

Public version

## North West Shelf Project

Application for authorisation –  
supporting submission

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# Supporting submission

## 1 Executive summary

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- 1.1 The North West Shelf Project (**Project**) has been supplying domestic gas (**domgas**) to the Western Australian (**WA**) market for over 25 years. During this period, the North West Shelf venture participants with entitlements to produce domgas (**NWS venture participants**) were granted authorisations under section 88(1) of the *Trade Practices Act 1974* (Cth) (**TPA**) to engage in joint marketing of domgas. Those authorisations are no longer in place, but several significant long-term gas supply arrangements were formed pursuant to the authorisations.
- 1.2 Due to the current structure of the WA gas market, the NWS venture participants do not consider that their joint marketing activities result in a lessening of competition or any other concerns under the TPA. However, the supply of domgas in WA has been the subject of increased interest by the ACCC, the Senate and customers over the past two years. As a consequence, the NWS venture participants consider that authorisation of their joint marketing activities would provide greater certainty for the NWS venture participants and their customers, which will help reduce the substantial compliance costs and management time incurred in responding to regulatory issues.
- 1.3 The NWS venture participants are seeking authorisation for their joint marketing activities until the end of 2016 and to administer gas supply contracts. This timeframe is broadly consistent with the recent Gorgon authorisation determination (**Gorgon determination**)<sup>1</sup> in which the ACCC expressed a view that the WA market may mature in the medium term (notwithstanding very limited development over the last decade). In particular, the ACCC noted that a number of other projects with domgas potential (not least of all Gorgon itself) may commence production in or around 2015.
- 1.4 If authorisation is not granted for the joint marketing of domgas from the Project, the NWS venture participants will need to re-consider their activities in WA.
- 1.5 Separate marketing is not presently commercially feasible in WA for the NWS venture participants. The market features identified by the ACCC in 1998, and again in 2009, as being relevant to separate marketing have not developed in WA in any material way. In particular, the implementation of gas balancing arrangements, which are a prerequisite for separate marketing, would not be feasible for the Project.
- 1.6 Joint marketing has continuously delivered domgas at competitive prices to the WA market over a sustained period of time. This in turn has delivered many benefits to the WA economy, including the development of important industry in the State.<sup>2</sup> Due to the commercial infeasibility of separate marketing, the continued joint marketing by the NWS venture participants will result in significant public benefits, including:
- more domgas being supplied to the WA market than would be available under attempted separate marketing;
  - more competition than would exist under attempted separate marketing;
  - potentially lower prices, or at least prices that are not higher, than would result under attempted separate marketing; and

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<sup>1</sup> Chevron Australia Pty Ltd & Ors - Authorisations - A91139 & A91140 & A91160 & A91161, 5 November 2009.

<sup>2</sup> For further details see: *National Builder: How the North West Shelf Project has driven economic transformation in Australia*; ACIL Tasman, October 2009. A copy of this report is at Attachment 7.

- recognised economic benefits, such as security of supply (including prompt emergency supply) and increased capital investment – which continue to be supported by the NWS venture participants' joint marketing activities.
- 1.7 The public detriment arising from the NWS venture participants continuing joint marketing, if any, would be minimal. Competition on material terms (such as price, volume and duration of supply) is unlikely to be more effective under attempted separate marketing, and other contract terms may be less flexible.
- 1.8 To address any concern that commercially sensitive information could be shared internally with rival domgas projects, those NWS venture participants who currently have an interest in a rival project<sup>3</sup> are currently implementing ring fencing arrangements based on those accepted by the ACCC in the Gorgon determination.
- 1.9 Authorisation should be granted for joint marketing by the NWS venture participants, as it results in significant public benefits and minimal detriment. Without authorisation, these public benefits would be substantially diminished if not altogether forgone.

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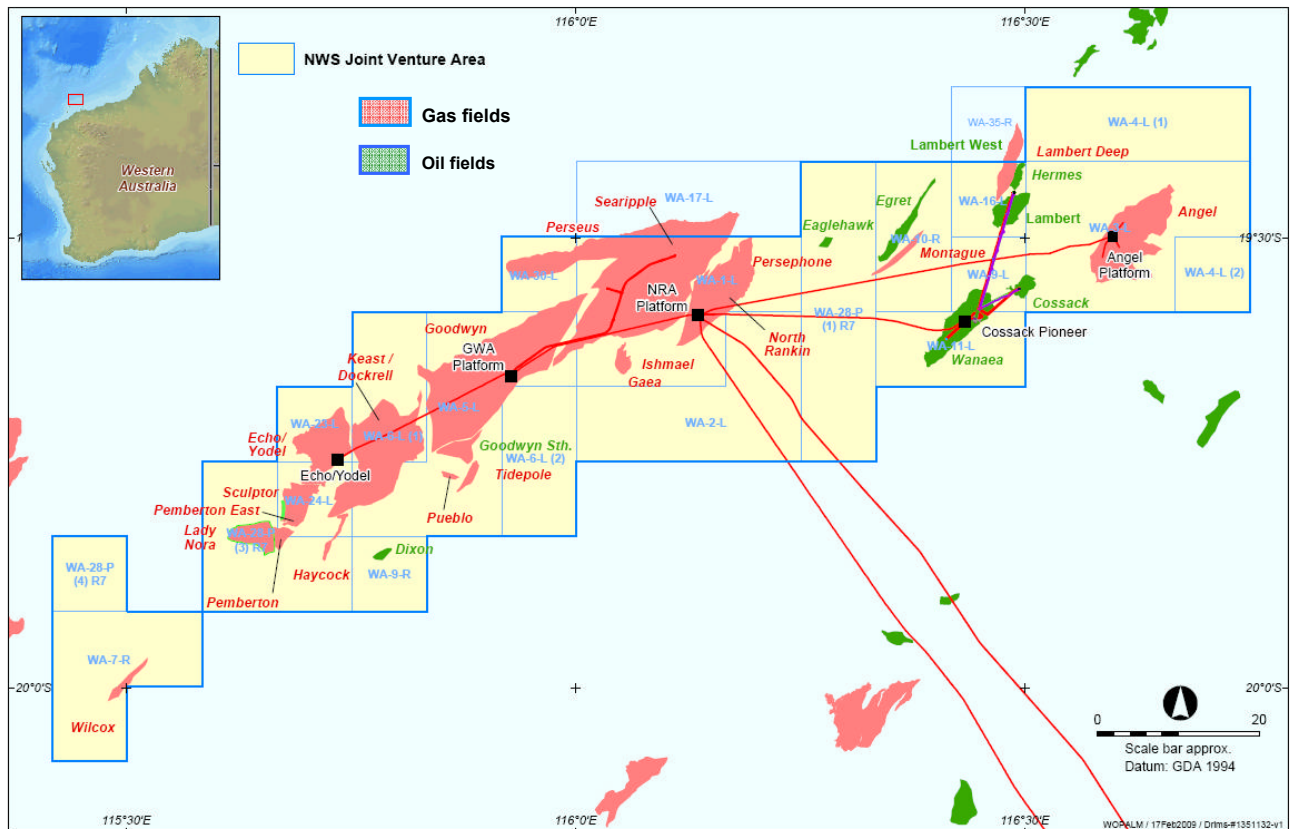
<sup>3</sup> A project or business, other than the Project, engaged in the marketing or sale of natural gas in the Western Australian domestic market and in which a NWS venture participant or its related body corporate has or gains an interest.

## 2 The Project

### Overview

- 2.1 The Project is currently the largest resources project in Australia, accounting for:
- more than 40% of Australia's total oil and gas production;
  - approximately 1% of Australia's gross domestic product; and
  - a total taxation benefit, including royalties, for the Commonwealth and State governments approaching A\$5 billion.
- 2.2 The Project involves the exploration for, production and processing of hydrocarbons found in the Carnarvon Basin located off the North-West coast of WA, approximately 125km north-west of Karratha.
- 2.3 Figure 1 shows the location and size of the Project Area.

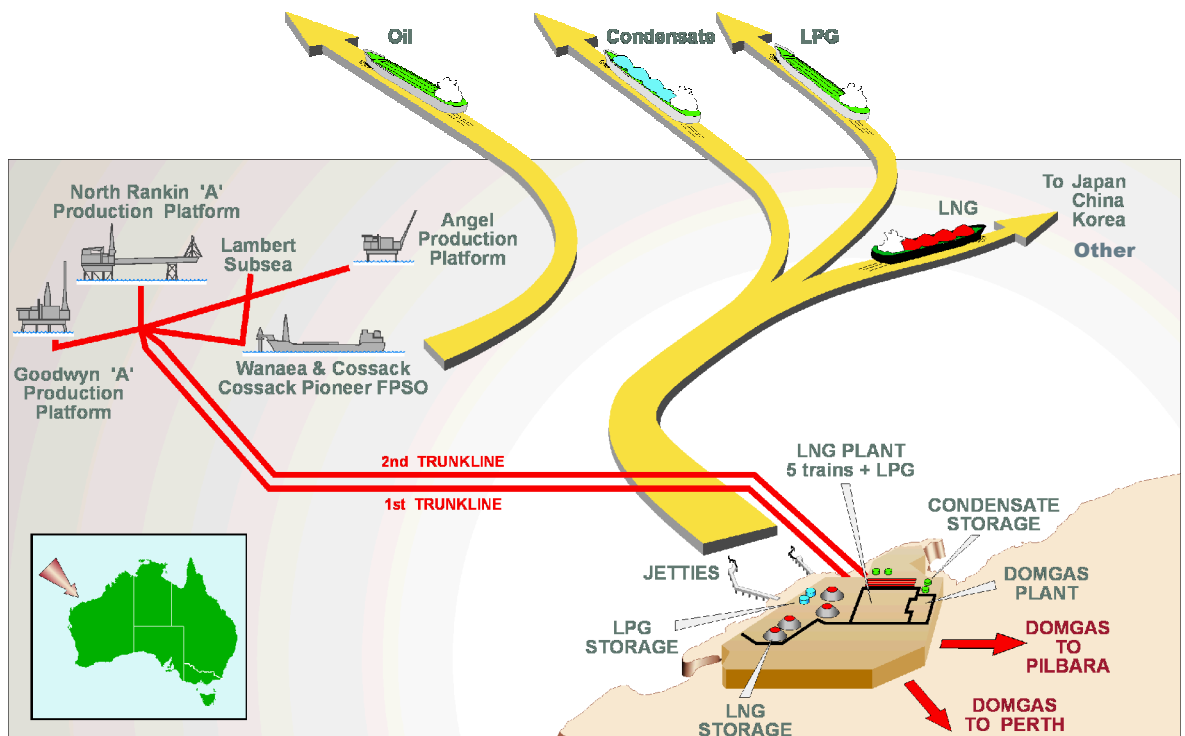
**Figure 1**



- 2.4 The Project's offshore and onshore facilities are operated by Woodside Energy Ltd. Gas is currently produced from a number of fields in the Project Area – including North Rankin, Goodwyn, Perseus, Angel, Searipple, Echo/Yodel and associated gas from the Wanaea, Cossack, Lambert and Hermes fields. The offshore gas facilities include three deep-sea platforms and associated infrastructure capable of producing an aggregate amount of more than 100,000 tonnes of gas per day.
- 2.5 Hydrocarbons extracted offshore are transported via two subsea pipelines to the onshore Karratha Gas Plant (**Plant**). The Plant is operated as an integrated system capable of processing:

- LNG for international export
  - domgas for supply to WA;
  - LPG; and
  - condensate (a by-product of natural gas).
- 2.6 The Plant has two domgas trains capable of producing approximately 600 TJ ( $\approx 12,000$  tonnes) of domgas per day and five LNG trains capable of producing up to 52,000<sup>4</sup> tonnes of LNG per day. The Project's onshore facilities also include storage, loading and port facilities for LNG, LPG and condensate.
- 2.7 Following processing, domgas is supplied to the Dampier to Bunbury Natural Gas Pipeline and the Pilbara Pipeline for transportation to WA customers. LNG is exported overseas.
- 2.8 Oil is produced and processed offshore (pursuant to a separate joint venture) by the Cossack Pioneer floating production storage and offloading (FPSO) facility. Oil is currently extracted from the Wanaea, Cossack, Lambert and Hermes fields.
- 2.9 Figure 2 provides a visual overview of the Project's operations.

**Figure 2**



### NWS Venture Participants

- 2.10 An overview of the six NWS venture participants is set out below.
- 2.11 All of the parties, except for Japan Australia LNG (MIMI) Pty Ltd (**MIMI**), were participants in the Project's original gas production joint venture and entered into the initial domgas contracts. MIMI joined the Project in 1985 when it invested in the LNG export phase. Subsequently, MIMI acquired a participating interest in future domgas production and sales.

<sup>4</sup> Maximum daily capacity, does not include variations for availability and utilisation.

- 2.12 In 2004, China National Offshore Oil Corporation Ltd (**CNOOC**), invested in the Project. However, CNOOC does not currently have an interest in the production or sale of domgas or any other infrastructure of the NWS Project and is not a party to this authorisation application.

