15 March 2019

Committee Secretary
Senate Standing Committee on Rural and Regional Affairs and Transport
PO Box 6100
Parliament House
Canberra ACT 2600

Via email: RRAT.Sen@aph.gov.au

Re: Inquiry into the policy, regulatory, taxation, administrative and funding priorities for Australian shipping

Thank you for the opportunity to provide a submission the Senate Standing Committee on Rural and Regional Affairs and Transport Inquiry into *the policy, regulatory, taxation, administrative and funding priorities for Australian shipping.*

The Australian Institute of Petroleum (AIP) presents this submission to the Committee on behalf of AIP's core member companies BP Australia Pty Ltd, Caltex Australia Limited, Mobil Oil Australia Pty Ltd and Viva Energy Australia Pty Ltd.

AIP member companies operate across all or some of the liquid fuels supply chain including crude and petroleum product imports, refinery operations, fuel storage, terminal and distribution networks, marketing and retail. Underpinning this supply chain is considerable industry investment in supply infrastructure, and a requirement for significant ongoing investment in maintaining existing capacity. Over the last decade, AIP member companies have invested over $10 billion to maintain the reliability and efficiency of fuel supply meeting Australian quality standards. This investment underpins:

- some 2,000 jobs at the refineries and more than 10,000 in the industry across Australia
- more than $300m in direct wages and salaries paid each year to refinery workers
- on average $15bn in fuel tax (excise) collected and paid to government per annum.

AIP's submission:

- Outlines the coastal and international shipping task for the supply of fuel into the Australian market
- Discusses fuel security issues and the role of shipping
- Identifies key shipping issues for the downstream petroleum industry going forward

1. The petroleum shipping task

AIP, and Member Companies, have been actively engaged in the policy discussions relating to Australia's Coastal Shipping regime for many years. Efficient coastal and international shipping remains important to the industry and Australia because of the ongoing need for transport of crude oil and petroleum products to Australia and around the coast.

The supply of petroleum products to meet Australia's demand for liquid fuels requires the refining of crude oil at Australian oil refineries and supply of these products to terminals, the import of the finished petroleum products to seaboard terminals, and the distribution of petroleum products from terminals to major commercial customers and service stations.

Coastal Shipping

The involvement of the petroleum industry in coastal trading includes the movement of:

- domestically produced crude oil to Australian refineries (declining in recent years)
- intermediate products between refineries (also diminishing in recent years)
- finished products from refineries or major distribution terminals to other major seaboard terminals.

The industry also has requirements to hold intermediates and residue offshore, including during planned or unplanned shutdowns of refineries.

While Australia has its own indigenous crude oil production, this has been declining with around 84 percent exported in 2017–18. These crudes are largely unsuitable for Australian refineries to manage their production slate, with the locations of Australian refineries being generally remote from upstream production also contributing to the quantity of exports. Crude oils required to meet the product demand mix in Australian refineries were imported from over 20 countries. These imports of crude oil are globally dispersed, with 57 percent sourced from the Asia Pacific region, 21 percent from the Middle East 21 percent from Africa with the remainder from a range of countries including the United States.

Crude oil from Bass Strait is supplied by pipeline to the Altona refinery in Melbourne and the Geelong refinery. However, the production of crude oil from Bass Strait continues to decline as the fields are depleted and the production from Bass Strait is progressively becoming a lighter condensate and unsuitable for processing in Australian refineries in more than small volumes. However, there are still movements of crude oil by ship from Bass Strait to other Australian refineries. Other Australian sources of crude oil include the Cooper Basin fields, and the North West Shelf which are also moved by ship and utilised in Australian refineries from time to time.

Although rare, there are movements of intermediate products between Australian refineries by ship because of greater capacity to process certain types of inputs and due to the nature of consumer demand in the regional supply foot print of the receiving refinery. Past examples of these intermediate product movements include cracker feeds for processing in a fluidised catalytic cracker, high sulfur gasoil for processing in hydrogen desulfurisation unit to produce diesel and occasionally the re-routing of off-specification product for further processing.

Intermediate products are also exported on occasion to foreign refineries and chemical manufacturing facilities.

In 2017–18, Australia consumed 60,415 ML (mega litres) of petroleum products - or around 165 ML per day. Australian refineries produced 28 671 ML of petroleum products, of which around 4 percent was exported (excluding LPG). Net imports from over 30 countries accounted for 57 percent (or 34 000 ML) of total consumption. The bulk of imported fuel came from refiners and regional suppliers in South Korea, Singapore, Japan, Malaysia, India, China and Indonesia with increasing imports from the United States.

