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Dampier Bunbury Natural Gas Pipeline (DBNGP)

REVIEW OF PROPOSED DBNGP ACCESS ARRANGEMENT (AA6) 2026 - 2030 (PUBLIC VERSION)

Report prepared for:

ECONOMIC REGULATION AUTHORITY (ERA) OF WESTERN AUSTRALIA

June 2025

Preface

This report has been prepared to assist the Economic Regulation Authority (ERA) with its assessment of DBNGP Transmission Pty Ltd's (DBP) Access Arrangement for the Dampier to Bunbury Natural Gas Pipeline (DBNGP), for the period from 1st January 2026 to 31st December 2030 (AA6), which it is required to conduct in accordance with the National Gas Law and the National Gas Rules (NGR). This report covers a particular and limited scope as defined by the ERA and should not be read as a comprehensive assessment of proposed expenditure that has been conducted making use of all available assessment methods.

This report relies on information provided to EMCa by the ERA and by DBP up until 29th April 2025. EMCa disclaims liability for any errors or omissions, for the validity of information provided to EMCa by other parties, for the use of any information in this report by any party other than the ERA and for the use of this report for any purpose other than the intended purpose.

In particular, this report is not intended to be used to support business cases or business investment decisions nor is this report intended to be read as a definitive legal interpretation of the NGR or other legal instruments. EMCa's opinions in this report include considerations of materiality to the requirements of the ERA and opinions stated or inferred in this report should be read in relation to this over-arching purpose.

Some numbers in this report may differ from those shown in DBP's Access Arrangement Information (AAI) or other documents due to rounding.

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Date saved
2/07/2025 12:36 PM

Version
Final v4

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABBREVIATIONS

Term	Definition
AAI	Access Arrangement Information
AGIG	Australian Gas Infrastructure Group
AMP	Asset Management Plan
BST	Base Step Trend
DBP	Dampier Bunbury Pipeline
DMIRS	Department of Mines, Industry Regulation and Safety
DMZ	Demilitarised Zone (refers to Maximo software)
ECI	Electrical Control and Instrumentation
ERA	Economic Regulation Authority
F&G	Fire and Gas
FHE	Full Haul Equivalent
GEA	Gas Engine Alternator
GIP	Good Industry Practice
ICT	Information and Communications Technology
ILI	In Line Inspections
IR	Information Request
IT	Information Technology
KPI	Key Performance Indicators
MDQ	Maximum Daily Quantity
MLV	Main Line Valves
NGR	National Gas Rules
OEM	Original Equipment Manufacturers
PMM	Project Management Methodology
PMO	Project Management Office
RTU	Remote Terminal Units
SIB	Stay in Business
SUG	System Use Gas

EXECUTIVE SUMMARY

Scope

1. This report describes our assessment of the technical aspects of DBP's regulatory submission for its AA6 Access Arrangement tariffs for reference services. In accordance with our scope, we have reviewed:
   - The governance, management and forecasting methodologies that DBP applies in the management of its business and in preparing the expenditure forecasts that it has proposed to ERA;
   - DBP's forecast throughput and its forecast System Use Gas (SUG) quantities;
   - The conformance of DBP's AA5 capex;
   - The reasonableness of DBP's proposed AA6 capex and opex allowances; and
   - DBP's proposals regarding categorisation and economic lives applied for regulatory depreciation purposes.

Our findings

DBP's governance, management and forecasting methodologies are reasonable in principle, though there are instances in which its application of these methodologies is weak

2. DBP's capex forecasts are derived primarily from a risk-ranked set of projects. The business cases for these projects include an adequate needs analysis though, as we found in our assessment for AA5, options analysis remains relatively simplistic and in most instances does little to establish DBP's adoption of a prudent course of action. We consider that DBP's cost estimation is adequate particular for work relating to its primary gas delivery infrastructure, noting that most of these projects are periodic or ongoing work. For supporting work (particularly for ICT) its costings present as indicative allowances for work that is as yet not scoped.
3. We also find a number of instances where the allocation of costs to the DBNGP regulated services has not been appropriately allocated within DBP and where allocation between DBP and other AGIG regulated and unregulated services is also unclear. While the formalised allocation bases and percentages appear reasonable, we find instances where these have not been correctly or transparently applied.
4. We consider that DBP will not have issues with delivering its proposed plan.
5. DBP's has forecast its opex requirements using a combination of Base Step Trend (BST) for recurrent expenditure and a bottom-up forecast for SUG, GEA and turbine overhauls and for inspections. We consider that this combination of methods represents a reasonable approach to forecasting opex.
6. DBP has applied real cost escalation of 0.67% per year, both to its opex and to its capex forecasts. We consider that this is a reasonable assumption.

DBP's demand forecast and associated SUG quantity forecast is reasonable

7. DBP has forecast a continuing decline in Full Haul throughput through AA6, as has occurred in AA5, though with some increase in Part Haul. DBP forecasts a considerable decrease in contracted capacity. Its forecasts are based on contracts that it has already negotiated or is

in the process of negotiating. Our observation is that these appear to be reasonable forecasts and we have taken them as given for the purpose of this report.

8. DBP also forecasts a continuing decline in SUG quantity ratios, which it has determined from its gas system modelling. In conjunction with falling throughput volumes, this results in a considerably lower forecast for SUG quantities. Our observation is that this too has been derived on a reasonable basis.

DBP's AA5 capex applied to its primary gas supply infrastructure conforms to the NGR criteria; a number of other components do not[1]

9. DBP has incurred $212.8m capex in AA5, compared with an ERA allowance of $182.1m. The largest single contributor to the increased expenditure is a significant cost overrun on its OneERP ICT development, which results in DBP's proposed AA5 conforming capex for 'computers and motor vehicles' of $57m compared with ERA's allowance of $32.7m. expenditure ICT. We consider that a considerable proportion of this expenditure does not satisfy the NGR criteria and is therefore not conforming

10. DBP also incurred more than the ERA allowance for cathodic corrosion protection and for metering. We consider that its expenditure on corrosion protection is conforming and responds appropriately to corrosion issues that became evident during the period. We consider that some of DBP's metering expenditure was not conforming to the extent that it was undertaken directly for customers or was not for 'Existing Stations'.

11. In summary, DBP's AA5 expenditure on its primary gas supply assets comprising its pipeline and MLVs, compression, cathodic protection and SCADA, ECI and Comms conforms with NGR criteria. The expenditure that we consider to be non-conforming was for other assets including ICT and metering, as referred to above, and some building expenditure.

12. We propose an alternative value for AA5 conforming capex of $193.1m, which is $19.7m (9%) less than DBP has proposed.

DBP's AA6 capex forecast includes some proposed expenditure that we consider is not prudent, or for which we consider the proposed timing or options are not adequately justified

13. DBP proposes an AA6 capex allowance of $288m. This would represent a 49% increase over the AA5 capex that we consider to be conforming.

14. Relative to buildings capex of $6.9m in AA5, DBP proposes a $51.8m allowance in AA6, most of which is for a redevelopment of its Jandakot site that would be considerably more extensive than it proposed (and which ERA accepted) for AA5. We consider that DBP has not justified why its proposed development has expanded to the extent that it appears to, including why it considers that the development proposal that it provided for AA5 is no longer viable. Much of the plan appears to provide optionality for accommodation and facilities needs that are considerably greater than DBP's current requirements and appear to provide DBP with optionality, at considerable associated cost, for future relocations that it has not committed to.

15. DBP also proposes further investment of $59m for 'computers and motor vehicles', which includes significant allowances for continued (though undefined) enhancements to its suite of applications. DBP has not provided quantified justification for these allowances that would satisfy the NGR criteria for inclusion in its regulatory allowance, but it is open to DBP to undertake the investments to the extent that it considers as part of its BAU governance that there is a sufficient internal benefit to be realised.

16. As was the case for AA5, some of DBP's proposed AA6 expenditure for metering does not satisfy the NGR as it is not for assets or services that are 'conforming' with respect to the

[1] For comparability, all costs in this Executive Summary are presented in $2024, converted as necessary using the same escalators that DBP has applied.

regulated DBNGP. We also consider that some of DBP's proposed allowances for compression are overstated and that DBP has not adequately justified some individual projects.

17. We propose an alternative allowance of $219.8m, which is $68.2m (24%) less than DBP has proposed. This will still be more than DBP's AA5 allowance, its actual capex and what we consider to be conforming capex for AA5. This essentially will be in recognition of the justified need to continue to address newly revealed corrosion protection issues and a major refresh of its SCADA and upgrading of compressor station accommodation and addressing a backlog in replacement of some vehicles and civil equipment.

Some aspects of DBP's proposed AA6 opex are not adequately justified

18. DBP has incurred opex averaging $109.3m per year in AA5[2], which is $4.8m per year more than the ERA allowance. DBP has proposed an opex allowance for AA6 of $652.5m, or an average of $130.5m per year, which would represent an increase of $26m per year on ERA's AA5 allowance and $20.7m per year (19.3%) more than DBP's AA5 average annual expenditure to date.

19. We consider that DBP has considerably overstated its requirement. Our main area of concern is with DBP's proposed allowance for wages and salaries. For this, DBP has proposed an adjusted base year value of $43.0m. This compares with DBP's previous year actual cost of $30.2m and a five-year average cost of $31.8m. DBP's proposed amount incorporates an assumed change in its internal accounting policy, arising from a report provided to it coincident with its regulatory proposal, and which has the effect of adding $8.5m to DBP salary opex and benefit other AGIG entities and DBP unregulated services, with a reduction also in future labour costs charged to DBNGP capex. We consider that this additional impost on DBNGP customers is not justified.

20. We also find that, while DBP has sought to adjust for staff increases in its regulatory proposal, the increased headcount is largely not attributable to DBNGP requirements but rather to charge outs to other AGIG business entities.

21. DBP also proposes base year adjustments and step changes for IT and for insurance, and a bottom-up allowance for turbine and exchange and overhauls, each of which we consider to be overstated relative to evidence that DBP provides.

22. We consider that DBP's trend factor which allows for a 0.67% p.a. real labour cost increase, is reasonable.

23. In aggregate we consider that a reasonable alternative forecast is $551.6m, corresponding to an annual average of $110.3m per year. This is an increase on ERA's AA5 allowance but very close (in real terms) to DBP's actual opex in AA5. We take note of certain factors which have led to real cost increases, however DBP has also made substantial investments in AA5 that should offset these increased real costs through improved productivity.

Implications

24. Summarising the implications of the alternative forecasts referred to above, we propose:

- A reduction of $19.7m (9%) to DBP's proposed AA5 conforming capex;
- A reduction of $68.2m (24%) to DBP's proposed AA6 capex allowance; and
- A reduction of $100.8m (15%) to DBP's proposed AA6 opex allowance.[3]

[2] For these AA5 amounts, we refer to the period to date, being the four years to 2024. However, this figure includes DBP's amount for 2024, which is on a different accounting basis. Its actual costs for the three years prior to this change are $106.7m per year.

[3] Considering the components that we have reviewed, DBP's proposed opex was $535.9m (when we exclude its proposed SUG allowance of $116.6m). Relative to this, the proposed alternative forecast reduction of $100.8m is 18.8%.

1 INTRODUCTION

The Economic Regulation Authority (ERA) has asked us to provide technical advice to assist with its assessment of proposed revisions to the access arrangement for Dampier Bunbury Natural Gas Pipeline (DBNGP). The requested technical advice covers a range of matters that can affect the capital and operating expenditure proposed by DBNGP. Our review is based on information that DBNGP provided and on aspects of the National Gas Rules (NGR) that apply in Western Australia relevant to assessment of regulatory expenditure allowances.

1.1 Purpose and scope of requested work

1.1.1 Purpose

25. The Economic Regulation Authority (ERA), in accordance with its responsibilities under the National Gas Law (NGL) and the National Gas Rules (NGR), is currently reviewing Dampier Bunbury Pipeline (DBP) access arrangement (AA) proposal for the Dampier to Bunbury Natural gas Pipeline (DBNGP) for the 5-year period from 1 January 2026 to 31 December 2030 (AA6).

26. In Western Australia, the *National Gas Access (WA) Act 2009* amends and implements the NGL ('the NGL (WA)'). The NGL WA gives effect to a modified version of the NGR as relevant to gas access regulation in WA ('the NGR (WA)'). For simplicity, and unless otherwise designated, references in this report to NGR shall mean NGR (WA).

27. To assist with its assessment of DBP's AA6 Proposal, the ERA has engaged Energy Market Consulting associates (EMCa) to review and provide technical advice on:

- the capital expenditure (capex) incurred (or to be incurred) by DBP in the current 5-year period from 1 January 2021 to 31 December 2025 (AA5);
- DBP's proposed capex for the AA6 period;
- DBP's proposed operating expenditure (opex) for the AA6 period;
- the governance arrangements, forecast methodology and cost estimation processes employed by DBP when developing its expenditure proposals; and
- other specific matters, including DBP's KPIs and asset lives assumed for depreciation purposes.

28. The results of our technical assessment are set out in this report.

1.1.2 Scope of the review

29. In regard to DBP's expenditure, the overarching objective of this review is to assist the ERA to determine whether the actual capex incurred, or to be incurred, by DBP in AA5 and its proposed capex for AA6 complies with the criteria set out in rule 79 of the NGR and whether its proposed opex for AA5 complies with rule 91(1). Whilst we have not been requested by the ERA to document compliance of the capex and opex proposals with the individual rules and tests included in the NGR as a part of our assessment, to the extent that we consider that such expenditure does not comply, the ERA has sought our technical advice on adjusted expenditures that could be considered to comply.

30. In carrying out this review, the ERA has asked us to evaluate a range of matters that can affect capex and opex including, amongst others:

- DBP's substantiation and justification for forecast increases in opex and capex;

- DBP's project governance arrangements (e.g. procurement practices and delivery models), and the methods or models used by DBP to estimate its expenditure requirements and to prioritise areas of expenditure;
- the methodology DBP has used to develop capacity and utilisation forecasts as part of developing its capex and opex forecasts;
- the extent to which DBP has factored efficiencies into the opex and capex forecasts;
- DBP's ability to deliver its proposed capex program;
- the asset lives assumed by DBP when calculating depreciation; and
- the Key Performance Indicators (KPIs) used by DBP to support its capex and opex forecasts including comparison with industry standards and any proposed changes to DBP's operational and service level performance.

31. We have presented the findings of our assessment in this technical report.

1.2 Our review approach

32. In undertaking our review, we:

- Completed a desktop review of the information provided to us by the ERA
- Prepared requests for information to DBP to help ensure that we correctly understood the methodology and assumptions that DBP had applied in estimating its expenditure requirements
- Conducted an in-person review meeting with DBP staff to review elements of its submission
- Undertook an assessment of relevant aspects of the proposed expenditure, including by taking into account the responses from DBP to information requests - our review considers the requirements of the NGR, specifically the capex and opex criteria and objectives
- Documented our findings in this report.

33. We also provided feedback to ERA staff on our preliminary findings, while drafting this report.

34. Our review has placed emphasis on those matters that are of greatest significance in driving the level of reference tariffs the ERA has been asked to approve. Accordingly, we have deepened our assessment process on such components of proposed expenditure to provide the ERA with the necessary supporting evidence and supporting logic on matters of most significance. Our review does not, nor is it intended to, represent an expenditure approval process and the specific projects, programs, and activities that DBP chooses to undertake are matters for DBP's management judgment.

35. Where we find that DBP's proposed expenditure is not reasonable in terms of the relevant requirements of the NGR, we have identified the extent to which the issues we have found have resulted or may result in a higher level of expenditure than what would be required of a prudent and efficient service provider.

36. To the extent that there may be implications for aspects of DBP's access arrangement that are beyond our scope, we have included additional observations in some areas that we trust may assist the ERA with its own assessment.

1.2.1 Conformance with NGR requirements

37. In undertaking our review, we have been cognisant of the relevant aspects of the NGR under which the ERA is required to make its determination. We provide our interpretation of the capex and opex criteria in our assessment in Appendix A.

1.2.2 Technical review

38. Our assessment comprises a technical review. While we are aware of stakeholder inputs on aspects of what DBP has proposed, our technical assessment framework is based on engineering considerations and economics.

39. We have sought to assess DBP's expenditure proposal based on DBP's analysis and DBP's own assessment of technical requirements and economics and the analysis and other information that it has provided to support its proposal. Our findings are therefore based on the available information and, to the extent that DBP may subsequently provide additional information in a revised proposal, any subsequent assessment may differ from the findings presented in the current report.

40. We have been provided with a range of reports, internal documents and responses to information requests in support of what DBP has proposed and our assessment takes account of this range of information provided. To the extent that we found discrepancies in this information, our default position is to revert to DBP regulatory submission documents as provided on its submission date, as the 'source of record' in respect of what we have assessed.

1.3 About this report

1.3.1 Report structure

41. The following sections of our report are structured as follows:

- Executive Summary section - our main findings are summarised in the at the beginning of this report.
- In Section 2, we present a context overview of the capex and opex elements relevant to our review. This overview includes consideration of the expenditure trends and DBP's forecasting performance of AA5 capex, by way of contextualising its forecast regulatory allowances for AA6 capex and AA6 opex.
- in Section 3, we describe our assessment of the governance and management framework that DBP uses to plan and approve its expenditure, its business planning process, asset lives that have been assumed in DBP's depreciation calculations, and management of KPIs, together with the implications for its forecast expenditure of any identified issues;
- In Section 4, we describe our assessment of DBP's Demand Forecast of throughput, and its related forecast of System Use Gas quantities;
- in Section 5, we set out the results of our assessment of DBP's AA5 capex incurred, or to be incurred, against the capex criteria and describe any issues we have identified with the expenditure;
- in Section 6 we set out our assessment of DBP's proposed capex for the AA6 period; and
- in Section 7 we set out our assessment of DBP's proposed opex for the AA6 period.
- Finally, in section 8 we assess changes that DBP has proposed to its regulatory depreciation, through changes to asset classification, changes to assumed asset lives and DBP's assessment of a capped overall economic life expectation for the entire pipeline.

1.3.2 Information sources

42. We have examined relevant documents that DBP provided to the ERA in support of the areas of focus and projects that the ERA has designated for review. This included further information at meetings with DBP and further documents in response to our information requests. These documents are referenced directly where they are relevant to our findings.

43. Except where specifically noted, this report was prepared based on information provided to us prior to 30 April 2025 and any information provided subsequent to this time may not have been taken into account.

1.3.3 Presentation of expenditure amounts

44. Expenditure is presented in this report in real terms December 2024, to be consistent with DBP's AAI, unless stated otherwise. In some cases, we have converted to this basis from information provided by the business in other terms.

45. While we have sought to reconcile expenditure presented in this report to source information, in some cases there may be discrepancies in source information provided to us and minor differences due to rounding. Any such discrepancies do not affect our findings.

2 BACKGROUND

DBP proposes AA5 conforming capex of $182m, an AA6 capex allowance of $288m and an AA6 opex allowance of $652m.

DBP's AA5 capex is higher than the ERA allowance for the period and its proposed capex and opex for AA6 are each considerably greater than for AA5.

2.1 Introduction

47. In this section, we provide background context to the assessments which follow. We first provide an overview of the total capex for the AA5 and AA6 periods, and we include observations of DBP's actual capex in AA5 against the ERA's AA5 capex allowance. We provide an overview of the total opex for the AA5 and AA6 periods.

48. We then outline our approach for the assessment we have undertaken, and which is described in the remainder of this report.

2.2 DBP's proposed AA6 and AA5 (actual/estimated) capex

2.2.1 DBP's historical and proposed capex

49. DBP has forecast total capex of $288.0m for the AA6 period. In the table below, we show the breakdown of capex in AA6 by asset class.

Table 2.1: Proposed AA6 capex by asset class- $m, real Dec 2024

Asset class	2026	2027	2028	2029	2030	Total
Building	1.4	23.4	17.8	6.6	2.6	**51.8**
Cathodic/Corrosion Protection	5.5	4.9	4.5	4.4	4.3	**23.6**
Compression	7.8	6.7	8.1	5.3	5.3	**33.3**
Computers and Motor Vehicles	17.8	11.9	8.6	12.3	8.3	**59.0**
Metering	8.8	8.8	5.9	4.2	4.1	**31.8**
Other Depreciable	1.4	1.6	1.1	1.3	1.1	**6.4**
Pipeline	0.2	0.2	0.2	0.3	0.2	**1.0**
SCADA, ECI And Comms	18.2	16.4	16.1	17.3	13.3	**81.2**
Total	**61.1**	**73.9**	**62.3**	**51.6**	**39.2**	**288.0**

Source: EMCa table derived from DBP response to IR EMCa03

50. DBP reports that it has incurred, or will incur, a total of $212.8m capex in the AA5 period which includes $37.7m as actual/estimate in 2024 and $37.3m as estimate in 2025. In the table below, we show the breakdown of capex in AA5 by asset class compared with ERA AA5 capex allowance.

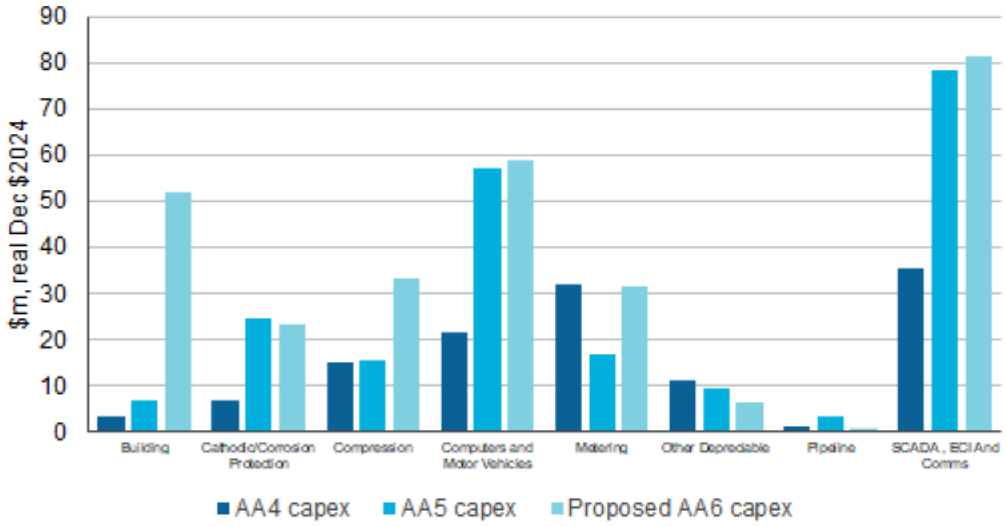
Table 2.2: Actual/estimate AA5 capex compared with ERA allowance - $m, real Dec 2024

Asst class	2021 (A)	2022 (A)	2023 (A)	2024 (E)	2025 (E)	Total (A/E)	AA5 ERA Allowance
Building	0.6	1.2	-0.2	1.0	4.4	**6.9**	**19.8**
Cathodic/Corrosion Protection	4.8	6.1	6.9	3.9	3.0	**24.8**	**16.7**
Compression	3.2	4.1	5.1	1.6	1.3	**15.4**	**19.6**
Computers and Motor Vehicles	17.3	7.1	18.2	5.1	9.2	**57.0**	**32.7**
Metering	4.7	2.9	3.6	3.3	2.5	**17.0**	**8.3**
Other Depreciable	2.9	2.7	0.5	1.8	1.8	**9.7**	**9.7**
Pipeline	0.0	2.5	1.1	0.0	0.0	**3.6**	**0.0**
SCADA, ECI And Comms	9.2	16.5	16.7	20.9	15.1	**78.5**	**75.2**
Total	**42.6**	**43.1**	**52.0**	**37.7**	**37.3**	**212.8**	**182.1**

Source: EMCa table derived from DBP's response to Information Request EMCa03

51. In the figure below, we show capex for the AA4 and AA5 periods.

Figure 2.1: Comparison of AA4, AA5 and proposed AA6 capex by asset class - $m, real December 2024



Source: EMCa analysis derived from DBP response to IR EMCa03

52. DBP's total proposed capex in AA6 is 35.3% and 58.1% higher than the actual/estimated AA5 capex and ERA AA5 capex allowance respectively.

2.3 DBP's proposed AA6 opex

2.3.1 DBP's historical and proposed opex

53. DBP has proposed an AA6 opex allowance of $652.5m (real Dec 2024). This is $130.5m per year compared with $109.3m[4] per year for DBP AA5 opex actual and $104.5m[5] per year the AA5 ERA allowance.

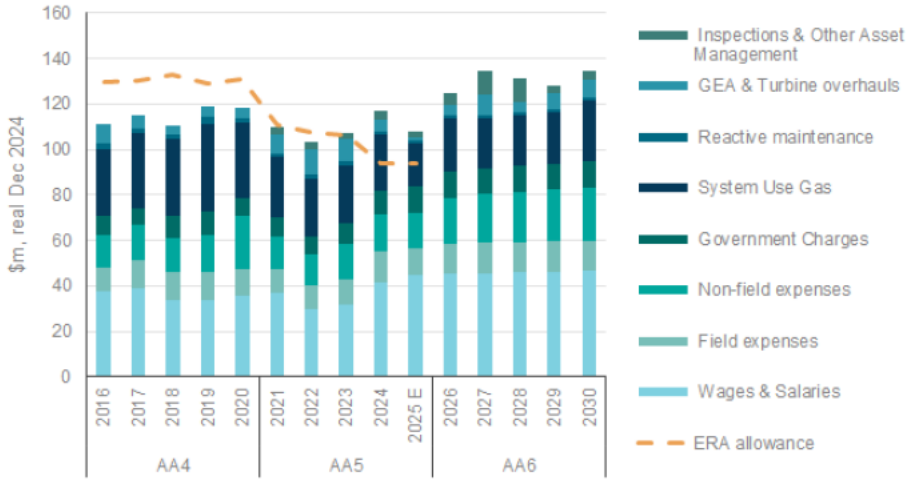
54. In Table 2.3 below we summarise DBP's derivation of its forecast and its BST components, while Figure 2.2 shows a comparison between DBP's proposed opex with DBP historical opex and ERA allowances.

Table 2.3: DBP AA6 proposed opex - $m, real Dec 2024

Category	2024	2026	2027	2028	2029	2030	Total
Efficient Base Year	89.2	89.2	89.2	89.2	89.2	89.2	**446.2**
Step changes							
IT		*1.8*	*2.7*	*2.5*	*2.6*	*2.7*	*12.4*
Insurance		*0.0*	*0.2*	*0.8*	*1.5*	*2.3*	*4.9*
Subtotal		**1.8**	**2.9**	**3.4**	**4.2**	**5.0**	**17.3**
Bottom-up							
Fuel Gas (SUG)		*23.1*	*22.0*	*22.3*	*22.5*	*26.7*	*116.6*
GEA & Turbine overhauls		*4.9*	*8.8*	*4.5*	*6.9*	*7.8*	*32.8*
Inspections & Other Asset Management		*4.8*	*10.4*	*10.4*	*3.6*	*3.7*	*33.0*
Subtotal		**32.8**	**41.2**	**37.2**	**33.0**	**38.2**	**182.4**
Labour cost escalation		0.7	1.0	1.3	1.6	2.0	6.6
Total forecast opex		**124.5**	**134.4**	**131.1**	**128.0**	**134.4**	**652.5**

Source: EMCa table derived from DBP opex model, att. 8-1 and DBP's response to EMCa01

Figure 2.2: DBP proposed opex compared with AA4 and AA5 - $m, real Dec 2024[6]



Source: DBP opex model, att. 8-1 and DBP's response to EMCa01

[4] AA5 yearly average is based on DBP's response to IR EMCa01 actual 2021-2024 (excluding 2025 forecast/estimate which during onsite meeting, DBP advised us that 2025 figure will be revised)

[5] Based on DBP's response to IR EMCa01 ERA allowance sheet

[6] 2025 is estimated amount sourced it from DPB response to EMCa01

2.4 Approach for our review

55. Our review has entailed:

- carrying out a first pass review of DBP's capex and opex proposals to identify any areas where there has been a material change in either:
  - the capex incurred (or to be incurred) by DBP in AA5 relative to what was approved by the ERA AA5 Final Decision, with a focus on the material variances against the ERA allowance; or
  - the expenditure DBP has proposed for AA6 relative to what it spent in AA5;
- conducting a more detailed assessment of the capex and opex proposals using the review framework outlined in Appendix A and having regard to information provided by DBP in its initial submission to the ERA, at the on-site meeting, and in response to our information requests. For:
  - capex, this typically involved review of various DBP planning documents and 'business case' documents for its proposed projects; and
  - opex, we reviewed DBP's forecasting methodology and relevant input assumptions; and
  - carrying out a high-level review of the remainder of DBP's capex and opex proposals.

56. Our review has placed emphasis on those matters that are of greatest significance in driving the level of the reference tariffs that the ERA has been asked to approve. Accordingly, we have deepened our assessment process on such components of proposed expenditure to provide the ERA with the necessary supporting evidence and supporting logic on matters of most significance. Our review does not, nor is it intended to, represent an expenditure approval process and the specific projects, programs, and activities that DBP chooses to undertake are matters for DBP's management judgment.

3 GOVERNANCE AND MANAGEMENT

DBP's documented governance and management framework is relatively thorough. However, there are elements of this framework that are weak or otherwise not evident in DBP's application of this framework as it applies to its AA6 regulatory submission. This includes relatively weak options analysis, minimal quantification of the benefits of what it proposes and bundling of projects in business cases such that there is little insight into the possibility of preferrable alternative combinations of projects.

In some cases, such as for its proposed Jandakot site redevelopment, we also see little evidence that effective governance has yet been applied.

3.1 Introduction

58. To inform our assessment of the capex incurred (or to be incurred) by DBP in the AA5 period and its proposed expenditure for the AA6 period, we have reviewed DBP's investment governance and management systems, procedures, and practices and compared them to good industry practice (GIP). We have also compared what DBP's governance framework requires against the evidence we have seen of consistent application of those requirements.

59. We have reviewed DBP's governance framework with the emphasis on the policies, procedures, and key documents that it has in place to:

- develop its 'portfolio' of work;
- approve individual projects of work in the context of the portfolio of work; and
- manage the delivery of approved work to achieve efficient costs.

60. For each element of DBP's governance and management framework, we provide observations that we have taken into account in our review of its proposed capex and opex.

3.2 Elements of DBP's investment governance and management framework

3.2.1 DBP ownership and management

DBP information

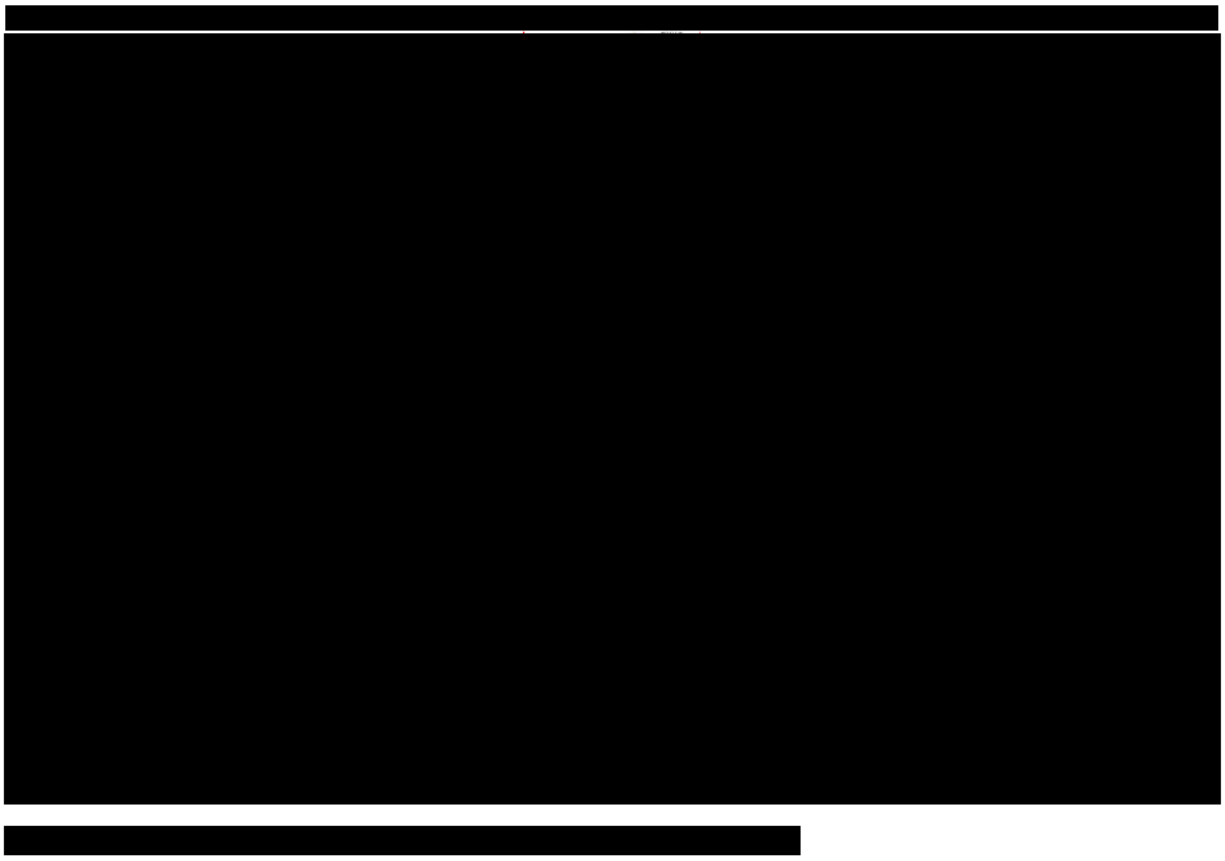
61. The current ownership and management structure of the DBNGP is shown in the figure below. As can be seen from this diagram, the responsibilities for management and operation of different aspects of DBP are spread across a number of entities, not all of which are solely dedicated to DBNGP, as defined for regulatory purposes.

62. In addition to the DBNGP, AGIG also owns and/or operates assets in WA, including:

- Wheatstone Ashburton West Pipeline
- Ashburton Onslow Gas Pipeline
- Fortescue River Gas Pipeline
- Tubridgi Gas Storage
- Tanami Gas Pipeline, and
- Hydrogen Parks (in different locations).

63. Outside of WA, AGIG owns and/or operates gas transmission assets in South Australia, Victoria, NSW, Queensland and Northern Territory.

Figure 3.1: Ownership of the DBP and related entities



Observation

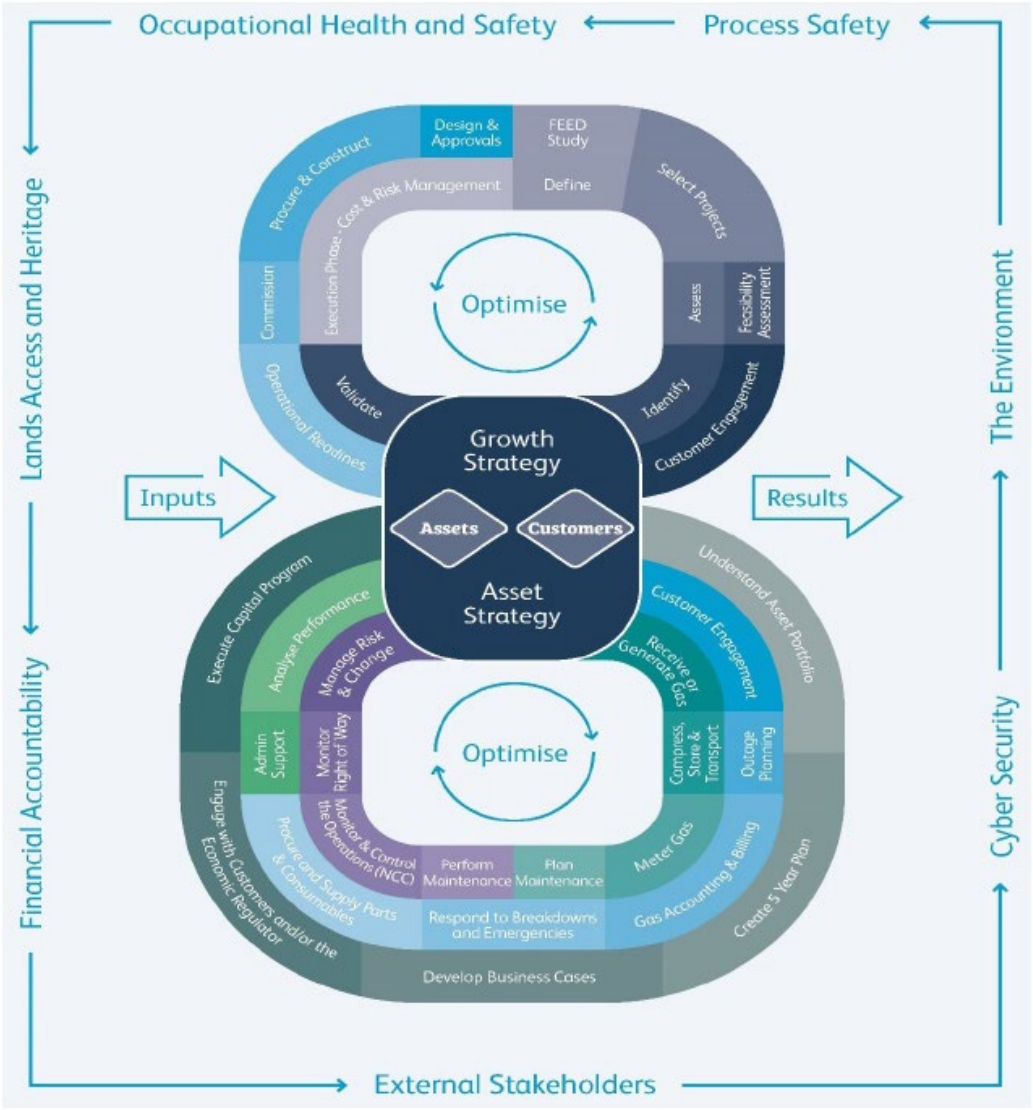
64. Information on the management and operational roles of different entities assists with assessing the extent to which DBNGP costs are appropriately determined and allocated.

3.2.2 AGIG's Asset Management System Framework

DBP information

65. DBP provided AGIG's Asset Management Framework for its transmission assets, and which it represents in the diagram that we include as Figure 3.2.

Figure 3.2: AGIG Asset Management Framework



Source: DBP Attachment 9.1, AGIG Asset Management Framework, page 6 (Confidential)

66. We sought information on the five-year plan referred to on this diagram and DBP advised that this is the 'final plan' provided each five years as its regulatory submission. DBP advised that it does not produce annual updates to such plans.

67. AGIG defines the key documents in its asset management framework as its

- Asset Management Plan
- Safety Case, and
- Environment Plan.

Observations

68. We make the following observations from what we have observed of DBP's implementation of this framework:

- The DBNGP is a mature operation and, while there can be some variation in its customers' requirements, based on DBP's own forecast it is not in a growth phase. The apparent emphasis in the diagram to a growth strategy is therefore unclear to the extent that it applies to DBNGP, although we acknowledge that this is a general AGIG framework. For regulatory depreciation purposes, DBP has defined a nominal operating window for the pipeline to 2063, i.e. less than 40 years from now.

  - We consider that it is relevant to asset management that many gas infrastructure assets, including buildings and structures have a lifespan of around this time and in some cases longer. This presents a case that, where it can be demonstrated that an investment is required in an asset with a lifespan of this order, and where that investment will demonstrably provide a net benefit, then there is merit in undertaking that investment so as to maximise that benefit over the remaining life of the pipeline.
- DBP refers to stakeholder input in its framework diagram
  - DBP's regulatory submission (i.e. its Final Plan document) provides a significant amount of direct evidence of the stakeholder engagement process that it undertook. This is valuable context that materially assists in a review of its proposal.
  - An observation would be that there is a degree of repetition in this material and an implication of strong reliance on the tenor of stakeholder feedback at the expense of evidence of sound economic and engineering judgments in the proposal document.
  - While much of the stakeholder feedback is valuable, in a number of instances we consider that there is only a tenuous link between generic stakeholder feedback (such as for reliable supply and efficient costs) and claimed support for a particular initiative.
- Each of the circles in AGIG's diagram refers to 'optimise' cycles with the implication that this is undertaken throughout the process of selecting and delivering projects.
  - We consider that DBP's processes for optimising its selection of projects for inclusion in its 'Final Plan' are not particularly strong. We discuss specific observations on this in referring to its asset management and business cases below and this is inevitably an important aspect in our review of specific projects and their justification.

