more one can do in terms of the program as we see it now. We've factored issues such as environmental studies and approval and... already quite an accelerated program. But however going forward, one might look at the issue of saying, is there an opportunity of accelerating the program further? But at this point in time, we do not see that opportunity doing that. And again I think what I need to again say is that from our point of view it becomes a business opportunity and not an obligation to provide capacity by 2007.*²⁵³

429. During his examination-in-chief, Mr Natha talks about when the DJP will become constrained again,

Well I noted with interest that previous documentation and Mr Moodley's what we are talking about is replacing the 12 inch line with a 16 inch line. So the incremental capacity that you're going to get out of it is only the difference between 115 million litres, which they say is the operational capacity of the 16-inch line and the 68 million litres, which is the current. So say 70, 47 million litres of week extra capacity. The question to me when I look at that and I look at the supply demand balances across the base and the need for pipeline capacity in the region for NatRef to put their product in, I believe it will be a very short period, maybe 2 to 3 years when this capacity runs out. ²⁵⁴

430. And then under cross-examination,

ADV VAN DER NEST: You also said that upon questioning from Mr Gotz on the capacity of the new DJP when it is expanded to 18 inches. You said that after a year or 2 about 2012 or 2013 looking at supply/demand balances, it would again be full. Correct?

*MR NATHA: Yes and just let me add, that's based on the growth rates.*²⁵⁵

431. We will now deal with the alleviation of the second constraint, namely in the northern section of the DJP.

²⁵² Page 207 of the transcript.

²⁵³ Page 225 of the transcript.

²⁵⁴ Page 2280-2281 transcript.

²⁵⁵ Page 2299-2300 transcript.

De-bottlenecking the northern DJP

432. The northern DJP feeds depots in the inland region. It operates on the basis of the same “common carrier” principles as the southern DJP but has a somewhat larger capacity of 80 million litres per week. At Sasolburg white fuel product destined for the inland market is injected into the northern DJP by Sasol and TOTAL from the Natref refinery. It is at this point that the OOCs must then remove some of their product to allow Natref to inject its allocated share. A “bottleneck” is caused by the insufficient capacity of the pipeline at Sasolburg to accept all produced volume injections by TOTAL and Sasol as well as from the southern section of the DJP for supplies to the northern depots.²⁵⁶

433. A further problem is the unavailability of the capacity in the so-called “components pipeline” which conveys components from Secunda for blending at the Natref refinery. The existence of the components pipeline is another consequence of the 1995 reconfiguration which was that the old crude oil pipeline from Coalbrook to Kendal had become redundant. In order to avoid leaving the line unutilised, Petronet came to an agreement with Sasol to use the line. Petronet connected that section to Secunda to facilitate the blending of Sasol’s Secunda product components with Natref product components at the Natref refinery. The section is governed by an agreement with Sasol in terms of which Petronet transported components from Secunda to Natref in a downward direction. According to Natha, the flow of components in the reconfigured pipeline from Secunda to Natref in Sasolburg had the effect of limiting the capacity to move products from Durban to the inland market via Sasolburg, as the OOCs were unable to make use of this stretch of the pipeline network.²⁵⁷ With the scheduled termination of the MSA, the OOCs sought to maximise the movement of product from their coastal refineries to meet their inland market demand and approached Petronet with the request that the components pipeline be reintegrated into the general pipeline network.

434. Petronet decided to alleviate the constraint by de-bottlenecking that section and moving refined product upwards. However Petronet’s attempts to open the components pipeline up for use by the OOCs, immediately ran into stern opposition

²⁵⁶ Mr. Swart, page 41 of the Witness statement bundle.

²⁵⁷ See Mr. Natha and Mr. Kramer’s witness statements.

from Sasol. Mr Moodley testified that it is not feasible to move products in both directions – components ‘downwards’ and refined product ‘upwards’ - in that line. Petronet therefore had to give Sasol notice on the existing agreement. Sasol did not accept the notice and launched interdict proceedings against Petronet to prevent it from terminating Sasol’s rights of exclusivity to the components pipeline.²⁵⁸ Petronet and Sasol eventually came to a settlement based upon a “*technical solution agreeable to both parties.*” Petronet and Sasol agreed on the bi-directional movement of products: for four days of each week it would transport Sasol’s components from Secunda to Sasolburg and for the other three days of each week it will transport products in the other direction. According to Moodley, this de-bottlenecking exercise increased the capacity for conveying products from the Natref refinery northwards to Johannesburg from 80 million litres per week to 95 million litres per week. The section would still transport 20 million litres of component to Natref per week. The additional capacity has been available since October 2005. The revised allocations to the oil companies was as follows:

Oil Company	August 2005	October 2005
	<i>Millions of litres per week</i>	
Shell	16.70	19.8
BP	15.9	18.8
Caltex	14.1	16.7
Engen	13	15.4
Total	17.9	21.2
Sasol	2.4	2.8

Source: Mr. Natha’s witness statement

435. Mr. Kramer, a witness for BP who furnished a witness statement but who was not called upon to provide oral testimony, avers that the inland refiners and Engen will consume slightly under 40 million litres of the available capacity. The remaining capacity of some 55 million litres will be shared between the other coastal refiners.

436. However, according to Mr. Natha, the increased capacity created by the de-bottlenecking does not immediately improve the ability of the coastal refiners

²⁵⁸ According to Swart, Petronet had given very short notice of termination on this agreement, which did not give Sasol Oil sufficient time to plan and readjust its logistics in order to deal with the loss of the components transport capacity. See page 45 of the witness statement bundle.

to supply their inland marketing arms because the southern DJP – that is, the section from Durban to Sasolburg - is still constrained.

It should be noted that the allocated pipeline capacity in the Northern DJP can only be fully utilised by those oil companies with coastal refineries if they purchase additional product from Sasol's share of Natref production at Sasolburg. The principle reason for having to purchase product from Sasol is the capacity constraint in the southern section of the DJP pipeline, which is limited to 68 million litres per week.²⁵⁹

437. Mr Natha confirmed his position under cross-examination:

even though the capacity is there, they can't utilise it and even when the proposed de-bottlenecking of the line, I think it is now in operation from the 1st of October, the additional capacity that gets allocated to the companies, they can't use it because they don't have the product coming out from the Southern line. So, any efforts to de-bottleneck the Northern line has minimal or no benefit to the people bringing product up from Durban.²⁶⁰

438. Mr Moodley confirmed the OOCs predicament:

ADV SNYCKERS: Now there is a suggestion in some of the documents that expanding the capacity north of Sasolburg by way of this de-bottlenecking doesn't actually assist those coastal companies that want to bring in further product, because they still have only the 68 million a week that they can bring in from the south. But isn't it the case that the more you expand the northern capacity, the more of your product you can push further north, because pipeline is the cheapest and most competitive method of transporting the product?

MR MOODLEY: That's true, but I think one's got to be wary of what the scenario is. I think what you state is a possibility. If you take two different scenarios, if you take one of the clients that does drop off product in the southern section, say between Durban and Sasolburg ... let's take Ladysmith as an example. So, in his current logistics plan, if he is dropping off product at Ladysmith, if he gets more capacity in the north, he can optimise that by saying he will not drop off product at Ladysmith. He can take that product through to the north. But let's assume you have a player that already optimising his logistics. He is not dropping off a significant amount of product in the south. Then by giving him any more capacity in the north doesn't help him, because he cannot get any more product into the southern section. So it just depends on what scenario the person you are talking about finds himself. ²⁶¹

439. Therefore while the debottlenecking creates additional capacity north of Sasolburg, until the OOCs are able to inject more product into the southern DJP, this section will

²⁵⁹ Page 39 of Mr. Natha's witness statement.

²⁶⁰ Page 2280 of the transcript.

²⁶¹ Page 231 of the transcript.

be somewhat under-utilised by the OOCs.²⁶²

440. And when the coastal refiners have, as a result of the expansion predicted to become available in 2010, increased access to the southern DJP, their ability to transport products in the pipeline would remain constrained by the available capacity of the all-important northern pipeline. The OOCs argue that post merger Sasol will seek to utilise a considerable proportion of the Natref refinery's production to supply Engen's downstream marketing requirements and that the bottleneck at the Natref refinery will emerge once again.

Strategic Responses to Foreclosure – prioritisation and retaliation

441. The merging parties make much of the contention that, in the event of foreclosure, there are obvious strategic responses available to the OOCs that would serve to render the foreclosure unprofitable or, in the formulation that we prefer, diminish the credibility of a threatened foreclosure. These relate, firstly, to the opportunity to prioritise their customer base so as to minimise the reputational damage arising from an inability to supply all customers, and, in particular, to ensure that, once new logistical capacity becomes available, losses in market share occasioned by the foreclosure will be immediately reversed.

442. Secondly, the merging parties insist that the capacity of the OOCs to retaliate will significantly raise the costs that the foreclosing entity will have to bear further reducing the profitability of foreclosure.

²⁶² We note too that the merging parties have also speculated on the volume of road logistics that will be freed up by the de-bottlenecking of the northern DJP – the merging parties assert that trucks that were previously utilised to convey product from Durban to areas north of Sasolburg. Dr Stillman submits that this change in logistics will therefore reduce the average distance that trucks out of Durban will have to travel in a foreclosure scenario, which will allow these trucks to make more trips and to transport more volumes. We raise this, not because we think that it remotely figures in a decision regarding the efficacy or otherwise of foreclosure but because it illustrates the speculative lengths to which merging parties were prepared to go in order to construct their foreclosure balance sheet.

Prioritisation

443. The merging parties lay much store by their contention that any gains – in the form of increased market share – that accrue to the foreclosing entity will be swiftly reversed once the logistical constraint is relaxed – as they assume it will be - by the commissioning of the extended DJP. They claim that

...central to the foreclosure strategy there put forward is the concept of a dramatic and irreversible gain of retail market share by Uhambo in 2006. This concept is central to the models of Bishop and Baker, which extend the period of the alleged profitability of foreclosure beyond 2010 up to and including 2015. This serves to introduce the concept of a 'lock-in' or irreversibility of the gain in retail market share, so that the arrival of the expanded DJP (which would otherwise solve the OOCs logistical constraints and put an end to any foreclosure strategy in 2010) becomes irrelevant (in the Bishop model) or less relevant (in the Baker model).²⁶³

444. The merging parties cite with approval a passage from an earlier OOC expert report submitted on behalf of Shell by Professor Ordovery who argues that

...of course for a [foreclosure scenario] to be a realistic possibility, it has to be the case that Uhambo's rivals cannot either enter the retail market with new stations or that they cannot hold on to their existing stations until such time that new supplies become available because of the DJP expansion.²⁶⁴

445. The merging parties contend that, in the event of foreclosure, careful prioritisation of their customer base will ensure that any gains in market share that accrue from foreclosure will be immediately reversed once the logistical constraints are relaxed.

446. 'Prioritisation' essentially refers to the selective provision of supplies to inland service stations and commercial customers in the event of foreclosure. The merging parties contend that the rational response to foreclosure would be for the foreclosed entities to ensure that, at the very least, petrol supplies were maintained at core retail sites. They contend that, first, retail service station customers would be preferred over commercial customers and, second, that core retail sites would be preferred over non-core sites. We also understand

²⁶³ Merging Parties Heads of Argument page 76-7.

²⁶⁴ Cited Merging Parties Heads of Argument page 82.

the merging parties to be arguing that petrol will be prioritised over diesel although this may simply arise as a result of the prioritisation of retail service station customers (overwhelmingly petrol customers) over customers in the commercial and industrial market (predominantly diesel). They note that the inland commercial market of the OOCs amounts to 2,9 billion litres and the KZN commercial market amounts to approximately 1 billion litres so only a part of these commercial markets would absorb the whole of the short fall of approximately 2,4 billion litres.

447. The merging parties claim that because the Baker model only incorporated prioritisation in respect of the *incremental* capacity available to the OOCs – which claim is denied by Shell – incorporation of prioritisation in respect of all transport capacity would reduce Mr. 's projected profit from foreclosure from R3,3 billion to R1,7 billion.²⁶⁵

448. BP and Shell acknowledge that a certain degree of prioritisation would rationally take place in the face of constrained supplies although they suggest that the bald categories proposed by the merging parties – service stations v. commercial, core service stations v. non-core service stations – do not accurately reflect the complexities entailed in the selection of priorities. And, more important, the OOCs do not believe that prioritisation will materially enhance their ability to reclaim lost market share. They rather view prioritisation as the near-permanent drawing in of the boundaries of their operations, a selection, as it were, of their future competitive terrain.

²⁶⁵ Merging Parties Heads of Argument page 100. Shell explains that the Baker model incorporates the prioritisation of all transport capacity and not merely incremental capacity. This contrasts with the Stillman model that assumes incremental prioritisation. Baker does however argue that it would make no sense for the OOCs to prioritise beyond the point at which the inland becomes structurally short of diesel. Were this to happen, Uhambo would have an undeniable claim on logistical capacity to bring diesel in from Enref. In this event, prioritisation would not only cost the OOCs diesel sales in the commercial market but would also reduce the quantum of logistical capacity available to them because a certain amount of this capacity would be used for the Uhambo diesel conveyed from the coast. This appears to be an eminently sensible argument although the parties reason, in somewhat Machiavellian fashion, that the OOCs may want to engineer a structural shortfall because this would arouse public opinion and lend credence to a demand for government intervention.

