CALTEX
Caltex Australia

Application by BARA for declaration of services provided by jet fuel infrastructure

Service No 2: provided by the Caltex Pipeline Facility

Submission by Caltex Australia to the National Competition Council

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PUBLIC VERSION

Contents

Executive summary

1 On 16 December 2011, the National Competition Council (**NCC**) published its draft recommendations in relation to jet fuel supply infrastructure at Sydney Airport (**Draft Recommendation**).

2 Caltex welcomes the NCC's draft recommendation that the Minister not declare the services provided by means of the Caltex Jet Fuel Pipeline.

Summary of Caltex's position

- Caltex welcomes the NCC's Draft Recommendation that the Minister not declare the services provided by means of the Caltex Jet Fuel Pipeline.
- Caltex strongly supports the NCC's conclusion that there are substantial costs and risks associated with allowing regulated access to the Caltex Jet Fuel Pipeline, and that access would not promote a material increase in competition in any relevant market.
- Caltex agrees with the NCC's finding that jet fuel supply to Sydney Airport is not characterised by excessive prices or other manifestations of market power, consistent with its submission in response to the BARA Application dated 21 November 2011 (and subsequent correspondence dated 29 November 2011) (together, the **Caltex First Submission**) and the expert opinion of NERA, submitted on behalf of Caltex (**NERA First Report**).
- The NCC has correctly rejected suggestions that there has been a withholding of access and has concluded that issues in relation to reliability are not access related, but arise from capacity constraints.
- However, Caltex submits that the competitive significance of trucking should be given greater weight, and invites the NCC to consider further information provided by Caltex in this submission.
- The principal area in which Caltex does not support the NCC's conclusions is in relation to whether it is uneconomic to develop another facility to provide the service. In particular, Caltex disagrees with the NCC's conclusion that because there will be, for a time, spare capacity on the Caltex Jet Fuel Pipeline, it would be uneconomic for another party to develop a competing facility in that time period.
- Caltex submits that the approach adopted by the NCC is not consistent with Full Court precedent, and is inconsistent with a rigorous economic approach to the question of whether, in circumstances where access to the Caltex Jet Fuel Pipeline was not made available to third parties, it would be economical for a person to develop another facility. That question should be answered by reference to the potential over the economic life of the pipeline to recover its costs.
- Further, Caltex submits that the narrow service definition proposed by BARA and accepted by the NCC is artificial and does not reflect the actual nature of the relevant service.
- In summary, Caltex considers that the NCC has reached (on a preliminary basis) the only conclusion available to it, that is, that it cannot be satisfied that the relevant criteria are satisfied. Caltex submits that, while it does not agree with all aspects of the Draft Recommendation, the NCC should finalise its position and recommend to the Minister that the services provided by means of the Caltex Jet Fuel Pipeline not be declared.

3 The Draft Recommendation reflects the NCC's conclusion, based on its preliminary findings in relation to the supply of jet fuel to Sydney Airport, that there are substantial costs and risks

associated with allowing regulated access to the Caltex Jet Fuel Pipeline and that access would not promote a material increase in competition in any relevant market, including relevantly the markets in which jet fuel is supplied to airlines operating out of Sydney Airport.

4 Caltex strongly supports those conclusions, which are consistent with both the Caltex First Submission and the NERA First Report.

5 The NCC's conclusions rest on its findings that jet fuel supply to Sydney Airport is not characterised by excessive prices or other manifestations of market power.[1] The NCC has recognised the important competitive constraint of the Shell Jet Fuel Pipeline, and its potential enhanced constraint as a source of transport for imported jet fuel once the Clyde refinery is decommissioned. It is submitted that this singular feature of the supply of jet fuel to Sydney Airport of itself should be sufficient to support a recommendation not to declare the service.

6 The Draft Recommendation reflects an assessment that there is a competitive tender market for the supply of jet fuel to Sydney Airport, in which Caltex already provides access to its Jet Fuel Pipeline to third parties, and that issues around access to the Caltex Jet Fuel Pipeline have not hindered competition in the supply of jet fuel to Sydney Airport.

7 The NCC has questioned the competitive significance of trucking as a transport option. In this submission, Caltex provides further information to the NCC to establish the existing and potential competitive use of trucking as an alternative to the Caltex Jet Fuel Pipeline, which Caltex invites the NCC to consider in making its final recommendation.

8 Caltex's analysis shows that trucking capacity could be significantly increased with little investment in new infrastructure. Using existing infrastructure, approximately 305 ML of jet fuel could be trucked from the Vopak Terminal to Sydney Airport each year. This represents approximately 9% of forecast jet fuel demand at Sydney Airport in 2014.[2] Trucking capacity could be further expanded by investing in a new bridger facility at the Sydney JUHI, at a cost of approximately $460,000.[3]

9 This information demonstrates the significant potential of trucking as a competitive alternative, at least to a material degree, to the Caltex Jet Fuel Pipeline. Trucking is a viable option and competitive constraint on pipeline operators. Current low utilisation of trucking reflects the availability on commercial terms of access to the Caltex Jet Fuel Pipeline, not the infeasibility of trucking. Trucking is relevant to the assessment under both criteria (a) and (b).

10 The NCC has correctly rejected suggestions that there has been a withholding of access and has concluded that issues in relation to reliability are not access related, but arise from capacity constraints.

11 The NCC has noted concerns raised at a general level by a few airlines about a lack of response to some tenders. The NCC has, correctly in Caltex's submission, stated that these concerns are more likely to reflect overall supply constraints than a lack of competition. However, Caltex notes the NCC's comment that it is difficult to reach a firm conclusion on this matter without further information. For that reason, in this submission, Caltex has included information about Caltex's decision making process in relation to deciding whether and how to respond to tenders.

12 The NCC has noted that where infrastructure is at capacity, declaration is likely to be ineffective in introducing or increasing access. Further, in reaching its conclusions on the costs and risks of declaration of the service, the NCC has recognised the material risks to investment of declaring the Caltex Jet Fuel Pipeline. In this regard, the NCC has noted the need for further investment in transport capacities to meet the projected demand for jet fuel at Sydney Airport. Caltex submits that the NCC is correct in its assessment that those risks are not outweighed by

[1] Draft Recommendation, [4.58].

[2] Based on forecast annual jet fuel demand at Sydney Airport of 3472 ML in 2014. See SJFIWG Report, 30.

[3] SJFIWG Report, 39.

any competition benefits, and accordingly that declaration would be contrary to the public interest.

13 In its Draft Recommendation, the NCC considered analysis from Qantas as to the likely requirements for future investment in transport capacity and the extent to which there may be spare capacity. The Qantas analysis is reflective of similar analysis presented by Caltex, although it does not address all relevant considerations (including the requirements for capacity to achieve a replenishment rate above actual daily usage). In this submission, Caltex has provided further information in relation to the anticipated requirements for future capacity to transport jet fuel to Sydney Airport.

14 In particular, when the minimum replenishment rate is taken into account, both the Qantas analysis and the Caltex analysis shows that a new pipeline is required from around 2018 to 2019, and potentially earlier if the Clyde conversion does not result in 100% utilisation of the Shell Jet Fuel Pipeline.

15 The principal area in which Caltex does not support the NCC's conclusions is in relation to whether it is uneconomic to develop another facility to provide the service. In this submission, Caltex addresses the approach adopted by the NCC to this question, which largely rests on a conclusion that where there will be, for a time, spare capacity on the Caltex Jet Fuel Pipeline (based on current and proposed investments by Caltex to expand capacity to meet projected demand), it would not be economic for another party to develop a competing facility in that period.

16 Caltex's submission addresses the following aspects of the NCC's conclusion:

(a) The appropriate legal test for assessing whether a facility is uneconomic to duplicate.

In this respect, it is submitted that the approach adopted by the NCC is not consistent with either the current prevailing legal approach as reflected in the Pilbara Full Federal Court decision or alternative natural monopoly or social cost analysis.

The appropriate legal test is to consider whether, if access to the Caltex Jet Fuel Pipeline was not available, it would be economically feasible for an access seeker to develop another means that would provide the service required, so that it could compete in the downstream market.

(b) Whether, as a matter of economics and fact, it is uneconomic for another person to develop an alternative facility to provide the service simply by reason of the presence of potential spare capacity in the short term.

In this respect, it is submitted that the factual material before the NCC is insufficient to establish that it is uneconomic to develop another facility to provide the service.

The economics of a long term pipeline investment are not governed by questions of potential short term spare capacity, but the potential for the pipeline, over the economic life of the investment, to recover its costs (including recovery of those costs through returns in the downstream supply of jet fuel).

Furthermore, even where it is the case that there may be delayed investment in new pipeline capacity (because of available capacity on the Caltex Jet Fuel Pipeline), the NCC's conclusions do not properly consider the option of trucking as a viable alternative facility in the short term period.

To assist the NCC in this regard, Caltex has obtained a report from ACIL Tasman, recognised experts in fuel supply chain economics, which addresses the question of the economics of developing an alternative facility to provide the service.

(c) The approach to service definition.