3.2.3 DBP Asset Management Plan (AMP)

DBP information

69. DBP's AMP provides:
    - Descriptions of each of the assets, by asset category
    - Further detail on the asset management framework, including
      - overviews of DBP's obligations under the various Acts and regulations
      - processes and information to assist with planning and development, design and procurement, pipeline operations, maintenance management, breakdowns, monitoring and dealing with assets at end of life.
70. The AMP includes a brief overview of the economic regulatory regime including ERA's role in the approval of Access Arrangements. The AMP refers to this as '…*a framework around which pipeline operators like AGIG and customers can negotiate access'* and describes the Standard Shipper Contracts that represent the outcome of such negotiations.
71. The AMP makes a distinction, that we refer to in our review, between 'shipper funded projects' and Stay in Business (SIB) projects. For the latter, the AMP refers to the following assessment criteria:
    - *Increases the service capacity of an asset*
    - *Increases the service quality of an asset; or*
    - *Extends the predetermined useful life of an asset.*
72. Given the maturity of the asset, the majority of capex involves some form of replacement. The AMP describes this process as follows:

    Equipment replacement program and improvement initiatives generated by the business, SIB projects are prioritised on an annual basis with forward planning, aligning with the Access Arrangement submission schedule, providing supporting information on the

proposed CAPEX spend. As part of the optimisation of CAPEX for each year, SIB proposals (business cases) are reviewed and evaluated through a strategic and business case screening process, using the AGIG Risk Model. [7]

Observation

73. While the AMP provides context, the primary documents that DBP has provided in support of its AA6 capex and bottom-up opex proposals are business case documents and we provide our observations of these in sections 3.2.5 and 3.2.7 and throughout our review.

3.2.4 DBP's Safety Case

DBP information

74. The Safety Case is a document that DBP is required to lodge with the WA safety regulator (WorkSafe Western Australia). The Safety Case provided by DBP is 615 pages and contains detailed information on the asset and information and plans that demonstrate how it is managed and operated safely.

75. The version that DBP has provided is dated as having been accepted by WorkSafe Western Australia on 20 August 2024. It is a requirement that DBP operates and manages the pipeline in accordance with its Safety Case and, regardless of it having been accepted by the safety regulator, the cover letter to AGIG from the safety regulator includes a statement that

'the duty remains yours at all times for ensuring your operations are conducted safely, comply with the legislation and conform with the accepted Safety case.'

Observations

76. While it is not within our scope to review the safety case in itself, we consider that the level of information and planning definition that is evident in the safety case, demonstrates a disciplined approach to safe management of the DBNGP.

77. We take compliance with the Safety Case as a given in our review of DBP's proposed projects and operations.

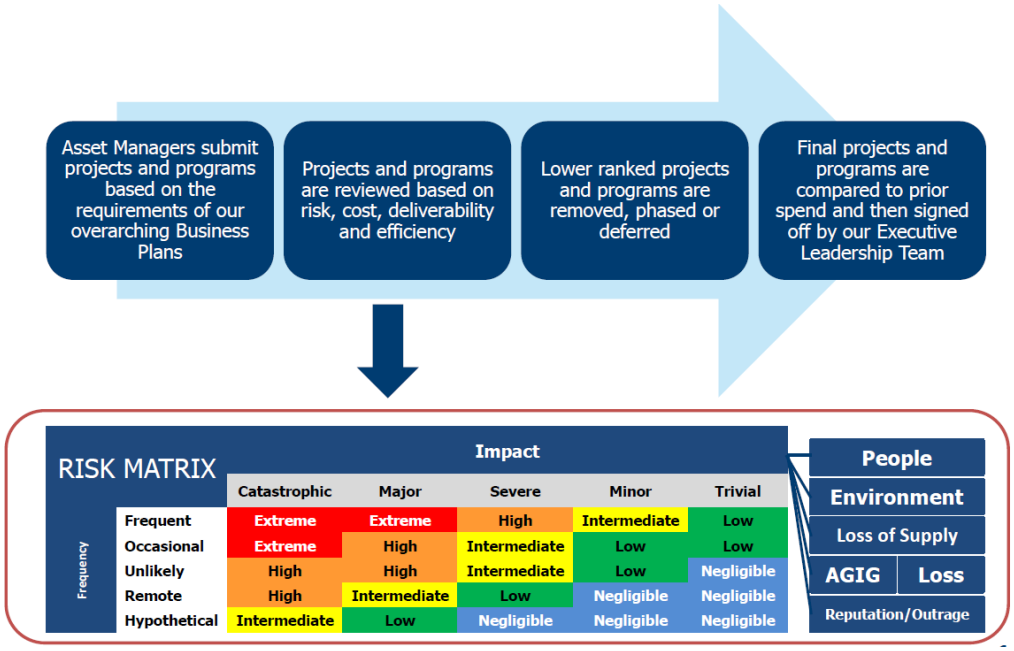
3.2.5 DBP's project delivery, risk and governance framework

DBP information

78. In its onsite presentation, DBP provided the diagram below (which exists in several of its documents) to explain its project delivery and governance process.

[7] AGIG AMP, page 54

Figure 3.3: DBP illustration of its project delivery and governance process



Source: DBP onsite presentation, page 10.

79. In its documentation DBP makes multiple references to risk ranking its projects and, in response to our information request, DBP provided what it referred to as an example of its consolidated risk assessments of each project consideration.[8] We observe that each project is rated according to the consequence, frequence and overall risk across six dimensions, being:

- DBP
- People
- Environmental
- Outrage
- Asset Damage
- Loss of Supply

EMCa observation

80. While the information provides evidence of assessments, DBP did not provide evidence of the overall project risk ranking process that it adopted (noting the implication of an ordinal ranking process that takes account of the multiple risk dimensions referred to above) or the criteria that it had applied to determine which projects to include in its Final Plan.

81. As we found in our assessment of DBP's AA5 proposal, there are many projects on DBP's SIB project list that it has rated with low or negligible risk. This is particularly the case for a number of IT Sustaining projects.

3.2.6 Capex Business cases

DBP information

82. DBP's business cases are the primary documentation that it has provided to support its proposed AA6 expenditure. For its capex program, DBP provided a single document that contains 15 business cases.[9]

[8] DBP response to EMCa04, Q4 – SIB List

[9] DBP attachment 9.5

83. DBP's business case documentation is evidence of a structured process that includes:

- A description of the problem or opportunity
- Risk assessment (untreated and treated)
- Consideration of options
- Description of the proposed solution
- Estimated costs and their basis
- Statements on variation from AA5, vision alignment, consistency with the NGR and on stakeholder engagement.

84. Each 'business case' typically involves a number of projects. DBP frequently also includes background information and evidence, for example information including photographs evidencing condition etc.

85. The individual streams of work in each business case were relatively readily able to be matched to 'projects' in DBP' capex model and we were able to align capex amounts between the business cases and the capex model. This alignment assisted our ability to review DBP's proposed program of work.

Observations

86. We comment extensively on the specifics of each business case throughout this report. However, some general observations are as follows:

- DBP's selection of options often provided little insight to substantiate its preferred option:
  - While consideration of a 'do nothing' option is reasonable as a counterfactual, it is more useful if this is at least viable or to some extent realistic. A more useful definition may be 'continuation of current practices'.
  - In some instances, there was minimal difference between the preferred option (which is typically the second of three) and a 'more intensive' or 'accelerated' option. In other instances, the 'third option' is sufficiently extreme that, like 'do nothing' it too is readily open to rejection.
  - Adoption of a 'preferred' option would be more robust if 'sub-option' variations were shown to have been considered, such that there are genuine viable options to choose between, with DBP able to then provide assessment against defined criteria to evidence the logic of its preferred option choice. In most business cases there was effectively no contest for a choice of anything other than the preferred option.
  - We also note that, by the way that projects are bundled into business cases, and options were considered only at the business case level, adoption of the preferred business case effectively was represented as selection of all of the projects within that business case option, avoiding the possibility that some but not all projects in that option might be justified.
- There was almost no quantified benefit assessment to support either the need for proposed work or selection of the preferred option
  - Monetised risk assessment (risk-cost) is not part of DBP's assessment framework. Nevertheless, there are instances where projects are expected to provide benefits that can be quantified, including through cost reduction, yet DBP did not provide evidence for these that might have assisted in supporting its proposal through Cost Benefit Analysis.
- In instances where the proposed project may be in whole or in part for a Shipper or may be non-conforming for DBNGP or in part for use by another AGIG entity, the business cases did not always show formal recognition of this nor (where applicable) show a transparent proportionate allocation to DBNGP.

3.2.7 Opex business cases

DBP information

87. DBP provided six opex business cases which cover those aspects of its opex proposal that are forecast on a bottom-up basis.

Observations

88. These provide reasonable descriptive material, and we refer to the information in these businesses cases where we review the proposed opex amounts (in section 7.4). These tend to provide reasonable information for decision-making purposes, subject to observations akin to those that we have made for DBP's capex business cases.

3.2.8 Annual capital planning process

DBP information

89. While DBP does not appear to update its five-year plan, it states that it does have an annual capital planning and budgeting process at which projects are risk-ranked and approved. DBP provided the following information in response to our information request.[10]

> *In the annual planning process, all proposed capex projects with more accurate budgets and scopes are risk ranked, and the list is approved for inclusion in the annual capex program and budget approved by the Board each year. The delivery of the program is reported in the monthly business reports and at the Project Review Committee where the Traffic Light Dashboard is reported, and performance is assessed.*
>
> *Risk ranking is refreshed annually to ensure project assumptions remain valid and are assessed against emerging risks that have been identified. This ensures the prudent deployment of capital, based on risks, business needs and significant unplanned events.*
>
> *The approved capex projects are presented for approval in accordance with our Delegation of Financial Authority policy, for example to the Board, Executive Leadership Team, depending on its value. Once approved, projects are then managed and monitored in line with our Project Management Methodology (PMM). We regularly report our expenditure performance against prior year spend and approved regulatory allowances.*

Observations

90. A process such as DBP describes should lead to prudent project selection. Other information that DBP provided leads us to a view that there may be a degree of suboptimality occurring in practice. Examples are:

- We observed on a numbering of occasions in discussions with DBP at our onsite meetings, a reference to ERA 'funding.' This tended to be in the context that if ERA accepted a particular project in its determination of a tariff allowance, then DBP would consider that as forming some form of authorisation to undertake the project; conversely if ERA did not include a particular project, then DBP would not undertake it. This is problematic in that, as is the case with the safety regulator, ERA does not act in the role of a project decisionmaker and it is DBP's responsibility to undertake the work that it considers to be required, in accordance with its obligations and application of good industry practices.
- While DBP states that its projects are risk ranked, its process for doing so is unclear. Moreover, DBP does not provide evidence of Cost Benefit Analysis and if, or how, this is taken into consideration in project selection where quantified benefits are identified.

[10] EMCa04, Q1

- We did not see evidence of a 'benefits realisation' process, that would help to confirm (or otherwise provide a feedback loop) as to whether projects are delivering the outcomes assumed at project selection.

3.2.9 Cost estimation

DBP information

91. In response to our information request, DBP provided the following summary of its cost estimation process:

> *There are three specific methods we have used to forecast capex, depending on the nature of the work. These methods consider actual historic costs along with specialised engineering advice and market testing through vendor quotes and expressions of interest.*
>
> *For ongoing activities that are volume driven we estimate costs by identifying the volume of work to be undertaken and applying a historical average unit rate (typically for the last three full calendar years).*
>
> *Where the program of work is delivered externally, consideration is also given to the specific projects and locations where historical work has been delivered, particularly given the geographical isolation of much of the DBNGP.*
>
> *For periodic programs of work (those that may not be required in every regulatory period) cost estimates have been developed with regard to historical costs (over a longer time period) for the same, or similar programs of work. Where the program of work has not been delivered for some time (for example, replacing assets at the end of their useful life) we may also have regard to updated vendor and contractor quotes.*
>
> *For one-off, new or discrete projects which have not been required in the past, efficient costs are determined through a competitive tender process. Where a competitive tender process has not yet been undertaken, an expression of interest is undertaken or a bottom-up cost estimate is produced.*
>
> *A bottom-up cost estimate will be based on recent works where the project is sufficiently comparable, using the most recent unit rates or actual costs. Where the work is unique or greater than $5 million, an efficient cost estimate is developed using internal estimates from different engineering disciplines or using external engineering or building specialists.*

Observation

92. In addition to the statement of methodology above, DBP provided information showing its application of this process to the proposed capex projects in Attachment 9.7 to its submission.[11] We consider that this evidence supports its application of a reasonable costing process that aligns with the nature of different projects.

3.2.10 AA6 Final Plan development process

DBP information

93. We sought information on the process by which DBP had developed its Final Plan. DBP provided information on this process and the successive iterations in its proposed capex plan.[12]

94. DBP listed the meetings of its Regulatory review Steering Committee (RSC) as follows:

---

11 DBP Attachment 9.7, Cost estimation methodology (January 2025)

12 DBP response to EMCa04, Q2

Figure 3.4: DBP's regulatory review development governance process

DBP information on Regulatory review Steering Committee meetings

RSC meetings were held on the following dates and generally covered both the DBP AA and SA AAs:

- *31 July 2023 – no AA6 forecasts presented however there was early discussion on business cases*
- *11 September 2023 - no AA6 forecasts presented however there was early discussion on business cases*
- *31 October 2023 - no AA6 forecasts presented however there was early discussion on business cases*
- *4 December 2023 - no AA6 forecasts presented however there was early discussion on business cases*
- *16 February 2024 – IT forecast presented as per below*
- *15 May 2024 – full AA6 forecasts for IT and non-IT presented*
- *2 September 2024 - full AA6 forecasts for IT and non-IT presented*
- *20 September 2024- full AA6 forecasts for IT and non-IT presented*
- *11 November 2024- full AA6 forecasts for IT and non-IT presented*

Source: DBP response to EMCa04, Q2

95. DBP provided evidence of the capex forecast information put to the committee, and the various drafts of such forecasts before they were finalised.

Observations

96. The information that DBP provided shows recognition of the evolving status of works in flight and of factors affecting the proposed plan, including stakeholder input and recognition of matters that were considered to be challenged by ERA.

97. The largest single change in the program during this process was the decision not to proceed in proposing a pressure reduction initiative, at a proposed cost of over $400m.[13]

98. While the documentation shows reference to risk ranking, it does not evidence the criteria by which projects were ultimately determined to be included or excluded from the plan.

99. Of relevance to our AA6 assessment, our reading of DBP's documentation suggests that the Jandakot redevelopment was (in early September 2024) included as a $9.9m spend in AA5 followed by $2.9m in AA6 (i.e. $12.8m total), then moved to $3.8m in AA5 followed by $17.9m in AA6 (implying $21.7m total). These amounts are around one-third to one-half the amount that DBP subsequently proposed in its Final Plan.

3.2.11 Cost allocation

DBP information

100. We asked DBP for information on its cost allocation between entities.

101. In its response DBP stated that allocation of costs between AGIG entities occurs only in national IT projects and provided the allocation metrics shown in Figure 3.5.

[13] The Pressure Reduction project is referenced in RSC meeting notes provided for 14 May 2024, at a cost of $422m. The RSC meeting notes from 2 September 2024 state that the project is 'unl kely to be proposed'.

Figure 3.5: DBP information on ICT cost allocation

Allocation Method	AGN SA	AGN Vic	AGN Other	DBP/DDG	MG
Equal Share	11%	11%	11%	33%	33%
Total Revenue	19%	20%	9%	35%	17%
RAB/Asset Base	19%	19%	8%	39%	15%
Total Expenditure	23%	27%	7%	24%	19%
Employee #s	5%	8%	2%	65%	20%
Employee + Contractor #s	15%	24%	5%	19%	37%
Customer #s	23%	35%	7%	-	35%

Source: DBP response to EMCa04 Q3

102. In its same response, DBP provided information on how it attributes costs between AGIG entities and DBP. DBP refers to cost coding and time writing practices that separately recognise AGIG and DBP costs and time incurred and also to expenditure on pre versus post 1995 assets.

Implications for our assessment

103. We looked for evidence of such allocations in DBP's AA6 project proposals, both for proposed AA6 capex and opex and for DBP's proposals for inclusion of conforming AA5 capex. While we find some reference to allocation of such costs between AGIG entities, we expected, but not find, evidence that capex investments (or associated capital-related costs) that appear to provide shared resources that service both regulated and unregulated requirements within DBP, are allocated accordingly in its regulatory submission. We would expect this to apply to DBP's AA5 and proposed AA6 capex on assets such as buildings, vehicles and ICT systems and infrastructure.

3.3 Conclusions and Implications for DBP's AA5 Proposal

104. While DBP's governance and management documentation appears largely adequate for BAU purposes, we consider (as we found for its AA5 proposal) that it is relatively weak as a framework for presenting plans for regulatory consideration, with the level of justification that can be considered reasonable in meeting the relevant criteria under the NGR. We find evidence of some weaknesses in DBP's application of a suitable framework including with regard to:

- Options analysis
- Cost Benefit Analysis
- Application of risk analysis at the aggregate portfolio level (as opposed to the individual project level)
- Consistently and transparently demonstrating appropriate allocation for assets with a degree of AGIG joint use, including ICT infrastructure, ICT application development and, for AA6, for its proposed Jandakot redevelopment
- Demonstrating appropriate allocation for opex proposal purposes, of employee costs to DBNGP as compared with other AGIG operations

105. We took these matters into account in reviewing DBP's AA5 and AA6 projects and (proposed) expenditures.

4 FORECAST DEMAND AND SYSTEM USE GAS

DBP proposes declining gas throughput and declining contract quantities. This also leads to a declining requirement for system use gas. We consider that DBP's forecasts are reasonable.

4.1 Introduction

107. In this section we present our review of DBP's demand forecast and its forecast System Use Gas (SUG) quantities. We consider the demand forecast to the extent that it can (potentially) affect proposed capex and also because the forecast throughput is a key determinant of the SUG requirement, which in turn is a significant component of opex.

4.2 Forecast gas demand

4.2.1 What DBP has proposed

DBP's capacity forecast

108. DBP has forecast both contracted capacity (MDQ) and throughput for each of the three reference services: Full Haul, Part Haul and Back Haul. DBP's AA6 forecast contracted capacity is shown in Table 4.1, together with its actual contracted capacity for AA5 up to 2023, and the 'benchmark' assumptions made for AA5 for each of these services.

109. DBP's contracted capacity was above the benchmark values set for AA5, notably for 2023 and which DBP explains as being due to a new contract that operated from this year.[14] We comment in sections below on DBP's somewhat lower forecast for AA6.

Table 4.1: DBP Capacity demand (TJ/d, Full Haul Equivalent)

	AA5 Actual					AA6 Forecast				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Full Haul T1										
Benchmark	*606.1*	*591.1*	*570.3*							
Actual/forecast	609.2	602.9	611.3			481.3	494.3	489.3	469.5	472.5
Part Haul P1 (FHE)										
Benchmark	*26.0*	*25.4*	*26.9*							
Actual/forecast	24.6	22.9	33.7			30.6	34.9	34.2	37.2	37.2
Back Haul B1 (FHE)										
Benchmark	*18.1*	*17.3*	*17.3*							
Actual/forecast	23.4	24.5	27.4			32.4	32.4	2.4	32.4	32.4
Total (FHE)										
Benchmark	*650.1*	*633.7*	*614.5*							
Actual/forecast	**657.2**	**650.4**	**672.4**			**544.3**	**561.6**	**525.9**	**539.1**	**542.1**

Source: EMCa, from data in DBP Final Plan, tables 13.2 and 13.5

[14] DBP Final Plan, page 125

DBP's throughput forecast

110. DBP has provided throughput information as shown in Table 4.2. The table shows a decline in throughput over AA5, and which was expected as per the benchmark throughput volumes as shown here. At our onsite meeting, DBP referred to closures including Alcoa Kwinana and BHP Nickel Refinery in explaining the falling demand, which is evident both in the contracted capacity information in Table 4.1 and in the falling throughput shown in Table 4.2.

111. On the working assumption that the proxy estimates that we have inserted in Table 4.2 are reasonable estimates for P1 and B1 service throughput in 2025, then DBP's 2026 forecast will be similar to 2025 throughput. This is also consistent with DBP's advice to Shippers that '*…the demand projections for AA6 in the Draft Plan are quite similar to the current levels in AA5, with many Shippers experiencing stable capacity and utilisation.*'[15]

Table 4.2: DBP actual and forecast throughput

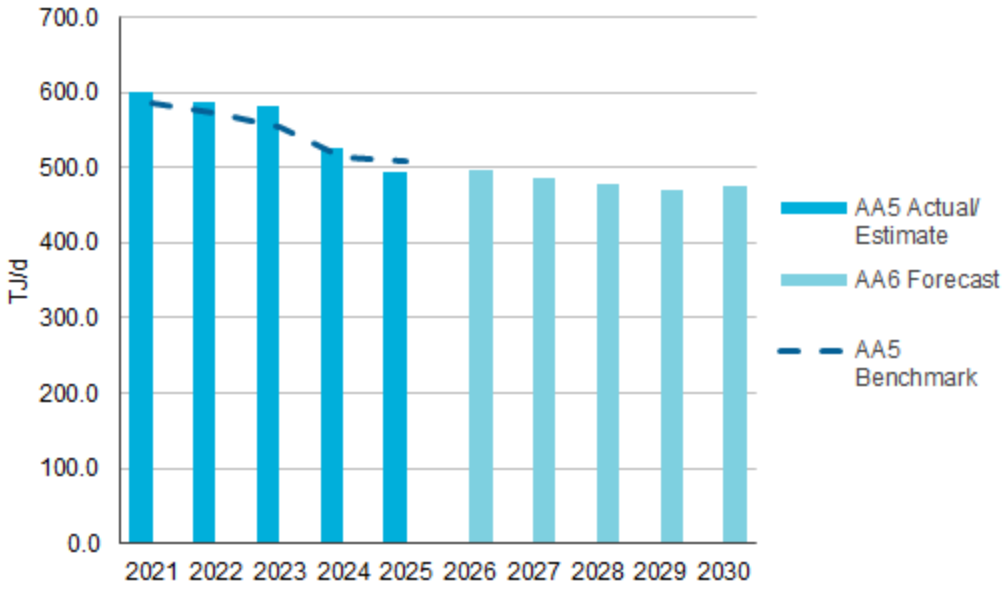
	AA5 Actual/Estimated					AA6 Forecast				
	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Full Haul T1										
Average	562.8	550.2	536.8	488.7	454.2	458.9	443.7	434.9	424.1	429
Benchmark	*555.3*	*540.8*	*521.6*	*465.9*	*459.6*					
Part Haul P1										
Average (FHE)	18.4	17.4	26.0	22.3*	22.3*	22.3	26.7	25.9	28.9	28.9
Benchmark (FHE)	*17.7*	*17.9*	*19.6*	*34.0*	*36.3*					
Back Haul B1										
Average (FHE)	19.5	20.2	20.4	16.4*	16.4*	16.4	16.4	16.4	16.4	16.4
Benchmark (FHE)	*13.9*	*13.3*	*13.3*	*13.3*	*13.3*					
TOTAL (Average FHE)	**600.7**	**587.8**	**583.2**	**527.4***	**492.9***	**497.6**	**486.8**	**477.2**	**469.4**	**474.3**

Source: EMCa, from data in DBP Final Plan, tables 13.3 and 13.7. (DBP data does not provide P1 and B1 FHE throughput figures for 2025 and 2025. We have entered proxy amounts equal to DBP's 2026 forecasts, in order to provide a closer approximation in the trend information, than would be the case with amounts of zero for these years)

112. In Figure 4.1 we show DBP's AA5 actual throughput together with its benchmark forecasts for that period, and its current forecasts for AA6. The graph shows that DBP's actual AA5 throughput (on an FHE basis) has been quite consistent with the benchmark forecasts for this period and illustrate the further decline in throughput that it forecasts over AA6.

[15] DBP Final Plan, page 124.

Figure 4.1: DBP's actual and forecast throughput (Full Haul Equivalent basis))

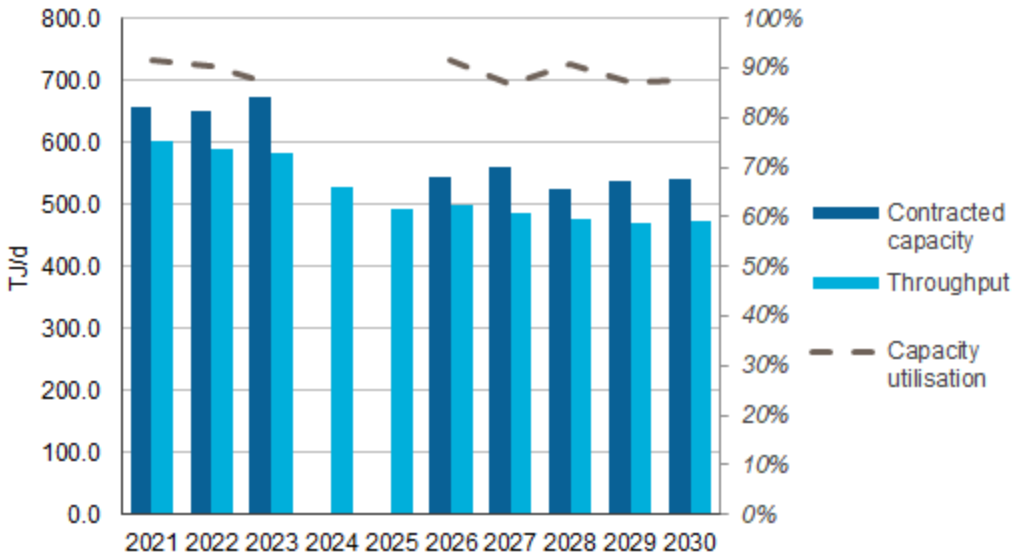


Source: EMCa analysis, from information provided in DBP Final Plan (section 13). (As per the source note under Table 4.2, we note that the AA5 Actual throughput values for 2024 and 2025 include proxy estimates for P1 and B1 services)

Capacity utilisation

113. In Figure 4.2 we show DBP's actual and forecast capacity and throughput, along with the capacity utilisation percentage derived from this. While a slight decline in capacity utilisation is evident over the first three years of AA5, the change in utilisation has been relatively small. Despite some slight annual fluctuations, DBP's forecast capacity and throughput imply relatively stable utilisation of contracted capacity and similar to that in AA5.

Figure 4.2: DBP's actual and forecast contracted capacity utilisation (%)



Source: EMCa, derived from data in DBP Final Plan tables 13.2, 13.3, 13.5 and 13.7. (Note DBP data for contracted capacity is incomplete for 2024 and 2025)

4.2.2 DBP's forecasting and verification approach

Contract information and advice from Shippers

114. DBP states in its Final Plan that its '*contracted capacity forecasts are based upon actual contracted capacity for AA6 where available…*' and '*(a) small number of Shippers will be finalised next year and therefore we have relied on information that they have provided to us at this time.*' DBP provided evidence of this information in a confidential attachment.[16]

115. DBP states that its '*…throughput forecasts are based on the contracted capacity forecast and historic capacity utilisation rates'*

Reconciliation against AEMO GSOO[17]

116. DBP has sought to reconcile its demand forecast against the South-West and Metro' component of the most recent GSOO from AEMO. DBP states that this covers around 90% of its demand, on a FHE basis.

117. A reconciliation between these two forecasts requires accounting for factors such the amount of gas delivered by non full-haul (T1) contracts, gas from non-reference services and gas flows into the South-West and Metro region through the Parmelia Pipeline. DBP has described its reconciliation and how it has taken these factors into account. [18] While all such 'adjustment factors' rely on assumptions, after making such adjustments DBP still finds its forecast to be significantly less than the AEMO GSOO.

118. DBP notes that AEMO has assumed that that the BHP Nickel refinery and the Alcoa Kwinana refinery both restart during the period. However, these assumptions are both contrary to DBP's information from the parties.

119. Even after accounting for these two differences in assumptions, DBP estimates that the AEMO GSOO is around 61TJ/day higher than its forecast by the end of AA6. The information in the AEMO GSOO is not sufficient to determine the reason for this difference but from circumstantial information in the GSOO and supporting documents, DBP considers that it lies in assumptions that AEMO appears to have made regarding fuel switching amongst alumina producers. However, DBP considers that such switching is either unlikely to occur, or if does, will be deferred relative to AEMO's assumptions, or that it will not be provided through its Full Haul T1 service.

120. DBP also notes that the parties that AEMO appears to be assuming to fuel switch have not approached DBP to discuss any possible service.

121. Having considered these various factors and assumptions, DBP therefore forms the view that its AA6 forecast is reasonable and, while its forecast is not the same as AEMO's GSOO, it has a reasonable explanation for the differences.

4.2.3 Observations

122. Noting that ERA is separately reviewing DBP's demand forecast, for the purpose of this report we consider that DBP has provided a reasonable forecast for AA6 contracted capacity and for throughput. Our observations on this are informed by the following factors:

- DBP's contracted capacity forecast is almost entirely based on contracts already agreed or information from 'notices of intent' and similar correspondence with Shippers.
- It is reasonable to assume that DBP is in the best position of any party to understand that further need of its customers and that a bottom-up forecast transparently based on this information is therefore likely to be a reasonable forecast.
- DBP's forecasts of capacity and throughput are relatively consistent with current levels

16 DBP Attachment 13.2, Full Haul Contracted Capacity Evidence (January 2025) (CONFIDENTIAL)

17 Information in this section is from DBP Attachment 13.1, pages 3 to 6

18 DBP Attachment 13.1: Further Information on Demand (January 2025) (CONFIDENTIAL)

- DBP's throughput forecast implies relatively consistent utilisation of contracted capacity
- DBP has sought to reconcile its forecast with an independent source (AEMO GSOO) and has provided reasonable evidence of having explored and explained the reasons for differences from this forecast.
- In that DBP's forecast is lower than the GSOO forecast, DBP's forecast is consistent with the trend towards lower gas demand that is evident in AA5 and which we consider to be a realistic continuing trend.
- We also note that the benchmark forecast of DBP's demand for AA5 was a reasonable estimate of eventual throughput, as shown in Figure 4.2.

4.2.4 Conclusions on DBP's gas demand forecast

123. For the purpose of this report, we consider that DBP's demand forecasts are reasonable, both for contracted capacity and for throughput.

124. DBP's capex forecast does not rely on any demand growth assumptions. Its compressor overhaul forecasts are to some extent dependent on throughput and, in later sections of this report, we look for evidence that its expenditure forecasts are consistent with the decline in throughput that DBP forecasts.

125. DBP's forecast SUG expenditure is directly related to its throughput forecast.

4.3 System Use Gas

126. DBP's forecast for System Use Gas quantity is directly derived from its forecast full-haul throughput. DBP explains that it has used the same hydraulic modelling in producing this forecast as it did for AA5, changing two provisions to account for '*likely impacts on compressor operation from changing operational dynamics*'[19].

127. As shown in Table 4.3, DBP estimates that its fuel efficiency will improve from [redacted] in 2026 to [redacted] by 2030. Its proposed average of [redacted] compares with an average of [redacted] over AA5, and DBP explains that this is because in AA6 it '*…will be operating on the lower part of the fuel curve.*'.[20]

Table 4.3: DBP Fuel efficiency forecast

	2026	2027	2028	2029	2030	Average
SUG Requirement	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
F/H Throughput	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	
Fuel efficiency	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: DBP Tariff model, Att 14.1

128. We further examined DBP's forecast to understand the relationship with throughput, as shown in Table 4.4. As expected, we find from its model that it allows for two 'fixed' components (CS fuel and 'other system use' gas, and that the majority of its SUG forecast is a direct function of its throughput forecast, and with this being the full haul forecast that we have shown in Table 4.2.

[19] DBP Final Plan, page 78

[20] DBP Final Plan, page 77

Table 4.4: SUG fixed and variable components

	2026	2027	2028	2029	2030
SUG Requirement (Average Fuel Usage)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
PIA Offset Gas [TJ/day]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Less					
DBNGP CS10 fuel [TJ/day]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Other System Use Gas [TJ/day]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total (TJ/day)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
F/H Throughput (TJ/day)	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SUG variable ratio	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

Source: DBP Tariff model, Att 14.1

129. We consider that DBP's forecast SUG quantity is reasonable.

4.4 Conclusions and implications for DBP's AA6 proposal

130. We conclude that DBP's forecast gas demand and forecast SUG quantity are both reasonable forecasts.

5 AA5 CONFORMING CAPEX

DBP proposes AA5 capex of $212.8m is accepted as conforming. This would be $30m more than ERA's allowance for the period.

We consider that not all of the capex that DBP has proposed meets the criteria to be considered conforming capex. We consider that part of its significant cost overrun on its OneERP project, some metering costs and some expenditure on its proposed Jandakot redevelopment are not conforming.

We consider that $193.1m of DBP's capex meets the relevant criteria. This is 9% less than DBP has proposed.

5.1 Introduction

132. This section contains our assessment of the capex incurred (or to be incurred) by DBP in AA5. We have undertaken this review using the assessment framework set out in Appendix A and having regard to our findings in section 3.

133. The results of our review and our overall assessment of whether this capex satisfies the capex criteria for the purposes of determining the level of conforming capex under the NGR are set out below.

5.2 DBP's proposed conforming capex for AA5

5.2.1 Overview of DBP's proposal

134. DBP proposes to include its AA5 expenditure of $212.8m as conforming capex in rolling forward its Regulatory Asset base (RAB). This is $30.7m (17%) more than the ERA allowance for the period and represents a 68% increase on DBP's capex in AA4.

135. As can be seen in Table 5.1, the main source of this increase is higher expenditure on Computers and Motor Vehicles and, as we show in subsections below, this is largely attributable to a single IT project. DBP also incurred materially more than the allowance for Cathodic/corrosion protection and for Metering, but in aggregate this was offset by lower spending on the Building and Compression categories.

Table 5.1: DBP proposed conforming capex for AA5 (m, real December 2024

Business case	AA4 Actual	AA5 All'nce	2021 (A)	2022 (A)	2023 (A)	2024 (E)	2025 (E)	AA5 Act / Est
Building	**3.3**	**19.8**	0.6	1.2	-0.2	1.0	4.4	**6.9**
Cathodic/Corrosion Protection	**6.8**	**16.7**	4.8	6.1	6.9	3.9	3.0	**24.8**
Compression	**15.1**	**19.6**	3.2	4.1	5.1	1.6	1.3	**15.4**
Computers and Motor Vehicles	**21.8**	**32.7**	17.3	7.1	18.2	5.1	9.2	**57.0**
Metering	**31.8**	**8.3**	4.7	2.9	3.6	3.3	2.5	**17.0**
Other Depreciable	**11.3**	**9.7**	2.9	2.7	0.5	1.8	1.8	**9.7**
Pipeline	**1.1**	**0.0**	0.0	2.5	1.1	0.0	0.0	**3.6**
SCADA, ECI And Comms	**35.5**	**75.2**	9.2	16.5	16.7	20.9	15.1	**78.5**
Total	**126.8**	**182.1**	**42.6**	**43.1**	**52.0**	**37.7**	**37.3**	**212.8**

Source: EMCa table derived from DBP's response to Information Request EMCa03

5.2.2 Information sources and our assessment process

Information source on AA5 expenditure

136. In its primary submission document[21] DBP provides little information to support its proposed AA5 conforming capex, with only 2.5 pages[22] (in section 9.9) of the 136-page document providing data on the aggregate AA5 expenditure that DBP is claiming, together with brief descriptions of what DBP did. Its supporting capex model covered only the years 2026 to 2030, and did not provide historical data on annual capital expenditure incurred (or forecast) on projects in AA5.

137. We sought AA5 expenditure information in EMCa03 and asked for this to be categorised by asset class and business case (where applicable), together with DBP's calculations of the equivalent AA4 expenditure and ERA allowances, similarly categorised and updated to $2024, consistent with DBP's AA6 proposal.

138. DBP provided this information in a well-structured form, consistent with our request and we were able to reconcile this information with aggregates that DBP had provided in its documents. From this we were able to create a concatenated database of time-series capex information from 2016 through to proposed capex for 2030 that provided a listing of the specific projects and associated expenditures that we have been asked to review.

Information supporting acceptance as conforming capex

139. We then sought information from DBP to support its claims that its AA5 expenditure on the revealed projects was conforming capex. The brief overviews in the Final Plan of 'what was done' were not sufficient for this purpose and the business cases that DBP provided tended to focus on its AA6 proposals, with only occasional references to work undertaken in AA5. To supplement information provided at the onsite meetings (17th and 18th March), we therefore sought information through a series of information requests to support our assessment of AA5 capex.[23] We received DBP's responses between 7th and 15th April 2025 and our assessment is primarily based on this information.

[21] Five year plan for the Dampier Bunbury Natural Gas Pipeline, 1 January 2026 – 31 December 2030. FINAL Plan (January 2025)

[22] As above. Section 9.9.

[23] IR EMCa05 to EMCa17

Our overall assessment approach

140. We have chosen to undertake our assessment based on DBP's primary presentation of its expenditure, which is at the 'asset class' level, and which it utilises both in referring to its AA5 expenditure and its proposed expenditure in AA6.

141. Below this level, DBP categorises the majority of its AA5 projects according to one of 15 'business cases'. While the content of these business cases largely focus on DBP's proposals for AA6, they nevertheless in many cases provide context for the nature of work conducted in AA5. There is a 'many-to-many- relationship between business cases and asset classes, however aided by DBP's response to our IR EMCa03, we have been able to undertake our assessment at the asset class level, while being able to refer to the relevant business case for justification at the project level.

142. For the most part, we have therefore undertaken our assessments for each asset class, at the grouped level of projects falling under a given business case. However, we have assessed individual projects where they are of a unique nature (examples being the ICT project to implement OneERP or for a number of site-specific metering projects).

143. While our assessment relates to the whole of what DBP has proposed for AA5, we have undertaken a deeper assessment for larger one-off projects and groups of projects with expenditure that we would expect to be relatively stable, but for which DBP's reported expenditure is both higher than the historical trend and higher than ERA's AA5 allowance.

5.3 Our assessment

5.3.1 Compression asset class

What DBP proposed

144. DBP expects to spend $15.4m in AA5 on Compression, a $4.3m reduction from its ERA approved forecast of $19.6m. As shown in the table below, the various projects that DBP has classified as related to 'compression' have been aggregated into four business cases.

Table 5.2: Summary of AA5 compression asset capex by business case - $m, real 2024

Business case	AA4 actual	AA5 Allowance	AA5 Actual	*Variance*
DBP01: Compressor Stations	13.69	11.88	9.28	*-2.60*
DBP02: Pipeline and MLV	0.00	1.46	0.96	*-0.50*
DBP18: Turbine exhaust replacement	0.00	5.79	2.77	*-3.03*
DBP38: Structures & Operational Sites	1.41	0.49	2.36	*1.87*
Total	**15.11**	**19.62**	**15.37**	***-4.26***

Source: EMCa table derived from DBP's response to Information Request EMCa03

145. In aggregate DBP spent less on compressors than the allowance and less than it had incurred in AA4. We focused attention on DBP's justification for three projects for which there was either no allowance or (in one case) a minimal allowance made, as shown in Table 5.3:

- Working at heights upgrades
- Compressor air package replacement
- Relocating unit piping above ground at CS3.