449. The merging parties insist that retail service stations will be preferred over commercial customers principally because the investment in an individual service station site is significantly greater than that in a commercial site and because the margin on retail sales is significantly higher – approximately 42c per litre v. 16c per litre – on service station sales than on commercial sales. Also mentioned is the imperative of brand protection – it is stressed that the damage to the brand will be greater in the event of a failure to maintain supply to service stations than in the case of less visible commercial sites. They also appear to contend that lost share of the commercial market is easier to retrieve than lost share of the retail service station market.

450. Each of these contentions is persuasively countered by the OOCs.

451. Both Mr. Fienberg for BP and Mr. Milner for Shell reject the notion that commercial customers could be jettisoned at will.²⁶⁶ Both point out that they are subject to contractual commitments to their commercial customers certain of whom are global customers. In BP's case, its commercial and industrial business is conducted by Masana whom they are obliged to supply. Failure to do so would – and this was confirmed by Mr. Mncwango of Masana – severely damage and likely destroy their empowerment partner with the consequential reputational damage that would ensue. They accordingly question the merging parties contention that there is limited reputational damage arising from a prioritisation strategy that neglects commercial customers. The problem confronting all the OOCs is clearly expressed by Mr. Fienberg:

The other issue is that when you are focussed on 500 core or 400 core customer groups, you are dealing largely with national accounts and in many cases global accounts, the Rio Tintos, Billiton, Anglo American, etc. The other phenomenon is that you are dealing with very informed buyers and it is obvious that fuel is an absolute essential commodity and without access to fuel, these businesses, commercial businesses can't operate. If a company like BP or any other company starts failing in its obligation to provide reliable, and when I say reliable, sort of well above 99% reliability of access to supply for these customers, you start running into big problems... So I think that as far as prioritisation is concerned, I think to just glibly say we prioritise away from commercial would create significant problems for

²⁶⁶ This is conceded by Mr. Oberholster. Page 568 of the transcript.

452. Nor is there any apparent basis for the assertion that lost commercial sales will be easily re-captured. Commercial customers who are forced to turn to an alternative supplier – and this will be Uhambo – will inevitably enter into a supply contract which cannot simply be abrogated when the original source of supply presents itself again. And nor is there any reason why a commercial purchaser, provided that it has been well serviced by its new supplier, should revert to its original supplier, one that had once proved incapable of meeting its requirements for a product as vital as fuel.

453. ***We should add that if it does indeed prove difficult to re-claim lost market share in the commercial market, then the prioritisation thesis effectively concedes that this market, at a minimum, is subject to successful foreclosure.*** This was, in fact, conceded by the merging parties.

ADV CILLIERS: And the reason I say one of two is because either with the prioritise existing inland incremental and existing inland transportations, or whether you'll prioritise your KwaZulu Natal commercial market and you subject that to taking petrol inland. Either of them will keep the inland retail market wet.

CHAIRPERSON: An alternative way of expressing that prioritisation is to concede that they will have successfully foreclosed the commercial market. Not only in the inland area but in KwaZulu Natal as well, there will be a successful foreclosure there.

ADV CILLIERS: That's exactly so.

CHAIRPERSON: Well that's quite a concession (inaudible). 268

454. Prioritisation of core over non-core service stations is also fraught with difficulty, particularly if a key objective is relatively easy reversibility. Here the merging parties suggested that relative brand damage would be the key criterion. Mr. Milner of Shell appeared to acknowledge the salience of this consideration. That is, he acknowledged that the foreclosed entity would prioritise core over non-core sites. Milner distinguished the non-core sites on the basis of the ownership of the sites. He testified that the dealer-owned-dealer-operated (DODO) sites would be allowed to run dry before the non-core company controlled sites. However if a DODO site was allowed to run dry, it would not be retained because the dealer-owner would be

267 Page 2974 of the transcript.

268 Page 2693 of the transcript.

entitled to enter into a supply and branding arrangement with an alternative supplier. In this instance the new supply contract could only be concluded with Uhambo, the foreclosing entity.²⁶⁹ It could only be retained by the OOC if the latter agreed to maintain the owner of the foreclosed site in the same financial situation that would pertain were the dealer-owned site fully operational until such time that petrol supplies were restored. Milner also pointed out that the retention of even a company-controlled site would entail considerable expense – rental, insurance, security, etc. The cost of retaining a site is potentially increased by the prospective introduction of ‘use or lose’ regulation which would provide that a license to operate a site would be removed were it not utilised. Under this sort of regulatory regime, the foreclosed company may find that it had incurred the considerable cost of maintaining a foreclosed site, only to lose the license to continue operating it.

455. Milner also points that a site that is non-core is, per definition, a site in which volumes and profitability are relatively low. Accordingly the rewards for retaining it are concomitantly low and may not justify the risk or the cost entailed in retention. If deregulation of the pump price of petrol were to occur in the closure period, then the rewards from retention will decline with the decline of margins that are predicted to follow deregulation.

456. Finally, Milner notes that, given the homogeneity of the competing petrol products there is no reason to expect that brand loyalty would ensure the return of a customer after several years of foreclosure.

457. The contention that assumed irreversibility is a critical underpinning of Mr. ’s finding of profitable foreclosure because it prolongs profitability beyond the expansion of the DJP is also denied. Because . predicts a substantial decline in post-deregulation margins, the profits of the 2011-15 period are relatively low.

458. What are we to conclude from this?

²⁶⁹ Shell notes that in order to capture the market share of the foreclosed service stations, Uhambo need not take of every non-core station relinquished. If there was an Uhambo site already established in the local market – and the size of the Engen footprint would ensure that this would be so in most local markets – the market share will simply transfer to the Uhambo facility.

459. Certainly it appears that the foreclosed OOCs would respond by prioritising amongst their various customers and, in general outline, the prioritisation would be along the lines suggested by the merging parties. This is particularly so where the distinction between core and non-core service stations is concerned, though less so where the prioritisation of commercial customers vis-a-vis service station customers is concerned. However prioritisation is more likely to be a *retrenchment* strategy than a *retention* strategy. And the multi-national status of the oil companies is likely to pre-dispose in favour of retrenchment over retention.

460. This is persuasively explained by Mr. Fienberg:

Sure. You see, I think the issue here, if in whatever way, whether it was a letter from Uhambo, which says next week we are going to foreclose on you, so get your banners ready or whatever or whether it was the scenario that I outlined with regard to the LSD, I don't know. Whichever way it comes about, I think the first instance is whether you have 20, 30, 40, 50 dealers or more who are no longer accessing reliable supply, so maybe it's just well there is a shortage of product at the depot and you can't get it. For three days they don't have product, so they don't trade. So instead of sales of 20, 15 000 litres a day that they are selling half of that or whatever. I mean I've stood in front of disaffected dealer groups and like any small businessperson, when they face an inability to trade, it's a survival issue for them. There it is a survival issue, and that's not a pleasant place to be at all.

I think that's the reality that you face and I think the situation that any oil company would face in that scenario is not a legal one of well we've got you tied in by a contract, but actually you've got 50 people or more or whatever, you have a group, you have a dealer body, and you have an issue on your hands in terms of their livelihoods, in terms of them seeking security of just having been able to find a way in which they can earn a secure living. I think you go down that route. I think practically it's what happens. I think the reality from a shareholder's intervention, so help from London for us comes in many forms, but I think in this case there would be a very hard look. So what is your competitive position here? What would the strategic considerations be? What is your competitive position? What is your ability to reliably service the market demand in the market? To what extent have you got access to competitive supply? To what extent can you keep this business going?

I think that the problem we have here, which is why I keep coming back to the structural issues, is that if you look at it through those lenses, we wouldn't have very good answers for our shareholders. I think that where it takes them or where it would take us when the strategic analysis, whatever experience I have in this business, I think it says we would be coming increasingly less competitively positioned. Our access to competitive advantage or competitive supply becomes threatened and post 2010 long-term it doesn't look much better and I think that the hard business answer is well rationalise your portfolio to a position where you can compete, you can compete effectively and where you have long-term access to

461. This is precisely what we mean when we conclude that the strategic response to foreclosure is more likely to be retrenchment than retention. And it reflects again much that is wrong with the merging parties' arguments in respect of the profitability or otherwise of foreclosure. Without decrying the importance of the numbers, the strategic choices facing the OOCs are ultimately not resolved by the minutiae inserted into an economic model. They are resolved by an overarching consideration of the credibility of foreclosure and an assessment of the intensity of the battle before them and a judgement on whether the spoils are worth fighting for. Consider the following:

Uhambo forecloses on a group of multinational oil companies. In the greater scheme of things this market is not of significant consequence for any of these multinationals, while for Uhambo this is home base and far and away their most significant market. The oil companies who, possibly for good reason, the public love to hate, are invited to engage in a highly public foreclosure battle with a powerful and well-connected domestic firm. In order for them to believe that it may be possible to prevail in this battle, they have to take a wager on future growth rates, they have to believe that they will be able to transport diesel in a crude oil pipeline despite numerous technical obstacles and the resolute opposition of the foreclosing entity who enjoys a statutory first-call on the pipeline, and they have to believe – and this would be an act of pure faith – that the market share lost now will be rapidly regained 4 years hence.

462. Is it any wonder that the threat of foreclosure is considered credible? And is it any wonder that at this stage the OOCs may pragmatically consider running up the white flag, or, in Mr. Fienberg's business-speak, 'rationalising (their) portfolios'? They do not, after all, have a lot to lose - a few percentage points share each of a small market and acceptance of Uhambo as the price leader in this market. This is the real strategic choice faced by the OOCs.

270 Page 3030-2 of the transcript.

463. It is our view, then, that the possibility of prioritisation does not dent the credibility of the threat of foreclosure.

Retaliation

464. The merging parties aver that a foreclosure strategy would cause irreparable damage to their relationship with the OOCs and would invite retaliation from them. They would refuse to grant hospitality agreements to Uhambo at their storage depots. Even though Uhambo would own the Sasol depots and Engen depots, the merging parties argue that Uhambo would still need hospitality at a substantial number of guest depots. Furthermore Uhambo would forego Caltex swaps in the Western Cape, where Sasol's requirements were minimal but Uhambo's would exceed 1 billion litres per annum.²⁷¹

Hospitality at Storage depots

STORAGE DEPOTS ²⁷²

Company	Owned	Guest
BP	11	14
Caltex	20	11
Engen	13	9
Sasol	2	23
Shell	13	17
TOTAL	13	13

Source: TOTAL

465. As is evident from the table above, Sasol is currently highly dependent on hospitality agreements with other oil companies. It owns only two depots and is therefore dependent on hospitality arrangements for its downstream expansion strategy. Shell concedes that were Sasol to pursue a foreclosure strategy in the pre-merger scenario, it would be highly vulnerable to retaliation at the depot level. However Shell submits that any retaliation against Uhambo at depot level would not pose a significant deterrent to a foreclosure strategy on the part of Uhambo. Uhambo could simply decide to increase its secondary distribution costs (while decreasing primary

²⁷¹ From page 63 of the Merging parties' Heads of argument.

²⁷² Page 1199 Witness Statement Bundle, Page 17 Pricemetrics report.

distribution costs) to service its service stations from Engen's depot network.²⁷³

Retaliation by Caltex

466. Dr Stillman also argues that Uhambo would suffer loss of access to the Western Cape market where it is dependent upon Caltex for meeting its marketing requirements.²⁷⁴ However, the OOCs argue that in the event that Caltex refuses to supply Uhambo, it (Uhambo) would have the Enref refinery in its arsenal and could therefore ship product along the coast to service the Western Cape market. Furthermore, the evidence of Mr. Wright suggests that Engen already imports product into the Western Cape. Mr Wright further admits that they may have in their base case overstated the costs of importing further product into that region.

ADV ROGERS: Isn't the position now that Caltex cannot supply the Western Cape demands of all the other oil companies.

MR WRIGHT: Correct.

ADV ROGERS: So each of them are required including Engen to ship in some portion of their product?

MR WRIGHT: Correct..... Ja, I think what we are doing is moving product out of Petro SA to the Cape.

ADV ROGERS: So on your base case Engen stops doing what it currently does, which is shipping from Durban?

MR WRIGHT: No not shipping from Durban, Mosselbay.

ADV ROGERS: You say Engen no longer ships from Mosselbay in your base case?

MR WRIGHT: Ja.

ADV ROGERS: Why is that?

MR WRIGHT: I can't answer that question, I don't know.

ADV ROGERS: I mean it doesn't seem a logical...

MR WRIGHT: No I agree. Your point is a valid point.

ADV ROGERS: So the base case cost is almost certainly significantly above R18 million.

MR WRIGHT: I don't think it is significantly above. 275

467. The OOCs submit that the true costs of shipping product to the Western Cape are materially less than the profits that Uhambo would enjoy from foreclosure.

468. Shell submits that:

...however much Caltex might wish to retaliate by refusing to supply Uhambo in the

²⁷³ Paragraph 74 of Shell's Heads of argument.

²⁷⁴ See page 352 of the transcript where Mr. Oberholster deals with the alleged ability of the OOCs to retaliate in the face of an Uhambo foreclosure in the inland.

