

SUBMISSION 18: Response to Halcrow Pacific Issues Report / Request of Information



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1. INTRODUCTION

- 1.1. On Friday 4 June 2010, the Economic Regulation Authority (**ERA**) issued DBP with an Information Request (**Information Request**) to assist in the assessment of the proposed revisions to the Access Arrangement. DBP has been provided with two documents outlining the Information Request's requirements:
 - (a) Report prepared by ERA consultants Halcrow Pacific Pty Ltd (Halcrow Report); and
 - (b) DBP's confidential tariff model with highlighted areas indicating requests for further information.
- 1.2. The ERA asked DBP to provide a response by Tuesday 15 June 2010 and met with Halcrow Pacific for workshop discussions the week that commenced Monday 5 July 2010.
- 1.3. DBP provided the ERA with a submission on Tuesday 15 June and subsequent submission on Friday 25 June containing informing that was able to be brought together within the timeframe.
- 1.4. Subsequent to the workshop discussions the ERA issued DBP with a Follow-up Request for Information on Monday 12 July 2010.
- 1.5. This submission details DBP's response to the Follow-up Information Request.
- 1.6. As advised in the initial submission of 15 June, there are a number of overarching concerns DBP has with the nature and type of information being requested. These concerns are outlined in section 2 of submission 14.
- 1.7. Given the above, DBP is providing this information in the interests of transparency. However, by making this submission, it should not be construed that DBP concedes that the ERA has a need to access this information in order to perform its statutory function of assessing the access arrangement proposal.
- 1.8. The sections of this submission that follow section 1 are structured using the same structure used in the Halcrow Report.
- 1.9. There are some requests in the Follow-up Request for Information which DBP has not responded to in this submission they relate mainly to the requests relating to operating expenditure. DBP has advised the ERA that responses relating to these requests will be provided Monday 19 July 2010.



2. GENERAL INFORMATION REQUESTED

- 2.1. The Halcrow Report has requested some general information requested about DBP and the DBNGP, as outlined in the following table.
- 2.2. DBP has shaded out items that have already been fully responded to (see submissions 14 and 17).

Item	Description	Comment	Status of Information Provision
1	General		
1.1	Please provide a copy of the Asset Management Plan	To get an understanding of the asset management strategy adopted by DBP including the infrastructure replacement strategy.	Information has been provided.
1.2	Please provide a copy of the Safety Case.	To get an understanding of the safety regime.	Only Sections 0 and 1 of the Safety Case have been provided. It is requested that the balance of the document, specifically sections related to description of the assets and the risk assessment, are provided.
1.3	Please provide a copy of the capitalisation policy.	To understand what is capitalised versus operating expenditure.	Information has been provided.
1.4	Please explain how DBP has entered into an Alliance arrangement with a service provider.	To get an understanding of how DBP has gone to the market to put into place an Alliance arrangement.	Information has been provided through discussions at the meetings/dissuasions with DBP.
1.5	To get an understanding of the IT strategy for the Sadopted by DBP including the replacement plan and the adoption of new technology.	IT Services Plan 2009-2010 and IT Services Plan 2010-2011 have been provided. DBP indicated during the meetings/discussions, however, that this information does not accurately reflect its IT Strategy. It is requested that appropriate information be provided.	
1.6	Please provide details of the costing methodology adopted for the 2010 capital expenditure and the rationale justifying the projects.	To understand how the 2010 capital projects have been derived and costed.	A Process Flow Chart, Charter for the PRC and PRC Guidelines have been provided. Project Estimating Guidelines have also been provided, however, Appendix A – Contingency on Small Projects. It is requested that this Appendix be provided.



ltem	Description	Comment	Status of Information Provision
1.7	Please provide details of the costing methodology adopted for the 2011 to 2015 capital expenditure and the rationale justifying the projects.	To understand how the 2011 to 2015 capital projects have been derived and costed (It is acknowledged that this request could be covered in the Asset Management Plan).	As for Item 1.7.
1.8	Please provide details of the pipeline modelling used in determining the pipeline augmentation required and the timing of the augmentation.	To get an appreciation of the methodology used to determine the extent and timing of the augmentation.	Information has been provided.
1.9	Please provide the inflation factors that have been used in the forecast capital.	To be able to convert the costs to real dollars (\$)	Information has been provided.

2.3. DBP provides responses below to the following requests for information from the above table.

Response to 1.2

- 2.4. In relation to the asset description please see attachment 1.2 a Chapter 2 Facility Description Rev J Dated 020210
- 2.5. In relation to asset description please see attachment 1.2 b Chapter 3 Safety Management System Rev J Dated 020210_Feb Update.
- 2.6. As discussed in the workshops, the Safety Case documentation submitted includes proposed revisions which are presently being assessed by the technical regulator. Further revisions will also need to be made as a result of the commencement of amendments to the Petroleum Pipelines Act, the new Petroleum Pipeline (Management of Safety of Pipeline Operations) Regulations 2010 and the new Petroleum Pipelines (Occupational Safety and Health) Regulations 2010. These amendments to the Act and the new regulations impose on the owners and operators of licensed gas transmission pipelines (such as the DBNGP) a significantly higher standard for the safe management of pipelines than previously existed. As examples, they require the following:
 - (a) Schedule 1 Division 2 of the Petroleum Pipelines Act 1969 requires the DBNGP to be "without risk". This is an increase from the previous position under AS2885 which provide that a pipeline should be operated without "undue risk" or "at a level of risk that is acceptable and as low as reasonably practicable (ALARP). DBP therefore has to review all of its procedures and policies and supporting systems to ensure that there is no risk involved in the operation of the DBNGP.
 - (b) DBP is now subject to a mandatory obligation to not engage in a pipeline operation if a significant new risk to safety or health, or a significant increase in an existing risk to safety or health, arises or is likely to arise from the operation and the new risk or increased risk is not provided for in the safety case in force for the operation. DBP will now have to ensure that systems are in place to stop pipeline operations in circumstances where a new or increased risk arises that is not provided for in the safety case and to not resume operations until modifications are made to the safety case to deal with the new or increased risk.



Response to 1.5

2.7. DBP will provide its response to this request in the submission to be provided in the week commencing 19 July 2010.

Response to 1.6

2.8. DBP advises that it is unable to provide the attachment referenced in the Project Estimation Guidelines as it does not presently exist.



3. HISTORICAL CAPITAL EXPENDITURE

- 3.1. The Halcrow Report has outlined specific and general information which it requires for the actual capital expenditure incurred in the period 2005 to 2010, as outlined in the following table.
- 3.2. DBP has shaded out items that have already been responded to in submissions 14 and 17.

Item	Description	Comment	Status of Information Provision
2	Expansion Capital Expenditure (2	005 to 2010)	
2.1	Please provide the actual gas quality reading since 2005.	To understand the impact of the actual versus minimum specified gas quality.	Information has been provided.
2.2	In Submission 9, section 9.4, DBP advised that it has used a different ledger for recording different actual expenditure. What is the difference in to the previous ledger that makes it difficult to reconcile the information provided to the ERA in 2005.	To be able to make comparison of the actual versus forecast provided in 2005.	Information not yet provided.
2.3	In Submission 9, section 9.10, in respect to the FEED study, DBP indicated that the cost included both internal and external feed consultant cost. Please provide supporting information to show that the internal cost has not also been included in the operating cost or in the overheads.	To ensure that there is no double counting in the capital project cost.	The intent of statement at section 9.10 is not apparent; it appears to relate to the FEED study line items in the table at section 9.7. Please provide a breakdown of the inclusions within the FEED cost line items.
2.4	In Submission 9, section 9.18, DBP indicated that duty is payable at 5% of the cost of pipe. Please provide supporting information that shows that DBP is required to pay the duty.	To justify the cost of the purchase of the pipes.	DBP has advised that, in some cases, it is granted exemptions in respect to the payment of duty. It is understand that DBP is endeavouring to provide a reconciliation, however, this is not yet available.
2.5	Submission 9, section 9.19 states that interest costs during construction have been included. Please provide a spreadsheet showing how the interest charges have been included in the construction costs.	To understand the impact of the interest charges on the construction costs.	Information has been provided.



Item	Description	Comment	Status of Information Provision
2.6	Submission 9, section 10.38 discusses how the effect of HHV and Wobbe index experienced since 2005 has impacted on DBNGP capacity and DBP's ability to meet its existing contractual obligations. Please provide information on the variability of the HHV and Wobbe index and the impact on DBP's ability to meet its contractual obligations. Please detail the number of incidents that have occurred. Please indicate whether DBP has incurred additional costs as a result of this issue.	To understand the impact of HHV and Wobbe index on DBP expansion program.	Information has been provided.
2.7	Submission 9, section 11.10 states that increased electric power generation capability will be required and, as such, existing gas engine alternators have to be replaced. Please advise whether the existing units have been disposed of or sold. If sold please indicate the sell price of these items.	Understand the materiality of the sale of the alternators.	Information not yet provided.
2.8	Additional data to support Submission 9, Attachment 12 - Audit Report Capex Stage 5A is requested.	Attachment 12 is a table – are there any BDO Audit Reports or documents to support the figures?	Information not yet provided. DBP's advice (refer Submission 14) that it not able to provide a final audit report at this time is noted.
2.9	Is there a document covering Stage 5B Looping - Design Basis?	It is understood that the Stage 5B design was closely based on Stage 5A.	Information has been provided.
2.10	Is there a document covering Stage 5B Compression - Design Basis?	It is understood that the Stage 5B design was closely based on Stage 5A.	Information has been provided.
2.11	Explanation of Submission 9, Attachment 15 - Stage 5 Technical Review, 29 June 2006 is required.	Capacity figures, stages, scope of work appear to be different to other documentation?	Information has been provided.
2.12	Please provide financial audit report for the expenditure for Stage 5B for the current period.		DBP has advised that this is not yet available and is unlikely to be available within the review timeline.



Item	Description	Comment	Status of Information Provision
2.13	Please explain what is included in the DBP overhead cost and the AAM margin costs on overheads in the table in section 11.12	Understand what is included in the overheads and margin.	Information not yet provided.
2.14	In Submission 9, section 17.13(b), DBP states that it has informal supporting information from a number of reputable consulting firms that the project management fees are in accordance with accepted industry practice; and in section 17.13(d) say that recent market information (publicly available) shows (i) that it is accepted industry practice for project management fees to be included into contracts for infrastructure construction, and (ii) that the 3% fee compares favourably with other fees payable in similar circumstances. Please make this information available for review.	To provide an improved understanding of these fees and their applicability to the capital programs.	Information has been provided.

3.3. DBP provides responses below to the following requests for information from the above table.

Response to 2.2 – Project Ledgers

- 3.4. DBP has prepared spreadsheets for each of stages 5A and 5B which:
 - (a) allocates the actual expenditure incurred for each stage into the categories of expenditure that were used in the budgets for each stage (as were previously provided to the ERA). The categories used in the budget are called cost time resources (CTRs) and are referred to as such in the spreadsheets; and
 - (b) reconciles these budgeted expenditure categories (ie CTRs which were activity based) with the categories of expenditure used in DBP's filing (which were asset based).
- 3.5. The spreadsheet for stage 5B also reconciles the entire stage 5B project and DBP managed works (ie works not to be undertaken by contractors and which forms the punch lists from the looping and compressor facilities construction contracts that will be funded out of the forecast \$51 million forecast to be incurred in 2011.
- 3.6. The reconciliation for 5B includes the capital cost associated with the BEP lease which were not included in the actual capital expenditure included in the proposed revisions to the Access Arrangement documentation (as either the opening capital base or the forecast capital expenditure). This was an oversight on DBP's part at the time of filing at 1 April 2010.