#### **BHP Billiton Petroleum (North West Shelf) Pty Ltd**

- 2.13 BHP Billiton Petroleum (North West Shelf) Pty Ltd is a wholly-owned subsidiary of BHP Billiton Petroleum International Pty Ltd, an international oil and gas exploration and production company owned by BHP Billiton Limited. BHP Billiton's other relevant Australian interests include:
- the Bass Strait oil and gas production joint venture, located off the south-eastern coast of Australia;
  - a 45% operating interest in the Griffin Venture (in the Carnarvon Basin off the coast of WA), which has recently ceased production;
  - a 90% operating interest in the Minerva offshore gas venture, located in the Otway Basin of Victoria;
  - a 50% operating interest in the Stybarrow venture, producing oil and gas from fields in the Exmouth sub-basin, offshore WA;
  - a 71% operating interest in the Pyrenees venture, producing oil and gas from fields in the Exmouth sub-basin, offshore WA;
  - a 71% operating interest in the Macedon joint venture with Apache, located off the north coast of Exmouth in WA;
  - an interest in the Browse LNG joint venture off the northern coast of WA; and
  - a 50% interest in the Scarborough gas field, a potential LNG development, and 100% interest in the nearby Thebe discovery, off the north west coast of WA.

#### **BP Developments Australia Pty Ltd**

- 2.14 BP Developments Australia Ltd (**BP Developments**) is part of the BP group of companies, one of the world's largest energy companies. BP Developments is involved in the exploration for and production of oil, natural gas, and the refining, transportation and marketing of petroleum and lubricant products. BP Developments' other relevant interests include:
- a stake in the Browse LNG joint venture off the northern coast of WA; and
  - the Io gas field, which is located in the Greater Gorgon development area off the coast of WA.

#### **Chevron Australia Pty Ltd**

- 2.15 Chevron Australia Pty Ltd is a wholly-owned subsidiary of the Chevron Corporation. Chevron Corporation was formed by the merger of Chevron and Texaco in 2001. Chevron's other relevant Australian interests include:
- a 50% operating interest in the Gorgon Project, located off the northwest coast of WA (due to supply gas to the WA market in or around 2015);
  - the wholly-owned Wheatstone LNG project and domgas operation near Onslow on the mainland of WA;
  - an interest in the Browse LNG joint venture off the northern coast of WA; and
  - offshore exploration in the north-west of Australia.



**Japan Australia LNG (MIMI) Pty Ltd**

- 2.16 Japan Australia LNG (MIMI) Pty Ltd is an Australian company ultimately owned equally by Mitsubishi Corporation and Mitsui & Co., Ltd. MIMI was formed to participate in the Project and has no other relevant oil and gas business interests in Australia.

**Shell Development Australia Pty Ltd**

- 2.17 Shell Development (Australia) Pty Ltd (**Shell Development Australia**) is a member of the Royal Dutch/Shell group of companies, one of the world's largest energy companies. Shell Development Australia's other relevant Australian interests include:

- a 25% interest in the Gorgon Project;
- an interest in the Browse LNG joint venture off the coast of WA;
- a 100% interest in the Prelude and Concerto fields located in the Browse Basin off WA;
- interests in the Sunrise (26.6% interest) and Evans Shoal (25% interest) gas fields in the Bonaparte Basin off the north-west coast of Australia;
- a 33% interest in the Iago and Clio fields off the coast of Australia;
- interests in coal bed methane to LNG in Queensland; and
- offshore exploration in the north-west of Australia.

**Woodside Energy Ltd (venture participant and delegated Operator)**

- 2.18 Woodside Energy Ltd is wholly-owned by Woodside Petroleum Ltd, Australia's largest publicly-traded oil and gas exploration and production company. Woodside's other relevant Australian interests include:

- a 90% operating interest in the Pluto LNG Project near Karratha in WA;
- a 33.44% operating interest in the Sunrise LNG development in the Timor Sea;
- operator and an interest in the Browse LNG development in northern WA; and
- offshore exploration in the north-west of Australia.

**Development of the Project****Project history**

- 2.19 In 1970, the original NWS venture participants discovered significant quantities of natural gas and condensate in the Carnarvon Basin off the coast of North-Western Australia. The Project was then developed in 2 stages:
- (a) the production of natural gas for supply to the WA domestic market (the domgas component); and
  - (b) the production of LNG for export.
- 2.20 The first deliveries of domgas to the WA market occurred in 1984. LNG export commenced in 1989 with a shipment to Japan.
- 2.21 There have been 5 major phases of commercial investment in the development and expansion of the Project.
- 2.22 **Phase 1** began in 1980 when the NWS venture participants entered into a 20 year gas supply agreement (**GSA**) with the WA state government owned utility SECWA. The first phase involved the construction of the first offshore production platform and the domgas Plant in Karratha. Although Phase 1 was focussed on domgas, future LNG supply was factored into the design and construction of the offshore facilities.

- 2.23 **Phase 2** followed the signing in 1985 of long term LNG contracts with eight major Japanese companies. MIMI also joined the Project at this time. The construction of LNG processing and export facilities at the Karratha plant, including two LNG trains, was completed in 1989. This enabled the first shipment of LNG to Japan later that year.
- 2.24 **Phase 3** involved the completion of a third LNG train in 1992 followed by the commissioning in 1995 of a second offshore production platform. New LPG extraction and storage facilities were also commissioned and a second ship loading jetty was built to load LPG and condensate. Operating efficiency at the Karratha plant was improved to increase the Project's LNG production capacity to 7.5 million tonnes per year. The Project's oil operations also commenced during this phase.
- 2.25 **Phase 4** was underpinned by the NWS venture participants signing the first of a series of letters of intent with new Japanese customers. This fourth major phase involved the commitment to a fourth LNG train and a second trunkline in 2001 which commenced operation in 2004, increasing the Project's LNG production capacity to 11.9 million tonnes per year.
- 2.26 **Phase 5** began in August 2005 and involved the construction of a fifth LNG train and a second LNG loading berth, increasing the Project's LNG capacity to 16.3 million tonnes per year. A third offshore production platform was constructed from 2005 and began producing in 2008. During this phase the NWS venture participants delivered the first cargo of Australian LNG to China and CNOOC acquired an interest in the Project's reserves.
- 2.27 The NWS venture participants' total investment in the development and expansion of the Project has totalled more than AUD\$27 billion (and this infrastructure would cost more than \$50 billion if it was constructed today). Figure 3 provides a timeline summarising key relevant investments.

**Figure 3**

Phase	Period	Cost (AUD \$m) (nominal dollars of the day)
Phase 1	1979-1984	2,500
Phase 2	1984-1989	2,995
Phase 3	1988-1995	3,111
Phase 4	1996-2004	10,974
Phase 5	2005-2008	

Source: ACIL Tasman, *Nation Builder: how the North West Shelf Project has driven economic transformation in Australia*, October 2009.

### Future investment

- 2.28 The Project's existing reserves have been in production for more than 25 years and, based on the current understanding of the fields' subsurface, there is limited scope for adding incremental reserves through exploration. Any future discoveries within the Project Area are expected to be relatively small.
- 2.29 Consequently, the focus of investment in the Project has shifted from expansion to maintaining deliverability and maximising resource recovery. Investment is now directed towards exploration and offshore infrastructure intended to secure gas flows from diminishing fields as well as smaller undeveloped fields and to maximise the life of the Project.
- 2.30 As the Project matures, the difficulty and cost of extracting gas from existing reserves (known gas resources) increases. Just to maintain production at existing levels (without

any expansion) will require significant ongoing investment by the NWS venture participants.

2.31 To ensure that current domgas and LNG contractual commitments are met and that future gas sales are possible, the NWS venture participants estimate that in excess of AUD\*\*confidential\*\* of expenditure on Project development will be required over the next 10 years. This expenditure will be in addition to the regular operational and production costs incurred in maintaining existing facilities, which totals approximately AUD\*\*confidential\*\* per annum<sup>5</sup>. In sum, NWS venture participants estimate that more than AUD\*\*confidential\*\* will be required to maintain production over the remaining Project field life. Key developments include:

- North Rankin Redevelopment Project (**NR2**): will involve the installation of a second deep-sea platform with compression to enhance offshore deliverability and access additional reserves. NR2 will enable the NWS venture participants to recover remaining low pressure gas from some Project fields and help to satisfy both existing and future domgas customer commitments. NR2 is expected to require approximately AUD\$5 billion of investment, with reliable production expected in around 2013;
- \*\*Confidential\*\*
- \*\*Confidential\*\*
- \*\*Confidential\*\*

2.32 Each of the investments subsequent to NR2 listed above (which are estimated to amount to more than AUD\*\*confidential\*\* are subject to Final Investment Decisions (**FID**). Making these FIDs will be facilitated by continued joint marketing and by the regulatory certainty provided by ACCC authorisation.

## Domgas production

### The domgas joint ventures

2.33 The structure of the Project is governed by the North West Shelf Project Agreement (**NPA**), as restated on 18 December 2004. All six NWS venture participants, plus CNOOC, are parties to the NPA.

2.34 The NPA essentially acts as an umbrella agreement covering all aspects of the Project. It creates six inter-related joint ventures which define the rights and interests of the NWS venture participants and CNOOC in relation to exploration, appraisal and development of new fields and the production of different products.<sup>6</sup> New joint ventures may be created in the future to reflect additional investment in the Project.

2.35 Relevantly, the NPA establishes two joint ventures for the production of domgas:

- (a) the Domestic Gas Joint Venture (**DGJV**); and
- (b) the Incremental Pipeline Gas Joint Venture (**IPGJV**).

2.36 These two joint ventures have different participating interest structures. The DGJV comprises the original NWS venture participants who entered into the initial 20 year contracts with the WA state government. MIMI was not involved in the Project at that time.

<sup>5</sup> Due to the fact that existing fields are diminishing, there is unlikely to be any significant expansion of on-shore infrastructure. However, substantial expenditure in ongoing Plant maintenance and debottlenecking will be required.

<sup>6</sup> In addition to the DGJV, IPGJV and LNG joint venture, the NPA establishes the Gas Recycling Joint Venture, the CLNG joint venture and the LPG joint venture. None of these additional joint ventures are involved in supplying domgas to WA.

- 2.37 The IPGJV was created in the 1990s to sell additional domgas (beyond that already committed under the initial contracts) and to recognise MIMI's participation. All NWS venture participants, including MIMI, hold equal shares in the IPGJV.
- 2.38 Figure 4 sets out the participating interests in the DGJV and IPGJV.

**Figure 4**

Party	DGJV (1979)	IPGJV (1995)
Woodside	50%	16 <sup>2/3</sup> %
Shell	8 <sup>1/3</sup> %	16 <sup>2/3</sup> %
BHP Billiton	8 <sup>1/3</sup> %	16 <sup>2/3</sup> %
BP	16 <sup>2/3</sup> %	16 <sup>2/3</sup> %
Chevron	16 <sup>2/3</sup> %	16 <sup>2/3</sup> %
MIMI	N/A	16 <sup>2/3</sup> %

- 2.39 Following CNOOC's investment in the Project in 2004, it was agreed that additional joint ventures, the Extended Interest Joint Ventures (**EIJV**), may be established in the future to reflect CNOOC's interest. Under the terms of the NPA, the EIJV will be established to the extent that the cumulative production and sales commitments for both domgas and LNG exceed a proved base quantity already allocated to the existing Project joint ventures. Whilst it is possible that at some time in the future domgas could potentially be marketed by an EIJV, this is subject to many uncertainties (including the relevant NWS venture participants reaching agreement on the terms of the EIJVs). This application for authorisation is limited to, and therefore focussed on, domgas supply made by the DGJV and IPGJV.

#### Domestic reservation obligations

- 2.40 In 1977, the five foundation NWS venture participants entered into a State Agreement with the WA state government. The agreement became a Ratified State Agreement (**RSA**) when it was legislated as the *North West Gas Development (Woodside) Agreement Act 1979 (WA)*.
- 2.41 The RSA imposed specific supply obligations on the NWS venture participants. These obligations included 5064 PJ of Project gas for delivery and use in WA<sup>7</sup> (including the 20 years of supply to SECWA) and approximately 7560 PJ of Project gas for export to satisfy initial LNG contracts.<sup>8</sup>
- 2.42 The domgas obligation is likely to be satisfied under existing Project domgas contracts by around 2014. The initial quantity of gas allocated for export has already been delivered. The residual quantities of gas produced by the NWS venture participants in excess of the amounts required to satisfy the RSA domestic and export obligations is not subject to specific State requirements. However, the RSA requires the NWS venture participants to:
- keep the relevant State Minister informed of their proposed arrangements for the utilisation of gas produced during the years 2010 to 2034; and

<sup>7</sup> Clause 44A (1) – (4) of Schedule 3 to the *North West Gas Development (Woodside) Agreement Act 1979 (WA)*.

