# SUBMISSION 7: Capacity and Throughput Forecast

## Public Version

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# 1. EXECUTIVE SUMMARY

1.1. DBP has prepared the Capacity and Throughput Forecast for 2010 – 2015 Paper to support the assumptions and forecasts used in generating the forecast throughput on the DBNGP for the period 2010 – 2015. The forecast contracted capacities are based on existing contracts and take into account leading market indicators and discussions with Shippers when determining if there will be any demand for additional capacity on the DBNGP. Forecast throughput rates are developed using the historical actual throughput rates and have been increased where knowledge of the market suggests that there will be increased throughput.

1.2. The commentary below supports DBP's position on the forecasts on the DBNGP and is outlined in more detail below.

1.3. Based on the analysis of the gas market, DBP is not forecasting any increase in demand for contracted pipeline capacity that is not part of the current 5B expansion program and subsequently does not forecast any further expansion on the DBNGP before 31 December 2015.

1.4. Comprehensive analysis of the market suggests there will not be any significant increases in domestic gas demand in the medium term. Major indicators which lead DBP to predict minimal growth include:

(a) Existing Shippers have captured future capacity requirements with the 5B expansion;

(b) The Global Financial Crisis delayed projects as banks became concerned with liquidity, which subsequently made it a lot harder for companies to raise capital through the debt markets and the adverse exposure to risk amongst investors resulted in it being more difficult for companies to raise capital in the equity markets;

(c) Since the allocation of capacity from the Stage 5B Expansion, DBP has only received one Access Request from a potential shipper for 4.4TJ. The prospective shipper has indicated that it is unlikely to proceed with this request; and

(d) High domestic gas prices resulting in alternative energy sources such as coal being favoured for base load power generation and most mineral resource processing power requirements.

1.5. DBP has identified a number of risks to growth in the gas market in Western Australia (WA). The particular areas of concern are:

(a) Affordability of supply – Wholesale gas prices have risen dramatically in WA over the last two years and has resulted in a number of resource and energy development projects resorting to coal-fired energy;

(b) Reliability of supply – Upstream incidents have severely disrupted the State's gas supply and has forced companies to switch to coal or diesel fired power generation to ensure a reliable energy supply. Reliability of the DBNGP does not represent a major challenge;

(c) Diversity of supply – With two producers controlling almost 100% of the domestic market there are significant challenges to energy security. The lack of diversity also obstructs the development of an efficient and competitive market; and

(d) Longevity of supply – Unrestricted growth of LNG exports together with domestic demand could lead to the Carnarvon Basin (major supply basin of WA) being fully depleted within 30 years. Future projects (Devils Creek, Macedon and Gorgon) will be a source of supply for the domestic market.

## 2. INTRODUCTION

2.1. On 1 April 2010, DBNGP (WA) Transmission Pty Ltd (DBP) filed the following documents with the Economic Regulation Authority (**ERA**):

(a) proposed revised Access Arrangement (**Proposed Revised AA**); and

(b) proposed revised Access Arrangement Information (**Proposed Revised AAI**).

2.2. These documents contain the information that the National Gas Access (WA) Act 2009 (**NGA**) (which includes the Western Australian National Gas Access Law text (**NGL**) and the National Gas Rules (**NGR**)) requires to be included in order to enable them to be approved by the ERA.

2.3. The ERA also issued a Regulatory Information Notice on 2 March 2010 (**RIN**).

2.4. In addition to the Proposed Revised AA and Proposed Revised AAI, a number of additional submissions on key issues will be or are to be filed to assist the Regulator to assess the Proposed Revised AA and to address the categories of information requested in the RIN. These included the following:

1. Background Information
2. AA & AAI Compliance Checklist
3. Pipeline Services
4. Basis for Total Revenue
5. Terms and Conditions Justification
6. Explanation of Queuing Requirements
7. Capacity and Throughput Forecast (being this submission)
8. Rate of Return
9. Justification of Actual expansion Capital Expenditure (2005 – 2010)
10. Actual Stay-in-Business Capital Expenditure (2005 – 2010)
11. Forecast Capital Expenditure (2005 – 2010)
12. Actual Operational Expenditure and Forecast Operational Expenditure

2.5. Accordingly, this submission is aimed at supplementing the information in the Proposed Revised AA and Proposed Revised AAI in order to:

(a) address the information requested by the ERA in the RIN in relation to the contracted capacity and throughput forecasts; and

(b) enable the aspects of the Proposed Revised AAI relating to the contracted capacity and throughput forecasts to be approved by the ERA.