Table 5.3: Summary of AA5 Compression asset class projects - $m, real December 2024

Project	AA4 actual	AA5 Allowance	AA5 Actual	*Variance*
CP1700014: Working at height upgrades at Compressor Stations	1.41	0.00	1.76	*1.76*
CP1700282: Compressor Air Package Replacement	0.14	0.00	0.79	*0.79*
CP1700499: Relocate Unit Piping to above ground at CS3	0.00	0.36	1.63	*1.27*
Other projects	13.55	19.26	11.18	*-8.08*
Total	**15.11**	**19.62**	**15.37**	***-4.26***

Source: EMCa table derived from DBP's response to Information Request EMCa03

Working at heights upgrades

146. An audit of compliance with AS1657 was conducted in 2023/2024 and identified 733 non-compliances. These were risk assessed and prioritised with work on the sites with the highest risk ranking commencing during AA5.[24] The initial works involved design and installation of work platforms to access compressor air inlet filters.

It is reasonable for the operator to have commenced these works during AA5 and the costs appear reasonable.

Compressor air package replacement

147. These are 'end of life' assets for which replacement is inevitable. While no replacement was originally planned in this period the programme was brought forward based on risk assessment. Discussion during the onsite presentations[25] demonstrated that this action was reasonable.

148. DBP has proposed an allowance for a significantly greater replacement program in AA6, and which we assess in section 6. This work will be a continuation of the work done in AA5 based on the same risk criteria as explained at the onsite.

Relocate unit piping to above ground at CS3

149. While this work was planned, the cost was considerably greater than the allowance. AGIG explained at the onsite that a site inspection and subsequent risk assessment identified that the originally proposed approach to the project would not be prudent. A different approach requiring additional resources, but with acceptable risk, was developed and implemented. We consider that the approach adopted was reasonable.

Other projects

150. Of the remaining projects, for which aggregate spend was less than the allowance, the major contributors to this are:

- Turbine exhaust replacement[26], for which DBP incurred around $3m less than the allowance, and
- Three valve replacements[27], for which DBP incurred around $3.4m less than the allowance.

151. For two of the valve replacement projects, it appears that the work was not required and has not been proposed for AA6. For one valve replacement project and for the turbine exhaust replacement, less was incurred in AA5 but further work is proposed for AA6. For the

[24] Response to EMCa06

[25] Onsite presentation slide 29 and associated discussion

[26] Project CP1700483

[27] Projects CP1700503, 504, 505

remaining projects, similarly the project was found either not to be required or able to be deferred.

Findings

Proposed expenditure is conforming

152. We consider that DBP's proposed inclusion of $15.37m conforming capex for Compression is justified.

5.3.2 Corrosion protection asset class

What DBP proposed

153. DBP's actual/estimated capex in the AA5 period in the Corrosion protection category is $24.8m across four business cases. This is $8.0m or 48% higher than the $16.7m ERA Allowance, as shown in the following table.

Table 5.4: Summary of AA5 corrosion protection asset capex by business case - $m, real 2024

Business case	AA4 actual	AA5 Allowance	AA5 Actual	*Variance*
DBP01: Compressor Stations	4.71	13.21	18.39	*5.18*
DBP02: Pipeline and MLV	0.76	2.42	4.05	*1.62*
DBP15: Meter Stations	1.37	1.10	2.31	*1.21*
DBP38: Structures & Operational Sites	0.00	0.00	0.00	*0.00*
Total	**6.84**	**16.73**	**24.75**	***8.02***

Source: EMCa table derived from DBP's response to Information Request EMCa03

154. Two projects contribute entirely to DBP spending more than the ERA allowance, as shown in Table 5.5:

- Annual dig up program, and
- Rectification of corrosion under insulation at compressor stations.

Table 5.5: Summary of AA5 capex for the Corrosion Protection asset class projects - $m, real December 2024

Project	AA4 actual	AA5 Allowance	AA5 Actual	*Variance*
CP1700076: Annual digup program based on Runcom results	0.48	0.18	1.91	*1.72*
CP1700560: Rectification of Corrosion Under Insulation at CS	0.00	0.00	6.18	*6.18*
Other projects	6.36	16.55	16.67	*0.12*
Total	**6.84**	**16.73**	**24.75**	***8.02***

Source: EMCa table derived from DBP's response to Information Request EMCa03

Annual digup program

155. AGIG completed more dig-ups than forecast[28] during AA5. During discussion at the onsite, AGIG stated that they had also found more issues requiring rectification. Based on information provided, we consider that the expenditure was justified.

[28] Onsite Presentation Slide 30

Rectification of corrosion under insulation

156. Corrosion under insulation is a known issue for pipelines with the problems increasing as they age. In its response to EMCa13 (which refers to AA6, AGIG states "This project is a continuation of the existing program and enables us to have sufficient provision to address the recent escalating integrity issues at pipeline ground to air transitions"[29]. The photographs included with Business Case Opex DBP19 Section 1.3.2 demonstrate the nature of the issue[30] .

157. The work done during AA5 helped to clarify the issue. During discussion at the onsite, AGIG explained that it had been found that in some locations replacement of pipe spools would be more prudent than to carry out in-field repairs due to the extent of the corrosion.

158. The photographic evidence provided, industry experience and the comprehensive list of sites to be rectified[31] indicate that the work to identify the issues and commence rectification was prudent. The explanations provided by AGIG regarding the nature and complexity of the works within operating facilities at the onsite indicate that the costs are reasonable.

Other projects

159. For the remaining projects, aggregate expenditure was consistent with the allowance, with variances for individual projects reflecting responses to information revealed in the period on condition and opportunities for prudent deferral.

Findings

Proposed expenditure is conforming

160. We consider that DBP's proposed inclusion of $24.75m conforming capex for Corrosion Protection is justified.

5.3.3 Pipeline asset class

What DBP proposed

161. DBP's actual/estimated capex in the AA5 period in the Pipeline asset class is $3.6m. The projects that DBP undertook were not allowed for in ERA's allowance for the period.

162. DBP undertook two significant projects that were not envisaged in the allowance and which comprise the dominant expenditure incurred, as shown in Table 5.6.

- Heritage Act project, and
- WAWP to Loop1 Interconnect

Table 5.6: Summary of AA5 capex for the Pipeline asset class projects - $m, real December 2024

Project	AA4 actual	AA5 Allowance	AA5 Actual	*Variance*
CP1700559: Heritage Act Project	0.00	0.00	1.25	*1.25*
CP1700563: WAWP to Loop1 Interconnect	0.00	0.00	1.95	*1.95*
Other projects	1.11	0.00	0.37	*0.37*
Total	**1.11**	**0.00**	**3.57**	***3.57***

Source: EMCa table derived from DBP's response to Information Request EMCa03

[29] Response to EMCa13

[30] BC Opex DBP19 Section 1.3.2

[31] Response to EMCa13

Heritage Act project

163. The Western Australian Parliament passed the *Aboriginal Cultural Heritage Act* in 2021 but repealed it in 2023. The Act imposed greater obligations on businesses and individuals than the former *Aboriginal Heritage Act 1972* (which was reinstated in 2023). As the 2021 Act had been passed, it was prudent for AGIG (and all businesses in Western Australia to which it could have applied) to fully assess the implications.

164. There was strong opposition from business groups and many community groups to the Act. It quickly became apparent that the Act would be heavily amended or even repealed to address significant shortcomings in the drafting.

165. While it was prudent to assess the implications of the Act during its development and immediately after it was passed, it was not prudent to continue any material activities once it became clear that the Act would not survive in the form in which it was passed. It was definitely not prudent to commence implementing any required changes to processes and procedures to meet the requirements of the Act.

166. We find that DBP incurred expenditure through a period when it was reasonable to assume that the Heritage Act would come into force. We therefore consider that it is reasonable to consider this to be conforming capex.

WAWP to Loop1 Interconnect

167. The internal business case provided in response to IR EMCa 07 Q8 sets out the rationale for the project:

> *"The interconnection pipeline was identified during a review of opportunities to use bi-directional flows and the changing hydraulics of the pipeline to provide security of supply and continuity of service for the benefit of our customers and shippers. By installing this pipeline, we can help ensure customers connected all along the DBNGP experience the current good levels of service and security of supply. Without this investment, there is a risk that the changing hydraulics, flows and usage patterns in the DBNGP may result in supply being compromised"*[32].

168. The relatively small investment of $1.95M is prudent to mitigate against the risk of gas flows or gas quality being impacted by outages at any of the Carnarvon Basin producer facilities in an environment where multiple producers are supplying gas at varying rates on a daily basis.

Other projects

169. There are only two other AA5 projects, with relatively minor expenditure in aggregate. We are satisfied that these amounts were reasonably incurred.

Findings

Proposed expenditure is conforming

170. We consider that DBP's proposed inclusion of $3.57m conforming capex for Pipelines is justified.

5.3.4 SCADA, ECI & Comms asset class

What DBP proposed

171. DBP's actual/estimated capex in the AA4 period in the SCADA, ECI, and Comms category is $78.5m, which is $3.2m more than the $75.2m ERA allowance.

[32] Response to EMCa 07 Q8

Table 5.7: Summary of AA5 capex for the SCADA, ECI, & Comms asset class - $m, real December 2024

Project	AA4 actual	AA5 Allowance	AA5 Actual	*Variance*
CP1700458: Replacement of Northern Communications System	0.00	30.35	35.31	*4.96*
CP1700550: CCVT Replacement	0.00	0.00	4.71	*4.71*
Other projects	35.52	44.89	38.46	*-6.43*
Total	**35.52**	**75.24**	**78.48**	***3.24***

Source: EMCa table derived from DBP's response to Information Request EMCa03

172. As shown in Table 5.7, the major SCADA and comms project in AA5 was for Replacement of Northern Communications System. This project was envisaged and included in the allowance, though actual expenditure was $5m more than the allowance.

173. A further project – CCVT Replacement - was not included in the AA5 allowance.

Replacement of Northern Communications System (business case DBP08)

What DBP has proposed

174. DBP planned replacement of its Northern Communications System in AA5 and the ERA included a capex allowance for this in its AA5 determination. As shown in Table 5.8, DBP's AA5 allowance for this project comprised a 'SCADA, ECI and Comms' asset and a 'building' asset.

Table 5.8: Project cost information for Northern Communications Project

Project	AA5 Allowance	AA5 Actual	*AA5 Variance*	Proposed AA6	Project total
CP1700458: Replacement of Northern Communications System					
Asset: SCADA, ECI and comms	30.35	35.31	*4.96*	3.80	39.11
Asset: Building	6.20	0.62	*-5.58*	0.00	0.62
Total	**36.55**	**35.93**	***-0.62***	**3.80**	**39.73**

Source: EMCa table derived from DBP's response to Information Request EMCa03

175. DBP delayed commencement of the project for around two years, in the first place due to logistical challenges from the covid lockdowns, then because the quotation that it received from [redacted] exceeded its budget (and the ERA allowance) by over $20m. DBP made the decision then to manage the project in house and established a baseline project budget of $38.84m. In a response to our information request (EMCa09, Q10), DBP advises that 'the *'forecast cost at completion is within the baseline budget*'.

Our assessment

176. As shown in Table 5.8, in AA5 DBP has spent $0.62m less than its AA5 allowance overall. However, inspection of this by asset shows that DBP spent $4.96m more than the allowance for the SCADA ECI and Comms asset and is proposing a further $3.8m in AA6, meaning that this component will exceed the AA5 allowance by around $8.8m. Against this, DBP appears not to have taken a much lower-cost approach for the 'building' component of the project and has not proposed an allowance for this component in AA6. However, our assessment is of the project cost as a whole, comprising both 'assets' and the expenditure spanning both regulatory periods.

177. This has been a major project for DBP. We see evidence of DBP having modified its approach in response to changing information and circumstances and on balance and we

consider that DBP has prudently incurred expenditure to date, albeit by (it appears) reprioritising the asset makeup of the project towards the SCADA ECI and comms assets.

Considering the project as a whole, we consider it reasonable to accept AA5 capex as conforming, but we consider that a proposed additional allowance in AA6 is not justified

178. We consider that DBP's AA5 expenditure represents conforming capex. However, there is a discrepancy between DBP's advised baseline project total cost of $38.84m and the total of $39.73m for the Northern Communications System project (as shown in Table 5.8) that would result from acceptance of its proposed AA6 allowance. While we therefore propose accepting the AA5 expenditure as conforming capex, as discussed in section 6 we propose a $0.89m reduction of DBP's proposed AA6 allowance, which would then be $2.91m.

CCVT replacement

179. The documentation provided in response to IR EMCa15[33] demonstrates that a detailed evaluation of available technologies was conducted in developing the approach to the replacement of the end-of-life unsupported CCVT's used for power generation at remote MLV sites. The PV / Battery technology is widely used in the pipeline industry for these applications. We consider that the expenditure is conforming.

180. DBP proposes further replacement of these assets in AA6 at a cost of $9.5m, which we consider in section 6.

Other SCADA and comms projects

181. Given the scale of expenditure on these assets we further analysed expenditure on projects other than the two dominant projects referred to above. As shown in Table 5.9, the largest of these other projects (CP1700184) came in slightly under the allowance. The aggregate result of incurring $6.4m less than the allowance, for this cohort of projects, results from a range of 'unders and overs' on individual projects, though the net result largely results from several projects that were included in the allowance, being not required.

182. We are satisfied that the outcome for this cohort reflects reasonable re-prioritisation during the period, with the aggregate result being a lower level of spend.

[33] CP1700550 Replacement of CCVT's at MLV Sites with PV and Batteries Basis of Design

Table 5.9: Further analysis of variance for other SCADA and comms projects

Analysis of variance for 'other' projects	AA5 Allowance	AA5 Actual	*Variance*
CP1700184: Compressor unit control system replacement	19.65	18.42	*-1.22*
CP1700311: Installation of Fire Suppression System	2.38	1.79	*-0.59*
CP1700377: SCADA Hardware upgrade - Servers	1.06	0.92	*-0.15*
CP1700471a: CS unit F&G monitoring system replacement (ACS)	2.20	0.00	*-2.20*
CP1700471d: CS unit F&G control system replacement (Stage 4)	1.46	0.00	*-1.46*
CP1700489: Station PLC replacement	1.83	1.83	*0.00*
CP1700494: RTU replacement	1.27	0.33	*-0.94*
CP1700511.21: GEA control system replacement (GE for Waukesha)	1.10	0.00	*-1.10*
CP1700511.23.001: GEA control system replacement (ESM for GEA)	2.75	0.00	*-2.75*
CP1700511.23.002: GEA control system replacement (Allen Bradley for Waukesha)	2.75	0.00	*-2.75*
CP1700511.24.001: GEA control system replacement (Intellisys for DEA)	1.10	0.00	*-1.10*
CP1700511: GEA and DEA control system replacement	0.00	2.94	*2.94*
Remainder	7.35	12.22	*4.87*
Total	**44.89**	**38.46**	***-6.43***

Source: EMCa table derived from DBP's response to Information Request EMCa03

Findings

Proposed expenditure is conforming

183. We consider that DBP's proposed inclusion of $78.48m conforming capex for SCADA and comms is justified.

5.3.5 Metering asset class

What DBP has proposed

184. DBP's actual/estimated capex in the AA5 period in the Metering asset class is $17m, as shown in the table below. This is $8.7m more than the $8.3m ERA allowance, with almost all of the expenditure covered under the Meter Stations business case.

185. In Table 5.10 we show the projects that are responsible for the majority of the variance. For three of these projects (numbers CP1700017, 476 and 482) we considered information to confirm whether these assets are pre- or post-1995, and which determines whether the expenditure is considered Conforming Capex in relation to the Covered Pipeline. For the three Alcoa projects, we considered whether these projects relate to a specific customer, and similarly therefore whether the expenditure is Conforming Capex.

Table 5.10: Summary of AA5 capex for the Metering asset class - $m, real December 2024

Business case	AA4 actual	AA5 Allowance	AA5 Actual	*Variance*
CP1700017: Upgrade of Odorant Facilities at Meter Stations and Kingtool filling facilities	2.47	0.00	1.69	*1.69*
CP1700369: Alcoa Kwinana Facilities Upgrade (in line with our recommendation to DMIRS)	2.52	0.00	2.19	*2.19*
CP1700476: Turbine meter refurbishment & replacement	0.00	0.27	1.11	*0.84*
CP1700482: Heater fuel gas train replacement	0.00	1.46	2.55	*1.09*
CP1700567: Alcoa Pinjarra Run1 Inlet Valve Replacement	0.00	0.00	0.88	*0.88*
CP1700568: Alcoa Wagerup Run3 Outlet Valve Installation	0.00	0.00	0.51	*0.51*
Other projects	26.83	6.59	8.07	*1.48*
Total	**31.82**	**8.32**	**17.00**	***8.68***

Source: EMCa table derived from DBP's response to Information Request EMCa03

Projects CP1700017, CP1700476 and CP1700482

Criteria for defining what constitutes conforming capex by reference to Existing Stations

186. Clause 6.12(b) of the T1 Reference Service Contract states:

> *"The Operator is not entitled to impose any charges under clauses 6.6, 6.8 or 6.11 or otherwise under this Contract in respect of Existing Stations, except in relation to the incremental costs of the design, installation, maintenance and operation of a modification of an Existing Station which occurred, or occurs, after 1 January 1995"*[34].

187. This is because all new inlet and outlet points installed after 1 January 1995 were fully funded, including operations and maintenance, alterations and enhancements, by shippers using the relevant point.

Our assessment against the criteria

188. The response to IR EMCA08 sets out the seventeen locations at which works were carried out across these three projects. It shows that:

- Work was done on the five odorant facilities (CP1700017). However, one of these is Carnarvon Meter Station, which is not an Existing Station, therefore this expenditure is not conforming.
- Meter Replacement work was done at ten sites (CP1700476). One of these is Mondarra Meter Station, which is not an Existing Station and is therefore not conforming; expenditure at the other nine sites was conforming.
- Work was done on two Gas Train Water Heater Bath sites (CP1700482), both of which are Existing Stations, therefore this expenditure is conforming

189. The equipment on which work was done was beyond end of life and in poor condition and the costs incurred were in line with industry norms for these types of projects, so the costs were efficient. DBP's capex for the two projects in which one of the stations was not an Existing Station, therefore does not fully conform. For these two projects we consider that a reasonable alternative amount can be obtained by making a pro rata adjustment, based on

[34] T1 Reference Service Terms and Conditions cl6.12(b)

the station that is not an Existing Station relative to the total number of stations worked on in the project. Adjustments consistent with this are therefore:

- CP1700017 reduced by 20%;
- CP1700476 reduced by 10%.

190. No adjustment to CP1700482 is required.

Projects relating to assets supplying Alcoa (CP1700369, CP1700567, CP1700568)

191. The metering stations which supply the Alcoa sites are defined as Existing Stations[35] and, accordingly, expenditure at these sites is conforming.

Other projects

The aggregate expenditure on other projects was greater than the allowance because of new projects

192. We then further investigated the source of the $1.5m variance for 'other projects'. As shown in Table 5.11, this variance is attributable to a number of 'new' projects that were not envisaged in setting the allowance for the period. For remaining projects, which comprised $6.18m incurred, we find that the majority were included in the AA5 allowance and came in at around the cost allowed for, but in aggregate cost slightly less.

Table 5.11: Further analysis of variance for other metering projects

Analysis of variance for 'other' projects	AA5 Allowance	AA5 Actual	*Variance*
2024-New10: Alcoa Pinjarra Cogen Flow Meter	0	0.27	*0.27*
2024-New11: Burrup Fertiliser MS Flow Meter Replacement	0	0.19	*0.19*
2024-New12: Cape Preston Gas Chromatograph	0	0.21	*0.21*
2024-New6: Alcoa Pinjarra Corroded Heater Piping Repair	0	0.26	*0.26*
2024-New8: Re-orientation of WLPG Odorant Bund	0	0.14	*0.14*
2024-New9: Safe Access Upgrades to MS	0	0.26	*0.26*
CP1700167: Retrofit Remote Isolation Valve Actuator @ MS -FY15/16	0	0.36	*0.36*
CP1700471: New Gas Analysers	0	0.20	*0.20*
Remainder of projects	6.59	6.18	*-0.41*
Total	**6.59**	**8.07**	***1.48***

Source: EMCa table derived from DBP's response to Information Request EMCa03

Assessment of specific sites reveals that not all are Existing Stations and therefore some expenditure is not conforming

193. Our project by project assessment is as follows:

- Projects 2024-New10 and 2024-New6 were necessary works to repair damaged or failed equipment identified during routine maintenance checks. The Alcoa sites are Existing Stations and accordingly, this is conforming expenditure.
- Projects 2024-New11 and 12 are not conforming as neither the Burrup Fertilisers nor the Cape Preston Meter Station is an Existing Station.

[35] Response to EMCa08

- The facilities at WLPG are an Existing Station so works necessary to ensure that the odorant facilities comply with environmental requirements are prudent and the expenditure is conforming.
- Project 2024-New9 would appear to be a routine maintenance activity required to ensure that access roads into meter stations are always safe for use by light vehicles. This would appear to be more appropriately treated as an expensed routine maintenance activity and not capex.
- It is unclear to which facility CP1700167 refers, but the name implies that it relates to facilities constructed during FY15/16 in which case the expenditure is not conforming.
- CP1700471 is for the acquisition of new gas analysers at unspecified locations. DBP has not provided any justification as to why these GCs are required so it is assumed that the relatively minor expenditure of $207,000 in AA5 is preparatory work for project DBP15 New04 in AA6 for installation of analysers at inlet points. As responsibility for the quality of the gas delivered into the pipeline is the responsibility of the shippers, this expenditure should be recovered from the shippers using the relevant inlet points and is therefore not conforming.

Findings

Most but not all of DBP's proposed expenditure is conforming capex

194. We consider that DBP's proposed inclusion of $17.00m conforming capex for Metering is not justified. We consider that a reasonable alternative value is $1.8m less than what DBP has proposed, based on the exclusion of those projects referred to above that are non-conforming or for exclusion of a proportion of such expenditure where part of it was not conforming.

Table 5.12: DBP proposed and EMCa adjusted conforming AA5 capex for Metering - $m, real Dec 2024

Project	ERA allowance	DBP Proposed	EMCa Adjustment	EMCa Adjusted	*EMCa Adjustment (%)*
DBP15: Meter Stations - Conforming	7.72	12.88	0.00	12.88	*0%*
DBP15: Meter Stations - Proportion not conforming	0.27	2.80	-0.45	2.35	*-16%*
DBP15: Meter Stations - Not conforming[36]	0.15	1.37	-1.37	0.00	*-100%*
Other metering (including DBP01, DBP03, DBP38)	0.18	-0.06	0.00	-0.06	*0%*
Total	**8.32**	**17.00**	**-1.82**	**15.18**	***-11%***

Source: EMCa

5.3.6 Computers & Motor Vehicles asset class

What DBP proposed

195. DBP expects to spend $57.0m in the AA5 period on Computers & Motor Vehicles, a $24.3m increase from its ERA Approved forecast of $32.7m.

196. While expenditure on vehicles was $1.1m (or 20%) greater than the allowance, the majority of the $24.3m expenditure in excess of the allowance is IT-related. In our assessment below, we focus on the IT projects that have led to this variance.

[36] Comprises projects 2024-New11, 2024-New12, 2024-new9, CP1700167, CP1700261, CP1700471. For project CP1700261, see assessment in section 6.7.2. DBP had $0.16m expenditure in AA5 for this project, and which is included within 'Remainder of projects' in Table 5.11.

Table 5.13: Summary of AA5 capex for the Computers & Motor Vehicles asset class - $m. real December 2024

Project	AA4 actual	AA5 Allowance	AA5 Actual	*Variance*
4070-CIT-000109: Data Centre Infrastructure	0.00	0.00	1.89	*1.89*
CP1700368: Maximo Business Process Redesign	0.66	1.42	3.35	*1.93*
CP1700407: OneERP S/4HANA Implementation	3.57	11.46	28.08	*16.62*
CP1700161: CRS upgrade	0.76	3.40	0.43	-2.98
DBP21-New-04: IT Sustaining Applications - refreshes of core business applications - TBS	0.00	0.00	5.17	*5.17*
Other projects	16.79	16.45	18.11	1.66
Total	**21.79**	**32.73**	**57.03**	***24.30***

Source: EMCa table derived from DBP's response to Information Request EMCa03

OneERP S/4HANA implementation

We assessed DBP's originally-proposed expenditure allowance for an ERP implementation and this was included in ERA's AA5 determination

197. We first reviewed DBP's ERP implementation as part of our Technical Review for its AA4 capex allowance. Initially, DBP was proposing an upgrade of its Microsoft Dynamics application at a cost of $3.0m ($2019) in 2020 (i.e. in AA4) to be followed by a further $2.0m ($2019) in AA5 (2021 to 2023). This was to be an interim solution, pending implementation of a 'OneERP' AGIG-wide solution that at that time was planned for implementation in 2023. In our assessment, we recommended against accepting this allowance and suggested instead that DBP consider the option of advancing OneERP, avoiding the need for the proposed $5.0m interim solution.[37]

198. DBP based its AA5 revised proposal on the option that we had suggested considering in our assessment of its initial proposal, namely replacing Microsoft Dynamics with SAP S/4HANA in each of the AGIG businesses. DBP stated that it would spend $3.2m on this in AA4 (and which would have been in the December quarter of 2020) with a further cost of $9.5m in AA5, bringing DBP's total proposed allowance for this project to $12.7m (in $2019).[38]

199. Our findings on this AA5 revised proposal were as follows:[39]

- Selection of SAP S/4HANA as the new ERP appears reasonable
- The Phase 1 cost estimate methodology and estimated cost are reasonable
- Allocation of DBP's share of the Phase 1 cost is appropriate
- Project timing appears to be ambitious.

200. Our conclusion was that DBP's proposed conforming capex allowance of $3.2m for AA4 and its proposed allowance of a further $9.5m in AA5, were reasonable. ERA accordingly determined to allow the total of $12.7m ($2019) for this project, as DBP had proposed.

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37 EMCa: *Review of technical aspects of proposed access arrangement for 2021 to 2025.* Report to ERA (May 2020). Paragraphs 245, 246 and 344 and Appendix B referring to Business Case DBP21.

38 DBP presented this as being DBP's share of a total AGIG cost of $19.1m for the phase relevant to DBP (which it referred to as Phase 1), with the balance to be allocated to AGN. See EMCa: *Review of selected aspects of revised final plan for AA5 (2021 to 2025).* Report to ERA (December 2020). Paragraphs 240 to 244.

39 EMCa report as above, pages 44 and 45

DBP's current proposal is to include AA5 expenditure that is considerably greater than the allowance

201. ERA records that it incurred $3.5m in AA4, in $2024. This broadly equates to the $3.2m ($2019) allowance. However, DBP now proposes allowing conforming capex of $28.1m ($2024) in AA5. This compares with ERA's AA5 allowance which, in $2024 terms, was around $11.5m.

The ERP implementation was problematic[40]

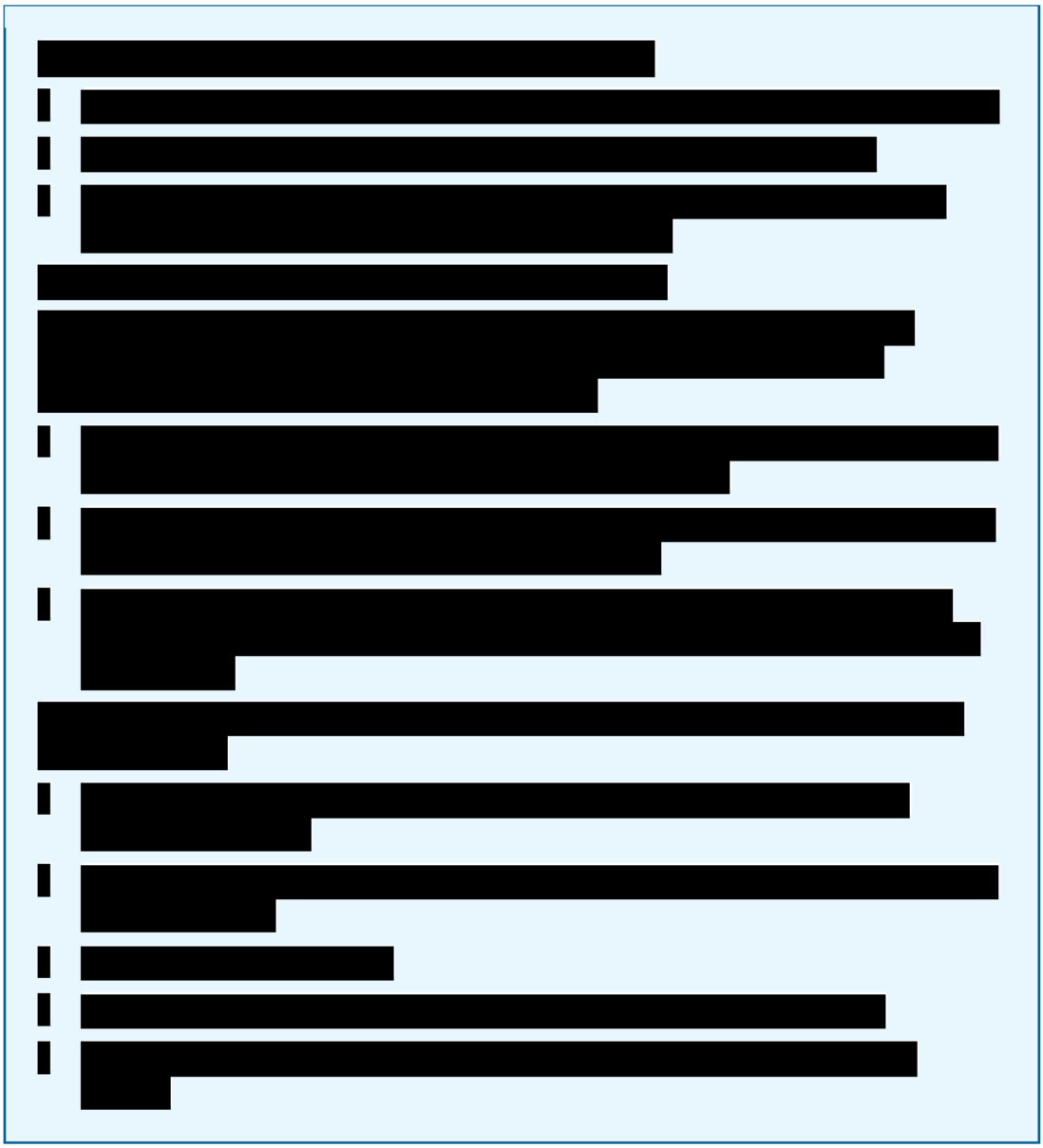
202. The project commenced with a vendor [redacted] which had won a competitive tender with a price of $9.4m. This price was broadly consistent with the relevant line item for Systems Integration in DBP's proposed overall OneERP project costing of $19.1m, and which was the basis for its proposed allocation of $12.7m to DBP.

203. We considered that DBP provided insufficient information in its AA6 regulatory proposal for this significantly higher cost for this project. We therefore sought information to better understand how this outcome had eventuated and to enable us to assess whether it meets the criteria for inclusion as conforming capex.

204. DBP provided the information requested. In summary this shows that the initial vendor did not perform and after protracted delays, increased costs and an unsatisfactory level of gaps and defects, DBP replaced the vendor and restructured the project. In documentation, we observe statements such as we show in Figure 5.1.

[40] Information in this section is drawn from DBP's response to IR EMCa11, Question 12. DBP provide an overarching response, which it refers to as responding to Q12a to Q12g. DBP also provided supporting information that responded to our specific requests, including a [redacted] assurance report (dated 24 May 2021), [redacted] a Gap Assessment, listings of Functional and Non-functional requirements and a project timeline.

Figure 5.1: Information on project issues



205. To address these issues, DBP resolved to replace the Systems Integrator with a firm ( ) that was the second-ranked firm (to) in the original bid. Prior to its engagement, DBP commissioned to undertake a gap analysis on the project. DBP states that had originally quoted $9.0m for the project, however on engagement to rescue the project, quoted a revised price of $9.5m. DBP states that this revised price was *'…informed by…the results of the Gap Analysis…'* and took account of *'…inflation of specialist contractor rates in the 3 years since the original project award…'* but *'…offset by the fact that they inherited a partially built system (albeit with significant defects)…'*.[42]

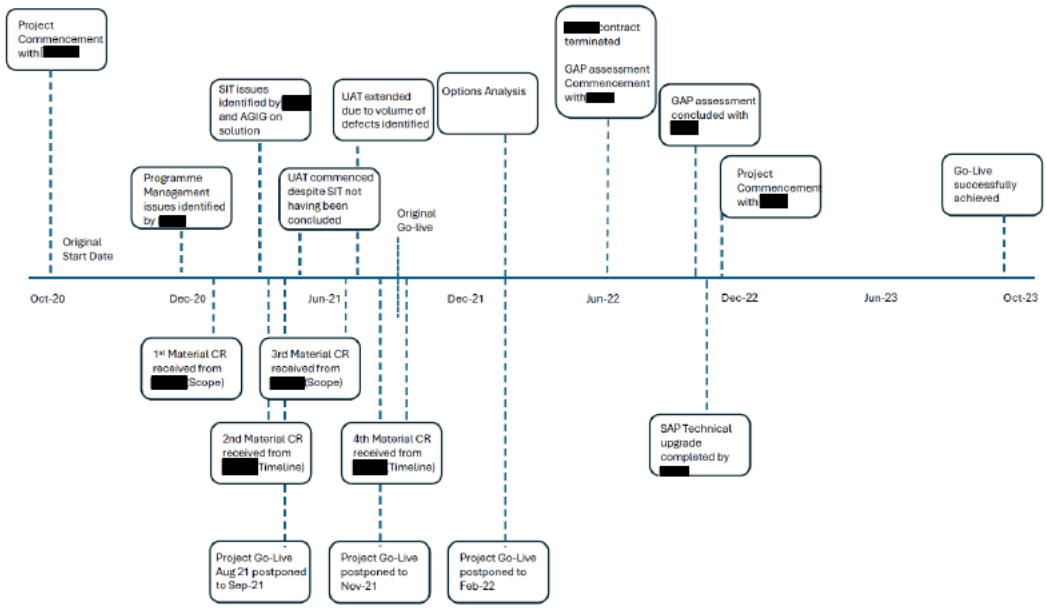
206. In restarting the project, DBP also switched from to to provide PMO support and increased the level of internal labour dedicated to the project.

[41] OneERP S/4HANA Program and Controls Assurance. update as at 24 May 2021. Provided by DBP as Attachment 12b.1 in response to IR EMCA11. The report is caveated that it is for use by DBP only and that it is not intended to be read or used by anyone else. DBP has however provided it to us, knowing the purpose of our request. While we provide this information here, we record that we have not relied on it in forming our recommendations to ERA, as later information provided by DBP supersedes it in any case.

[42] DBP response to EMCa11, Q12d.3

207. The sequence of events is shown in the timeline in Figure 5.2.

Figure 5.2: OneERP high level timeline



Source: DBP in response toEMCa11, attachment 12e.1

The project cost continued to increase ahead of even updated DBP estimates

208. As stated earlier, DBP had based its proposed ERA allowance on a total OneERP costing of $19.1m. By June 2022, DBP advised its Board of updated estimates that summed to $31.3m.[43] As presented by DBP in response to our IR, the eventual cost was $49.4m, which we assume (since DBP directly makes this comparison) to be in dollar terms consistent with the AA5 allowance, i.e. $2019 or $2020.

209. When we convert DBP's proposed conforming capex of $31.7m (summing over AA4 and AA5) grossing up by the stated 58.9% allocation to DBP, we derive an inferred AGIG total project cost of $53.7m, in $2024.

210. As shown in Table 5.14, the main sources of increase were:

- A more than doubling of the original vendor implementation costs, with the actual cost being also 50% higher than the updated estimate provided to the Board in 2022.
- External technical resource requirements eight times higher than originally estimated, and a similar amount higher than the update provided to the Board in 2022.
- Internal resource requirement around 2.5 times higher than originally estimated, and 50% higher than the updated estimate provided to the Board in 2022.

43 [redacted]

Table 5.14: DBP's OneERP Total Project cost allowances, estimates and actual cost[44]

Cost component	Basis for AA5 allowance (2020)[45]	[redacted]	[redacted]	Completed total cost[47]
Vendor implementation	10.8	[redacted]	[redacted]	24.3
SAP licence	1.2	[redacted]	[redacted]	2.2
MS Azure	0.4	[redacted]	[redacted]	0.8
External technical	0.8	[redacted]	[redacted]	6.6
AGIG project resources	5.9	[redacted]	[redacted]	15.5
Contingency		[redacted]		
Total cost	**19.1**	[redacted]	[redacted]	**49.4**

Source: EMCa, from information provided by DBP in response to IR EMCa11, Q12.

The project ultimately went live in October 2023 with functionality that was essentially the same as had been originally envisaged

211. In response to our information request, in referring to the 'restart' DBP has confirmed that *'…no material additional functionality was included as part of this process….'*.[49] In considering the significant cost increase for the project, this effectively excludes as a hypothesis that it was due to a scope increase which (hypothetically) may have delivered greater benefit to DBP. We are left therefore needing to consider only the cost side of the equation, namely, the extent to which it can be considered prudent and efficient expenditure.

212. As can be seen from Figure 5.2, after a restart in December 2022 the project went live in October 2023. DBP states that the 'go-live' was successful,[50] which we take to mean that it has delivered and operated successfully in the business since that time.

Our assessment is that the expenditure amount that DBP has proposed is not conforming

213. We consider that the conforming capex that DBP has proposed, does not meet the required criteria. Factors that lead us to this conclusion are as follows:

- The project took longer and cost significantly more than budgeted for reasons that appear to be largely due to the non-performance of the original Systems Integrator and ultimately its failure to deliver the project.
- The cost for the Systems Integrator was competitively tendered, and both the original winner and the underbidder (which subsequently completed the project) offered similar prices, being $9.4m for the original winner and $9.0m for the underbidder, [51] and both were close to (and slightly less than) the amount of $10.8m used as the basis for DBP's

44 The denomination of these costings is not entirely clear. While the ERA approved costs were in $2019, DBP refers to them in places as being in $2020 (though inflation was minimal between these years). As DBP present the completed total cost in the same table, and uses it to derive a variance, we assume it is presented on the same basis.. The basis of the Board Paper costings is not stated, but a default assumption is that these would be nominal dollars of around that time – ie 2022..

45 DBP response to EMCa11, Q12e.2. (Some row labels have been shortened and rationalised for comparison with other information)

46 9 June 2022 Board Paper. ('Updated estimate' derived by EMCa from sum of 'incurred to date' and 'forecast additional' costs

47 DBP response to EMCa11, Q12e.2

48 [redacted]

49 DBP response to EMCa11, Q12b

50 DBP response to EMCa11, Q12b

51 We note that the tendered price for the original SI was slightly more than that offered by the underbidder, but we can only therefore assume that [redacted] scored higher in the original procurement for other reasons.

AA5 allowance. This leads us to the view that the original budget for the Systems Integration component was a reasonable estimate of a prudent and efficient amount.