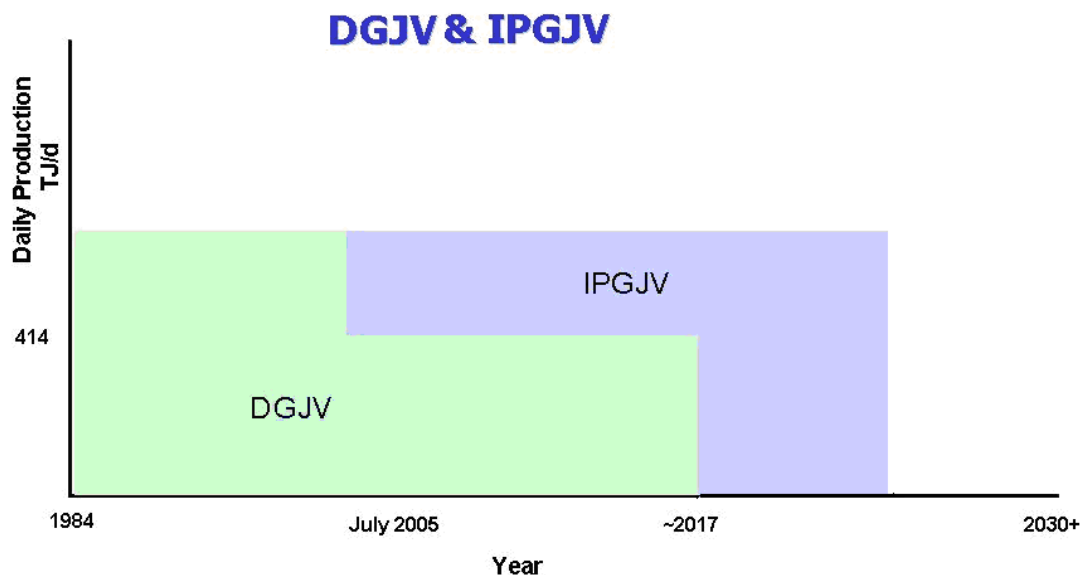
<sup>8</sup> The RSA expresses this amount as 198,000,000,000 cubic metres of gas (clause 44A(3) of Schedule 3 to the RSA).

- consult with the Minister prior to entering into any arrangements for the sale, use, supply or export of natural gas and to reach agreement with the Minister on the requirements in the State and the manner in which they will be met.<sup>9</sup>

### Domgas production entitlements

- 2.43 The NPA incorporates obligations related to those set out in the RSA and allocates domgas production entitlements to the relevant NWS joint ventures accordingly:
- 5064 PJ of domgas production was allocated to the DGJV;
  - residual gas (gas exceeding the State obligations) is owned in equal shares by all six NWS venture participants and may be sold either as domgas by the IPGJV or exported as LNG; and
  - in the future, gas in the Project Area exceeding a base quantity under the NPA may be designated as Extended Interest Gas and would be allocated to the EIJV for sale as either LNG or domgas.
- 2.44 Due to the fact that the DGJV has fully contracted its production entitlement under existing domgas contracts, any future sales of NWS domgas are likely to be made by the IPGJV.
- 2.45 Figure 5 illustrates the split of production between the DGJV and IPGJV as the DGJV's production entitlements are exhausted.

Figure 5



Note: Figure 5 is indicative for illustrative purposes only

- 2.46 In addition to the domgas volume entitlements, the NPA specifies a daily production limit for the DGJV – presently 414 TJ (per day). However, gas supply requirements under existing DGJV contracts often exceed its daily production limit. To ensure that DGJV customers receive uninterrupted supply at agreed prices and conditions despite the production limit, the DGJV and IPGJV participants entered into a Production Transfer Agreement (PTA). Under the PTA, the DGJV participants effectively purchase any shortfall (the amount exceeding 414TJ) from the IPGJV participants.

<sup>9</sup> Clause 16 of Schedule 2 to the *North West Gas Development (Woodside) Agreement Act 1979 (WA)*, amending Clause 46 of the Principal Agreement.

### **Domgas production capacity**

- 2.47 Daily domgas production is constrained by the Karratha Plant's maximum committable capacity of approximately 600 TJ per day. The committable capacity is the total firm amount that can be processed regardless of uncontrollable factors such as:
- weather fluctuations (gas is harder to process on hot days);
  - the specifications of the hydrocarbons feeding into the facility;
  - minor unplanned shutdowns; and
  - planned maintenance.
- 2.48 As there are no substantial storage facilities for domgas in WA, if processing stopped or decreased there would be a risk of interruption of supply to customers.
- 2.49 If the Plant was run at the absolute maximum capacity (on an interruptible basis), it could potentially produce more than the maximum committable capacity. However, achieving a production level higher than the maximum committable capacity is dependent on particular circumstances (ie it could only be achieved during cooler weather, with optimal configuration and without maintenance interruption) and could not be guaranteed by the NWS venture participants for any sustained period.
- 2.50 Following the Varanus Island outage in June 2008, the NWS venture participants temporarily operated the Plant above maximum committable capacity to provide emergency supply of between zero and 150 TJ per day. This rate of incremental interruptible production was only possible because it occurred during the coolest months of the year. It is not sustainable over a longer period and results in a sub-optimal outcome for the NWS venture participants.

### **Joint marketing arrangements**

- 2.51 Under the NPA, each NWS venture participant has the right to own, take and separately dispose of its production entitlement. However, due to the nature of demand and market conditions in WA, the NWS venture participants have always jointly marketed their domgas entitlements.
- 2.52 The NWS venture participants established a specialist marketing agency, NWSG Pty Ltd (**NWSG**) to undertake the following activities on their behalf:
- (a) market domgas produced by the DGJV and IPGJV to WA domestic customers; and
  - (b) administer existing domestic GSAs.
- 2.53 NWSG is staffed by representatives from the companies participating in the NWS venture.
- 2.54 The joint marketing arrangements for each of the DGJV and IPGJV, along with the role of NWSG, are set out in marketing agreements.

### **New gas sales**

- 2.55 NWSG's role is to identify opportunities to sell domgas and to recommend terms and conditions, including prices, for consideration by the NWS venture participants. NWSG does not have the authority to commit the NWS venture participants to particular terms and conditions and takes instructions from the NWS venture participants.
- 2.56 The process by which the NWS venture participants enter into domestic GSAs can be summarised as follows:
- the relevant NWS venture participants (for future sales, likely to be the IPGJV participants) collectively negotiate and agree all of the terms and conditions, including price, for supply of gas to the prospective buyer identified by NWSG. These negotiations are managed and facilitated by NWSG;

- the buyer contracts individually with each relevant NWS venture participant in respect of its proportionate share of the delivered domgas (being each NWS venture participant's percentage interest in the DGJV or the IPGJV, as the case may be);
- the separate GSAs between the buyer and each NWS venture participant (on common terms) are consolidated into a single document;
- the domgas made available to a buyer under the GSAs is delivered in a common and comingled stream; and
- NWSG invoices the buyer on behalf of each of the NWS venture participants.

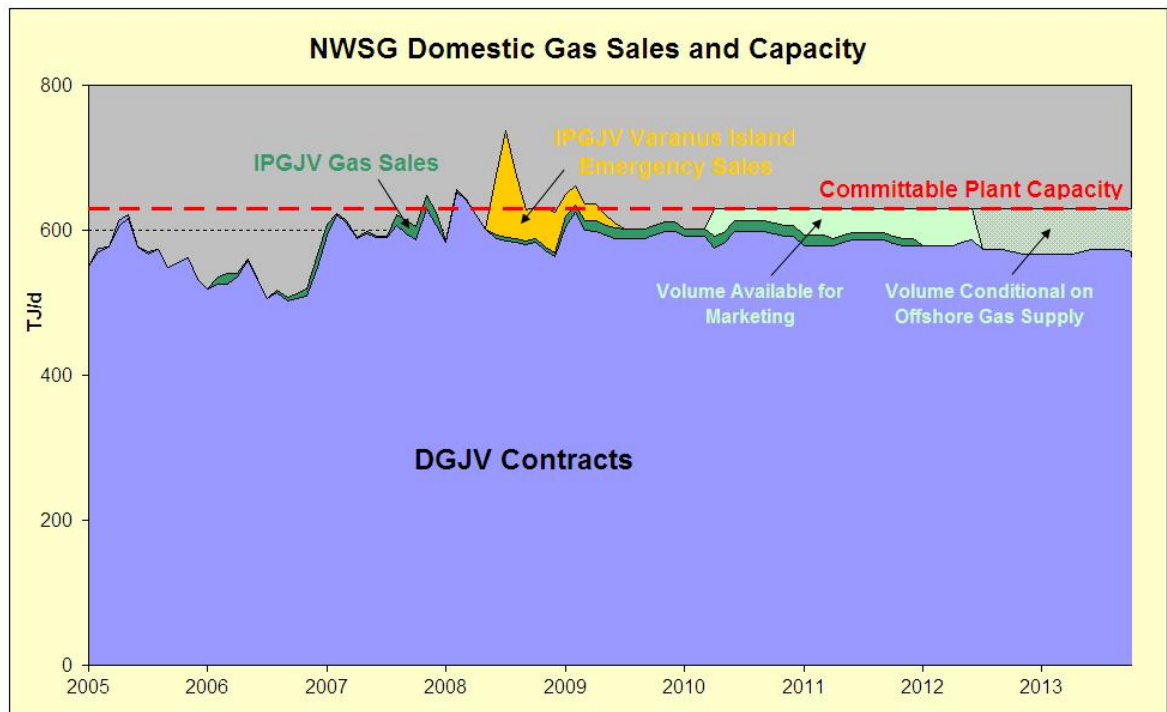
### Existing contracts

- 2.57 NWSG is also responsible for administering existing contracts. NWSG receives nominations from customers for the amounts of gas they require on a particular day. This information is then provided to the Project's operator, Woodside, who determines the total amount of domgas to be produced and processed by the Project. NWSG also assists Woodside with forward planning and forecasting at the Karratha Plant.
- 2.58 A small number of the DGJV's longer term contracts contain price review clauses. NWSG's role in relation to price reviews (and other substantive contract administration) is similar to its role in negotiating new contracts. NWSG facilitates meetings and communications between the NWS venture participants and their customers, makes recommendations based on market research, takes instructions from each of the NWS venture participants and communicates agreed price proposals to the buyer.
- 2.59 DGJV contracts that allow for price reviews generally provide for disputes to be resolved via an independent arbitration process.

### Current domgas supply

- 2.60 The five original NWS Project venture participants entered into a GSA with the former State Energy Commission of Western Australia (**SECWA**) for the supply of approximately 414 TJ per day from July 1985 to June 2005. In 1994, the SECWA contract was disaggregated into separate DGJV contracts with 5 major customers.
- 2.61 The DGJV continues to supply the following five major domestic customers, largely under restatements of the original contracts:
- Alcoa;
  - Alinta;
  - BHP Billiton;
  - Hamersley Iron; and
  - Verve.
- 2.62 Over 90% of the Project's available domgas production capacity is utilised in meeting the requirements of these 5 major customers.
- 2.63 The IPGJV has made some short term sales of domgas where small amounts of capacity exceeding DGJV commitments have become available. Opportunities for the IPGJV to sell new quantities of gas will increase as the DGJV contracts gradually fall away and Plant capacity becomes available.
- 2.64 Figure 6 graphs:
- the quantities of gas supplied under DGJV and IPGJV contracts; and
  - future capacity that may be available for supply.

Figure 6



- 2.65 The yellow spike above committable plant capacity represents the non-firm quantities of gas supplied by the IPGJV following the Varanus Island incident in June 2008. The incident shut down Apache's production of domgas which caused a significant reduction in the amount of gas supplied to the WA market. In response to the emergency shortfall of gas, the IPGJV entered into short term contracts with affected customers for up to 150TJ per day of interruptible gas. To run the processing plant at this level the NWS venture participants were prepared to incur LNG production losses.

#### Emergency supply arrangements

- 2.66 As demonstrated by the Varanus Island incident and the Karratha Plant's outage in January 2008, gas producers always face the risk that supply could be interrupted by a range of events (for example, due to maintenance activities or adverse weather conditions). In order to ensure that customers receive continuous gas supplies in these circumstances, affected producers may request 'back-up' supply from unaffected producers.
- 2.67 The IPGJV has previously entered into emergency 'back-up' supply agreements with Apache. These arrangements were very short term, typically lasting for a few days, and were entered into on an ad-hoc, non-exclusive basis.

#### Future domgas supply

- 2.68 Future Project domgas production and sales could come from either:
- the residual reserves (the reserves not subject to a State obligation) allocated to the IPGJV; or
  - potentially, extended interest gas which would be allocated to the future EIJV – see paragraph 2.39 above.
- 2.69 The extent to which the IPGJV or EIJV will be able to supply the domestic market is highly dependent on investment decisions and will involve the NWS venture participants assessing a range of factors, including:
- proving of gas reserves;



- the terms of potential domgas sales;
- the value of alternative uses for the gas (such as LNG sales);
- the increasing costs of producing from diminishing fields (involving investment in compression facilities and additional infrastructure to develop smaller fields, as described in paragraphs 2.28 to 2.31 above); and
- assessment of regulatory obligations and regulatory risk.

### **LNG production**

- 2.70 The Project's LNG production is governed by two separate joint venture structures:
- (a) the LNG joint venture: the ownership and participating interests of the LNG joint venture are the same as the IPGJV; and
  - (b) the CLNG joint venture: in which CNOOC has a 25% participating interest and the other six NWS venture participants each hold a 12.5% participating interest.
- 2.71 The combined LNG joint ventures export over 240 LNG cargoes each year. Since the first LNG cargoes were shipped 20 years ago, the Project has exported more than 2,800 LNG cargoes worldwide. The CLNG joint venture produces LNG for export to China under a 2002 contract.
- 2.72 The NWS venture participants have always jointly marketed their LNG. North West Shelf Australia LNG Pty Ltd performs a marketing role for LNG similar to the role of NWSG for domgas.

### 3 Previous authorisations

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- 3.1 The joint marketing activities of the NWS venture participants have previously been subject to certain TPA authorisations.