²⁷⁵ From page 1639-1640 of the transcript.

Western Cape, Caltex's commercial interests would probably be best served by continuing to supply Uhambo into the Western Cape in return for supply and gantry hospitality with Enref in Durban. And since Uhambo could import product into the Western Cape if necessary, this would be an added reason for Caltex not to embark on a costly and ultimately unsuccessful retaliation. 276

469. Regarding the resulting shortage of supply for Caltex in Durban, Shell submits that Mr Wright incorrectly assumes that BP and Shell would in a foreclosure scenario assist Caltex by supplying it with the product it requires and sharing their gantry capacity. If BP and Shell were unable to assist Caltex, it (Caltex) would be dependent on Uhambo (as Caltex currently is on Engen) for product in the Kwa-Zulu Natal coastal area. It would not be profitable for Caltex to stop supplying Uhambo in Cape Town because Caltex would be required to replace valuable upstream sales to Uhambo with less profitable exports, while still being obliged to purchase product at the higher prices from Uhambo in the KZN region.

ADV ROGERS: Of course quite what could be done from Durban will depend on decisions on other matters of logistic, gantry constraints and so forth, but certainly on the Shell and BP or on the Shell figures, if there are significant constraints, Caltex may well find that BP and Shell are forced to favour their own inland operations out of their gantry facilities and logistical capacity and that a significant portion of the lost volume will in fact be Caltex's as Caltex may be in that sense frosted out.

MR WRIGHT: You're alluding to the fact that Caltex can de-load at Wentworth.

ADV ROGERS: Well yes.

MR WRIGHT: Yes.

ADV ROGERS: And in a foreclosure they might require significant further gantry capacity and logistical capacity if they're going to source their inland demand out of Durban.

MR WRIGHT: Yes, but again the assumption is made that the oil companies will co-operate under these unusual circumstances.

ADV ROGERS: Although, well I have the highest regard for my client, I imagine that in a foreclosure scenario if it is between itself and Caltex, it would make sure that its own requirements are met first.277

470. Caltex itself submits that the merging parties are incorrect in their proposition that post-merger Uhambo will be more dependent on Caltex for supply in the western Cape than Sasol is currently since Uhambo will also need supplies for Engen's

276 Paragraph 66.6 of Shell's Heads of Argument.

277 Page 1641 of the transcript.

downstream markets.²⁷⁸

471. Caltex argues that, firstly, insofar as Uhambo may have an increased need for product in Cape Town, it will control product in two areas in which Caltex must obtain product – Durban and Inland. Caltex's dependency on Uhambo will therefore also increase as against its dependency on Sasol or Engen alone. Secondly, Caltex would be unlikely to retaliate against a price rise by Sasol by foreclosing supply in Cape Town, since by doing so it would lose upstream sales and would be obliged to replace those sales with less profitable exports while still being obliged to purchase product at the higher prices in Durban and Inland.²⁷⁹

472. Whereas Sasol does *not* have a coastal refinery, Uhambo will have the benefit of Engen's Durban refinery. Furthermore whereas Sasol is heavily dependent on the OOCs for depot hospitality, the extensive Engen depot network, which would be brought into the deal, is significant and would mitigate any loss resulting from such a retaliation. The merging parties argue that a foreclosure strategy would invite retaliation from Caltex in the Western Cape has no merit. Caltex will, post merger, be in a weaker bargaining position as it would be dependent on Uhambo for product in the two areas in which Uhambo will be dominant, i.e. Durban and the inland.

Foreclosure – summary and conclusions

473. The merging parties insist that foreclosure will be an unprofitable and self-defeating strategy, a contention that hinges on argument and voluminous evidence that purports to demonstrate that there is sufficient logistical capacity available to enable the OOCs to convey fuel from their coastal refineries to the inland market and so to overcome any foreclosure scheme. They also argue that in the event of foreclosure the OOCs have, at their command, a number of strategic responses that would enable them to swiftly re-capture market share lost to a foreclosing Uhambo, particularly because the planned expansion of the DJP will eventually relax any logistics constraint that may exist. Finally, they argue that the OOCs would respond to a foreclosure of the inland market

²⁷⁸ Para 96 of Caltex Heads of Argument.

²⁷⁹ Para 97 of Caltex's Heads of argument.

with retaliatory action, principally directed at the market of the western Cape in which Uhambo does not possess refining capacity, further raising the costs of foreclosure.

474. The merging parties' case is anchored in an economic model prepared by their economics expert which purports to demonstrate that foreclosure will indeed be an unprofitable enterprise.

475. The OOCs have argued, and have submitted equally voluminous evidence to bolster their contention, that the merged entity is capable of successfully foreclosing the inland market. They insist that after all available logistical capacity is exhausted, they will remain dependent for a significant proportion of their inland requirement on the inland refinery monopolist, Uhambo. While they readily acknowledge that they would respond to foreclosure in a manner designed to limit their long term loss of market share, they insist that ultimately there is no strategic response capable of blunting the merged entity's exercise of market power, and certainly not to the extent that they are capable of reversing the gains realised by the foreclosing entity. In the face of foreclosure they would, argue the OOCs, ultimately have to cut their losses by accepting a smaller market share and Uhambo price leadership. They reject the contention that they have the capacity to retaliate in the manner suggested by the merging parties.

476. The OOCs have also marshalled their own economics experts who have presented models that purport to demonstrate the profitability of foreclosure.

477. We have focussed our examination of the evidence and argument on those elements of the models, that, it is common cause, are decisive in determining the question of profitability – the rate of growth for fuel in the inland region; the availability of transport logistics, in particular, the contention that the crude oil pipeline will, in the event of foreclosure, be utilised for the conveyance of diesel; and the availability of strategic responses that may ameliorate the

consequences of foreclosure. We have also examined the contention that the logistics constraint will be lifted with the expansion, planned to come on stream in 2010, of the DJP.

478. We have already indicated that many of the key issues in dispute are not susceptible to mathematically precise findings. The uncertainty surrounding certain of the variables is inherent – no-one can claim to ‘know’ in advance the rate of growth of demand – while in other instances (for example, the conveyance of diesel in the COP) we have heard the untested opinions of technical experts, all of whom acknowledge that costly and time consuming trials are yet to be undertaken in order to rigorously evaluate their contending viewpoints.

479. However, while on balance neither we nor anyone else can claim to know with absolute certainty whether or not foreclosure will be profitable, we are confident that the evidence demonstrates conclusively that the merger presents a credible threat of foreclosure. This finding – a credible threat rather than a finding of definite profitability – is not the acceptance of a lower standard. It merely acknowledges that the outcomes of great campaigns, military or commercial, cannot be known in advance with absolute certainty. If that were so, battle would never be joined. However, there are circumstances where the armoury at the disposal of the aggressor and the attractiveness of the potential spoils combine to ensure that the campaign will be launched and that the damage will be considerable. Under these circumstances, the target of the foreclosure must – faced with the certainty of a fierce, costly battle and the very real prospect of defeat – decide whether to sue for peace and retain part of what is desired by the opposing force or to engage in battle and risk losing all, or, at least, a significant part of the desired booty.

480. It is, in fact, our firm view that the battle in this instance – as in many other similar and dissimilar engagements – is unlikely to take the form of a full-blooded foreclosure. Instead it is likely to take the form of well-planned

guerrilla-like skirmishes designed by each of the contestants in order to demonstrate their respective strengths and to expose the weaknesses of their counterparts.

481. This is, to a considerable extent, already taking place. We are persuaded by Mr. Fienberg's contention that the timing of the very decision to terminate the MSA expressed Sasol's assessment that available logistical capacity was insufficient to overcome, to any significant extent, Sasol's monopoly of the inland supply of refined product. Sasol's attempt to obtain a statutory reserve of the COP for crude oil, is one likely example of an early skirmish in the foreclosure campaign and the litigious response to Petronet's efforts to de-bottleneck the northern DJP is probably another. And they are merely a foretaste of how the merged entity, Uhambo, will respond should the OOCs attempt to acquire significant logistics capacity – for example, we are in no doubt whatsoever that the industry-wide co-operation needed to test the capacity of the COP to convey diesel would be reluctantly given, if at all, and, it goes without saying, that, should the tests prove affirmative, the co-operation required to actually convey the diesel would never be forthcoming in the time frame required.²⁸⁰

482. Mr. Fienberg testified that his company had experienced difficulties obtaining supplies of low sulphur diesel from Sasol – indeed the supply problems proved so intractable that BP was compelled to exit that particular market in the inland because it was not able to guarantee supplies to its affiliated retailers through whom this particular variety of fuel was being marketed. He conceded that he did not know whether BP's inability to obtain the necessary supplies from Sasol, had been an instance of foreclosure in action or whether it had been the result of genuine operational difficulties.²⁸¹ And that is precisely the point of the sort of guerrilla-type skirmishes that we have referred to – the company on the receiving end (and certainly the public and even the regulators) may never be quite certain whether it is the victim of poor service, of

²⁸⁰ Mr. Oberholster says as much at page 444 of the transcript '*I've got all the product in the inland today. I would love to sell to the oil companies. I would love to sell at their alternative above a certain baseline volume. If the oil companies do not purchase the from Sasol, if they are able to use the crude oil pipeline, it would in fact further diminish the amount of volumes that they would want to purchase, as it were, from Sasol. So, if I can make it technical difficult from my point of view to do that at this stage, saying that I will not ... well, not saying that I will not supply my technical knowledge to do this, but at least not being participative in that. It again helps me to try and balance the level of power in the negotiation situation.*'

²⁸¹ Page 2968-71 of the transcript.

technical problems or of active foreclosure. However the executive of an oil company with whom Sasol has contemplated, in print, 'war' and a total refusal to supply,²⁸² is entitled to his paranoia, if that is all that it be, and to contemplate the very real likelihood of a massive battle to come.

483. These preliminary skirmishes are initiated by Sasol acting on its own. Uhambo is, as we have elaborated at length, significantly better placed to engage in these forms of attrition, or, if necessary, to mount a full-scale foreclosure campaign.

484. We conclude then that the formation of Uhambo presents a highly credible threat of foreclosure. We are persuaded that, should the merged entity be compelled to engage in a full-scale foreclosure campaign, it will prevail, and that it will, as a result of the foreclosure, capture significant downstream market share. We are equally persuaded, however, that victory for Uhambo will require little more than several concrete demonstrations of its willingness and capacity to foreclose. This will persuade the OOCs to sue for peace, effectively to forebear from competition with Uhambo in both the upstream and downstream markets.

A Substantial Lessening of Competition – our findings

485. In their heads of argument the merging parties identify the two determinants of retail pricing when they urge us to

*...retain the distinction between potential price effects downstream arising out of horizontal concentration downstream, on the one hand, and the potential downstream effect of bulk pricing, on the other.*²⁸³

486. This formulation suggests – and correctly so – that prices in a downstream market will be determined, firstly, by the extent of competition in the upstream market which will determine output prices in that market or, what is the same

²⁸² From page 384 of the transcript.

²⁸³ Page 153 of the Merging parties' Heads of Argument.

thing, the input costs in the downstream market. The merging parties use the term 'bulk pricing' in respect of the product in the upstream market. This is the term used by Professor Scheffman, the Caltex expert, and this then becomes the platform for the merging parties' attack on Scheffman's identification of the relevant upstream geographic market and on the concept of divertible capacity. However, for our purpose, whether Scheffman is correct or not, is beside the point. What is obviously true is that input costs determine the floor price of the product utilising the input in question. In our formulation the price is referred to as the wholesale price which in the era of the MSA was derived from the import parity price or BFP to which was added a wholesale margin and other wholesale distribution costs. The inland marketing arms of the OOCs were obliged to procure product from the inland refineries at BFP and then passed it on the retailers at the stipulated wholesale price.

487. Secondly, the formulation of the parties referred to above, recognises that another determinant of downstream prices is '*horizontal concentration downstream*'.

A substantial lessening of competition in the downstream market

488. We begin by examining the impact that the merger will have on the second of these determinants, namely, '*horizontal concentration downstream*'. parties assert that Sasol's limited penetration of the downstream market ensures that the merger-specific accretion to Engen's large downstream market share is minimal.

489. We refer back to our analysis of the relevant markets and note that the Sasol contribution to downstream market share should not be underestimated. In the North West province Sasol contributes a 14% market share of the petrol retail (service stations) market; in the Free State, Limpopo and Mpumalanga provinces Sasol contributes 12%; and in the all-important Gauteng market Sasol's contribution is 11%. When these are added to the Engen share, the portion of the market accounted for by the largest retailer rises from the mid- to high- twenty percentage points for Engen to the high thirties and forties for Uhambo. In the commercial and industrial segment of the retail market, Sasol contributes 21% in Gauteng, 16% in the Western Cape, 14%

in the Free State and 12% in Limpopo. These are by no means insignificant accretions.

490. The merging parties draw on evidence presented by the various experts to bolster the benign conclusion they derive from an examination of the market shares, which, they rightly insist, is an insufficient basis for drawing conclusions regarding competition impact.