- The amounts paid to the original SI do not appear to reflect the value that it provided. DBP states that at the time of its termination this firm had completed to Milestone 8 and had commenced Milestones 9 and 10. This suggests that [redacted] were considered to have completed between 57.5% and 80% of the project. Yet it took a similar amount to what both [redacted] and [redacted] each had tendered in the first place, to complete the project from that point. DBP provided us information that it paid [redacted] a total of $12.9m, for an incomplete project for which it had tendered a fixed price of $9.4m.
  - In its assurance report (21 May 2021), [redacted] noted that '*…[redacted] had originally planned for 67 resources to be working on the project and they now have in excess of 110 resources engaged.*' While DBP had entered into a fixed price contract with [redacted], the additional resourcing is evidence of the higher costs being incurred within the project.
- The protracted project implementation timeframe together with time incurred by the business and its advisors in identifying and managing resolution of defects, and the ineffective and therefore inefficient use of time referred to in undertaking dress rehearsals that were ineffectual because of defects, all contributed to an inefficient level of internal and external resource cost. This is manifest through:
  - The need to engage a PMO for the restart [redacted] at a cost of $2.0m, having already engaged [redacted] for a period of around two years prior to undertake a similar PMO role at a not dissimilar cost. Both were necessary given the circumstances: [redacted]'s reports were clearly instrumental in leading to the decision to terminate the services of the first SI, while in its later role [redacted] oversaw successful completion of the project. Nevertheless, the protracted delivery time and multiple issues with the performance of the original SI clearly resulted in a 'doubling' of the PMO cost. DBP states the aggregate cost of the PMO role as being $3.5m ($1.5m for [redacted] and $2.0m for [redacted]).
  - The level of external resources (other than PMO) and AGIG resources. We consider that there was a degree of underestimation of these costs, relative to requirements for successful delivery of a project with significant process and change management implications for a range of functions within the business; nevertheless as shown in Table 5.14, the eventual project costs of $6.6m and $15.5m respectively for these components, exceeded these budgets and estimates by a wide margin.
- The cost of conducting a Gap Analysis ($0.6m) as part of scoping the restart of the project, would not have been required if the first SI had been able to complete the project.

We consider that a reasonable alternative estimate of the prudent and efficient cost of this project is 50% of the eventual project cost, and which results in a reduction to DBP's proposed AA5 amount of just over 50% .

214. Providing DBP with conforming capex equal to its proposed AA5 allowance (and incurred AA4 expenditure) would imply a 61% reduction in the aggregate project cost.[52]

215. We consider that a reasonable estimate of a prudent and efficient cost for this project would be 50% of the cost that DBP incurred. This reflects:

- the need effectively to undertake the main part of the project (SI) twice at a cost that was more than twice the budget that formed the basis of DBP's AA5 proposal to ERA, and for which DBP's original budget was based on an efficient procurement process;
- External and internal resource costs that were over three times the amount allowed for in the amount that formed the basis of DBP's AA5 proposed to ERA;
- Partly offsetting this, we consider that aspects of the original budget were likely under-scoped, including the likelihood that at least some change requests would be prudently

[52] 1- ($19.1m/$49.4m). Refer to Table 6.10.

required and that a greater degree of internal business resource would be more likely to deliver the project successfully.

216. Because part of the project cost was included in AA4 (and has already been determined as conforming capex) the 50% reduction in the aggregate cost results in a slightly greater proportionate adjustment for AA5. This calculation is shown in Table 5.15.

Table 5.15: Derivation of alternative conforming capex amount for Sap S/4HANA project

	Aggregate	2021	2022	2023	2024	2025
DBP: incurred in AA4	3.57					
DBP: Proposed conforming capex for AA5	28.08	10.83	2.82	14.53	-0.10	0.00
Total DBP proposed project cost allowance	**31.66**					
less proposed EMCa adjustment	*-15.83*					
less incurred in AA4	*-3.57*					
Adjusted conforming capex allowance for AA5	**12.25**	**4.73**	**1.23**	**6.34**	**-0.04**	**0.00**
Implied AA5 adjustment	*-15.83*	*-6.11*	*-1.59*	*-8.19*	*0.06*	*0.00*

Source: EMCa analysis

Observations on AGIG's perspective on regulatory funding for this project

217. The SAP 4/HANA was part of the AGIG OneERP project. In reviewing DBP's proposed allowance, we have considered (and accept) the rationale for the sharing of the cost to DBP, which has been reduced from 66.5% to 58.9% which DBP explains as being due to it being able to extend the scope to include other parts of the AGIG business (i.e. external to DBP).[53]

218. [redacted]

219. We consider this to be evidence that AGIG was in effect seeking to manage its expenditure allowance allocations between the different regulatory jurisdictions with the aim of achieving full recovery, despite the cost overruns. We note in particular the implication from this of an intention that the 'remaining costs', which clearly included the majority of the cost overrun, would be allocated across businesses other than DBP. However, we also observe that the eventual cost of the project was somewhat more than DBP had advised the Board at that time, so it is unclear whether AGIG achieved its intended regulatory recovery of full costs from other jurisdictions.

220. While the statement in DBP's Board paper could be taken as an indication that the ERA's AA5 allowance was sufficient, we have taken the view that it is not our role to involve ourselves with amounts that may have been proposed to or accepted by regulators in another jurisdiction. While we have considered the basis for allocation between businesses,

[53] DBP response to EMCa11 Q12g. DBP states that it allocates costs based on the number of users.

we have ultimately assessed only the amount that DBP has proposed to ERA under the relevant WA rules.

Maximo process redesign

What DBP has proposed

221. As shown in Table 5.13, DBP incurred $3.35m for Maximo process redesign, compared with an ERA allowance of $1.42m. DBP has proposed the cost of $3.35m as conforming capex.

222. We observe that the majority of DBP's expenditure was incurred in 2021, and the project expenditure ceased from 2024. No further expenditure is proposed.

Assessment and finding

223. We sought information from DBP on the reasons for this variance. In response to our information request, DBP provided an overview of these reasons and two internal change request documents.

224. Our reading of these documents is that they reflect a reasonable response to realisation of the volume of work required and to revealed opportunities to add to the scope of the project, and therefore to more fully realise the potential benefits from the Maximo application.

225. We consider that the expenditure was prudently incurred and can reasonably be considered conforming capex.

Refresh of core apps – Transmission Billing System

What DBP has proposed

226. As shown in Table 5.13, ERA provided an allowance of $3.4m in AA5, for what DBP had at that time presented as being an upgrade to its Customer Reporting System (CRS).[54] In our AA5 report to ERA, we supported DBP's proposal that it needed to replace or significantly upgrade the CRS.[55]

227. DBP did not proceed with upgrading the CRS (though DBP shows $0.4m conforming capex against this project) and instead switched to an option to build a new system, which it refers to as the Transmission Billing System (TBS). DBP expects to incur $5.2m on this system in AA5, and has proposed this as conforming capex, along with a proposed allowance for a further $1.7m in AA6. Taken together with the $0.4m incurred against the CRS project, makes a total of $7.3m claimed capex.[56]

228. In its AA6 regulatory proposal DBP provides minimal information on the TBS; in its Final Plan DBP's full reference to the project is as follows:

> *Replacement of the Customer Reporting System (CRS) with Transmission Billing System (TBS) ($8 million): this project will upgrade the CRS user interface so it is compatible with use on mobile devices while continuing to support upgrades to the system as business requirements and customer needs change.*[57]

229. In referring to its $51.4m AA5 IT capex as being $25.8m more than its IT allowance, DBP does not refer to the CRS/TBS as contributing to this,[58] nor does it do so in its business case document.[59]

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54 ERA allowed the amount of $2.9m ($2019) that DBP had proposed, and which equates to $3.4m in $2024.

55 For example, in section 4.11 of our December 2020 report to ERA

56 In its business case, DBP presents capex of $7.999m (page 13)

57 DBP Final Plan, page 106

58 As above, page 106

59 DBP Attachment 9.5, Capex business cases. DBP discusses AA5 variance on pages 206 to 208 but explains this solely by reference to the OneERP project

DBP has made the prudent decision to replace the CRS with a new billing system

230. We sought a business case for the TBS, and DBP provided an AGIG business case dated December 2023.

231. From our review of this business case, we consider that AGIG has produced reasonable evidence that continued to support the need to replace or upgrade the CRS. For reasons that are not addressed in this business case, DBP by this time was estimating the capex cost of upgrading the CRS at $4.9m. DBP provides reasons for no longer preferring this option, including poor response from the vendor and some limitations with the fundamental concepts and structure of the CRS. We consider that AGIG's reasoning, including its risk analysis, provides reasonable grounds for its decision not to pursue this option, and are consistent with views that we expressed in our 2020 report to ERA.

232. In its place, AGIG preferred an option to build a system on a hosted and readily customisable platform. From the information provided, we consider that AGIG's choice of this solution is adequately justified. The system will also provide enhanced functionality, including hydrocarbon accounting and other information that will assist with compliance and customer reporting. AGIG's capex estimate for this solution is $8.0m., and with post implementation operating costs totalling a further $2.4m over a five-year period.[60]

233. The business case shows the project to be delivered by June 2025.

The proposed capex for AA5 is conforming, however DBP proposes considerable level of ongoing expenditure on the TBS in AA6 and which we review in section 6.8

234. Despite the AA5 cost for the CRS ($0.4m) and TBS ($5.2m) being considerably more than the ERA allowance of $3.4m (in $2024), we consider that the decision to switch to a new system is justified and that the AA5 capex is conforming.

235. In section 6, however, we take a less accepting view of the considerable level of ongoing capex that DBP proposes.

Data centre infrastructure

Establishing an AGIG data centre was not allowed for in DBP's AA5 regulatory determination.

236. As is shown in Table 5.13, DBP incurred capex of $1.9m on establishing a data centre. In its Final Plan DBP refers to this project as reflecting '*…a change in approach to the managed IT infrastructure services and consolidating data centres as part of transition to the shared AGIG infrastructure, enabling us to leverage economies of scale for long-term benefits*' and ascribes a $2m variance relative to the ERA allowance.

237. DBP provided no further information that would assist with understanding the rationale or the business case for the data centre expenditure and we therefore sought further information through information requests. In IR EMCa 19, DBP provided information that:

- The expected total cost of the WA Data Centre ($6.1m) was allocated to three AGIG entities, with DBP's share being 32%
- The project is forecast to be delivered by October 2025
- The Data Centre is hosted at [redacted] in Perth. Other information that DBP provides suggests that infrastructure is being moved out of its current corporate premises. DBP states that the Data Centre could be relocated to Jandakot in future.

DBP has not provided a business case for this project that includes a cost benefit analysis of options

238. DBP responded to our first IR on this subject, confirming that the AA5 'Data Centre Infrastructure' project in its capex model was for establishment of a West Coast Data

[60] AGIG business case for Transmission Billing System, pages 13, 14

Centre.[61] DBP claimed that a cost-benefit analysis for this could be found in the business case (DBP30); however DBP30 does not contain a CBA for establishing the West Coast Data Centre (i.e. in AA5); it does contain information that purports to be a CBA for ongoing expenditure in AA6, though (as we discuss in section 6.8.3) we do not consider this to be a valid CBA either.

239. DBP provided an AGIG business case for a 'Data Centre Refresh' and some further explanatory information in a PowerPoint presentation.[62] The business case contains only two options, one of which is to 'do nothing' (and comprises no expenditure) and the other is the proposed refresh option at a capex cost of $6.1m. It does not contain any CBA and the scope described in this business case includes only in part '*establish(ing) a new Data Centre in Perth.*'[63] The business case contains no cost breakdown that would identify the cost of the proposed WA data centre. It refers to activities involving data centres in Melbourne and Sydney and does not indicate the basis or quantum of costs allocated to DBP.

DBP claims that the AGIG expenditure is included in regulatory allowances, including for DBP, however we can find no evidence for DBP that this is the case

240. In IR EMCa19, question 2, we asked about a statement in the Data Centre Refresh business case that '*the proposed CAPEX is within the MGN/AGN and DBP AA5 allowance…'*.[64] In its response DBP claims that this '…*was funded…via Infrastructure renewals and SIB contributions in 2025*.' However, we can find no reference for this claim in DBP's listing of its ERA AA5 allowances and it seems inconsistent with DBP referring to it as a +$2m variance in its AA6 Final Plan.

241. The PowerPoint presentation provided in response to our IR, refers to what appears to be DBP-specific capex of '*$1m - $1.5m*' plus opex of $0.1m for 2 years, '*on top of planned data centre currency projects*.' This document contains the only reasoning to support establishing the West Coast data Centre from a DBP perspective, and which we reproduce here in full:[65]

- *Application & Internet localisation for DBP Staff*
- *Makes solution architecture simpler and easier to govern*
- *Long term Datacentre strategy with SYD DC to decom in future.*
- *WA DC implementation allows for faster access to DBP business applications & removes some bottlenecks for AGIG*
- *This solution aligns us with the AGIG core values of "Delivering for Customers".*

Despite the lack of CBA, we consider that the investment expenditure in AA5 is likely to be prudent. However, DBP proposes considerable further expenditure on IT infrastructure in AA6 and which we review in section 6.8.

242. While DBP's proposal lacks proper option analysis, and lacks a CBA, we consider that the performance issues for DBP staff and other users in WA together with the claimed (though unquantified) future cost efficiency benefits likely are sufficient to justify the investment, which we therefore consider reasonable in AA5. In section6.8.3, we consider the implications of this investment for DBP's proposed further expenditure on IT infrastructure refresh in AA6.

61 IR EMCa11, Q14

62 DBP response to EMCa11, Q14; Also DC Refresh Business Case (AGIG, approval date 25 September 2025); Also PPT presentation 'AGIG DC Transformation – WA Datacentre', 01/03/2024.

63 AGIG Data Centre Refresh business case, page 8

64 AGIG Data Centre Refresh Business Case, page 2

65 WA Tertiary DC Solution TGB v1.1, page 6

Other projects

DBP's AA5 expenditure on the remainder of IT projects and for vehicles is justified

243. We further analysed the variance of projects in the Computers and Motor Vehicles asset category, and in Table 5.18 we illustrate this showing expenditure on some selected projects.

244. Expenditure on the motor vehicle fleet was close to, and slightly less than, the allowance.

245. We observe three IT projects for which DBP spent markedly less than the allowance, however this lower spend is partly offset by a range of typically smaller projects for which a specific allowance was not included in ERA's determination. We are satisfied that the outcome for this cohort reflects reasonable re-prioritisation during the period, with the aggregate result being a lower level of spend. We therefore consider that it is reasonable to consider DBP's AA5 expenditure on other projects as conforming capex.

Table 5.16: Further analysis of variance for other Computers and Motor Vehicles projects

Analysis of variance for selection of 'other' projects	AA5 Allowance	AA5 Actual	*Variance*
CP1700155: Fleet Vehicles	4.94	4.68	*-0.26*
CP1700161: CRS upgrade	3.40	0.43	*-2.98*
CP1700349: Cyber Security CY18	2.84	1.57	*-1.27*
CP1700703: Enterprise SCADA 2023	1.22	0.15	*-1.07*
Remainder	7.45	11.71	*4.26*
Total	**19.85**	**18.54**	***-1.31***

Source: EMCa table derived from DBP's response to Information Request EMCa03

Summary of findings and proposed adjustment

DBP's proposed level of AA5 capex is not justified as conforming capex and an alternative forecast is less than what DBP has proposed

246. We consider that DBP's proposed inclusion of $57.03m conforming capex for computers and motor vehicles is not justified. We consider that a reasonable alternative value is $15.83m (28%) less than DBP has proposed, reflecting exclusion of inefficient expenditure on the SAP 4/HANA implementation.

247. We consider that DBP's expenditure on other Corporate Sustaining Apps, on Network Security, on other IT (which includes IT sustaining infrastructure) and on vehicles can reasonably be accepted as conforming capex.

Table 5.17: DBP proposed and EMCa adjusted conforming AA5 capex for Computers and Motor Vehicles projects - $m, real Dec 2024

Business case	ERA allowance	DBP Proposed	EMCa Adjustment	EMCa Adjusted	EMCa Adjustment (%)
DBP21: Corporate IT Sustaining Apps	18.40	38.24	-15.83	22.41	-41%
DBP23: Network Security	3.65	2.89	0.00	2.89	0%
Other IT	5.01	9.11	0.00	9.11	0%
DBP17: Vehicles (Fleet & civil equipment)	5.67	6.78	0.00	6.78	0%
Total	**32.73**	**57.03**	**-15.83**	**41.20**	**-28%**

Source: EMCa

5.3.7 Buildings asset class

What DBP has proposed

248. DBP's actual/estimated capex in the AA5 period in the Buildings category is $6.9m, $12.8m less than the ERA allowance of $19.8m, as shown in the table below.

Table 5.18: Summary of AA5 capex for the Buildings asset class - $m, real December 2024

Project	AA4 actual	AA5 Allowance	AA5 Actual	Variance
CP1700207: Compressor Station Site Accommodation	1.77	5.05	3.41	-1.64
CP1700458: Replacement of Northern Communications System	0.00	6.20	0.62	-5.58
DBP10-NEW-02: Jandakot Site Redevelopment	0.00	8.52	2.78	-5.74
Other	1.57	0.00	0.13	0.13
Total	**3.34**	**19.77**	**6.94**	**-12.83**

Source: EMCa table derived from DBP's response to Information Request EMCa03

DBP10-NEW02: Jandakot site redevelopment

What DBP has proposed

249. As shown in Table 5.18, DBP proposes conforming expenditure of $2.8m on Jandakot redevelopment and explains this this was less than the ERA allowance because it deferred its Jandakot redevelopment. Deferral of the Jandakot redevelopment accounts for close to half of the lower spend on buildings. DBP has re-proposed the Jandakot redevelopment for AA6 at a significantly higher cost than was allowed for AA5 and we assess this in section 6.

250. In its current proposal, DBP states that '*planning and design phases are occurring in 2024/25, with construction to occur during 2026 to 2028.*'[66] DBP provides no information to indicate that it has undertaken works to remedy issue that it identified in its AA5 proposal at this site. The planning and design work referred to above therefore appears to constitute DBP's proposed conforming capex of $2.8m which (from its capex model) DBP estimates incurring in 2025.

[66] Business case DBP10 in attachment 9.5, page 124

DBP proposed an allowance to redevelop Jandakot in its AA5 proposal, and which ERA accepted but DBP did not proceed on this basis

251. In its AA5 proposal in 2020, DBP submitted that its Jandakot site comprised *'30-year old facilities which no longer meet business requirements, operational or safety needs.'*[67] DBP provided evidence to support this and proposed an allowance that would allow redevelopment to address the issues that it identified. In its determination, ERA accepted the redevelopment that DBP had proposed and its associated capex allowance.

252. In the current submission, DBP provides reasons as to why it did not proceed at that time with the proposed redevelopment, and which it largely attributes to the 2020/21 covid pandemic. However, despite the issues that DBP flagged as being of sufficient concern to warrant the proposed work, DBP has provided no evidence to indicate that it has undertaken any part of the redevelopment work that it had proposed, and for which ERA had provided an allowance. We note, for example, that DBP shows no capex against this project for any of the years 2020 to 2024, and the only expenditure relating to Jandakot buildings is $134,000 on a 'new Jandakot warehouse dome'.

The expenditure that DBP has incurred in AA5 relates to a considerably expanded proposed AA6 project that we review in section 6.9.2, where our finding is that DBP has not justified it

253. For the same reasons that we discuss in section 6.9.2487, we consider that the level of DBP's proposed expenditure in 2025 is not prudent. DBP has provided us with material from the planning and design activity that it refers to in its business case and which shows that it is for a considerably more elaborate redevelopment than DBP had originally proposed at a cost that is around four times greater. But DBP has not provided evidence to support the need for the increased scope or information on internal governance processes that might have shown evidence of consideration and endorsement of this significant change.

254. DBP refers to increases in building costs since its original submission, but on DBP's own information this does not come close to explaining the increase in the redevelopment cost that it now proposes.

The planning and design work is for architectural concept plans and site development planning that have been undertaken in advance of a coherent strategic plan

255. The planning and design work that DBP refers to appears to comprise site architectural concept designs and associated site development plans for a redevelopment of a scope and scale that DBP has defined to external parties. These are not supported by evidence of a coherent long-term strategic assessment of DBP's accommodation and facilities needs and options for the Jandakot site in conjunction with DBP's other accommodation in the Perth region, such as its current accommodation and facilities in Perth CBD.

256. We consider that engaging in site design and associated site development planning is premature and contributes little to outcomes that will eventually benefit DBNGP customers.

DBP has not defined the extent to which the proposed redevelopment is reasonably attributable to DBNGP needs, relative to DBP non-regulated and AGIG

257. The proposed development is referred to in DBP documentation as an AGIG development and appears to be scaled to be able to provide staffing and ICT facilities that go beyond the requirements of its DBNGP operation. Yet DBP has provided no recognition of this in the DBNGP expenditure allowances that it proposes (either in AA5 or AA6).

We consider that Jandakot redevelopment expenditure that DBP has incurred in AA5 on behalf of AGIG, is not justified as conforming DBNGP capex

258. We consider that AA5 capex at the level that DBP has proposed including, is not conforming.

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67 DBP Revised Final Plan Attachment 8.5A Addendum to Capex Business Caser CONFIDNETIAL, page 44

259. For the reasons stated above, we consider that the majority of the expenditure that DBP estimates to incur in 2025, and which comprises the entirety of its AA5 proposal for acceptance as conforming capex, is not prudent. However we consider that it is reasonable to assume that a part of the expenditure that it has incurred will contribute to decisions that it needs to make on an appropriately justified redevelopment. Accordingly, we consider that a reasonable alternative estimate of the capex that can be considered as conforming for DBNGP customers, is to allow 25% of the capex amount that DBP has proposed.

Other buildings capex

DBP's other buildings capex in AA5 is considerably less than DBP's allowance, and is justified

260. DBP incurred only around one-tenth the amount that had been allowed for buildings associated with the Northern Communications System. We consider that the proposed amount is reasonable, noting that we considered this within our overall review of the Northern Communications System project.

261. DBP also incurred less than it had planned for replacement and upgrades of compressor station accommodation. We consider that this can reasonably considered to be conforming capex. We note that DBP has proposed a much-expanded program for AA6, at an allowance of $14.7m, which we assess in section 6.

Findings

The level of DBP's proposed AA5 expenditure for the buildings asset class is not justified. A reasonable alternative is 30% less than DBP has proposed.

262. In summary, we find that DBP has not demonstrated that its proposed level of conforming capex for the Buildings asset class is justified.

263. We consider that a reasonable allowance for its proposed Jandakot site redevelopment is 75% less than it has proposed, but that its expenditure on other projects was reasonable.

Table 5.19: DBP proposed and EMCa adjusted conforming AA5 capex for Buildings - $m, real Dec 2024

Project	ERA allowance	DBP Proposed	EMCa Adjustment	EMCa Adjusted	*EMCa Adjustment (%)*
CP1700207: Compressor Station Site Accommodation	5.05	3.41	0.00	3.41	*0%*
CP1700458: Replacement of Northern Communications System	6.20	0.62	0.00	0.62	*0%*
CP1700571: New Jandakot Warehouse Dome	0.00	0.13	0.00	0.13	*0%*
DBP10-NEW-02: Jandakot Site Redevelopment	8.52	2.78	-2.09	0.70	*-75%*
Total	**19.77**	**6.94**	**-2.09**	**4.85**	***-30%***

Source: EMCa

5.3.8 Other depreciable assets

What DBP has proposed

264. DBP's actual/estimated capex in the AA5 period in the Other depreciable category is $9.7m, which is the same as the ERA allowance. Because of the variable nature of these assets, we present them here categorised according to business case information that DBP provided.

Table 5.20: Summary of AA5 capex for Other Depreciable Assets - $m, real December 2024

Business case	AA4 actual	AA5 Allowance	AA5 Actual	*Variance*
DBP01: Compressor Stations	2.83	2.87	2.66	*-0.21*
DBP02: Pipeline and MLV	1.49	2.10	1.81	*-0.29*
DBP10: Jandakot Facility Redevelopment	0.39	1.92	0.60	*-1.32*
DBP12: Safety Case	0.68	0.37	0.57	*0.20*
DBP16: Tools	1.45	2.00	2.23	*0.23*
DBP38: Structures & Operational Sites	0.00	0.00	0.20	*0.20*
Other	4.43	0.44	1.61	*1.17*
Total	**11.28**	**9.70**	**9.67**	***-0.03***

Source: EMCa table derived from DBP's response to Information Request EMCa03

DBP's AA5 expenditure is consistent with the ERA allowance

265. With minimal aggregate variance compared with the allowance, and with AA5 expenditure less than for AA4, we consider that the proposed expenditure was prudent and that the individual variances reflect reasonable re-prioritisations during the period.

Findings

DBP's AA5 capex for 'other depreciable assets' is conforming

266. We consider that DBP's proposed inclusion of $9.67m conforming capex for Other Depreciable Assets is justified.

5.4 Conclusions

5.4.1 Our findings

267. We consider that DBP's AA5 capex on its primary gas supply assets, comprising compression, corrosion protection, pipelines and MLVs and SCADA ECI and Comms, was prudent and we propose no adjustment to this.

268. Our findings for those asset classes where we consider that DBP's proposed expenditure level is not conforming are as follows:

- We consider that a considerable proportion of its ICT expenditure is not conforming, being a proportion of DBP's excess expenditure on implementing its Sap4/HANA OneERP project.
- We consider that a proportion of DBP's metering -related expenditure is not conforming, because it related to assets for which expenditure is not considered to be for DBNGP customers.
- We consider that the majority of buildings expenditure that DBP has described as being for planning and design of its proposed Jandakot redevelopment was not prudent because it relates to a redevelopment that DBP now proposes (for AA6) for which DBP has not justified an increase of approximately four-times relative to the redevelopment that ERA had accepted.

5.4.2 Implied adjustment assessment for AA5

269. Our assessed adjustment to DBP's AA5 capex has been applied to each asset class. We have made an adjustment for all or part of specific project or program expenditures, where

we consider that the information DBP has provided for our assessment does not demonstrate that the expenditure can reasonably be considered to be consistent with the actions of a prudent operator.

270. The proposed adjustments are primarily based on our analysis from information that DBP provided in response to our Information Requests, though with contextual information provided in DBP's submission, including in DBP's business case documentation.

271. The aggregate impact of our assessed adjustments would imply a reduction to DBP's AA5 capex of $19.7m, which represents 9% of DBP's actual/estimated capex of $212.8m. By dollar value, the majority of the adjustment is to DBP's expenditure on ICT, followed be a proportion of metering and building asset expenditure.

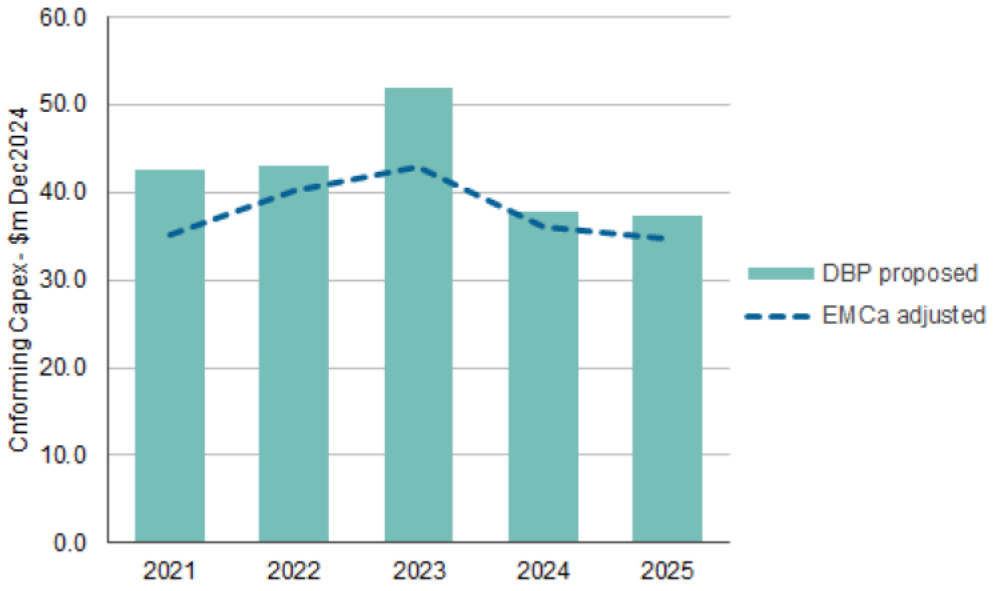
Table 5.21: Adjustments in AA5 period by asset class - $m, real Dec 2024

Asset category	ERA Allowance	DBP Actual/ Estimate	EMCa Adjustment	EMCa Adjusted	*EMCa adjustment (%)*
Building	19.8	6.9	-2.1	4.9	*-30%*
Cathodic/Corrosion Protection	16.7	24.8	0.0	24.8	*0%*
Compression	19.6	15.4	0.0	15.4	*0%*
Computers and Motor Vehicles	32.7	57.0	-15.8	41.2	*-28%*
Metering	8.3	17.0	-1.8	15.2	*-11%*
Other Depreciable	9.7	9.7	0.0	9.7	*0%*
Pipeline	0.0	3.6	0.0	3.6	*0%*
SCADA, ECI And Comms	75.2	78.5	0.0	78.5	*0%*
Total	**182.1**	**212.8**	**-19.7**	**193.1**	***-9%***

Source: EMCa analysis derived from DBP responses to Information Request EMCa01

272. The following graph illustrates the effect of the assessed adjustments against DBP's proposed conforming AA5 capex.

Figure 5.3: DBP AA5 capex and EMCa adjusted - $m, real Dec 2024



Sources: EMCa

6 PROPOSED AA6 CAPEX

DBP proposes an AA6 capex allowance of $288m. This is 35% more than DBP spent in AA5 and would be 49% more than the amount that we consider meets the requirements for conforming capex in AA5.

We consider that DBP's proposed capex allowance is not a reasonable forecast of its prudent and efficient requirements. A considerable component of the increase is for DBP's proposed redevelopment of its Jandakot site that is more extensive and with a considerably higher cost than ERA previously approved. We consider that DBP has not justified the increased scale and scope of this redevelopment and therefore the increase in proposed cost, which has almost tripled relative to the amount that it had proposed (and ERA had allowed) for AA5.

We consider that some other elements of DBP's proposal are also either overstated or not justified, including some aspects of its proposed IT and metering expenditure. We consider that the majority of DBP's proposed expenditure on its primary gas supply assets, being the pipeline and MLVs, compression, corrosion protection and SCADA, is reasonable.

We consider that a reasonable alternative allowance is $219.8m, which is $68.2m (24%) less than DBP has proposed.

6.1 Introduction

6.1.1 Assessment framework

273. This section contains our assessment of DBP's AA6 capex forecast. We have undertaken the review using the assessment framework set out in Appendix A based on DBP's Final Plan 2026-2030) and supporting information (such as Business Cases), our observations from the onsite meeting that we held with DBP, together with information supplied pursuant to EMCa information requests.

6.1.2 Information sources

Capex model

274. As we described in section 5.2.2, DBP provided a capex model (as attachment 9.6) which listed its proposed projects and their proposed AA6 expenditure and categorised them by asset class and by business case. This model is our primary data source that identifies the AA6 projects and proposed expenditure allowances.

275. For AA6, the capex model comprises the following:

- Project level – 161 projects;
- Business case level – 15 business cases, which comprise multiple projects; and
- Asset level – 8 classes which comprise expenditures allocated from the business cases.

276. To supplement this information, we sought further information that provided historical information on DBP's projects back to the beginning of AA4. This information assisted in understanding expenditure trends and providing historical context to the projects and expenditure proposed for AA6. DBP provided the requested information, and we linked this into DBP's AA6 capex model such that we could then readily view and compare historical

expenditure, ERA allowances and forecast AA6 expenditure at the project level, business case level and asset class level.

277. We also expanded this model to facilitate calculation and presentation of alternative forecasts.

Business cases and other information sources

278. DBP provides its 15 capex business cases in a single document (Attachment 9.5). This is our primary initial reference point for our assessment; however, we supplemented this with information that DBP provided in its response to our information requests and from information that DBP presented to us at our onsite meetings.

6.1.3 Inclusion of real cost escalation

279. As we describe in section 7.6.2, DBP has applied a rate of real labour cost escalation in its forecast opex requirements, and which we accept there as reasonable. For the same reasons we accept DBP's application of this real cost increase to the labour component of its proposed capex. The capex that we present as DBP's proposal therefore incorporate this real cost escalation and align to such amounts in DBP's regulatory submission.[68]

6.1.4 Assessment, findings and alternative forecasts

280. The results of our review and our assessment of whether the proposed capex is likely to satisfy the capex criteria for the purposes of determining the level of conforming capex under the NGR are set out in sections 6.3 to 6.10, following our overview of DBP's proposed allowance that follows in section 6.2.

281. To the extent that we consider DBP's proposed expenditure is not justified, we indicate the basis for alternative estimates in each of our findings and we combine this into an aggregate alternative forecast in section 6.11.2 which we present by asset class and by business case. Finally, we provide a 'top-down' perspective in section 6.11.3.

6.2 Overview of DBP's proposed AA6 capex allowance

DBP's proposed AA6 capex allowance is 35% higher than AA5

282. DBP's proposed AA6 capex by asset class is shown in Table 6.1. Its AA6 proposed capex is 35% higher than its actual AA5 capex, which in turn was 68% higher than its AA4 capex.

[68] DBP's

Table 6.1: AA6 proposed capex versus AA4 and AA5 capex by asset class - $m, real December 2024[69]

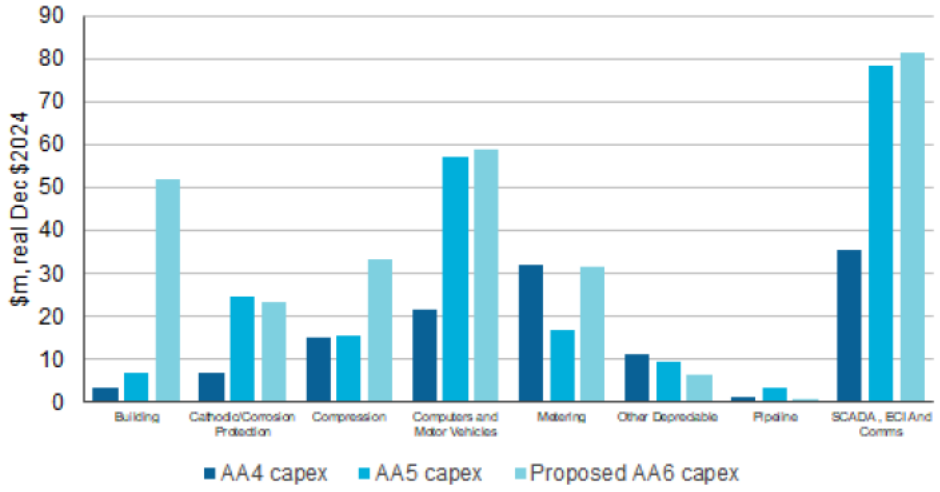
Asset class	AA4 total	AA5 total	AA6 2026	AA6 2027	AA6 2028	AA6 2029	AA6 2030	AA6 Total
Building	**3.3**	**6.9**	1.4	23.4	17.8	6.6	2.6	**51.8**
Cathodic/Corrosion Protection	**6.8**	**24.8**	5.5	4.9	4.5	4.4	4.3	**23.6**
Compression	**15.1**	**15.4**	7.8	6.7	8.1	5.3	5.3	**33.3**
Computers and Motor Vehicles	**21.8**	**57.0**	17.8	11.9	8.6	12.3	8.3	**59.0**
Metering	**31.8**	**17.0**	8.8	8.8	5.9	4.2	4.1	**31.8**
Other Depreciable	**11.3**	**9.7**	1.4	1.6	1.1	1.3	1.1	**6.4**
Pipeline	**1.1**	**3.6**	0.2	0.2	0.2	0.3	0.2	**1.0**
SCADA, ECI And Comms	**35.5**	**78.5**	18.2	16.4	16.1	17.3	13.3	**81.2**
Total	**126.8**	**212.8**	**61.1**	**73.9**	**62.3**	**51.6**	**39.2**	**288.0**

Source: EMCa table derived from DBP response to IR EMCa03

283. In Figure 6.1 we illustrate the movement in expenditure across three regulatory periods AA4 to AA6, for each asset class. We observe that:

- The largest proposed increase for AA6 is for buildings and is for the proposed Jandakot redevelopment.
- DBP's expenditure on computers and motor vehicles, and on SCADA ECI and Comms are both consistently high across AA5 and AA6, relative to AA4.
- DBP's proposed expenditure for compression and cathodic protection for AA6 remain elevated but are much less than the categories referred to above, while its proposed expenditure on the pipeline, MLVs and other depreciable assets is relatively small.
- DBP proposes more metering expenditure than for AA5, but at a similar level to AA4.

Figure 6.1: Comparison of AA4, AA5 and proposed AA6 capex by asset class - $m, real December 2024



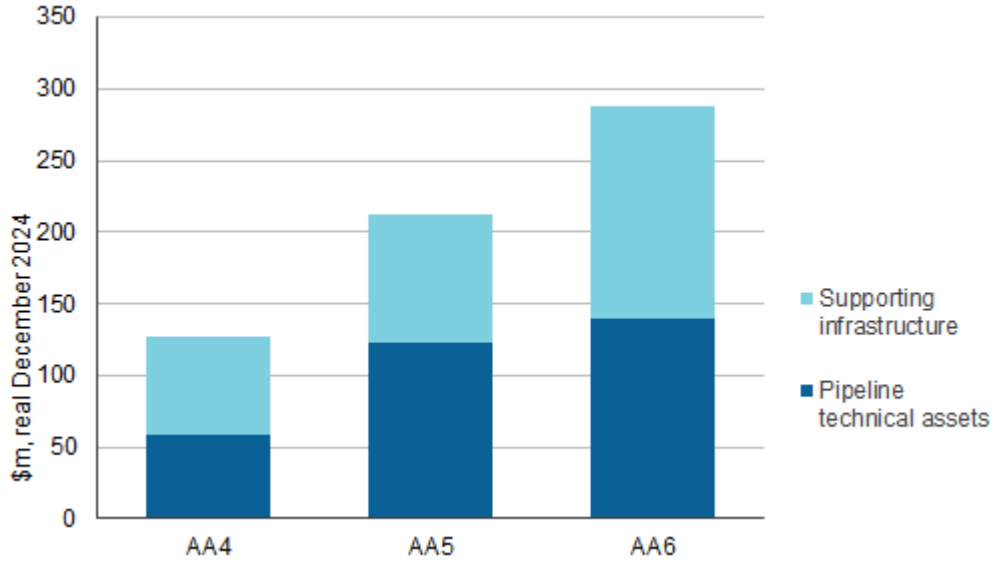
Source: EMCa derived from DBP response to IR EMCa03

[69] AA6 forecasts are escalated, as proposed by DBP in its regulatory submission. Figures do not match exactly with figures shown in DBP's business case document, and which are unescalated.

DBP's trend expenditure is for significant increases from AA4 to AA5 and AA6

284. DBP's AA6 proposal continues a trend of modest increases in expenditure on the pipeline and associated assets (including compression, corrosion protection and metering), but with a significant uplift and proportionate focus on supporting infrastructure including buildings, ICT, fleet, metering and 'other'. We illustrate this in Figure 6.2.

Figure 6.2: Expenditure trends across regulatory periods



Source: EMCa derived from DBP response to IR EMCa03

285. As we described in section 5, DBP's AA5 expenditure was $31m (17%) more than the ERA allowance for the period and we considered that some of DBP's expenditure was not conforming. Nevertheless, even considering the alternative forecast that we propose in section 5.4.2, DBP's AA5 conforming capex would be more than ERA's allowance and considerably more than its AA4 expenditure.

Assessments are by asset class

286. In the following sections we present our assessment of DBP's AA6 capex proposal for each asset class.

6.3 Compression asset class

6.3.1 What DBP has proposed

287. As shown in the table below, DBP's AA6 Compression asset class capex forecast of $33.2m is $17.9m (116%) more than DBP's actual AA5 capex of $15.4m. In AA5, DBP spent $4.3m (22%) less than the ERA allowance for reasons discussed in Section 5.

288. While DBP proposes to spend almost double its AA5 expenditure on compressor stations, its proposed expenditure from the other business cases also all represent significant uplifts on AA5.