#### **Authorisation A18492 – 1977**

- 3.2 In February 1977, the Trade Practices Commission (**TPC**) granted authorisation to the DGJV participants to discuss and agree the common terms and conditions (including price) and the methods by which natural gas would be offered for sale by the DGJV.
- 3.3 The 1977 authorisation was granted without any time limit, although it was subject to review in the event that market conditions changed.
- 3.4 In March 2008, the authorisation was revoked at the request of the DGJV participants. The DGJV participants decided to revoke the authorisation after undertaking an extensive review of the WA domgas market and the likely effect of joint marketing on competition. As the WA market had not materially changed since the ACCC 1998 determination (referred to below), the DGJV participants concluded that joint marketing was unlikely to lessen competition and thus authorisation was unnecessary.
- 3.5 The DGJV long term contracts (entered into prior to March 2008 and represented as the blue shaded area in Figure 6) were formed pursuant to this ACCC authorisation.

#### **Authorisation A90624 – 1998**

- 3.6 In July 1998, the ACCC granted authorisation to the IPGJV participants to discuss and agree the common terms and conditions (including price) and the methods by which natural gas would be offered for sale by the IPGJV. This authorisation operated in parallel with the 1977 authorisation.
- 3.7 In granting authorisation, the ACCC concluded that the WA market had not developed the key market features that are a prerequisite for separate marketing.
- 3.8 Unlike the 1977 authorisation, the IPGJV authorisation was limited as to time and expired in 2005. The IPGJV participants did not seek a renewal of the 1998 authorisation for the same reasons that the DGJV participants decided to revoke the 1977 authorisation – the NWS venture participants consider that joint marketing is unlikely to lessen competition given the structure of the WA gas market.

#### **State authorisations under s 51(1)(b) of the TPA**

- 3.9 A number of authorisations were also granted pursuant to the operation of s 51(1)(b) of the TPA. These authorisations are contained in the RSA and relate to the DGJV's initial contracts. Clauses 41A and 42(a)(i) of the RSA authorise the DGJV participants to sell domgas on agreed terms and conditions pursuant to specified contracts for a limited term.

## 4 Applications for new authorisations

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### Decision to seek authorisation

- 4.1 The IPGJV has jointly marketed domgas in WA without authorisation for nearly 5 years. The DGJV has also operated without authorisation since March 2008 (in particular, it continues to give effect to existing contracts formed under the 1977 authorisation).
- 4.2 Throughout the period without authorisation, the NWS venture participants have regularly obtained updated expert market analysis to ensure that their joint marketing activities remain in compliance with the TPA. The NWS venture participants have also continued to keep the ACCC fully informed of their activities and any material developments in the WA domgas market.
- 4.3 The NWS venture participants believe that the WA gas market has not materially developed since 1998 and that separate marketing remains commercially infeasible for the Project. These conclusions are consistent with the findings of the ACCC in the Gorgon determination.<sup>10</sup> The NWS venture participants remain of the view that their joint marketing activities do not lessen competition in WA or otherwise raise any TPA concerns.
- 4.4 Notwithstanding this position, the NWS venture participants have decided to seek new authorisations for their joint marketing activities and for contract administration. This decision is motivated by the current regulatory and political sensitivity and customer interest concerning the supply of domgas in WA. The NWS venture participants consider it likely that without authorisation, their marketing activities will continue to be subject to regulatory inquiries, political interest (such as the 2008 Senate Inquiry) and the potential for concern arising from certain domgas buyers. Responding to these matters results in substantial ongoing costs (including management time) and uncertainty for the NWS venture participants.

### Conduct sought to be authorised

- 4.5 The NWS venture participants are seeking authorisations to:
- (a) jointly discuss and negotiate common terms and conditions (including price) and the methods by which domgas produced from the Project will be offered for sale by the participants of the DGJV or IPGJV;<sup>11</sup>
  - (b) enter into contracts, arrangements or understandings between the NWS venture participants containing common terms and conditions (including price) upon which domgas produced from the Project will be offered for sale and sold by the participants of the IPGJV or DGJV; and
  - (c) give effect to existing and new contracts, arrangements or understandings for the sale of domgas by the participants of the DGJV or IPGJV.
- 4.6 The NWS venture participants request that separate authorisations be granted to both the IPGJV and the DGJV in recognition of the different participating interests in each of those

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<sup>10</sup> Chevron Australia Pty Ltd & Ors - Authorisations - A91139 & A91140 & A91160 & A91161, 5 November 2009 (**Gorgon determination**), paras 7.41 - 7.47.

<sup>11</sup> The NWS venture participants note that it is presently anticipated that future contracts will be formed by the participants in the IPGJV.

joint ventures. In this regard, the NWS venture participants have lodged separate application forms seeking authorisations applicable to both the DGJV and IPGJV.

### Duration of authorisation

- 4.7 The NWS venture participants request authorisation be granted to jointly market and enter into domgas contracts:
- until the end of 2016, to provide regulatory certainty for the NWS venture participants to underwrite investment decisions to maintain capacity and deliverability for the production of domgas to be marketed by the IPGJV participants; or, if the ACCC believes the issues should be reconsidered prior to this time
  - until at least the end of 2015, in line with the ACCC's findings in the Gorgon determination in relation to possible development of the WA market.<sup>12</sup>
- 4.8 The NWS venture participants request authorisation be granted to give effect to:
- existing domgas contracts for the full term of those contracts (including any extensions)<sup>13</sup>; and
  - domgas contracts entered into during the term of authorisation (or any extensions of such contracts) for a period of up to 25 years from the date of the first delivery of gas under that contract. As noted by the ACCC in the Gorgon determination, domgas customers in WA have recently expressed interest in contracts for up to 25 years.<sup>14</sup>

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<sup>12</sup> Gorgon, above n 10, 7.282 – 7.283, 7.285 – 7.286.

<sup>13</sup> A confidential list of existing contracts is at Attachment 8 to this submission. The application also encompasses giving effect to any existing DGJV GSAs that may be assigned to the IPGJV participants in the future.

<sup>14</sup> Gorgon, above n 10, 7.288.

## 5 The authorisation test

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- 5.1 Under section 90 of the TPA, the ACCC may only grant authorisation where it is satisfied that in all the circumstances the conduct for which authorisation is sought is likely to result in a public benefit that would outweigh any likely detriment to the public.
- 5.2 In weighing the public benefits and detriments, the ACCC must apply the ‘future with and without’ test. That is, the ACCC compares the likely future if the authorisation were granted with the counterfactual if the authorisation were not granted.<sup>15</sup>
- 5.3 Public benefit is not defined in the TPA, however both the ACCC and the Australian Competition Tribunal (**Tribunal**) have consistently stated that the term ‘public benefit’ should be given its widest possible meaning.<sup>16</sup> More specifically, the Tribunal has found that this extends to:
- “...anything of value to the community generally, any contribution to the aims pursued by society including as one of its principle elements... the achievement of economic goals of efficiency and progress”.<sup>17</sup>
- 5.4 Public detriment is not defined in the TPA. The Tribunal has given the concept of public detriment a wide ambit, including
- “...any impairment to the community generally, any harm or damage to the aims pursued by the society including as one of its principal elements the achievement of the goal of economic efficiency.”<sup>18</sup>

## 6 Relevant market

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- 6.1 The assessment of the effect of joint marketing needs to take place in the context of a relevant market.
- 6.2 The ACCC has previously considered the relevant market to be the wholesale market for the domestic supply of gas in WA or the south west region of the State (**WA domgas market**).
- 6.3 Arguably, there is a broader energy market which encompasses gas and other fuels such as coal and oil.
- 6.4 For the purposes of this Application only, the NWS venture participants adopt the ACCC’s previous market definition (i.e. the WA domgas market).

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<sup>15</sup> *Australian Performing Rights Association (1999) ATPR 41-701 at 42,936 and Re Media Council of Australia (No. 2) (1987), ATPR 40-774 at 48,419.*

<sup>16</sup> *Macadamia Processing Company and Suncoast Gold Pty Ltd (1991) ATPR (Com) 50-109 at 56,101; Davids Limited (1996) ATPR 50-224 at 56,458; Du Pont (Australia) Ltd and Ors (1996) ATPR (Com) 50-231 at 56,529.*

<sup>17</sup> *Re Queensland Cooperative Milling Association Ltd (1976) ATPR 40-012 at 17,242.*

<sup>18</sup> *Re 7-Eleven Stores Pty Ltd (1994) ATPR 41-357 at 42, 683.*

## 7 Potential counterfactuals

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- 7.1 The NWS venture participants consider that there are three possible outcomes if they are not granted authorisation for their ongoing joint marketing activities:
- (a) continue joint marketing of domgas without authorisation, notwithstanding the significant regulatory costs and uncertainty; or
  - (b) attempt to transition the Project to separate domgas marketing; or
  - (c) consider lower risk / cost alternatives, such as focussing on export opportunities (even though this is not the NWS venture participants' preferred course of action).
- 7.2 It is difficult to say at this time what the most likely outcome would be, as it will depend on each NWS venture participant's individual assessment of the economic and legal costs and risks of each option after reviewing the ACCC determination.
- 7.3 Each of the possible counterfactual scenarios are examined below.

### Counterfactual 1: Continue joint marketing

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- 7.4 If authorisation is not granted, the NWS venture participants could potentially elect to continue to jointly market domgas based on their assessment that joint marketing is unlikely to lessen competition in the WA domgas market.
- 7.5 This counterfactual is likely to result in the NWS venture participants having to:
- respond to regulatory inquiries, including possible requests for information about their marketing activities;
  - potentially respond to other issues raised by governments, such as the Senate Inquiry that took place in 2008<sup>19</sup>;
  - potentially respond to issues raised by domgas users and related industry associations; and
  - obtain regular market analysis and have discussions with the ACCC, AER and other regulators regarding the development of the WA domgas market, to ensure compliance with the TPA.
- 7.6 Managing all of these processes is likely to result in considerable uncertainty and costs for the NWS venture participants. The NWS venture participants anticipate this uncertainty and cost may increase over the next five years having regard to the views of the ACCC that the WA market may develop in the medium term (for the reasons set out in the Gorgon determination).<sup>20</sup>

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<sup>19</sup> The Senate of the Commonwealth of Australia, Standing Committee on Economics, *Joint marketing arrangements on the North West Shelf project*, December 2008.

<sup>20</sup> Gorgon, above n 10, 7.279.

## Counterfactual 2: Attempt to transition to separate marketing

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### Separate marketing not commercially feasible

- 7.7 The NWS venture participants submit it is not commercially feasible to transition the Project to separate marketing at this time. The ACCC reached essentially the same conclusion in the Gorgon determination.<sup>21</sup>
- 7.8 The reasons why separate marketing is not feasible include:
- (a) the features of the WA domgas market do not support separate marketing for the NWS venture participants;
  - (b) gas balancing arrangements (**GBAs**) would involve considerable commercial risk, costs and practical difficulties; and
  - (c) substantial (and potentially prohibitive) costs and difficulties would arise in attempting to transition a project of the size, age and complexity of the Project from joint to separate marketing.
- 7.9 Nevertheless, the NWS venture participants recognise that an adverse ACCC determination may ultimately force them to consider attempting to implement this alternative.

### Structure of the WA domgas market

- 7.10 The structure of the WA domgas market is central to a consideration of the feasibility of separate marketing.
- 7.11 In the 1998 North West Shelf authorisation determination, the ACCC concluded that the WA domgas market did not have the maturity or necessary structural features to enable separate marketing of domgas.<sup>22</sup>
- 7.12 The ACCC identified a list of market features that would facilitate separate marketing in WA:
- a significant increase in the number of customers;
  - the entry of new competitive suppliers;
  - additional transport options;
  - storage;
  - the entry of brokers / aggregators;
  - the creation of a gas related financial market; and
  - the development of substantial short-term and spot markets.<sup>23</sup>
- 7.13 The ACCC stated that, while not all of these features would need to be present for separate marketing, the greater number of features that developed the greater the likelihood that separate marketing would be viable.<sup>24</sup>

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<sup>21</sup> Gorgon, above n 10, 7.75, 7.110 – 7.111.

<sup>22</sup> 1998 NWS authorisation at pp 47-49.

<sup>23</sup> Ibid p 49.

<sup>24</sup> Ibid; The ACCC subsequently recognised these features in the Mereenie Producers (A90637 – A90645, April 1999, at 6.2.2) and PNG (A40081, May 2005, at 7.1.1) authorisations.

- 7.14 The ACCC recently considered the extent to which these market features have developed in WA as part of the Gorgon determination. The ACCC concluded, based on extensive market inquiries and independent expert analysis, that the WA market has only developed marginally since 1998 and lacks the features necessary to support separate marketing.<sup>25</sup>

#### Wood Mackenzie WA market review

- 7.15 The NWS venture participants have engaged Wood Mackenzie to prepare an independent report examining the current structure and competitive conditions of the WA domgas market. The report, entitled “*Western Australia Gas Market Study*” is provided as Attachment 1 to this submission.
- 7.16 Wood Mackenzie was asked to pay particular attention to the market features identified by the ACCC as being relevant to the feasibility of separate marketing. In summary, Wood Mackenzie reached essentially the same conclusion as the ACCC in the Gorgon determination – there has been no material development in the maturity of the WA market since 1998.<sup>26</sup>
- 7.17 Wood Mackenzie’s conclusions on the development of each of the key market features are summarised in Figure 7 below.