3.7. For the spreadsheet associated with stage 5B, see attachment 2.2a. For Stage 5A, see attachment 2.2b.

Response to 2.3 – Consultant Costs

3.8. DBP will provide its response to this request in the submission to be provided in the week commencing 19 July 2010.

Response to 2.4 - Duty

- 3.9. As previously advised:
 - (a) Duty costs were originally assumed in project budgets as evidenced by Submission 9. However, after the commencement for each project DBP was granted exemptions to the Duty in each case except for small amounts which can be evidenced by specific duty reconciliations.
 - (b) The Duty costs are not reflected in the actual expenditure.
- 3.10. This is reconciled in the spreadsheet in attachment 2.4 Reconciliation of duty refunds.xls

Response to 2.7 - GEAs

- 3.11. DBP details the incremental changes to compressor station Gas Engine Alternators (GEAs) from Stage 4 to 5B (attachment: 2.7 Incremental changes to GEAs STX4 to 5B).
- 3.12. The attached spreadsheet shows that after the completion of 5B, all but two of the GEAs will be installed at compressor station sites.
- 3.13. Of the remaining two, neither will be nor have been sold or disposed. Instead, one is being installed at the Jandakot depot site as part of establishing DBP's disaster recovery capability for that site. This is critical given DBP intends to locate its IT data centre at DBP's Jandakot depot during the regulatory period.
- 3.14. The remaining GEA will be retained as a critical spare at the Jandakot depot as part of the DBNGP inventory given the contractual obligations of DBP and the need to ensure the DBNGP does not create additional energy supply reliability issues to that already being experienced by energy users.

Response to 2.13 – Overhead Costs

- 3.15. DBP refers to the CTR tab of attachment 2.2b Stage 5A Rec.
- 3.16. The CTR tab of the attachment provides all items under each category, including AAM margin and overheads in the table provided in section 11.12 of Submission 9.



4. STAY-IN-BUSINESS EXPENDITURE (2005 TO 2010)

- 4.1. The Halcrow report has outlined specific and general information which it requires for the stay-in-business expenditure incurred in the period 2005 to 2010, as outlined in the following table.
- 4.2. DBP has shaded out items that have already been responded to in submissions 14 and 17.

Item	Description	Comment	Status of Information Provision
3	Stay-in-Business Capital Expendit	ture (2005 to 2010)	
3.1	<u>Computers</u> – at Esplanade \$ in 2007; please provide details of the \$ (eg. design, procurement, installation, overheads etc) and the business case.	To understand the different components of the costs for the relocation of the control room.	Information has been provided.
3.2	<u>Motor Vehicles</u> – Please provide a copy of the vehicle replacement policy and outline the types of vehicles included in the cost category.	To get an appreciation of the frequency of vehicle replacement.	Information has been provided.
3.3	<u>SCADA</u> – Please provide a copy of the SCADA strategy prepared in 2006.	To understand the justification for the upgrade.	Information has been provided.
3.4	<u>SCADA</u> – In 2010, there is a cost of Sector please provide details of the project scope, details of the cost and business case.	Explanation in Submission 10 is not clear in respect to what is proposed for 2010.	Information has been provided.
3.5	<u>CCTV</u> – Please provide scope of works, details of the cost of in 2010 and the business case for the project.	No details of the project were provided in Submission 10.	Information has been provided.
3.6	Software – Please provide the scope of works, details of the cost of final in 2010 and the business case for the Maximo project.	Project was only shown as Corporate system in Submission 10.	Some explanation has been provided in <i>Submission 14;</i> <i>Submission 17</i> indicates that DBP is compiling further information. It is requested that the additional information be provided.
3.7	<u>Compression</u> – Please provide a copy of the replacement philosophy adopted for compressors.	To get an understanding of the frequency of replacement.	Information has been provided.
3.8	<u>Compression</u> – CS6/2 Nuova Pignone Low Pressure Turbine replacement at a cost of \$ in 2009. Please provide scope of works, details of costs and business case.	To understand the scope of works and the cost.	Information not yet provided.



Item	Description	Comment	Status of Information Provision
3.9	Compression – CS2/2 100 cost \$ in 2009. Please provide scope of works, details of costs and business case.	To understand the scope of works and the cost.	Information not yet provided.
3.10	Compression – CS8/2 100 cost provide scope of works, details of costs and business case.	To understand the scope of works and the cost.	Information not yet provided.
3.11	<u>Compression</u> – Please provide scope of works, details of the cost of \$13.1m in 2010 and the business case for the projects.	No details of the project were provided in <i>Submission 10</i> .	Information not yet provided.
3.12	<u>Microwave</u> – Please provide scope of works, details of the cost of \$ in 2010 and the business case.	To understand the scope of works and the cost.	Information has been provided.
3.13	DBNGP Signage – Please provide scope of works, details of the cost of \$ in 2010 and the business case.	To understand the scope of works and the cost.	Information not yet provided.
3.14	Compressor Station Pipework – Please provide scope of works, details of the cost of Second Second	To understand the scope of works and the cost.	Some explanation provided in Submissions 14 and 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).
3.15	<u>Transition Costs</u> – Please provide scope of works, details of the cost of \$ in 2010 and the business case for the project/s.	To understand the scope of works and the cost.	Some explanation provided in Submission 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).
3.16	<u>Coating</u> and <u>Earthing</u> <u>Replacement</u> – Please provide scope of works, details of the cost of S in 2010 and the business case for the project/s.	To understand the scope of works and the cost.	Some explanation provided in Submissions 14 and 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).

4.3. DBP provides responses below to the following requests for information from the above table.



Response to 3.6 – Software (Maximo)

- 4.4. DBP provides the Maximo business case in attachment 3.6 a CMMS Upgrade Business Case accepted final rev 4.doc
- 4.5. The CMMS software is the core IT system utilized for DBNGP Asset Management. It is the inventory management system for the pipeline.
- 4.6. Until the project was undertaken, Maximo Version 4.3 was being used. This version was released in 1999. However, this version was no longer supported by the vendor, Accordingly, it needed to be upgraded, or else, DBP would have been faced with a redundant inventory management system.
- 4.7. The overall project was divided into two sub-projects. Whilst these are clearly separate parts of the overall project, they are dependent on each other, and one cannot be implemented without the other.
- 4.8. Project 1 covered all tasks related to data gathering and mapping, and Project 2 contained all tasks relevant to the implementation, including solution design and testing, software, hardware, training and technical development.

Project 1: Data re-engineering includes -:

- 4.9. Data structure definition: data conversion strategy definition and detailed planning, data hierarchies design and template documentation, team training
- 4.10. Data mapping: data extract from Maximo 4.03 and mapping to the new hierarchies
- 4.11. Data collection: drawing inspections and technical information gathering for all missing pieces of information within the scope of the work outlined in the study.
- 4.12. Data structure refinement: hierarchy assessment by business users and on-site assessment requests for data deemed problematic
- 4.13. Data validation: mock conversion waves in Maximo 6.2 through data loader to validate data quality and integrity

Project 2: Maximo Implementation (commencing once the functional team has completed Project 1) includes -:

- 4.14. Four phases business blueprint, realization, final preparation, go-live and support (see below diagram).
- 4.15. Two rounds of mock conversion (mock 1 and 2) were to place. This used intermediate data supplied by Project 1, as scheduled below.
- 4.16. One additional round of mock conversion (mock 3) took place during Project 2. This round used final static and the latest dynamic data snapshot as scheduled below.
- 4.17. The Monte Carlo cost analysis was undertaken to establish the following budget for the project:



Cost Items	Baseline	P50	P85
IBM Software Components			
Data Reengineering			
Technical Developments			
Maximo Implementation			
Internal Resources			
Travel and Accommodation			
Sub Total			
IT Cost			
IBM Hardware Components			
Internal Labour Resources			
IT Licence Costs			
IT Sub Total			
Provisional Cost			
Data Reengineering (Provisional)			
Training Services (Provisional)			
Technical Developments (Provisional)			
Maximo Implementation (Provisional)			
Provisional Sub Total			
Total			

4.18. DBP has advised (in submission 10) that the actual expense of the project in 2010 was \$6,165,560.

Response to 3.8 - Compression

4.19.

Unit that has been in service since it was last changed out 4 years prior. This project was initiated to cover its replacement following the reaching of its operating hours as agreed with the manufacturer. The agreed process with was for the purchase of a new HP Module and for the LP Module to be overhauled on site at CS6. The following is a summary of the scope of work completed on site:

- (a) Old HP Module was replaced with new HP module
- (b) LP Module was overhauled on site with a new LP rotor and all other related parts were overhauled in accordance with processes
- (c) The accessory gearbox was replaced
- (d) The torque converter (between started motor and gearbox) was overhauled
- (e) The bleed and blow off valves were overhauled
- (f) The cracked components of the exhaust system was replaced
- (g) The vibration monitoring system was upgraded to 3300 series system
- (h) The coupling was replaced
- 4.20. As this work required heavy lifting and materials handling, specialist resources from Melbourne were used to support the work. Support work included:
 - (a) Catering
 - (b) Scaffolding
 - (c) National and international transport / shipping



- (d) Crane hire
- (e) Machining
- 4.21. This project was justified on the basis of the run hours that the machine had reached the overhaul time and criteria set out in the Asset Management Plan for overhauls. The negotiated outcome with was best option available considering the demand at the factory of machines world wide. CS6/2 is a critical compressor unit for the delivery of contractual commitments to shippers.
- 4.22. A budget was developed for this project working in conjunction with the supplier. That budget is summarised as follows:

Description	Sub Total	Total
Direct Labour		
Materials Project		
Other Job Costs		
Nuova Pignone Hardware		
Transport		
Oil		
Labour, external		
Plant & Equip Hire		

4.23. DBP has advised (in submission 10) that the actual expense of the project in 2009 was \$6,403,078.38 – representing an approximate 3% favourable variance to the budget.

Response to 3.9, 3.10 - Compression

- 4.24. In accordance with the Asset Management Plan and as part of the Agreement for the servicing of the machines on the DBNGP, a process has been outlined whereby gas turbines that have reached 30,000 hours are to be replaced using an engine exchange agreement with
- 4.25. The scope of this particular project involved the following:
 - (a) overhauling an engine at the DBNGP. for use on the
 - (b) DBP sending an employee to the US to witness the overhaul and the performance testing of the machine.
 - (c) Following successful test of the engine in the US, it is then despatched to Perth and is installed in the field once approval for shut down and replacement is received from the DBP control room the timing for the shut down must not impact on contractual supply obligations to shippers.
 - (d) The field scope involves taking the unit out of service, followed by the isolation of the unit and the disconnection and removal of the engine in accordance with approved procedures. The new machine is prepared and checked before it is moved into position for installation, connections and alignment.
 - (e) Following alignment, recommissioning works continue to a stage where it can be started and tested before it is water washed, dried and put into initial services with key performance parameters taken and monitored.