491. Much of the evidence on the downstream markets relates to attempts to assess competition effects in local downstream geographic markets. It is asserted that the retail link in the supply chain is composed of a large number of small local markets which are bounded by the distance that a consumer would be willing to travel in order to substitute away from a service station that has increased its price. The leap from this calculation – viz. the distance that a disaffected consumer would travel in order to substitute – to the relevant market is significantly complicated by the ‘chain of substitution’ that would clearly be pertinent in this market. Accordingly, a proxy for local markets has to be selected and, as in many retail cases, the proxy selected is the magisterial district. Further investigation is hampered by the paucity of market share data at this level. Hence a further proxy for measuring market share has to be selected, and that is the number of service stations in the magisterial district.

492. The merging parties argue that, because Sasol’s retail service station footprint is still relatively small, the number of magisterial districts in which there is an overlap with an Engen station is limited. Nevertheless, the intervenors – notably BP – have presented evidence that purports to identify a number of local markets in which Sasol and Engen control more than 50% of the service stations, a degree of concentration which the merging parties’ expert conceded would be ‘*a potential area of concern*’. However, the evidence is scrappy and inconclusive. It possibly bears out the merging parties’ contention that the downstream horizontal effects, *on their own*, is, when abstracted from the vertical aspect of the merger, do not portend competition problems. That is to say, the data suggest that there are indeed a relatively small number of downstream markets in which the concentration levels rise, as a result of the merger, to levels that ring competition alarm bells. However we note again that the market share that Sasol brings to the certain of the provincial markets suggests

caution before jumping to any overly benign conclusion on the basis of allegedly limited additions to market share.

493. There is also reference to an attempted study of the ‘Sasol effect’ on the diesel market, a market in which retail prices are no longer regulated. The study does not reveal a Sasol effect. We do however note BP’s argument to the effect that the consuming public is generally unaware that diesel prices are unregulated.

494. However, as we have already noted in our discussion of the relevant geographic markets, the critical decisions that drive competition in fuel retailing are clearly made by the oil companies whose brands the respective retail networks carry and not by the individual service station ‘operators’ who strike us as being little more than glorified branch managers. The selection of sites and the level of investment in the sites, are all oil company decisions. We understand that advertising and promotion are all the responsibility of the brand owners, the marketing arms of the various fuel companies. And so too are pricing decisions largely in consequence of the fuel companies control of the wholesale price, the most important element in the make up of the retail price. This is elaborated below.

495. Thus although when viewed from the perspective of the individual consumer, substitution between competing retail service stations will occur only within limited geographic boundaries, the extent and nature of competition in these local markets will be driven by competition between the national brands. In our view then the national and provincial market shares and the size of the footprint of the various brands are the appropriate indices of concentration that should be examined when assessing the downstream effect of the merger.²⁸⁴

496. However, the horizontal dimensions of the merger do not end with the aggregation of Engen and Sasol’s respective market shares because we have

²⁸⁴ We have taken this view in a number of other mergers in which competition was clearly orchestrated by national chains even though substitution could only take place within narrower geographic limits. See *JD Group-Elleries* merger, Tribunal Case No.: 78/LM/Jul00.

to place these market shares in the context of the likely impact of foreclosure. Our finding is that there is a credible likelihood of foreclosure. We have little doubt that a full blooded foreclosure of the downstream market will lead to a significant increase in the Uhambo's retail market share – even if foreclosure only results in the OOCs giving up the commercial and industrial market and their non-core sites (the prioritisation option), the impact on the overall downstream market share of Uhambo will be significant. We cannot predict the extent to which a foreclosure strategy will actually be implemented. This, as we have already elaborated, will largely be determined by the strategic response of the OOCs. Should they elect to 'sit out' a full-blooded foreclosure the change in downstream market shares is likely to be significant. However they may elect to sue for peace after a short, sharp demonstration of Uhambo's ability to foreclose. The likely terms of the peace treaty will be an agreement between Uhambo and the OOCs to forebear from competition in the upstream and downstream markets.

497. Uhambo is able to enforce peace – an agreement not to compete - in the downstream market because, in the event that the OOCs step out of line, it has the power to foreclose the inland market and thus increase its market share. And because of Uhambo's downstream market share, which, even if it is not obliged to foreclose at all, will be double that of its nearest competitor, it is, comes deregulation of the retail petrol price, also able to threaten a price war in the industry.²⁸⁵

²⁸⁵ Note the following extracts from Sasol document BP19 page 12 cited at transcript page 430-1 "the incentive to an oil company to bust the logistics constraint is about 7c a litre, attract BFP minus 16 while transporting the product inland at 19c a litre would attract BFP plus 10 minus 19c a litre. If the pipe tariff falls to 7, the incentive reduces to 4c a litre. The risk to them by doing them is that Sasol will retaliate in the market". "investing in road infrastructure now would tie the particular oil company up contractually for 3 to 5 years. Any oil company tied up in such logistics, which would be more expensive than the pipeline cost, would also be at a competitive disadvantage to Sasol Marketing or other companies with whom Sasol may swap and would then have to lower transport costs. Sasol could also embark on attacking the wholesale price to place larger volumes to the detriment of all the oil companies". And at pages 431-2 "we have so far based our strategy on rational behaviour and having a strategic marketing presence to protect our wholesale price. If we believe in irrational behaviour and that the oil companies will invest in 1.7 million metres cubed of extra road capacity or a relatively small reward and high risk, then we must be prepared to use our marketing strategy against them. We cannot simply accept their irrational actions and not take counter action". (our emphases).

498. This latter argument was emphasised by Mr. Reid, the former BP executive, who insisted that the acquisition of marketing infrastructure was key precisely because of the power it accorded the merged entity to act as a price leader, in particular to both lead prices down in a price war and then subsequently to lead them up again. He argued that while a 10% share sufficed to lead prices down, a significantly higher share was required to be sure of being able to lead prices up again.²⁸⁶ These conclusions were based entirely on his own considerable personal experience of the fuel industry. He comments:

This [slide] shows the inland retail market shares post the merger, which, as you can see, would lead to Uhambo as one player having a dominant market share of nearly 40% and only 4 competitors, each with around 15 or 16%.

In the markets I've dealt with, both as a marketer and also as merger and acquisitions practitioner, this is the most concentrated retail market that I can recall. Based on my US retail experience when price stickiness can develop at market shares greater than 25%, given this collective dominance in South African that this merger creates, I believe that the 40% market share position will give Uhambo real pricing power.²⁸⁷

499. Reid's thesis is intuitively persuasive. It finds echo in Scherer and Ross's analysis of price leadership in the 3rd edition of their classic text '*Industrial Market Structure and Economic Performance*'. They note that

*'Dominant price leadership occurs when the leader has a large market share, with other sellers being too small to have a perceptible influence on price, or when one firm is recognised as having a sufficient cost advantage over rivals, and sufficient available capacity, to impose its pricing preferences on the industry.'*²⁸⁸

500. Scherer and Ross examine the market conditions that must pertain for the successful exercise of price leadership. These are much the same as the standard list of features – based on the work of George Stigler – that underpin cartelisation, namely, an oligopolistic market structure, homogenous products,

²⁸⁶ See from page 2131 of the transcript. Mr. Reid notes on page 2132 that '*..from my experience, influencing prices in the retail market upwards, not downwards, is highly dependent on market structure and critical mass*'.

²⁸⁷ Page 2139-40 of the transcript.

²⁸⁸ FM Scherer and David Ross – *Industrial Market Structure and Economic Performance* (Houghton Mifflin) 3d Edition, 1990, page 249.

similar cost curves, barriers to entry and inelastic demand. In their examination of a number of industries evidence of price leadership was particularly evident in the steel and gasoline markets:

‘As the Standard Oil of Ohio statement quoted previously indicates, even when market conditions are firm, producers with weak market positions might be unable to increase prices successfully. An accepted price leader like Sohio can lead the way to prices higher than those attainable if no such firm existed. This price may not be much higher, but there is no guarantee that it will not exceed the competitive level by at least a small amount on the average’ 289

501. However, this matter is put to rest by Sasol’s own assessment of the dynamics of the downstream market. Mr. Norton, for BP, put to Mr. Oberholster a 2002 Sasol document entitled ‘*South African Liquid Fuels Assumptions – Sasol Group Planning: January 2002.*’ relevant extracts are enlightening and read as follows:

“Should the oil industry demand a discount below IPP on the volume, which they are constrained to buy due to the inland logistics, Sasol will have a credible threat to use to discipline the market”.²⁹⁰

502. And then further:

“Sasol will pass the demanded discount on to the motorist, to the high volume retail outlets, thus initiating a price war. The discounts so offered will draw demand away from surrounding retail outlets, dramatically reducing their income and driving them below sustainable volumes. *The oil industry will then have a choice of competing on price, thus reduced margins, of allowing the closure of retail outlets with loss of market share or of accepting the Sasol price aspiration and avoiding a price war*”.²⁹¹

503. And finally:

“the assumption is made that the oil industry will be successful in raising prices in the affected areas after the resolution of the price war”²⁹²

504. Mr. Oberholster attempts, implausibly to cast this as merely one of a number

289 *ibid* page 261. It’s interesting to note that one of Mr. Reid’s examples is based on his experience in the same geographic market as that investigated by Scherer and Ross, though some 30 years later.

290 BP2 page 116.

291 BP2 page 116 (Our emphasis).

292 BP2 page 116.

of scenarios that were tested. However, he confirms that this squares with his own understanding of the characteristic dynamics of the retail fuel market when, under cross-examination, he states:

The assumption is made that the oil industry will be successful in raising prices in the affected areas after the resolution of a price war. That's always the case sir. You will see in Australia, for 10 years after there was tremendous deregulation, oil companies were in the red and recently prices are at more sustainable, higher levels. So, after any price war, prices tend to go back, never to where they were, but certainly at the lower level, but they stabilise out. On our side we also said ... let's go back to the Sasol strategy. We always said it is not appropriate to grow into the market organically. It is expensive. It is difficult. It is for us not feasible. Our first choice, and if you were to read those documents and hopefully our counsel will highlight – I don't know – you will see that our first and foremost strategy always was during the first instance to a merger with Engen or then preferably another oil company.²⁹³

505. This is neatly tied up in the following exchange between Mr. Oberholster and Mr. Norton:

MR NORTON: I want to put it to you, Mr Oberholster, that one of the other reasons that you want a retail network and a sizeable retail network at that, is you also want to be in a position to be able to influence the retail pump price. Correct?

MR OBERHOLSTER: We would like to be, when the market is deregulated, in a position to influence the pump price, should we so require. That was our view. How practicable it is, well that we have to see when the time comes.

MR NORTON: But that's certainly part of your strategy going forward, isn't it?

MR OBERHOLSTER: That is. And if I could just ask, when you say sizeable retail network, just give me an indication of what you consider sizeable?

MR NORTON: Well if you inherit through this acquisition the largest retail network in the country through Engen, presumably that equates to a sizeable...

MR OBERHOLSTER: That's sizeable. I agree with you sir, absolutely.²⁹⁴

506. So much for the impact on downstream competition. In summary, abstracted from the effects of foreclosure and calculated simply by adding Engen's downstream share to Sasol's downstream share, the impact is by no means trivial. Moreover this is a static approach. When a dynamic approach is taken, when the impact of the vertical aspects of the merger with the consequential likelihood of foreclosure is factored in, the likely horizontal consequences in the downstream market loom much larger.

²⁹³ Page 549 of the transcript.

²⁹⁴ Page 552-3 of the transcript.

507. We note however, that if the OOCs, fearful of a successful foreclosure, sue for an early peace, Uhambo may well forebear from taking additional market share downstream in exchange for an undertaking from the OOCs to forebear from competition downstream, or what is the same thing, for acceptance of Uhambo's price leadership in the downstream market. Uhambo's ability to foreclose – and thus gain additional downstream market share – and its ability to initiate a price war in the downstream market will be the disciplining instruments that will maintain an agreement not to compete in the downstream market.

508. Cartelisation – under Uhambo's leadership – of the downstream market will limit the downstream pressure that the deregulation of that market will impose on the retail price of petrol, an avowed concern of Sasol, and, of course, of Engen, the country's largest retailer. It will also ensure that the wholesale price (and its BFP basis) is not put under pressure by the feedback from competition in the downstream market. This, as we have seen, is, from the pre-merger perspective of Sasol, the merchant refiner, arguably the most important objective of the merger.

A substantial lessening of competition in the upstream market

509. What of the merger's impact on the wholesale price? How does this impact on competition in the downstream market? The merging parties aver that the

'...the way in which prices might be affected in a deregulated petrol market (whenever that might eventuate) is a matter of complexity and opacity. This is a function of the complexity and opacity of the manner in which prices will be set downstream, given, inter alia, the complexities of interaction between the autonomous actions of retail dealers and the pricing policies of oil companies at the wholesale downstream level.'²⁹⁵

510. We have little difficulty agreeing with the contention that price formation in the industry is 'complex and opaque'. However, not for the reasons cited above. We do not

²⁹⁵ Page 128 of the Merging Parties' heads of argument.

foresee that strategic price competition will be driven by the so-called 'autonomous ... retail dealers'. Sasol's agreements with its franchisees actually provide for resale price maintenance, that is they provide that the franchisee shall sell at *the franchisor's prescribed retail selling price*.²⁹⁶ Mr. Fienberg confirmed that price competition will be driven by the brand owners. It is conceivable that the retail station operators may be given a limited amount of discretion over prices. However the decision to initiate an aggressive price war or the decisions regarding the strategic responses to price wars initiated by a competitor will be taken by the national brand managers. It is not difficult to see why this should be so – a small business person does not easily take the initiative from the company who is not only the supplier of his most important input, but who also owns the branding of his outlet and the property on which he operates and most of the assets.