Finished petroleum products are also moved by ship from Australian refineries to other seaboard terminals around Australia. The major regular supply areas from Australian refineries were Northern Queensland, South Australia, North West Western Australia and Tasmania. There have also been

irregular movements of finished petroleum products between major metropolitan terminals of finished petroleum products and ad hoc supplies being conducted between major metropolitan terminals in the event of supply disruptions.

The volume of petroleum products shipped locally is in long term decline. The most recent data from the Bureau of Infrastructure, Transport and Regional Economics on Australian Sea Freight 2014-15 (2017) showed a reduction of coastal trading volume for petroleum products from 14.9 million tonnes in 2005-06 to 8.3 million tonnes in 2014-15 (Table 2.8, p 33). This 44 percent decline in coastal shipping of petroleum products over the period is in the context of a 14 percent growth in total Australian demand for petroleum products over the same period.

Structural Change in Australian Downstream Petroleum Industry

This reduction in the need for coastal shipping of petroleum products is largely as a result of the rationalisation of the Australian oil refining industry over the past decade and associated changes to the petroleum distribution system brought about by increasing competition from larger and more efficient refineries in the Asian region.

In 2003, Australia had eight operating refineries with the capacity to supply over 95 percent of Australia's liquid fuels demand. The Australian Government's Cleaner Fuels Program that commenced in 2001 required a progressive tightening of fuel standards to deliver urban air quality benefits and facilitation of more advanced motor vehicle technologies. The Australian refiners were required to spend over $3 billion by 2010 in order to stay in business and resulted in the refineries operating with significantly less flexibility.

As a result of the capital requirements to meet these fuel specifications, ExxonMobil announced the mothballing of the Port Stanvac refinery in Adelaide in 2003 and in 2009 the facility was subsequently decommissioned. The Cleaner Fuels program also caused the de-rating of the ExxonMobil Altona refinery in Melbourne reducing from 135,000 barrels per day to 82,000 bpd. These ExxonMobil decisions reduced the capacity of the Australian refining sector by 15 percent.

During the mid-2000s a supply surplus began to emerge in the Asian region as a result of large-scale refinery construction programs in India and China. This surplus was exacerbated by the Global Financial Crisis which saw the emergence of a global overcapacity in the supply of refined petroleum products. The Australian refining industry faced an unprecedented level of competition from larger and more efficient Asian export refineries leading to significant financial losses in 2008, 2011 and 2012.

In response, Shell's Clyde refinery in Sydney was closed in 2012 with work commencing to convert the facility to an import terminal. Agreement was also reached in 2014 on the sale of the remainder of the Shell downstream petroleum assets in Australia to Vitol, the world's largest petroleum trader, now trading as Viva Energy Australia.

Further rationalisations included the closure of Caltex's Kurnell refinery in Sydney, which was converted into Australia's largest fuels import terminal in the fourth-quarter 2014, and the closure of BP's Bulwer Island refinery in Brisbane in mid-2015, which was also converted into a fuel import terminal, as well as stocking local product.

The remaining Australian refineries, BP Kwinana in Western Australia, Caltex Lytton in Brisbane, ExxonMobil Altona in Melbourne and Viva Energy Geelong are still subject to ongoing intense competitive pressures, including through consideration of changes to fuel standards to reduce the sulfur content in unleaded petrol which would require additional significant investment in the facilities to meet the standards.

The fundamental restructuring of the Australian refining industry has significant implications for fuel distribution and consequently the volume and type of coastal shipping needed to move the fuel around the country.

International Shipping

AIP member companies currently engage in a mixture of voyage-charter and time-charter arrangements for vessels to deliver refined and crude oil products to Australian ports from their port of origin. At this time, no AIP member companies engage in owning/operating company vessels for the delivery of petroleum products.

It is important to note that there are distinct differences in the requirements for refined products, as opposed to crude vessels, as the cargo holds pipework and pumps of refined tankers coated with epoxy (or other) coatings to prevent reactions between the tank materials and the products.

Given the raw state of crude oil, this is not required for crude tankers and in some circumstances, refined petroleum tankers can be utilised for transporting crude oil, however this cannot be easily done in reverse. Furthermore, in a situation whereby a refined petroleum tanker was used to transport crude oil, there are strict cleaning and cartage requirements in place which govern how it could be utilised to transport refined petroleum again in the future.