Caltex had submitted that the appropriate service definition is the service of transporting jet fuel from an import available storage facility to the Sydney JUHI. The NCC has assessed criterion (b) by reference to a service definition of jet fuel transported from the Vopak Terminal (at Port Botany) to the Sydney JUHI, including any ancillary equipment necessary for the operation of the specified part of the Caltex Jet Fuel Pipeline.[4]

In this respect, it is submitted that it is open to the NCC and appropriate to consider each of the criteria, and importantly criterion (b), in the context of a service definition which practically reflects the nature of the service required, which in this case is the transport of imported jet fuel to Sydney Airport. Adopting this approach allows a proper consideration of the Shell Jet Fuel Pipeline. (It is recognised that the NCC does consider the Shell Jet Fuel Pipeline under criterion (a) and perhaps implicitly in the reaching its conclusions on criterion (f)).

The artificiality of the alternative approach proposed by BARA is manifest in that it excludes from the analysis of criterion (b) the essential fact that there is an alternative facility that can transport imported jet fuel to Sydney Airport. That this facility may be owned by one other operator and may or may not be available to third parties, is irrelevant to the analysis under criterion (b).

It is also noted that the Caltex First Submission, while advancing a functional and realistic service definition, did squarely address in detail the narrower question as to whether it would be uneconomic to duplicate the pipeline from the Vopak Terminal (or other import storage terminals in Port Botany) to Sydney Airport.

17 Caltex also asked ACIL Tasman to consider whether, based on available information, it is economic to duplicate the Caltex Jet Fuel Pipeline. In its report submitted to the NCC (**ACIL Tasman Report**), ACIL Tasman concludes that "*having regard to our experience in assessing the cost and economic viability of investments in the fuel supply chain and in other industries, we consider that, on the information available, it would be economic (ie that is viable) for another person to duplicate the Caltex Jet Fuel Pipeline from the Vopak Terminal to the JUHI starting from 2014*".[5]

18 Caltex has sought not to repeat in these submissions on the Draft Recommendation the Caltex First Submission. However, Caltex continues to rely on the information and submissions contained in its First Submission. Caltex has also submitted a short second report from NERA responding to relevant aspects of the Draft Recommendation and a report from ACIL Tasman.

19 Capitalised terms used in this submission have the meanings set out in the Caltex First Submission.

[4] Draft Recommendation, [2.17] - [2.18].

[5] ACIL Tasman, *Economics of a new jet fuel pipeline from Vopak terminal*, February 2012, 2.

1 Promotion of competition

20 The NCC concluded in its Draft Recommendation that criterion (a) is not satisfied in respect of the BARA Application as it relates to the Caltex Jet Fuel Pipeline. Caltex agrees with this overall conclusion, and submits that it is the only conclusion that the NCC could have reached on the basis of information before it.

21 In particular, Caltex supports the following findings:

- Any promotion of competition in a market for international and domestic freight and passenger services would be likely to be a derivation of the promotion of competition in another market,[6] and therefore need not be separately considered in the assessment of criterion (a). In any case, Caltex considers that there would not be any material promotion of competition in that market for international and domestic freight and passenger services (or indeed in any dependent market).

- Jet fuel supply to Sydney Airport is not characterised by excessive prices or other manifestations of market power, and a high HHI of itself does not lead to any relevant conclusions.[7] Those observations accurately reflect the competitive nature of the industry.

- The price differentials (as put forward by BARA and IATA), including the methodologies used in compiling that data, are deficient in so many respects that they can only be "*of very limited, if any, value in establishing a case of either excessive pricing of jet fuel or an abuse of market power*".[8] Caltex submits that on that basis the BARA Application, which heavily relies on the pricing differentials and effectively assumes excessive prices and market power, should be rejected.

- The Shell Jet Fuel Pipeline must be considered in the competition analysis, and its underutilisation and the conversion of Shell's refinery are relevant to competition in the market for supply of jet fuel.[9] Any promotion of competition in the supply of jet fuel at Sydney Airport is therefore likely to arise from market forces and the factual circumstances that currently exist rather than any declaration or access or increased access to the Caltex Jet Fuel Pipeline. As acknowledged in the Draft Recommendation, "*[w]ith the critical jet fuel infrastructure undergoing a degree of change and investment, the market is likely to experience opportunities for increased, or at least enhanced, competition that are not dependent on access or declaration under Part IIIA*".[10]

- Importantly, as noted in various submissions and accepted by the NCC, "*issues around reliability are not access related, but arise from capacity constraints on the supply infrastructure*".[11] Of note, this point was made by parties that are participants in the supply chain between Port Botany and Sydney Airport, including Qantas[12] and Q8[13].

- Declaration would not necessarily increase access to the Caltex Jet Fuel Pipeline. As the NCC recognised:

  – declaration does not subject a facility to a common carriage regime where all parties are given equal access and an arbitrated access determination cannot deprive an existing user of a declared service of the right to a sufficient amount of the service to meet its reasonably anticipated requirements or prevent a person

[6] Draft Recommendation, [4.12].

[7] Draft Recommendation, [4.58].

[8] Draft Recommendation, [4.24].

[9] Draft Recommendation, [4.59].

[10] Draft Recommendation, [4.76].

[11] Draft Recommendation, [4.60].

[12] Qantas Submission, 11.

[13] Q8 Submission, 1-2.

from obtaining pre-notification rights to a sufficient amount of a service to meet the person's actual requirements.[14] Very large portions of the capacity on the Caltex Jet Fuel Pipeline are therefore likely to remain reserved for existing users, even in the event access disputes are taken to the ACCC.[15] The NCC therefore accurately recognised that the effect of these requirements is likely to limit the amount of access or increased access that might be available and consequently any effect of access on competition; and

– where infrastructure is at capacity, declaration will likely be ineffective in introducing or increasing access. As aptly put by the NCC, "*declaration cannot create additional capacity where none exists*".[16]

- In relation to into-plane services, barriers to entry are low[17] and not dependent on access to the Caltex Jet Fuel Pipeline.[18] Given these factors, the lack of recent entry is telling – suggesting that there is sufficient competition in into-plane services and access or increased access to the Caltex Jet Fuel Pipeline is unlikely to promote competition.

- It follows from the above that access would not promote competition in the supply of jet fuel at Sydney Airport or in the supply of into-plane services at Sydney Airport, and criterion (a) cannot be satisfied.

22 While the NCC found that competition in the supply of jet fuel would be unlikely to be promoted by access or increased access to services provided by the Caltex Jet Fuel Pipeline, Caltex recognises that the NCC did not consider that it had sufficient information to reach a firm conclusion in relation to whether or not access could improve tender responses and reliability.[19] Caltex submits that the preliminary conclusion reached by the NCC, that is, that concerns about a lack of response to some tenders is more likely to reflect overall supply constraints than a lack of competition that could be rectified by access or increased access, is correct. However, in light of the NCC's interest, further information in relation to tendering is set out in the section below.

2 Tendering

2.1 Caltex tendering considerations

23 As discussed in the Caltex First Submission, most airlines purchase jet fuel through international tenders that cover a number of airports worldwide. Response to these tenders is coordinated on a global scale by jet fuel suppliers. In Caltex's case, Chevron (which owns 50% of CAL) has been appointed as Caltex's agent for this purpose, and assembles a global bid for presentation to the airlines that incorporate supply to all Australian airports that Caltex is able to supply. Caltex coordinates Australian tenders.

24 Even at a domestic level, tenders cover a number of airports. It is very unusual for Caltex to be asked to respond to a tender for the supply of jet fuel solely at Sydney Airport.

25 The only circumstances in which Caltex is aware of airlines putting out tenders in relation to Sydney Airport alone are:

- when an airline is commencing operations at Sydney Airport for the first time; or

- when an airline decides to increase significantly its flights into Sydney Airport.

[14] Draft Recommendation, [4.72].
[15] Draft Recommendation, [4.72].
[16] Draft Recommendation, [4.74].
[17] Draft Recommendation, [4.83].
[18] Draft Recommendation, [4.82].
[19] Draft Recommendation, [4.61].

26 Decisions around tendering reflect a number of criteria that affect whether a supplier will respond to a request for tender, and the nature of any response. Given the NCC's statements about tendering, and the concerns expressed by some airlines, it is useful to set out in some more detail how Caltex, as a supplier of jet fuel, makes decisions in relation to responding to requests for tender.

27 In deciding whether to submit a bid to supply jet fuel, Caltex considers a number of criteria. The criteria are not necessarily definitive, but will influence Caltex's decision-making processes. [**c-i-c**] [redacted]

[redacted]

[**/c-i-c**]

28 While these are the criteria Caltex considers, other jet fuel suppliers are likely to consider similar criteria. It can be seen that there are a number of criteria that can influence a decision not to respond to a request for tender, which are unrelated to matters of competition.

2.2 Caltex pricing over time

29 [**c-i-c**] [redacted]

[**/c-i-c**]

30 As discussed in Caltex's First Submission, jet fuel prices comprise a floating benchmark, plus a fuel differential, which is a function of costs above the MOPS. The differential must cover (at least): freight costs, terminal fees (ie, for storage and throughput of jet fuel at the refinery or import terminal), transportation fees, throughput fees charged by SACL, fees for use of the Sydney JUHI, into-plane fees, the cost of credit and a risk premium to cover exchange rate and shipping volatility.