511. But more than that the oil company has in its hands the price of the most important retail input. If an oil company wishes to enable retail price competition, then it simply discounts the wholesale price. If it wants to rein in price competition, it simply reduces the discount. There is nothing opaque or complex about this at all. And Sasol should appreciate this because, as the evidence shows, it reflects precisely the manner in which Sasol has won market share from its opponents in the period before it decided to merge with Engen.

512. Sasol, in its many candid reflections on the purpose of the merger, made it clear that the maintenance of BFP and the protection of the wholesale price was its principal objective. Foreclosure – which, we have found, is enabled by the merger – is the principal instrument through which BFP will be maintained.²⁹⁷ That is to say, Uhambo has the supply; the inland OOCs have the demand. They will meet – the market will clear - but only, insist the merging parties, if the price is 'fair', by which it means is based on BFP. If the OOCs do not pay BFP then supply will be withheld and the ability of the OOCs to mobilise sufficient logistical capacity to convey product at commercially viable rates from the coastal refineries will be tested. The evidence

²⁹⁶ Page 555-6 of the transcript citation from Commission's Record page 3009.

²⁹⁷ As we just seen, the avoidance of competition in the retail market and the consequent pressure that this may impose on wholesale prices is another mechanism for protecting the wholesale price.

reveals that a significant proportion of the product presently purchased from Sasol cannot be conveyed at commercially viable rates from the coastal areas. The OOCs will then either agree to relinquish the downstream retail outlets that require this output or they will pay BFP for these 'must-have' volumes.

513. The merging parties insist that the OOCs' intervention is rooted in

'fear of durable price competition from a low cost efficient competitor who has excess supply to put to market, and the incentive and ability to compete vigorously for retail market share in the long run.' 298

514. This is precisely the prospect that is portended by a Sasol that attempts to enter the downstream market on its own. It appears, though, that the OOCs are willing to countenance this prospect because, as we have outlined above, as Sasol gradually expands on its own its power balance with the OOCs and their coastal refineries will alter only gradually if at all.

515. However, in combination with Engen, the frontiers of Sasol's strategic possibilities are considerably expanded. With the large guaranteed market that is bestowed by Engen's premier position in the inland downstream market, its excess supply position in the inland is significantly reduced and, with the Enref refinery in its armoury, the vulnerability of its coastal marketing arm is largely eliminated.

516. We have seen in our analysis of the downstream markets, that if the OOCs elect, in the face of foreclosure, to sue for peace, the terms of the peace agreement will effectively be a retail cartel under the leadership of Uhambo. The terms of the peace agreement in the upstream market will be a return to 'rationality' – the acceptance of Uhambo as the sole supplier of refined product in the inland market at the BFP price. In short, the reinstatement of the MSA with one critical difference: where the MSA explicitly guaranteed the OOCs security of supply in the inland area in exchange for their acceptance of Sasol as sole supplier and BFP-based pricing, the terms of the peace will only

298 Page 131 of the Merging Parties' Heads of Argument.

guarantee the OOCs their inland supply as long as they accept Uhambo's terms. It is well put by Mr. Fienberg:

'Effectively you go back to an MSA arrangement regarding price but without the commitments around volume. So from an OOC point of view the market demand exists. There will be a netwhat volume has to be bought from Uhambo will have to be bought at BFP or whatever price prevails at that time, but it would be the maximum price and there isn't the underpinning, if you like, or the security of supply in order to service the market that goes with it.

So, in a sense, it's a full circle back to the MSA without the security of supply aspect. 299

517. Mr. Fienberg adds:

So we have that sequence of events and the only piece that's missing here is the retail marketing side of it and what Uhambo allows, the final piece that falls into place for Uhambo is that the market can then be managed and prices can then be maintained in the market. So if you step back, you have a sequence of events, which to our mind don't appear random. With the merger being effectively the final move in the long run, in a chess game, and what one has, again in our view, is a transition from government regulation to Uhambo regulation where prices can be managed right through the chain from refinery production right through to the marketplace. 300

518. We should also put in proper perspective the claim that Uhambo be characterised as 'a low cost efficient competitor'. 's principal competitive advantage is, in periods of high crude oil prices, to be found in the application of the oil-from-coal technology and the cost of this feedstock relative to the cost of crude. However, the byzantine Components Supply Agreement ensures that this substantial cost advantage is ring-fenced in Sasol Synfuels, which is expressly excluded from the Uhambo JV and which thus remains a wholly owned subsidiary of Sasol Ltd. As we have explained, all that Uhambo is guaranteed is a 'virtual refining margin', that is, the synfuel components are transferred to Uhambo at crude oil import parity prices plus the notional cost of conveying the crude oil equivalent from the coast less the margin earned by a coastal refiner. That is neither the technology nor the locational advantage is extended to Uhambo. In order to maintain the margin on its sales to the

299 Page 2964 of the transcript. This is strikingly similar to Sasol's own assessment viz. "the termination of the MSA marks the transition from a contractual to a logistical inland supply constraint. The base volume for which Sasol has a secure and attractive outlet, will shrink from 7.7 million metres cubed under the MSA to around 7.3 million metres cubed in 2004". page 318.

300 Page 2959 of the transcript.

wholesalers, Uhambo *must* sell its product at BFP. If it fails to achieve BFP it will take all the downside. That is, the entity in which Sasol Ltd owns a 37,5% share will take the downside; and the entity in which Sasol Ltd owns a 100% share will retain the advantages of its low cost feedstock and all the upside of a rising crude oil price.

519. But this is the precise point of the merger: that Uhambo should secure supra-competitive prices by exploiting the market power, the lessening of competition, bestowed by the merger between Sasol and Engen. It is not intended that Sasol should pass its locational and technological rents downstream. Sasol has as little interest as its competitor OOCs in utilising its competitive advantages to bring down the wholesale and retail prices of petrol and diesel, although the advantages that Sasol possesses are a useful disciplinary threat. The merger will allow the merged entity to maintain dominant positions in both the upstream and downstream markets that are spanned by it without the expedient of competing on the merits.

Cartelisation and the fuel markets

520. In our view, then, this merger is likely to result in the re-cartelisation, under Uhambo's leadership, of the oil industry. Sasol's decision to terminate the MSA, the cartel agreement that dominated fuel markets for so long, has led, inevitably, to an outbreak of competition in the oil markets, circumscribed, of course, by continuing regulation of the pump price of petrol. Government is however committed to de-regulating this vital market as well and so, all things being equal, the competition that has broken out upstream will extend to the downstream as well. And competition in the retail markets will feed back to the wholesale markets as is already evidenced by Sasol's discounting of the wholesale price to its Exel retail outlets.

521. The merger is Sasol's attempt to put the genie back in the bottle, to reconstitute the cartel but under Uhambo leadership. For Engen, the merger is an opportunity to defend its retail margins and extend its retail market share.

There can be little question that the OOCs will rationally calculate that if they are unable to beat Uhambo – and it is our firm view that they will not prevail in a foreclosure battle with Uhambo – then they must join it. The OOCs may have to accept a somewhat reduced market share – precisely by how much will depend upon when precisely they decide to throw in the towel in the foreclosure battle. At the very least, they will accept their present market shares, their inability, that is, to compete away Uhambo’s significantly larger share. There is, of course, much that is attractive about membership of a cartel under Uhambo leadership. Not the least of the advantages of cartel membership is that a cartel under the leadership of an extremely well-connected Uhambo (bolstered by its well-connected empowerment partners) is extremely favourably placed to represent the interests of the oil industry in the many battles – with, for example, common opponents such as government and consumers – that are yet to come.

522. The fuel markets lend themselves to the formation and maintenance of cartels. This is elaborated at some considerable length in the BP heads of argument which, on this score, are highly persuasive. We do not intend reproducing these arguments in detail here. Suffice to note that all the conditions for cartel formation and maintenance pertain: the structure of the markets is oligopolistic; the products are homogenous and technologically mature; entry barriers are very high; cost structures of the various oil companies are similar and the acquisition will narrow the differences because approximately 50% of Uhambo’s output is from its two crude refineries and the CSA places the Secunda refinery on the same basis as a coastal crude refinery; the rate of growth in demand is moderate and demand is highly inelastic; there is no countervailing buyer power to speak of; the markets are highly transparent; there is an extensive history of co-operation both at the level of the MSA and also in a range of joint ventures and ubiquitous swap and hospitality arrangements; and Uhambo will have clearly established its capacity to discipline any would-be detractors.

523. Several of the key factors that lend themselves to cartelisation are notably absent in the counterfactual, that is, in a market in which Sasol is attempting, on its own, to enter the market. Mr. Reid testified that Sasol's imbalance portended well for the future of competition in South Africa's fuel market. Rapid expansion in the retail sector will prove difficult and will rely, the Components Supply Agreement notwithstanding, on the willingness of Sasol Ltd to pass some of the considerable cost and locational advantage enjoyed by its Synfuels subsidiary down to its customer, Uhambo's refining arm, and from there to its wholesale and retail arms. In short, Sasol on its own is a maverick, a lone and hungry, and, as Engen would have it, a 'big, bad' wolf, fighting the pack for its share of the spoils. Uhambo, the combination of Sasol and Engen, is the likely leader of the pack, whose natural prey is the South African consumer.

524. We find then that the merger is likely to lead to a substantial lessening of competition in both the upstream and downstream markets relevant to this transaction.

Efficiencies

525. Once we have concluded that a merger will substantially lessen or prevent competition, the Act requires us to determine:

"whether or not the merger is likely to result in any technological, efficiency or other pro-competitive gain which will be greater than, and offset, the effects of any prevention or lessening of competition, that may result or is likely to result from the merger, and would not likely be obtained if the merger is prevented..."

526. This is generally referred to as the 'efficiency defence'.

527. In the present merger, the merging parties indicated in their filing that they would rely on an efficiency defence and filed a report by their expert economists, Genesis, dated November 2004. Later, according to the Commission, Genesis made a second set of efficiency claims, which they appear to have presented to the Commission on 26 April

2005.³⁰¹The Commission states that due to time constraints it did not have sufficient time to adequately evaluate this new set of claims and so in its recommendation it only evaluates the original, that is, the November 2004, set of claims. The Commission recommended that we find that the efficiency claims had not been established, concluding that they were flawed because they were, variously, '*overstated*', '*not merger specific*', '*ordinary efficiencies*' or '*ambiguous*'.³⁰²

528. When hearings commenced, Mr. Cilliers, counsel for the merging parties, did not touch on this issue in his opening address so the status of the efficiency defence was not clear.

529. However in the course of their case the parties led the evidence of Mr Malherbe, an economist from Genesis, whose testimony in other respects we have referred to earlier in this decision. Mr Malherbe was the witness upon whom the parties relied for the evidence that the merger would bring about efficiencies and had been responsible for the team that had prepared the Genesis reports.

530. It emerged during the course of his evidence that the parties had submitted a third document on efficiencies, dated 25 August 2005, and this was the one on which they now sought to rely. Thus like other evidence submitted by the merging parties during the course of this merger on logistics, the efficiency claims have during the course of the process gone through a number of iterations.

531. An examination of the evolution of the efficiency claims appears below in the following table which compiled by the attorneys of Shell and which summarises what efficiencies were claimed, when, in the three successive reports, they were claimed, and how they differed between the amounts claimed in respect of the net present value (NPV) of operational and capital efficiencies.³⁰³

³⁰¹ See Commission's recommendation, page 37 paragraph 8. Malherbe describes the 26 April 2005 document as a presentation for the Commission not a report. (See transcript page 1304).

³⁰² See Commission's recommendation, page 41 paragraph 8.2.

³⁰³ Exhibit 39, page 1.

	Genesis 1 (Nov 2004)	Genesis 2 (Apr 2005)	Genesis 3 (Aug 2005)
NPV for operational efficiencies (Rm)	1500	2522	1072
NPV for capital efficiencies (Rm)	1101	1101	1236
Total NPV (Rm)	2601	3623	2308

532. What emerges from this table is that total efficiencies claimed rose between the first and second reports but then diminished in the final report. The NPV for operational efficiencies shows the same pattern but the NPV for capital efficiencies rises all the time.

533. Sensitive to this fact, the merging parties led Mr Malherbe on why the efficiencies claims had undergone a “wild gyration.”³⁰⁴ . Malherbe attempts to explain this on the basis that he was given greater access to information only as the process wound on and could, as a result, only later work on a more reliable set of figures. He explains that this would be a normal feature of efficiency evidence as at the beginning of a merger process neither of the merging firms is fully acquainted with the others figures. The other discrepancy is due to fluctuations in the crude oil prices. Shell, for its part, is sceptical of this excuse. It maintains that he would have had access to both sides’ records for over a year and that the crude oil price recalculation had already taken place in the second report. Not much turns on this as we see later, but it is indicative of the fact that despite Malherbe’s claims to the contrary, efficiencies were not at top of mind of the merging parties when they consummated the merger, and the fact that he had to rummage through the collective drawers of the merging entities to find them much later, in three varying if not gyrating reports, is an indication of this. Having said that, this is not a criticism of his work, which is painstaking and thorough, but rather of the merging parties claims in this area.