**Figure 7**

Market feature	Wood Mackenzie comparison to 1998
Customers	Similar concentration of major buyers Majority of gas still purchased by only five customers
Suppliers	Similar concentration of major suppliers Majority of gas still supplied by the Project, Apache and Santos
Transportation	Increased capacity but number of pipelines has not materially changed and most transportation via DBP Key pipelines are fully contracted
Storage	No material change One small facility (12-15 TJ/day) but peak market demand 1000 TJ/day
Brokers / aggregators	Modest progress Immature trading market
Financial markets	No change No gas-related financial markets exist in WA
Short term / spot markets	No material change Spot markets are very modest and considered

<sup>25</sup> Gorgon, above n 10, 7.41 – 7.49.

<sup>26</sup> Wood Mackenzie report, page 8.



	immature
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- 7.18 Wood Mackenzie also confirmed the ACCC's conclusions in the Gorgon determination that new demand in WA is characteristically 'lumpy'.<sup>27</sup> Wood Mackenzie attributes this to the necessary simultaneous alignment of:
- predominantly project-based new demand;
  - incremental gas transportation capacity between the gas supply point and the end-users' delivery point requiring step change augmentation;
  - new onshore mid-stream gas processing capacity aggregating offshore raw gas supply; and
  - new upstream gas supply.<sup>28</sup>
- 7.19 As each of these necessary components require significant business investment decisions in themselves, the alignment of all four components that is required to see delivered gas volumes materially change results in 'stair step' or 'lumpy' market developments overall.<sup>29</sup>
- 7.20 Additional background to the current structure and competitive conditions in the WA domgas market can be found in:
- The WA Department of Industry and Resources, *Western Australian Oil and Gas Review 2008* (Attachment 2);
  - The WA Office of Energy, *Gas Supply and Emergency Management Committee Report to Government*, September 2009 (Attachment 3); and
  - The Australian Energy Regulator, *State of the Energy Market*, December 2009 (available on the ACCC website).

### Gas balancing in WA

- 7.21 Separate marketing would necessarily result in some joint venture participants selling more gas than others and depleting their share of reserves more quickly. To deal with the resulting production imbalances, the NWS venture participants would be required to enter into GBAs.
- 7.22 GBAs enable joint venture participants to supply gas in different proportions to their individual production entitlements. GBAs are intended to:
- enable reserves to be produced optimally despite the fact that some of the joint venture parties may not have entered into gas supply contracts for their share of production; and
  - provide a mechanism to correct the inevitable pipeline imbalances that occur when producers are unable to deliver or customers are unable to receive the contracted amount of gas.
- 7.23 Under a GBA, a joint venture party can supply more than its share of production (for either of the above reasons) by effectively borrowing the additional gas from under-supplying parties. At a later point in time, the over-supplying party compensates the under-suppliers either in-kind (with gas) or through a cash settlement.

<sup>27</sup> Gorgon, above n 10, 7.39.

<sup>28</sup> Wood Mackenzie, above n 26, 14.

<sup>29</sup> Ibid.

**Immature WA domgas market does not support GBAs**

- 7.24 In the Gorgon determination the ACCC concluded that without a functioning spot/secondary market in WA and lack of significant storage options, there exists a high commercial risk in attempting to enter into a GBA.<sup>30</sup>
- 7.25 To assist with the analysis of a counterfactual involving GBAs, the NWS venture participants obtained an expert report from James Jensen, an internationally recognised authority on natural gas supply, demand, trade and pricing. A copy of this report is at Attachment 4.
- 7.26 Mr Jensen was asked to examine:
- the significance of market structure for GBAs; and
  - whether separate marketing using GBAs is feasible for the NWS venture participants given the current structure of the WA gas market.
- 7.27 Mr Jensen undertook his analysis by examining the features generally present in all gas markets, such as the US, where GBAs are used. He then compared the features of the WA gas market. Mr Jensen concluded that due to the current structure of the WA gas market, it would be very difficult to implement either in-kind or cash balancing arrangements.<sup>31</sup> These conclusions closely mirror those of the ACCC in the Gorgon determination.<sup>32</sup>
- 7.28 From the Gorgon determination and Mr Jensen's report, it is apparent that there are three key features of the WA domgas market which in particular undermine the viability of GBAs.<sup>33</sup> These key market features (which are also examined in detail in the Wood Mackenzie report) are summarised below.
- (a) *Illiquidity / 'lumpiness' of the market*
- 7.29 The WA domgas market is made up of a small number of significant buyers and sellers.<sup>34</sup> As a result of the limited supply options and the need for security of supply for the small number of large purchasers looking to underwrite investment, the WA domgas market has become dependent on long term, large volume bilateral contracts.<sup>35</sup> Furthermore, market developments will continue to be 'lumpy', given the interlinking chain of investment decisions required (upstream supply, mid-stream processing, transportation and downstream demand).
- 7.30 The significance of these market characteristics is that the imbalances (between individual participant gas sales and joint venture ownership of the gas reserves) resulting from separate marketing are likely to be large and persistent (long term).<sup>36</sup>
- 7.31 Comparatively, the gas markets where GBAs are used, such as the US and UK, tend to be highly liquid commodity markets involving many buyers and sellers of gas, with significant flexibility in terms of storage and transportation options.<sup>37</sup> GBAs can work in this environment because there are many available options to ensure imbalances are small and short term only.

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<sup>30</sup> Gorgon, above n 10, 7.75.

<sup>31</sup> Jensen report, paras 11.1-11.3.

<sup>32</sup> Gorgon, above n 10, 7.75 – 7.76.

<sup>33</sup> Jensen, above n 3131, 2.2 and 11.2.

<sup>34</sup> Wood Mackenzie, above n 26, 8 – 9.

<sup>35</sup> Jensen, above n 31, 7.3 – 7.4 and 8.3; Wood Mackenzie, above n 26, 14; Gorgon, above n 10, 7.39.

<sup>36</sup> Jensen, above n 31, 3.6.

<sup>37</sup> Jensen, above n 31, 3.2, 7.1 – 7.2 and 8.1.

(b) *Lack of an effective spot or secondary market*

- 7.32 Due to the reliance on long-term contracting, there has been no development of a functioning spot or secondary market in WA.<sup>38</sup> Whilst a sporadic, small amount of shorter term trades have occurred, this is mainly used to manage risks of gas shortfalls.
- 7.33 There is no formal trading platform operating in WA on which gas producers can offer short-term trades on transparent terms and conditions. Following the Varanus Island outage in June 2008, the WA state government attempted to set up a gas bulletin board to facilitate a short term gas market. However, as was noted by the ACCC in the Gorgon determination, only a small number of trades for relatively small volumes of gas were actually executed on the bulletin board and it was closed down after only 4 months of operation.<sup>39</sup> These events occurred in exceptional 'emergency' circumstances where it might otherwise have been expected that a significant level of short term trading would be observed.
- 7.34 Wood Mackenzie identifies the DBP's Inlet Trades service as the most material platform for short term and spot trading in WA.<sup>40</sup> However, the Inlet Trade service is only available for trades between existing DBP users to assist with their short term gas supply and imbalance needs and does not constitute a transparent spot market.
- 7.35 Overall, Wood Mackenzie does not consider the market for short term/spot sales in WA to have developed materially since 1998.<sup>41</sup> This is consistent with the Gorgon determination.<sup>42</sup>
- 7.36 In the absence of an effective short term/spot market there is no mechanism that enables price discovery or for physically clearing short term gas imbalances. The enormous difficulties in establishing a 'market price' for gas in WA is amply demonstrated by the recent Alinta Sales price arbitration process which took more than two years to complete.
- 7.37 The recent report published by the Western Australian Gas Supply and Emergency Management Committee (**GSEMC**) (Attachment 3) recommends the re-establishment of a gas bulletin board and that a short term trading market be considered.<sup>43</sup> In the Gorgon determination the ACCC notes these recommendations and considers that they demonstrate the potential of the market to develop in the medium term.<sup>44</sup> Importantly though, the ACCC recognises that the GSEMC recommendations have not been implemented, nor are there any firm timelines for their implementation.<sup>45</sup>
- 7.38 Even if these GSEMC reforms are supported and implemented in the future, the NWS venture participants believe that it will be some time before the creation of a gas bulletin board or short term market would have any material impact on the structure and operation of the WA market, given the underlying 'lumpiness' of domgas demand and market development. The longer-term failure of the gas bulletin board that was established following the Varanus Island incident

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<sup>38</sup> Wood Mackenzie, above n 26, 43.

<sup>39</sup> Wood Mackenzie, above n 26, 43; Gorgon, above n 10, para 7.41.

<sup>40</sup> Wood Mackenzie, above n 26, 43;

<sup>41</sup> Wood Mackenzie, above n 26, 10.

<sup>42</sup> Gorgon, above n 10, 7.39 -7.42 and 7.47.

<sup>43</sup> Government of WA, Office of Energy, *Gas Supply and Emergency Management Committee Report to Government*, September 2009 (**GSEMC Report**), page 5.

<sup>44</sup> Gorgon, above n 10, 7.43.

<sup>45</sup> Ibid.

demonstrates that the mere existence of a trading platform will not necessarily overcome the structural immaturity of the market.

(c) *Lack of storage facilities*

7.39 Significant commercial gas storage is also critical for a functioning GBA as it enables a joint venture participant to defer supply if it does not enter into a gas supply agreement at the time of production. The only gas storage facility that has developed in WA since 1998 is the Mondarra facility. The capacity of the Mondarra facility is very modest, at less than 2% of the total average daily market volume.<sup>46</sup> The facility is currently believed to be fully contracted to Verve Energy.<sup>47</sup>

7.40 Park and loan services provided by major pipelines do not provide storage of the size or duration that would be required to support separate marketing in WA. Particularly in the case of the DBP, customers may not fall outside of the +/- 8% range of contracted capacity, which in any event must be cleared daily. The DBP can at best offer limited imbalance flexibilities and short term storage. It cannot store large volumes of gas for an extended period of time or operate as a commercial storage facility.

7.41 The GSEMC report also recommends the development of additional gas storage capacity.<sup>48</sup> Again, however, the NWS venture participants are unaware of any plans to implement this recommendation.

7.42 As a result of these features of the WA market, it will be very difficult for joint venture participants to find balanced outlets for their individual production entitlements.<sup>49</sup> This is likely to result in large and persistent production imbalances<sup>50</sup> increasing costs and will put investment, resource recovery and future production at risk.

**Domgas / LNG balancing not feasible**

7.43 As the ACCC accepted in the Gorgon determination, it is not commercially feasible to balance domgas sales against the LNG market.<sup>51</sup>

7.44 Mr Jensen also considers this issue and points to the limited size and liquidity of the WA domgas market compared with the international LNG market and the pricing differential between the two markets as the key reasons why attempting to balance domgas against LNG would be problematic.<sup>52</sup>

7.45 In any event, the NWS venture participants have never separately marketed their LNG entitlements.

**Risks and difficulties of GBAs**

7.46 Attempting to remedy large and persistent production imbalances through GBAs would involve substantial commercial risk, cost and practical difficulties for the NWS venture participants. These risks, costs and difficulties are outlined below.

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<sup>46</sup> Wood Mackenzie, above n 26, 39.

<sup>47</sup> Ibid.

<sup>48</sup> GSEMC Report, page 5.

<sup>49</sup> Jensen, above n 31, 3.6.

<sup>50</sup> Ibid.

<sup>51</sup> Gorgon, above n 10, 7.79.

<sup>52</sup> Jensen, above n 31, 3.10 – 3.12 and 10.11 – 10.19.

**Reserves risk**

- 7.47 It is difficult to estimate provable levels of gas reserves in the future (particularly towards the end of a gas field's life). The amount of provable gas capable of being extracted can also be affected by the management of reserve depletion. As shown in Mr Jensen's report, the long term nature of contracting in WA means that the critical issue is not whether production can be increased in the short term but whether reserves can be managed to satisfy delivery obligations over the full term of existing (and future) contracts.<sup>53</sup>
- 7.48 The reserve risk would be magnified under separate marketing in WA due to:
- the increased possibility that an under-supplying venture participant with a large and prolonged imbalance will never be repaid their 'borrowed' gas if reserves do not perform as expected;<sup>54</sup>
  - the reduced incentive for joint venture parties to work together to optimally manage reserve depletion to maximise field life and avoid the need for investment in additional or alternative extraction facilities,<sup>55</sup> and
  - the inability of joint venture parties to mitigate reserve risk by depositing their share of gas in storage facilities or making sales on a spot market.
- 7.49 The NWS venture participants would face a particularly high reserve risk under separate marketing due to the age and complexity of the Project and the investment required to maintain production at current levels. The future profile of gas available from known reserves in the Project Area is highly uncertain and contingent on joint investment decisions. This uncertainty will increase as the known reserves approach end of life.

**Revenue risk**

- 7.50 The use of GBAs in WA would jeopardise the ability of joint venture participants to maximise their revenue from and recoup investment in joint production.<sup>56</sup>
- 7.51 Joint venture participants supplying more than their production entitlement would bring forward their future sales revenue, thereby deferring the revenue of the under-supplying joint venture participants. The likelihood in WA that repayment of imbalances and therefore revenues will be deferred for many years creates a real risk that under-supplying (or 'loaning') participants would receive less profit than if they had themselves sold and not lent their gas. Uncertainty about future revenue arises from:
- the potential for natural gas prices to fluctuate between the time of the 'loan' of gas to the over-supplying participant and the time of repayment;
  - the likelihood that the costs of extracting and processing gas will increase towards the end of reserve life; and
  - the time cost of money.