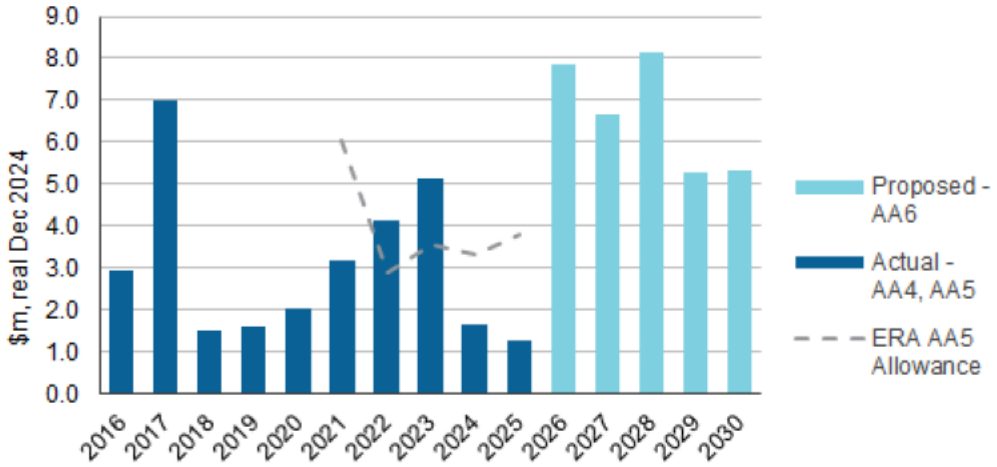
Table 6.2: DBP's proposed AA6 capex in the Compression asset class - $m, real Dec 2024

Business case	AA4 total	AA5 total	AA6					AA6 Total
			2026	2027	2028	2029	2030	
DBP01: Compressor Stations	**13.69**	**9.28**	3.87	2.51	4.85	2.54	3.48	**17.26**
DBP02: Pipeline and MLV	**0.00**	**0.96**	0.90	0.91	0.45	0.00	0.00	**2.27**
DBP18: Turbine exhaust replacement	**0.00**	**2.77**	1.01	1.39	1.39	1.34	0.64	**5.77**
DBP38: Structures & Operational Sites	**1.41**	**2.36**	2.05	1.86	1.45	1.40	1.20	**7.96**
Total	**15.11**	**15.37**	**7.83**	**6.67**	**8.15**	**5.27**	**5.32**	**33.25**

Source: EMCa table derived from DBP response to IR EMCa03

289. In Figure 6.3 we show the capex time trend for this asset class, including comparison of AA5 expenditure with the ERA allowance.

Figure 6.3: AA4, AA5 and proposed AA6 capex in the Compression asset class - $m, real December 2024



Source: EMCa derived from DBP response to IR EMCa03

290. As shown in the table above, projects from four business cases are allocated to the Compression asset class. We assess the expenditure proposed under each of these business cases in the following sub-sections.

6.3.2 Assessments by business case

Compressor stations DBP01

What DBP has proposed

291. DBP has proposed 10 compressor stations projects, which are predominantly associated with replacement of plant and equipment at end-of-life or refurbishment.

DBP has not adequately justified all projects

292. While DBP's business cases for these replacements provide evidence of need in most cases, we consider that not all projects are adequately justified and that, as it did in AA5, DBP will find opportunities to defer or otherwise not proceed with some projects. Specific factors leading to our findings for the projects within this business case are as follows:

- DBP has a comprehensive compressor unit overhaul programme based on condition monitoring and OEM recommendations. This programme will reduce the requirement for replacement of equipment as life-extension options are developed from the knowledge gained from the condition monitoring activities.
- Forecast reduced throughput and increasing production from the Perth Basin will reduce the requirement for compressor stations 1 to 6 to operate at the same duty as in previous periods.
- DBP's proposed allowance of $2.8m for compressor air package replacement (as compared with $0.8m in AA5) is an ambitious uplift on the $0.8m incurred in AA5 for which life extension options do not appear to have been fully explored at this stage;
- DBP has proposed $1.8m for compressor station valve replacements. DBP underspent the ERA allowance in AA5 and we consider it likely that condition monitoring information will reveal opportunities for life extension in some cases;
- DBP's proposed allowance of $1.5m for rotor bundle replacement at this stage appears to be a speculative allowance; we consider that further monitoring and inspection information will reveal life extension opportunities.

In aggregate, DBP will require less than it has proposed

293. As was the case for AA5, we consider that DBP is likely to spend around 20% ($3.4m) less than it has proposed due to the prudent deferral factors above (before allowing also for an overall 10% unit cost adjustment, which we refer to below). This is primarily because DBP has demonstrated that it updates its age-based or condition-based assessment of the asset health. This can lead to prudent deferral of work, noting that its scheduled replacement and/or major refurbishment work is based predominantly on age in the early stages of asset planning

Pipeline and MLV DBP02

DBP's proposal is reasonable

294. Based on condition information, we consider that DBP has provided adequate justification of the need to undertake the single project that it has proposed (Pig barrel isolation valve replacement) at a cost of $2.3m, and that this work needs to be undertaken in AA6.

Turbine exhaust replacement DBP18

What DBP has proposed

295. DBP's AA6 Business Case DBP18 proposes to replace 4 turbine exhausts.

The business case evidence supports the need for the work and the higher unit costs are justified

296. Based on the evidence provided in the Business Case, the work is necessary.

297. The costs proposed for AA6 are approximately double the actual costs incurred in AA5 on a per unit basis. However, the units to be replaced in AA6 are the oldest on the pipeline and of a more complex design and installation. The proposed expenditure is reasonable, other than for the unit cost adjustment referred to below.

Structures and operational sites DBP38

What DBP has proposed

298. As shown in Table 6.2, DBP proposed $7.96m for structures and operational sites. In DBP38, DBP describes nine projects in this category.

Much of the proposed work is speculative and not supported by adequate justification

299. From our review of this business case, we consider that the three projects listed below are at a speculative stage for which there is insufficient justification of need or for expenditure at the proposed level. These are:

- $1.5m for site building conversion
- $0.6m for helicopter landing pads
- $0.4m for oil farms.

300. DBP also proposes a project to address 'working at heights' issues, with a proposed allowance of $2.3m. While there is reasonable evidence of a need to address issues, this appears to be a generalised allowance that we expect will be reduced once needs are considered at a site-specific level.

In aggregate, DBP will require less than it has proposed

301. While some of the work in this business case is likely to be needed, on balance we consider that DBP is more likely to require around 40% ($3.2m) less for this category than the $7.96m it has proposed, as well as allowing for a unit cost reduction (as described below).

Unit costs

Unit costs for all compressor asset projects are not at the detailed level that we would expect for mature planned projects and result from a process that it is reasonable to assume involved a degree of rounding up

302. To the extent that DBP undertook similar projects in AA5, for the most part we observe unit costs for AA6 that are broadly consistent (in real terms). The exception is the project for turbine exhaust replacement, for which the average unit costs for the two replacements recorded in AA5 is $705,000, but the AA6 forecast shows an average of $1.43m per replacement.

303. We also observe that many unit rates are highly rounded. For example, all RO replacements are costed at $300,000, helicopter landing pads at $200,000 each and replacement of GC's at $200,000 each. While such estimates may not be inaccurate in aggregate, the rounded estimates are a further indication of the relatively low level of maturity of much of the project budget for compressor station work at this stage and suggest that for much of its program, DBP lacks hard evidence of projects costs that it can utilise in producing its forecasts.

304. Overall, we consider it likely that there was a tendency to round up the unit costs applied in developing DBP's AA6 forecast, and we propose an across the board 10% reduction in DBP's allowance for this asset class, to account for this.

6.3.3 Findings summary and implications

DBP's proposed allowance is more than it will require

305. In aggregate we consider that DBP's proposed AA6 capex allowance for compression asset class is more than it will require.

306. In Table 6.3 we summarise DBP's proposed capex and the implication of the proposed EMCa adjustment for the AA6 capex allowance for compression. The adjustments result from the application of individual project adjustments that are identified in our assessment above (for DBP01 and DBP38), together with the overall 10% unit cost adjustment.

Table 6.3: DBP proposed and adjusted allowance for compression - $m, real Dec 2024

Business case	DBP Proposed	EMCa Adjustment	EMCa Adjusted	EMCa Adjustment (%)[70]
DBP01: Compressor Stations	17.26	-4.83	12.42	-28%
DBP02: Pipeline and MLV	2.27	-0.23	2.04	-10%
DBP18: Turbine exhaust replacement	5.77	-0.58	5.19	-10%
DBP38: Structures & Operational Sites	7.96	-3.66	4.30	-46%
Total	**33.25**	**-9.30**	**23.95**	**-28%**

Source: EMCa

6.4 Corrosion Protection asset class

6.4.1 What DBP has proposed

307. DBP has forecast $23.6m capex over the AA6 period in the 'Corrosion Protection' asset class, as shown in the table below. The proposed AA6 expenditure is $1.2m (5%) less than DBP's AA5 capex, but considerably more than DBP spent in AA4. In AA5, DBP spent $8.0m (48%) more than the ERA allowance for reasons discussed in Section 5.

308. While DBP proposes to spend less in AA6 on compressor stations, it proposes a significant uplift in expenditure on the pipeline and mainline valves and at meter stations.

Table 6.4: DBP's proposed AA6 capex in the Corrosion Protection asset class - $m, real Dec 2024

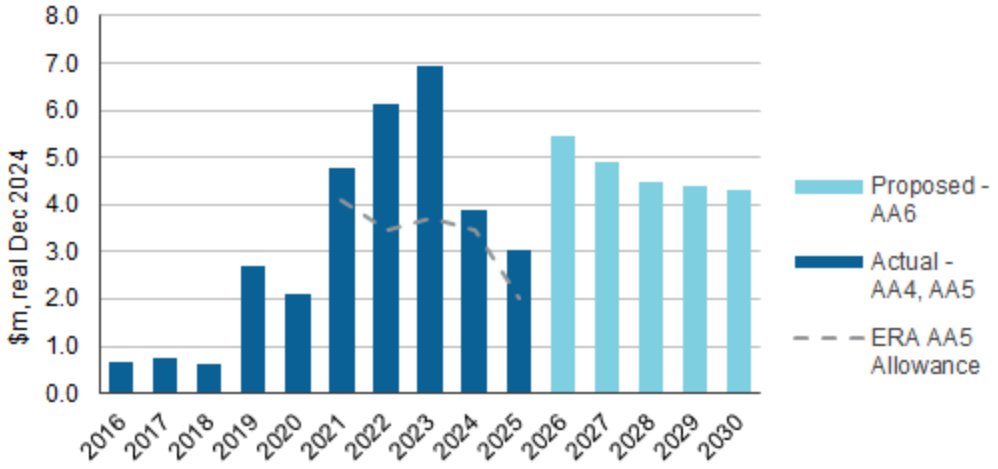
Business case	AA4 total	AA5 total	AA6					AA6 Total
			2026	2027	2028	2029	2030	
DBP01: Compressor Stations	**4.71**	**18.39**	2.82	2.43	2.25	2.14	2.05	**11.70**
DBP02: Pipeline and MLV	**0.76**	**4.05**	1.76	1.59	1.36	1.37	1.37	**7.45**
DBP15: Meter Stations	**1.37**	**2.31**	0.79	0.79	0.79	0.79	0.79	**3.95**
DBP38: Structures & Operational Sites	**0.00**	**0.00**	0.09	0.09	0.09	0.09	0.09	**0.45**
Total	**6.84**	**24.75**	**5.46**	**4.90**	**4.50**	**4.39**	**4.30**	**23.56**

Source: EMCa table derived from DBP response to IR EMCa03

309. In Figure 6.4 we show the capex time trend for this asset class, including comparison of AA5 expenditure with the ERA allowance.

[70] Note that a 10% unit cost adjustment is applied to all business case amounts, further to specific adjustments referred to in assessment text above)

Figure 6.4: AA4, AA5 and proposed AA6 capex in the Corrosion protection asset class - $m, real December 2024



Source: EMCa derived from DBP response to IR EMCa03

6.4.2 Assessments by business case

Compressor stations DBP01

DBP's proposed expenditure is justified through a need to rectify issues that it has identified in AA5

310. DBP has included five Compressor Stations projects under the Corrosion Protection asset class.

311. In AA5 DBP found evidence of significant corrosion under insulation which necessitated rectification that had not been foreseen at the time of its AA5 regulatory proposal, and which was the main contributor to spending more than the allowance in that period. Having undertaken this work at 12 sites in AA5, DBP proposes to rectify a further 3 in AA6.

312. DBP also found evidence of underground pipework corrosion at compressor stations and, after rectifying 2 sites in AA5, plans a further 5 in AA6 at a cost of $8.1m, this being the largest component of the proposed cost.

313. We consider that the evidence provided in the business case supports the proposed work in AA6.

Pipeline and MLV DBP02

While most of the proposed work is justified, DBP has made conservatively high allowances for work that is unknown at this stage

314. DBP includes ten projects in this business case totalling $7.5m under the Corrosion Protection asset class.

315. While we consider it likely on the evidence that DBP presents, that it will need to spend more than in AA5, the volume of work required is pending further investigation. We note, for example, that DBP found the need to spend only $0.4m on 'digging up un-piggable pipework at facilities' as against an allowance of $1.1m in AA5, yet it has again proposed an allowance of $1.1m for AA6.

316. On balance we consider that DBP has made conservatively high assumptions on the volume of work required in AA6, and we therefore propose a -10% adjustment.

Meter Stations DBP15

The proposed work is required but absent specific information from DBP it is reasonable to assume that this will be across sites which will include only some Existing Stations

317. The works proposed for the AA6 period are to address significant corrosion issues identified at a number of sites along the DBNGP and, in particular, issues with corrosion under insulation and at the ground to air interface ($2.3M), as well as a continuation of earthing replacement from AA5 ($$0.5M) and painting of facilities at a similar level to AA4 ($1.2M). As with similar corrosion issues at compressor station and pipeline facilities, DBP has demonstrated that the work is justified.

318. As these issues are common to all sites and DBP has not provided a list of sites at which work is proposed, it is assumed that work will occur at Existing Stations and other sites proportionately. To allow for this, we consider that a reasonable allowance will be 61% ($2.4m) less than DBP has proposed.

Structures and operational sites DBP38

DBP's proposed capex is reasonable

319. DBP has proposed a series of small projects totalling $0.45m over the period. These are adequately justified in DBP's business case.

6.4.3 Findings summary and implications

DBP's proposed allowance is more than it will require

320. In aggregate we consider that DBP's proposed AA6 capex allowance for the Corrosion Protection asset class is more than it will require.

321. In Table 6.5 we summarise DBP's proposed capex and the implication of the proposed EMCa adjustment for the AA6 capex allowance for corrosion protection. As can be seen in this table, the adjustments result from two factors that are explained in our assessment above:

- Reduction of 10% for DBP02 Pipelines and MLVs to reflect implicit cost contingency,
- Reduction of 61% for DBP15 Meter Stations to reflect the proportion of Existing Stations.

Table 6.5: DBP proposed and adjusted allowance for corrosion protection - $m, real Dec 2024

Business case	DBP Proposed	EMCa Adjustment	EMCa Adjusted	*EMCa Adjustment (%)*
DBP01: Compressor Stations	11.70	0.00	11.70	0%
DBP02: Pipeline and MLV	7.45	-0.75	6.71	-10%
DBP15: Meter Stations	3.95	-2.41	1.54	-61%
DBP38: Structures & Operational Sites	0.45	0.00	0.45	0%
Total	**23.56**	**-3.16**	**20.40**	**-13%**

Source: EMCa

6.5 Pipelines and MLVs asset class

6.5.1 What DBP has proposed

322. As shown in the table below, DBP's AA6 Pipeline and MLV asset class capex forecast of $1.0m is $2.5m (71%) less than DBP's actual AA5 capex of $3.6m, and similar to its AA4 expenditure.

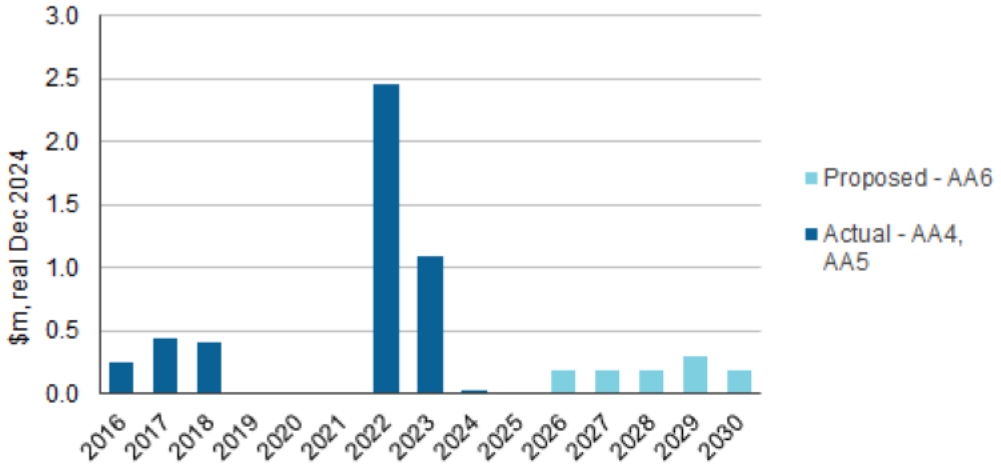
Table 6.6: DBP's proposed AA6 capex in the Pipeline and MLV asset class - $m, real Dec 2024

Business case	AA4 total	AA5 total	2026	2027	2028	2029	2030	AA6 Total
DBP02: Pipeline and MLV	**1.11**	**2.32**	0.09	0.09	0.09	0.19	0.09	**0.54**
DBP38: Structures & Operational Sites	**0.00**	**0.00**	0.10	0.10	0.10	0.10	0.10	**0.51**
Other project	**0.00**	**1.25**	0.00	0.00	0.00	0.00	0.00	**0.00**
Total	**1.11**	**3.57**	**0.19**	**0.19**	**0.19**	**0.29**	**0.19**	**1.04**

Source: EMCa table derived from DBP response to IR EMCa03

323. As can be seen in Figure 6.5, the time trend for this category tends to reflect the need for specific projects from time to time, but with minimal or no expenditure in many years.

Figure 6.5: AA4, AA5 and proposed AA6 capex in the Pipeline and MLV asset class - $m, real December 2024



Source: EMCa derived from DBP response to IR EMCa03

6.5.2 Assessment

DBP's proposed work is justified

324. The three projects that DBP proposes for AA6 include erosion repairs and replacement of some fencing. From condition information provided in DBP's business cases, we consider that this work is required and that it is prudent to undertake it in AA6.

6.5.3 Findings summary and implications

DBP's proposed allowance is reasonable

325. In aggregate we consider that DBP's proposed AA6 capex allowance for the Pipelines and MLVs asset class is reasonable.

326. We propose no adjustment for the Pipeline and MLV asset class. Therefore, we propose accepting the allowances shown in Table 6.6.

6.6 SCADA, ECI, Communications asset class

6.6.1 What DBP has proposed

327. DBP has forecast $81.2m capex over the AA6 period in the 'SCADA, ECI and Communications' asset class, as shown in the table below. The proposed AA6 expenditure is $2.7m (3%) more than DBP's AA5 capex, but more than twice its expenditure in AA4.

328. DBP's largest project in AA5 was replacement of the Northern Comms infrastructure, which we reviewed in section 5. That project is now largely complete, though DBP proposes carry-over expenditure of $4.8m in 2026, and which we assess below.

329. In AA6 DBP proposes to allow for a range of further significant replacements and upgrades. These include:

- Compressor unit control system replacement at $15.7m
- GEA engine replacement at a cost of $11.7m
- CCVT replacement at $9.6m
- RTU replacement at a cost of $6.9m
- GEA and DEA control system replacements at a cost of $6.8m
- Gas measurement software upgrade at a cost of $1.5m
- Core and site firewalls, Pure storage replacement and replacing batteries at repeater sites, at costs of $1.9m for each of these three projects.

330. These are either new projects for which there was no expenditure in AA5 or represent significant uplifts on work undertaken in AA5.

Table 6.7: DBP's proposed AA6 capex in the SCADA, ECI, Comms asset class - $m, real Dec 2024

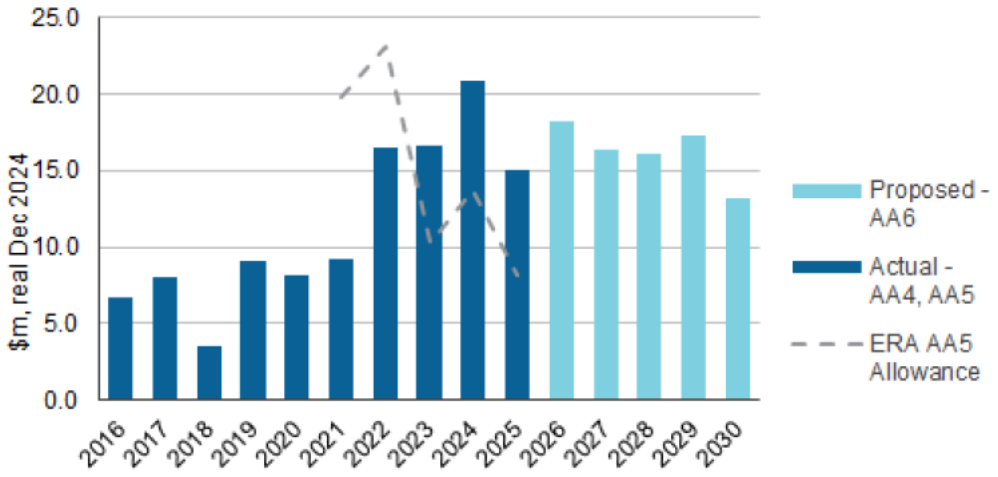
			AA6					
Business case	AA4 total	AA5 total	2026	2027	2028	2029	2030	AA6 Total
DBP01: Compressor Stations	**6.26**	**7.41**	1.14	0.17	1.14	0.83	0.83	**4.10**
DBP02: Pipeline and MLV	**1.67**	**1.96**	0.00	0.02	0.00	0.29	1.47	**1.77**
DBP03: Operating Technology (OT)	**2.90**	**1.95**	3.03	3.94	3.92	4.14	3.66	**18.69**
DBP08: Northern Comms Replacement	**0.00**	**35.31**	4.80	0.00	0.00	0.00	0.00	**4.80**
DBP09: Compressor Unit Control Systems Replacement	**7.98**	**18.42**	3.12	3.12	3.13	3.14	3.15	**15.66**
DBP23: Network Security	**0.00**	**0.49**	0.20	0.20	0.40	0.20	0.20	**1.21**
DBP35: Power Gen & Mgt	**4.42**	**11.20**	5.89	8.91	7.54	8.69	3.95	**34.98**
Other projects (not proposed for AA6)	**12.28**	**1.75**	0.00	0.00	0.00	0.00	0.00	**0.00**
Total	**35.52**	**78.48**	**18.19**	**16.36**	**16.12**	**17.30**	**13.25**	**81.22**

Source: EMCa table derived from DBP response to IR EMCa03

331. The figure below shows DBP's considerable increase in capex in AA5, relative to AA4. This is largely because of the Northern Communications replacement project, as discussed in

section 5. This project was included in the ERA allowance for the period and, while the profile of expenditure differs, in aggregate DBP's expenditure was 4% higher than the allowance. While the large Northern Communications project is now largely completed, the graph shows that DBP's proposed AA6 allowance would essentially continue the high level of annual expenditure incurred in AA5.

Figure 6.6: AA4, AA5 and proposed AA6 capex in the SCADA, ECI & Comms asset class - $m, real Dec 2024



Source: EMCa derived from DBP response to IR EMCa03

332. In the following subsections, we discuss the proposed AA6 expenditure according to each DBP business case.

6.6.2 Assessments by business case

DBP08: Northern Comms replacement

Taken in conjunction with our proposed acceptance of DBP's AA5 expenditure, only part of DBP's proposed further AA6 allowance is justified

333. DBP has largely undertaken its replacement of the Northern Communications System in AA5. As we discuss in section 5.3.4, DBP has advised that its expected total project cost is $38.84m. While we propose accepting all of DBP's AA5 capex as conforming, its proposed AA6 allowance would lead to a total allowance that exceeds its currently-expected cost and is essentially a contingency against the possibility of a cost and/or time over-run into AA6.

334. For the reasons that we describe in section 5.3.4, we therefore propose an adjustment of $0.89m to DBP's proposed AA6 allowance, and which has the effect of providing a total allowance across the two periods equal to DBP's expected total cost for the project.

DBP03: Operating Technology

Justification that DBP has proposed

335. Whereas DBP spent $1.95m in AA5, it now plans a large-scale replacement of its OT in AA6 at a proposed capex allowance of $18.7m.

336. [redacted]

[71] DBP03 business case, page 84

- [redacted]

DBP presents adequate justification of need and a prudent program to address that need

337. OT replacement will reduce the risk of OT failures and improve the reliability of information required to operate and report on the operations of the pipeline. A further factor, which we consider relevant, is that the cyber security offered by current technologies is considerably stronger, thereby further reducing risk.

338. DBP's business case demonstrates that it has considered reasonable options. We consider that DBP is justified in rejecting a 'run to failure' option, due to the risks that it would impose indicates. DBP also considered an accelerated option but provides its assessment that it can adopt a prioritised approach which will allow it to defer some elements of the replacement program. Its preferred option therefore spreads replacement of RTUs over 10 years, while replacing 'end of life' assets within 5 years.

339. DBP also states that it will utilise usable spares to extend the program where possible.

DBP will find opportunities to prudently defer some projects to address delivery challenges

340. DBP's proposed replacement program (for this asset class alone) comprises 18 projects. While we consider that DBP's proposed program represents a prudent approach, we consider that DBP will face challenges in delivering the scale of replacement that it has proposed within the timeframe, and that it will find prudent opportunities to defer some replacements, as it has suggested. To account for this and given the size of the proposed allowance for this work, we consider that a 10% lower capex allowance will provide DBP with sufficient allowance to maintain the intended risk position.

DBP35: Power generation and management

What DBP has proposed

341. DBP is proposing $35m capex under this program, compared with $10.3m in AA5. The largest single project GEA engine replacement at a proposed allowance of $11.7m, GEA and DEA control system replacement at $6.8m and CCVT replacement at a cost of $9.6m.

DBP's proposed GEA engine replacement project (NEW-BC-1-02) is justified

342. DBP is proposing $11.7M for replacement of GEA's during AA6.

343. The GEA's are end of life and DBP has considered reasonable options for replacement. Emissions reduction obligations add a new dimension to the evaluation of options. The preliminary cost benefit analysis demonstrates a positive NPV of $73k, including environmental benefits in contributing to meeting DBP's emissions reduction obligations.

344. The Business Case and responses to IR's EMCa15 Q29 demonstrate that there is justification for this programme.

DBP's proposed GEA and DEA control system replacement project (CP1700511) is justified

345. DBP is proposing $6.8M for replacement of GEA and DEA control systems during AA6.

346. The programme is in accordance with OEM recommendations and an independent study carried out by Motherwell Systems in 2012[72]. The work is being scheduled with the GEA replacement project to optimise resource and staff deployment and minimise duplication of personnel visiting a site.

347. The Business Case justifies the expenditure.

[72] Business Case Capex DBP35 Section 1.3.2.2

DBP's proposed CCVT replacement project (CP1700550) is justified

348. DBP has proposed $9.5M for replacement of CCVT's during AA6.

349. The Business Case and responses to IR EMCa10 and EMCa15 demonstrate that DBP has undertaken a thorough review of power generation options for remote MLV sites. The existing CCVT's are end of life and no longer supported by the OEM, so an alternative is required.

350. The expenditure is justified.

DBP's proposed expenditure allowances for other projects are reasonable

351. Other projects that DBP proposes for AA6 are largely end of life replacements or the continuation of existing projects, with some also prompted by the introduction of renewables. These are individually relatively small projects at what should be well-understood costs.

352. We consider that in aggregate DBP's proposed allowance for these projects is reasonable.

DBP09: Compressor Unit Control Systems Replacement

What DBP has proposed

353. DBP proposes an allowance of $15.7m for this project. This is in effect a continuation from a project for which it incurred $18.4m in AA5 and $8.0m in AA4.

DBP's proposed expenditure allowance is reasonable

354. As set out in Business Case Capex DBP09 compressor turbine control systems have a design life of 18 years after which the OEM will no longer provide support. DBP's continuing replacement programme meets this OEM requirement.

355. Further, [redacted] has introduced improvements to its control systems to improve compressor unit operational efficiency and provide better diagnostics as issues develop. These enhancements should deliver benefits in future periods.

356. The costs are based on the experience of conducting this programme through AA4 and AA5.

357. The Business Case justifies the expenditure.

DBP23 Network security

DBP's proposed expenditure allowance is reasonable

358. DBP proposes $1.2m for OT within its business case for network security. We consider that the justification in the business case is reasonable to maintain risk levels.

DBP01: Compressor stations and DBP Pipeline and MLV

DBP's proposed expenditure allowance is reasonable

359. As is shown in Table 6.7, DBP's proposed OT expenditure under these business cases is less than, though broadly commensurate with, past expenditure and represents a continuation of ongoing replacements and minor upgrades.

360. We consider that the proposed allowance for this is reasonable.

6.6.3 Findings summary and implications

361. In aggregate we consider that DBP's proposed AA6 capex allowance for the SCADA ECI and Comms asset class is more than it will require. As described in our assessment above, this arises from two factors:

- Prudent deferral of a proportion of DBP's proposed OT program (DBP03)

- Reduction in the proposed allowance for remaining work on Norther Comms replacement (DBP08).

362. In Table 6.8 we summarise DBP's proposed capex and the implication the proposed EMCa adjustment for the AA6 capex allowance for SCADA, ECI, Communications asset class

Table 6.8: DBP proposed and adjusted allowance for SCADA, ECI, Communications- $m, real Dec 2024

Business case	DBP Proposed	EMCa Adjustment	EMCa Adjusted	*EMCa Adjustment (%)*
DBP01: Compressor Stations	4.10	0.00	4.10	*0%*
DBP02: Pipeline and MLV	1.77	0.00	1.77	*0%*
DBP03: Operating Technology (OT)	18.69	-1.87	16.82	*-10%*
DBP08: Northern Comms Replacement	4.80	-0.89	3.91	*-19%*
DBP09: Compressor Unit Control Systems Replacement	15.66	0.00	15.66	*0%*
DBP23: Network Security	1.21	0.00	1.21	*0%*
DBP35: Power Gen & Mgt	34.98	0.00	34.98	*0%*
Total	**81.22**	**-2.76**	**78.46**	***-3%***

Source: EMCa

6.7 Metering asset class

6.7.1 What DBP has proposed

363. DBP has forecast $31.8m capex over the AA6 period in the Metering asset class, as shown in the table below. The proposed AA6 expenditure is $14.8m (87%) more than DBP's AA5 capex, which in turn was more than double the ERA allowance for this period. The projects that contribute the majority of the proposed increase are:

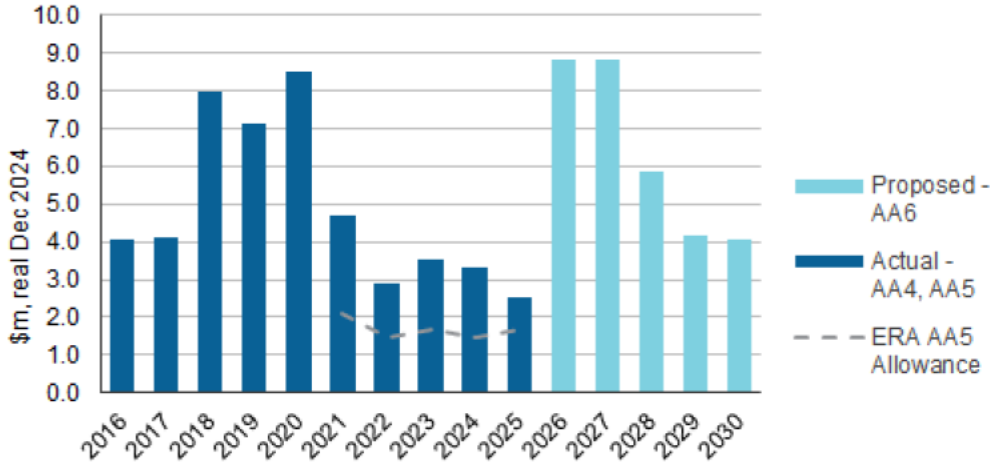
- The proposed installation of Gas Chromatographs (GCs) at a cost of $6.0m (compared with $0.2m in AA5)
- The proposed installation of analysers at intake sites at a cost of $4.7m (compared with none in AA5 or AA4);
- Progressive recertification of meters (at a proposed cost of $1.3m, compared with none in AA5 or AA4)
- Increased allowances for turbine meter refurbishment and replacement, heater fuel gas train replacement and flow computer replacement at costs that are $2.2m, $1.3m and $2.0m respectively more than in AA5.

Table 6.9: DBP's proposed AA6 capex in the Metering asset class - $m, real Dec 2024

Business case	AA4 total	AA5 total	2026	2027	2028	2029	2030	AA6 Total
DBP01: Compressor Stations	**1.38**	**0.01**	0.00	0.00	0.00	0.00	0.00	**0.00**
DBP03: Operating Technology (OT)	**2.41**	**0.18**	0.00	0.22	0.66	0.67	0.67	**2.22**
DBP15: Meter Stations	**28.03**	**16.82**	8.35	8.45	5.06	3.45	3.38	**28.69**
DBP38: Structures & Operational Sites	**0.00**	**0.00**	0.49	0.14	0.14	0.04	0.04	**0.86**
Total	**31.82**	**17.00**	**8.84**	**8.81**	**5.86**	**4.16**	**4.09**	**31.76**

Source: EMCa table derived from DBP response to IR EMCa03

Figure 6.7: AA4, AA5 and proposed AA6 capex in the Metering asset class - $m, real Dec 2024



Source: EMCa derived from DBP response to IR EMCa03

6.7.2 Assessment

DBP15: Meter stations

Only a proportion of metering stations are Existing Stations and therefore qualify as regulatory capex

364. There are 67 meter stations (Inlet Points and Outlet Points) along the DBNGP. Of these, 26 (or 39%) are identified as Existing Stations for which DBP is responsible for operations and maintenance costs under clauses 6 and 15 of the DBNGP Reference Service Terms and Conditions. At all other stations, the shippers using a particular station are responsible for the costs of operating and maintaining that station. Where DBP's proposed projects do not relate to a specific station, they should not therefore be assigned in full to the DBNGP; a reasonable assumption is to apportion the costs on the basis of 39% to Existing Stations (and therefore complying) and 61% to other stations for which costs are recoverable from shippers.

365. There are some significant projects within this business case which we have assessed on a case-by-case basis as follows:

Project CP1700261: Gas chromatograph installations at producer inlets and at CS1 & CS2

366. DBP proposes an AA6 capex allowance of $6.0m for the installation of gas chromatographs at inlet stations and at CS1 and CS2. DBP stated at the onsite that these were requested by shippers as the information provided by producers has been unreliable.

367. Clause 15 of the Reference Service Terms and Conditions stipulates that the provision of metering at inlet points is the responsibility of the shippers, but the shippers may engage DBP to install, operate and maintain the facilities at the shippers' expense. Further, it is not DBP's responsible to provide GC's elsewhere in the gas network as part of provision of its regulated services.

368. CS1 is the location of the inlet point for Varanus Island and Gorgon and CS2 is the location of the inlet point for Wheatstone and Tubridgi Storage. Accordingly, if this is to proceed, the full costs should be recovered from the relevant shippers, so it is not conforming expenditure.

Project New 04: Analyser installation at intake sites

369. DBP proposes an AA6 capex allowance of $4.7m to install gas analysers at intake stations.

370. Clause 25 of the Reference Service Terms and Conditions stipulates that the provision of metering at inlet points is the responsibility of the shippers, but the shippers may engage DBP to install, operate and maintain the facilities at the shippers' expense.

371. Accordingly, if this is to proceed, the full costs should be recovered from the relevant shippers, so it is not conforming expenditure.

Project New 04: Meter recertification

372. DBP proposes an AA6 capex allowance of $1.3m to recertify meters.

373. We sought information on the sites for the relevant meters. In its response to EMCa14 Q24, DBP states "*For meter replacement or recertification projects it is not practicable to identify specific sites at this time. We have based the forecast volumes on historical averages.*"[73]

374. Of the 67 meter stations on the DBNGP, 26 are Existing Stations[74] for which DBP must meet the costs of operations and maintenance[75]. At the other 41 stations, shippers are responsible for the costs for operations and maintenance, including maintenance capex.

375. Accordingly, based on pro rating the costs in proportion to the number of Existing Stations and other stations, 39% or $0.5M is conforming capex with the remainder recoverable from shippers.

Project New 03: Spare meters for recalibration

376. DBP proposes an AA6 capex allowance of $0.7m to recalibrate spare meters.

377. Clause 15 of the DBNGP Reference Service Terms and Conditions sets out the[76] requirements for metering at inlet and outlet points Specifically at clause 15.4(b) the requirements include the provision of alternative metering equipment at all locations with a design capacity greater than 5TJ/day.

378. Given this redundancy requirement for meters in situ, there is insufficient justification provided by DBP to allow inclusion of pre-emptive recalibration of DBP's stock of spare meters, as DBP has proposed for its AA6 capex allowance. Further, clause 15 clearly states that it is the shipper's responsibility to provide the metering equipment.

379. This proposed expenditure is not complying.

Project New 02: Annual Ultrasonic meter (USM) replacement

380. DBP proposes an AA6 capex allowance of $0.8m for annual USM replacement.

[73] Response to EMCa14 Q24

[74] Attachment to response to EMCa08

[75] Clause 6 of DBNGP Reference Service Terms and Conditions

[76] DBNGP Reference Service Terms and Conditions

381. None of the priority sites[77] identified in the response to EMCa14 Q28 is an Existing Station[78]. Accordingly, under the DBNGP Reference Service Terms and Conditions, the shippers are responsible for the operations and maintenance of these stations and the proposed expenditure is not complying.

Project CP1700017: Upgrade of odorant facilities and Kingtool filling facilities

382. DBP proposes an AA6 capex allowance of $2.4m, following on from $1.7m incurred in AA5.

383. The response to EMCa14 Q25 provides additional information on the rationale and prioritisation of sites for upgrade of odorant facilities and replacement of the end-of-life Kingtool odorant filling facilities. All of the sites at which work is proposed in AA6 are Existing Stations. The information provided justifies this proposed expenditure as complying.

Project CP1700476: Turbine meter refurbishment and replacement

384. DBP proposes an AA6 capex allowance of $3.3m, following on from $1.1m incurred in AA5.

385. All of the turbine meters proposed for replacement during AA6 are located at Existing Stations and are at end of life, being at least 25 years old[79]. This expenditure is justified.

Project CP1700482: Heater fuel gas train replacement

386. DBP proposes an AA6 capex allowance of $3.9m, following on from $2.5m in AA5. This expenditure is justified.

DBP03: Operating Technology

387. DBP proposes an allowance of $2.2m to replace flow computers (project CP1700006). DBP spent $2.4m on this project in AA4, followed by $0.2m in AA5. In AA5 DBP replaced 6 flow computers, but in AA6 DBP proposes to replace a further 66.

388. As set out in Business Case Capex DBP03 Operational Technology, the replacement of flow computers is part of a larger programme to replace obsolete OT equipment at compressor stations and meter stations.

389. The proposed expenditure is justified and the forecast is reasonable.

DBP38: Structures & operational sites

390. As set out in Business Case Capex DBP38 Structures and Operational Sites in Section 1.3.1.6 replacement of air conditioners is an ongoing programme to replace units at their end of life. This expenditure is justified.

391. As set out in Business Case Capex DBP38 Structures and Operational Sites Section 1.3.1.10, refurbishment of concrete bunds at odorant facilities is undertaken on the basis of a site-by-site assessment. These facilities have deteriorated due to their age and the expenditure is justified.

392. As set out in Business Case Capex DBP38 Structures and Operational Sites Section 1.3.1.11 and Appendix A Section A.4.1.2, the proposal to install Palisade fencing at Kwinana Junction is driven by previous security breaches and the criticality of the site. The proposed expenditure is justified.