31 Over the last 10 years the market price of jet fuel has increased. This increase is attributable to several factors, including:

- Increases in the MOPS price of jet fuel: As noted in the Caltex First Submission, MOPS is a function of MOPAG (Arab Gulf) fuel prices, plus freight costs from the Arab Gulf to Singapore. Between 2003 and 2011, the MOPS price of jet fuel increased by approximately 282%, from US$32.90 per barrel to US$125.71 per barrel.[20] This has, in turn, resulted in an increase in the price of jet fuel and an increase in the cost of credit incurred by jet fuel suppliers.

- Rising sea freight costs: In recent years, the cost of shipping jet fuel to Australia has also increased. A major component of shipping costs is the cost of fuel oil, which fuels the ships. Between 2003 and 2011, the cost of fuel oil in US Dollar terms increased by approximately 282%.[21]

- Increases in other input costs, including labour and electricity costs, as well as inputs such as the steel used for building terminals: Data from the Australian Bureau of Statistics indicates that, between 2003 and 2011, private sector labour costs across all industries in Australia increased by approximately 34%.[22] Electricity[23] and steel[24] prices have also increased over this period.

- Exchange rate fluctuations: Fuel differentials are calculated in US Dollar units. However, many local supply chain costs, including ports, storage, infrastructure, transportation and estimated Sydney JUHI and into-plane costs are determined in Australian Dollars. Increases in the value of the Australian Dollar increase the cost of these inputs in US Dollar terms and therefore increase the total fuel differential. Between 2003 and 2011,

[20] Platts, MOPS data for jet fuel.

[21] Platts, MOPS data for HSFO 180cst

[22] Australian Bureau of Statistics, Labour Price Index, Australia, September 2011.

[23] The increase in electricity prices is demonstrated by the increase in the electricity price component of the consumer price index. Data from the Australian Bureau of Statistics indicates that, between 2003 and 2011, the electricity price component of the consumer price index for Sydney increased by approximately 125%. See Australian Bureau of Statistics, Consumer Price Index, Australia, December 2011.

[24] Between 2003 and 2011, the iron and steel index increased by 36%. See Australian Bureau of Statistics, Producer Price Indexes, Australia, December 2011.

the value of the Australian Dollar against the US Dollar has increased by approximately 58%.[25]

32 In these circumstances, Caltex submits that the increases that have occurred in the jet fuel differential in recent years merely reflect changes in the operating conditions at Sydney Airport and in Australia more generally. They are not an indication of a lack of competition in the supply of jet fuel at Sydney Airport. The competitiveness of jet fuel supply is discussed at length in the Caltex First Submission.

3 Trucking

3.1 Overview

33 In the Draft Recommendation, the NCC has questioned the competitive significance of trucking as a transport option. While recognising that the supply of jet fuel by truck does occur at Sydney Airport, the Draft Recommendation concludes that trucking is, and is likely to remain, at the periphery of jet fuel supply because it appears to be used in response to outages or other difficulties in transporting jet fuel by pipeline or to meet some other occasional or low-volume-bespoke requirement.[26] This conclusion appears to be based on the findings of the SJFIWG Report that trucking of jet fuel into the Sydney JUHI is possible, but not normally undertaken.[27] As such, the Draft Recommendation finds that trucking "*is best viewed as a complementary mechanism to the use of pipelines rather than as a competitive substitute or alternative*".[28]

34 The current utilisation of trucking reflects current commercial conditions and does not give a complete indication of its potential as a competitive constraint. What is important is what is commercially feasible, and in particular, what could be done if third parties did not have access to the Caltex Jet Fuel Pipeline. As discussed in section 3.2 below, trucking has been, and is, used to transport jet fuel to many Australian airports, including Sydney Airport, and there is the potential for trucking volumes to be increased. In this sense, trucking acts as a constraint on Caltex as a pipeline operator. In the context that Caltex provides commercial access to the Caltex Jet Fuel Pipeline, it is not surprising that trucking has not been used more extensively. In this regard, NERA has noted that:

> "*The [current] modest level of trucking may simply reflect the fact that:*
>
> - *there are rarely any difficulties associated with transporting jet fuel by means of the Caltex pipeline (or by the Shell pipeline); and*
> - *Caltex has offered prices that are consistent with the competitive level...*
>
> *In other words, the „peripheral' use of trucks may simply be symptomatic of the fact that they are not needed very often. However, that does not mean that trucking is „not a competitive substitute', and has no effect on the prices that Caltex can charge.*"[29]

35 The Draft Recommendation conclusions in relation to the significance of trucking do not appear to be based on substantive data such as an assessment of the relative costs of, or capacity for, trucking at Sydney Airport.

36 To aid the NCC in its assessment of trucking as a competitive option, in this submission, Caltex sets out additional information in relation to trucking, which supports a finding that trucking is a viable option and competitive constraint on pipeline operators.

[25] Reuters, Hedge Settlement Rate Australia.

[26] Draft Recommendation, [4.38].

[27] SJFIWG Report, 25. Referred to in the Draft Recommendation, [4.42].

[28] Draft Recommendation, [4.43].

[29] NERA Economic Consulting, *Review of Draft Recommendations*, 13 February 2012, 5-6.

3.2 Current and potential use of trucking in Australia

37 As noted in the Caltex First Submission, Caltex uses trucks to transport jet fuel to Williamstown, Canberra and Melbourne airports. Caltex understands that third parties also use trucks to transport jet fuel to on-airport storage facilities in these and other locations. The table below lists the parties supplying jet fuel by truck at major Australian airports in capital cities, to the best of Caltex's knowledge. Caltex notes that at smaller and regional airports, all jet fuel is transported by truck.

Table 1: Parties trucking jet fuel to major Australian airports

Airport	Suppliers trucking jet fuel to airport
Sydney	BP
Canberra	BP, Caltex, Shell
Melbourne	Caltex, Shell, ExxonMobil
Brisbane	No road access is provided to the JUHI
Adelaide	BP, Shell, ExxonMobil
Darwin	BP, Shell
Perth	No road access is provided to the JUHI

3.3 The use of trucking at Sydney Airport

38 The Draft Recommendation notes that BP currently transports jet fuel from the Vopak Terminal to the Sydney JUHI using trucks.[30] However, the Draft Recommendation appears to discount the significance of this supply, stating that it represents a small proportion of the total volume of jet fuel supplied at Sydney Airport.[31] The volume of jet fuel transported from the Vopak Terminal to the Sydney JUHI using trucks could be increased relatively quickly with little investment in new infrastructure.

39 Caltex understands that there is currently one truck loading facility at the Vopak Terminal. There are also truck unloading facilities at the Sydney JUHI, which can receive jet fuel from single barrel road tanker trucks. These trucks have a maximum capacity of approximately 35 KL.

40 Caltex estimates that, using road tanker trucks and without installing any new facilities at the Vopak Terminal or Sydney Airport, approximately 305 ML of jet fuel could be trucked to the Sydney JUHI each year. The calculations underlying this estimate are shown in Table 2 below, and represent conservative estimates of trucking capabilities.

[30] Draft Recommendation, [4.39].

[31] Draft Recommendation, [4.39].

Table 2: Volume of jet fuel transported from the Vopak Terminal to the Sydney JUHI

Figure		Source and calculations
Total number of days on which jet fuel can be trucked to the Sydney JUHI per year	362.7 days	This figure is based on there being 52.1 weeks per year, 7 days per week and 2 holidays per year. That is, this figure has been calculated as: (52.1 x 7) – 2 = 362.7 days
Total number of hours during which jet fuel can be trucked to the Sydney JUHI per day	24 hrs	This figure is based on two 12 hour shifts. That is, this figure has been calculated as: 2 x 12 = 24
Time required to unload jet fuel from a road tanker truck into the Sydney JUHI	1 hr	Caltex estimate based on experience trucking jet fuel in other locations
Maximum number of trucks that can be received at the Sydney JUHI per day	24	This figure is based on each truck taking one hour to unload jet fuel at the Sydney JUHI
Volume of jet fuel that can be transported to the Sydney JUHI by each single barrel road tanker truck	35 KL	This figure is based on the maximum capacity of single barrel road tanker trucks
Maximum volume of jet fuel that can be transported to the Sydney JUHI per day using single barrel road tanker trucks	840 KL	This figure is based on the Sydney JUHI receiving 24 single barrel road tanker trucks, carrying 35 KL of jet fuel, per day. That is, this figure has been calculated as: 24 x 35 KL = 840 KL
Volume of jet fuel that can be transported to the Sydney JUHI per year by single barrel road tanker trucks (without further investment)	**304,668 KL**	This figure assumes that jet fuel is trucked to the Sydney JUHI an average of 362.7 days per year. That is, this figure has been calculated as: 362.7 x 840 KL = 304,668 KL

41 Based on the NCC's findings that BP accounts for only a small proportion of the total amount of jet fuel supplied into the Sydney JUHI, Caltex considers that BP is unlikely to be making full use of the available trucking capacity. As such, there is likely to be significant scope for expansion in the volume of jet fuel supplied into the Sydney JUHI by truck.