**Pricing difficulties**

- 7.52 Due to the risk that large and sustained imbalances may not be able to be repaid in kind, gas balancing in WA would need to be heavily reliant on cash settlements. However, as acknowledged by the ACCC in the Gorgon determination, the lack of a transparent trading exchange or spot market prevents price and volume discovery.<sup>57</sup>

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<sup>53</sup> Jensen, above n 31, 8.5 and 8.7.

<sup>54</sup> Jensen, above n 31, 7.6.

<sup>55</sup> Jensen, above n 31, 8.9 – 8.10.

<sup>56</sup> Jensen, above n 31, 8.10.

<sup>57</sup> Gorgon, above n 10, 7.42.

- 7.53 In the absence of a liquid and transparent pricing system, Mr Jensen outlines three alternatives for pricing 'borrowed' gas. For the reasons set out below, none of these alternatives is likely to result in a more competitive market outcome than joint marketing.<sup>58</sup>
- (a) *Prices achieved by over-supplier*
- 7.54 Cash settlements could be at the prices achieved by the over-supplying participants. While such an approach could theoretically be applied in WA, it is very unlikely to produce a more competitive outcome than joint marketing. Joint venture participants engaging in separate marketing would have no incentive to compete with each other on price in order to 'increase their individual market share'.<sup>59</sup> If a large volume, long term contract was won by an individual joint venture party at a reduced price, the discount would impact not only on that venture participant's own volumes of gas, but also on the volumes of gas 'borrowed' from the under-supplying parties. The NWS venture participants would have no incentive to bid against each other to bring about this outcome.
- 7.55 It must also be remembered that the NWS venture participants produce gas jointly, including by making joint decisions about production levels and timing. In making these production decisions the NWS venture participants must have regard to the constraints that apply, for example in processing and pipeline capacity. This essential joint venture activity further reduces both the incentive and the ability for individual joint venture participants to compete with each other on price / volume.
- (b) *Internally negotiated prices*
- 7.56 Cash settlements could be priced by internal negotiation among joint venture participants prior to individual sales. However, this process would be likely to produce a very similar price outcome as joint marketing.
- (c) *Independent benchmarks*
- 7.57 Finally, the gas balancing price could be set by reference to some independent benchmark. For example, the marginal competitive fuel available in WA (eg coal or diesel) or with reference to the export price for LNG. However, as Mr Jensen notes, the imposition of an arbitrary pricing mechanism seems incongruous if the aim of separate marketing is to liberalise the market.<sup>60</sup> The NWS venture participants consider that price setting by reference to an adjacent or export market would significantly distort the development of the domestic gas market and would not result in a more competitive environment.
- 7.58 In this context Mr Jensen also notes that producers in the US avoid cash settlements during the life of the project wherever possible due to the difficulties associated with finding the right settlement price.<sup>61</sup> The fact that pricing difficulties impair cash settlements in what is arguably the most liquid and transparent market in the world indicates that it is likely to be impossible to implement a workable cash balancing system in the highly illiquid and opaque WA market.

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<sup>58</sup> Jensen, above n 31, 3.8.

<sup>59</sup> Jensen, above n 31, at 2.2 and 3.8.

<sup>60</sup> Jensen, above n 31, 3.8.

<sup>61</sup> Jensen, above n 31, 3.7 and 9.3.

## Costs and difficulties of attempting to transition to separate marketing

7.59 The procedural, economic and legal difficulties of attempting to transition a project the size, complexity and age of the Project to separate marketing can not be underestimated. This would likely result in large and ongoing costs for the NWS venture participants.

7.60 Some of the key issues include:

- (a) **negotiating new joint venture arrangements:** The NWS venture participants, plus CNOOC, would need to negotiate and agree a suite of arrangements necessary to facilitate separate marketing. This process would not be limited to complex GBAs that attempt to overcome the difficulties outlined above. It would also involve revisiting and unravelling the many inter-related joint venture agreements that have been developed over the last 25 years and agreeing new or amended joint venture documentation.

The Project is managed as an integrated production system across multiple fields (21) and six production joint ventures.<sup>62</sup> The scale and complexity of these operations and the requirement for a co-ordinated activity to ensure ongoing deliverability, resource optimisation and integrated development plans (for both LNG and domgas) has significant implications for any change to existing marketing arrangements. Key project management issues that need to be managed on an integrated basis include field depletion planning/reserves risk and associated investments, liquids recovery optimisation, LNG vs domgas deliverability requirements and the unit cost of production all of which make consideration of a separate marketing model extremely complex.

Even assuming this could be achieved (ie all six NWS venture participants plus CNOOC could agree on appropriate arrangements) within a reasonable timeframe, the process would result in very significant costs and delays for ongoing supply to the domgas market;

- (b) **misalignment of risk and reward:** Misalignment between Project risk (investment) and rewards (sales and profit) would likely result from the reserve and revenue risks associated with separate marketing and gas balancing.

Ongoing investments are planned to be jointly funded by the NWS venture participants in their respective proportionate interest. In assessing the commercial viability of each investment decision it is necessary to first have in place real, identified gas sales opportunities (LNG and/or domgas) to guarantee, to the extent possible, an adequate rate of return on invested funds. Under a joint marketing environment the investment decision is underpinned by a joint marketing agreement as each participant investing in the upstream development will ultimately realise the same return from their downstream sales agreements, at the same time. In a separate marketing environment it is likely that not all joint venture participants are able to monetise sales agreements in unison for their full entitlement of gas.

The difficulty in aligning risk and reward for the Project will be further compounded by the need to balance declining reserves between competing LNG and domgas opportunities.

This outcome would delay or frustrate entirely the necessary upstream investment and ongoing maintenance decisions required to maintain the current levels of the Project's supply to the WA domgas market (as discussed in paragraphs 2.28 to 2.32 above);

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<sup>62</sup> See above n 6 and accompanying text.

- (c) **processing capacity and operational constraints:** The capacity and operational constraints at the Karratha Plant would need to be balanced between the competing contractual priorities of each NWS venture participant;
- (d) **legal costs and disputes:** There are likely to be considerable legal costs associated with managing interactions between the NWS venture participants and resolving disputes that would be almost certain to arise both between the NWS venture participants and with their individual customers in relation to the new arrangements.

Transitioning an established brownfields project the size and complexity of the Project to separate marketing would give rise to an extremely high risk of protracted disputes. The incentives to challenge the new arrangements (which will almost inevitably be close to unworkable and highly complex) would exist whenever the NWS venture participants' interests fell out of alignment. This could well occur every time a new gas supply contract is signed.

The costs of managing legal compliance (not least of all compliance with the TPA) would also be significantly increased.

7.61 **Other substantive issues:** there are a host of other substantive issues that would need to be overcome in attempting to separately market gas from the Project. Some of these issues are briefly outlined below. Undoubtedly many others would come to light.

- (a) **resolving the interplay and productions entitlements between the DGJV, the IPGJV and the potential EIJVs** (each of which has different constituents and participation interests): the Project has developed, over time, an extremely complex structure and set of inter-linked entitlements and responsibilities. Reconstructing these in an environment that was never anticipated would be extremely difficult. These matters are not simply restricted to production, management and marketing. Broader responsibilities, such as regulatory compliance, the calculation of royalties and taxation, joint venture Accounting Principles and obligations to supply gas to WA would all be impacted;
- (b) **reconfiguring the Project Operator:** the role of the Project Operator would fundamentally change under separate marketing. Significant new resources, protocols and processes would be required to manage and attempt to resolve the individual desires of the six NWS venture participants (which may be conflicting or inconsistent). The Operator would function in a dramatically more complex and costly environment;
- (c) **determining what happens to liquids:** liquids are produced along with domgas and vary over the life of a project. How would the costs of production and the benefits of liquids associated with borrowed gas be dealt with under separate marketing?
- (d) **overcoming gas transportation constraints:** each NWS venture participant would need to make arrangements to separately contract for gas supply and transportation would need to be arranged in circumstances where there is little or no spare capacity on the DBP and with any new capacity enhancement requiring significant investment;
- (e) **ensuring that 'borrowed gas' is sufficiently bankable for a customer:** project financiers and customers will need to review not only a proposed gas sale agreement but also the new GBAs and underlying joint venture arrangements to determine the security of their supplies. If changes are sought to any joint venture agreements, all NWS venture participants would need to consent and this in turn would have flow on effects for all other individual gas supply agreements; and
- (f) **increased transaction costs:** for example, NWSG would need to be dismantled and six separate joint marketing operations established in its place



(which would also include six separate nomination, allocation and invoicing processes).

- 7.62 The complexities and risks of an attempt to move to separate marketing outlined above are magnified for a Project that is in its mature, and declining, phase. The profile of gas from the Project will be uneven in terms of duration and rate. There will also be some initial uncertainty as to how much incremental gas will be available for sale (having regard to reserves, deliverability and prior domgas and LNG commitments).

### **Pohokura demonstrates significance of costs and risk**

- 7.63 The NWS venture participants agree with the ACCC's view in the Gorgon determination that the difficulties encountered by the Pohokura venture participants in New Zealand demonstrate the significance of the costs and risks of transitioning to separate marketing in an immature market.<sup>63</sup>
- 7.64 In the Gorgon determination the ACCC notes that the Pohokura project was a relatively technically straight forward project to bring into supply in comparison to the complexity of the proposed Gorgon Project.<sup>64</sup> The ACCC also notes that the Pohokura project was supplying into a market where demand for gas was guaranteed and at a price that would underwrite the investment.<sup>65</sup>
- 7.65 Nevertheless, the Pohokura venture participants have not been able to negotiate and agree on gas balancing arrangements and have been in litigation since 2006 in relation to the project's arrangements (including gas balancing).<sup>66</sup>
- 7.66 Transitioning the Project to separate marketing would be far more complex and risky than either Pohokura or Gorgon. The critical factors in this regard are:
- the number of joint venture participants involved. Whilst this sounds simple, with every additional party to the production joint venture the complexity and litigation risks associated with GBAs (along with the risks of irreconcilable imbalances) are likely to increase significantly;
  - the technical complexity of the joint venture arrangements. The Project consists of six inter-related ventures (two of which produce domgas) that have different participating interests;
  - the size and age of the Project (including having regard to end of life / reserve risks). Putting in place a GBA at the outset of a small project would be far easier than the NWS venture participants trying to do so after 25 years of operation across many oil and gas fields, and in the context of arrangements that have developed over time and that did not anticipate such an outcome.
- 7.67 The Pohokura outcome clearly demonstrates that there are likely to be very large transition risks and costs involved for a project of the size, complexity and history of the Project.

### **Limited instances of separate marketing in WA**

- 7.68 The NWS venture participants acknowledge the few instances of separate marketing that have occurred in WA and that some limited separate marketing may occur in the future. These examples include the separate sale of small volumes from the John Brookes field. As far as the NWS venture participants are aware, the vast majority of sales of domgas in WA have been via joint marketing.

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<sup>63</sup> Gorgon, above n 10, 7.95 – 7.96.

<sup>64</sup> Gorgon, above n 10, 7.92.

<sup>65</sup> Ibid.

<sup>66</sup> Gorgon, above n 10, 7.95.

- 7.69 The NWS venture participants do not consider that these limited examples of separate sales demonstrate that sustained separate marketing of domgas would be commercially feasible for the Project.
- 7.70 The ACCC appears to agree with this conclusion in the Gorgon determination noting that the limited instances of separate marketing that have occurred so far have been for small amounts of gas, with large contracts remaining jointly marketed.<sup>67</sup>
- 7.71 As noted above, the NWS venture participants also submit that the feasibility of separate marketing must take into account critical project-specific factors, including:
- the number of joint venture participants involved (it is not a coincidence that the limited separate sales to date in WA have resulted from a venture that has only two participants);
  - the technical complexity of the joint venture arrangements involved;
  - the size and age of the project;
  - the nature and significance of ongoing investments required to develop reserves; and
  - other project specific-factors (for example, separate marketing may be facilitated if participants have guaranteed outlets for their gas (eg via related party demand)).

### **When is separate marketing likely to be feasible?**

- 7.72 As noted above, Wood Mackenzie predicts that the WA market will continue to develop in 'lumps' due to the need for simultaneous alignment of:
- gas demand;
  - gas transportation capacity;
  - mid-stream processing capacity; and
  - upstream gas supply,
- to support any material growth in the market.<sup>68</sup>
- 7.73 Importantly, Wood Mackenzie concludes that material developments in a more liquid market in WA is unlikely to occur before substantial new supply comes into the market in around 2015 / 2016.<sup>69</sup> These conclusions are similar to those expressed in the Gorgon determination.<sup>70</sup>
- 7.74 On the basis of these projections for WA market development, the NWS venture participants do not consider that separate marketing for the Project is likely to be commercially feasible in the short or medium term.

### **Conclusions on counterfactual 2**

- 7.75 Attempting to separately market gas from the Project is likely to result in significantly higher up-front and operating costs and risks (including the risk of protracted litigation) for the NWS venture participants.

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<sup>67</sup> Gorgon, above n 10, 7.106.

<sup>68</sup> Wood Mackenzie, above n 26, 45.

<sup>69</sup> Ibid.

<sup>70</sup> Gorgon, above n 10, 7.285.