Unit costs

DBP's proposed unit costs are reasonable

393. For those projects that are a continuation of volume work undertaken in AA5, unit costs used in DBP's forecasts are suitably consistent. However, as described above, several significant projects are new and for these DBP has used the costs for similar projects and,

[77] Attachment EMCa14 Q28 USM sites

[78] EMCa08 Existing Stations (Pre-95 Sites).docx

[79] Response to EMCa14 Q24 and Q26 and attachment EMCa14 Q26 Turbine MGMT for AA6

where applicable, vendor quotes. Each of the projects is similar in nature to projects carried out in AA5 and we consider that DBP's unit costs are reasonable.

6.7.3 Findings summary and implications

Summary of findings

394. We consider that a considerable portion of the AA6 metering expenditure that DBP has proposed is not justified for inclusion in its regulatory allowance. Summarising the findings from our assessment above, this comprises the following:

- For DBP15 Metering stations:
  - Gas chromatograph installation at inlet points is not justified;
  - Analyser installation at inlet points is not justified
  - 39% ($0.5M) of the proposed meter recertification project is justified;
  - Acquisition of spare meters for calibration is not justified
  - Annual USM replacement is not justified
  - Upgrade of odorant facilities Is justified
  - Turbine meter refurbishment and replacement is justified
  - Heater fuel gas train replacement is justified
- DBP's expenditure proposed under DBP03 (Operating Technology) and DBP38 (structures and operational sites) is justified.

EMCa adjusted capex for metering asset class

A significant amount of the metering expenditure that DBP has proposed is not conforming

395. In Table 6.10 we summarise DBP's proposed capex and the implication of EMCa's proposed adjustment for the AA6 capex allowance for Metering asset class. In this table, we apply subcategories that relate to the adjustments referred to above. In this table, the conforming and non-conforming projects are each aggregated separately.

396. As per our assessment above, the project for which a proportion of the proposed expenditure is conforming is the Meter Recertification program. In total, we find that 41% of DBP's proposed metering expenditure is not just justified as the sites and related work does not conform.

Table 6.10: DBP proposed and EMCa adjusted allowance for metering - $m, real Dec 2024

Business case and subcategory	DBP Proposed	EMCa Adjustment	EMCa Adjusted	*EMCa Adjustment (%)*
DBP15: Meter Stations - Conforming	15.19	0.00	15.19	0%
DBP15: Meter Stations - Not conforming	12.24	-12.24	0.00	-100%
DBP15: Meter Stations - Proportion not conforming	1.26	-0.77	0.49	-61%
DBP03: Operating Technology (OT)	2.22	0.00	2.22	0%
DBP38: Structures & Operational Sites	0.86	0.00	0.86	0%
Total	**31.76**	**-13.01**	**18.75**	***-41%***

Source: EMCa

6.8 IT and Motor Vehicles asset class

6.8.1 What DBP has proposed

DBP's proposed AA6 expenditure is higher than for AA5, despite it having completed several major ICT projects in AA5

397. DBP has forecast $59m AA6 capex in the 'Computers and Motor Vehicles' asset class, as shown in the table below. DBP's expected AA5 capex in this asset class is $57m, which was $35.2m (162%) greater than the $21.8m DBP incurred in AA4 and $24.3m (74%) more than the ERA allowance for the period.

398. As discussed in section 5.3.6, expenditure on DBP's OneERP project was the dominant explanation for spending considerably more in AA5 than in AA4, and issues with this project are the dominant explanation for DBP spending considerably more than the allowance. In AA5 DBP has also developed the new Transmission Billing System (TBS) and the West Coast Data Centre, both also significant projects. Despite having essentially completed these major initiatives in AA5, DBP is proposing even greater ICT expenditure in AA6.

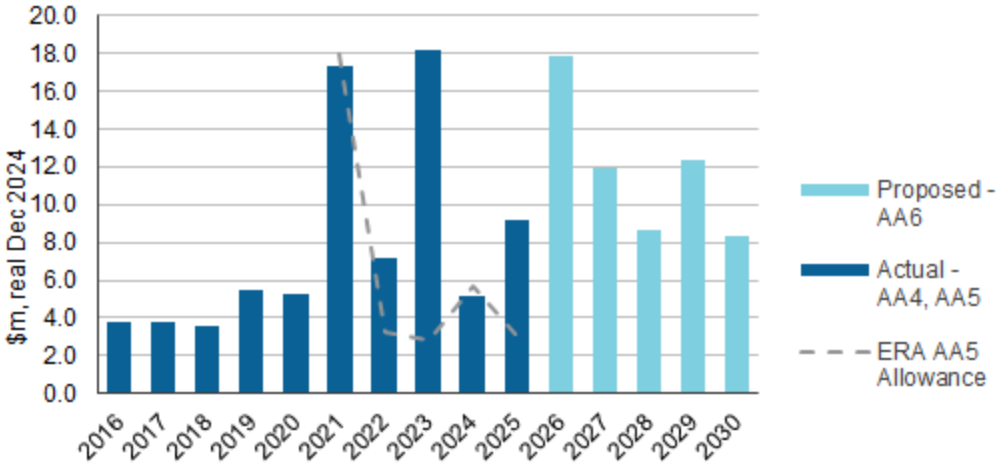
Table 6.11: DBP's proposed AA6 capex in the Computers & Motor Vehicles - $m, real Dec 2024

			AA6					
Business case	AA4 total	AA5 total	2026	2027	2028	2029	2030	AA6 Total
DBP03: Operating Technology (OT)	**0.00**	**0.15**	2.59	0.79	0.56	0.00	0.00	**3.94**
DBP17: Vehicles (Fleet & civil equipment)	**6.75**	**6.78**	3.22	2.59	2.33	2.23	2.34	**12.70**
DBP21: Corporate IT Sustaining Apps	**12.01**	**38.24**	4.81	3.33	2.92	7.65	2.64	**21.35**
DBP23: Network Security	**0.65**	**2.89**	2.31	1.44	1.06	0.92	0.63	**6.36**
DBP30: IT Sustaining Infrastructure	**2.01**	**5.80**	4.80	3.66	1.77	1.51	2.70	**14.45**
DBP38: Structures & Operational Sites	**0.00**	**0.00**	0.10	0.10	0.00	0.00	0.00	**0.20**
Other projects (not included in AA6)	**0.36**	**3.16**	0.00	0.00	0.00	0.00	0.00	**0.00**
Total	**21.79**	**57.03**	**17.83**	**11.92**	**8.63**	**12.32**	**8.31**	**59.01**

Source: EMCa table derived from DBP response to IR EMCa03

399. Figure 6.8 illustrates the trend from AA4 through to the end of DBP's proposed allowance for AA6. It shows how DBP's expenditure in AA5 exceeded the ERA allowance despite this including allowances for these major initiatives, with the ERA allowance being significantly exceeded in 2023 (coinciding with the restart of the OneERP project) and projected to be exceeded again in 2025.

Figure 6.8: AA4, AA5 and proposed AA6 capex in the Computers & Motor Vehicles asset class - $m, real Dec 2024

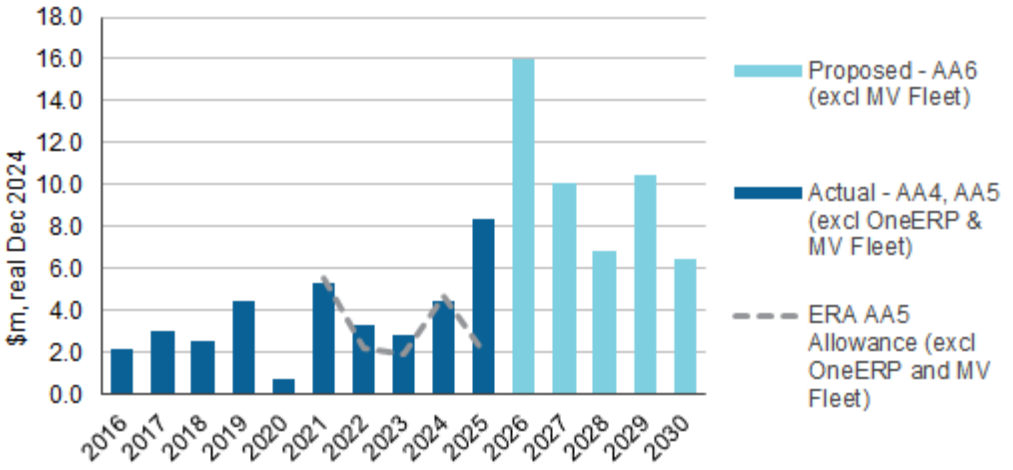


Source: EMCa derived from DBP response to IR EMCa03

If we exclude the major AA5 OneERP initiative and also vehicles from historical data, DBP's proposed AA6 ICT expenditure presents as a significant increase on trend, against what could be expected to be a 'business continuity' requirement

400. In Figure 6.9 we show the trend for what could be considered underlying IT expenditure. For this purpose, we have excluded the OneERP project and Fleet motor vehicles. Excluding DBP's forecast expenditure for 2025, the figure shows that DBP's actual underlying IT expenditure over AA5 was close to the ERA allowance and the increase relative to AA4 is much less significant (and in part driven by the TBS and West Coast data Centre projects referred to above). Against this baseline, DBP's proposal for AA6 presents as a significant increase.

Figure 6.9: AA4, AA5 and proposed AA6 capex on underlying IT (excluding OneERP project and Motor Vehicle Fleet) - $m, real Dec 2024



Source: EMCa derived from DBP response to IR EMCa03

6.8.2 Assessment - DBP21: IT sustaining apps

DBP's IT management approach

DBP's distinction between enhancements and upgrades provides a reasonable strategic framework for considering its requirements

401. In DBP21 DBP classifies its proposed expenditure on IT sustaining apps into 'enhancements' and 'upgrades'. From its descriptions, what DBP refers to as 'upgrades' are in effect version upgrades, which maintain the currency of the application. The expenditure that it proposes under these categories is shown in Table 6.13 (for application upgrades) and Table 6.14 (for application enhancements).

402. DBP describes its IT asset management approach as follows:

> *Our approach is to ensure our business-critical systems remains available and secure for our staff and our shippers, minimising system interruption risks. We apply upgrades, patches and application enhancements based on consideration of business purpose, system criticality, and vendor recommendations on upgrade patches and version support.*[80]
>
> *We apply an underlying principle of staying at a minimum of N-1 (i.e. systems will remain operational given the failure of any single component) for application upgrades. The alignment with industry practice of N-1 ensures ongoing vendor support and mitigates the risk of security breaches, system outages and potential regulatory non-compliance.*[81]

403. These statements of approach reflect good industry practice; we therefore sought evidence that DBP has applied this approach prospectively in proposing its forecast allowances.

DBP's consideration of strategic options for upgrades and enhancements

DBP's option analysis is coarse. It is not sufficient to wholly endorse any one option and therefore each proposed project requires consideration

404. DBP presents three strategic development options in its business case, as shown in Table 6.12. DBP does not present a cost benefit analysis of the options but does present a risk assessment which we reproduce in this table.

Table 6.12: DBP's stated risk assessment of the three options it considered

Option	Cost	DBP's risk assessment (EMCa emphasis added)
Option 1: Upgrade all systems based on vendor recommended cycles	$25.3m	This option moderates all high and intermediate risks to ALARP
Option 2: Deliver upgrades and application enhancements on a risk-based assessment of business need	$21.1m	This option moderates all high and intermediate risks to ALARP
Option 3: Deliver the upgrades program only with no application enhancements	$13.8m	This option moderates all high and intermediate risks to ALARP, **but may compromise ability to address risks that emerge during the period**

Source: EMCa table from DBP business case DBP21, in DBP Attachment 9.5, table 1.14 (page 292)

80 DBP21, Attachment 9.5, page 277

81 As above, page 278

405. DBP dismisses Option 1, which in any case would have the highest cost. We concur with this judgment. However, we observe that for seven of the proposed application upgrade allowances, the costs are the same between options 1 and 2.

406. DBP's option 3 has the same cost estimates as option 2 for application upgrades but has no allowance for enhancements.

407. In discussing why it considers Option 2 to be the prudent option, DBP states that Option 2 is '*the most cost-effective way of dealing with the risks posed by outdated and unsupported applications*'. DBP further refers to the need to '*minimise business disruption'* and to '*mitigate risk by ensuring software currency'*.[82]

408. As can be seen, DBP's primary statements on the risk outcomes are the same, with the one proviso on option 3 being that it **may** compromise the ability to address (unknown and unspecified) future risks. Given the implied conditionality of this statement, we have further considered the extent to which the anticipation of such possible future risks warrants the considerably higher cost of adopting Option 2, relative to option 3. We do so by considering the specifics of each of the 'enhancement' projects that DBP proposes.

Application upgrades

DBP proposes upgrades by reference to application lifecycles

409. In Appendix A.1 of its business case (DBP21) DBP presents 'upgrades' by reference to project lifecycles and the need to maintain the currency of the suite of applications. DBP also refers to the need for such upgrades as being *'…compounded by business needs that change over time and result(s) in either manual workarounds or changes to the IT application over time.'* In this appendix to its business case, DBP presents background context information on each of the proposed upgrade projects.

410. DBP's proposed allowance for application upgrades comprises the projects shown in Table 6.13.

82 As above, page 293

Table 6.13: DBP proposed AA6 capex for application upgrades - $m, real dec 2024

Project	2026	2027	2028	2029	2030	AA6 Total
CP1700235: Maximo Upgrades	1.61	0.00	0.00	1.42	0.00	**3.03**
CP1700472: I-05 Other Core Systems (IT)	0.20	0.20	0.20	0.20	0.20	**1.01**
DBP21-New-04: IT Sustaining Applications - refreshes of core business applications - TBS	0.25	0.35	0.45	0.25	0.45	**1.75**
DBP21-New-09: IT Sustaining Applications - refreshes of core business applications - Public websites	0.35	0.00	0.24	0.00	0.00	**0.58**
DBP21-New-19: IT Sustaining Applications - refreshes of core business applications - INX	0.13	0.12	0.06	0.07	0.07	**0.45**
DBP21-New-20: IT Sustaining Applications - refreshes of core business applications - [redacted]/Governance, Risk, and Compliance (GRC)	0.39	0.20	0.00	0.17	0.00	**0.75**
DBP21-NEW-21: Application architecture tool (EAM)	0.07	0.08	0.10	0.10	0.09	**0.45**
DBP21-NEW-22: Data Archiving	0.15	0.10	0.11	0.12	0.13	**0.61**
DBP21-NEW-23: Centralized GIS Database	0.08	0.69	0.16	0.23	0.19	**1.35**
DBP21-New-24: IT Sustaining Applications - OneERP S/4HANA Upgrades	0.00	0.00	0.00	3.29	0.00	**3.29**
DBP21-New-25: IT Sustaining Applications - OneERP SuccessFactors Half Yearly Releases	0.13	0.13	0.13	0.13	0.13	**0.66**
Total	**3.35**	**1.87**	**1.45**	**5.98**	**1.27**	**13.93**

Source: EMCa table derived from DBP response to IR EMCa03 and information in Table 1.9, Business Case DBP21 (page 288 and 289 of Att 9.5)

DBP will find that it is able to defer some projects and/or avail itself of lower cost options, including through synergies with other AGIG entities

411. We have reviewed the descriptions of each of these projects, and their claimed rationale, and note the following:

- DBP's proposal provides for a significant upgrade of the SAP S4/HANA 2029 and it is reasonable to consider the need for such an allowance, given that the system went live in 2023. However, within the AA6 timeframe, it may be found that a deferral or an interim investment is possible; also that savings from leveraging between AGIG businesses under the OneERP investment may allow for a lower investment cost to DBNGP customers.
- With regard to the proposed allowance for TBS upgrades:
  - DBP states that its cost estimates are '*based on advice from the vendor*' and '*historical averages of upgrades and enhancements made to the old CRS system*'. Yet in DBP's detailed business case, DBP estimated that maintaining the CRS would cost $1.2m in capex over five years, but that for the TBS no post-implementation capex would be required.[83]
  - DBP states that significant factors in its choice of system include that it is '*easy to support and maintain (all included in subscription)*' and that '*changes to*

[83] AGIG Detailed Business Case, provided in response to EMCa11, Q15. Pages 11 (re Option 1) and 14 (re Option 3).

configuration can be made by AGIG staff with Excel skills or outsourced [redacted] *or other* [redacted] *resellers/partners*' and that '*other skills required to make changes or enhancements [are] commonly available.*'

- To the extent that upgrades are required to meet the complexities of non-regulated contracts, these should not be charged to DBNGP.

- [redacted]
- The proposed allowances for architecture management and for [redacted] appear to provide new functionality, for which the net benefit is not demonstrated.

412. While DBP states that its chosen option assumes that it will undertake a risk-based assessment of need over AA6, its proposed program for seven of the proposed upgrades is the same for this option as for option 1, which assumes upgrades according to vendor recommendations.

413. As a bottom-up forecast, we consider that in applying the management approach described earlier in this subsection involving an 'N-1' approach and risk-based criteria, DBP will find that it is able to defer some upgrades and/or is able to avail itself of lower-cost options and/or that some costs will not be attributable to DBNGP.

Application enhancements

DBP proposes allowance for a number of specific enhancements

414. DBP has proposed an allowance of $7.4m for application enhancements, as shown in Table 6.14. DBP describes application enhancements as those that provide additional functionality, which may be offered by the vendor or identified by users.[85]

Table 6.14: DBP proposed AA6 capex for application enhancements - $m, real dec 2024

Project	2026	2027	2028	2029	2030	AA6 Total
DBP21-New-08: IT Sustaining Applications - refreshes of core business applications - System enhancements	0.60	0.60	0.61	0.51	0.51	**2.83**
DBP21-New-12: Contract Management System (Commercial Tool)	0.00	0.00	0.00	0.30	0.00	**0.30**
DBP21-New-26: IT Sustaining Applications - OneERP Maximo incremental functionality enhancements	0.20	0.20	0.20	0.20	0.20	**1.01**
DBP21-New-27: IT Sustaining Applications - OneERP S/4HANA incremental functionality enhancements	0.65	0.65	0.66	0.66	0.66	**3.28**
Total	**1.46**	**1.46**	**1.46**	**1.67**	**1.37**	**7.43**

Source: EMCa table derived from DBP response to IR EMCa03 and information in Table 1.9, Business Case DBP21 (page 288 and 289 of Att 9.5)

Evidence of benefits, benefit assessment processes and quantitative decision criteria is lacking

415. We sought further information on the process by which DBP identifies and determines the enhancements that it will undertake, and the benefits achieved from them.[86] DBP's response describes the role that Business Process Owners have in deciding whether to

84 [redacted]

85 Attachment 9.5, Business case DBP21, pages 316 and 317

86 Information Request EMCa16, Q12

proceed with each enhancement that is under consideration and refers to 'cost benefit analysis' being required and undertaken. However, the examples that DBP provided all rely on qualitative descriptions of benefits or outcomes; DBP did not provide evidence for quantified assessment of benefits or quantified CBA. Some examples were referred to as CBAs, and included calculation of NPVs, but the NPVs were simply present value equivalents of the proposed costs.

416. Without attempting to quantify benefits, we consider that such analyses as DBP undertakes cannot be considered to be Cost Benefit Analyses and consequently DBP provided no evidence that it monitors benefits realisation. We consider that:

- DBP has not provided evidence that the enhancements that it proposes either will deliver benefits, or will only be undertaken on the basis of providing realisable benefits, and
- To the extent that DBP does identify such enhancements, then it is reasonable to expect that they will realise benefits in excess of the investment and which would therefore warrant DBP's investment regardless of the prospective regulatory allowance.

Claim that enhancements are required to mitigate unidentified potential future business risks does not justify the proposed investment

417. As we noted above, DBP's 'option 3' would exclude all application enhancements. DBP's determining criterion for rejecting this option appears to be that it '*could place business operations at risk if the enhancement is required to address a material issue*.'[87] We consider the reference to business risk is misplaced for this category, and inconsistent with DBP's explanation of enhancements as providing what are better characterised as operational benefits.

418. DBP has not to date provided adequate justification for its proposed allowance for application enhancements. We consider that applying a more transparent, criteria-based and more-often quantified test for the net benefit of enhancements will lead DBP to undertake less investment in enhancements than it has proposed and that it will by default look for internal benefits that are sufficient to justify any such investments that it chooses to make.

Findings and implications for the proposed allowance for IT sustaining applications

DBP's forecast for upgrades is overstated and it has not demonstrated the justification for proposed enhancements

419. We consider that DBP has not demonstrated that its proposed allowance for IT sustaining applications is a reasonable estimate of prudent and efficient requirements.

420. We consider that DBP has not justified the need to allow $1.75m over AA6 for annual upgrades of the TBS, which is newly developed, exists in part to manage billing of customers under non-regulated contractual arrangements and for which, in its business case, DBP forecast no further capex requirement beyond the initial deployment. On the other hand, we consider that a newly deployed system is likely to require some upgrades over the period, but DBP has not provided justification for the substantial amount that it proposes. Absent justification that addresses these matters, we consider that a reasonable allowance is for 30% of what DBP has proposed.

421. We consider that a reasonable alternative allowance would be to provide 20% ($2.8m) less than DBP has proposed for upgrades, allowing for a proportion of deferrals and adoption of lower cost options.

422. On the basis that no prospective benefits are identified and that, if they are, then DBP has the incentive to make the necessary investments, we consider that the proposed allowance for enhancements is not reasonable.

[87] Attachment 9.5, Business case DBP21, page 292

423. In Table 6.15 we summarise the EMCa adjustments to DBP's proposed capex allowance for sustaining applications, and which comprise allowances for application upgrades and application enhancements.

Table 6.15: Summary of EMCa adjustments for DBP21 – Sustaining applications - $m, real 2024

Business case subcategory	DBP Proposed	EMCa Adjustment	EMCa Adjusted	*EMCa Adjustment (%)*
Application upgrades - CRS/TBS	1.75	-1.23	0.53	*-70%*
Other application upgrades	12.17	-2.43	9.74	*-20%*
Subtotal: Application upgrades	**13.93**	**-3.66**	**10.26**	***-26%***
Application enhancements	7.43	-7.43	0.00	*-100%*
Total	**21.35**	**-11.09**	**10.26**	***-52%***

Source: EMCa

6.8.3 Assessment - DBP30: IT sustaining infrastructure

What DBP has proposed

424. DBP proposes an allowance of $14.5m in AA6 for IT sustaining infrastructure. As shown in Table 6.16, the largest category is for 'network and currency' infrastructure, and which is dominated by expenditure under the AGIG OneIT initiative which includes ongoing capex for the West Coast Data Centre.

425. The proposed amount is more than twice DBP's AA5 capex of $5.8m which, as we discuss in section 5.3.6, is $2.0m more than ERA's allowance, primarily because it includes expenditure of this amount on the West Coast Data Centre, but which was not included in ERA's AA5 allowance.

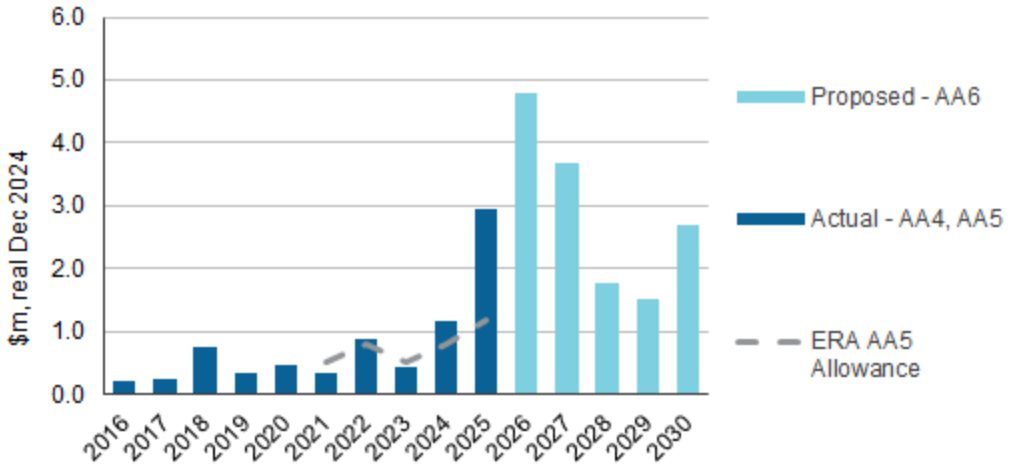
Table 6.16: DBP's proposed capex allowance for IT infrastructure in AA6

Project group	2026	2027	2028	2029	2030	AA6 Total
Data Centre (AGIG OneIT)	0.40	0.13	0.13	0.13	0.23	**1.01**
Network and currency						
AGIG OneIT	1.83	2.01	0.67	0.61	0.62	**5.74**
Other	0.41	0.00	0.21	0.00	1.07	**1.68**
Subtotal	2.24	2.01	0.87	0.61	1.69	**7.42**
End user devices	1.41	0.77	0.77	0.77	0.78	**4.51**
Field devices	0.75	0.76	0.00	0.00	0.00	**1.51**
Total	**4.80**	**3.66**	**1.77**	**1.51**	**2.70**	**14.45**

Source: EMCa table derived from DBP response to IR EMCa03

426. As shown in Figure 6.10, DBP's proposed capex allowance for AA6 is considerably greater than for either of the past two regulatory periods. The graph also illustrates how DBP's 2025 expenditure markedly exceeded the ERA allowance, with expenditure on the AGIG OneIT Data Centre in this year.

Figure 6.10: Time trend of DBP's IT infrastructure capex



Source: EMCa derived from DBP response to IR EMCa03

Assessment

Efficiencies from AGIG OneIT are not apparent

427. In our report to ERA on DBP's AA5 proposal, we noted the absence of analysis of the NPV of DBP's IT sustaining infrastructure proposal for what at that time were referred to as 'group services',[88] and which we assume are the AGIG group services now being established under 'OneIT'. This is still the case: an example in the current submission is the statement that DBP's higher than forecast IT capex in AA5 was in part due to '*a change in approach to the managed IT infrastructure services and consolidating data centres as part of the transition to the shared AGIG infrastructure, enabling us to leverage economies of scale for long-term benefits…*'[89]. However, DBP has not provided a CBA that quantifiably demonstrates these benefits at the AGIG level nor how they will flow to customers of the DBNGP.

DBP has extrapolated from a generalised statement made by AER, to claim endorsement for its OneIT infrastructure strategy

428. DBP claims support for the AGIG OneIT strategy from the AER, and refers to statements such as the following:

> *"We consider AGIG's strategy of moving to a common enterprise-wide platform across its networks to be a prudent approach that is likely to minimise risks and enable economies of scale in operational planning as well as the costs of procuring and supporting IT."*[90]

DBP has provided no adequate business case or evidence of sound IT governance for its OneIT initiative, that would be sufficient to demonstrate that the expenditure either in aggregate or as allocated to DBNGP, is prudent and efficient

429. In principle, a strategy in which the relevant entities share a common infrastructure platform would appear to be prudent. We therefore examined the business case that DBP provided to AER and which DBP referenced as being within Attachment 8.8 to AGN's SA Final Plan for AGN, and which is referred to there as business case SA138.[91]

430. The AGN business case that DBP refers to was produced in July 2020. It describes an AGIG IT Strategy and Roadmap for applications and infrastructure, in which the largest

88 EMCa report to ERA, May 2020, paragraph 354

89 DBNGP Final Plan, page 106

90 AER: Attachment 5: Capital expenditure | Draft decision – Australian Gas Networks (VIC & Albury) Access Arrangement 2023–28, December 2022 p.13

91 Refer to AER's website for its AGN decision for the period

single component is the One ERP initiative. It does not explicitly address what, in the DBP proposal, are referred to as the AGIG OneIT infrastructure initiatives, including establishment of the West Coast Data Centre.

431. In the section headed '*summary of costs and benefits*' the document provides no assessment of benefits other than a claim that the chosen option (which is also the most expensive by a considerable margin) '*is more sustainably cost efficient*' than the lower cost option.[92] Nowhere in the business case is this claim evidenced.

432. We would expect AGIG to have prepared an overall business case for its AGIG OneIT initiative in which it would have (as a minimum) defined the overall 'current state' AGIG infrastructure landscape and future infrastructure options, defined the relative costs and benefits of each option, and defined how those costs and benefits would be allocated across the AGIG entities. The apparent lack of such analysis undermines the credibility of the AGIG OneIT elements of DBP's proposed infrastructure capex for AA6.

No assessment of benefits is provided in DBP's DBP30 business case

433. As with the AGN business case referred to above, the DBP30 IT Infrastructure business case does not contain a CBA. In section 1.6 of the business case, DBP presents a comparison of the two options (stand-alone or AGIG OneIT for 'end user devices' and 'network and currency') and including a third option ('big bang cloud migration') for the Data Centre. We note that:

- There is no quantified assessment of the benefits of each option and the claimed 'NPV' of each option is simply the present value of the costs.
- There is minimal difference in total cost (totex) between options 1 and 2 for the largest component, which is Network and Currency ($7.3m for Option 1 versus $7.2m for Option 2)
- There is also minimal difference in totex for the Data Centre between options 2 and 3 ($2.8m versus $2.9m), though the proposed capex is lower for option 2.

434. DBP does not present compelling justification for its identification of options or its consideration of their relative costs and benefits.

For the data centre, DBP's proposed organic transfer to the cloud is a reasonable policy

435. DBP presents the merits of an organic transfer to the cloud and which we consider to be reasonable on qualitative grounds, including by consideration of risk. This option also has the lowest capex, at $1.0m total over AA6.

436. DBP presents the information on the proposed 'organic transfer' to the cloud, as shown in Table 6.17. We consider that this reasonably reflects such a transfer process, noting that it appears to result in an overall reduction in the number of servers. However, we would expect to see the claimed cost efficiencies but, as we discuss later in this subsection where we consider expenditure trend information, these are not evident. We also refer to the data centre expenditure in section 7.5 where we assess DBP's associated proposal for a $1.8m opex step change accompanying this transfer. We consider that this is not reasonable because:

- The incremental cost of the cloud service should be offset by savings in not needing to manage the on-prem servers, and
- As is shown in the table, there is a net reduction in the number of servers.

92 As above, page 457

Table 6.17: Migration of on-prem servers to cloud basis

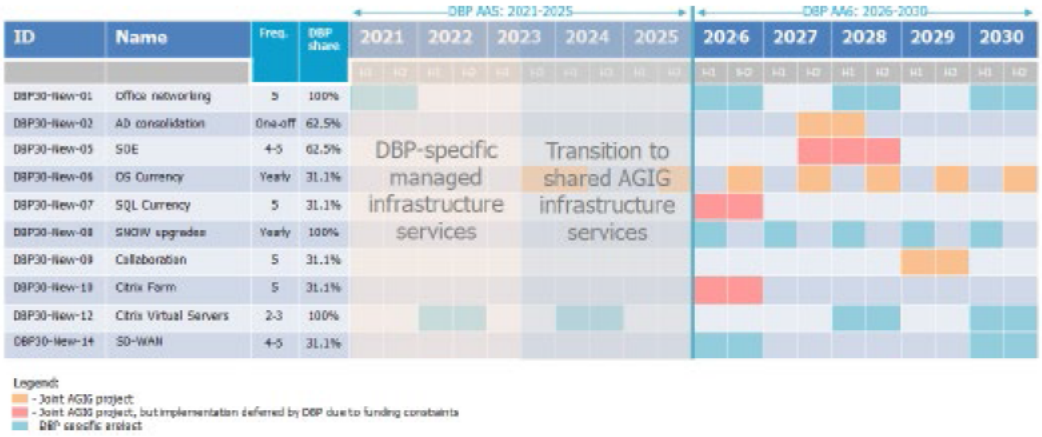
Number of servers	2024	2025	2026	2027	2028	2029	2030
DBP number of Azure Servers	-	-	18	35	53	70	88
DBP number of On-Prem Servers	126	118	93	68	43	18	-

Source: Extract from DBP30, table 1.24, for Option 2

DBP provides a Network and Currency refresh roadmap, but it has no realistic consideration of options

437. In its DBP30 business case, DBP refers to '*…leveraging the existing infrastructure already purchased by AGN and MGN*'[93] during AA5 but then refers to this infrastructure as being '*…due for refresh…* ' and which it presents as driving the proposed significant uplift in required investment for AA6. For the Network and Currency workstream, DBP provides the lifecycle roadmap as shown in Figure 6.11.

Figure 6.11: Roadmap for the Network and Currency Workstream



Source: DBP30 business case, Attachment 9.5 page 370

438. DBP's lifecycle roadmap is evidence of a specific plan that its proposal is based on. However, while DBP presents two options (DBP-centric and AGIG One-IT), there is only one item of difference between them, out of 10 projects, and consequently minimal cost difference ($7.4m compared with $7.5m).[94] We consider that this is not a realistic assessment of the options, nor does this analysis in isolation justify the 'AGIG One-IT' approach, which we would expect to provide much greater savings.

Consideration of refresh frequencies and claimed deferral

439. As shown in Figure 6.12, DBP has presented that the lower IT infrastructure totex that it incurred in AA5 was because it deferred infrastructure refresh of the order of $3.5m. It refers to this as being due to 'funding constraints', although as it shows in Figure 6.11, a contributing factor also appears to be the transition to the AGIG share infrastructure platform. However, in its business case, DBP also shows refresh frequencies for each item of equipment, that range from 2-3 years up to 5-yearly.[95] While DBP claims to have deferred some infrastructure refresh in AA5, this rate of refresh implies several cycles over a period of 15 years.

440. Given the minimal difference between DBP's 'DBP-centric' and its 'AGIG OneIT' approaches to IT infrastructure refresh, we consider it more realistic, and consistent with its claims regarding the OneIT approach, that it will find some opportunities for deferrals in

93 DBP30 in attachment 9.5, page 391

94 DBP30 business case, Attachment 9.5, tables 1.15, 1.18 and 1.22.

95 For example, in DBP30, table 1.15

AA6, as it has in the past. We consider that the level of DBP's proposed expenditure allowance is not reasonable.

End user devices, mobility and meeting room refresh

441. Growth in head count and increased use of field devices are reasonable drivers of the need for some increase in expenditure, as is the extent to which costs are increasing in real terms. In response to our information request (IR EMCa16, Q36) DBP provides a comparison of the replacement costs and quantities that it has assumed for each type of end-user device. As two examples, DBP's proposed AA6 replacements would comprise:

- A 28% increase in the number of laptops replaced
- A 335% increase in the proposed expenditure on monitors replaced (with a more than five-fold increase in the cost per monitor)

442. We consider that DBP's proposed allowance for end user device replacements is not reasonable. We consider that DBP will find some opportunities to extend lifecycles relative to the assumptions it has made for its proposal.

Field mobility devices

443. As with other aspects of its proposal, we expected DBP would seek to justify deployment of mobility devices through some form of CBA. None was provided and we sought further information through an Information Request (EMCa16, Q37)

444. In its response DBP provided evidence of a reasonable deployment plan, including a pilot project followed by a phased rollout. The program would leverage off the functionality that is inherent in applications such as Maximo and SAP 4/HANA that DBP has already deployed. Despite the lack of a CBA, in this instance we consider this to be a reasonable program, on the basis that it represents good industry practice, enhances the benefits from investments already made and is supported by a sound deployment plan.

445. We consider that the proposed allowance is reasonable and should facilitate field efficiency improvements.

Meeting room refresh

446. DBP provides minimal information on the proposed meeting room refresh. DBP states that the existing meeting room AV equipment was installed in 2021 under the office fit out project and requires a refresh in 2026. DBP does not provide any evidence to suggest that the equipment is not fit for purpose, and which would warrant allowing for replacement.

447. We consider that this expenditure allowance is not required.

IT sustaining infrastructure trend information

448. Given shifts in accounting policies for IT, there is merit in presenting IT infrastructure on a totex basis, rather than looking separately at capex and opex trends. DBP presents the figure that we have reproduced as Figure 6.12, in its business case.

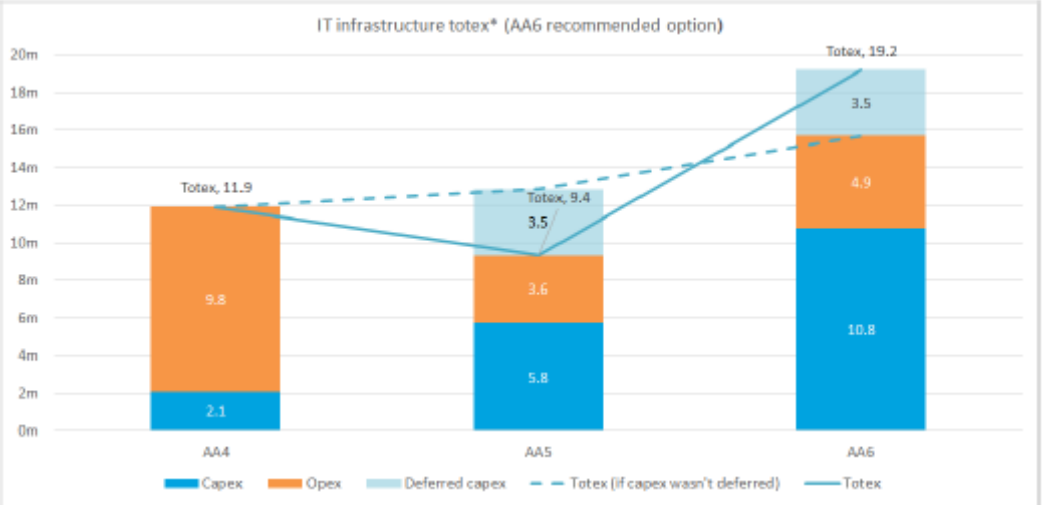
A totex perspective helps in understanding expenditure trends, but does not in itself justify the proposed increase for AA6

449. From a trend perspective, we consider that DBP's totex graph is instructive in indicating baseline levels of aggregate IT infrastructure spend over time. By including in its AA5 requirement the $3.5m of expenditure that DBP did not spend, but has deferred to AA6, an inference would be that the totex requirement has over the past two periods been of the order of $12m. Nevertheless, there is a considerable increase from this to DBP's AA6 totex proposal, which it indicates on this graph as being around $15.7m. This leads us towards considering DBP's long-term totex trend as a reasonable indicator of its requirements within a given 5-year regulatory period and we are also cognisant of DBP's claims of efficiencies arising from its AGIG OneIT approach. We consider that the prime deficiency in DBP's IT infrastructure proposal is the lack of CBAs that would demonstrate the need or net benefit to

DBNGP of an uplift of the scale that DBP is proposing, or the efficiency which it claims from leveraging off the AGIG OneIT approach.

450. We therefore tend to rely mostly on a 'totex trend' perspective and which suggests that, even taking account of a claimed refresh deferral from AA5 of the order of $3.5m, the proposed AA6 totex of $19.2m, as shown in Figure 6.12, is not a reasonable continuation of DBP's totex trend.

Figure 6.12: Total IT infrastructure expenditure over the 15-year period from 2021 (sic) until 2030 – the effect of capex deferral



Source: DBP business case DBP30, in Attachment 9.5 (page 391)

Findings and implications for the proposed allowance for IT sustaining infrastructure

DBP's proposed allowance for IT sustaining infrastructure is overstated

451. We consider that DBP has not demonstrated that its proposed allowance for IT sustaining infrastructure is a reasonable estimate of prudent and efficient requirements.

452. We have considered the components of DBP's proposed allowance and our findings are as follows:

- DBP's proposed field mobility allowance is reasonable
- DBP's proposal for end user device replacements is not reasonable. We consider that a reasonable estimate for this is 20% less than DBP has proposed
- DBP's proposed allowance for meeting room refresh is not reasonable; its proposed allowance is not justified
- For Data Centre ongoing capex, we consider that DBP's proposed allowance is not reasonable. We consider that a reasonable estimate of requirements will be 10% less than DBP has proposed, reflecting AGIG OneIT cost efficiencies
- For Network and Currency infrastructure, we consider that DBP's proposed allowance is not reasonable. We consider that a reasonable estimate of requirements will be 20% less than DBP has proposed.
- DBP's proposed expenditure for compressor station boom gates is reasonable.