2.6. It should be noted that, when assessing these terms and conditions, the only applicable requirement and criterion of the NGL and NGR that the Regulator must consider or apply is that the terms and conditions are consistent with the national gas objective in the NGL (see Rule 100 of the NGR).

2.7. If however, the ERA does not accept the proposed terms and conditions for the R1 Service as attached to the Proposed Revised AA and requires amendments to them, the Operator requests that the amendments be marked up on a Microsoft Word version of the terms and conditions, rather than on the DeltaView version submitted with the Proposed Revised AA.

# 3. NGL AND NGR REQUIREMENTS FOR USAGE OF THE DBNGP

3.1. Rule 72 requires the Proposed Revised AAI to include the following information in relation to usage of the DBNGP:

(a) Over the Prior Access Arrangement Period (as that term is defined in the Proposed Revised AA), the minimum, maximum and average demand for each receipt or delivery point on the DBNGP (see Rule 72(1)(a)(iii)(A) of the NGR);

(b) Over the Prior Access Arrangement Period, user numbers for each receipt or delivery point (see Rule 72(1)(a)(iii)(B) of the NGR);

(c) To the extent that it is practicable to forecast pipeline capacity and utilization of pipeline capacity over the access arrangement period, a forecast of pipeline capacity and utilization of pipeline capacity over that period and the basis on which that forecast has been derived ((see Rule 72(1)(d) of the NGR).

3.2. In deciding whether the Proposed AAI contains this information, the relevant sections of the Proposed Revised AAI only need to contain a level of detail that is reasonably necessary for shippers and prospective shippers to understand:

(a) the background to the access arrangement or the access arrangement proposal; and

(b) the basis and derivation of these elements of the Proposed Revised AA.

3.3. It is noted that if they do not, then the ERA may only exercise one of the powers under Rule 43(3) of the NGR.

3.4. It is DBP's position that the provisions of Rule 100 of the NGR are not relevant to this process.

# 4. PROPOSED FORECAST

4.1. In the Proposed Revised AAI, the Operator has included the following tables in response to the requirements in Rules 72(1)(a)(iii)(A) and (B) of the NGR:

**Min, Max and Average demand over the Prior Access Arrangement Period (TJ/d) for Full Haul Pipeline Service inlet and outlet points**

| | 2005 – 2010 |
|---|---|
| Minimum quantity | 572.5 |
| Maximum quantity | 894.0 |
| Average quantity | 625.4 |

**Min, Max and Average demand over the Prior Access Arrangement Period (TJ/d) for Part Haul Pipeline Service inlet and outlet points**

| | 2005 – 2010 |
|---|---|
| Minimum quantity | 52.27 |
| Maximum quantity | 137.24 |
| Average quantity | 79.67 |

**Min, Max and Average demand over the Prior Access Arrangement Period (TJ/d) for Back Haul Pipeline Service inlet and outlet points**

| | 2005 – 2010 |
|---|---|
| Minimum quantity | 0 |
| Maximum quantity | 136.67 |
| Average quantity | 93.94 |

4.2. The Operator refers to its Submission #2 filed on or about 1 April 2010 which explains the basis for setting out the information in this manner.

4.3. In addition, Operator submits that, because of the provisions of the current access arrangement and the Proposed Revised AA, there is no requirement to provide more detail because the above information is reasonably necessary for shippers and prospective shippers to understand:

(a) the background to the Proposed Revised AA; and

(b) the basis and derivation of the elements of the Proposed Revised AA.