42 As noted in the Caltex First Submission, trucking capacity to Sydney Airport could be further increased by installing a new bridger facility at the Sydney JUHI. Caltex's preliminary estimates are that, following the installation of new facilities at the Sydney JUHI, up to 500 ML of jet fuel could be transported to Sydney Airport using trucks each year.

43 It should also be noted that, any future redevelopment or relocation of the jet fuel storage facilities servicing Sydney Airport, either on or off airport, may result in the installation of additional truck off-loading facilities which would enable an even greater volume of jet fuel to be supplied to Sydney Airport using trucks.

44 The information set out above demonstrates that there is currently spare trucking capacity between the Vopak Terminal and the Sydney JUHI and that additional capacity could be generated with only a modest investment in new infrastructure. Caltex submits that, in these

circumstances, trucking is a viable alternative means of supplying jet fuel to Sydney Airport. NERA has also reached this conclusion, stating:

> *"These findings [set out in the NERA First Report] suggest that any attempt by Caltex to increase the price it charged for pipeline capacity above the competitive level could well see a significant increase in the amount of trucking. In other words, trucking may represent a close economic substitute for the Caltex pipeline (and shell pipeline)."*[32]

45 Caltex considers that trucking constitutes a greater competitive constraint than the term "complement" would suggest and that, even as a complement, trucking has the potential to play an important role in the dynamics of jet fuel supply at Sydney Airport. The information set out above demonstrates that very substantial quantities of jet fuel can be trucked to Sydney Airport at relatively low cost. Through modest investment, a party could begin to build volumes in advance of the time at which an additional pipeline is required. In this way, trucking can be used to "fill in the gaps" in capacity requirements, and underpin eventual investment in a new pipeline, without the need to make a lumpy investment absent established volumes.

3.4 Other submissions in relation to trucking

46 Submissions from parties other than Caltex also acknowledge trucking as an alternative to the Caltex Jet Fuel Pipeline. For example:

- Q8 stated: "*The Caltex pipeline is not the only method of supplying the airport with Jet Fuel, with both a truck unloading facility and the pipeline from the Shell Clyde Refinery in existence at JUHI*";[33]
- the Sydney JUHI noted: "*Jet fuel can also be delivered to the JUHI via trucks. For example, trucks can be loaded at a terminal (for example, Banksmeadow, Parramatta and Vopak) for road transport of jet fuel. Some jet fuel is currently trucked by BP into the JUHI from the Vopak terminal*";[34] and
- RBB noted that transport costs "*can vary considerably according to the type of transport vehicle used to supply jet fuel to a particular airport. Variations of such transport could include rail, truck or pipeline transport, each of which imply the product is delivered at varying costs*".[35]

47 It can be seen from the above that trucking is already used at Sydney Airport, and has the potential to be used to a greater extent.

3.5 Constraints on the use of trucking to supply jet fuel to Sydney airport

48 The Draft Recommendation indicates that transporting large volumes of jet fuel using trucks would create significant congestion at Port Botany, Sydney Airport and on the roads between those sites.[36] This appears to be based on the findings of the SJFIWG Report. Caltex acknowledges that the SJFIWG Report found that "*[t]rucking significantly increases congestion around the **immediate JUHI area***"[37] (emphasis added). However, Caltex notes that the SJFIWG Report did not raise any concerns about the impact of increased trucking on traffic levels at Port Botany and/or on roads between Port Botany and Sydney Airport.

49 Caltex does not believe that increased used of trucking to transport jet fuel to Sydney Airport would have any material impact on traffic conditions in the Port Botany area. The route typically followed by trucks transporting jet fuel from the Vopak Terminal to the Sydney JUHI is just 10km in length.

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32 NERA Economic Consulting, *Review of Draft Recommendations*, 13 February 2012, 6.

33 Q8 Submission, 2.

34 JUHI Submission, [31].

35 RBB Report, 8.

36 Draft Recommendation, [4.40].

37 SJFIWG Report, 40.

50 In addition, the total number of truck movements required to transport jet fuel to Sydney Airport would be dwarfed by the relative scale of operations in the Port Botany area. A report prepared by Sydney Ports Corporation in 2008 indicates that, in 2006, 1.44 million TEUs (twenty foot equivalent units) were imported into and out of Port Botany. Of these units, 1.15 million or 80% were moved by road.[38] This resulted in approximately 3,500 truck movements per day.[39]

51 The information provided by Caltex in section 3.3 above shows that, using existing infrastructure, an additional 305 ML of jet fuel could be trucked from the Vopak Terminal to Sydney Airport per year using road tanker trucks. This would require just 24 truck movements to and from the Sydney JUHI. This represents less than 1% of the total number of truck movements into and out of Port Botany in 2006 and, as such, is unlikely to have any material impact on traffic conditions in the Port Botany area.

52 Caltex notes the findings of the Draft Recommendation that, despite the modest costs involved in installing a permanent bridger facility at the Sydney JUHI, this has not been done.[40] The Draft Recommendation suggests that this is, at least in part, an indication that industry expects future jet fuel demand to be met by the two existing pipelines and that, when those pipelines reach capacity, a third pipeline will be built.[41] The fact that a permanent bridger facility has not been built to date reflects the situation that third parties have had sufficient and commercial access to the Caltex Jet Fuel Pipeline so as not to require alternative means of transport. The potential for a permanent bridger facility also acts as a constraint on pipeline operators.

53 Even if trucking would increase traffic congestion (to a very small extent) and it were a less safe, less reliable and potentially more costly way to transport jet fuel as compared with pipelines (which arguments are not accepted), the relevant test is not about what is socially optimal but rather, what is commercially feasible. By all measures (financially or otherwise) and based on the views of the participants within the supply chain and evidence of what happens at Sydney Airport and elsewhere, trucking is a commercially feasible option and should therefore factor in the assessments of criteria (a) and (b).

4 Jet fuel demand and pipeline capacity

54 The NCC's findings, particularly in relation to criterion (b), are predicated on findings in relation to the time over which there is pipeline capacity that is in excess to demand for jet fuel at Sydney Airport. Before examining the substantive issues associated with that approach, it is worthwhile considering the data that informs the NCC's conclusions.

55 The NCC considers that "*it is uneconomical to duplicate the facility that provides the Caltex Pipeline Service until at least mid 2023 and in all likelihood this situation will continue until sometime after 2025*".[42] This conclusion was based on a graph provided by Qantas to show jet fuel demand and pipeline capacity over time (**Qantas Graph**).

56 Jet fuel demand is met by the combination of on site storage capacity and the pipeline supply rates to replenish stock.[43] The replenishment rate therefore determines the required capacity of pipeline transfer to ensure that jet fuel is constantly available at the Sydney JUHI so as to avoid a stock-out (being an instance when demand cannot be met because there is insufficient jet fuel in the Sydney JUHI storage at that point in time).

57 Recognising this reality, the working group in the SJFIWG Report identified the replenishment rate (being 1.2 times daily "typical" demand[44]) as a criterion for assessing the adequacy of existing jet fuel supply infrastructure.[45]

[38] Sydney Ports Corporation, *Port Freight Logistics Plan*, June 2008, 26.
[39] Sydney Ports Corporation, *Port Freight Logistics Plan*, June 2008, 26.
[40] Draft Recommendation, [4.39].
[41] Draft Recommendation, [4.39].
[42] Draft Recommendation, [5.26].
[43] SJFIWG Report, 6.
[44] SJFIWG Report, 34.

58 In particular, the working group noted that:

"The sprint rate[46] assumes that the maximum capacity can be utilised without any disruption for any required period. However, the length of time the maximum transfer rate can be utilised is limited by the volume of stock on hand at each supply location and third party access arrangements from Vopak to the Caltex pipeline which is currently 5 days per month.

…

The capability criterion for the replenishment rate of on-airport stocks uses a target level of 1.2 times daily demand. In other words, one day of "typical" demand should be replenished within five days. Table 10 shows the minimum required replenishment rates to satisfy the capability criteria in future years.

Table 10: Required minimum replenishment rates

	2014	***2019***	***2024***	***2029***
Required minimum replenishment rate (ML/day)	*12.10*	*13.68*	*16.64*	*19.16*

The theoretical maximum transfer (sprint) rate of the existing infrastructure (11.8ML per day) is not capable of meeting the forecast high end typical daily demand replenishment rate in 2014 (if standard positive deviation is applied). Therefore, investment in at least 0.3ML of capacity per day will be required in the short term and at least 7.4ML per day to supply the projected long term jet fuel demand."[47]

59 The Qantas Graph analyses the effect of various capacity enhancements on the balance of demand and pipeline capacity for delivery of jet fuel to Sydney Airport.[48] Caltex agrees that it is useful to analyse supply and demand in that fashion in order to understand what transport capacity will be required to fulfil future demand, and when it is likely to be required. Indeed, Caltex produced a similar graph to that effect in Figure 5 of the Caltex First Submission (**Caltex Capacity Graph**).