- (f) Key Activities:
 - (i) Engine cool down, isolation and removal from skid
 - (ii) The new gas turbine is unwrapped, inspected and prepared for installation
 - (iii) The new gas turbine is placed into the skid and reconnection process recommenced
 - (iv) The accessory gearbox is replaced
 - (v) The hydraulic oil is analysed and replaced
 - (vi) The exhaust expansion joint is replaced
 - (vii) The inlet air filters are replaced
 - (viii) Recommissioning process
- 4.26. These machines are required to ensure DBP meets its contracted capacity obligations to shippers on the pipeline. The replacement is justified on the basis that reliability and availability of plant needs to be maintained at a level where all contractual terms are able to be met. As previously mentioned, the T1 capacity of the pipeline (which is fully contracted) is determined by assuming what can be delivered with only the most critical compressor unit being off line. If this is not able to be achieved, DBP will be in a position of having to curtail. Accordingly, it needs to ensure its compressors are
- 4.27. A budget was developed for the CS2/2 upgrade component of the project in conjunction with and based on the schedule of rates set out in the agreement with That budget is summarised as follows:

CS2/2 Solar mars 100 (Request 3.9)

Description	Sub Total	Total	
Description	Sub Total	Total	
Solar			
Transport			
Hire Equipment			
Labour			
General			
	Grand Total		

- 4.28. DBP advised (in submission 10) that the actual expense of the project in 2009 was \$1,784,474.
- 4.29. Similarly, a budget was developed for the CS8/2 upgrade component of the project in conjunction with and based on the schedule of rates set out in the agreement with the transformation of the budget is summarised as follows:

CS8/2 100 (Request 3.10)

Description	Sub Total	Total	
Transport, Hire equipment			
Labour			
	Grand Total		

4.30. DBP advised (in submission 10) that the actual expense of the project in 2009 was \$2,121,076.



Response to 3.11- Compression

- 4.31. DBP advises that this particular SIB project can be broken down into 4 sub projects.
- 4.32. The following table demonstrates how the project components build up to the \$3.1 million to be incurred in 2010.

SIB Compression 1	CS9-1 Gas Turbine Major overhaul
SIB Compression 2	CS7-2 Gas Turbine Major overhaul
SIB Compression 3	48000H service @CS3GEA1 GEA Overhaul
SIB Compression 4	Stage 3A filters (CS2, 4,7)



- 4.33. The project justification forms for SIB Compression projects 2, 3 and 4 are attached as attachment 3.11 a SIB Compression. DBP has been unable to locate a project justification form for SIB Compression project 1.
- 4.34. However, in relation to SIB Compression project 1, as is the case with CS6/2 referred to above, CS9/1 is a **Sector Control** Unit that has been in service since it was last changed out 4 years prior. This project was initiated to cover its replacement following the reaching of its operating hours as agreed with **Sector**. The agreed process with was for the purchase of a new HP Module and for the LP Module to be overhauled on site at CS9. The following is a summary of the scope of work completed on site:
 - (a) Old HP Module was replaced with new HP module
 - (b) LP Module was overhauled on site with a new LP rotor and all other related parts were overhauled in accordance with processes
 - (c) The accessory gearbox was replaced
 - (d) The torque converter (between started motor and gearbox) was overhauled
 - (e) The bleed and blow off valves were overhauled
 - (f) The cracked components of the exhaust system was replaced
 - (g) The vibration monitoring system was upgraded to 3300 series system
 - (h) The coupling was replaced
- 4.35. As this work required heavy lifting and materials handling, specialist resources from Melbourne were used to support the work. Support work included:
 - (a) Catering
 - (b) Scaffolding
 - (c) National and international transport / shipping
 - (d) Crane hire
 - (e) Machining
- 4.36. This project was justified on the basis of the run hours that the machine had reached the overhaul time and criteria set out in the Asset Management Plan for overhauls. The negotiated outcome with was best option available considering the demand at the factory of machines world wide. CS9/1 is a critical compressor unit for the delivery of contractual commitments to shippers.



4.37. A budget was developed for this project in conjunction with **summarised**. That budget is summarised as follows:

	Engine Replacements				
<u>CS9U1</u>					
					Estimated
_		Cost	Cost	Exchange rate	AU\$ Value
HP Turbine Overhaul					
LP Turbine – New					
Balance of Plant overha	ul spare parts				
Supply of Supervisio	n				
Removal and Installatior	n Services				
Transportation					

Response to 3.13 – DBNGP Signage

- 4.38. This project was incorrectly categorised in the proposed revised access arrangement. This expenditure actually related to various changes to the asset which were undertaken using the management of change process under the Safety Case. It included the work undertaken from 2007 to 2010 as outlined in attachment 5.18 MOC recon.xls. This spreadsheet identifies the items of work undertaken and the costs incurred for each item of work.
- 4.39. DBP advised (in submission 10) that the actual expense of the project during 2010 was \$1,073,713.00.

Response to 3.14 – Compressor Station pipework

- 4.40. The condition of the underground pipework on the DBNGP is monitored via the Cathodic Protection (CP) and Direct Current Voltage Gradient (DCVG) survey processes. However, the condition of the underground pipework in compressor stations cannot be determined in the same manner due to the vast number of other underground systems in the compounds and the fact that there is no detailed depth of cover records for pipework in the compounds.
- 4.41. Also, in many instances, due to the presence of other metal and equipment in the compound, "shielding' occurs. This can block CP from certain parts of pipe and which in turn can result in corrosion of the pipework.
- 4.42. A dig up program of under ground pipework was started to verify the condition of the coating systems.
- 4.43. A total of \$1,500,000 was budgeted for 2009/10 financial year to perform the investigations required, with the same amount required for the following 2 years.
- 4.44. This project is required to maintain an acceptable level of inspection of underground pipework, ensuring that defects have not occurred during or as a result of the extensive amount of expansion work conducted over the recent years.
- 4.45. Deliverables include inspection and repair of all defects identified within the compressor stations.



4.46. DBP provides the expected budget and notes that the project is currently ongoing:

Description	Project Budget
Contracted Employees	
Internal Labour	
Materials	
Travel & Accommodation	
Total	

Response to 3.15 – Transition Costs

- 4.47. DBP refers the ERA to the summary scope provided in submission 17.
- 4.48. In addition to the scope, DBP provides the project justification form outlining the TX2 office fit out component of the project (attachment 3.15 PJF TX2 Office Fit Out). In addition, the total project consists of a number of additional components including, SAP costs, user migration costs, network separation costs and data clarification during the changes.
- 4.49. DBP provides the breakdown of expenditure incurred for the project in the following table:

TX2 Office Fit Out SAP - TX2 User Migration - TX2 Network Separation - TX2 Data Classification - TX2



- 4.50. The SAP component related to the TX2 project was required to complete migration of the gas transmission and pipeline maintenance functions plus corporate functions of finance and Human Resources of the asset manager to DBP. As a result of these changes there was a requirement to create a new SAP environment for DBP to enable day to day business functions.
- 4.51. The User Migration work allowed for the management of the DBP IT environment transitioning it to a separate entity while providing sufficient separation for compliance purposes. This incorporates the configuration of perimeter network services such as Internet services, SMTP Email routing, Backups, Antivirus, Antispam and Monitoring services to service the new DBP IT Infrastructure. In summary, this component of the overall project included:
 - (a) Separation of the DBP network, users and resources from all other business entities in the form of routers/firewalls at all points of connection between the WNG and DBP network.
 - (b) Capacity for DBP to obtain access to Internet services (web, email etc) via WNG's internet connection(s).
 - (c) Capacity for DBP users to have access to DBNGP domain applications as required.
 - (d) IT support services for the DBP domain and associated infrastructure and staff
- 4.52. Network separation component included:
 - (a) Electronically identifying current workstation list for users (based on the in-scope personnel list)
 - (b) Validation the workstation list with users and manager



- (c) Determination of applications requirements for users and workstations, including Blackberry and remote access, on a like-for-like basis
- (d) Determination of the data and hardware implications for the workstation migration
- (e) Development of a user migration strategy based on the already identified tools and processes, defined user list, and application requirements
- (f) Pre-stage user accounts in the DBP domain (based on the in-scope personnel list)
- (g) Pre-stage mailboxes and mail data to the DBP exchange server (based on the inscope personnel list) (has data separation implications)
- (h) User Acceptance Testing (UAT) for the identified application list with the new workstation SOE at The Esplanade and Jandakot Gate 2
- (i) Pilot migrations at The Esplanade and Jandakot Gate 2
- (j) Refinement of User Migration strategy based on UAT and Pilot stages
- (k) User Migrations on Level 7 The Esplanade
- (I) User Migrations at Jandakot Gate 2
- (m) User Migrations at GHD House (Control Room DR site)
- 4.53. The final data clarification component of the overall project included:
 - (a) Development of data governance and management principles including a data classification scheme that classifies data belonging to DBP.
 - (b) Accommodate and controlling access to data accessible by both DBP and WNG (shared data). Develop associated documentation as required.
 - (c) Define a new directory structure for the new DBP ICT environments' shared data servers. This directory structure shall was based on DBP's organisational structure and provided the functionality for DBP's implementation of Microsoft's Distributed File System (DFS). Implementation of a Role Based Access Control (RBAC) model that enabled RBAC for DBP's DFS.
 - (d) Identification of electronic and hard copy data to be migrated to DBP and associated metadata, including location, owner, users; volume, security requirements, processing systems and storage systems.
 - (e) Classification of each migrant's personal business data items (e.g. business emails in personal and shared email mailboxes and business data resident in migrants Home Drives) as belonging to DBP. Move each migrant's personal business data items to an appropriate DBP location.
 - (f) Alignment of the structure of shared data (e.g. shared files residing on data servers) with DBP's new DFS directory structure. Move shared data items to an appropriate DBP location.
 - (g) Identification and classification of all hard copy data items (e.g. printed reports, paper files and records) as belonging to DBP. Move hard copy data items to an appropriate DBP location.

Response to 3.16 – Coating and earthing Replacement

4.54. This project required the excavation, inspection and assessment of pipe defects, the recoating of the pipes with a non-shielding epoxy based coating system, and the reinstatement of the excavated areas.



- 4.55. The scope of work involves the engagement of contractors on a schedule of rates basis including plant and equipment from a Civil Contracting organisation that has been accredited to work on the DBNGP. The contractors together with DBP staff provide the key resources for the:
 - (a) Locating of all services before commencement of works
 - (b) Positive identification of all buried structures
 - (c) Hand excavation until the pipeline is located
 - (d) Machine excavation until the pipeline is fully exposed all around
 - (e) The coating evaluation and assessment of the pipeline
 - (f) The surface preparation and recoating
 - (g) The curing of coating and backfilling and reinstatement
- 4.56. The ultra High Built epoxy system applied in Expansion Projects back in 1991 in CS1, 3,5 and 8 have shown in preliminary inspection and audit programs to be shielding the CP currents within the station. The shielding has created onset of corrosion pitting and metal loss. So far the following stations have been inspected and the coating system has been renovated: C3 both hot and cold sections, CS5 and CS8 the hot section. The Project is aimed to continue to complete CS5 and CS8 cold sections then proceeding to CS1, 2, 4, 6, 7 and 9 progressively until all below ground pipework are completed.
- 4.57. A provision \$1.5M per compressor station and an allowance of work at 1.5 compressor stations per year has been assumed in developing the cost estimate, although the actual costs will be dependent on the outcome of inspections.



5. FORECAST CAPITAL EXPENDITURE

5.1. The Halcrow report has outlined specific and general information which it requires for the forecast capital expenditure, as outlined in the following table.

Item	Description	Comment
4	Expansion Capital Expenditure (2011 to 2015)	
4.1	Pipeline – Please provide details of the scope of works.	To understand the extent of work and expenditure required to complete Stage 5B.
4.2	Compression – Please provide details of the scope of works.	To understand the extent of work and expenditure required to complete Stage 5B.
4.3	Other – Please provide details of the scope of works.	To understand the extent of work and expenditure required to complete Stage 5B.

- 5.2. Copies of the detailed work scopes and specifications for the following components of the project are attached to this submission:
 - (a) Pipe procurement and coating attachment 4.1a
 - (b) Looping construction attachment 4.1b
 - (c) Compressor station facilities civil works attachment 4.2a
 - (d) Compressor station facilities electrical and instrumental works attachment 4.2b
 - (e) Engineering design attachment 4.2c
- 5.3. The balance of the works is described in the FEL document for stage 5B, a copy of which has already been provided to the ERA.



6. STAY-IN-BUSINESS CAPITAL EXPENDUTRE (2011 TO 2015)

6.1. The Halcrow Report has outlined specific and general information which it requires for the stay-in-business capital expenditure incurred in the period (2011 to 2014), as outlined in the following table.