4.4. In the Proposed Revised AAI, the Operator included the following tables in response to the requirements in Rules 72(1)(d) of the NGR:

**Forecast of Demand for Services**

| Year ending 31 December | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|---|
| ***Full Haul*** | | | | | |
| Contracted capacity (TJ/day) | 851.3 | 860.3 | 860.3 | 860.3 | 860.3 |
| Throughput (TJ/day) | 703.1 | 718.8 | 719.7 | 725.8 | 732.5 |
| ***Part Haul (forward haul)*** | | | | | |
| Contracted capacity (TJ/day) | 215.4 | 215.4 | 215.4 | 215.4 | 215.4 |
| Throughput (TJ/day) | 191.5 | 189.7 | 189.7 | 189.7 | 189.7 |
| ***Back Haul*** | | | | | |
| Contracted capacity (TJ/day) | 130.0 | 130.0 | 130.0 | 130.0 | 130.0 |
| Throughput (TJ/day) | 112.3 | 112.3 | 112.3 | 112.3 | 112.3 |

4.5. In relation to the capacity of the DBNGP, the Operator also included the following information in the Proposed Revised AAI:

(a) The Pipeline Capacity of the DBNGP is determined based on the following assumptions:

(i) It is for delivery of Full Haul pipeline services

(ii) The gas composition is as follows:

- Higher Heating Value – 37.0 MJ/m3;
- Wobbe Index - 46.5MJ/m3 ;
- the percentage content of Inert Gases of no greater than 6.39%;
- no LPG content;

(iii) the ambient conditions on the DBNGP from Compressor Station 1 to Compressor Station 9 are average conditions for the month of January;

(iv) gas is being delivered for receipt into the DBNGP at existing inlet points;

(v) the designed inlet pressure at the inlet point known as I1-01 is 8MPa; and

(vi) all compressor units are operating.

(b) However, it is important to note that the Pipeline Capacity is not an indication of:

(i) the actual Capacity of the DBNGP on any given day;

(ii) the available firm Full Haul capacity of the DBNGP during the Current Access Arrangement Period; or

(iii) the available Part Haul Forward Haul capacity of the DBNGP during the Current Access Arrangement Period.

4.6. In relation to the requirement to include the forecast utilisation of pipeline capacity, in addition to the forecast outlined in Table 17 in the Proposed Revised AAI, the Operator also included the following statements to support the requirement that the AAI contain the basis on which the forecast has been derived:

(a) The forecasts in Table 17 were forecasts of the Capacity of the DBNGP that will remain contracted for certain pipeline services during the Access Arrangement

Period, and forecasts of the volumes of Contracted Capacity expected by the Operator to be used by Shippers of these pipeline services.

(b) The firm Full Haul capacity of the DBNGP is fully contracted for the duration of the Current Access Arrangement Period.

(c) Whether the Part Haul capacity of the DBNGP is fully contracted for the duration of the Access Arrangement Period will depend on a number of factors. So it is not practical to forecast it in this AAI.

4.7. The following section of this submission contains further information to justify the forecasts.

# 5. CAPACITY AND THROUGHPUT SUBSTANTIATION

5.1. The contracted Full Haul capacity of the pipeline and the throughput forecasts are key inputs into the calculation of the Reference Tariff for the DBNGP.

5.2. The Operator is forecasting only minor increases in the average annual Full Haul contracted capacity on the DBNGP and in the average annual Full Haul throughput on the DBNGP during the proposed access arrangement period to 2015.

5.3. The increase in contracted capacity is solely attributable to the commencement of additional capacity under the last of the contracts that underpinned the Stage 5B expansion project.

5.4. The Operator does not forecast any increase in demand for Full Haul contracted capacity on the DBNGP following the completion of the Stage 5B expansion.

5.5. The reason for this is outlined in the following sections of this submission.

# 6. WESTERN AUSTRALIAN GAS MARKET - DEMAND

6.1. Natural gas consumption in Western Australia (WA) averaged an estimated 1,194 TJ/d in 2006/07 and is used to supply half of the State's primary energy needs and fuels 69% of the State's electricity generation. Since 1984, domestic demand for gas has been growing at around 8.5% per year.[1]

6.2. Despite this historical 8.5% growth per year in demand for gas, DBP is not seeing any market signals to suggest that there will be any significant increases in domestic gas demand in the south-west following the Stage 5B expansion and subsequently is not forecasting any increases in Full Haul throughput on the DBNGP, apart from the 2.4% yearly increase amongst the shippers who are aggregators in 2014 and 2015. This is consistent with the forecast adopted by WA Gas Networks in its proposed revised AAI.