In any charter agreement, there are often multiple parties engaged, and various combinations of parties engaged in the ownership, operating and chartering process. This includes:

- vessel owners, who ultimately retain ownership over the vessel
- technical operators, who may be engaged by the vessel owners to maintain and operate the vessel, including crewing the vessel, and/or
- commercial operators who are the party who retain control over the commercial operations of the vessel, they are typically the beneficiary of any commercial contracts with charterers.

In situations involving voyage-charter arrangements, there is often an additional chartering party, who engages in a commercial arrangement with the commercial operator to have the vessel undertake a voyage.

Currently the majority of vessels chartered are done so under spot-charter arrangements given the large quantity of vessels in the market, and the business efficiencies which can be gained through matching a vessel size, and hold volume, to a desired cargo type and size, while also taking account port capability (draught, tides, etc). This is opposed to the reverse scenario, which would be the case if a vessel was time chartered or owned/operated.

These efficiencies are maximised by AIP member companies to meet market demands in a cost-effective manner utilising a variety of vessel sizes (e.g. MR, LR1 & LR2 vessels).

Voyage-charters effectively operate whereby the chartering party will engage the Commercial Operator of the vessel, who may or may not be the vessel owner, to undertake a voyage on behalf of the chartering party.

The chartering party, and the commercial operator, will then negotiate a set fee for the voyage based on either a lumpsum amount, or, they will calculate a rate based on the World Scale Flat Rate, multiplied by a negotiated percentage, multiplied by the cargo size with the commercial operator then taking on liability for all variable and/or fixed voyage costs. The commercial operator will be

compensated for delays in loading and/or discharging the cargo at a fixed agreed daily rate referred to as demurrage.

Given the oversupply of vessels in the current international market, this presents opportunities for chartering parties to gain significant cost efficiencies through the usual supply/demand forces operating within a free market.

This is in contrast to time charter arrangements, whereby the chartering party will take on a fixed daily rate for chartering the vessel, while also taking on the liability for the voyage related costs, such as fuel and port related costs, as well as costs related to any delays.

In both these scenarios, the Technical Operator, who is engaged by the vessel owner, will bear responsibility for ensuring that appropriate wages are paid to seafarers in line with either the International Transport Federation requirements, which set out base wage levels, or specific wage rates set by either the nation under which the vessel is flagged, or the nation in which they are operating.

Under current Australian legislation, it is necessary for any crew engaged in coastal shipping to be paid Australian wages if the vessel performs three or more coastal voyages in a 12-month period. Time charter vessels used by AIP members are aware of this requirement. Spot vessel operators should be aware as the three-voyage requirement is not dependent on three voyages with a single company (i.e. vessel could perform coastal voyages for multiple companies).

By way of operational comparison for tanker rates, an Australian tanker crew cost between $9-10m per annum, whereas British or European tankers cost $3.5-4m per annum. A New Zealand tanker cost exactly half the rate of Australian crews at $4.5m.

The viability of Australian refineries could also be impacted with stricter shipping conditions. Any excess molecules which are not required in a domestic refinery's local market are currently distributed to other locations via coastal shipping. This flexibility allows domestic refineries to maximise production rates and efficiency. Restrictions or additional costs imposed by coastal shipping therefore have the potential to impact refinery production, and therefore competitiveness and viability.

AIP member companies are often constrained by current tolerance levels for cargo size, and departure dates under the existing temporary licencing regime, which impact on the company's ability to respond to potential supply disruptions through:

- securing larger cargo sizes, beyond the current 20 percent tolerance
- bring forward/delay loading, by a window of greater than 5 days,
- reschedule cargo to an alternate port where is a supply security event, and/or
- temporary license approval time of 15 days.

AIP and member companies therefore seek administrative arrangements that provide for greater flexibility and efficiencies in supplying Australian consumers.

2. Fuel Security

Australia does not have a transport fuel reliability or fuel security problem.

With increasing fuel import requirements since 2003, the domestic industry has taken the opportunity to fully integrate into the deep and growing Asian market to meet growth in Australian fuel demand and has established multiple and reliable sources of supply from the region.

Importantly, additional diversity and flexibility in the Australian supply chain is expected over time with the emergence and proximity to Australia of major new petroleum export centres (e.g. India) and with the United States now becoming a major crude and petroleum exporter to the world including Australia. Australia's direct involvement in global trade in crude oil and petroleum products provides security through the diversity of source countries and multiple import terminals around the Australian coastline.