Item	Description	Comment	Status of Information Provision
5	Stay-in-Business Capital Expenditure (2011 to 2015)		
5.1	<u>Compressor</u> <u>Stations</u> – Replacement of compressor control at CS2, 4 & 7 at a cost of <u>S</u> in 2011 and <u>S</u> in 2012. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived.	To understand the scope of works and the costing methodology.	Some explanation provided in Submission 17, however, no supporting documentation has yet been provided. Reference is made to a FEED Study from which costs were derived; it is requested that a copy of the FEED Study/cost derivation be provided.
5.2	<u>Compressor</u> <u>Stations</u> – Replacement of compressor control at CS10 to cost \$ 2012. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived.	To understand the scope of works and the costing methodology.	Some explanation provided in Submission 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).
5.3	<u>Compressor</u> <u>Stations</u> – Replacement of station PLC 5 at ACS sites and CS10 S in 2011. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived.	To understand the scope of works and the costing methodology.	Information has been provided.
5.4	<u>Compressor Stations</u> – CS6 exhaust replacement \$ in 2014. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived.	To understand the scope of works and the costing methodology.	Some explanation provided in Submission 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).
5.5	<u>Compressor</u> <u>Stations</u> – Underground pipework at compressor station at <u>S</u> per annum. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived.	To understand the scope of works and the costing methodology.	Some explanation provided in Submission 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).



Item	Description	Comment	Status of Information Provision
5.6	<u>Compressor Stations</u> – Replace compressor station copper earthing (CS1, 5 & 8) at \$ per annum from 2011 to 2013. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived.	To understand the scope of works and the costing methodology.	Some explanation provided in Submission 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).
5.7	<u>Compressor</u> <u>Stations</u> – Replacement of stage 3A turbine air inlet filters cost S in 2011. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived.	To understand the scope of works and the costing methodology.	Some explanation provided in Submission 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).
5.8	<u>Compressor Stations</u> – Upgrade of compressor station costs in 2015. Please provide scope (age of building, work carried out internal/external) and details of the cost including how they have been derived.	To understand the scope of works and the costing methodology.	Some explanation provided in Submission 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).
5.9	<u>Compressor Stations</u> – GEA overhaul costs Second per annum. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived.	To understand the scope of works and the costing methodology.	Information not yet provided.
5.10	Meter Stations – Flow computer upgrades cost \$ in 2012 and \$ in 2013 and 2014. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived.	To understand the scope of works and the costing methodology.	Information has been provided.
5.11	<u>Pipeline</u> – South West Communication Upgrade cost South per annum from 2011 to 2013. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived. Please clarify what is meant by "changes in the associated assets".	To understand the scope of works and the costing methodology.	Explanation provided in Submission 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).



Item	Description	Comment	Status of Information Provision
5.12	<u>Pipeline</u> – Replacement of CCVT cost \$ in 2011, \$ in 2012 and \$ in 2013. Please provide scope (age of equipment, work carried out internal/external) and details of the cost including how they have been derived. Please clarify the difference between the project in 2010 as compared to what is proposed from 2011 to 2013.	To understand the scope of works, the costing methodology and the difference between work in 2010 as compared to the forecast period.	Some explanation provided in Submission 17, however, no supporting documentation has yet been provided. It is requested that relevant supporting documentation be provided (if available).
5.13	<u>Other</u> – Jandakot office construction. Please provide details of cost including how they have been derived. Please detail if there are any cost savings as a result of the move.	To understand the benefit in the move, costing methodology and any cost savings.	Information not yet provided.
5.14	Other – SCADA upgrade of Content of the project, the cost and how it has been derived. Please clarify the difference in the project in 2010 and 2011.	To understand the scope of works and the costing methodology.	Information not yet provided.
5.15	 <u>Other</u> – Please provide the IT strategy that determines the requirements of: ICT (SAP, Maximo, CRS) replacement and the proposed timing; and Lap top replacement and the proposed timing. Also provide details of the costs and how they have been derived. 	To understand the scope of works, the justification and the costing methodology.	Information not yet provided.
5.16	Other – Replacement vehicles cost \$ per annum; consistent with item 3.2 please provide details of the number, types of vehicles to be replaced and the costs per vehicle.	To understand the scope of works, the justification and the costing methodology.	Information has been provided.
5.17	Other – Software licences cost per annum. Please detail how this provision has been derived and what type of licences they cover.	To understand the scope of works, the justification and the costing methodology.	Information not yet provided.



ltem	Description	Comment	Status of Information Provision
5.18	<u>Other</u> – Management of change; please provide details of what type of changes have been provision for and how the costs of \$ per annum has been derived.	To understand the scope of works, the justification and the costing methodology.	Information not yet provided.

6.2. DBP provides responses below to the following requests for information from the above table.

Response to 5.1

6.3. In relation to request 5.1 please see attachment 5.1 FEED study Report

Response to 5.2

- 6.4. DBP refers to the summary work scope and results of Monte Carlo cost analysis it provided in Submission 17.
- 6.5. DBP will provide its response to this request in the submission to be provided in the week commencing 19 July 2010.

Response to 5.4 – Compressor Station exhaust Replacement

- 6.6. A Magnetic Particle inspection was conducted by an NDT specialist on accessible external welds at CS06 Turbine Exhaust during 2009. A total of 37 linear indications were detected ranging from 2 170 mm's in length. The areas highlighted indicate where the majority of defects were found. A full report is expected in the near future.
- 6.7. Steel patches were welded to the structure as a temporary measure to support and strengthen circumferential cracks found some time ago. Initial findings reveal that the welds will need replacement as the stitch welds are porous and cracked.
- 6.8. Unit 2 at CS6 was operational with gas flowing. However, structural debris falling from height had the potential to impact and damage the adjacent discharge pipeline, surrounding buildings and/or personnel working in the vicinity.
- 6.9. This type of event would have a severe impact with unacceptable consequences in terms of injury to personnel, substantial cost, interruption to the supply of gas, uncontrolled release of gas to the environment and damage to reputation.

Response to 5.5

- 6.10. DBP refers to the summary work scope and results of Monte Carlo const analysis in provided in Submission 17.
- 6.11. DBP will provide its response to this request in the submission to be provided in the week commencing 19 July 2010.

Response to 5.6

6.12. DBP refers to the summary work scope and results of Monte Carlo const analysis in provided in Submission 17.



6.13. DBP will provide its response to this request in the submission to be provided in the week commencing 19 July 2010.

Response to 5.7 – Compressor Stations

- 6.14. This project involves the replacement of the Stage 3A Turbine Air Inlet Filter Housing at Compressor Stations 2 unit 2, 4 (unit 2) & 7 (unit 2).
- 6.15. The existing turbine air inlet filter housings are corroding and the existing static filters are susceptible to overloading and have ruptured several times.
- 6.16. It is considered more efficient to purchase a new Turbine air inlet filter assembly including ducting in stainless steel as the new unit is a replication of the stage 4 turbine air inlet filters and as such offer standardisation across DBP's fleet of Solar Mars 100 gas turbine. It also ensures efficiencies in terms of commonality of spare parts and maintenance.
- 6.17. DBP provides the relevant FEED study as attachment 5.7 FEED study report.
- 6.18. DBP provides the following results from Monte Carlo cost analysis:

Stage 3A Filters

	Baseline	P50	P85
EPCM		•	
Material			
Construction (CS2)			
Construction (CS4)			
Construction (CS7)			
Internal Cost			
Total			

Response to 5.8

- 6.19. DBP refers to the summary work scope and results of Monte Carlo const analysis in provided in Submission 17.
- 6.20. DBP will provide its response to this request in the submission to be provided in the week commencing 19 July 2010.

Response to 5.9

- 6.21. In accordance with DBP's Asset Management Plan, Gas Engine Alternators are replaced at 27000 hours of operation.
- 6.22. Under this project, the following GEAs will be replaced :
 - (a) Compressor Station 1 GEA 3 180K (minor overhaul, 27000 hrs)
 - (b) Compressor Station 5 GEA 1 380k (major overhaul 48000 hrs)
 - (c) Compressor Station 1 GEA 4 180k (minor overhaul, 27000 hrs)
 - (d) Compressor Station 6 GEA 2– 100k (minor overhaul 12000 hrs)
 - (e) Compressor Station 8 GEA 2 180k (minor overhaul, 27000 hrs)
 - (f) Compressor station S 9 unit 1 100k (minor overhaul 12000 hrs)



- 6.23. Cost for these tasks include, hire of cranes, external labour and materials associated with the unit replacement at 27000 Hours.
- 6.24. Further detail in relation to this forecast expenditure will be provided in the submission to be issued to the ERA in the week commencing 19 July 2010.

Response to 5.11

6.25. In addition to summary work scope and results of Monte Carlo cost analysis included in Submission 17, DBP provides attachment 5.11 Southern Communications Upgrade Stategy_Rev2c.

Response to 5.12

6.26. In addition to summary work scope and results of Monte Carlo cost analysis included in Submission 17 DBP provides the relevant project justification form attachment 5.12 Replacement of CCVT PJF SIB.

Response to 5.13 - Jandakot Office

6.27. DBP will provide its response to this request in the submission to be provided in the week commencing 19 July 2010.

Response to 5.14 – SCADA

6.28. DBP will provide its response to this request in the submission to be provided in the week commencing 19 July 2010.

Response to 5.15 – IT Strategy

6.29. DBP will provide its response to this request in the submission to be provided in the week commencing 19 July 2010.

Response to 5.17 – Software licences

- 6.30. This project involves the cost to DBP of securing software licenses for the following IT software:
 - (a) Microsoft Enterprise Agreement (inclusive of MSOffice, Windows, Sever, SQL, Project & Visio across the organisation).
 - (b) Maximo licences for 100 users at various levels of access/functionality.
 - (c) A number of small engineering specific applications.

Response to 5.18 - Management of change

- 6.31. DBP provides the Change Management Manual as attachment 5.18 Change Management Manual Rev 3 Final.
- 6.32. To further justify the provision of **\$** per annum DBP provides 5.18 MOC recon.xls.
- 6.33. The forecast is based on the calendar year 2009 expenditure which totals \$



7. HISTORICAL OPERATING EXPENDITURE

- 7.1. The Halcrow Report has outlined specific and general information which it requires for the historical operating expenditure, as outlined in the following table.
- 7.2. DBP has shaded out items that have already been responded in an earlier submission.

Item	Description	Comment	Status of Information Provision
6	Historical Operating Expenditure	(2005 to 2010)	
6.1	A breakdown of historical operating expenditure on the same basis as provided for forecast expenditure (refer Table 2 in <i>Submission 12</i>).	To understand the detailed makeup of the historical operating expenditure and thereby confirm the baseline level of operating expenditure.	There are errors in the information provided; please provide corrected information.
6.2	A comparison of actual operating expenditure to the proposed operating expenditure as identified in the (existing) 2005 Access Arrangement. The comparison should preferably be presented on the same basis (ie. breakdown) as provided for forecast expenditure (refer Table 2 in <i>Submission 12</i>).	To understand the detailed makeup of the historical operating expenditure and changes from the expenditure forecast in the 2005 Access Arrangement.	Information not yet provided.
6.3	Details demonstrating the correlation between changes in operating expenditure and the growth of DBP's asset portfolio (inventory) on an annual basis over the period from 2005 to 2010.	To understand the operating and maintenance costs attracted by each item of infrastructure.	Overview provided in interviews. It is requested that documented response be provided.
6.4	Correlation of historical staffing levels with operations and maintenance activities.	To enable allocation of staffing costs to specific activities.	Overview provided in interviews. It is requested that documented response be provided.
6.5	Clarification as to the correct timeframe over which the growth in DBNGP assets has been assessed in Submission 12, section 6.4 [it is noted that the text and Table 5 caption refer to the period 1999 to 2009/10, whilst the table header row shows 2004 and 2009/10].	To clarify the rate of asset growth.	Clarification has been provided.