6.3. Market indicators which lead DBP to forecast no growth in demand for domestic gas include:

(a) WA domestic gas prices are perceived to be uncompetitive compared to other gas markets in Australia, resulting in businesses locating outside WA;

(b) There have been a number of recently commissioned coal-fired base load generators and the near completion of other coal-fired base load generators; and

(c) WA based mineral and resource projects which require gas for the generation of electricity or the operation of processing equipment is likely to be serviced by the GGP or PEPL systems or may look at utilising liquids, such as diesel.

6.4. Despite possessing 80% of Australia's natural gas, WA domestic gas prices are now amongst the highest in Australia and in some instances are around four times higher than Eastern State prices. For example, in 2007-08 the average daily spot price in the Victorian gas market was $3.90/GJ[2] versus reported prices in WA of between $8 and $15/GJ.

6.5. With only two producer groups controlling close to 100% of the domestic gas market, WA continues to be subject to what looks like a monopolistic market which appears to impact on price competition.

6.6. Prices in WA have risen sharply from around $3.50 - $4.50/GJ to an indicated price for some recent contracts of around $14.00 - $16.00/GJ. 80% of current gas demand in the WA gas market is derived from power generation, alumina refining and resource processing and manufacturing in the South West and is highly sensitive to gas prices.[3]

6.7. Recent WA wholesale gas prices are appreciably higher than prices in major gas producing/exporting countries. WA prices are in fact closer to the prices charged in energy poor countries such as China, Japan and South Korea.[4]

6.8. At the current gas prices in WA, gas is not competitive with coal for base load power generation and most resource processing. Therefore DBP is not expecting to see increased

[1] DomGas Alliance, *Western Australia's Domestic Gas Security Report 2009*, 2009.

[2] Abare.gov.au, *Energy in Australia 2009*, Department of Resources Energy and Tourism, 2009.

[3] DomGas Alliance, *Western Australia's Domestic Gas Security Report 2009*, 2009.

[4] US Energy Information Administration, *International natural gas prices for industry*, available at http://www.eia.doe.gov/emeu/international/ngasprii.html.

demand for pipeline capacity.[4] For example, Adelaide Brighton Limited has increased its investment in coal fired generation due to cheap coal and expensive gas and is looking to lock-in a long term coal supply agreement.[5] Coogee Chemicals has publicly stated that with gas prices between $8 and $15/GJ, it is totally uneconomic to develop any new downstream processing facilities in WA.[6]

6.9. There were two advanced electricity generation projects in WA as at October 2009. Griffin Energy's Bluewaters Stage II project will have a capacity of 208MW. The Western Energy Kwinana Swift dual fuel fired project will have capacity of 120MW. However Western Energy does not have any contracted capacity on the DBNGP.

6.10. There are a number of factors to substantiate DBP's decision not to forecast any increase in contracted capacity, in relation to mineral resource developments:

(a) The Global Financial Crisis delayed projects as banks became concerned with liquidity, which subsequently made it a lot harder for companies to raise capital through the debt markets and the adverse exposure to risk amongst investors resulted in it being more difficult for companies to raise capital in the equity markets;

(b) The majority of new mining and resource projects will be serviced primarily from the PEPL and GGP;

(c) Many advanced and less advanced mining and resources projects do not have the power requirements to make the use of gas fired generation feasible; and

(d) Existing Shippers have captured all of their future capacity requirements with the latest expansion project on the DBNGP.

[5] Adelaide Brighton Limited, *Energy Strategy – An End Users Perspective Taking Control of your own Destiny*, 27 August 2009.

[6] Coogee Chemicals, *Energy in WA – A Customer's Perspective*, Gordon Martin.

# 7. GAS MARKET RISKS TO DBP

7.1. The forecasts of the contracted capacity and throughput for the DBNGP during the Access Arrangement Period are based on information available at the time the Proposed Revised AA was prepared. Actual capacities and volumes may, however, be substantially different due to changes in future general economic and market conditions that may impact gas users and their suppliers. The following are the major uncertainties impacting on the realisation of the forecasts:

(a) The uncertainty created by a future response to climate change.

(b) The extent and pace of expansion of the alumina and electricity industries is such that there is a real likelihood that additional gas will not be required for these industries – DBP is only forecasting a 2.4% growth year-on-year for the shippers who act as aggregators for other gas consumers but no throughput growth forecast for any other shipper.