60 The critical difference between the Qantas Graph and the Caltex Capacity Graph is the absence of the minimum replenishment rate on the Qantas Graph,[49] the importance of which is discussed above. Accordingly, Caltex has attempted to reproduce the Qantas Graph with a minimum replenishment rate superimposed, below.[50]

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[45] SJFIWG Report, 9.

[46] Sprint rate is the theoretical maximum capability of all existing supply infrastructure to transport jet fuel to Sydney Airport.

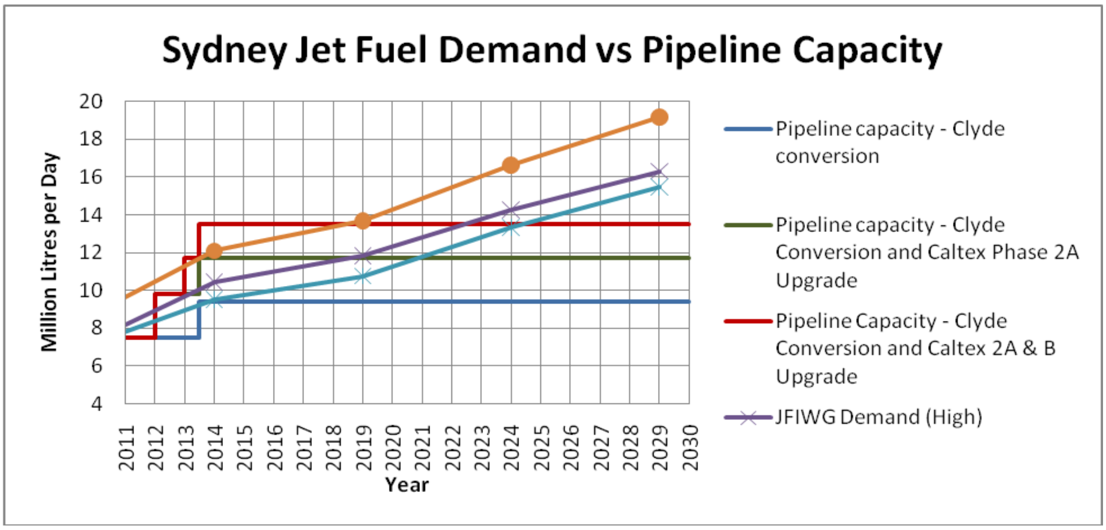
[47] SJFIWG Report, 35-36.

[48] Draft Recommendation, [5.23].

[49] From what we can tell, the reference to JFIWG Demand (Low) appears to be the daily demand and the JFIWG Demand (High) appears to be the busy day demand as noted in the SJFIWG Report.

[50] While Caltex has used best endeavours to recreate the Qantas Graph based on the supply data in Figure 5 of the Qantas submissions, Caltex is not in a position to verify the underlying data or to confirm the methodology applied. However, Qantas appears to have plotted the SJFIWG demand data in 2015, 2020, 2025 and 2030, which appears inconsistent with the SJFIWG Report. In light of that inconsistency, Caltex has plotted the demand and replenishment rate data in the SJFIWG Report in the Amended Qantas Graph instead.

Figure 1: Amended Qantas Graph



61 Figure 1 demonstrates that new infrastructure would be required by around 2018 to 2019 to meet the minimum replenishment rate as set out in the SJFIWG Report. Therefore, new infrastructure would be required by around 2018 to 2019 to meet demand, or earlier if the Clyde conversion does not result in 100% utilisation of the Shell Jet Fuel Pipeline.

62 This conclusion is consistent with the SJFIWG Report, which notes that:

> *"Upon completion of the second phase upgrade of the Caltex pipeline and the construction of the second bulk liquids berth in Port Botany, the Working Group considers that Sydney Airport can expect a higher level of jet fuel supply security to 2019. However, the Working Group believes that further investment in jet fuel supply infrastructure to Sydney Airport, in addition to the above planned investments, will be required to meet projected demand in the medium to long term."*[51]

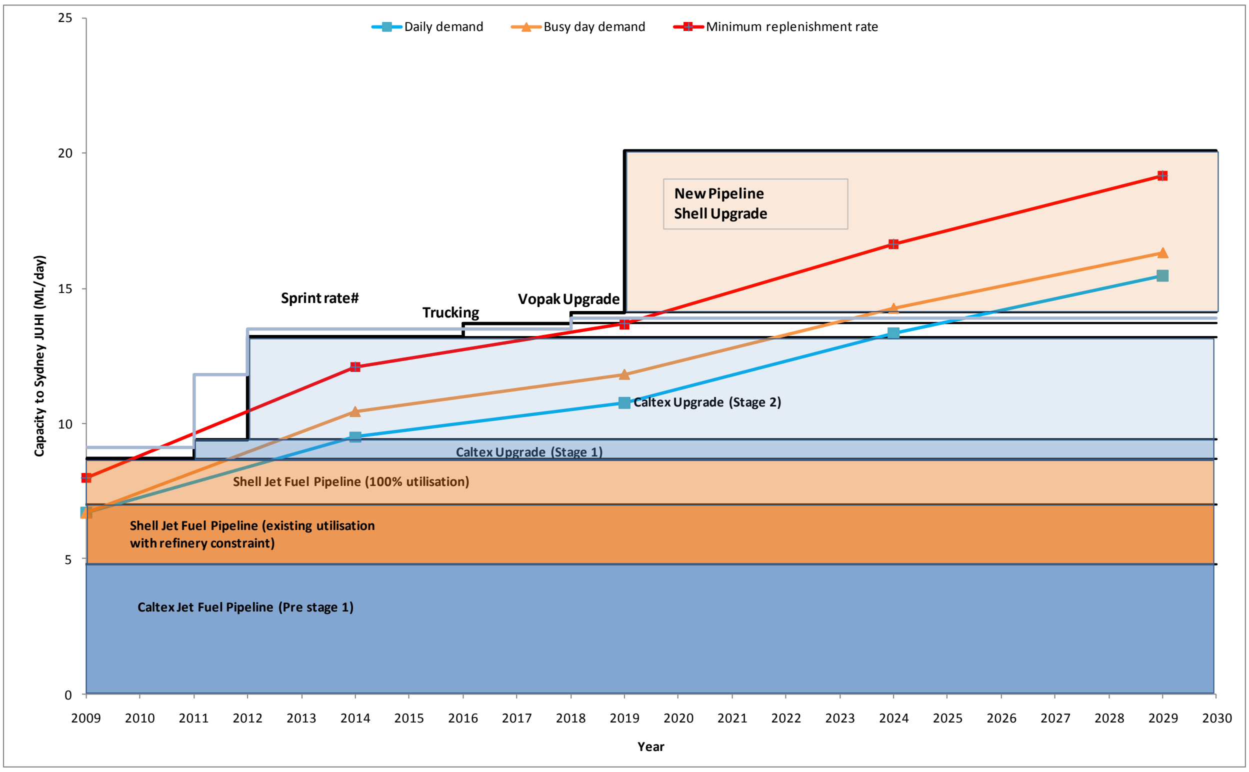
63 This conclusion is also similar to that derived from the Caltex Capacity Graph.

64 The Caltex Capacity Graph has been reproduced below with adjusted trendlines[52] for consistency with the Amended Qantas Graph (**Amended Caltex Capacity Graph**). The Amended Caltex Capacity Graph shows that a new pipeline or upgrade to the Shell Jet Fuel Pipeline (or both) will likely be required to be on line by around 2018 without trucking or the Vopak Upgrade, or around 2019-2020 with trucking and the Vopak Upgrade.

[51] SJFIWG Report, 10.

[52] The lines for the daily demand, busy day demand and the minimum replenishment rate now go through each data point, as opposed to being „a line of best fit'.

Figure 2: Amended Caltex Capacity Graph[53]



The "Sprint rate" is the theoretical maximum capability of all existing supply infrastructure to transport jet fuel to Sydney Airport.[54] This capability may be used to ensure daily and busy day demands are met.

65 The Caltex Capacity Graph (and the Amended Caltex Capacity Graph) provides further information to that provided in the Qantas Graph. For example, the Caltex Capacity Graph demonstrates how each of the respective pipelines and upgrades (taking into account the days where jet fuel is pumped through the Caltex Jet Fuel Pipeline from the Vopak Terminal rather than Kurnell Refinery) increase the overall capacity of the infrastructure in order to meet demand. The graph also provides for increases in trucking and upgrade to the pumps at the Vopak Terminal, and identifies the sprint rate achievable with the existing infrastructure.

66 Therefore, both the Amended Qantas Graph and the Caltex Capacity Graph (original and amended) show that:

(a) demand is met by various means (and not just the Caltex Jet Fuel Pipeline);

(b) new infrastructure would likely be required by around 2018-2019 to meet forecast demand (as forecasted in the SJFIWG Report); and

(c) new infrastructure may be required even earlier than 2018-2019 if the Clyde conversion does not result in Shell using 100% of the Shell Jet Fuel Pipeline for transporting jet fuel to the Sydney JUHI.

[53] For the sake of simplicity, the Caltex Stage 2 Upgrade is indicated to come on at the beginning of 2012, although it will likely be available later that year. In addition, while 100% utilisation of the Shell Jet Fuel Pipeline is available now (as shown in the diagram), that capacity is likely to be there on an ongoing basis following the closure of the Clyde refinery in mid-2013.