Item	Description	Comment	Status of Information Provision
6.6	Details of adopted/assumed inflationary factors and the net impact over the period 2005 to 2010 [it is noted that Submission 12 provides a discussion of the impact of inflation over the period 1999 to 2009, with a further adjustment to 2010 for the adopted factors (unless the references to 1999 in sections 6.5 and 6.7 are errors)].	To understand DBP's submission in respect to the impact of inflation on historical operating costs.	Clarification has been provided.
6.7	Documentation demonstrating the proposed fee increases under the Access Right, including the timeframe under which they will become applicable.	To understand the breakdown of the "Utility Rates and Taxes" expenditure category.	Documentation has been provided.
6.8	Details of a risk assessment or business case that underpins the need to increase aerial surveillance of the DBNGP pipeline corridor, together with details of scope and cost of surveillance activities both prior and subsequent to the increased surveillance frequency.	To understand the basis for and magnitude of surveillance cost increases.	Documentation has been provided.
6.9	Clarification of the timing when cost sharing of the microwave maintenance costs ceased.	To understand that impact of changes to microwave maintenance arrangements on operating expenditure.	General overview provided during interviews. It is requested that a documented response be provided (refer to Item 10.7).
6.10	Details of the need to install a new microwave system, including assessment of options taking into account whole of life (including maintenance) costs [it is noted in <i>Submission 12</i> that maintenance costs are higher than for the previous system].	To understand that impact of changes to microwave maintenance arrangements on operating expenditure.	Overview provided during interviews. Response to request still outstanding.
6.11	Details of the additional costs incurred by engineering consultancies, including details of the nature of the work undertaken, the associated costs and justification for the increased activity.	To understand the significance and impact of the increased expenditure.	General overview provided during interviews. It is requested that a documented response be provided.



Item	Description	Comment	Status of Information Provision
6.12	Details of the reasons for the increased Information Technology Costs including changes to the Operating Services Agreement and details as to whether alternative supply options were considered.	To understand the impact of changes to the Operating Services Agreement.	General overview provided during interviews. It is requested that a documented response be provided.
6.13	Details of the increased obligations that have resulted in increased Audit Costs.	To understand the impact of changing regulatory obligations.	Information not yet provided.
6.14	Identification of the categories (refer Table 2 in Submission 12) to which Information Technology and Audit costs have been allocated.	To understand the compilation of expenditure categories.	Clarification has been provided.
6.15	Details of the correlation between calculated (forecast) and actual quantities of fuel gas used during the current Access Arrangement period.	To confirm the veracity of the fuel gas forecasting model.	Information not yet provided.
6.16	Details of actual self insurance events during the current Access Arrangement period, including details of associated costs.	To understand the nature and extent of self insurance events.	Information not yet provided.

7.3. DBP has advised the ERA that responses relating to operating expenditure will be provided in a further submission to be provided in the week commencing Monday 19 July 2010.



8. FORECAST OPERATING EXPENDITURE

8.1. The Halcrow Report has outlined specific and general information which it requires for the historical operating expenditure, as outlined in the following table.

Item	Description	Comment	Status of Information Provision
7	Forecast Operating Expenditure (2011 to 2015)		
7.1	In Submission 12, DBP has used the term "operator" in the same context as DBP. Clarification is required as to which entity operates the pipeline; if not DBP, details of the relationship between the parties are required.	To understand how operation and maintenance of the pipeline is administered.	Clarification has been provided.
7.2	Detailed breakdown of proposed expenditure by activity, preferably in MSExcel (or similar) format to enable detailed analysis, together with spreadsheet models (which detail key assumptions and methods) used to determine forecast operating expenditure [it is noted that DBP has advised that all budgets are "zero" based].	To understand how DBP has derived its forecast operating expenditure and how it relates to the historical operating expenditure.	Information not yet provided.
7.3	A copy of the Safety Case and any further correspondence with Western Australia's Safety and Technical Regulator in relation to its assessment of the Safety Case, which is likely to have an impact on operating expenditure.	To provide details of the changes to the Safety Case, as required by the Western Australian Government.	Refer also to Item 1.2 (Section Error! Reference source not found.). Only Sections 0 and 1 of the Safety Case have been provided. It is requested that a copy of any relevant correspondence with Western Australia's Safety and Technical Regulator be provided.
7.4	Details of the increased compliance obligations that will need to be included in the Safety Case, and the resultant impact on Operating Expenditure.	To understand the impact of regulatory obligations and related changes on operating costs.	Information not yet provided. It is requested that documentation indentifying additional obligations be provided (if available).
7.5	Asset Management Plan/Maintenance Plans (both routine and reactive) for all items of infrastructure, showing proposed maintenance activities and associated costs on an annual basis.	To understand basis of operating and maintenance costs allocated to each item of infrastructure.	Asset Management Plan provided. Details of proposed maintenance activities and associated costs not yet provided (refer to Items 10.10 and 10.11, Section Error! Reference source not found.).



Item	Description	Comment	Status of Information Provision	
7.6	A copy of DBP's Audit Schedule, including identification of all Mandatory Audits. The scope and timing of all audits should be identified.	To understand the impact of regulatory obligations on operating costs.	Documentation has been provided.	
7.7	Correlation of forecast staffing levels with operations and maintenance activities.	To enable allocation of staffing costs to specific activities.	Overview provided in interviews. It is requested that documented response be provided.	
7.8	Details of the calculation of labour costs and the basis of the assumed 2 percent labour cost escalation rate.	To confirm justification for the adopted labour cost escalation rate.	Response has been provided.	
7.9	Details of DBP's assessment of risk and the basis for the agreements with Alcoa in respect to the supply of Fuel Gas. When is it expected that Alcoa will be supplying its own fuel gas and what will the impact be on the quantity of fuel gas forecast in the Access Arrangement?	To understand the cost of mitigating risks associated with the System Use Gas Agreement.	General overview provided during interviews. It is requested that a documented response be provided.	
7.10	Documentation supporting the adopted weighted fuel gas cost (\$ GJ.in 2011 rising to \$ GJ.in 2015).	To justify the adopted cost of fuelgas.	Information not yet provided.	
7.11	Details of DBP's assumptions in respect to "hardening of the insurance market in the upcoming period", including comparison with actual insurance premiums paid during the period 2005 to 2010 and assumptions in respect to the increased asset portfolio.	To understand how the forecast insurance costs have been derived.	Some information has been provided. Additional response required (refer Item 10.9, Section Error! Reference source not found.).	
7.12	Details of the self insurance risks demonstrating the quantification of the potential risk and the mitigation measures implemented (or planned to be implemented) in respect to uninsured risks, together with details of the associated costs.	To understand how the forecast self insurance costs have been derived.	Information not yet provided.	



Item	Description	Comment	Status of Information Provision
7.13	Assumptions made in respect to forecast operating costs relating to Climate Change Reform, specifically the Carbon Pollution Reduction Scheme, and the impact of the Government's decision to defer implementation of the scheme on DBP's forecast operating expenditure.	To understand the impact to changes in Climate Change policy on forecast operating expenditure.	DBP modelling assumptions regarding CO ₂ emissions not yet provided.
7.14	Details of basis adopted for forecasting compressor overhaul costs, including assumptions in respect to the number of units to be overhauled and the timing of such overhauls. If overhaul costs are incurred in foreign currency, provide details of assumptions made in respect to currency exchange rates used for in estimating overhaul cost.	To understand how compressor overhaul costs have been derived.	General overview provided. Additional breakdown of costs, and information on currency exchange rate assumptions is still outstanding.
7.15	Details of proposed non- recurrent expenditure, eg. DCVG surveys, ILI pigging and heater inspections, including details of the cost derivation and justification for the timing of activities.	To understand the impact of non-recurrent activities on operating expenditure.	Overview provided during interviews. Details of the cost derivation are still outstanding.
7.16	Records of unplanned repairs and maintenance activities, including costs, given that historical performance has been used as the basis for estimating forecast expenditure (refer <i>Submission 12</i> , Section 6.50).	To understand the basis upon which reactive maintenance costs have been derived.	Information not yet provided.

8.2. DBP has advised the ERA that responses relating to operating expenditure will be provided in a further submission to be provided in the week commencing Monday 19 July 2010.



9. ADDITIONAL – GENERAL

9.1. The Halcrow Report outlines additional specific and general information which it requested, as outlined in the following table.

ltem	Description	Comment
8.1	Please provide a copy of all presentations given during the meetings/discussions held between Halcrow and DBP.	To better inform Halcrow's understanding of the information presented.
8.2	Please provide a plan of the DBNGP showing the various expansion projects.	To get an appreciation of the DBNGP and the location of the various stages of the expansion projects.
8.3	Please provide a copy of the Capacity Management Plan (as referred to at meetings/discussions as a key element of DBP's Asset Management Framework).	To understand how pipeline capacity is managed and (presumably) additional capacity is planned.

9.2. In this section of the submission, DBP provides responses to the following requests for information from the above table.

Response to 8.1 – Presentations

- 9.3. Attached are the following presentation given during the workshop discussions:
 - (a) 8.2 a Overview Presentation July 2010
 - (b) 8.2 b Asset Management Framework ATR.ppt

Response to 8.2 – Map

9.4. In response to request 8.2 DBP provides the following attachment 8.3 DBNGP Map. It should be noted that this is the map that was emailed to the ERA on 8 July 2010.

Response to 8.3 – Capacity Management Plan

- 9.5. Please find attached the following documents which are central to DBP's asset management framework:
 - (a) Asset Operating Strategy/Plan attachment 8.3b
 - (b) Operational Environmental Management Plan attachment 8.3c
 - (c) The Asset Management Plan incorporating the Capacity Development Plan and Asset Reliability Management Plan – attachment 8.3d
 - (d) The Asset Decommissioning Plan attachment 8.3e
 - (e) Asset maintenance plan attachment 8.3f
- 9.6. DBP assumes that the reference to "Capacity Management Plan" in Halcrow's information request should, in fact, have been a reference to the Capacity Development Plan which forms part of the Asset Management Plan.
- 9.7. In addition, and as outlined in the meetings with the ERA and Halcrow, DBP and the DBNGP is expanded only to meet the needs of its customers. It has no uncontracted firm full haul capacity during the access arrangement period and will not build spare capacity.