(c) There has been a significant reduction in the proportion of contracted capacity that shippers use on a daily basis. Whereas the operator was witnessing shippers' average daily usage at in excess of 90% of contracted capacity up until 2008, since then, the rate is between 70-80% of contracted capacity.

(d) The significant increases in gas prices that have been reported in the last 24 months will adversely impact on gas versus coal competition in the electricity market – high gas prices are resulting in coal remaining the economic option for new electricity generation.

(e) The extent and timing of expansion of the DBNGP and the disincentives to the Operator in funding the expansion of capacity of the DBNGP under the NGA.

(f) actual amounts of LPGs in the DBNGP gas stream – decreased LPG content will result in decreased throughput for Alinta as it transports gas to the Wesfarmers LPG Plant; and

(g) uncertainty in capacity and volume growth in the minerals processing industries because of a number of factors including:

(i) the global financial crisis;

(ii) the impact of climate change reform driving consumers of gas to use gas more efficiently in their downstream operations; and

(iii) the significant increases in gas prices referred to above.

7.2. Some of these risks are expanded upon in more detail in turn below while all risks are discussed in detail in submission #8 (rate of return).

***Uncertainly created by a future response to climate change***

7.3. The Federal Government has undertaken to implement an emissions trading scheme re-introducing the Carbon Pollution Reduction Scheme (CPRS). A Bill to enact the CPRS was tabled in the parliament on 2 February 2010, the same day the Opposition Government proposed its alternative policy option.

7.4. Under the CPRS:

(a) The DBNGP will be covered by the scheme;

(b) Entities such as the Operator will be liable to pay the full costs of the effect of emissions of $CO_2$ from the operation of systems such as the DBNGP;

(c) Exporters of LNG will be given significant concessions to minimize the costs of being caught by the CPRS; and

(d) Certain coal fired electricity generators will be given significant concessions to reduce the effect of being caught by the CPRS.

7.5. The Operator's current situation exposes DBP to a significant risk that any cost imposed on the Operator by a potential carbon price will not be able to be passed onto shippers under the Standard Shipper Contracts.

7.6. Should this materialize, there is a real risk that the financial viability of the owner of the DBNGP will be significantly affected. This may result in delays in the expansion of the capacity of the DBNGP which would detract from the overall competitiveness of gas supply in WA.

7.7. There are also other effects of the CPRS which will negatively impact on the overall competitiveness of gas supply in WA:

(a) To the extent that the Operator can pass through the additional costs imposed on it to shippers, this will increase the delivered cost of gas and may adversely influence shipper's requirements for gas in the future.

(b) There will be less incentive on gas producers to market gas domestically if concessions are given to producers for the export of gas as LNG without similar concessions being given for the sale of gas domestically. This tightening of supply is likely to significantly increase the price of gas.

(c) The coal industry will be given a significant concession which again makes it harder for gas to remain competitive as a fuel source for electricity generation.

7.8. More generally, the political environment creates much uncertainty for projects that may be considered for a WA location. The continued delay may lead to these projects being suspended or relocated to other jurisdictions.

7.9. These issues are outlined in more detail in the attached submission from the DomGas Alliance to the State Government's Strategic Energy Initiative Review, a copy of which is contained in **Appendix 2**.

***Availability of affordable gas supply***

7.10. The WA gas market has seen substantial increases in gas prices in the last few years. There have been reports of a four to five fold increase in gas prices over the last three to four years to $14 - $16 per GJ. Domestic gas prices in WA are now among the highest in the country and also among the highest for any other gas producing/exporting economy in the world.

7.11. The consequences (both real and potential) of a gas price increase of this nature have been outlined in detail in a submission by the DomGas Alliance to the WA Government's Strategic Energy Initiative review that is presently being undertaken, a copy of which is attached to this submission as **Appendix 2.**

7.12. In particular however, the key actual consequences of this significant increase in gas prices and the shortage of domestic gas are that a number of resource and energy development projects have been suspended, relocated or resorted to alternative forms of energy such as liquids or coal (see paragraph 6.8 of this submission).