Industry and market confidence is well founded and supported by comprehensive government and independent reviews of liquid fuel supply security over many years. Key reviews include the National Energy Security Assessments (NESA) and Liquid Fuel Vulnerability Assessments since 2008, Australian Government Energy White Papers in 2004 and 2012, and the 2013 Report of the Parliamentary Inquiry into Australia's Oil Refining Industry.

These reviews have confirmed that Australian liquid fuels supply is highly secure, competitively priced and reliable because of:

- a flexible, resilient and reliable supply chain with:
    - a diversity of supply sources for crude oil and petroleum products, including domestic and imported sources
        - In addition to domestic crude supply, crude oils required to meet the product demand mix in Australian refineries are imported from well over 16 countries.
        - Finished petroleum products are imported from over 30 countries, and this diversity is growing with increasing imports from India and the US.
        - This means any supply disruption in one market, can be readily substituted with alternative supply from existing sources of reliable supply to Australia, from emerging sources of supply actively looking to supply the Australian market, or from global spot markets.
    - secure shipping routes and a significant volume of stock on the water owned by local companies
    - a domestic refining capability providing multiple supply options and the ability to convert domestic and imported crude oil into useable products
    - actual and planned investment in import, storage and distribution infrastructure which is able to meet growth in fuel demand as well as specific products such as jet and diesel
    - efficient domestic distribution using a variety of transport modes and routes
    - an extensive, safe and reliable network of service stations
- established and effective integration of this supply chain into the global crude oil and petroleum product markets, including the rapidly growing Asian fuels market
- domestic fuel pricing that relates directly to global market prices (import parity pricing)
- expert and efficient management of the supply chain by industry (demonstrated by a strong record of reliable supply)
- ongoing, substantial investment in new/expanded petroleum storage and handling facilities
- robust risk and emergency management frameworks at industry and government levels.

Australia also has robust emergency response plans and arrangements.

- Industry and governments fully recognise the potential impacts of a severe national shortage of fuel supplies to business and consumers.
- Australia has robust response plans for managing a national liquid fuel emergency, which reflect Australian market characteristics, utilise proven market and commercial response mechanisms, and adopt international approaches that will be effective in our operating environment and market.

- While every effort is made by industry to ensure continuing reliable supply, the National Oil Supplies Emergency Committee (NOSEC) and the International Energy Agency (IEA) have established management plans that would help ensure a coordinated response to any supply emergency at a national (NOSEC) or international (IEA) level.
- NOSEC and the National Plan (NLFERP) are also well supported by flexible and wide-ranging ministerial powers under the Liquid Fuel Emergency Act 1984 to authorise the Australian Government to prepare for, and manage, a national emergency.
- Extensive reviews in recent years have concluded that Australia's emergency response framework for liquid fuels is robust and proven, and there are no obvious gaps currently. The framework should be periodically reviewed to ensure its ongoing alignment with market-based principles and operation.
- According to the IEA previously, Australia is well served by an industry which operates a resilient and diversified supply chain, supported by a regime of policy and regulatory emergency measures, regular in-depth vulnerability assessments, and international advocacy of open global markets.
- A National Liquid Fuels Emergency has never been declared by an Australian Government.

Australia's access to diverse supply sources and well established international and domestic supply networks suggests that any future disruption risks are unlikely to compromise Australia's access to the physical supply of liquid fuels. This is evidenced by past instances of geopolitical instability, civil unrest and war that have had a relatively small impact on global crude oil flows and have not had a major impact on the reliability of supplies to Australia. Supply diversity clearly plays a key role in managing and mitigating such risks to Australia.

There are over 10,000 tankers trading world-wide and cargoes can be purchased and sold on the water if required with tankers re-routed accordingly.

Fundamentally, the global oil market is highly mature, deep and flexible and has consistently shown its ability to respond quickly to such events and other market imbalances. This is underpinned by the importance of the global oil market to all countries' economic performance and activity, and the very strong incentives to maintain trade flows.

Australian fuel security would however benefit from more flexible licensing and administrative arrangements and processes to allow the industry to respond to very short-term operational issues. The overall system has sufficient inventory of petroleum products, but there are occasions where companies may need to move product around the country at short notice to meet needs in select areas.