- 9.8. Further, DBP will only fund an expansion of the capacity of the pipeline if it is economic for DBP to do so. At the current reference tariff, it would not be economic for DBP to fund an expansion. However, it is most likely that it would be economic for DBP to fund an expansion if a customer were to contract at the tariff under DBP's non reference T1 service under the Standard Shipper Contract.
- 9.9. It should be noted however, that if a shipper contracts for additional capacity, under the terms of the SSC, DBP must provide that additional capacity in accordance with clause 16 of that contract.
- 9.10. Under clause 16 of the SSCs, DBP is obliged to provide additional T1 Capacity, subject to certain conditions, to a Prospective Shipper within 30 months of the Prospective Shipper lodging a notice with DBP requesting the capacity and within 24 months of the shipper contract being formed.
- 9.11. DBP's obligations to expand under the SSCs are conditional on, among other things, DBP being able to obtain finance for the proposed expansion on terms which are materially equivalent to the terms of the finance obtained for the first expansion after October 2004 (ie, Stage 4). Where DBP is unable to obtain either equity or debt funding for an expansion, the process to be followed to determine whether DBP has fulfilled its obligations in respect to obtaining finance is unclear.
- 9.12. The SSCs provide that, where DBP is unable to obtain finance on reasonable terms, DBP and the Prospective Shipper may agree terms on which the Prospective Shipper can provide subordinated debt or equity to enable finance to be secured.
- 9.13. Under clause 22.9 of the SSC, DBP is liable for Liquidated Damages if it fails to provide capacity to shippers in accordance with the provisions of clause 16. The conditions under which Liquidated Damages become payable are:
 - (a) The Requested Capacity is not provided within 24 months of the date of the shipper's Final Capacity Requirement Notice or the agreed Capacity Start Date, whichever is the later.
 - (b) The amount of Liquidated Damages is **\$ 100**/GJ (October 2004 dollars escalated at CPI), except for **100** where the amount of Liquidated Damages is the cost of replacement fuel, which would generally be distillate.
- 9.14. So, DBP needs to make a final investment decision very quickly and to do that, needs to have in place the design, costings and configuration and supply arrangements in place. Effectively, this needs to be done within a 6 month window.
- 9.15. In addition, if DBP's board consciously decides not to fund an expansion that is configured so that all contracted capacity obligations can be met, DBP is in wilful default and is exposed to direct and indirect damages.
- 9.16. To assist shippers gain access for the T1 SSC service, DBP has prepared an access guide which is available on the DBP website via the following link:
 - (a) <u>http://www.dbp.net.au/files/DBNGP-Accessguidev11032010.pdf</u>



10. ADDITIONAL - CAPITAL EXPENDITURE

10.1. The Follow-up Request for Information outlines additional specific and general information which it requested, as outlined in the following table.

ltem	Description	Comment
General		
9.1	Please provide a copy of the project prioritisation (ranking) spreadsheet.	To get a better understanding of how projects are ranked.
9.2	Please provide a copy of any documents summarising standard cost rates used in the development of cost estimates.	To understand the basis of cost estimates, specifically for Stay-in Business capital expenditure.
9.3	We understand that DBP pays WNE an annual \$2 million retainer fee for WNE to maintain the appropriate expertise for future expansion projects. Please clarify why DBP believes that the \$2 million is an appropriate amount for the required expertise and when DBP first commenced paying the \$2 million retainer.	To understand the basis of the retainer fee.
9.4	In relation to the \$2 million retainer fee, please clarify what type of expertise that WNE has to maintain and how does DBP ensure itself that WNE has the appropriate expertise.	To understand how DBP assures itself that the relevant expertise has been maintained.
Expansion Ca	apital Expenditure	
9.5	Please confirm the cost differences for Stage 5Aand Stage 5B for the following gas qualityscenarios:• HHV38.5 MJ/m3;• HHV37.7 MJ/m3; and	To understand the cost implication of the various HHV assumptions.
	• HHV 37.0 MJ/m3.	
9.6	In <i>Submission 9</i> , page 47, the table shows a cost of \$14 million for Stage 5A in 2010. Please advise what additional work is required and please provide details of the cost.	To get an appreciation of the remainder work to be carried out and details of the costs.
9.7	In <i>Submission 9</i> , page 47, the table shows the costs for Stage 5B for 2010 and 2011. Please provide details of the reconciled costs for 2010 and the scope of works and details of the costs for 2011.	To get an understanding of Stage 5B costs to be incurred in 2010 and 2011.
9.8	Please provide a copy of the FEL Study report (or similar) in respect to the Stage 4 Expansion works, including a breakdown of the cost estimate.	To better understand the cost breakdown of the Stage 4 works.
9.9	A copy of the Stage 5A FEL Studies report has been provided, although the Appendices have not been included. Please provide a copy of the Appendices.	



ltem	Description	Comment
9.10	Please provide further details of the reason for discounting mid-line compression as a variable expansion option. Whilst the arguments presented during the meetings/discussions seemed logical, the figures shown in the NPV Assessment of Options presentation did not support this.	To underpin understanding of the reasons for discounting mid-line compression as a viable expansion option.
Stay-in-Busir	ness Capital Expenditure	
9.11	<u>Management of Change</u> – It is understood that the annual cost is an allowance for unexpected items that may arise during the year. Please advise the basis of the estimate?	To understand how the allowance has been derived.
9.12	Please provide a copy of the Long Term Equipment Strategy spreadsheet (presented at meetings/discussions by Hugo Kuhn).	To better understand the assumed life cycle of assets and the impact on Stay-in Business capital expenditure.
9.13	Please provide a copy of a typical costing report (as shown during the Monte Carlo Analysis demonstration during the meetings/discussions).	

10.2. In this section of the submission, DBP provides responses to the following requests for information from the above table.

Response to 9.1 – Risk ranking spreadsheet

- 10.3. DBP refers to information already provided in response to item 1.6 to detailing governance and process which adequate outlines the risk ranking process for stay in business projects.
- 10.4. During the workshops DBP spoke to the risk ranking spreadsheet to further demonstrate the rigorous assessment process DBP undertakes when ranking projects.
- 10.5. This risk ranking spreadsheet is an example and only relates to one years worth of expenditure. DBP has attached as attachment 9.1a a document that explains in more detail the risk ranking process for stay in business projects and how the model that has been prepared to risk rank these projects works.

Response to 9.2 – Unit costs (SIB)

- 10.6. In response to request 9.2 DBP can provide the unit rates from three key service providers who provide labour assistance for minor projects (they have been selected following a tender process undertaken in 2009), including
 - (a) attachment 9.2a H162 CTR 3.140.pdf
 - (b) attachment 9.2b DBP and EFX estimate examples.pdf
 - (c) attachment 9.2c agreed rates Feb 10.pdf

Response to 9.3 & 9.4 – WNE project retainer fee

10.7. DBP refers to Submission 9 supporting the proposed revisions to the access arrangement. The relevant text of the submission is as follows:



- 10.8. In accordance with the terms of the amended and restated OSA (effective from February 2009) under which WestNet Energy Services provides project management services to DBP, two types of fees are payable by DBP to WestNet over and above WestNet's direct costs incurred in connection with expansion works:
 - (a) A project management fee pursuant to which a fee is paid equal to 3% of all capital expenditure incurred in connection with capital works (**PM Fee**); and
 - (b) A project management retainer fee pursuant to which DBP pays WestNet a fee equal to \$2m per year to incentivise WestNet to provide the necessary personnel, corporate systems and procedures to maintain an ongoing capability to provide the Project Management Services irrespective of whether an Additional Capacity Expansion is being planner or undertaken (PMR Fee).
- 10.9. The PMR Fee is a recently established fee DBP agreed to pay to WestNet at the time the OSA was renegotiated in 2009. It was at this time that DBP internalized many of the personnel who previously provided assistance to WestNet but on a cost pass through basis. At that time, the following factors made it relevant to pay this amount on an ongoing basis:
 - (a) In early 2009, there was a likelihood that the continual expansion program that had been undertaken since 2005 would not continue beyond stage 5B
 - (b) It was important to ensure that the project manager maintained the relevant personnel with the corporate knowledge and understanding of the pipeline and its operations until any transitioning issues are dealt with.
 - (c) It was also important to pay a fee that incentivised the project manager to pay certain individuals to remain "on standby" to commence on any further project, should it materialize, in time to complete a business case and allow an investment decision to be made by the Board. This is particularly relevant given the contractual obligations to deliver additional capacity by a certain time, which obligations are referred to in section 2 of Submission 9.
- 10.10. The PM Fees paid and payable by DBP to WestNet and its predecessors in respect of each expansion project are as follows:

Project	PM Fee Paid	PMR Fee Payable	
Stage 4	\$13.0 million	\$0	
Stage 5A	\$18.15 million	\$0	
Stage 5B	\$19.35 million	\$6m	

- 10.11. The inclusion of fees of this type in expansion project costs has been questioned previously by regulators because:
 - (a) such fees appear, in the minds of regulators, to be "cost-plus" in nature;
 - (b) there are no performance or efficiency requirements imposed on the provider of construction services; and
 - (c) the fees are large in relation to the scale of the project.
- 10.12. DBP submits that:
 - (a) insufficient reasoning exists to conclude that these fees do not meet the requirement of Rule 79 of the NGL; and, moreover,
 - (b) there is evidence to support the conclusion that these fees do meet the requirements of section Rule 79 of the NGL.



The amount must be capital expenditure

- 10.13. There are several reasons why the amounts recovered by way of a PM Fee and a PMR Fee are capital expenditure.
- 10.14. Firstly, DBP incurs the WestNet PM Fee in the process of expanding or replacing assets which form the DBNGP, and which are used to provide services to shippers in the future.
- 10.15. Secondly, DBP incurs the PMR Fee in the process of ensuring WestNet has resources, processes and systems in place to be able to commence the management of a project at relatively short notice. This is particularly relevant in the context of contractual background where shippers can require additional capacity within 24 months of an access request but also where there is significant uncertainty as to when expansions will be required.
- 10.16. Thirdly, the PM Fee and the PMR Fee are explicit components of payments DBP must make to WestNet for services provided under an Operating Services Agreement ("OSA") entered into at the time the current owners acquired the DBNGP and amended in February 2009 (Amended OSA). Clause 5(a) of Schedule 3 (Fees) to the OSA describes the PM Fee:
 - (a) The Project Management Fee is an amount equal to 3% of the cost of any Additional Capacity Expansion and Capital Works.
 - (b) Clause 5(b) of the OSA notes that the cost of additional capacity expansions and capital works includes all direct costs paid to third parties, overheads which are or will be capitalized and indirect costs.
 - Thirdly, that the WestNet project management fees are a capital item of expenditure (c) is acknowledged by shippers in the Standard Shipper Contract entered into by most shippers at the time of acquisition of the DBNGP by its current owners in 2004. The mechanism for the adjustment of the tariff under the Standard Shipper Contract, in circumstances where the capacity of the pipeline is expanded in accordance with the requirements of the Standard Shipper Contract, expressly allows for project management costs to be included in the calculation, including costs incurred in the management of all aspects of the expansion from the decision to conduct expansion to completion of the expansion, and including the project management costs of contractors. In addition, the Standard Shipper Contract expressly provides that the capital cost of an expansion is to include the "fees and costs (including project management costs) of any company contracted by [DBP] to provide operating, maintenance and contract procurement and management services in respect of the DBNGP under a long term contract, whether that company is an [associate of DBP] or not."
 - (d) Fourthly, as part of an independent audit that DBP undertook to verify the capital costs associated with the Stage 4 and 5A expansion projects, these costs were verified as being capital costs relating to these expansions.

The amount must be incurred by a prudent Service Provider acting efficiently

10.17. Concern has been expressed, by the ERA and by others, that project management fees might not reflect amounts incurred by prudent Service Providers acting efficiently because no performance or efficiency requirements were imposed on the provider of construction project management services.