7.13. While solutions have been proposed to address this, the solutions are unlikely to redress the impact of the price increase in the next 5 years and therefore, the likelihood of gas becoming an economically viable fuel source for potential users of gas that would rely on the DBNGP to deliver it to the markets in which they wish to participate is small. Therefore, there is a sound basis for the Operator not forecasting any growth in throughput except for the aggregators.

***Regulatory framework not providing appropriate incentives for investment***

7.14. The Operator's current commercial arrangements are underpinned by a Standard Shipper Contract (SSC) allowing a higher tariff than would otherwise be applied under the regulatory regime while affording shippers rights to additional capacity under that agreement. These contracts were negotiated outside the regulatory regime on a bi-lateral basis.

7.15. Under the commercially negotiated agreements DBP has successfully invested $1.8 billion of capital since 2005 resulting in over 300 TJ/day of additional T1 capacity being constructed.

7.16. From 1 January 2016, under the terms of these contracts, the tariff for the T1 Service under these negotiated contracts will revert to the tariff determined by the Economic Regulation Authority for the "nearest equivalent" Reference Service and the arrangements in these contracts which support expansions will fall away. Accordingly, unless the regulatory regime can:

(a) Provide certainty on a timely basis that the expenditure to fund the expansion can be rolled into the capital base;

(b) Provide the service provider and its investors with a rate of return on the investment to make it economic for the service provider to fund the expansion,

expansions will be funded by shippers on an incremental cost basis.

7.17. The Operator has consistently argued that the application of the regulatory framework by regulators will not allow these objectives to occur. If this is the case, then expansions will not be funded by service providers. If this occurs, then it will be left to shippers to fund expansions. This could lead to significant delays and a more costly expansion program (on a $/GJ basis).

7.18. In addition to these regulatory risks, there is a risk that expansions will not occur if shippers are required to pay for the incremental costs of expansions and a differential tariff structure results amongst shippers.

7.19. As the cost of expansion varies significantly depending on the pipeline configuration and as the configuration will vary with each expansion, it is almost certain that different shippers will be paying different tariffs depending on when, in the development cycle, they seek capacity.

7.20. If this occurs, it will lead to shippers which compete against each other in downstream markets (such as electricity generation) potentially having to pay different transportation costs and therefore for one shipper being at a competitive disadvantage to the other shipper in that downstream market.

7.21. Shippers have consistently, since the mid 1990s, rejected a scenario of price discrimination for pipeline transportation tariffs. Accordingly, there is a real risk that no expansion of the DBNGP will occur under the current contractual arrangements without a significant change in the application of the NGL and NGR by the ERA.

***Lack of general demand at affordable gas prices***

7.22. The Stage 5B expansion is due for completion in April 2010. Much of the capacity being provided for under this expansion program is not new growth. Rather, most of the capacity is a result of shippers either firming up their contracted capacity (approximately 50TJ/day of capacity is within this category) or relocating their contracted capacity to outlet points further downstream. Accordingly, the growth in demand for new capacity really peaked at the time of the 5A expansion project in 2006.

7.23. The Operator does not believe there will be sufficient increases in demand for domestic gas from 2010 to 2015 to warrant the need for expansion on the DBNGP during the next regulatory period.

7.24. While there exists market forecasting indicating a significant demand exists for new gas, the assumptions underpinning this demand do not match the market realities presently confronting users of gas in Western Australia. While these are outlined in more detail in the DomGas Alliance submission recently made to the State Government's Strategic Energy Initiative review (see **Appendix** 2), in summary, they are:

(a) Gas is not being made available under terms and conditions (in particular volume, duration and reliability of supply) which could enable many downstream projects such as minerals processing and electricity generation projects to proceed.

(b) They make invalid assumptions as to the affordability of gas. Gas prices are so high that the customers' downstream projects would, by and large, not be economic. Alternatively, the prices are not competitive with alternative fuel sources such as coal.

(c) The uncertainties surrounding climate change reform and the renewable energy targets are delaying the timing of any demand materializing.

7.25. DELETED

7.26. DELETED

7.27. Accordingly, it is reasonable for the Operator to not forecast any increase in demand for additional capacity on the DBNGP during the access arrangement period.