[54] For example, prior to the Caltex Stage 2 Upgrade, the sprint rate would be the sum of 7.9 ML per day (using Vopak's pumps) and 3.9 ML per day (being the maximum capacity of the Shell Jet Fuel Pipeline).

5 Uneconomical to develop another facility to provide the service

5.1 Overview

67 Given the NCC's findings in relation to criteria (a) and (f), the preliminary recommendation not to declare the services provided by means of the Caltex Jet Fuel Pipeline is unaffected by a conclusion that the pipeline is uneconomic to duplicate.

68 That notwithstanding, Caltex submits that the factual material before the NCC is insufficient to establish that criterion (b) has been fulfilled. On the contrary the evidence available is strongly indicative that it is economic to duplicate the facility to provide the relevant service (even on the basis of a service defined by reference to the transport of jet fuel from the Vopak Terminal to the Sydney JUHI).

69 The Draft Recommendation considers the test under criterion (b) from the perspective of whether a person would develop a facility to provide the "Caltex Pipeline Service", namely, a point-to-point service from the Vopak Terminal to the Sydney JUHI.[55]

70 The Draft Recommendation accepts that it will be "*economical to develop another facility to provide the Caltex Pipeline Service at some point in the future*".[56] However, it does not accept that it would be profitable to develop such a facility "*until such time as demand for jet fuel at Sydney airport approaches the capacity for jet fuel to be delivered to the Sydney JUHI*".[57]

71 The time at which spare capacity would be exhausted is assessed to be no earlier than, at least, "*mid 2023*", or, "*sometime after 2025*", being the point where the NCC estimates that no further upgrades could be done to both the Caltex and the Shell Jet Fuel Pipelines.[58] The basis for this assessment is the analysis of projected average daily demand against pipeline capacity, as set out in the submission from Qantas.

72 The Draft Recommendation concludes that, until such time as the Caltex and the Shell Jet Fuel Pipelines are fully upgraded, and then capacity constrained, "*any party developing a duplicate pipeline will face competition from existing capacity such that its business would be unprofitable*".[59]

73 The Draft Recommendation notes the possibility that the Sydney JUHI will be relocated within the Sydney Airport precinct, and concludes that "*it is highly unlikely that, as a practical matter, any party will look to construct a new pipeline facility until it knows where such a facility needs to end*".[60]

74 Further it is noted that "*no party suggests it would be in a position to develop a new pipeline ... until the existing facility approaches capacity*".[61] Reference is made to a stakeholder that had made "*significant progress in considering a business case for such a pipeline project*",[62] but that this project was "*deferred on the announcement of Caltex's plans for expansion of its pipeline capacity*".[63]

75 In response, Caltex submits that the conclusion in the Draft Recommendation that it would be unprofitable for anyone to develop another facility to provide the service is largely conjectural, with little or no substantive factual basis or analytical support.

[55] Draft Recommendation, [5.13].
[56] Draft Recommendation, [5.17].
[57] Draft Recommendation, [5.17].
[58] Draft Recommendation, [5.26].
[59] Draft Recommendation, [5.17].
[60] Draft Recommendation, [5.27].
[61] Draft Recommendation, [5.18].
[62] Draft Recommendation, [5.18].
[63] Draft Recommendation, [5.16].

76 As a particular factual matter, as set out in section 4, the evidence before the NCC indicates that spare capacity on the Shell and Caltex Jet Fuel Pipelines is likely to run out by 2018 - 2019 if not before.

77 The Draft Recommendation appears to rely on an untested conjecture that in the presence of spare capacity, new investment will be unable to recover its costs. The conjecture appears to be that competition will drive prices down below levels sufficient to recover long term costs. The conjecture is unrealistic. Firstly, the assumption that an investor would have to price at levels below its costs in the face of spare capacity is unrealistic. It is unlikely that pricing would reflect short term spot pricing. An investor in a new facility may use the facility for its own purposes and assess its viability against alternative transport costs, or alternatively seek to mitigate risks by entering into contracts (even relatively short term contracts of say 2- 5 years) based on the recovery of its long term costs.

78 Ultimately, whether a further pipeline is economic or not is determined by the expected returns over the life of the pipeline, compared to the cost. A long term pipeline investment is not governed by whether the immediate short term returns will be sufficient to recover capital costs.

79 The Draft Recommendation appears to confuse or conflate the question of if and when another pipeline may be built (given the presence of existing facilities) with the relevant question of whether it would be economic for another person to duplicate the facility to provide the service. No assessment is made as to whether, in the circumstances where access was not made available to third parties on the Caltex Jet Fuel Pipeline, it would be economical for another person to develop another facility.

80 Overall, the approach adopted in the Draft Recommendation does not appear to accord with any precedent approach to the determination of whether it would be uneconomical for anyone to develop another facility to provide the service. No consideration is given to whether it would be privately profitable to develop another pipeline (or trucking) in order to compete for some $3bn worth of jet fuel sales at Sydney Airport. Nor could it be said that the Caltex Jet Fuel Pipeline is a natural monopoly, given that it cannot currently or in the future meet total demand for jet fuel at Sydney Airport.

81 These matters and relevant information are addressed below.

5.2 The economics of a new pipeline are determined over its entire economic life, not the short term

82 Whether it is economic to develop a new facility to provide a point-to-point service from the Vopak Terminal to the Sydney JUHI, must be determined over the entire economic life of the facility, not a short term period in which there may be competing spare capacity.

83 Neither the BARA Application, nor any other submission, has provided probative evidence to support a finding that it is uneconomic to develop another pipeline to provide a point-to-point service from the Vopak Terminal to the Sydney JUHI over the life of such a pipeline. No modelling has been provided over the life of such a pipeline to suggest that it would not provide a return on the capital required to build the pipeline. Investment is routinely undertaken in new assets that may not provide a full return on and of capital in the early years, but do so over their entire economic life.

84 As set out in the Caltex First Submission,[64] BARA itself works on the basis that an additional pipeline would cost $50 million to $60 million, with supply of jet fuel at Sydney Airport worth approximately $3 billion and growing. On that basis, the capital cost is only approximately 2% of the total annual revenue derived from the jet fuel market. A new pipeline is a 40-50 year asset and therefore the owner of the new pipeline would have 40-50 years to recover that capital cost. NERA has also reached this conclusion, stating:

[64] Caltex First Submission, [312].

"…the relevant consideration is whether the total cost of the asset, plus a commercial return, can be recovered over its 40 to 50 year life....

The analysis I set out in my first report illustrated that, even under very conservative assumptions, a commercial return could be obtained upon such investment over a 40 to 50 year period, suggesting that criterion (b) was not met in this instance."[65]

85 It is worth noting that in the order of [**c-i-c**] [redacted] [**/c-i-c**] of jet fuel is pumped from the Vopak Terminal on the days currently made available by Caltex to third parties for the use of the Caltex Jet Fuel Pipeline. That is already a substantial volume, which, together with incremental increases over time, could underpin the construction of a new pipeline. Alternatively, such investment could be supported by a commitment from a major domestic or international airline or a group of smaller airlines to use the new pipeline. In this regard, NERA found that:

"...if Caltex and Shell were setting charges for existing capacity that exceeded this level [ie, long run average cost (LRAC)] then an alternative supplier could enter into a contract (of, say, 3-6 years in duration) with one or more [fn: A commitment from Qantas alone could guarantee sufficient demand to make such an investment worthwhile. Qantas currently consumes 40 per cent of all the jet fuel at Sydney airport (See: Caltex Submission, para.37). If this was still the case in 2014, Qantas would require approximately 3.8ML of jet fuel per day (based on total annual demand for jet fuel at Sydney airport of 3,472ML, Caltex Submission, para.116). This is approximately equivalent to the capacity of the Shell pipeline. Alternatively, a pipeline might „aggregate' the custom of a number of the smaller airlines in order to secure the volumes needed to justify the investment.] airlines (or jet fuel resellers) to transport all their jet fuel through a new pipeline at a price between the prevailing price and the LRAC."[66]

86 As discussed at 45 above, there is also a role for trucking in the time leading up to investment in an additional pipeline. As the data provided in this submission shows, the volumes that can be transported by truck are substantial, and a new pipeline proponent could undertake trucking to provide additional capacity required in the short term. Those volumes then underpin the business case for investment in an additional pipeline, reducing the magnitude of the "step up" in capacity that a pipeline would otherwise be.

87 The evidence that is available in respect of the cost of a new pipeline and demand projections support a conclusion that it is economic to duplicate, and do not provide a basis to support a conclusion that it is not economic. No economic modelling has been provided over the life of the pipeline to support the conclusion that it is uneconomic. Modelling performed by ACIL Tasman on behalf of Caltex supports ACIL Tasman's conclusion that "*having regard to our experience in assessing the cost and economic viability of investments in the fuel supply chain and in other industries, we consider that, on the information available, it would be economic (ie that is viable) for another person to duplicate the Caltex Jet Fuel Pipeline from the Vopak Terminal to the JUHI starting from 2014*".[67]

88 Further, NERA has concluded that "*it would be profitable to build a new pipeline between the Vopak storage facility and the JUHI*".[68]

89 It follows that there is a substantive basis on which to conclude that it would be economic to duplicate the Caltex Jet Fuel Pipeline, even on a narrow service definition. There is no evidence to support the opposite conclusion. Caltex therefore submits that the NCC cannot be satisfied that criterion (b) is satisfied.