- 10.18. DBP submits that, in the case of the PM Fee and PMR Fee payable to WestNet under the OSA, the amount of the fees is such that it would be incurred by a prudent Service Provider acting efficiently for the following reasons:
 - (a) The current owners of the DBNGP comprise DUET (60%), Prime Infrastructure (20%) and Alcoa of Australia (20%). DUET is a major owner of infrastructure assets in Australia but (as with its investment in the DBNGP) it invests as a "passive" owner rather than as an "owner/operator" of assets. DUET does not possess the technical or operational expertise to manage the operation or expansion of pipelines. It therefore relies on others with these skills. Alcoa's investment is primarily aimed at maintaining a secure, reliable and economically efficient supply of gas to its significant downstream operations in the South West of Western Australia. Through WestNet, Prime has experience in the ownership, operation and development of gas pipelines. Accordingly, it is prudent for the ownership consortium of the DBNGP to have relied on the resources and expertise of one of the members of that consortium to provide services relating to the operation and expansion of the pipeline.
 - (b) The agreement that was entered into for the management of the operation and expansion of the DBNGP – the OSA – was negotiated between the 3 owners as part of the acquisition of the DBNGP in 2004. The negotiations involved each of Alinta (now Prime), Alcoa and DUET, and were conducted on an arms length basis. The parties were unrelated at that time and remain unrelated today. DUET, through its ownership of other large infrastructure assets in Australia, and Alcoa through its expertise in the alumina industry, are both experienced at negotiating major construction and operating contracts. Moreover, Alcoa and DUET were commercially motivated to ensure that any fees charged by one member of the ownership consortium, and which would potentially affect the returns available to the other members, were at reasonable levels.
 - (c) There was no reason, and there continues to be no reason, for either DUET or Alcoa, to have any commercial or other interest in Alinta deriving non-commercial fees for performing services under the OSA, or for the contractual arrangements to be of a nature, that are not efficient or in accordance with good or accepted industry practice.
 - (d) the amount of the PM fee and the PMR Fee is efficient because it covers an expansive range of services provided by WestNet under the OSA in relation to capacity expansions and capital works. These include all project services, from conceptual design, through FEED studies, planning, construction, commissioning and final delivery of the projects for operation (and all services to support these activities e.g. human resources management, and financial control), are either undertaken directly by WestNet or arranged and managed through contractors that are under the day to day management of WestNet (although contracted by DBP).
 - (e) the amount is efficient having regard to DBP's commercial arrangements with shippers. Under the Standard Shipper Contracts, DBP has a positive obligation to seek to minimise the capital costs of expansions of the DBNGP. Otherwise, it risks not being able to recover costs from shippers. Therefore DBP is incentivised to ensure that its contractors, including WestNet, do not spend more than amounts that can be recovered from shippers. It should also be noted that under the OSA, it is DBP, not WestNet that approves the budgets for the operation and expansion of the DBNGP. In approving such budgets, DBP must have regard to the limitations on its ability to recover costs. Moreover, WestNet is not able to spend more than 110% of the budget without prior approval of DBP.
 - (f) the project management fee payable to WestNet is reflective of costs incurred by a prudent Service Provider acting efficiently is the fact that under the OSA, WestNet is incentivised to incur costs efficiently. Under the OSA, WestNet is required to perform



all the services set out in the OSA to a standard and in accordance with stipulated service criteria. The following extract from the OSA clearly sets out a number of efficiency and performance criteria in relation to the provision of these services by WestNet:

ANS must ensure that the Services [which include additional capacity expansion works] are provided and the Asset is operated or maintained at all times during the Term:

- in all material compliance with all Applicable Laws (including occupational health and safety legislation), codes, policy, regulations or orders or governmental bodies having jurisdiction;
- in accordance with the terms and conditions of all Material Contracts and applicable licences;
- generally in accordance with Good Industry Practice;
- in a manner which achieves the Key Performance Indicators;
- in a timely, commercial, prudent and reasonable manner;
- in compliance with the Asset Management Plan; and......
- (g) that the PM Fee and PMR Fee payable to WestNet are reflective of costs incurred by a prudent Service Provider acting efficiently relates to the fact that WestNet is incentivised to minimise costs (or at least to not exceed the approved budget) in order to preserve its reputation. There is significant "reputation risk" at stake for WestNet in undertaking the role of construction manager for DBP. As the ERA has acknowledged, the expansion of the DBNGP is a high profile project, which is critical to both energy supplies and industry in Western Australia. The delivery of an expansion project on time and budget carries significant business community focus and hence reputation risk for WestNet for which it should be compensated.

The amount must be incurred by a prudent Service Provider acting in accordance with accepted good industry practice

- 10.19. DBP submits that the forecast project management fee is an amount which would be incurred by a prudent Service Provider acting in accordance with accepted good industry practice for the following reasons.
 - (a) Firstly, it is accepted practice for DUET to negotiate such arrangements and include fees of the nature of the WNE management fee. DUET also has a preference for its operators, such as AAM/Alinta, to have an ownership stake in the assets, to ensure that there is an alignment of interests. This is the case with the DBNGP.
 - (b) Secondly, project management fees are accepted industry practice in the construction industry. This is supported by information received (at this stage, informally) from a number of reputable engineering consulting firms, indicating that the existence of a project management fee in similar infrastructure construction projects, is usual industry practice.
 - (c) Thirdly, as outlined above, shippers on the DBNGP have, through the tariff adjustment mechanism under the Standard Shipper Contracts, agreed that fees such as the 3% project management fee payable to WNE can be included in the calculation for the adjustment to the tariff payable under these Contracts.
 - (d) Fourthly, recent market information (which is publicly available) in respect of similar arrangements in place for other infrastructure for the payment of a project management fee indicates that:



- (i) it is accepted practice for project management fees to be included in contracts for infrastructure construction; and
- (ii) the amount of the fee payable to WNE (that is, 3%) compares favourably with other fees payable in similar circumstances.
- 10.20. In this regard, DBP refers to two reports prepared by NERA for Jemena Networks as part of the revised access arrangement proposal. The reports are:
 - (a) A report dated March 2007 called "Outsourcing by Regulated Businesses". A copy is contained in attachment 26 of Submission 9; and
 - (b) A report which critiques "Allen Consulting Group's Review of NERA's Benchmarking of Contractors' Margins" prepared in 2007. A copy is contained in Submission 9.
- 10.21. A key finding of this report was that prudently incurred outsourcing contracts will generally include a margin on the contractor's directly incurred costs. It was also noted in the report that the payment of such margins is consistent with both economic theory and observed good industry practice and will tend to reflect:
 - (a) the contractor's ability to provide the service at a lower cost than the purchaser could obtain elsewhere (eg, a return to the 'know how' of the contractor);
 - (b) the required return on and return of physical and intangible assets employed by the contractor in the provision of the service;
 - (c) efficiencies on the part of the contractor over the life of the contract (eg, where the contract allows some part of these to be retained by the contractor);
 - (d) the allowance required to meet the contractor's common costs; and
 - (e) the allowance required to self insure against the asymmetric risks faced by the contractor.
- 10.22. The report contains a benchmarking of the margins of various asset managers and argues that the margins of Alinta Asset Management (who, in the case of the DBNGP were removed as asset managers in 2009 as part of the changes to the OSA) should remain as an appropriate benchmark. It concluded that an acceptable range of margins (with a 95% confidence interval for the true population mean) is from 4.3% to 6.7%.
- 10.23. While the PM Fee and the PMR Fee payable to the Project Manager are not expressed as margins per se, the quantum of the fees effectively falls within this range.

The amount must be incurred by a prudent Service Provider to achieve the lowest sustainable costs of providing the Services

- 10.24. The reasons outlined above to substantiate the costs as those incurred by a Service Provider acting efficiently apply equally to substantiate the costs as being incurred by a prudent Service Provider to achieve the lowest sustainable costs of providing the Services. A project management fee of the type which DBP proposes to pay to WestNet would be payable by DBP to any manager it appointed to manage a large construction project such as the Stage 5 expansion of the DBP. Furthermore, the 3% fee payable to WestNet compares favourably with the fees that are generally paid to managers of large construction projects.
- 10.25. In addition to the submissions made in Submission #9, DBP also is of the view that the fee is an appropriate amount for the required expertise in the circumstances because it was the consideration paid by DBP to WestNet in order to secure amendments to the Operating



Services Agreement – in particular the internalisation of most of the functions to DBP. These changes provided DBP with significantly enhanced control of the asset and the greater ability to ensure it could comply with its obligations as operator and owner of the pipeline.

10.26. DBP confirms that the \$2million retainer fee was first paid in February 2009 when the amendments to the OSA took effect.

Response to 9.4 – WNE Expertise

- 10.27. WestNet must maintain all systems and processes developed during the expansion projects to date. This includes:
 - (a) All of the processes that were documented as part of the decision to internalise the functions to DBP in 2009.
 - (b) Document records.
 - (c) A chart of accounts for recording and capturing costs.
- 10.28. Many of the WestNet team involved in the project management also have long term employment contracts in place
- 10.29. WestNet also has alliance arrangements with key contractors such as approvals coordinators to ensure they can be accessed at short notice for future expansions.
- 10.30. Finally, WestNet has a contractual obligation which, if it does not comply with, would expose it to having the OSA terminated by DBP. Therefore this is the most significant incentive to ensure that WestNet retains the appropriate levels of expertise, systems and procedures.

Response to 9.5 – Gas Quality

- 10.31. Attachment 9.5a contains a spreadsheet prepared as part of DBP's assessment of making a final investment decision for stage 5A showing the different hardware required to be constructed based on 3 gas quality scenarios.
- 10.32. It is important however to restate the background for why the gas quality design assumption for stage 5A changed. While this is outlined in detail in DBP's submission 9, in summary, the gas producers were able to use the ERA's decision in 2005 for the DBNGP access arrangement as a basis for forcing all new customers and some existing customers to accept gas at a lower gas quality specification one that contained a minimum HHV content of 37.0 MJ/m3.
- 10.33. For DBP to therefore accommodate requests for new capacity it was forced with proceeding one of the following choices:
 - (a) To not agree to expand the capacity other than at the then prevailing contractual specification – ie with a minimum HHV content of 37.3 MJ/m3 (the "narrower specification"). This was clearly not a suitable option for DBP given that shippers could not secure gas supply contracts from producers at this specification and the success of the business was dependent on its ongoing expansion.
 - (b) To agree to expand at a narrower specification but being exposed to unacceptable risks. These risks are outlined below
 - (c) To agree to modify the contractual specification to the broader specification and design accordingly while obtaining compensation from shippers.



- 10.34. The risks to DBP of designing stage 5A based on a gas quality specification other than one which contained a minimum HHV of 37.0MJ/m3 was considered too great for DBP to contemplate in the design assumption for the Stage 5A expansion project. Accordingly, the third option was the only viable option.
- 10.35. As discussed in the workshops, these risks were as follows:
- 10.36. Firstly, DBP has long term contracts with shippers that specify contracted capacity must be delivered in accordance with the stipulated gas quality specification which includes a minimum HHV of 37.0 ML/m3.
- 10.37. Accordingly, if, during the course of the contract, DBP is not in a position to be able to deliver contracted capacity within that specification, DBP will be in breach of contract and most likely also in default under the contract. This entitles a shipper to terminate a shipper contract. It would not only result in potential lost revenue for DBP but could result in DBP being in default of its borrowing covenants under its financing facilities.
- 10.38. Given the gas quality obligation is continuing and must be met every minute of the term of the contract, there was no way DBP could build additional hardware in time to meet a change in quality, particularly when DBP has no ability to find out about a change to gas quality until after it enters the system.
- 10.39. Secondly, DBP's standard shipper contracts (entered into in 2004 when the pipeline was acquired) entitle shippers to take up to 108% of their contracted capacity on any day without giving notice to DBP.

A shipper does not have to nominate for capacity in advance. Therefore, the DBNGP has to be designed and configured in a way that ensures DBP can meet these contractual obligations on any given day during the term of the contract. Most of the SSCs last until 2019 with shippers having at least two, five year options to extend the term (ie out to 2020).

- 10.40. If DBP does not provide a shipper with its contracted capacity, it will be in default under its contract (being a material term of the contract).
- 10.41. Again, given the contracted capacity obligation is continuing and must be met every minute of the term of the contract, there was no way DBP could build additional hardware in time to meet the impact on pipeline capacity caused by a change in quality, particularly when DBP has no ability to find out about a change to gas quality until after it enters the system and given it takes almost 2 years to build additional hardware.
- 10.42. The third risk to DBP is that the standard shipper contracts provide that DBP is only able to adjust the tariffs for additional capital costs incurred by DBP when it expands at the time that the additional capacity is commissioned. It is not able to adjust tariffs for any capital expenditure incurred at any other time which does not increase the capacity of the pipeline. Accordingly, if DBP chose to design the expansion using a HHV assumption other than 37.0 MJ/m3 (eg 38.5MJ/m3) but 5 years later, chose to add additional hardware to accommodate a change to 37.0MJ/m3 (so as to be able to ensure it could meet its obligations to shippers if the quality changed), it had no way of recovering the associated capital costs from shippers. This would not be economic for DBP.
- 10.43. The fourth risk is that if DBP chose consciously to design using an HHV assumption other than 37.0 MJ/m3, and shippers then chose to supply gas into the pipeline with an HHV content less than the design assumption but still within specification, DBP would be in wilful default under the contract. This would expose DBP to liability for it would be exposed to direct and indirect damages from affected shippers.