### Counterfactual 3: Lower risk / cost alternatives

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- 7.76 A third alternative counterfactual scenario to continued joint marketing without authorisation or separate marketing, is for the NWS venture participants to consider whether other options involve lower risks and costs. An obvious option would be to dedicate greater amounts of natural gas produced from the Project for export as LNG when plant capacity becomes available.
- 7.77 Due to the fact that the LNG processing facilities at the Karratha Plant are currently operating at maximum capacity, this option would likely result in deferred revenues.
- 7.78 However the potential benefits of this option include:
- (a) the reduction, if not avoidance, of the costs, risks and uncertainty inherent in the first two counterfactuals (continuing joint marketing without authorisation or attempted transitioning to separate marketing); and
  - (b) reduced risk of inquiries or enforcement action under the TPA.
- 7.79 This option is not desirable for the NWS venture participants but could potentially be supported by a commercial cost / benefit analysis if authorisation was denied. The option could only be pursued after discussions with the WA state government (which could also potentially canvass new State exemptions from the TPA, although the NWS venture participants do not underestimate the significant difficulties likely to arise in this regard).
- 7.80 Under this counterfactual the NWS venture participants would continue to service their current domestic contracts, but the volume of gas available to new or recontracting customers in WA would be significantly reduced.

## 8 Public benefit

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8.1 All three counterfactual scenarios are likely to result in increased costs and risks for the NWS venture participants and the wider public. The authorisation of NWS joint marketing would likely result in the avoidance of these costs and risks as well as other significant (but related) public benefits.

8.2 The public benefits of joint marketing when weighed against each possible counterfactual are set out below.

### **Joint marketing with or without authorisation (Counterfactual 1)**

8.3 Authorisation of joint marketing will resolve the regulatory uncertainty that is likely to persist if the NWS venture participants continue to jointly market without authorisation.

8.4 Accordingly, joint marketing with authorisation will likely result in the following public benefits under this counterfactual:

- reduction or avoidance of the costs that are likely to be incurred by the NWS venture participants in managing their regulatory exposure;
- greater economic efficiency in gas production and supply as a result of the decreased costs faced by the NWS venture participants;
- greater security of supply and contractual certainty for domgas customers; and
- avoidance of a disincentive for future investment in the Project's domgas production resulting from a higher cost / risk operating environment.

### **Joint marketing vs. attempted separate marketing (Counterfactual 2)**

8.5 The NWS venture participants engaged Frontier Economics (**Frontier**) to prepare an economic expert report examining:

- the effects on competition; and
- the public benefits and detriments that would likely arise,

from the NWS venture participants continuing to jointly market as opposed to separately marketing domgas in WA. This report is at Attachment 5.

8.6 The Frontier report concludes that the continuation of joint marketing by the NWS venture participants will unambiguously promote economic efficiency and is unlikely to reduce competition.<sup>71</sup>

8.7 Having regard to these conclusions and the detailed analysis above of this likely counterfactual, the NWS venture participants submit that continued joint marketing under authorisation will result in the following key public benefits:

- greater volumes of domgas supplied to the WA market;
- increased competition;
- the potential for lower prices; and
- economic development benefits of the type previously accepted by the ACCC as being relevant to the consideration of authorisation applications.<sup>72</sup>

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<sup>71</sup> Frontier report, paras 103 and 113.

<sup>72</sup> *Re ACI Operations Pty Ltd* (1991) ATPR (Com) 50-108.

- 8.8 The ACCC also recognised that these public benefits would arise from the joint marketing of natural gas in WA in the Gorgon determination.<sup>73</sup>
- 8.9 Importantly, these are not public benefits that arise from the Project itself. These benefits would be significantly diminished or completely forgone if the NWS venture participants attempted to engage in separate rather than joint marketing.

#### **Greater volumes of gas supply**

- 8.10 Domgas produced by the NWS venture participants is the most important source of supply of gas to the WA market. Since 1998, the Project has consistently accounted for around 60-65% of WA domgas sales. Whilst the supply available to the WA domgas market has not materially increased since 1998,<sup>74</sup> the volume of domgas demand has increased by around 56% from 1998 to 2007.<sup>75</sup> The WA market will continue to rely on gas from the Project until at least 2015 when the Gorgon Project (and potentially other projects with domgas components) is expected to come on stream.
- 8.11 The Frontier Report and the ACCC in the Gorgon determination both conclude that less gas would likely be supplied to the WA market under separate marketing than under joint marketing.<sup>76</sup> Given the importance of the Project's domgas supply to the WA market, the NWS venture participants consider this to be an important public benefit of continuing joint marketing under authorisation.
- 8.12 The reasons why joint marketing would likely result in more gas being supplied include:
- (a) *The costs and risks of GBAs*
- 8.13 In order to combine joint production with individual contractual commitments, the NWS venture participants would be required to enter into GBAs.
- 8.14 This is not feasible because the costs and risks of using GBAs in the WA market context are very large (particularly for a project the complexity, size and age of the Project) and are outlined in detail in section 7 above.
- 8.15 GBAs and separate marketing will significantly increase each individual NWS venture participant's cost of supply and will thus likely result in each NWS venture participant supplying less gas in WA.<sup>77</sup>
- (b) *Divergent investment incentives / reduced investment*
- 8.16 The Project is managed as an integrated production system across multiple fields and six production joint ventures. The scale and complexity of these operations means that coordination to ensure ongoing deliverability, resource optimisation and integrated development plans enables optimisation of field depletion, resource recovery and LNG and domgas delivery.
- 8.17 Separate marketing would introduce divergent incentives among the NWS venture participants in relation to their domgas activities which would affect joint decisions relating to ongoing investment in domgas production.<sup>78</sup> Divergent incentives could arise, for example, if one joint venture participant had already individually sold its share of production for the period in question but others had not.

<sup>73</sup> Gorgon, above n 10, 7.144, 7.156, 7.165, 7.177 and 7.191.

<sup>74</sup> Wood Mackenzie, above n 26, 31.

<sup>75</sup> Wood Mackenzie, above n 26, 13.

<sup>76</sup> Frontier, above n 71, 94 and 106; *ibid* 10 at 7.142-7.144.

<sup>77</sup> This was accepted by the ACCC as a likely outcome in the Gorgon determination paras 7.140 – 7.143.

<sup>78</sup> Frontier, above n 71, 92.

- 8.18 This would have substantial implications for future domgas supply from the Project given the ongoing investment that will be required to maintain current levels of domgas production (described in paragraphs 2.28 to 2.31 above). The level of ongoing investment required is substantial and directly affects the level of supply and the reliability of the Plant.
- 8.19 In the Gorgon determination the ACCC noted that investment decisions and costs associated with the domgas plant should be considered separately from LNG-related investment decisions and costs.<sup>79</sup> The NWS venture participants believe this is accurate and reflects the reality of how these decisions are made. If the Project's domgas Plant is assessed to have a higher risk / cost or lower rate of return by any individual venture participant than would otherwise be the case then lower levels of joint investment will inevitably be committed.
- (c) *Overcoming capacity constraints and flexibility in responding to market opportunities*
- 8.20 Through joint venture decision-making (and the current alignment of incentives under joint marketing) the NWS venture participants are able to most efficiently and effectively resolve issues that regularly arise from capacity constraints. The key constraints in this regard are offshore supply, domgas Plant capacity and pipeline capacity on the DBP.
- 8.21 Under separate marketing the inability of any one venture participant to obtain access to necessary infrastructure could easily result in disagreement over necessary joint production decisions thereby reducing or delaying downstream gas supply.<sup>80</sup>
- 8.22 An excellent example of the way in which joint decision-making and alignment of interests facilitates optimal gas supply arose from the recent Varanus Island explosion. Under joint marketing the NWS venture participants rapidly agreed to operate the Plant well above sustainable capacity and were able to negotiate and conclude several gas supply agreements and associated pipeline transportation arrangements.
- 8.23 This outcome is unlikely to have occurred under separate marketing. Separate marketing would require the alignment of each individual venture participant's return on risk, share of production and access to processing and transportation facilities, and achieving this would be extremely difficult. Similarly, the problem of large negative production externalities would have arisen from the inability to pool information about demand for emergency gas. These negative externalities are further discussed in the Frontier report<sup>81</sup> and will apply generally where the contract commitments of individual venture participants push up against Plant capacity (which is likely to be the case in the short to medium term).

#### **Increased competition**

- 8.24 Increased supply of domgas under joint marketing will likely result in higher levels of competition than would occur with separate marketing. The likely increase in competition under joint marketing was recognised as a public benefit in the Gorgon determination.<sup>82</sup>
- 8.25 In the Gorgon determination, the ACCC concluded that the introduction of greater volumes of gas would result in increased levels of competition regardless of whether the

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<sup>79</sup> Gorgon, above n 10, 7.55.

<sup>80</sup> Frontier, above n 71, 93.

<sup>81</sup> Frontier, above n 71, 87 and 88.

<sup>82</sup> Gorgon, above n 10, 7.160 and 7.165.

gas is jointly or separately marketed. This conclusion was based on the following findings:<sup>83</sup>

- the high concentration of parties producing domgas in WA will remain regardless of joint or separate marketing in the medium term;
- the timing and volume of gas supply will be determined jointly. In these circumstances the greatest benefits of competition are likely to result from competition between projects. The NWS venture participants note that this inter-project competition occurs while a project is producing gas and in the years leading up to that time;
- given the current nature and structure of the WA gas market, the price of domgas is likely to be more significantly influenced by the overall volume of gas supply rather than whether that gas is jointly or separately marketed;
- the timing and volume of supply will be determined jointly by production joint ventures, regardless of whether that gas is subsequently marketed jointly or separately;
- under separate marketing the venture participants would have the same production costs, which form a significant component of their marginal cost; and
- significantly, due to the difficulties of gas balancing agreements, venture participants would have little incentive to compete with each other for market share.<sup>84</sup>

8.26 These findings are equally applicable to joint marketing by the NWS venture participants under this counterfactual and are supported by the Wood Mackenzie, Jensen and Frontier reports.

#### **Potential for lower prices**

8.27 As discussed in section 7 above, the NWS venture participants are likely to face significantly higher costs if they attempted to transition to separate marketing. Decisions relating to the volume of gas supplied and the timing of supply will remain joint decisions of the NWS venture participants, regardless of whether they jointly or separately market gas.

8.28 In the Gorgon determination, the ACCC concluded that the increased costs and risks of separate marketing, particularly those associated with GBAs, could potentially be passed onto customers in the form of higher prices.<sup>85</sup>

8.29 Frontier also agrees that the price of gas under separate marketing would be affected by the likely increase in costs of supply as well as the costs of negotiating and enforcing contracts.<sup>86</sup> However, Frontier concludes that the overall effect on price is difficult to determine at this time.<sup>87</sup>

8.30 In circumstances where continued joint marketing will result in reduced costs, increased gas supply and more effective project based competition in the short to medium term, the NWS venture participants submit there are likely to be public benefits associated with the possibility of lower domgas prices (even though precise price effects are difficult to calculate).

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<sup>83</sup> Gorgon, above n 10, 7.159 – 7.162.

<sup>84</sup> Mr Jensen reaches the same conclusion at paragraphs 2.2 and 3.8 of his report (see above n 31).

<sup>85</sup> Gorgon, above n 10, 7.177.

<sup>86</sup> Frontier, above n 71, 99.

<sup>87</sup> Frontier, above n 71, 111.

### Economic development

- 8.31 The NWS venture participants submit that their continued joint marketing will likely result in significant economic benefits. These economic benefits have been accepted by the ACCC as being the type of public benefit relevant to authorisation determinations.<sup>88</sup> While many of these benefits are likely to arise as a result of the Project itself, they would be diminished if the NWS venture participants were to attempt to transition to separate marketing. This is due to the negative effect that separate marketing will likely have on:
- the quantity of gas supplied;
  - the incentives for continued investment in production; and
  - customers' transaction costs and certainty of supply.<sup>89</sup>
- 8.32 Economic benefits that will likely be enhanced as a result of the continued joint marketing of the NWS venture participants include:
- (a) *Capital investment*
- 8.33 The increased volumes of gas that would be supplied to the market with continued joint marketing will provide gas users with additional security of supply to invest in expansion of current operations and development of new projects. This is particularly relevant given the apparent recovery of the resources industry in WA and the dependence on gas for electricity generation.
- 8.34 The NWS venture participants also submit that the maintenance of the volumes of gas they currently supply to the WA market will be essential to the underwriting and development of gas infrastructure such as pipelines and storage facilities that may occur once other suppliers come on stream.
- 8.35 The NWS venture participants' own future investments (outlined above) would also be adversely impacted by a higher cost and risk environment for domgas supply.
- (b) *Net economic gain*
- 8.36 Joint marketing by the NWS venture participants will generate a greater net economic gain contributing more to both the national Gross Domestic Product and WA's State Domestic Product, than would occur under separate marketing. The increased volumes of gas, increased investment and lower costs that are likely to occur under joint marketing will result in more employment and greater output across a wide range of industries than would be the case with separate marketing.
- (c) *Increased government revenue*
- 8.37 The additional gas supply, investment, output and employment that is likely to occur as a result of the continued joint marketing by the NWS venture participants will result in increased revenue for both the Commonwealth and the WA governments. This is expected to occur through increases in revenues such as GST, company tax, personal income tax, mining royalties and payroll tax.
- (d) *Regional benefits*
- 8.38 Regional communities, such as Karratha, are expected to benefit from employment, training and business opportunities. The increased investment and increased gas supply by the NWS venture participants that is likely to occur with joint marketing will provide further opportunities for regional employment and business opportunities.