[65] NERA Economic Consulting, *Review of Draft Recommendations*, 13 February 2012, 10-11

[66] NERA Economic Consulting, *Review of Draft Recommendations*, 13 February 2012, 9.

[67] ACIL Tasman, *Economics of a new jet fuel pipeline from Vopak terminal*, February 2012, 2.

[68] NERA Economic Consulting, *Review of Draft Recommendations*, 13 February 2012, 13. There is also the possibility of connecting the SMP (which itself crosses Sydney Airport adjacent to the Sydney JUHI) to transport jet fuel from the Vopak Terminal and/or Mobil/BP Terminal into the Shell Jet Fuel Pipeline, as noted in the SJFIWG Report.

5.3 The presence of spare capacity does not make it uneconomic to duplicate a facility

90 The Draft Recommendation identifies the presence of spare capacity in the Sydney Airport jet fuel supply system (encompassing two pipelines, together with some trucking) for a period of time, provided that both Caltex and Shell upgrade their facilities to the extent and on the timetable the NCC anticipates, as supporting the conclusion that it would be uneconomic to duplicate the facility.

91 It is clear from the Draft Recommendation that, as regards criterion (b), the determinative consideration for the NCC was that there is "spare capacity" in the jet fuel infrastructure that supplies Sydney Airport. It reasoned that, until such time as this capacity was exhausted, no investment would be made as any new facility would "*face competition from existing capacity such that its business would be unprofitable*".[69] No evidence, in the form of commercial or economic modelling, is provided, nor could it be, as the reasoning behind this approach is in error.

92 It is first worth noting however, that this test appears to be a variation of the natural monopoly test, rather than a private profitability test as required by the Pilbara Federal Court Decision. The natural monopoly test asked whether *one* facility could, at least cost compared to two or more facilities, meet market demand. In its Draft Recommendation, the NCC has asked whether *all* existing facilities can meet market demand, regardless of the cost of the upgrades necessary for them to do so, or the broader costs (including externality costs) of that occurring. In short, the NCC has asked whether the combination of the Caltex and Shell Jet Fuel Pipelines can meet anticipated demand, and having found that they are able to do so by making technically feasible upgrades, made the finding that therefore all new investment is unprofitable.

93 In this respect, the argument that a party will not make investments in a system with spare capacity is wrong. It is an inherent feature of a competitive, market economy that firms in competition with one another will operate and invest in facilities that are not fully utilised irrespective of the capacity of competitors. This occurs for many rational reasons, including that the assets are lumpy and cannot by synced to demand, that there is a need to maintain spare capacity for growth, or that the firm anticipates volatile demand. This „spare capacity' is not considered problematic in market economies, as the optimal level of capacity in a market is determined by market forces, and „excess capacity' is not, in ordinary circumstances, regarded as inefficient. It is often, as it were, the „price' that is paid by a person wishing to enter a market where output is determined by fixed, lumpy assets. The alternative approach, where all existing capacity is consumed before new capacity is brought online, is akin to central planning.

94 Thus, for example, most manufacturing plants operate with spare capacity, as indeed, do most airlines. Nobody would suggest that investments in new factories or new aircraft are precluded by the mere fact that a competitor has spare capacity in its facility. It is not the case, for example, that Holden will not invest in its factory when Ford can make more cars on its line, or Virgin Australia will not put new aircraft on its Sydney to Perth route while Qantas has spare seats. It is a necessary feature of both of these markets that, in order to compete (whether that be in a market for cars, or a market for air travel), it is necessary to invest even where a competitor has the technical capability to increase output. The relevant question for the investor is whether the return available on the investment is profitable, not whether it is socially optimal for there to be, for example, an excess of seats on flights to and from Perth.

95 The truth of this is evident in the current structure of the jet fuel infrastructure at Sydney Airport, in that investments have been and continue to be made in the supply chain even where there is, from the perspective of total market demand, spare capacity in the system. Most obviously, Caltex is making investments in the Caltex Jet Fuel Pipeline in circumstances where there is spare capacity on the Shell Jet Fuel Pipeline. If the NCC was correct, and one could accurately assume that spare capacity was a bar to new investment, Caltex's expansion program would be unprofitable (and it is not expected to be). Indeed, the very fact that two pipelines have supplied Sydney Airport for a considerable period of time, both of which at various points in their

[69] Draft Recommendation, [5.17].

existence have had, and will have, spare capacity simultaneously, is further evidence that the logic of the spare capacity approach cannot be correct.

96 It follows that the presence or otherwise of spare capacity in upstream markets for the supply of jet fuel to Sydney Airport is not a germane consideration in an investment calculus, and is certainly not a determinative one. It is of course perfectly efficient for capital assets to be operated at less than their maximum capacity where downstream or upstream market revenues provide a commercial return on the capital invested, and the existence or otherwise of this capacity is largely immaterial to the decision to invest. Of course, where this capacity can be acquired at a competitive price, it may be that a prospective investor chooses to „buy' rather than „build', yet as noted above, a „buy' decision is not reflective on the economics or otherwise of investing in a facility.

5.4 The duplication test – not whether a facility will be economically duplicated but whether it can be, if access is not provided

97 The test adopted in the Pilbara Federal Court Decision is not directed at whether someone, in fact, will duplicate the facility (though evidence of this would be probative), but rather whether there is a "*possibility of someone in the market place ... **being able** to develop a similar facility*" (emphasis added).[70] This distinction, between a factual finding that someone will duplicate the facility and a factual finding that someone is capable of duplicating the facility, is critical to a correct approach to criterion (b). Adopting the former leads to a result where the more competitive downstream markets and access markets are, the more difficult the test is to satisfy. It also provides no meaningful insight on whether the facility is, in fact, a „bottleneck'.

98 The Draft Recommendation appears to proceed on the basis that criterion (b) is satisfied, given existing and prospective providers of jet fuel at Sydney Airport may be able to acquire additional access on the Caltex Jet Fuel Pipeline (once upgraded) and on the Shell Jet Fuel Pipeline (presuming Shell makes access available), such as to make any additional investment in supply infrastructure before 2025 unnecessary for the purpose of meeting total market demand.

99 In this, the NCC is effectively asking whether any firm will, in fact, construct a new pipeline before 2025, in circumstances where that investment may not actually be necessary in order for that firm to supply jet fuel to the Sydney JUHI. That approach in effect confuses the question as to whether the facility needs to be duplicated (from the broader perspective of whether market demand necessitates duplication), with whether it would be profitable for a market participant to do so, if it was unable to gain access to the relevant facility.

100 In a market such as this one, where the downstream market can be accessed by „buying' rather than „building' access, it may very well be the case that additional investments are not commercially required in the short term and therefore not contemplated by market participants.[71] It cannot be the case, however, that this is a sufficient basis to conclude that criterion (b) is satisfied, because on that basis, two identical pipelines competing to provide access would both be found to be economically incapable of duplication. As set out in the Caltex First Submission, it cannot be right that the privately profitable test leads to a conclusion that a market in which access is competitively supplied is more liable to declaration than one in which access is supplied monopolistically or not at all.

101 Rather, the test contemplated by the Pilbara Federal Court Decision was whether in the conjectured event of access to the facility no longer being available to existing and prospective users, those persons wishing to supply downstream of the pipeline would be able to do so by economically duplicating the facility. That essential question, which is fundamental to the purpose of Part IIIA and criterion (b) in particular, has not been addressed by the NCC.

[70] *Pilbara Infrastructure Pty Ltd and Anor v Australian Competition Tribunal and Ors* [2011] FCAFC 58, [56].

[71] Noting that at least one stakeholder has made "significant progress" on advancing a business case for a new pipeline. See Draft Recommendation, [5.18].

5.5 Deferral of a new pipeline, given access to the Caltex Jet Fuel Pipeline, does not mean it is uneconomic to duplicate it, if access was not available

102 The Draft Recommendation notes that a stakeholder has made significant progress in considering the business case for a new pipeline, but deferred that decision pending Caltex's plans for expansion, and that it may further defer its plans if Shell also expands capacity.

103 Presumably the deferral is because the stakeholder anticipates being able to obtain sufficient access to the Caltex expansion or any Shell expansion to meet its requirements.

104 The fact that a market participant has advanced a business case for constructing a new pipeline is evidence for, rather than against, the economic duplication of the pipeline. The fact that stakeholders in the Sydney Airport jet fuel supply system are actively exploring alternative means of accessing the Sydney JUHI is evidence that the economic prospects of duplication are high. If the case against economic duplication was clear-cut, one would not expect to find commercially-minded parties incurring substantial costs in studying alternative pipelines.