453. In Table 6.18 we show the proposed adjustments for the projects within the DBP30 Sustaining Infrastructure business case.

Table 6.18: Summary of EMCa adjustments for DBP30 – Sustaining infrastructure - $m, real 2024

Business case subcategory	DBP Proposed	EMCa Adjustment	EMCa Adjusted	*EMCa Adjustment (%)*
Data Centre (AGIG OneIT)	1.01	-0.10	0.91	*-10%*
Network and currency				
AGIG OneIT	5.74	-1.15	4.59	*-20%*
Other	1.68	-0.34	1.35	*-20%*
Subtotal	**7.42**	**-1.48**	**5.94**	***-20%***
End user devices	3.86	-0.77	3.09	*-20%*
Meeting room refresh	0.64	-0.64	0.00	*-100%*
Field mobility	1.51	0.00	1.51	*0%*
Total	**14.45**	**-3.00**	**11.45**	***-21%***

Source: EMCa

A totex cross check indicates that the proposed adjusted capex and opex step change allowances for ICT infrastructure result in a reasonable allowance

454. In section 7, we also consider the proposed IT infrastructure opex step change, and which we consider (for different reasons) is not reasonable. Taken together, these findings result in a reduction of $4.8m in IT infrastructure totex ($3.0m capex + $1.8m opex), meaning that the IT infrastructure totex allowance for AA6 would be of the order of $14.6m, compared with $19.4m that DBP proposed.[96]

455. Looking across the periods, therefore, DBP's expenditure on IT sustaining infrastructure at a totex level was $11.8m in AA4 and $9.4m in AA5 and would be $14.6m in AA6 if adjusted as we propose. While AA6 would still represent an increase, we consider that such allowance for AA6 strikes a reasonable balance between the increasing infrastructure needs of the business and evidence of a degree of deferral in past periods, offset by the benefits that should be achieved from the AGIG OneIT shared platform and which should be shared with DBNGP customers.

Table 6.19: Summary of IT sustaining infrastructure totex - $m, real 2024

	AA4	AA5 Allowance	AA5 Actual	*AA5 EMCa Adjusted*	AA6 DBP proposed	*AA6 EMCa Adjusted*
opex	9.8	3.6	3.6	*3.6*	4.9	*4.9*
less EMCa adjustment to DBP's proposed IT opex step change						*-1.8*
capex	2.0	3.8	5.8	*5.8*	14.5	*11.5*
Totex	**11.8**	**7.4**	**9.4**	***9.4***	**19.4**	***14.6***

Source: EMCa, with information from EMCa03 and from DBP30 in attachment 9.5, (page 391)

6.8.4 Assessment - DBP23: Network security (Cyber security)

What DBP proposes

456. [redacted]

[96] DBP presents this as $19.2m on the graph shown as Figure 6.12. We expect the small difference could relate to use of $2024, escalation or rounding

[97] [redacted]

[redacted]

457. DBP's business case considers its options and expenditure requirements on a totex basis. We primarily assess its network security business case and expenditure proposal in the current section, noting that DBP also proposes an opex step change, which we consider in section 7.5.

458. [redacted]

Table 6.20: DBP proposed AA6 capex for IT Network Security - $m, real dec 2024

Project	2026	2027	2028	2029	2030	AA6 Total
[redacted]						
[redacted]						
Subtotal	**2.31**	**1.44**	**1.06**	**0.92**	**0.63**	**6.36**

Source: EMCa table derived from DBP response to IR EMCa03

Assessment and finding

Our assessment of DBP's business case

460. We consider that DBP's business case provides evidence of a reasonable assessment of its cyber security risk position, its options and the suite of initiatives that will allow it to meet its cyber security objectives. DBP's business case provides evidence of a relatively granular buildup of costs, that are based on the initiatives set out in its roadmap.

We sought further information to aid our assessment

461. [redacted]

98 [redacted]

DBP provided satisfactory responses on these matters

462. We consider it helpful that DBP has had external advice to assist with understanding its requirements since (notwithstanding AGIG's team) this is a specialised area in which there is value in employing specialists who have a wide view across multiple business entities.

463. [redacted]

464. [redacted]

465. [redacted]

Finding

DBP's proposed capex allowance for AA6 is reasonable

466. We consider that the risk-based approach that DBP has adopted is appropriate, and that its proposed expenditure (as shown in Table 6.20) is reasonable.

6.8.5 Assessment - Other IT

DBP03: Operating Technology

What DBP has proposed

467. DBP proposes an allowance of $3.9m to upgrade its enterprise SCADA systems. DBP states that the existing system was deployed in 2011, was last upgraded in 2016 and is at the end of its technical life in 2024.

468. DBP associates this cost with the Jandakot development, in particular establishing the new control room there, as the two projects would need to align for efficiency reasons.

This work is justified as it is associated with work that we assessed as reasonable in section 6.6

469. As described in section 6.6, we consider that DBP has made a reasonable case for large-scale replacement of its SCADA, and it is reasonable to replace its head-end system at this time. Regardless of the scale and scope of the proposed Jandakot redevelopment (which we discuss in section 6.9.2) we consider it is likely to include a new control room and that it will be prudent to replace the SCADA system at this time.

470. DBP describes how it has estimated the costs,[100] and which we consider is a reasonable approach.

Finding

471. We consider that DBP's proposed SCADA system replacement is prudent and that its proposed expenditure allowance is a reasonable estimate.

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99 [redacted]

100 DBP03, attachment 9.5, page 101

DBP38 Structures and operational sites

DBP's proposed minor allowance for security access is reasonable

472. DBP proposes a capex allowance of $0.2m to provide for security access at boom gates at compressor station sites. We consider that this is reasonable.

6.8.6 Assessment - DBP17: Vehicles (fleet and civil equipment)

What DBP has proposed

General

473. DBP has forecast $12.7m AA6 capex for Vehicles and Civil Equipment, as shown in the table below. DBP's expected AA5 capex in this asset class was $6.8m, which is $1.1m (20%) more than the ERA allowance for the period. It follows expenditure also of $6.8m in AA4.

474. The largest component in the forecast is for replacement of fleet vehicles, for which DBP forecasts $9.1m, which is almost double its expenditure in AA5. In its business case and in its presentation at the onsite meeting, DBP explains this as resulting from a combination of:

- An increase in the number of vehicles (from 89 at the start of AA5 to currently 106)
- A 25% increase in the cost per vehicle since 2020
- A backlog resulting from under-replacement in AA5, due in part to delayed availability of suitable vehicles during and following covid and the need to prioritise new vehicles over replacement.

Fleet vehicles

475. DBP states that its fleet vehicle replacement policy has not changed: that is, to consider replacement at 5 years or 150,000km, however DBP seeks to extend this where possible on assessment of vehicle condition.

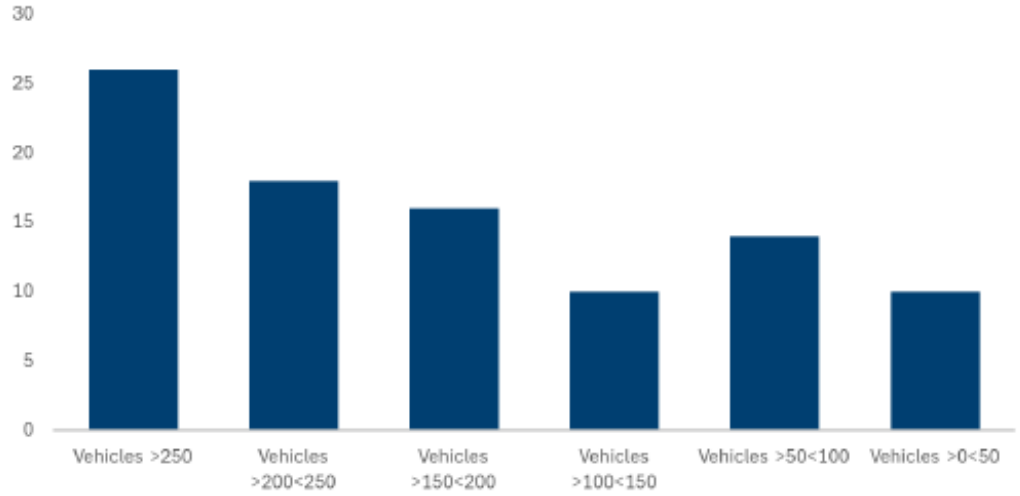
Table 6.21: DBP proposed AA6 capex for vehicles, fleet and civil equipment - $m, real dec 2024

Project	AA4 total	AA5 total	2026	2027	2028	2029	2030	AA6 Total
CP1700155: Fleet Vehicles	**5.19**	**4.68**	1.81	1.81	1.82	1.82	1.83	**9.09**
CP1700288: Replacement of civil equipment - truck, grader and tractor	**0.37**	**1.03**	0.60	0.42	0.31	0.20	0.46	**1.99**
CP1700336: Replacement of Manitou fleet	**0.12**	**0.00**	0.75	0.30	0.15	0.15	0.00	**1.36**
DBP17-NEW-02: Logistic Solutions	**0.00**	**0.00**	0.05	0.05	0.05	0.05	0.05	**0.25**
Other projects (not included in AA6)	**1.06**	**1.07**	0.00	0.00	0.00	0.00	0.00	**0.00**
Total	**6.75**	**6.78**	**3.22**	**2.59**	**2.33**	**2.23**	**2.34**	**12.70**

Source: EMCa table derived from DBP response to IR EMCa03

476. DBP presents a graphical representation of the current mileage of its fleet, as shown in Figure 6.13, and which shows that the majority of its vehicles are now over 150,000km, with around a quarter of the fleet more than 250,000km.

Figure 6.13: Number of vehicles in each mileage bracket for DBP light vehicles



Source: DBP17 business case, in attachment 9.5, page 241

477. DBP considers the costs of three fleet replacement strategies:

- Option 1: Replace on failure
- Option 2: Replace vehicles currently over 150,000km, over the period
- Option 3: Replace all vehicles as they reach 150,000km.

478. Option 1 is clearly not realistic for vehicles regularly travelling in remote parts of WA. DBP estimates that option 2 will require replacement of 60 vehicles while option 3 will require replacement of 80 vehicles over the period.[101] DBP has based its proposal on Option 2, noting that this will still leave 28 vehicles over 150,000km at the end of AA6, and then expects to be able to return to a more balanced replacement schedule in AA7.

Civil equipment

479. DBP presents a business case for replacement of eight Manitous (which are lifting vehicles), four of which were purchased in 2006. The replacement cost is $150,000 each. DBP considered extending their lives, however the cost for a major service would be in excess of $80,000 to $100,000 each. DBP therefore proposes to replace the whole fleet, noting that most vehicles by then will be 20 years old.

480. The remainder of DBP's proposal is for replacement of trucks, graders and tractors, for which again it has a specific replacement schedule.

Assessment and finding

DBP's fleet vehicle forecast is overstated; other components are reasonable

481. While we consider that it is prudent for DBP to replace higher-km vehicles as it proposes, we consider that under its condition-based replacement policy for individual vehicles it will find that it can extend the life of some, such that its overall replacement program will be less than it has proposed. We consider that a reasonable allowance is 10% less than DBP has proposed.

482. We consider that the other components of DBP's proposed vehicles and civil equipment replacement proposal are reasonable.

101 Business case DBP17, Attachment 9.5, page 241 (Table 0.3)

Table 6.22: Summary of EMCa adjustments for DBP17 – Vehicles and civil fleet - $m, real 2024

Business case subcategory	DBP Proposed	EMCa Adjustment	EMCa Adjusted	*EMCa Adjustment (%)*
Fleet vehicles	9.09	-0.91	8.18	*-10%*
Other vehicles and civil equipment	3.61	0.00	3.61	*0%*
Total	**12.70**	**-0.91**	**11.79**	***-7%***

Source: EMCa

6.8.7 Findings summary and implications

Finding

DBP's proposed allowance for computers and motor vehicles is overstated

483. We consider that DBP's proposed allowance is not reasonable, and is more than it will require. In summary, we consider that:

- DBP's proposed ICT allowances for application upgrades, infrastructure network and currency and end user devices are more than it will require
- DBP has not justified some aspects of its proposed ICT allowance, such as for application enhancements and for a meeting room refresh
- DBP's proposed allowance for fleet vehicle replacements is more than it will require
- DBP's proposed allowances for OT, non-fleet vehicles and civil equipment, cyber security and mobility devices are reasonable

EMCa adjusted capex for Computers and Motor Vehicles asset class

DBP's proposed allowance for computers and motor vehicles is overstated

484. In Table 6.23 we summarise DBP's proposed capex and the implication for the AA6 capex allowance for Computers and Motor Vehicles asset class. In this table, we apply subcategories that relate to the adjustments referred to above.

Table 6.23: DBP proposed and adjusted allowance for Computers and Motor Vehicles asset class - $m, real Dec 2024

Business case and subcategory	DBP Proposed	EMCa Adjustment	EMCa Adjusted	*EMCa Adjustment (%)*
DBP03: OT	3.94	0.00	3.94	*0%*
DBP17: Fleet Vehicles	9.09	-0.91	8.18	*-10%*
DBP17: Other vehicles and civil equipment	3.61	0.00	3.61	*0%*
DBP21: Application upgrades	12.17	-2.43	9.74	*-20%*
DBP21: Application enhancements	7.43	-7.43	0.00	*-100%*
DBP21: Application upgrades - TBS	1.75	-1.23	0.53	*-70%*
DBP23: Cyber security	6.36	0.00	6.36	*0%*
DBP30: Network and currency	1.68	-0.34	1.35	*-20%*
DBP30: Network and currency (AGIG OneIT)	5.74	-1.15	4.59	*-20%*
DBP30: Data Centre (AGIG One IT)	1.01	-0.10	0.91	*-10%*
DBP30: End user devices	3.86	-0.77	3.09	*-20%*
DBP30: Meeting room refresh	0.64	-0.64	0.00	*-100%*
DBP30: Field mobility	1.51	0.00	1.51	*0%*
DBP38: Structures	0.20	0.00	0.20	*0%*
Total	**59.01**	**-15.00**	**44.01**	***-25%***

Source: EMCa

Top-down sense check

We consider that a top-down sense check of our proposed adjusted allowance for ICT and vehicles, suggests that the adjusted amount is realistic by comparison with DBP's prior requirements

485. Given the diverse nature of the 'computers and motor vehicles' asset class and DBP's proposed allowances, we have undertaken a top-down 'sense check' on its proposal and our findings.

486. In Table 6.24 we have accounted for the following:

- Specifically-considered IT sustaining apps (OneERP, SAP, CRS and TBS), therefore leaving a trend figure for the remainder of IT sustaining apps
- Specifically-considered IT sustaining infrastructure projects, being for end user devices, field mobility devices and meeting room refresh, therefore leaving a trend figure for the remainder of IT infrastructure
- A range of projects not included in IT sustaining apps or IT sustaining infrastructure
- Other IT – being IT projects that DBP presents under categories other than IT sustaining, and
- Vehicles (and which includes civil equipment).

Table 6.24: Summary table for Computers and Motor Vehicles showing proposed and adjusted allowances

	AA4	AA5 Allow'ce	AA5 Actual	*AA5 EMCa Adjusted*	AA6 DBP proposed	*AA6 EMCa Adjusted*
Underlying IT (excluding major and specific initiatives)						
IT Sustaining apps (excluding oneERP and TBS development)	5.2	3.5	7.9	7.9	21.4	10.3
IT sustaining infrastructure (excluding end user devices, field mobility and meeting room refresh)	2.0	1.3	2.9	2.9	8.4	6.8
Underlying IT - apps and infrastructure	**7.2**	**4.9**	**10.9**	**10.9**	**29.8**	**17.1**
Specific applications						
OneERP	6.0	11.5	28.1	12.3	0.0	0.0
CRS/TBS	1.0	3.4	4.1	4.1	0.0	0.0
Maximo DMZ	0.1	0.0	0.4	0.4	0.0	0.0
IT enablement	0.0	0.0	0.9	0.9	0.0	0.0
Subtotal	**7.0**	**14.9**	**33.5**	**17.7**	**0.0**	**0.0**
Specific infrastructure						
End user devices - refresh	0.0	2.4	2.9	2.9	3.9	3.1
Field mobility devices (new)	0.0	0.0	0.0	0.0	1.5	1.5
Meeting room refresh	0.0	0.0	0.0	0.0	0.6	0.0
Subtotal	**0.0**	**2.4**	**2.9**	**2.9**	**6.0**	**4.6**
Other IT						
OT systems	0.0	1.2	0.2	0.2	3.9	3.9
Network security	0.8	3.7	2.9	2.9	6.4	6.4
operational sites	0.0	0.0	0.0	0.0	0.2	0.2
Subtotal	**0.8**	**4.9**	**3.0**	**3.0**	**10.5**	**10.5**
Subtotal: ICT	**15.0**	**27.1**	**50.2**	**34.4**	**46.3**	**32.2**
Vehicles and civil equipment	**6.7**	**5.7**	**6.8**	***6.8***	**12.7**	***11.8***
Reconciliation total (Computers and Vehicles)	**21.8**	**32.7**	**57.0**	**41.2**	**59.0**	**44.0**

Source: EMCa, derived from DBP response to EMCa03

487. By accounting for these specifically-considered and non-IT items, we can isolate the 'underlying' IT allowances for sustaining apps and sustaining infrastructure. We consider that the aggregate adjusted allowances that we propose for AA6 are reasonable and make the following observations on the implications for DBP:

- Our proposed adjusted aggregate ICT allowance of $32.6m for AA6 is slightly less than what we have assessed as conforming capex in AA5 and only slightly more than ERA's allowance for AA5. This is despite DBP having undertaken major ICT projects in AA5, namely the OneERP and TBS projects but not requiring similar major initiatives in AA6. For a relatively stable business that has not demonstrated a need for significant further

ICT initiatives in AA6, we consider that this provides a reasonable allowance for this period, but which we would expect to reduce in AA7.

- Our proposed adjusted AA6 allowance of $16.6m for underlying IT (i.e. excluding the major OneERP and TBS projects), encompassing applications and infrastructure, is still more than twice what DBP incurred in AA5 and in AA4. This provides for some continuing uplift in ICT over AA6, however it is considerably less than DBP's proposed allowance of $28m which would be almost four times its prior levels.

488. We consider that these trend observations support the aggregate adjusted allowances that we propose for AA6.

6.9 Buildings asset class

6.9.1 What DBP has proposed

DBP proposes significant new expenditure on buildings

489. DBP has forecast $51.77m AA6 capex in the Buildings asset class, as shown in the table below. This is considerably more than DBP has spent in the past two periods and, while the proposed expenditure is dominated by the proposed Jandakot redevelopment, DBP also proposes significant additional expenditure largely to upgrade buildings at other sites.

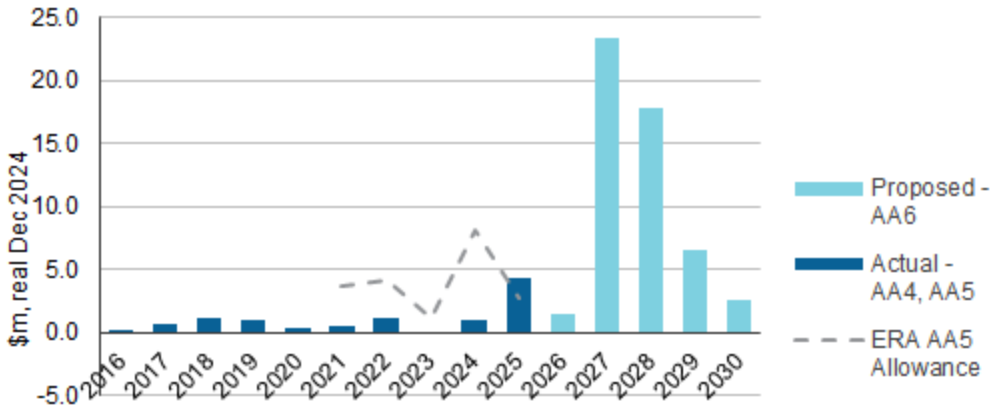
Table 6.25: DBP's proposed AA6 capex in the Buildings asset class - $m, real Dec 2024

			AA6					
Business case	AA4 total	AA5 total	2026	2027	2028	2029	2030	AA6 Total
DBP10: Jandakot Facility Redevelopment	**0.26**	**2.91**	1.11	16.65	16.87	0.00	0.00	**34.63**
DBP38: Structures & Operational Sites	**1.77**	**3.41**	0.30	6.73	0.91	6.58	2.62	**17.14**
Other projects (not included in AA6)	**1.31**	**0.62**	0.00	0.00	0.00	0.00	0.00	**0.00**
Total	**3.34**	**6.94**	**1.41**	**23.38**	**17.78**	**6.58**	**2.62**	**51.77**

Source: EMCa table derived from DBP response to IR EMCa03

490. As can be seen in Figure 6.18 DBP spent considerably less than the ERA allowance in AA5, largely because it has deferred the Jandakot redevelopment (as described in section 5.3.7). While ERA's AA5 allowance included provision for the Jandakot redevelopment at the cost estimate that DBP proposed at that time, DBP has now proposed a considerably more extensive redevelopment which drives this significant component of its proposed AA6 capex allowance.

Figure 6.14: AA4, AA5 and proposed AA6 capex in the Buildings asset class - $m, real Dec 2024



Source: EMCa derived from DBP response to IR EMCa03

491. As shown in the table above, projects from two business cases are allocated to the Buildings asset class. We discuss each of these business cases in the following sub-sections.

6.9.2 Assessment - DBP10: Jandakot facility redevelopment

Background to previous consideration of Jandakot development

492. For AA5 DBP proposed a redevelopment that was to provide improved office and training facilities, accommodation for the Transmission Operations division, a backup SCADA control room, server and communications facilities and warehousing. DBP stated that this was to replace 30-year old facilities which no longer meet business requirements, operational or safety needs. In its Final Decision ERA determined an allowance of $8.69m (in $2019), which was only fractionally less than the estimate that DBP had provided in its Revised Proposal.[102]

DBP's current proposal

493. DBP states that the global pandemic and subsequent disruptions have resulted in a 2-year deferral of the Jandakot redevelopment. Consequently, DBP did not undertake the approved development in AA5 and has instead engaged in concept design and site development planning. DBP's revised cost estimate is now $35m, which it attributes to increases in commercial construction costs.[103]

494. In its business case DBP states that it has revisited the scope of the project, while also stating that average annual commercial construction costs have increased by 5.2% per year. In brief, DBP has deleted the provision of onsite accommodation, but has otherwise considerably expanded the scope of the project.

Our assessment

There is a prima facie case for a redevelopment of the Jandakot site

495. Our assessment remains unchanged since our review in 2020, that for a range of reasons that DBP refers to, it is prudent to redevelop the Jandakot site. However, it is clear that, while construction cost increases will have played a part, the main reasons for the increase in the cost estimate from $8.7m (in $2019 terms) to $35m now, is because of the change in

[102] In the model that DBP provided us as EMCa03, DBP records ERA's allowance as $8.52m in $2024 terms, which appears to understate the allowance actually provided.

[103] DBP Final Plan, pages 98 and 99. DBP states a cost of $34m in this document however as shown in Table 7.18 the proposed cost is $34.63m. In general discussion in this report we will refer to this as a cost of $35m.

scope of what DBP proposes. We therefore sought information on the nature of the change in scope, its justification and associated governance of the scope change.

We sought information to better understand the change in scope of the project but the information DBP provided was not enlightening

496. DBP describes the scope of its proposed redevelopment as follows:

- *"Construction of a contemporary office space to accommodate existing and future planned workforce, including parking and other vehicle access resources designed and managed in a way that minimises exposure to the potential for harm*
- *Construction of an additional warehouse facility to house materials and equipment safely and securely in a weather resistant environment, with improved boundaries and security to reduce current potential for theft. The improved facilities, removal of demountables and improved vegetation management will also contribute to better safeguarding against snakes*
- *Fit for purpose training rooms to appropriately upskill staff and the contractor workforce*
- *Construction of appropriate facilities to ensure the continued use of the depot for incident and emergency response, including a new control centre and appropriate housing for SCADA."*[104]

497. We asked DBP to describe the scope of the redevelopment that it had originally proposed for AA5, and to describe any changes in scope or scale of the redevelopment that forms the basis for DBP is now proposing.[105] In this query, we also invited DBP to provide any Board or senior management decision papers and/or business cases that might explain the changes in scope or scale of the project.

498. DBP's response to the first part of this query was to provide an excerpt from its original proposal that described the current facilities at the site. DBP did not provide a description of the scope of the then-proposed redevelopment.

499. DBP's response to the second part was to provide the following information:

- An indicative cost estimate for the now-proposed development, together with an independent review of this cost estimate
- A document entitled *AGIG Jandakot Industrial Accommodation Strategy*[106]
- A Quantity Surveyor cost comparison with alternative site options.

The main element of DBP's claimed justification is its consideration as to whether to redevelop the Jandakot site or move to another site.

500. The Accommodation Strategy document is essentially an assessment of the relative merits of undertaking the Jandakot redevelopment compared with relocating to another site. It concludes that relocating would have a higher cost, in large part due to the favourable land tax regime that pertains to the current site and which would be foregone if AGIG was to relocate.

501. In short, DBP's 'options analysis' is solely confirmed to consideration of alternative sites. It provides no business case consideration of alternative options at the existing site, including for the option that it proposed for AA5, and which ERA accepted in its determination at that time.

The documentation that DBP provided does not canvass alternative development options for the Jandakot site, except with regard to architectural concepts.

502. In other regards, the information provided presents as a concept design, with a range of architectural concept drawings and site and development-related information and

104 Business case DBP10, in Attachment 9.5, page 135

105 IR EMCa17, Q38(b) and 38(c)

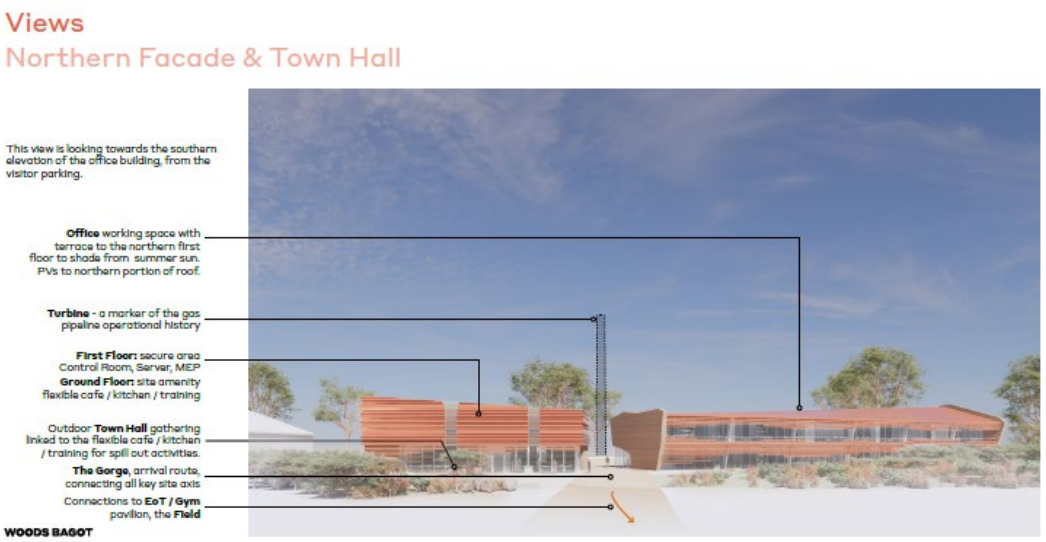
106 Woodsome Management Pty Ltd, 19 December 2024

associated costing. We present excerpts from the concept design documentation in Figure 6.15 and Figure 6.16 below, as indications of the maturity of the design process.

Figure 6.15: Jandakot concept design – AGIG selected site layout

Source: AGIG Jandakot Industrial Accommodation Strategy, page 51 of 280

Figure 6.16: Jandakot concept design – Indicative elevation render



Source: AGIG Jandakot Industrial Accommodation Strategy, page 87 of 280

We expected, but did not find, evidence of DBP's consideration of the justification for the significant scope changes that appear to have been now adopted

503. DBP did not provide any information which would evidence some form of governance concerning the leap that is apparent from the scope of the originally proposed redevelopment, compared with the redevelopment that it now proposes. We can infer from the information provided that the redevelopment scheme now proposed is considerably more elaborate than the scheme that DBP based its AA5 proposal on. However, DBP has not been able to provide us with a meaningful comparison between the original scope and the scope now proposed, why it now considers that the previously proposed scope would

not meet its requirements, what elements of the now-proposed scope are required to address these presumed deficiencies and justification for the scope additions.

Lack of evidence of effective governance of the development plan scope

504. For an envisaged redevelopment of the scale being proposed, we expected DBP to be able to provide Board/or senior management-level documentation that would indicate effective governance of the process of prescribing what is required at Jandakot, and recognising and endorsing the significant increase in scope and associated cost of the plan now proposed. None of the information provides such evidence.

505. As we observe in section 3.2.10, information that DBP provided also indicates that as late as September 2024 DBP was assuming a project cost of under $13m, leaving little opportunity for DBP to apply rigour to the assessment of the scope and cost of the redevelopment that it has now proposed.

Lack of evidence of coherent planning or internal stakeholder engagement

506. In information provided, the Jandakot redevelopment is presented as a site development plan that is designed to provide AGIG with optionality to choose what to locate there and when. While the site plan documentation records certain assumptions that were provided to AGIG's development advisors, the site plan does not follow from a well-defined and justified end-objective for DBP-related requirements or a coherent and endorsed transition plan towards that objective.

507. We note for example, indications that the redevelopment will provide the option to relocate the AGIG West Coast data centre and other DBP IT infrastructure; that it will provide the opportunity to accommodate increased staff numbers; that it will provide the opportunity for some divisions to relocate to Jandakot and the option to relocate the control centre. But for each of these elements, DBP has not provided evidence of its own internal commitment for siting of these functions or a formalised plan to do so. At our onsite meeting it became clear that many personnel in that meeting were unaware of assumptions that had been made regarding a potential move for themselves or their divisions.

508. In response to our IR[107], DBP provide information on assumptions regarding staff who might relocate to Jandakot, and which total 86 staff, and that there would be provision for a total of 240 staff at Jandakot. DBP also refers to growth requirements, the need for which is also unclear to us given a relatively stable operational requirement for DBNGP.

509. The concept plan briefing to its designers, however, refers to '*zones for approximately 350 staff*' and refers to the brief to '*consolidate staff into one location*'.[108]

510. In response to an IR[109], DBP also informed us that '…*we don't expect any significant relocation until AA7….*' and therefore, did not expect any cost savings in AA6 from downsizing its office lease in Perth. This is despite DBP's proposed redevelopment expenditure profile suggesting completion by 2028 and DBP refers in this same IR response to construction commencing in 2025, with a 24-month construction period over 2026 and 2027.

Lack of evidence of effective governance of a plan for relocating staff and facilities

511. In our query we asked about the level of maturity of assumed requirements for Jandakot and, specifically, evidence of endorsement by the Board or senior management of plans for the relocation of staff and facilities. None was provided. DBP has not provided a coherent timetabled plan that would define what functions would be located at Jandakot, whether or until when Perth CBD accommodation would be still required and the nature of that requirement and a transition plan for relocation of any staff and infrastructure facilities. We

107 EMCa17, Q38(d)

108 DBP10, in Attachment 9.5, page 152

109 EMCa17, Q38(a)

would expect some form of financial implications schedule and CBA to accompany such a plan.

512. Further, we would expect such a plan to compare with the locational accommodation plan that the AA5 redevelopment proposal was intended to represent and to evidence needs that were found not to be addressed by the AA5 plan and the 'incremental' business case for significantly expanding the scope of the proposed redevelopment.

Net benefit to DBNGP is unclear

513. A further aspect of DBP's proposal that is unclear is the extent to which the proposed redevelopment reflects the needs of DBNGP customers. Documentation that DBP provided to us tends to be branded as meeting AGIG requirements and does not appear to distinguish any requirements that may pertain to servicing (from WA) of AGIG east coast operations or of DBP's non-regulated services. While it is understandable that parties advising on the redevelopment are being briefed with AGIG requirements, the distinction is clearly of importance in considering the regulatory inclusion of costs.

Costing of DBP's proposal is adequate, if the scope and scale of the redevelopment are taken as given

514. DBP has provided sufficient evidence that, for the scale, scope and concept design that it has had prepared, it has a reasonable estimate of the cost. This is evidenced by the expert reports it commissioned, including costing by a Quantity Surveyor, and an independent cost review.[110]

515. In its business case, DBP has sought to benchmark its proposal with ATCO's development at an adjacent site. DBP states that '…*ATCO's Jandakot development provides a useful comparison to the proposed DBP Jandakot development…*' and estimates that *'….if we escalate publicly available values for the ATCO project…. ATCO's Jandakot development cost (was) approximately $35.2m'*.[111]

516. We also observe in the Quantity Surveyor information provided, reference to the costing as the *'$35m Target*' costing.

517. We asked DBP to provide further information that it might have for comparability between the ATCO development and its proposal. However, DBP responded that '*We don't think that the ATCO and proposed Jandakot facilities can be reasonably compared'*. On this basis, we therefore discount the information on this that DBP claimed in its business case; nevertheless, it appears that its quantity surveyor-based cost estimate has a reasonable basis and it may be coincidental that it results in the same cost.

Finding and implications

DBP has not provided adequate justification for its proposed expenditure allowance

518. We consider that DBP's current business case for its proposed Jandakot development does not support its proposed expenditure allowance. The business case focuses on what DBP proposes to do, but without justifying the redevelopment that it now proposes. It presents as a 'call to action', as was the case for its AA5 proposal, and also presents sufficient evidence to support redevelopment option as opposed to developing at a new location. However, it does not provide evidence to support the scope and scale of this proposed redevelopment and benefits to DBNGP operations sufficient to justify what it is now proposing.

519. For the reasons above, we consider that DBP has not adequately justified its proposed capex allowance for Jandakot redevelopment.

110 Independent Cost Review, Donald Cant Watts Corke, 18/03/2025

111 DBP10 business case, Appendix C, in Attachment 9.5, page 158

Alternative allowance can be based on an update to the allowance that ERA provided for AA5

520. DBP's proposal provides no option that could provide a basis for an alternative allowance, other than to take a 'reactive approach' (i.e. DBP's Option 1'). However, ERA already accepted the need for the redevelopment that DBP proposed for AA5 and DBP has not yet undertaken this.

521. Given the lack of justification that DBP has provided for its now-preferred option, we consider that a reasonable alternative for AA6 could be to allow for what in effect would be the same allowance, now deferred. We present in Table 6.26 a calculation of this, and which allows for 5% per year nominal increase in construction costs (as claimed by DBP).

Table 6.26: Alternative allowance for AA6 (based on ERA allowance for AA5)

	Years (FY)										
Input factors	19	20	21	22	23	24	25	26	27	28	AA6 Total
ERA AA5 Allowance ($2019)						7.05	1.47				8.52
Allowance for nominal increase (at 5% p.a.)	*1.00*	*1.05*	*1.10*	*1.16*	*1.22*	*1.28*	*1.34*	*1.41*	*1.48*	*1.55*	
Assumed inflation index	*1.00*	*1.01*	*1.04*	*1.13*	*1.17*	*1.20*	*1.25*	*1.27*	*1.30*	*1.33*	
Derived real building cost inflation escalation index	*1.00*	*1.04*	*1.06*	*1.03*	*1.04*	*1.06*	*1.08*	*1.11*	*1.14*	*1.17*	
ERA AA5 Allowance deferred to 2027 and 2028 ($2019)									8.01	1.71	
ERA AA5 Allowance deferred to 2027 and 2028 ($2024)									**9.62**	**2.06**	**11.68**

Source: EMCa table. ERA allowance for AA5 as provided by DBP, but treated as $2019.

6.9.3 Assessment - DBP38: Structures and operational sites

What DBP has proposed

522. A shown in Table 6.25, DBP has proposed $17.1m capex allowance for 'structures and operational sites'.[112]

523. The main component of DBP's proposed expenditure is to replace accommodation at two compressor station sites. DBP also proposes some structural rectification work, some site building conversions (to repurpose some now-unused standalone compressor station buildings to be used for storage), to establish an operational hub at Karratha and to for a workshop at CS9.

524. While the proposed capex is consistent with DBP's business case, there is some discrepancy between projects referred to in the business case and project descriptions in DBP's capex model, as follows:

- DBP's business case refers to the Northern Hub requirement, with a capex allowance of $2.0m (unescalated $2024) in 2030. In DBP's capex model this is not referred to as a line item, but this amount is shown in 2030 beside the description of 'Compressor Station Site Accommodation'
- An amount for 'Site Building Conversion' (i.e. for storage, as referred to above) does not appear to have been included in the 'Buildings' asset class, though an allowance for

[112] In DBP's business case DBP38, this line item is described as 'operational facility structures and accommodation'

'Remote Site Toilets' is included (though in the Business Case this is referred to under the heading of HSE).

Assessment

DBP's information provides reasonable evidence of a need to upgrade compressor station accommodation

525. DBP's case to upgrade compressor station accommodation is somewhat weakened by not having undertaken the level of work that was accepted by ERA for its AA5 allowance, as discussed in section 5.3.7. Nevertheless, we consider that DBP provides sufficient evidence that this work remains required and that the proposed upgrade of accommodation at two compressor stations in AA6 is reasonable.

DBP's information does not adequately justify its proposed acquisition of a site for later development of a Northern depot

526. While DBP makes a reasonable circumstantial case for creating a Northern Depot at Karratha, DBP undermines the timeliness of this by proposing only to conduct investigations with a view to purchasing a site with expenditure proposed for 2030. Moreover, the business case refers only to purchasing a site at this time and so does not appear to deliver a working depot. We consider that DBP has not adequately justified inclusion of this capex allowance.

527. DBP's case for providing toilets at remote sites and conversion of current compressor stations to buildings is reasonable, as is the proposed allowance for a workshop at CS9 and for structural rectification work.

Finding and implications for Structures and Operational Sites

The level of expenditure that DBP proposes for structures and operational sites is not adequately justified

528. We consider that DBP's proposed allowance of $17.1m for buildings capex under the DBP38 is not justified.

529. We consider that a reasonable alternative allowance would exclude the proposed allowance for purchase of a site at Karratha in 2030 and would therefore reduce the proposed allowance (which DBP includes in its proposed Compressor Station Accommodation allowance) by $2.0m.

6.9.4 Findings summary and implications

DBP's has proposed a very significant capex allowance for buildings in AA6, but with inadequate justification

530. In Table 6.27 we summarise DBP's proposed capex and the implication for the AA6 capex allowance for Buildings asset class. In this table, we apply subcategories that relate to the adjustments referred to above.

Table 6.27: DBP proposed and adjusted allowance for Buildings asset class - $m, real Dec 2024

Business case and subcategory	DBP Proposed	EMCa Adjustment	EMCa Adjusted	EMCa Adjustment (%)
DBP10: Jandakot Facility Redevelopment	34.63	-22.95	11.68	-66%
DBP38: Structures & Operational Sites - Other	2.28	0.00	2.28	0%
DBP38- CP1700207: Compressor Station Site Accommodation	14.86	-2.03	12.83	-14%
Total	**51.77**	**-24.98**	**26.79**	**-48%**

Source: EMCa

6.10 Other Depreciable' asset class

6.10.1 What DBP has proposed

531. DBP has forecast $6.4m AA6 capex in the Other Depreciable asset class, as shown in the table below. This is $3.2m less than DBP's expected AA5 capex, and less than AA4, with the main contributors being that DBP's AA4 and AA5 capex included office relocations, also that Jandakot redevelopment capex was previously included under this category (i.e. in AA4 and AA5), but is transferred to the Buildings category (as above), together with significantly lower proposed expenditure on 'other' assets related to Pipelines and MLVs.