<sup>88</sup> *Re ACI Operations Pty Ltd* (1991) ATPR (Com) 50-108.

<sup>89</sup> Frontier, above n 71, 95 – 96.



- (e) Business efficiency
- 8.39 Joint marketing is likely to result in greater volumes of gas being supplied to the WA market and with lower costs and greater business efficiency than would be the case with separate marketing.
- 8.40 Frontier found that continued joint marketing unambiguously promotes economic efficiency.<sup>90</sup> In this regard Frontier states:

*The individual negotiation of large contracts with flexible pricing arrangements means that contracts can be expected to be struck that:*

- a. allow all efficient downstream projects to proceed; and*
- b. create incentives for an efficient rate of utilisation of gas in those downstream projects.*

*The abandonment of joint marketing is likely to affect negotiations in two ways:*

- a. it will increase costs of supply; and*
- b. it will increase transactions costs – the costs of negotiating and enforcing contracts.*

*These increased transaction costs may well reduce the quantity of domestic gas that is produced and supplied.<sup>91</sup>*

- (f) Effective response to supply interruption
- 8.41 Joint marketing will also enable the NWS venture participants to provide efficient and rapid responses to potential future supply interruptions. The Varanus Island incident demonstrated the importance of a timely and coordinated response to a gas supply incident that posed a significant threat to the Western Australian economy. As discussed elsewhere in this submission, the urgent supply of domgas above committable levels was only able to be achieved due to the alignment of the NWS venture participants' commercial interests through joint marketing.
- (g) Expansion of employment
- 8.42 Continued joint marketing by the NWS venture participants will likely result in increased investment in production and greater levels of on-shore processing and supply of domgas than would occur with separate marketing. This is likely to generate additional employment opportunities in Western Australia.
- (e) *Development of import replacements and growth in export markets*
- 8.43 The greater levels of domgas that are likely to be supplied if the NWS venture participants continue to jointly market rather than attempt transitioning to separate marketing are likely to facilitate increased output across a range of Australian industries. This will assist the development of import replacements and growth in exports.
- (f) *Environmental benefits*
- 8.44 Electricity generation is a major source of greenhouse gas emissions, largely due to the use of fossil fuels such as coal as the main source of fuel generation.

<sup>90</sup> Frontier, above n 71, 103.

<sup>91</sup> Frontier, above n 71, 104 – 106.

Approximately 60% of electricity generation in WA is fuelled by domgas.<sup>92</sup> The NWS venture participants submit that the likely decrease in quantity of gas supplied to the market under attempted separate marketing combined with the likely increase in customer transaction costs and uncertainty of supply may force some generators to switch from cleaner gas to coal to fuel their generating units. This would result in increased greenhouse gas emissions.

### **Joint marketing vs. lower risk alternatives (Counterfactual 3)**

- 8.45 The public benefits arising from continued domgas joint marketing as compared with a move towards potentially lower risk alternatives, such as future LNG exports, primarily result from the greater amount of domgas that would be supplied to the WA market.
- 8.46 These benefits are similar to those discussed for Counterfactual 2 above.

## **9 Minimal public detriment**

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- 9.1 Continued joint marketing by the NWS venture participants is likely to result in minimal, if any public detriment when compared to all three possible counterfactual scenarios.

### **Joint marketing with or without authorisation (Counterfactual 1)**

- 9.2 There is no possible public detriment under this counterfactual as joint marketing would continue with or without authorisation.

### **Joint marketing vs. attempted separate marketing (Counterfactual 2)**

- 9.3 Potential public detriments associated with authorisation of joint marketing under Counterfactual 2 (attempted transition to separate marketing) are considered below.

#### **Competition on material terms not more effective**

- 9.4 For the reasons discussed throughout this submission, and as accepted by the ACCC in the Gorgon determination, separate marketing is not currently feasible in WA for the NWS venture participants and is therefore not likely to result in more effective competition than joint marketing.<sup>93</sup>
- 9.5 However, the NWS venture participants note the ACCC's view in the Gorgon determination that separate marketing may improve certain terms and conditions offered to purchasers under gas sales contracts.<sup>94</sup>
- 9.6 The NWS venture participants submit that any detriment in this regard would be negligible and could relate only to contractual terms at the margins.
- 9.7 Under separate marketing, each of the NWS venture participants would be operating from the same cost base, using facilities with the same capacity constraints and critical decisions relating to quantity and timing of gas produced would remain joint decisions. This would restrict each NWS venture participant's flexibility in relation to material terms and conditions. For example, it is likely that the NWS venture participants as a group (who would each face different risks and rewards) would encounter difficulties in agreeing on flexibilities such as reasonable endeavours, exceeding maximum entitlements or

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<sup>92</sup> Wood Mackenzie, above n 26, 17.

<sup>93</sup> Gorgon, above n 10, 7.214.

<sup>94</sup> Gorgon, above n 10, 7.220.

extending duration of agreements for the benefit of an individual venture participant / customer.

- 9.8 Under joint marketing, the NWS venture participants are able to compete more effectively with other Projects in relation to material contract terms and have much greater flexibility to adapt offers to respond to changing market conditions. As noted above, this flexibility was demonstrated in the NWS venture participants' rapid response to the Varanus Island outage in 2008.
- 9.9 The NWS venture participants submit that this increased level of inter-Project competition and greater contract flexibility actually results in more favourable terms and conditions for domgas customers than would likely occur with separate marketing.

#### **Higher prices unlikely**

- 9.10 As discussed in paragraphs 8.27 to 8.30 above, it is possible that the increased costs and risks of separate marketing would ultimately be passed on to domgas customers. In the Gorgon determination the ACCC concluded that this may lead to higher prices under separate marketing than would occur under joint marketing.<sup>95</sup> As also noted above, Frontier concludes that the overall effect on price is difficult to determine at this time.<sup>96</sup>
- 9.11 The NWS venture participants agree with the view of the ACCC in the Gorgon determination that domgas prices in WA have been historically low, which may have acted to discourage exploration and investment in new domgas supplies.<sup>97</sup> It should not be overlooked that these historically low prices arose exclusively from joint marketing arrangements.
- 9.12 The recent increases in domgas prices away from the historically low average is due to ordinary market factors. In the Gorgon determination, the ACCC examined the price increases having regard to the following combination of factors:
- the increasing costs of gas supply in WA as production moves further offshore into deeper waters;
  - the increase in domgas demand resulting primarily from the WA resources boom; and
  - the fact that supply has remained relatively stagnant with no significant new development and the gradual decline in production from the Perth Basin fields.<sup>98</sup>
- 9.13 The NWS venture participants consider that the Varanus Island outage which interrupted supply from Apache's facilities over the past year also contributed (at least temporarily) to the recent increase in domgas prices in WA.

#### **Market development not likely to be significant**

- 9.14 The NWS venture participants acknowledge the ACCC's finding in the Gorgon determination that despite the current infeasibility of separate marketing, an attempted transition may assist in the development of the WA domgas market in the medium to long term.<sup>99</sup> However, the potential for separate marketing to assist market development must be considered in the context of the nature of demand in WA and the underlying structure of the market.

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<sup>95</sup> Gorgon, above n 10, 7.236.

<sup>96</sup> Frontier, above n 71, 111.

<sup>97</sup> Gorgon, above n 10, 7.235.

<sup>98</sup> Ibid.

<sup>99</sup> Gorgon, above n 10, 7.215.

- 9.15 The ACCC concludes in the Gorgon determination that the long term contractual nature of the WA market is a significant factor impeding its development.<sup>100</sup> The NWS venture participants agree with this conclusion as does the Wood Mackenzie Report.<sup>101</sup>
- 9.16 The long-term contracting nature of the WA market is driven by the needs of the largely industrial domgas users who desire security of supply to underwrite investment in expansion and development of new projects as well as to underwrite significant investments in pipeline capacity over time. As acknowledged by the ACCC in its decision relating to the Gorgon project, customers in WA have recently expressed interest in the supply of domgas for periods up of 25 years.<sup>102</sup>

#### **Ring fencing addresses any information concerns**

- 9.17 The NWS venture participants acknowledge the concern raised during the Gorgon authorisation process that commercially sensitive information obtained for the Gorgon Project should not pass to competing Projects through joint venture partners having ownership in multiple fields.<sup>103</sup>
- 9.18 To address the potential for anti-competitive detriment to arise from this scenario, the ACCC accepted ring fencing arrangements from the Gorgon venture participants.<sup>104</sup>
- 9.19 The NWS venture participants consider that there is a very low risk that commercially sensitive information would be 'shared' due to safeguards put in place by the NWS venture participants and their cognisance of TPA risk and compliance.
- 9.20 Nevertheless, to address any minimal risk of detriment, those NWS venture participants with a rival project in WA are currently implementing appropriate ring fencing arrangements based on those referred to in the Gorgon determination. A copy of these arrangements is at Attachment 6. These arrangements involve a clear system governing access to and dissemination of commercially sensitive information obtained for the purposes of the Project.
- 9.21 The NWS venture participants submit that these arrangements adequately address the minimal potential for detriment to arise from the internal transfer of commercially sensitive information to a rival project.

#### **Joint marketing vs. lower risk alternatives (Counterfactual 3)**

- 9.22 A move to lower risk alternatives (such as future LNG exports) would see a material reduction in domestic marketing activities and domgas supply and correspondingly higher gas prices. Continued joint marketing and new supplies to domgas customers under authorisation are only likely to give rise to public benefits under this counterfactual.

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<sup>100</sup> Gorgon, above n 10, 7.219.

<sup>101</sup> Wood Mackenzie, above n 26, 14 and 45.

<sup>102</sup> Gorgon, above n 10, 7.288.

<sup>103</sup> Gorgon, above n 10, 7.245.

<sup>104</sup> Ibid.

## 10 Conclusion: public benefits outweigh detriment in all possible counterfactuals

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- 10.1 When analysed against all of the potential counterfactual scenarios, the continuation of joint marketing by the Project with the regulatory certainty afforded by authorisation is likely to result in substantial public benefits which outweigh any minimal detriment that may arise.
- 10.2 The key public benefits of authorised joint marketing include the reduction of costs and risk, stimulation of ongoing investment as well as the larger quantities of domgas that are likely to be supplied to the WA market as compared with any realistic alternative.
- 10.3 Due to the current structure of the WA domgas market, continued joint marketing is unlikely to result in a lessening of competition or higher domgas prices. The NWS venture participants do not consider that an attempt to move to separate marketing would enable them to compete more effectively on terms and conditions that are of most importance in the WA market – duration of supply, volume and price.
- 10.4 To avoid any potential detriment that may arise from commercially sensitive information obtained by the NWS venture participants being shared internally for the purposes of rival projects in WA, the relevant NWS venture participants are currently implementing ring fencing arrangements based on the ring fencing arrangements that were accepted by the ACCC in the interim and final Gorgon authorisation determinations.

## 11 Duration of authorisation

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- 11.1 As noted above, the NWS venture participants request authorisation be granted to jointly market domgas and enter into new domgas contracts:
- until the end of 2016, to provide regulatory certainty for the NWS venture participants to underwrite investment decisions to maintain capacity and deliverability for the production of domgas to be marketed by the IPGJV participants; or, if the ACCC believes the issues should be reconsidered prior to this time
  - until at least the end of 2015, in line with the ACCC's findings in the Gorgon determination in relation to possible development of the WA market.<sup>105</sup>
- 11.2 The NWS venture participants are unable to identify any indicators that the domgas market will develop sufficiently prior to the end of 2016 so as to support separate marketing. Market developments over the last decade in this regard have been very limited.
- 11.3 Even if some new sources of gas become available in 2015, this is highly unlikely to immediately bring about the significant structural changes that would require a review of any ACCC authorisation of joint marketing.
- 11.4 The NWS venture participants submit that granting authorisation to the end of 2016:
- will ensure public benefits of continued joint marketing are achieved over a reasonable period of time; and
  - entails virtually no risk of the balance of public benefit / detriment materially changing in the intervening period.
- 11.5 The NWS venture participants also request authorisation be granted to give effect to:
- existing domgas contracts for the full term of those contracts (including any extensions)<sup>106</sup>; and
  - domgas contracts entered into during the term of authorisation (or any extensions of such contracts) for a period of up to 25 years from the date of the first delivery of gas under that contract. As noted by the ACCC in the Gorgon determination, domgas customers in WA have recently expressed interest in contracts for up to 25 years.<sup>107</sup>

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<sup>105</sup> Gorgon, above n 10, 7.282 - 7.283, 7.285 – 7.286.

<sup>106</sup> A confidential list of existing contracts is at Attachment 8 to this submission. The application also encompasses giving effect to any existing DGJV GSAs that may be assigned to the IPGJV participants in the future.

<sup>107</sup> Gorgon, above n 10, 7.288.

Attachment 1 – Wood Mackenzie report

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Attachment 2 – Western Australian Oil and Gas Review 2008

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Attachment 3 – WA Gas Supply and Emergency Management  
Committee Report

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Attachment 4 – James Jensen report

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Attachment 5 – Frontier Economics report

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Attachment 6 – NWS Project ring fencing protocol

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## Attachment 7 – ACIL Tasman report

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Attachment 8 – Confidential (not for publication): List of existing  
NWS Project domgas contracts

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**\*\*Confidential\*\***