105 The deferral of any decision, presumably because competitively priced commercial access to the Caltex Jet Fuel Pipeline was available, is evidence that bypass is a threat that constrains Caltex's commercial access price, rather than an indication that the pipeline cannot be economically duplicated.

5.6 The prospect of the relocation of the Sydney JUHI does not mean it is uneconomic to duplicate the Caltex Jet Fuel Pipeline

106 While there is some prospect that the Sydney JUHI will be relocated, and that if that occurs, it is likely that some costs will be incurred by parties that use that facility, it does not follow that "*it is highly unlikely that, as a practical matter, any party will look to construct a new pipeline facility until it knows where such a facility needs to end*"[72].

107 In particular:

- the proportion of a new pipeline that may be affected by a relocation and therefore the materiality of the costs incurred by parties using the Sydney JUHI in the event it relocates is unknown;
- the extent to which those costs would ultimately be recoverable from other parties, whether from SACL, jet fuel customers, or from the Sydney JUHI itself, is unknown;
- no modelling is available to determine whether the revenue earned from the supply of jet fuel prior to any relocation would justify immediate investment, offsetting any (uncertain) future costs;
- there is no evidence that any party has actually delayed an investment decision for this reason; indeed, the opposite seems to be true, with Caltex investing in filters and other associated infrastructure at the Sydney JUHI end of the Caltex Jet Fuel Pipeline; and
- there is no evidence that it is impossible for a new pipeline to account for the prospect of Sydney JUHI relocation in its pipeline design (ie, in the route that the pipeline takes in the Sydney Airport precinct).

6 Service definition

108 As noted above, the NCC regards the relevant test as to whether or not it would be privately profitable for a person to construct a facility that would allow the transportation of jet fuel from the Vopak Terminal to the Sydney JUHI. In doing so, it rejects the relevance of a person providing an identical functional service that commences from a different import terminal (such

[72] Draft Recommendation, [5.27].

as the one at Gore Bay, the Mobil/BP Terminal or the Terminals Pty Ltd facility in Port Botany) and also ends at the Sydney JUHI.

109 That approach is at odds with that taken in the Pilbara Federal Court Decision. The Full Court in that case cautioned against taking an approach based on *"imagined state of affairs rather than the facts of the market place in which access is sought"*.[73] In this regard, it makes no sense to adopt a substantive test based upon practical, commercial realities, yet allow access seekers to manipulate a service definition that is so artificially narrow as to exclude commercial investments in alternative facilities that provide functionally substitutable services. That was not what the Full Court was contemplating when it said that the relevant inquiry was whether *"someone in the market place ... [is] able to develop a* ***similar*** *facility"* (emphasis added).[74]

110 On BARA's artificially narrow service definition, evidence that a person was able to construct a pipeline that provided a functionally substitutable service (ie, one that commenced at the Mobil/BP Terminal, which is geographically proximate to the Vopak Terminal) is not evidence that the Caltex Jet Fuel Pipeline can be duplicated. For the same reason, the NCC dismisses the fact that the Caltex Jet Fuel Pipeline has in fact been functionally duplicated by the Shell Jet Fuel Pipeline as not going to whether the Caltex Jet Fuel Pipeline can be economically duplicated.

111 This position is not only at odds with a practical, market-based assessment of fixed infrastructure investment at Port Botany, but is also inconsistent with the NCC's reasons for concluding that the Caltex Jet Fuel Pipeline cannot be duplicated. The NCC argues that there is no prospect of duplication because total demand is capable of being met by the combination of fully-upgraded Shell and Caltex Jet Fuel Pipelines. In this sense, the NCC accepts that decisions to invest in any pipeline in Port Botany would be materially affected by the prospect of obtaining access to the Shell Jet Fuel Pipeline. Yet, on the other hand, it says that the fact that a person (Shell) was willing to invest in a functionally substitutable facility to the Caltex Jet Fuel Pipeline is not evidence that the Caltex Jet Fuel Pipeline can be duplicated.

112 In this sense, BARA's service definition is unreasonable. On this construction, the presence of a functionally substitutable service is capable of evidencing that privately profitable investment is unlikely, yet incapable of evidencing that it is possible. Such an interpretation, which acts to exclude probative evidence for one purpose but not another, cannot on any reasonable view be the correct or preferable meaning of the legislation, nor the one that best accords with the Pilbara Federal Court Decision.

7 Other matters

7.1 Criterion (c) - national significance

113 Caltex recognises that the NCC has previously been satisfied that Sydney Airport is of national significance for the purposes of criterion (c), and that that position has been upheld by the Tribunal. However, Caltex does not agree that it follows that the Caltex Jet Fuel Pipeline is itself of national significance.

114 The NCC determines that the Caltex Jet Fuel Pipeline is of national significance as a consequence of the contribution it makes to the operation of Sydney Airport, and thereby to constitutional trade and commerce and the national economy.[75]

115 As the NCC recognises,[76] the Caltex Jet Fuel Pipeline is one of two pipelines delivering jet fuel to Sydney Airport, with the other being the Shell Jet Fuel Pipeline. It is true that neither pipeline has sufficient capacity to fulfil demand, either now or into the future. However, the feasibility of trucking and the inevitability of an additional pipeline mean that the Caltex Jet Fuel Pipeline's contribution to the national economy is as one of several means, current and anticipated, of

[73] *Pilbara Infrastructure Pty Ltd and Anor v Australian Competition Tribunal and Ors* [2011] FCAFC 58, [56].

[74] *Pilbara Infrastructure Pty Ltd and Anor v Australian Competition Tribunal and Ors* [2011] FCAFC 58, [59].

[75] Draft Recommendation, [6.15].

[76] Draft Recommendation, [6.13].

supplying jet fuel to Sydney Airport. In that context, it should not be concluded that the Caltex Jet Fuel Pipeline is of national significance.

7.2 Criterion (f) - public interest

116 The NCC concludes that:

> *"…in situations where access to a service does not promote a material increase in competition in a relevant dependent market (that is where criterion (a) is not satisfied), it is difficult to envisage how the costs of access would not exceed the benefits of access – which must be immaterial at best. In such a situation access is contrary to the public interest, and criterion (f) cannot be satisfied."*[77]

117 Caltex concurs with that position, and agrees with the conclusion in the Draft Recommendation that it follows that criterion (f) is not satisfied in relation to the Caltex Jet Fuel Pipeline.

118 The NCC notes that were it to alter its view regarding criterion (a) prior to making its final recommendation, it would consider further the potential costs associated with declaring services provided by means of the Caltex Jet Fuel Pipeline.[78]

119 For reasons set out elsewhere in this submission, Caltex agrees with the conclusion reached by the NCC in relation to criterion (a), and does not consider that there is a basis on which the NCC should reconsider its position. However, if it were to do so, Caltex does not consider that the NCC's conclusion in relation to criterion (f) should be different, given the potential for substantial public detriment to result from access to services provided by means of the Caltex Jet Fuel Pipeline.

120 As the NCC has identified, access to a service necessarily generates costs to society, and a range of other costs may arise from issues such as delayed investment, additional coordination costs or a need to change procedures and processes to accommodate additional users of a service.[79]

121 In the case of the Caltex Jet Fuel Pipeline, those costs are substantial. Caltex identified the potential costs of access in the Caltex First Submission (in section 8), and it is not necessary to repeat those arguments, but some points raised in the Draft Recommendation warrant further discussion.

122 The NCC has identified concerns in relation to the involvement of a regulator in determining access to the relevant services, as well as the potential for delay to investments in necessary additional infrastructure.[80] Caltex agrees that these are relevant and important concerns. The NCC raises the possibility that these costs might be sufficient to give rise to doubts in relation to the satisfaction of criterion (f), even where criterion (a) is satisfied.[81] Caltex agrees that that is possible, and indeed that it is actually the case in these circumstances, given the magnitude of the costs involved.

123 Caltex notes the NCC's view that some of the costs identified by Caltex are not relevant costs given conclusions reached by the NCC in other contexts, for example the costs associated with trucking.[82] Caltex notes its response to the NCC's position on trucking, as set out in section 3 above.

124 Similarly, the NCC states that some other costs are costs to a service provider that would likely be mitigated in the terms and conditions of access or compensated for in access pricing.[83] The

[77] Draft Recommendation, [8.28].
[78] Draft Recommendation, [8.36].
[79] Draft Recommendation, [8.26].
[80] Draft Recommendation, [8.33] – [8.36].
[81] Draft Recommendation, [8.36].
[82] Draft Recommendation, [8.31].
[83] Draft Recommendation, [8.31].

NCC has not identified which of the costs it considers fall into this category, so it is not possible to address them separately, but Caltex considers that there are very substantial costs associated with access that could not be adequately dealt with through terms and conditions of access. The NCC cannot be satisfied that criterion (f) is met.

8 Conclusion

125 Caltex commends the NCC's preliminary decision to recommend that the Minister not declare services provided by means of the Caltex Jet Fuel Pipeline. While Caltex does not agree with all aspects of the NCC's Draft Recommendation, Caltex submits that the NCC has reached the only conclusion open to it on the basis of information provided by stakeholders. Caltex submits that this conclusion should be reflected in the NCC's final recommendation to the Minister.