- 10.44. In addition, it should be noted that the new gas quality legislation does not give DBP the opportunity to recover from producers the capital costs of providing hardware to accommodate changes in gas quality other than capital costs to change from the original design assumption so given DBP's design assumption is 37.0MJ/m3, it can only be compensated for the capital costs associated with a change from that point, not from, say 37.3 MJ/m3 or 38.5MJ/m3.
- 10.45. Given DBP had contracted with shippers for a gas quality specification which included a minimum HHV of 37.0 and the fact that stage 5A had been designed based on this specification, no analysis was done as part of the assessment for making a final investment decision on stage 5B on the different costs for Stage 5B assuming different gas quality design scenarios.

Response to 9.6 – Stage 5A additional work

- 10.46. DBP provides the project reconciliation for Stage 5A as attachment 9.6 Stage 5A Rec. This is the same spreadsheet as was attached for the response to item 2.2 of the information request.
- 10.47. Specifically column E accounts for the estimate to completion project work. It outlines the work still to be performed. This is effectively the punch list items from the looping work.
- 10.48. DBP also notes that the CTR's have been included to demonstrate how the project relates back to the original FEL documentation related to Halcrow's request for information item 2.2 (see above).

Response to 9.7

10.49. DBP refers the ERA to DBP's response to Halcrow's request for information item 2.2.

Response to 9.8 – Stage 4 Expansion Works

- 10.50. There was no FEL document prepared for Stage 4 given the accelerated process DBP was required to follow to make a final investment decision.
- 10.51. However, attached as attachment 9.8a is the suite of information that was provided to the independent engineer who reviewed the stage 4 expansion for DBP's financiers.

Response to 9.9 -

10.52. Attached as attachment 9.9a are the attachments to the Stage 5A FEL report.

Response to 9.10 – midline compression option for stage 4

- 10.53. The mid-line compression expansion option was initially considered for stage 4 because DBP was considering options which would ensure the expansion was economic for DBP to fund it. It was considered as an option because one of DBP's shareholders at the time had access (through one of its other associated entities) to gas turbines. However, the reliability of that supply was never fully tested as this option was discounted and rejected as a viable option before hand.
- 10.54. While the NPV analysis presented at the workshops might have suggested it delivered a better outcome than the design option that was adopted (ie the full looping option), it was rejected as a viable option for the following reasons:



- (a) There were incorrect assumptions used in that NPV analysis which, if corrected, would have demonstrated that it was a significantly inferior option (even purely on an NPV analysis) than the design option that was adopted
- (b) There were other risks that outweighed the NPV analysis (even with the incorrect assumptions included in the NPV analysis).
- 10.55. The incorrect assumptions used in the NPV analysis were as follows:
 - (a) No value was assumed for the cost of an emissions trading scheme or a carbon tax. As outlined in DBP's proposed revised access arrangement, these costs are now assumed to be approximately \$10m per annum based on emissions from only 27 compressor units.
 - (b) The unit rate for compression that was assumed in the analysis was the same as is outlined in the SSCs. However, this has proven to be significantly underestimated over the last 5 years given the economic conditions in 2005-2007.
 - (c) A value for the cost of system use gas was based on the price paid under DBP's system use gas contract with Alinta Sales. However, that contract does not entitle DBP to secure the gas that would have been required to run the additional midline compression.
- 10.56. The other risks that outweighed the NPV analysis are as follows (even with those incorrect assumptions remaining):
- 10.57. Firstly, with more compressors being relied upon to provide capacity, the option would adversely impact on DBP's ability to provide Tranche capacity services based on the same compressor unit availability assumptions for determining existing Tranche 1 Capacity. Compression was considered to have greater reliability risks than looping. This was considered a catastrophic risk given the contractual obligations owed by DBP and the fact that the pipelines firm full haul capacity was fully contracted.
- 10.58. The second risk was that DBP had no ability to recover operating costs from shippers under the existing contracts higher than those assumed in the negotiated tariff under the T1 SSCs. Given the current price of gas and the proposals for emissions trading schemes, DBP would have been directly exposed to these costs and not able to pass them on to shippers. This was considered a catastrophic risk.
- 10.59. Regulatory risk arising from the doubt as to whether compression costs could be included as New Facilities with the definition of the Gas Code. This was particularly relevant given that compression could not be sized to match exactly the contracted capacity requirements.
- 10.60. Operational difficulties in optimising capacity tranches as a result of increased compression on the system.
- 10.61. An adverse impact on capacity as a result of compressor plant needing to be rotated.
- 10.62. There are significantly more difficulties in optimising the operation of the pipeline by adopting a midline compression option.
- 10.63. There could be an adverse impact on the integrity of the pipeline with additional compressors being installed.



- 10.64. There was a risk that more parts of the system would be exposed to stress corrosion cracking. While existing control mechanisms in place included operational procedures and Control Room competencies, modelling tools and field operations competencies these had not been tested under a mid-line compression option.
- 10.65. Increasing rotating plants with age will increase the non capital costs and stay in business capital expenditure.
- 10.66. Other equipment reliability issues could impact on compressor availability.
- 10.67. Additional facilities such as roads, airstrips, water amenities etc, will be required to support midline compressors, thereby increasing operating costs.
- 10.68. Additional equipment such as motor vehicles etc, would have been required to support the midline compressor option. These had not been factored in the estimate.
- 10.69. On this basis, it was not considered prudent to lock in an option solely based on low capital expenditure requirements that attract higher operating costs and force significant capital requirements in future expansion phases.
- 10.70. As outlined above, DBP must emphasise that an NPV analysis is only part of the overall business case analysis undertaken by DBP and its board and the more detailed risk analysis determined that the full looping option presented less risk to DBP.
- 10.71. DBP provides the Stage 4 Expansion Presentation provided to the ERA on 20 July 2005 as attachment 9.10 Stage 4 ERA Presentation 20 July 2005.pdf

Response to 9.11 – Management of change

10.72. DBP refers to the management of change manual and supporting accounts for 2009 provided in response to request 5.18.

Response to 9.12 – Long Term Equipment

10.73. In response to request 9.12, DBP provides the Long term equipment list as attachment 9.12 Long_term_equip_strategy rM 280110

Response to 9.13 – Monte Carlo

- 10.74. DBP refers Halcrow to information already provided in response to item 1.6 to detailing outlines project estimation.
- 10.75. During the workshops DBP presented the Monte Carlo process to further demonstrate the rigours assessment DBP undertakes and refers to the Monte Carlo results provided across the project justifications provided in this submission and submissions 14 and 17.



11. ADDITIONAL – OPERATING EXPENDITURE

11.1. The Follow-up Request for Information outlines additional specific and general information which it requested, as outlined in the following table.

ltem	Description	Comment
10.1	Budgets/budget packs for each division for 2010 and 2011.	To understand the key components of operating expenditure, and the key changes between 2010 and 2011.
10.2	End of year budget versus actual reports for 2005/06, 2006/07, 2007/08, 2008/09 and 2009/10 (May report if June currently unavailable).	To understand the key movements in operating expenditure over the past 5 years.
10.3	A copy of the head count report (breaking down headcount by division) as discussed with Sharon Kershaw, and a breakdown of the wages and salaries operating expenditure by function/division.	To better understand the functions/divisions of DBP and the contribution of each to wages and salaries operating expenditure.
10.4	A breakdown of consulting costs into key contracts (CP, etc) and the increases in operating expenditure resulting from each of the key items identified on page 14 of <i>Submission 12</i> .	To better understand the impact of the drivers for expenditure on consultants as identified in page 14 of <i>Submission 12</i> .
10.5	Relevant excerpt from the Cathodic Protection Annual Survey contract showing the agreed rate/fee.	To verify the expenditure on Cathodic Protection.
10.6	A breakdown of IT expenditure forecast into key components, including forecast payments to Westnet, microwave maintenance, etc.	To understand the key components making up IT expenditure.
10.7	Additional detail to be provided on movement of microwave costs over the period since 2005, including the step changes in expenditure resulting from DBP no longer sharing the expenditure with Telstra and Western Power.	To clarify the changes in expenditure over the period since 2005.
10.8	A breakdown of the microwave maintenance operating expenditure forecast and an excerpt from Microwave contract showing rates/contracted fee for maintenance on the new microwave system.	To verify the forecast expenditure on microwave maintenance.
10.9	Assumptions made in respect of increased operating expenditure resulting from "hardening of the insurance market" (ie. what is the increase in operating expenditure forecast to account for this?).	To understand the magnitude of the increased operating expenditure associated with the hardening of the insurance market.
10.10	A copy of the latest business plan for maintenance.	To understand the maintenance activities to be undertaken in 2010, and the key activities driving repairs and maintenance expenditure.



ltem	Description	Comment
10.11	Excel spreadsheet detailing key maintenance activities and forecast materials costs (for activity types).	To understand unit rates of expenditure for key maintenance activities.
10.12	Surveillance - a breakdown of the surveillance operating expenditure forecast, together with a copy of the relevant excerpt of the contract with Heliport detailing the contracted prices for surveillance activities, together with any mechanisms for variations to the contract.	To understand and verify the forecast operating expenditure on surveillance activities.
10.13	 Self insurance: Details of the self insurance events that have actually taken place over the period since 2005 and the cost of these events; and Evidence to demonstrate current insurance coverage exclusions. 	To understand the nature and extent of self insurance events.
10.14	Details on the method for estimating forecast expenditure on reactive maintenance.	To understand how reactive maintenance has been estimated.
10.15	Clarification of the accounting treatment of compressor overhauls (operating expenditure versus SIB capital expenditure), including classification of labour and materials.	To understand the change in treatment from SIB capital expenditure to operating expenditure.
10.16	The expenditure on compressor overhauls over the period since 2005 (split out by year).	To understand the historical expenditure on compressor overhauls.
10.17	Compressor overhauls – A breakdown of the expenditure making up the \$ million per overhaul.	To understand the key components of the cost estimate and key assumptions used to estimate costs.
10.18	Compressor overhauls – An indication of the labour hours required to overhaul a compressor	To understand the labour element of operating expenditure associated with compressor overhauls.
10.19	Please provide a copy of the Fuel Gas Assumptions Document (ie. the document used as the basis of the presentation regarding fuel gas by Nghia Truong).	To better understand the derivation of fuel gas requirements.
10.20	 Fuel gas: A breakdown of the operating expenditure that DBP forecasts it will actually incur on fuel gas (ie. excluding Alcoa) versus what has been included in the operating expenditure forecast; A copy of the amended agreement for the purchase of fuel gas from Alinta Sales (to confirm the unit rate adopted); and A copy of the agreement with Alcoa regarding the supply of fuel gas. 	To justify the forecast operating expenditure related to fuel gas.



Item	Description	Comment
10.21	Clarification of what category of operating expenditure the \$2 million retainer fee for Project Management Services has been allocated to (both historically and forecast).	To confirm what category of operating expenditure the expenditure has been allocated to.

11.2. DBP has advised the ERA that responses relating to operating expenditure will be provided in a submission to be provided in the week commencing Monday 19 July 2020.



12. CONFIDENTIALITY