# 8. DBNGP TRANSPORTATION FORECAST

8.1. Tables 1 and 2 show the Operator's forecast annual averages of contracted capacity and throughput for the period 2011 – 2015. The breakdowns by each shipper can be found in **Appendix 1**.

8.2. Table 1 - Average Annual Contracted Capacity (TJ/d):

| | Yearly Averages | | | | |
|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 | 2015 |
| **Total Full Haul** | **858.1** | **867.1** | **866.6** | **866.7** | **866.6** |
| Total Part Haul - CS7 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| Total Downstream CS7 | 883.1 | 892.1 | 891.6 | 891.7 | 891.6 |
| Total Part Haul CS3 | 3.9 | 3.9 | 3.9 | 3.9 | 3.9 |
| Total Downstream CS3 | 887.0 | 896.0 | 895.5 | 895.6 | 895.5 |
| Total Part Haul - Pilbara | 192.8 | 186.5 | 186.5 | 186.5 | 186.5 |
| **Pipeline Total** | **1,079.8** | **1,082.5** | **1,082.0** | **1,082.1** | **1,082.0** |
| Total Back Haul | 146.6 | 146.6 | 146.6 | 146.6 | 146.6 |

8.3. Table 2 - Average Annual Throughput (TJ/d):

| | Yearly Averages | | | | |
|---|---|---|---|---|---|
| | 2011 | 2012 | 2013 | 2014 | 2015 |
| **Total Full Haul** | **709.7** | **725.5** | **725.9** | **737.1** | **746.5** |
| Total Part Haul - CS7 | 21.5 | 21.5 | 21.5 | 21.7 | 21.9 |
| Total Downstream CS7 | 731.2 | 746.9 | 747.4 | 758.8 | 768.4 |
| Total Part Haul CS3 | 2.5 | 2.5 | 2.5 | 2.6 | 2.7 |
| Total Downstream CS3 | 733.7 | 749.5 | 749.9 | 761.4 | 771.2 |
| Total Part Haul - Pilbara | 167.5 | 165.7 | 165.7 | 166.2 | 166.7 |
| **Pipeline Total** | **901.1** | **915.2** | **915.6** | **927.6** | **937.9** |
| Total Back Haul | 112.3 | 112.3 | 112.3 | 112.3 | 112.3 |

***Key Assumptions***

8.4. The principal assumptions made in preparing these forecasts are set out in the following paragraphs.

8.5. The contracted Full Haul capacity forecast is based on an actual Full Haul contracted capacity as at 1 January 2011, following the completion of the Stage 5B expansion project in 2010. There are however, some shippers who contracted for additional capacity as part of the Stage 5B expansion project but who do not require the capacity until during 2011. Accordingly, DBP's forecast of contracted capacity in 2012 reflects that change.

8.6. DELETED

8.7. The Australian Demographic Statistics as at 30 June 2009 states that WA's population growth for the 2009 financial year was 3.0% which indicates that the Operator's forecast increase is reasonable.[7]

8.8. DELETED

[7] Australian Bureau of Statistics, *http://www.abs.gov.au/ausstats/abs@.nsf/mf/3101.0*, June 2009.

8.9. In forecasting additions to contracted capacity during the Access Arrangement Period, DBP has taken into account only those projects which it reasonably believes have a likelihood of proceeding. For the reasons outlined in earlier sections of this submission, there are no projects following the commissioning of the Stage 5B expansion project that meet this criteria

8.10. The Operator has assumed that the existing contracts for the existing shippers on the DBNGP will continue and remain largely in the same form. In that regard, it is noted that all of these pre-existing contracts extend for terms beyond 31 December 2015.

# 9. DELETED

# 10. FORECAST CONTRACTED CAPACITY AND USAGE FOR PART HAUL AND OTHER NON REFERENCE SERVICES

10.1. The Part Haul contracts are predominantly for the transport of gas for mining companies in the Pilbara and Mid-West region of WA and do not represent a significant part of the market.

10.2. DELETED

10.3. DELETED

10.4. DELETED

10.5. DELETED

10.6. DELETED

10.7. DELETED

10.8. DELETED

10.9. DELETED

# 11. DELETED

## APPENDIX 1 - DELETED

## APPENDIX 2

DomGas Alliance Submission to the Strategic Energy Initiative review being undertaken by the WA Government.