534. Most of Malherbe’s testimony was then addressed as to what the alleged efficiencies were, how he calculated them and what significance he attributed to them. During the course of his oral testimony, he made a candid and dramatic concession, to the effect that if the Tribunal accepted that the merger would make foreclosure more likely, then

³⁰⁴ See transcript, pages 1303-4.

the efficiencies would not outweigh the anti-competitive effect. put it as follows:

“If the big risk in this case is foreclosure and it is difficult to imagine that any reasonable spectra of foreclosure would have damage that is so small that R2 billion in their present value could resolve it and my response to that would be the following. I would accept that. I would accept that an ongoing risk of foreclosure would in all probability given the size of these markets, be greater than the efficiencies that we are discussing here.”³⁰⁵

535. This raised the obvious question as to what purpose the merging parties were leading evidence on efficiencies?

536. Malherbe answers this by offering three reasons. Firstly, since foreclosure is not the only theory of competitive harm being advanced by the intervenors, the efficiency defence may prevail in relation to some others, such as the horizontal effects. What Malherbe seems to be alluding to here are horizontal impacts in respect of local markets where a R 2,2 billion efficiency claim may countervail the anti-competitive effect. In other words he is addressing a horizontal finding in a limited number of local markets as opposed to a broader finding of a horizontal effect.

537. As he put it:

“In some small markets to a modest or intense degree and there you may well find that there is some kind of a trade-off.”³⁰⁶

538. His second reason for tendering this evidence is that the Tribunal is interested in the motivation for a merger and that while efficiencies are not the only motivation for the merger, his testimony is to show how important they are to the merger.

539. The third reason is that if the Tribunal is considering a remedy then it needs to bear in mind that the remedy should be one that preserves the efficiencies for it to be considered appropriate.

305 Page 1444 of the transcript.

306 Page 1445 of the transcript.

540. In closing argument Mr Van Der Nest for the merging parties confirmed that they had endorsed the approach taken by Malherbe. This emerges from the following exchange between the Tribunal and Mr Van der Nest.

“MR MANOIM: Just to cut through this, because I think we’ve read this and we know the numbers. I just want to assess the relevance of the efficiencies and where it leaves us. Shell have said that Mr Malherbe had conceded in relation to if there’s a foreclosure effect, we will define that. Then the efficiencies don’t offset that.

ADV VAN DER NEST: Yes.

MR MANOIM: So the efficiencies are therefore now being addressed just to the horizontal concerns.

ADV VAN DER NEST: That’s absolutely right. Mr Malherbe said, and there is a particular page, 1444, and he said that in the offset analysis he says he would accept that an ongoing risk of foreclosure would in all probably, given the size of these markets, be greater than the efficiencies that we are discussing here. He says that is so. So in terms of purely looking at it from the point of view of Section 12, does it offset? Mr Malherbe says it doesn’t offset, but he did say that there are essentially 3 issues that flow from the analysis, even though in his view the 2.2 billion, having regard to the size of the markets, doesn’t offset it.”³⁰⁷

541. Given our finding that the merger will lead to a substantial lessening of competition in both the upstream and downstream markets, that is, we find both a vertical anticompetitive effect as a result of a credible threat of foreclosure, and a national, as opposed to local, horizontal impact in the downstream market, it is not necessary for us to consider the countervailing effects of the efficiencies, as given the merging parties concession on this point the trade off would not prevail. Note that we have previously found in Trident that the onus of proving an efficiencies defence is on the merging parties.³⁰⁸

542. We find therefore that the efficiencies realised by the merger, even if they could be proved in the amount claimed by the merging parties, would not be greater than and offset the anticompetitive effects of the merger.

543. As we have not considered the imposition of conditions, as emerges later in this decision, the second reason for considering the evidence on efficiencies becomes academic. As to the third - that the efficiencies contribute to the rationale for the

³⁰⁷ See pages 3254-3255 of the transcript.

³⁰⁸ See the Tribunal’s case, *Trident Steel (Pty) Ltd and Dorbyl Limited*, Case No.: 89/LM/Oct00 at paragraph 51.

merger - we find that this is, despite Malherbe's protestations to the contrary, a post hoc justification to put some respectable gloss on the essentially anticompetitive rationale for this merger, a feature we have discussed at length earlier. The attainment of efficiencies, even if they are as large as Malherbe contends for, and we need not determine this, does not alter this conclusion.³⁰⁹

Public Interest

544. The only public interest claim made related to the BEE opportunities presented by the transaction. We note however that Engen is already empowered and Sasol conceded that its decision to introduce empowerment partners into its fuels business was not merger specific. That is, regardless of whether or not the merger takes place, Sasol Oil will, as required by the empowerment charter applicable to the industry, sell the requisite portion of its equity to historically disadvantaged persons.

³⁰⁹ In fairness to Malherbe he does seek to rely on some merchant bankers documents prepared by the merging parties for the purpose of the merger that refer to the existence of synergies. These commentators however do not do the exercise he has exhaustively done nor does he seem to have had access to the documents yielded from discovery which we have quoted earlier which suggest the anticompetitive rationale in unambiguous terms. Although Malherbe's efficiencies, on the face of it yielding an NPV of approximately R 2,2 billion, may seem tantalisingly large, on closer examination they may be less compelling. A large part of this figure is realised from service station rationalisation. In a nutshell if the parties merge they will need to build less service stations than they would otherwise have built if they were to proceed as separate firms in the market. This means that the greater the difference between the aggregate number of stations that they intended building as Sasol Oil and Engen, compared with the lesser number they intend to build as Uhambo, the greater the capital saving brought about as a result of the merger. Malherbe calculated that this would result in what he termed 'capital savings' over five years. Calculated on a five year NPV, this amounts to a R1,2 billion saving, slightly more than half of the total efficiencies claimed. During cross examination Shell challenged whether his evidence on this point was not seriously flawed, as he based his calculations on a heroic assumption of what Sasol would have rolled out if the merger would not have proceeded and thus made the difference between the merger roll out and the separate firms roll out seem larger than past history of rollouts suggests it would be. We need not resolve this issue. Shell also challenged whether this capital saving is a cognisable efficiency at all. It represents the difference between a competitive allocation of stations, between separate and competing firms, and a co-operative single firm strategy. As Professor Scheffman remarked "*Without the deal each company was likely to invest in more new stations and enhance competition downstream, particularly Sasol as it attempted to better balance its upstream and downstream supplier. Now with the JV, these investments will no longer be necessary. While this is a benefit for the company it is not a benefit to consumers who will lose that competition.*" See LECG report Para 211, page 1481). Finally they are, taken as a whole, as the Commission put it, fairly ordinary. There emerge no major innovations or higher order production gains as we identified them in Trident. Whilst Malherbe was careful to excise what he termed pure synergies that were not cognisable as merger efficiencies, what remains qualitatively are those on the lower order of the spectrum of efficiencies that we refer to in Trident.

545. We note too that the anti-competitive impact of the merger will weigh heavily on the retail arms of the OOCs, precisely where most empowerment has, to date, occurred. This was eloquently attested to by Mr. Mncwango of Masana, who averred that the merger, particularly if it led to the prioritisation against the OOCs commercial and industrial customers for which the merging parties contended, would lead to the demise of Masana.

546. Beyond the fact of empowerment it was suggested that the attainment, through the merger, of a better balanced company would enhance the future prospects of the company and thus lower the cost of capital and better enable the empowerment partners to fund the acquisition of their stake. No attempt was made to quantify this alleged benefit and we are hard pressed to accept that it could ever countervail the impact of a likely lessening of competition in the markets relevant to this transaction. Needless to add, because we have found that the 'better balance' or, as we prefer to term it, vertical integration, is at the centre of our finding of a substantial lessening of competition, we are effectively being asked to accept a direct trade off between our competition finding, on the one hand, and the cost of empowerment financing, on the other. We have no doubt that the 'balance' wrought by the transaction enhances the future prospects of the merged entity – market power always has this effect.

Remedies

547. As already noted, the Commission concluded that this transaction would likely give rise to a substantial lessening of competition because it would enable and incentivise the merged entity to foreclose the inland market. It recommended that these competition concerns be addressed by the imposition of a behavioural condition that, in essence, obliged the merged entity to meet the OOCs inland shortfall at a price no greater than BFP plus the cost of conveyance from the coast, the condition to apply until the commissioning of

the expanded DJP which, in the Commission's view, would relax the logistics constraint that enabled foreclosure.

548. We have already noted that in the course of its closing address the Commission announced that it had revised its recommendation of a conditional approval in favour of outright prohibition. However, the condition initially put up by the Commission was fully debated and is accepted by the merging parties. Despite the Commission's withdrawal of its recommendation for conditional approval of the transaction, we nevertheless examine the merits of the proposed condition as well as the attempts by the parties to reformulate it.

549. Shell correctly identifies the proposed condition's two main aspects as incorporating, first, an obligation on the merged entity to supply a certain volume of product to the OOCs, and, secondly, a time frame bounded by an event – the commissioning of additional logistical capacity in the form of the expanded DJP – that would eliminate the dependence of the inland marketing arm of the OOCs on the merged entity and so end the requirement for the condition.

550. Although the merging parties did not concede that the merger enabled foreclosure, they nevertheless indicated that they were willing to accede to the imposition of the condition recommended by the Commission. Note too that the merging parties, while not conceding the feasibility of foreclosure, did nevertheless hold that, should it be found that the merger would indeed enable foreclosure, this prospect would be eliminated by the imposition of the Commission's recommended condition.

551. We should state at the outset that we concur with the contention advanced by Shell that, having found a likelihood of a substantial lessening of competition, it is incumbent upon us to be particularly confident, to be as certain as possible, that a condition imposed would indeed eliminate that prospect.

552. There is no doubt that the requisite degree of certainty is better secured by a structural than a behavioural condition. Foreclosure is enabled by the structure of the two markets that are implicated in this transaction – an upstream market monopolised by the merged entity and a downstream market in which the merged entity is, by some considerable margin, the largest participant.

553. In these circumstances competition authorities generally favour – and the Competition Commission adheres to this general view - focused structural remedies, involving a divestiture of assets in one or both markets in order to secure a structural re-alignment capable of generating competitive outcomes. These structural remedies are favoured because they eliminate the root cause of the competition problem and there is thus no requirement for post-merger regulation or monitoring of the conduct of the merged entity by the competition authority or some other adjudicative agency. This implies then that a conduct or behavioural remedy would only be entertained when potentially transgressive conduct can be clearly specified and easily detected and remedied. The alternative implies on-going dispute and litigation and the likelihood of ongoing competitive harm while the attendant uncertainties are being addressed.

554. The Commission does not appear to have given much consideration to the possible imposition of structural remedies:

CHAIRPERSON: Do I take it then that the alternative structural remedies, and they involve a divestiture, as I've said, of EnRef and/or NatRef, in whole or in part, has not been canvassed in much detail?

MR PARR: Correct.³¹⁰

555. The testimony of Mr. Oberholster suggests that Sasol viewed the construction of the expanded DJP and the prospect of TOTAL taking its shareholding in Natref to 50% - a prospect that has come to naught because of the inability of Sasol and TOTAL to agree price – as the structural solutions that were to be introduced. For the rest however, Mr. Oberholster testified as to his scepticism

310 Page 147 of the transcript.

of the feasibility of other structural conditions. When cross-examined by Mr. Bonakele for the Commission, Mr. Oberholster revealed that there had been some discussion of the possibility of selling a stake in the Enref refinery, or of selling part of Sasol's stake in Natref to a third OOC (that is, other than TOTAL), or even selling a stake in Secunda, but these structural options were not considered feasible. In Mr. Oberholster's own words:

*In the end I think we all came to the conclusion that other structural remedies were not applicable in this situation.*³¹¹

556. However, the behavioural remedy recommended by the Commission in this transaction dismally fails to meet the test of clarity in specification and ease of implementation. Conversely, the condition is likely to be the subject of constant dispute and will require constant monitoring. This much is, indeed, common cause. The transcript of Mr. Rogers' cross-examination of Mr. Parr, the Commission's witness, is characterised by the number of occasions on which the witness conceded that the condition required, at the very least, significant reformulation. Parr concluded:

*that some of these clauses may need some tweaking or even major redrafting*³¹²

557. Mr. Oberholster's position is, as always, illuminating. He too expressed scepticism regarding the uncertainty inherent in the wording of the condition. Phraseology such as 'commercially reasonable terms' presented Mr. Oberholster with understandable interpretative difficulties, because, as he put it, '*commercial terms are actually in the eye of the beholder*'. What is most revealing in Mr. Oberholster's testimony regarding the condition is his view that it will ultimately be workable because the terms of the condition effectively coincide with Uhambo's principal objective, the maintenance of BFP. That is, as long as the OOCs are willing to pay BFP there is effectively no need for a condition obliging the merged entity to supply their inland needs – at this price Uhambo will be a perfectly willing seller. And, depending, presumably, on the size of the logistics constraint or, expressed otherwise, the 'must have' volumes, Uhambo would be prepared to negotiate discounts with the OOCs providing that the base price

³¹¹ Page 732 of the transcript.