3. Key shipping issues for the downstream petroleum industry

Shipping is a critical link in the various petroleum supply chains, so certainty, clarity and efficiency in the provision of shipping services is essential in order to reliably meet our customer requirements. Current coastal shipping arrangements do not meet these fuel industry needs.

As referenced in this submission, AIP member companies have declining requirements for coastal shipping brought about by fundamental restructuring of the Australian refining industry in recent years and associated changes to petroleum distribution. In particular

- a substantial decline in the need to ship Australian crude oil around the coast as a result of three refinery closures since 2008
- an almost complete cessation of movement of partially refined materials between refineries following these closures, and

- a substantial decline in the need to ship Australian refined fuels around the coast now that direct imports meet a significant proportion of Australian fuel demand, especially in Northern Australia.

Nevertheless, when petroleum companies do need to undertake this task, cost effective and efficient coastal shipping of Australian fuels is essential to maintain the competitive advantage of the Australian refineries in WA, Victoria and Qld. Nationally, Australian refined fuels are competing directly with imports of fuels sourced from overseas refiners that are imported directly into local Australian markets. The difference in shipping costs is, in many cases, sufficient to be a major challenge for Australian refinery competitiveness.

Subsequent restructuring of the Australian refining industry and associated changes in the petroleum supply chain mean that there is very little chance of a viable Australian petroleum coastal shipping vessel with any long-term business growth prospects.

As such, AIP and Member Companies support a shipping regulatory regime that:

- reduces the cost impost of coastal shipping on Australian refineries which in turn increase their ability to compete against direct imports and improve the competitive position of Australian refineries
- helps deliver cheaper freight costs for fuel supplies
- creates greater choice and flexibility in options to supply fuel to the significant number of terminals around Australia
- reduces administration costs for industry and government
- significantly reduces the complexity of rules relating to shipping of petroleum products in Australia
- facilitates supply chain operations that best meet fuel supply needs in regional markets across Australia.

In particular, AIP and Member Companies believe that:

- Vessels used by the petroleum sector must have the flexibility to deliver and/or move petroleum (crude oil and petroleum products) to and between any Australian port (i.e. both inter and intra-State cargo movements).
    - Current legislation makes it exceedingly difficult (because of relatively lengthy approval times and the complex approval process, as well as excessive paperwork) for Australian fuel suppliers to make short term decisions necessary to optimise the Australian fuel supply chains in ways that can best meet emerging fuel supply needs in Australia.
- Contestability is provided through the competitive shipping market – it is in the interest of business that cargo is moved at least cost.
    - Current legislation creates a significant administrative burden for the petroleum industry and Government with regards to investigating the availability of an Australian ship to do the task. This has no practical purpose since there are no Australian registered petroleum tankers available to contest proposed coastal trading voyages.
- Foreign vessels used by the petroleum industry to pick up crude oil and condensate from FPSOs in Australian waters and deliver that cargo to an Australian port, and petroleum tankers used to store crude oil or petroleum products on a temporary basis in Australian waters (as a form of temporary fuel storage during refinery maintenance periods) must be exempted from the 'importation' provisions of the Customs legislation, in the same way as all other foreign vessels used by the downstream petroleum industry.
    - Current legislation does not properly address these operational issues and as a result imposes significant unintended consequences and costs on the petroleum

industry and constrains potential options to optimise the fuel supply chain operations in Australia and hence fuel supply security. In the case of FPSO production, the current provisions actively discourage the use of Australian crude oil and condensate in Australian refineries.

Conclusion

The past decade has seen a dramatic structural change in Australia's downstream petroleum industry. The closure of four refineries and the subsequent closer integration into regional and global markets has provided significant supply flexibility for the industry and benefits for Australian consumers. Shipping is a critical component to the reliable supply of crude oil and petroleum products into the Australian market. The ability to utilise cost effective and efficient shipping is central to the supply chain not only for finished petroleum products, but for crude oil inputs to Australia's four refineries. AIP and member companies are concerned to ensure that Australia's regulatory environment further assists the industry in its shipping task and provides a level playing field between imported petroleum products and those produced in the domestic refineries. Any regulatory approach that works against that objective or distorts the market has the potential to threaten the viability of domestic refineries.

Thank you for the opportunity to provide a submission to the Inquiry.

Should you wish to discuss any elements of this submission further, please contact Peter Gniel, AIP General Manager, Policy at pgniel@aip.com.au or via phone on 02 6247 3044.

Yours sincerely

[SIGNED]

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