³¹² Page 131 of the transcript.

for the 'must have' volumes and from which any other volumes were discounted was BFP:

I think as I have listened to the gentlemen from the oil companies, to implement [the condition] exactly like that, I must be honest, I guess will be pretty tough. But what it says is any volumes required we must supply the oil companies. And I know I am talking against my better, what I probably should not say, but it is so. When I looked at them analysing this situation, but the bottom line is the following. Any volumes that they request from us we must supply. I must in any case supply that, I am a dominant supplier, I have to supply those volumes. Price is the issue.

The price is being capped here at BFP, I believe that to be an appropriate price so we can look at the condition, sir, and I know what you are asking me but certainly again, we will negotiate with the oil companies. I am compelled from this agreement, if I understand it, to supply any volumes that they require from me but the price is capped. And that protects me, on the capped price. So the oil companies can't say I must supply on at export parity, there must be negotiation on what that price must be, below BFP as is the case today. So I think it can work, sir. But there are difficulties in the wording and we could tighten up with the wording, yes. Have I got a suggestion for you now? I haven't, sir.³¹³

558. This articulates a principle reason why competition authorities hesitate before imposing obligations to supply. Price, as Mr. Oberholster well understands, is always the issue and this obliges the competition authority to impose not merely the obligation to supply but also the price of the product so supplied. In this instance the price specified is a maximum price but that price is the BFP. Even if the condition does not stipulate an actual price it does establish, as Mr. Oberholster is clearly comforted to note, the import parity rather than the export parity as the industry's base price.

559. Little is served by an elaborate re-examination of the recommended condition when its major protagonists – the Commission and the merging parties – concede that it is unworkable, at least in the absence of major reformulation. And if this does not persuade then certainly the witness statement of Mr. Milner for Shell and the cross-examination of Mr. Parr clearly establishes that the condition will serve as little more than a feeding trough for the law profession. Just as the voluminous evidence and the lengthy hearings that have characterised these proceedings have struggled with establishing, for

313 Page 738 of the transcript.

example, the size of shortfall volumes and of available road and rail logistics – two factual determinations at the heart of the proposed condition - so too will these complex factual disputes bedevil expeditious arbitration of the disputes that are bound to arise from the imposition of the proposed condition.

560. Hence, as the Shell heads of argument point out, the obligation to supply imposed by the condition will terminate with the construction of a new pipeline '*capable of carrying [the OOCs] shortfall volumes*'. This necessitates determination of the requirements of each of the OOC. If the determination were 'forward looking' the same problems involved in projecting, for example, rates of growth in demand, that have emerged in these hearings will have to be adjudicated by the arbitrator. And if the determination of the OOCs requirements were made on the basis of a backward look, then there can be no certainty that the requirements of the OOCs, even if adequately met on the day of the commissioning of the new pipeline, would be satisfied into the future. The condition proposed by the Commission gives no indication of the period in respect of which the new pipeline must satisfy the OOC requirements. Certainly our understanding is that the condition would remain in force if, at the time of the commissioning of the pipeline, it could not be shown – to whom is uncertain – that it was capable of carrying the OOCs shortfall volumes. This portends the prospect of the condition pertaining in perpetuity.³¹⁴

561. Nor does the Commission's condition confine the available logistics required to satisfy the OOCs inland requirement to the pipeline. The condition appears to specify that the OOCs shortfall volumes at the time of the commissioning of the new pipeline must be assessed with reference to the quantum of available road and rail logistics at the time of the merger. The pipeline volumes and the road and rail volumes will then be set against the OOCs requirement and this will determine whether or not the pipeline does in fact satisfy the OOCs shortfall and thus terminate the operation of the

³¹⁴ At page 133 of the transcript: *ADV ROGERS: If there is a new pipeline, but it doesn't meet what you attempted to capture in the wording of your condition, namely a new pipeline capable of carrying shortfall volumes. If you do that enquiry when the new pipeline is commissioned and you say well it's not capable of carrying shortfall volumes, however they are defined, assuming you've overcome the other difficulty that we have mentioned, if that leads to a negative answer then it must inevitably also follow the condition be perpetuate in nature? MR PARR: I don't know. You know I haven't really applied my mind to exactly what would be the case, because I think the pipeline does amount to a structural remedy and does then terminate the need for the condition to continue.*

condition. Apart from the difficulty – with which participants in this merger should be only too familiar – of specifying road and rail usage in any given period (and this will be a period at least four years earlier than the commissioning of the pipeline), there can be no certainty that this backward looking assessment will accurately reflect road and rail logistics availability at the commissioning of the pipeline.³¹⁵ Moreover this conceptualisation of road and rail logistics abstracts, as characterises the parties' entire case on logistical capacity, from the price of road and rail logistics. The road and rail logistical capacity may be technically available but it may nevertheless not constitute a commercially viable option.

562. As to the supply obligation itself, we have already indicated the difficulty inherent in terms like 'commercially, financially and technical reasonable'. The best that the merging parties can offer in defence of these terms is the contention that they are widely used and are capable of adjudication. While this may be correct, the greater certainties are that these terms do offer ample room for litigation and, given the strong incentive to foreclose, they will be litigated. Consumers will then bear the consequences of the likely lessening of competition while argument continues.

563. We could go further but this brief overview of the proposed condition clearly establishes its gross shortcomings. In short, the condition lacks clarity and will be extremely difficult to implement and monitor. The competition authorities will have simply abdicated their responsibility to an arbitrator who will effectively become the standing regulator of the fuel industry. This is, to put it mildly, a highly undesirable outcome.

564. The parties have belatedly attempted to tighten up the condition. The revised condition was submitted after the taking of evidence had been concluded – no request was made to re-open the hearings – and shortly before final argument commenced and this despite the fact that the inadequacies of the original condition

³¹⁵ At page 118 of the transcript: *ADV ROGERS*: As you stand there now or sit there now, the question is to how much rail and road infrastructure any one of the OOC's uses, is at least in your mind a matter of total confusion. Is that correct? *MR PARR*: I wouldn't put it so strongly, but it's certainly not readily ascertainable in terms of the position required by that clause.

were conceded by the Commission on the first day of the hearings. The revised supply condition that is proposed runs to some 15 pages and 35 clauses.³¹⁶ We share Shell's concern that evidence has not been led in support of some far-reaching proposed amendments. And they remain predicated on the contention that the only period with which the supply condition need be concerned is the period between the consummation of the merger and the commissioning of the expanded DJP with little effort made to evaluate critically the proposition that the expansion of the DJP will eliminate the prospect of foreclosure.

565. The parties essentially offer to remedy the uncertainties implicit in the wording of the original recommended condition by extending the existing supply contracts between Sasol and the OOCs or by making their terms applicable to new contracts. Again Shell's supplementary heads of argument persuasively outline the capacity for dispute implicit in this offer particularly when regard is had to the introduction of clean fuels regulation. Essentially this means that the basket of fuels provided for in the existing supply contracts cannot meet the OOCs existing and future requirements. Given that we have found that there is an incentive to foreclose we must assume that the merged entity will use whatever means that it has at its disposal in order to respond to this incentive. This will include lengthy and contentious litigation and arbitration. As might be expected in circumstances of such considerable complexity, the revised supply condition leaves considerable room for dispute and thus fails to meet the threshold requirements that, in our view, must be met if we are to accept a behavioural solution to a structural problem: clarity in specification and ease in implementation.

566. At the time that the merging parties presented the revised supply condition – that is,

³¹⁶ The merging parties concede that their proposed supply remedy 'is detailed and probably more so than international remedy precedents' but remark, somewhat enigmatically: 'However, it is to be expected that ingenious lawyers will always find arguments to create potential for dispute whilst businessmen seeking products would rather look for ways to secure supply.' Page 215 of Merging Parties' Heads of Argument. We agree with this observation which is precisely why we cannot preclude the possibility that embodied in the lengthy and complex proposed supply provision – drawn up by 'ingenious lawyers' - is the potential for dispute that would render nugatory the operation of the condition and is precisely why we would prefer the proposal to be subject to the scrutiny of opposing 'ingenious lawyers' and technical experts. See Page 213 of the Merging parties' Heads of Argument.

after the taking of evidence had been concluded and immediately before the commencement of final argument - they also submitted six other conditions. Certain of these – a proposed condition on employment and one on the proposed divestment of the Engen chemicals marketing business – have no bearing on the question of foreclosure. The other four conditions are intended to address foreclosure. These are a proposal for the divestment of 13,64% of Sasol's Natref shares,³¹⁷ a proposal with respect to the allocation of the merging parties' DJP capacity, a proposal to divest an unspecified number of service stations, and, finally a 10 page, 40 clause proposal relating to the purchase of components from Sasol Synfuels and a toll blending arrangement with Uhambo that would have to accompany the acquisition by the OOCs of synfuel components. We note that certain of these conditions were interrelated to the extent that we were advised by the merging parties that were we minded to accept certain of the proffered conditions, then their tender of certain other conditions would fall away.

567. We note again that the parties did not request to lead evidence in support of these proposals nor did they tender an opportunity for the Commission and the intervenors to do so. The proposals were, accordingly, not subjected to cross-examination, and the intervenors' and the Commission's technical and economic experts were not given the opportunity to scrutinise them. It is not clear whether the parties' motivation in presenting these complex proposals in this manner reflects sheer desperation or a deliberate attempt to shelter them from rigorous scrutiny. Given that these conditions entail logistical proposals they required expert comment but they were revealed at the stage when the only adverse comment could be made by the opposing lawyers. Talented as these counsel may be they are not industry experts and could not be expected to make more than lawyerish comments from the bar. Indeed such was the conduct of the merging parties that an amendment to a condition already proposed was only made in reply during final argument, that is, at a time when not even the intervenors' counsel, let alone their witnesses, could scrutinise them. This conduct was criticised by Mr Wilson, one of the few intervenors'

³¹⁷ This despite Mr. Oberholster's identification of the difficulties that would confront a three-way division of Natref's assets and output.

counsel still in the room at that late stage of the proceedings, and rightly so.

568. It needs to be pointed out that there was no reason why this suite of new conditions could not have been tendered at an earlier stage of these proceedings or at the very latest, when the oral hearings commenced. There were no surprises emerging during the oral evidence. All witnesses who testified had given witness statements which were available to the merging parties at least three weeks before the hearings commenced. None of the intervenors' witnesses who gave oral testimony can be accused of emerging with any surprises or departing from the themes in their witness statements.

569. In this context, the merging parties, if they were serious about tendering conditions that they consider to meaningfully alter the competitive outcomes of the merger, should have tendered them at the advance of the proceedings or, at the very least, applied to re-open evidence to have them considered with due seriousness by those best placed to subject them to scrutiny. They chose to do neither. While the Tribunal is loathe to adopt so rigid an approach that parties feel they cannot respond to changes in circumstances, if they feel they can constructively respond to criticism of a merger, we also cannot permit a situation where merger proceedings become an endless moving target, where merging parties once they feel backed into a corner throw out ever-changing undertakings that masquerade as concessions until their critics are either too exhausted or mesmerised to respond.

570. Whilst we offer flexibility to merging parties, we also owe procedural fairness to the intervenors and the Commission, all of whom, and in this case in particular, have brought enormous resources to bear to meet the case that was initially before us and not one that, like Proteus, kept changing shape at the whim of the merging parties. To do so would be to invite our procedures to be abused. Whilst we have considered, to the extent possible, the conditions tendered by the merging parties, we have taken into account that they have not been subject to proper scrutiny and to a fair and proper process.

A brief summary and conclusion

571. South Africa's fuel markets have long been regulated by a government sanctioned private market sharing agreement – the Main Supply Agreement or the MSA – which provided for Sasol's domination of the upstream inland market for refined product, in exchange for the narrow circumscription of Sasol's right to participate in the downstream retail markets. The price stipulated for refined product was the Basic Fuel Price – BFP – which was based on the import parity price and which was used to build up, by the addition of marketing costs including the requisite marketing margins, to the wholesale and retail prices of refined fuel products.

572. 1994 ushered in a government determined to re-regulate these vital markets, including a commitment to de-regulate pricing in the market. Sasol pre-empted the promised era of re- and de-regulation by giving, in 1998, the requisite five-year notice of its intention to terminate the MSA, which then duly terminated in late 2003. In so doing Sasol allowed the genie of competition to escape, and escape it did though constrained in its flight by continuing regulation of many aspects of the fuel markets, including a fixed price for retail petrol.

573. But Sasol had taken a calculated risk. It had gambled that a combination of, firstly, logistical constraints that prevented the easy conveyance of refined product from its competitors' coastal refineries and, secondly, a merger with Engen, the country's largest retailer, would swiftly return the genie to acceptable confines. It would ensure that the merged entity enjoyed downstream pricing power, the better to protect retail margins, and the better to mute feedback from competition in the retail markets to prices in the upstream markets.

574. This then is a merger between the country's largest producer of refined white

fuels – Sasol – and its largest retailer of these products, Engen. The implications for competition of this structural rearrangement of the relationship between the relevant upstream and downstream product markets are exacerbated by logistical constraints that inhibit the conveyance of fuel from the coastal refineries to the country’s largest retail market in the inland. These logistical constraints set the boundaries of the geographic markets as the inland, a market in which the merged entity will enjoy a near monopoly of refinery capacity and in which it will enjoy a retail market share that is considerable on any measure, including in comparison to that of any of its competitors.

575. A market structured in this manner immediately portends the prospect of input foreclosure on the part of the merged entity. That is, the prospect of the merged entity withholding supplies of the critical input – refined product – required by the retail arms of inland fuel marketers. By so doing, the merged entity may expand its own downstream market share, the better to attain pricing power in that market and the better to protect, through the muting of downstream competition, any pressure on the price of its upstream product. It is quite conceivable, and highly likely, that the merged entity may forbear from an all-out foreclosure campaign, provided that its competitors forbear from robust competition in the downstream market and accept the merged entity’s pricing aspirations in the upstream market. These pricing aspirations are clearly stated to be the maintenance of the import parity price base that underpins wholesale and retail prices.

576. However, the inland marketers are themselves all vertically integrated, that is they have access to upstream product out of their own refineries. But these are all based at the coast, some considerable distance from the inland market. The weapon then in this foreclosure battle is logistical capacity, the capacity to convey refined product from the coast to the inland. The other oil companies – the OOCs - have opposed this merger and the core of their opposition rests on their contention that available logistical capacity is insufficient to prevent the

merged entity from foreclosing the inland market.

577. All agree that a certain amount of logistical capacity is available, although, as with most factual averments in this transaction, even the precise amount of logistics currently utilised has been the subject of dispute. All equally agree that currently utilised logistical capacity leaves a large volume of refined product that the inland marketers of the other oil companies are obliged to purchase from the merged entity. The dispute, which has focused much of the voluminous factual evidence presented in this transaction, surrounds the merging parties contention that there is sufficient additional logistical capacity to successfully challenge foreclosure, a contention vehemently denied by the OOCs.

578. We have conducted an exhaustive examination of this evidence. Our examination has focused on those elements that materially impact on the prospects for foreclosure, on rates of growth in demand, on additional significant logistical infrastructure such as the possibility of conveying refined product in the underutilised crude oil pipeline, and on the strategic responses available to the OOCs should the merged entity attempt to foreclose. We have also examined many of the other logistical possibilities that the merging parties have presented despite our strong scepticism that many of these impact materially on a strategic decision to foreclose, or, indeed, to fight against or succumb to foreclosure.

579. While we have been candid in acknowledging that, the best efforts of learned economists and technical experts notwithstanding, few of these factual disputes can be resolved with mathematical precision the evidence clearly points to the credibility of the threat of foreclosure. The merging parties' contentions regarding additional logistical capacity are unpersuasive, as are their arguments which seek to establish the ability of the OOCs to respond to foreclosure in a manner that would materially ameliorate its intended consequences. Certainly, the ability of the coastal refiners to retaliate to the

threatened foreclosure of the inland by foreclosing the coastal markets is severely blunted by the presence of Engen's Enref refinery in the armoury of the merged entity.

580. The pipeline operator, Petronet, has committed itself to a planned expansion of the pipeline capacity, significantly the most cost efficient form of logistics. However, the evidence shows clearly that this will still leave the merged entity with, at least, a four-year window of opportunity to foreclose. In any event, the expanded logistics that will be commissioned by no earlier than late 2010, will only relieve the logistical constraints for a limited period whereupon they will reassert themselves in the face of reasonably projected growth rates in inland demand.

581. We have examined, as the Act requires, the public interest and efficiency implications of this merger. Neither compensate for the negative impact that the merger will have on competition.

582. We have also considered the possibility of the approval of the merger subject to a condition that would ameliorate the transaction's anti-competitive consequences. Behavioural conditions are generally considered inadequate responses to structural problems and, in this instance, the behavioural condition initially proposed by the Commission has been found to be grossly inadequate. The parties belatedly made a play of suggesting alternative conditions but these, though highly complex, were not subject to rigorous scrutiny and nor do we believe that the merging parties intended them to be so scrutinised.

583. Sasol complains that in the absence of the merger it is condemned to permanent exclusion from the country's retail markets. But this averment is clearly at odds with the facts. In the few years since the termination of the MSA, Sasol has already made considerable inroads into both segments of the retail market, in the service station segment and in the commercial and industrial segment. And it has achieved this by means of robust competition

on the merits, including the discounting of the wholesale price.

584. Critically, Sasol has the means to compete even more vigorously. Its wholly-owned Synfuels division controls a highly competitive feedstock particularly in these days of massively inflated crude oil prices. And it enjoys the considerable advantage of the inland location of its Synfuels plant which stands astride its own critical feedstock, South Africa's abundant resources of coal. That Sasol Ltd has chosen to retain all of this competitive advantage – through as we have seen the instrumentality of the Components Supply Agreement – is a strategic choice. If the exigencies of competition compel it to make available these advantages to its downstream wholesale and retail divisions, then it is capable of reconsidering the strategic decision to hold on to all of the monopoly rents that are bestowed by its oil-from-coal technology and its inland location.

585. It is our strongly held view that Uhambo's power to foreclose will end, not necessarily in a massively increased retail market share over that that will be enjoyed immediately upon merger. Rather it will end in a reconstituted cartel, though, unlike the MSA, this cartel will be under the clear leadership of Uhambo. This new cartel will eliminate the competition already ushered in by the termination of the MSA and it will destroy the promise contained in further planned deregulation.

586. In this vein we should note that we are deeply cognisant of the fact that this merger has been bitterly opposed by all of the merging parties' competitors who have devoted enormous resources to persuading us to reject the merger. The merging parties entreat us to view the intervenors' motives with deep suspicion, born of the knowledge that the OOCs are no more likely friends of competition than are the merging parties, and that their true concern is to weaken the emergence of a more powerful competitor in the shape of Uhambo. This is wise counsel - the merging parties are quite correct in their assertion that promoting competition is the least of the OOCs concerns.

587. In the post-MSA world the OOCs first prize, is one that allows a 10-15% retail share to Sasol, and gives to them an 'equitable' share of the rents that Sasol earns from supra-competitive pricing of its refined product in the inland. The OOCs calculate that by preventing this merger Sasol will be forced into a cartel similar in structure and power distribution to the MSA, but in which Sasol is granted a share of the retail rents and they, the OOCs, are accorded a share of the rents from BFP pricing in the inland. But this, the preferred outcome for the OOCs, would be Sasol and Engen's second prize.

588. For Sasol and Engen, first prize is a cartel where they have significant retail share (and thus the lion's share of the retail rents) and in which they earn all the rents that are to be derived from their monopoly of inland supply. This is a post-MSA cartel in which they are the leading force and the principal beneficiary. And so they have decided to merge in pursuit of this handsome prize. But this, the preferred outcome for the merging parties, is decidedly the second prize for the OOCs.

589. Dr. Stillman, the merging parties' economist, is right then in his insistence that a bargaining dispute is at the centre of the differences between the merging parties and intervenors. But it is not simply a price bargain, not, as he would have us believe, simply a disputatious moment in the process of settling on a price for a product – this is the outer form that the dispute takes. In substance it is a bargaining dispute between recently colluding (in the shape of the MSA) oligopolists over new rules for distributing monopoly rents.

590. As tough, well-resourced business institutions each of Uhambo and the OOCs will fight for their preferred outcomes. It is our view that the merged entity will have its way and the outcome will be a reconstituted cartel under the firm leadership of Uhambo. But as pragmatic business people the OOCs (and the merged entity if it was forced to) will also settle for second prize if necessary, if only because there is a third prospect that each of them seeks to avoid.

591. The least desirable outcome for both the OOCs and the merging parties, is a world in which Sasol is forced to compete for market share, in which it is forced to depress the retail price of its offering, something which can only be sustained if Sasol Synfuels is prepared to pass on some of the rents that it derives from its technology and its favoured location **to the consumer.** This is a competitive struggle in which Sasol is well placed to compete with the OOCs. It will, to be sure, depress both its wholesale and retail margins, but, like any wholesaler and retailer in competitive markets, it will seek to compensate for thinner margins through increased volumes. The well-resourced, firmly entrenched OOCs will have to meet this competition and we are confident of their ability to make a fight of it.

592. This – the least desirable option prize for the OOCs and Sasol alike - is the possibility that has been left open by Sasol's termination of the MSA and this is why we have chosen to prohibit a merger which is destined only to secure a less competitive outcome than the one that is now promised, that is indeed already showing distinct signs of life.

Order

593. The proposed joint venture / merger between Sasol Limited, Engen Limited, Petronas International Corporation Limited and Sasol Oil (Pty) Ltd is prohibited.

D. Lewis

23 February 2006
Date

Concurring: **N. Manoim, Y. Carrim**

For the Merging parties:

Advocate S Cilliers SC, Advocate M Van der Nest SC, Advocate H Maenetje, Advocate P McNally, Advocate H Shozi and Advocate F Snyckers instructed by

Edward Nathan Corporate Law Advisors.

For the Commission:

Mr. T Bonakele (Legal Services) and Ms. L Khumalo (Mergers & Acquisitions).

For the Intervening parties:

For BPSA: Advocate V. Maleka SC, Advocate A. Gotz and Advocate R Pearse instructed by Webber Wentzel Bowens and MNMR Attorneys.

For Shell: Advocate O Rogers SC and Advocate J. Wilson instructed by Cliffe Dekker Inc.

For Masana: Advocate E Fagan instructed by Webber Wentzel Bowens

For Caltex: Advocate D. Unterhalter SC and Advocate M. Wesley instructed by Deneys Reitz Inc.

For TOTAL: Advocate J Gauntlett SC and Advocate A Cockrell instructed by Werksmans Attorneys.

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APPENDIX A

Competition Commission's Conditions³¹⁸

The following conditions shall apply until a new petroleum products pipeline from Durban to Johannesburg to Tshwane has been constructed and makes available to OOCs a transportation infrastructure capable of carrying their shortfall volumes:

1. Subject to 3 below, the merged entity shall, on written request by any OOC, and on terms that are commercially, financially and technically reasonable, supply such OOC with such shortfall volumes or part thereof as may be requested.

2. Without derogating from 1 above, the selling price to be charged by the merged entity for any such supply shall not—

2.1 exceed a price determined according to the formula which is used to determine BFP at the relevant time plus the prevailing transport price determined for inland locations;

2.2 discriminate against any OOC or in favour of any business within the merged entity or any of its subsidiary or associated entities.

³¹⁸ From page 44 of the Commission's Report.

3. In the event of the merged entity being unable to supply the full volumes of refined petroleum products requested by the OOCs as contemplated in 1 above, as well as the volumes required by itself and its subsidiaries and associated entities, the merged entity shall reduce its supply of each affected product to each such OOC and to itself and its subsidiaries and associated entities pro rata to the volumes of such product supplied to each such OOC and to itself and its subsidiary and associated entities during the preceding three months.

4. Upon the written request of any OOC aggrieved by any alleged specific failure or refusal of the merged entity to comply with the above conditions, the merged entity — in the event that it does not admit the alleged failure or refusal and remedy the same forthwith — shall, within ten days of the request, offer to that OOC in writing an expeditious arbitration procedure on reasonable terms for the determination of the dispute, and for the making of any consequent award to ensure compliance, which procedure shall be binding on the merged entity and on that OOC upon acceptance of the offer of arbitration in writing by the latter. While any dispute remains subject to arbitration as above, the merged entity shall, if the aggrieved OOC so requires, and subject to any necessary pro rata adjustment in volumes provided for in 3 above, continue to supply any refined petroleum products affected by the dispute on the same terms as such products were supplied to that OOC immediately before the dispute arose.

5. The provisions of 4 above are not intended to affect in any way the powers and duties of the Competition Commission or the Competition Tribunal, in terms of the Competition Act and the Rules in force thereunder, in dealing with any alleged non-compliance by the merged entity with the above conditions.

6. Reports to the Commission:

6.1 The merged entity shall provide a quarterly written report to the Competition Commission, signed by a responsible person, indicating the volumes and prices at which refined petroleum products have been supplied to businesses within the merged entity and any of its subsidiary or associated entities and supplied to OOCs pursuant to the above conditions. Each such report shall be due not later than one month after the end of the quarter to which it applies. The first such report shall be due not later than one month after the first full quarter following approval of the merger and shall include information for the period between the approval of the merger and the commencement of the first quarter.

6.2 The merged entity shall provide annually to the Competition Commission an auditor's certificate confirming the correctness of, or qualifying, as the case may be, the information contained in the quarterly reports referred to in 6.1 above.

6.3 In the event of the merged entity reducing its supply of any refined petroleum product under circumstances contemplated in 3 above, it shall, within ten days of such reduction, notify the Competition in writing accordingly.

In these conditions, the following expressions shall have the following meanings:

(a) "shortfall volume", in relation to any OOC, shall mean the volume of refined petroleum products, in combination or individually as the case may be, required by that OOC for the inland market, and inland for the export market, at the relevant time in excess of the volume that can reasonably be transported through the then existing pipeline infrastructure together with such utilisation of the rail and road transportation infrastructure as is used by the OOC concerned at the time the merger is approved;

(b) "OOO" shall mean oil companies and their subsidiary and associated entities which, at the time the merger is approved, have been obtaining supplies of refined petroleum products from any of the merging parties, and shall include new entrants requiring refined petroleum products for the

inland market, or inland for the export market (provided that “OOC” shall not include any of the merging parties or their subsidiary and associated entities).