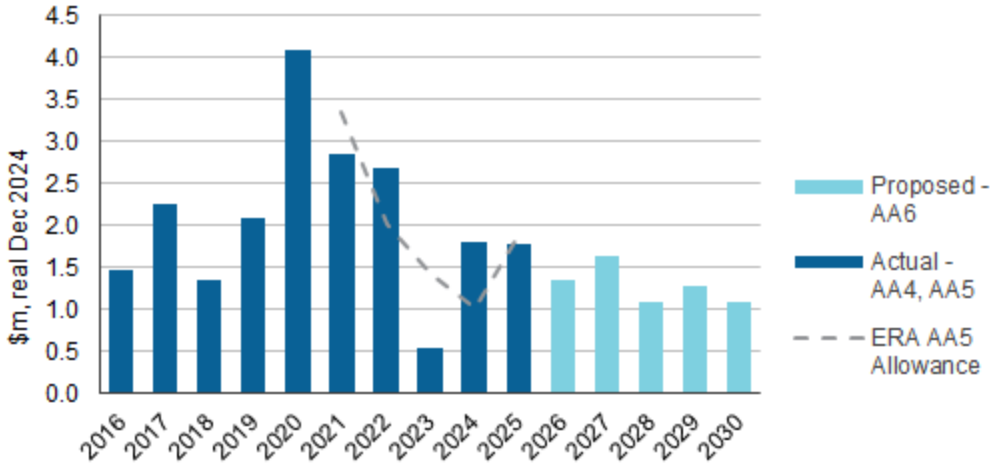
Table 6.28: DBP's proposed AA6 capex in the 'Other' asset class - $m, real Dec 2024

			AA6					
Business case	AA4 total	AA5 total	2026	2027	2028	2029	2030	AA6 Total
DBP01: Compressor Stations	**2.83**	**2.66**	0.35	0.35	0.35	0.35	0.35	**1.74**
DBP02: Pipeline and MLV	**1.49**	**1.81**	0.02	0.02	0.02	0.02	0.02	**0.11**
DBP12: Safety Case	**0.68**	**0.57**	0.00	0.57	0.00	0.00	0.00	**0.57**
DBP16: Tools	**1.45**	**2.23**	0.98	0.71	0.71	0.71	0.71	**3.82**
DBP38: Structures & Operational Sites	**0.00**	**0.20**	0.00	0.00	0.00	0.20	0.00	**0.20**
Other projects (not included in AA6)	**4.82**	**2.21**	0.00	0.00	0.00	0.00	0.00	**0.00**
Total	**11.28**	**9.67**	**1.35**	**1.65**	**1.08**	**1.28**	**1.08**	**6.44**

Source: EMCa table derived from DBP response to IR EMCa03

532. In Figure 6.17 we show this lower proposed AA6 expenditure. The graph also shows that actual AA5 capex broadly mirrored the profile of the ERA allowance (and was equal to it in aggregate).

Figure 6.17: AA4, AA5 and proposed AA6 capex in the Other Depreciable asset class - $m, real Dec 2024



Source: EMCa derived from DBP response to IR EMCa03

6.10.2 Assessment

DBP has provided adequate justification in its business cases

533. DBP proposes an AA6 allowance for other depreciable assets that is less than it spent in AA4 or AA5. We have reviewed DBP's descriptions for this allowance in the five business cases that DBP provides, and we consider that it is reasonable.

6.10.3 Findings summary and implications

DBP's proposed allowance is reasonable

534. DBP's proposed allowance is reasonable and we propose no adjustment for the Other depreciable asset class. Therefore, we propose accepting the allowances shown in Table 6.28.

6.11 Conclusions

6.11.1 Our findings

Our findings are based on review of all business cases that DBP provided, supplemented by information DBP provided in response to our information requests and at our onsite meeting

535. Our assessment of DBP's proposed AA6 capex is based on DBP's Final Plan and supporting information. To a significant extent, our assessments are based on information provided in DBP's Business Case documentation together with information supplied pursuant to EMCa information requests, supplemented by our observations from the onsite meetings that we held with DBP.

DBP provided reasonable evidence of need. We consider that there is justification for a higher capex allowance than for AA5, but DBP has not provided adequate justification for the level of increase that it proposes

536. Overall, we consider that at the business case level, DBP has tended to present evidence of issues that it needs to address. However, DBP's proposed AA6 capex would represent a considerable increase on AA5, and which in turn was a considerable increase on AA4. In large part the increased expenditure is for assets that do not form part of the primary gas

supply infrastructure and therefore warrant particular scrutiny of justification, and applicability to DBNGP customers.

537. While DBP provides evidence of some form of need, we find that there are numerous instances for which DBP has provided minimal evidence to demonstrate that its proposed course of action is prudent. In many cases, DBP's option identification contributes little to its intended justification, through identifying two 'extreme' options which are readily discarded and then proposing some form of 'middle course' that DBP then does not further justify. DBP refers frequently to having conducted cost benefit analyses but presents almost no quantification of benefits of any proposed project.

While our assessment is based strictly on the information provided to us, in aggregate we consider that DBP will find that the adjusted allowance that we propose will be sufficient

538. We have taken a strict view of our obligations to advise the ERA based on the information that DBP has provided us, and there are many instances where DBP has not provided adequate justification that its proposed programs or individual projects are reasonably required or, if so, that the proposed option is prudent or that the proposed expenditure is an efficient estimate of its requirements. We consider that, assuming it undertakes a prudent work program and efficiently executes that program, DBP will find that it requires less capex than it has proposed. On the information DBP has provided, however, we consider that it is reasonable to assume that this will nevertheless be slightly more than DBP spent in AA5.

6.11.2 Alternative forecast

Our alternative forecast for AA6 is based on DBP's proposed allowance, but applying adjustments that we have documented for each asset class in the preceding assessments

539. Our assessed adjustments to DBP's proposed AA6 capex allowance have been applied to each Business case and to each Asset class, as shown in the tables below. For the most part, we have adjusted proposed capex for all or part of specific proposed projects or programs, where we consider that the information DBP has provided for our assessment does not demonstrate that the expenditure is likely to satisfy the capex criteria. For some categories, we have made adjustments based on systemic issues that we have identified and described, and which tend to reflect the preliminary nature of justification as currently presented, or generic issues.

Our proposed alternative forecast is $220m, which is 24% less than DBP has proposed

540. The aggregate impact of our assessed adjustments from our assessment of the business cases is a project-related reduction to the proposed AA6 capex of $67.9m, which represents 24% of DBP's proposed capex requirement of $288.0m. The resulting alternative forecast is $220m.

541. We have accepted DBP's proposed allowance for labour cost escalation within its capex proposal; this is consistent with acceptance of DBP's allowance for such escalation in its opex proposal.

Table 6.29: AA6 adjustment by capex business cases - $m, real Dec 2024

Business case	DBP Proposed	EMCa Adjustment	EMCa Adjusted	EMCa adjustment (%)
DBP01: Compressor Stations	34.8	-4.8	30.0	-14%
DBP02: Pipeline and MLV	12.1	-1.0	11.2	-8%
DBP03: Operating Technology (OT)	24.8	-1.9	23.0	-8%
DBP08: Northern Comms Replacement	4.8	-0.9	3.9	-19%
DBP09: Compressor Unit Control Systems Replacement	15.7	0.0	15.7	0%
DBP10: Jandakot Facility Redevelopment	34.6	-22.9	11.7	-66%
DBP12: Safety Case	0.6	0.0	0.6	0%
DBP15: Meter Stations	32.6	-15.4	17.2	-47%
DBP16: Tools	3.8	0.0	3.8	0%
DBP17: Vehicles (Fleet & civil equipment)	12.7	-0.9	11.8	-7%
DBP18: Turbine exhaust replacement	5.8	-0.6	5.2	-10%
DBP21: Corporate IT Sustaining Apps	21.4	-11.1	10.3	-52%
DBP23: Network Security	7.6	0.0	7.6	0%
DBP30: IT Sustaining Infrastructure	14.5	-3.0	11.4	-21%
DBP35: Power Gen & Mgt	35.0	0.0	35.0	0%
DBP38: Structures & Operational Sites	27.3	-5.7	21.6	-21%
Total	**288.0**	**-68.2**	**219.8**	**-24%**

Source: EMCa

542. In the following table, we show the resulting adjusted annual capex, as applied at the Asset Class level.

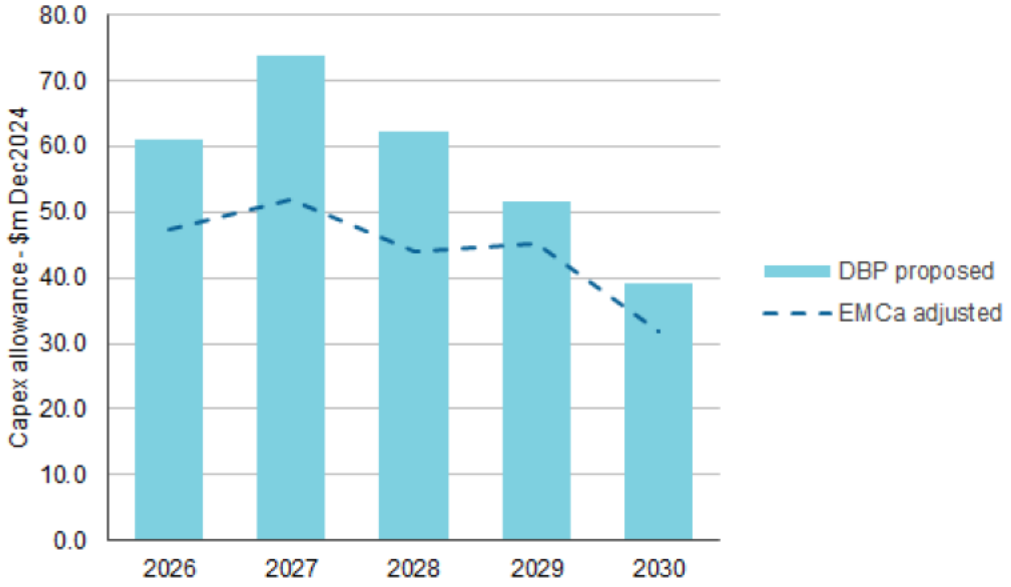
Table 6.30: Adjusted annual AA6 capex by asset class - $m, real Dec 2024

Asset category	DBP Proposed	EMCa Adjustment	EMCa Adjusted	EMCa adjustment (%)
Building	51.8	-25.0	26.8	-48%
Cathodic/Corrosion Protection	23.6	-3.2	20.4	-13%
Compression	33.3	-9.3	24.0	-28%
Computers and Motor Vehicles	59.0	-15.0	44.0	-25%
Metering	31.8	-13.0	18.8	-41%
Other Depreciable	6.4	0.0	6.4	0%
Pipeline	1.0	0.0	1.0	0%
SCADA, ECI And Comms	81.2	-2.8	78.5	-3%
Total	**288.0**	**-68.2**	**219.8**	**-24%**

Source: EMCa analysis derived from DBNGP capex model

543. The following diagram shows the DBP proposed and EMCa adjusted capex forecasts for AA6, while in Table 6.31 we present the alternative forecast year by year, by asset category.

Figure 6.18: DBP Proposed AA6 capex and EMCa adjusted - $m, real Dec 2024



Sources: EMCa analysis derived from DBNGP capex model

Table 6.31: Alternative forecast for AA6, by asset category - $m, real 2024

Asset category	2026	2027	2028	2029	2030	TOTAL
Building	0.7	12.3	6.6	6.6	0.6	**26.8**
Cathodic/Corrosion Protection	4.8	4.3	3.9	3.8	3.7	**20.4**
Compression	5.6	4.9	5.9	3.8	3.7	**24.0**
Computers and Motor Vehicles	14.1	9.2	6.1	8.9	5.8	**44.0**
Metering	3.6	3.3	4.5	3.7	3.6	**18.8**
Other Depreciable	1.4	1.6	1.1	1.3	1.1	**6.4**
Pipeline	0.2	0.2	0.2	0.3	0.2	**1.0**
SCADA , ECI And Comms	17.0	16.0	15.7	16.9	12.9	**78.5**
Total	**47.3**	**51.8**	**44.0**	**45.2**	**31.6**	**219.8**

Source: EMCa

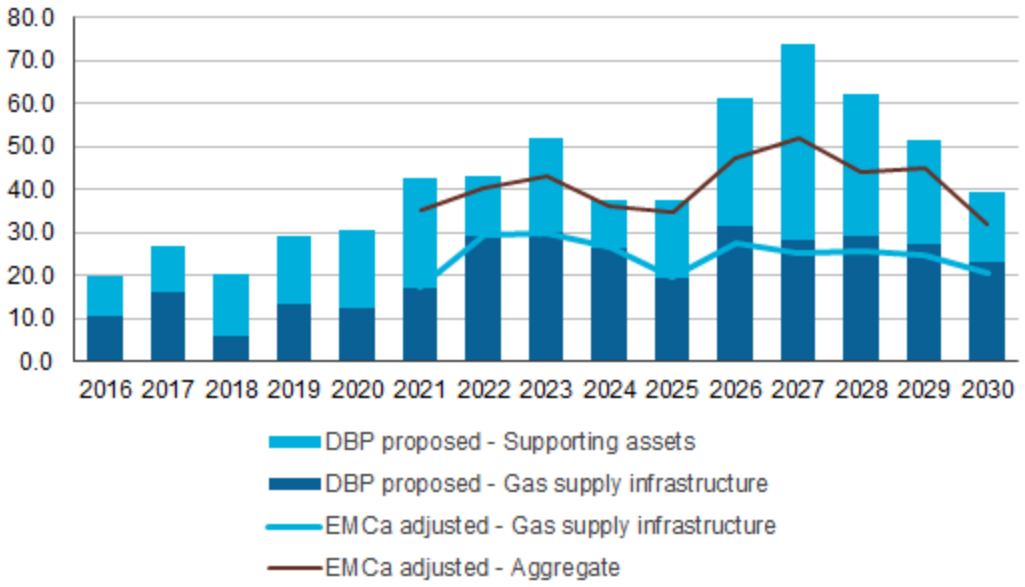
6.11.3 Time trend illustration

544. We present Figure 6.19 as an illustration of the time trend of DBP's proposed capex and our proposed adjustments to it.

545. For the purpose of illustration, we have distinguished capex on the primary gas supply infrastructure from capex on supporting assets, as follows:

- We have defined the primary gas supply assets to include the Pipeline and MLVs, Compression, Corrosion Protection and the 'control' infrastructure as represented by SCADA, ECI and Comms;
- We have defined the remainder as supporting assets, therefore comprising Buildings, Computers and Motor Vehicles and Metering.

Figure 6.19: DBP's long term expenditure trend and the impact of proposed adjustments - $m, real Dec 2024



Source: EMCa analysis, from base information provided in DBP response to IR EMCa03

546. Viewed from this perspective over three regulatory periods, we observe that:

- DBP commenced a marked increase in capex applied to its primary gas supply infrastructure in 2022 and which DBP proposes to continue at around this level through AA6.
- The main 'spikes' in DBP's expenditure are for 'supporting' assets.
- The increase in capex both for primary gas supply infrastructure and for supporting assets could be considered as consistent with DBP's view that there was underinvestment in and before the early years shown in this graph.
- EMCa proposes no adjustment to DBP's AA5 primary gas supply infrastructure capex.
- EMCa's proposed adjustment to DBP's proposed AA6 capex for primary gas supply infrastructure is relatively small and effectively would maintain a capex allowance for AA6 that is at a similar level to DBP's expenditure on these assets in AA5.
- The main adjustments that we propose are to DBP's AA5 and proposed AA6 expenditure on supporting assets. After taking account of these adjustments, however, DBP's AA6 allowance would still be greater than the expenditure that we consider to be conforming in AA5.

547. While the analysis above is not definitive, we consider that it is an indication that the proposed adjusted allowances are likely in aggregate to reasonably support DBP's continued provision of the regulated services of the DBNGP on a prudent and efficient basis, as required under the NGR.

7 PROPOSED AA6 OPEX

DBP proposes an AA6 opex allowance of $652m. This would represent an annual average that is 19% more than DBP's AA5 average annual expenditure to date.

We consider that DBP's proposed allowance is not reasonable. Our main concern is with its proposed base year value, which incorporates an accounting change and additional adjustments that result in an amount that is significantly higher than the relatively stable opex it has incurred for many years. We consider that some proposed step changes are also not justified or overstated.

We consider that a reasonable alternative AA6 opex allowance would amount to $552m over the period, which is 15% less than DBP has proposed.

7.1 Introduction

548. In this section, we first summarise DBP's proposed AA6 opex allowance and the basis on which DBP has sought to justify its proposed expenditure. We then assess the elements of DBP's proposed opex, including how it has applied its forecasting methodology and its assumptions. In the event that some elements of DBP's proposed forecast are not reasonable and, consistent with our brief, we provide an adjusted forecast which we consider would provide a reasonable allowance.

7.2 DBP's proposed AA6 opex

7.2.1 Overview

549. DBP has proposed an AA6 opex allowance of $652.5m (real Dec 2024). This is an average of $130.5m per year which compares to AA5 opex actual of $109.3m[113] per year and ERA's AA5 allowance of $104.5m[114] per year.

550. As we discuss in section 7.3.3, DBP's 2024 opex is presented on an accounting basis that differs from previous years, and from the basis on which its AA5 opex was approved. When we average over the three years prior to this change, DBP's actual AA5 opex averages $106.7m per year compared with the ERA allowance of $108.1m.

551. Table 7.1: summarises DBP's derivation of its forecast and its BST components, while Figure 7.1 shows DBP's proposed opex by category.

113 AA5 yearly average is based on DBP's response to IR EMCa01 actual 2021-2024. We exclude DBP's 2025 forecast/estimate which, during our onsite meeting, DBP advised us will be revised.

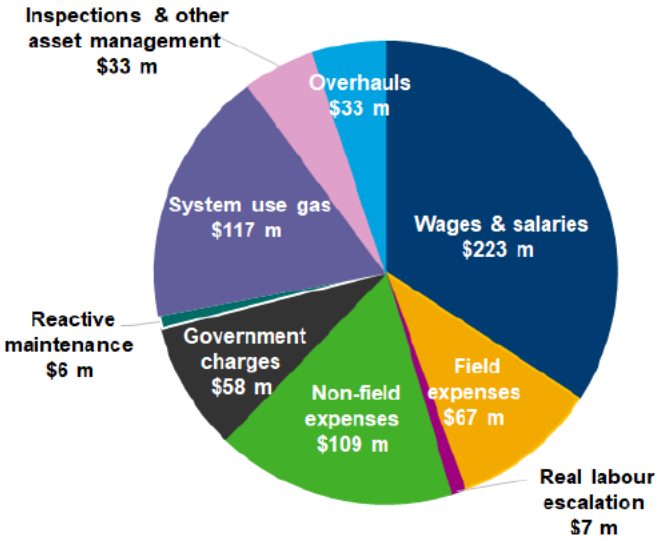
114 Based on DBP's response to IR EMCa01 ERA allowance sheet. All figures converted to $2024. For consistency with DBP's actual, this too is averaged over the 4 years to 2024.

Table 7.1: DBP AA6 proposed opex - $m, real Dec 2024

Category	2024	2026	2027	2028	2029	2030	Total
Efficient Base Year	89.2	89.2	89.2	89.2	89.2	89.2	**446.2**
Step changes							
IT		*1.8*	*2.7*	*2.5*	*2.6*	*2.7*	*12.4*
Insurance		*0.0*	*0.2*	*0.8*	*1.5*	*2.3*	*4.9*
Subtotal		**1.8**	**2.9**	**3.4**	**4.2**	**5.0**	**17.3**
Bottom-up							
Fuel Gas (SUG)		*23.1*	*22.0*	*22.3*	*22.5*	*26.7*	*116.6*
GEA & Turbine overhauls		*4.9*	*8.8*	*4.5*	*6.9*	*7.8*	*32.8*
Inspections & Other Asset Management		*4.8*	*10.4*	*10.4*	*3.6*	*3.7*	*33.0*
Subtotal		**32.8**	**41.2**	**37.2**	**33.0**	**38.2**	**182.4**
Labour cost escalation		0.7	1.0	1.3	1.6	2.0	6.6
Total forecast opex		**124.5**	**134.4**	**131.1**	**128.0**	**134.4**	**652.5**

Source: EMCa table derived from DBP opex model, att. 8-1 and DBP's response to EMCa01

Figure 7.1: DBP's proposed opex by category - $m, real Dec 2026



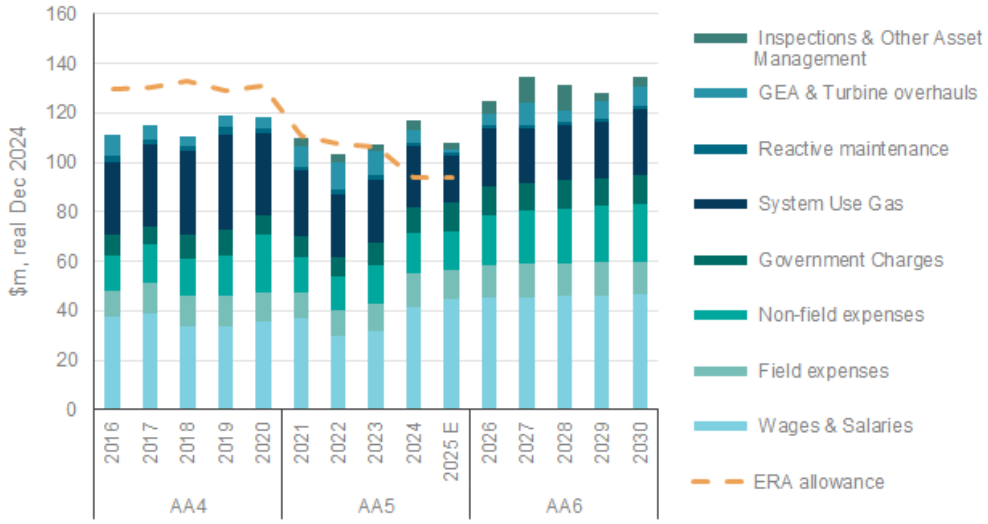
Source: DBP opex model, att. 8-1 and DBP's response to EMCa01

552. Figure 7.2 below shows that DBP's AA6 proposed opex is significantly higher compared with historical opex for AA4 and AA5, around 14% and 19% respectively. The major contributors to higher opex are non-field expenses and wages & salaries, which DBP forecasts to increase by 48% and 31% respectively.

553. In its AA6 proposal, DBP has described reasons for the increases, including:

- A tight labour market and legislated requirement for higher superannuation contributions.
- Insurance, utility, field and rental costs.
- Higher 'inspection and other asset management' item costs.
- Uplift in its IT capability including for its Software as a Service (SaaS) and Platform as a Service (PaaS) cloud-based.

Figure 7.2: DBP proposed opex compared with AA4 and AA5 - $m, real Dec 2024[115]



Source: DBP opex model, att. 8-1 and DBP's response to EMCa01

7.3 Assessment of Base Year Opex

554. In the following sections we provide our assessment of DBP's proposed base year adjusted efficient opex.

555. We summarise our proposed adjustments in the end of this section 7.

7.3.1 Selection of the base year

556. DBP has used a combination of actual opex 2024 (January – September) and forecast/estimated opex 2024 (October – December) as its base year for AA6 proposed opex. DBP then makes several adjustments by adding to its 2024 actual/estimated base year, which we discuss further below.

557. The selection of a base year which contains actual and estimated expenditures is not ideal, but was a pragmatic approach given 2024 full year actual was not available and used nine months actual data and three months forecast. However, we sought actual full-year information, which DBP provided to us (unaudited) and which we consider as input to our assessment. We understand that DBP will use full year 2024 audited actuals for its revised AA submission.

7.3.2 DBP proposed adjusted base year value

558. DBP's estimated actual/forecast 2024 base, excluding those items for which it provides a bottom-up forecast,[116] was $81.9m. DBP proposes adjustments of $7.3m meaning that it proposes an adjusted base year opex value of $89.2m.

559. In Table 7.2 we show the components of DBP's year by year opex and including its proposed adjustments.

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115 2025 is estimated amount sourced it from DPB response to EMCa01

116 The proposed base opex excludes three opex categories, for which DPB propose using a bottom-up approach::

- System Use Gas
- GEA & turbine overhauls
- Inspections & Other Asset Management

Table 7.2: DBP's proposed base year (excluding Fuel Gas, GEA & Turbine Overhauls)[117] - $m, real Dec 2024

Opex categories / sub-categories	Actual Jan-Sep 2024	Forecast Oct-Dec 2024	2024 Actual & Forecast	Base Year Adj.	Base Year
Wages & Salaries					
Salaries	31.1	8.8	40.0	3.0	43.0
Salaries - Contractors	1.2	0.4	1.6		1.6
Non-field expenses					
Employee Expenses	0.9	0.1	1.0		1.0
Advertising	0.0	0.0	0.1		0.1
Consulting	2.3	0.8	3.0	0.9	3.9
Entertainment	0.2	0.1	0.3		0.3
IT	4.3	1.6	5.9	1.7	7.6
Insurance	2.6	1.2	3.7	0.7	4.4
Office & Admin	0.7	0.1	0.8		0.8
OHS	0.2	0.1	0.3		0.3
Field expenses					
Motor Vehicle	1.3	0.3	1.6		1.6
Repairs & Maintenance	6.0	1.9	7.8		7.8
Training & Development	1.1	0.5	1.6		1.6
Travel & Accommodation	1.8	0.6	2.4		2.4
Government Charges					
Utilities Rates & Taxes	3.6	1.2	4.8	1.0	5.8
Permits, Licence Fees, Rates & Taxes	4.4	1.4	5.8		5.8
Reactive Maintenance					
Reactive Opex	0.9	0.3	1.3		1.3
	62.5	**19.4**	**81.9**	**7.3**	**89.2**

Source: DBP opex model att. 8-1

560. In the subsections which follow, we assess the extent to which each component of DBP's base year opex is representative of a revealed efficient cost and the extent to which adjustments are required to meet this objective.

7.3.3 Base year opex assessment – general expenditure trend considerations

Comparison with DBP historical opex

561. We sought to understand DBP's proposed adjusted base year through information requests. In its responses, DBP provided a historical opex breakdown including full year 2024 unaudited actuals as shown in Table 7.3.

562. The table shows that DBP's salaries in 2024 are significantly higher than the previous years and we find that it is almost 27% higher (in real terms) than the average over the five-years prior.

[117] As per DBP's proposal, these amounts are forecast on a bottom-up basis and are therefore not relevant to assessing its base year opex.

Table 7.3: DBP historical opex - $m, real Dec 2024

Category / subcategory	2019	2020	2021	2022	2023	2024
Wages & Salaries						
Salaries	*30.9*	*34.1*	*35.6*	*28.0*	*30.2*	*40.3*
Salaries - Contractors	*2.5*	*1.7*	*1.6*	*1.5*	*1.5*	*1.0*
Subtotal	**33.4**	**35.8**	**37.2**	**29.5**	**31.7**	**41.3**
Non-field expenses						
Employee Expenses	*0.2*	*0.3*	*0.7*	*0.4*	*0.5*	*1.3*
Advertising	*0.0*	*0.0*	*0.0*	*0.1*	*0.1*	*0.2*
Consulting	*5.2*	*6.7*	*5.3*	*1.0*	*3.4*	*4.4*
Entertainment	*0.6*	*0.6*	*0.3*	*0.2*	*0.3*	*0.3*
IT	*5.3*	*9.8*	*3.5*	*6.7*	*6.0*	*5.5*
Insurance	*3.5*	*3.1*	*3.3*	*3.8*	*4.7*	*3.4*
Office & Admin	*1.6*	*2.5*	*0.7*	*0.4*	*0.5*	*0.9*
OHS	*0.2*	*0.5*	*0.3*	*0.5*	*0.3*	*0.3*
Subtotal	**16.6**	**23.5**	**14.1**	**13.1**	**15.8**	**16.2**
Field expenses						
Motor Vehicle	*1.3*	*1.3*	*1.4*	*1.4*	*1.5*	*1.9*
Repairs & Maintenance	*7.1*	*6.6*	*6.4*	*6.8*	*6.3*	*8.1*
Training & Development	*1.6*	*1.4*	*1.0*	*1.3*	*1.2*	*1.5*
Travel & Accommodation	*2.6*	*2.0*	*1.4*	*1.5*	*2.0*	*2.5*
Subtotal	**12.6**	**11.3**	**10.2**	**11.0**	**11.0**	**14.0**
Government Charges						
Utilities Rates & Taxes	*9.9*	*8.1*	*4.5*	*4.4*	*4.3*	*4.7*
Permits, Licence Fees, Rates & Taxes	*0.0*	*0.0*	*3.8*	*3.6*	*4.6*	*5.8*
Subtotal	**9.9**	**8.1**	**8.3**	**8.0**	**8.9**	**10.5**
Reactive Maintenance	3.3	2.5	1.9	1.8	1.6	1.0
TOTAL	**75.8**	**81.2**	**71.7**	**63.4**	**69.0**	**83.0**

Source: EMCa table derived from DBP opex model att. 8-1 and EMCa Information Request (EMCa01)

563. We compared DBP's five-years average historical opex for each category, with its 2024 actual opex (full year unaudited) and with DBP's proposed adjusted 2024 base year opex, as shown in Table 7.4.

Table 7.4: Comparison between DBP average five-years with DBP proposed adjusted base year 2024 - $m, real Dec 2024[118]

Category	Average (2019-2023)	2024 Actual	DBP Proposed adjusted Base Year 2024	*Variance DBP proposed vs 5 years average*	*Variance DBP proposed vs 2024 actual*
Wages & Salaries					
Salaries	31.8	40.3	43.0	*11.2*	*2.7*
Salaries - Contractors	1.8	1.0	1.6	*-0.1*	*0.7*
Subtotal	**33.5**	**41.3**	**44.6**	***11.1***	***3.3***
Non-field expenses		0.0			
Employee Expenses	0.4	1.3	1.0	*0.6*	*-0.3*
Advertising	0.0	0.2	0.1	*0.0*	*-0.1*
Consulting	4.3	4.4	3.9	*-0.4*	*-0.5*
Entertainment	0.4	0.3	0.3	*-0.1*	*0.0*
IT	6.3	5.5	7.6	*1.3*	*2.1*
Insurance	3.7	3.4	4.4	*0.8*	*1.0*
Office & Admin	1.1	0.9	0.8	*-0.4*	*-0.1*
OHS	0.4	0.3	0.3	*0.0*	*0.0*
Subtotal	**16.6**	**16.2**	**18.4**	***1.7***	***2.2***
Field expenses		0.0			
Motor Vehicle	1.4	1.9	1.6	*0.2*	*-0.3*
Repairs & Maintenance	6.6	8.1	7.8	*1.2*	*-0.3*
Training & Development	1.3	1.5	1.6	*0.3*	*0.0*
Travel & Accommodation	1.9	2.5	2.4	*0.5*	*-0.1*
Subtotal	**11.2**	**14.0**	**13.4**	***2.2***	***-0.6***
Government Charges					
Utilities Rates & Taxes	6.2	4.7	5.8	*-0.4*	*1.1*
Permits, Licence Fees, Rates & Taxes	2.4	5.8	5.8	*3.4*	*0.0*
Subtotal	**8.6**	**10.5**	**11.6**	***2.9***	***1.1***
Reactive Maintenance	2.2	1.0	1.3	*-1.0*	*0.2*
TOTAL	**72.2**	**83.0**	**89.2**	***17.0***	***6.2***

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

564. The table shows that DBP's overall proposed adjusted base year 2024 is $17.0m higher than its five-year average and $6.2m higher than its 2024 actual opex. We therefore considered further the variance for each category, noting that DBP's proposed adjusted base year opex includes additional amounts for five subcategories as shown in Table 7.2.

118 The amount in 2024 is unaudited actual and is based on IR EMCao01, while 2024 adjusted base year is based on the What DBP has proposed 9 month actual plus 3 month estimated/forecast.

Wages & salaries

What DBP has proposed

565. DBP proposed $44.6m for adjusted wages & salaries base year, which is 33.1% higher than prior five-years (2019-2023) average.

Table 7.5: DBP Proposed wages & salaries adjusted base year 2024 - $m, real Dec 2024

Wages & Salary	Average (2019-2023)	2024 Actual [119]	DBP Proposed Base Year 2024	*Variance proposed vs 5 years average*	*Variance proposed vs 2024 actual*
Salaries	31.8	40.3	43.0	*11.2*	*2.7*
Salaries - Contractors	1.8	1.0	1.6	*-0.1*	*0.7*
Total	**33.5**	**41.3**	**44.6**	***11.1***	***3.3***

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

DBP presents a considerably greater salary cost in 2024 than in previous year

566. DBP proposes $43.0m base year salaries, which includes a proposed adjustment of $3.0m (from its actual/forecast). This is $11.1m more than the average for the previous five years (2019-2023) and $3.3m higher than its full-year unaudited actual for 2024. Given that this is a significant component of the proposed base year opex, we sought to understand whether it could be considered a representative efficient base year amount.

For its regulatory proposal, DBP has applied a reduced charge out rate to capex, other AGIG entities and to its provision of uncovered services and has countered this by increasing the salary costs ascribed to DBNGP regulated services

567. In December 2024, AGIG engaged BDO to review DPB's labour cost charging rate. BDO reported in December 2024, advising that it considered that DBP should reduce labour on costs in its charging rate from 104% to 75%.[120] BDO estimated that this would result in an $8.5m capex to opex shift.[121] BDO states in its report that

> *'We note that AGIG is no longer receiving the equivalent amount of revenue from capex projects and other areas of the business where the cost rates are charged, and it is reasonable to recover the full labour costs incurred as part of regulatory opex.'*[122]

568. We consider that this is a misrepresentation of regulatory requirements: it is not the role of the regulatory process for a regulated entity to effectively underwrite a shortfall in charge outs to other areas of the business, nor to absorb excess resource costs due to a reduction in capex requirements. The appropriate representation of regulated costs is that they should be prudent and efficient in meeting the specific needs of the regulated business entity. And, noting that the NGR defines this separately for capex and for opex, we consider that it is also the case that a reduced capex requirement does not justify loading inefficient resource costs into opex.

569. While the BDO report refers to the reduced charge out rate as a capex to opex switch, we also could not see where DBP had made a capex reduction commensurate with the increase in opex. We also noted that the BDO report's advice to DBP was dated December 2024 and by its title, was provided for the purpose of the AA6 Access Arrangement. The timing and context for this advice, including the calculation of the $8.5m increase, suggested

119 DBP 'actual' includes the BDO 2024 adjustment

120 Review of labour cost rate update (January 2025) containing BDO report: Access Arrangement 6 – Review of Labour Cost Rate Update (18 December 2024). Page 4

121 As above, page 7

122 As above, page 3

that it was provided in support of a representation of DBP's salary cost for that year rather than the internal accounting basis on which salary costs were charged out over the course of 2024.

570. We sought further information on DBP's allocation of salary costs. In response to EMCa's information request (EMCa18), DBP provided gross salaries before and after charging out to capex and to other AGIG entities, as shown in the Table 7.6. It is evident from this that charging to capex is reduced in 2024 due to the reduction in charge out, but it is also evident that DBP's charging to other AGIG entities and to DBP's unregulated services is also lower than it would otherwise have been if not for the impact of the $8.5m reduction referred to in the BDO report. Further, we note that the lower charge largely benefits other AGIG entities and the uncovered pipeline, while the impact on DBNGP capex is somewhat less.

571. Absent the $8.5m switch to opex, DBNGP net employee expenses in 2024 would have been around $34.6m rather than $43.1m as shown in this table. And noting that the subsequent actual opex figure for 2024 that DBP provided was $40.3m (as shown in Table 7.5Table 7.3) deducting the same on-cost adjustment of $8.5m would result in a net employee cost of $31.5m for 2024 – i.e. essentially the same as for 2023.

Table 7.6: DBP gross salaries and allocation - $m, real Dec 2024[123]

Employee Expense	2021	2022	2023	2024
Employee expenses (Salaries, STIP, Super, Contractors, etc)	51.0	51.5	59.3	66.2
Provision	5.6	-	-	-
Subtotal - Gross Employee expenses	**56.6**	**51.5**	**59.3**	**66.2**
Allocated to DBP SIB Capex	(5.8)	(7.4)	(8.2)	(6.9)
Allocated to other AGIG entities & uncovered pipeline	(17.9)	(16.2)	(19.6)	(16.2)
Subtotal - Employee expenses Netted Off	**(23.7)**	**(23.5)**	**(27.8)**	**(23.1)**
Net of 2021 provision	(5.6)			
Net Employee Expenses (DBNGP)	**27.3**	**27.9**	**31.5**	**43.1**

Source: DBP response to EMCa18 (Q39). We note that the information DBP provides here does not exactly reconcile with

BDO asserts evidence that DBP is efficient, but its analysis leads to the opposite conclusion

572. In its report to AGIG, BDO compares DBP's actual salaries and wages opex with ERA's allowances (which it refers to as the 'benchmark'). BDO calculates averages for the ERA allowance and for DBP's actual expenditure and notes that the nine-year average (2016 to 2024) is $30.9m, which compares with the benchmark average of $31.6m.[124] BDO goes on to assert that such values that are '*below the benchmark …support efficiency measurement requirements under the National Gas Rules*.'

573. This is a reasonable claim with regard to DBP's historical expenditure. However, DBP is proposing a much higher value for 2024 and which would then form the basis for a forecast for the next Access Arrangement period that, with an $8.5m increment, represents an additional $42.5m impost on DBNGP customers and which would largely benefit AGIG's other entities, including its non-regulated entities.

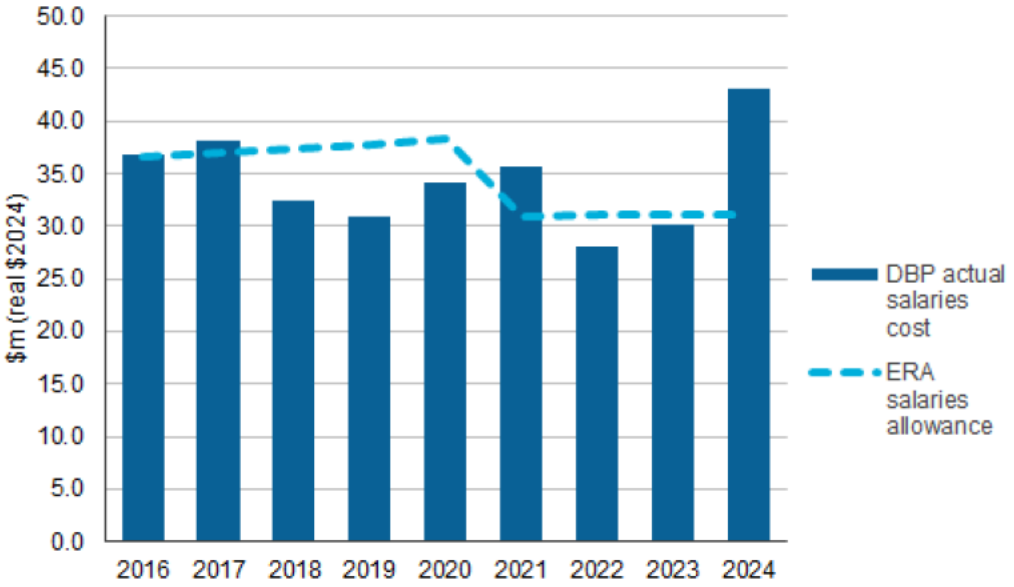
574. In Figure 7.3, which is drawn from the same historical data set used by BDO (but converted to real terms), it is clear that DBP has outperformed the ERA allowances in all except two of the previous eight years. However, to the extent that the ERA allowance is valid as an

123 We note that the net costs shown here do not exactly reconcile with the historical information that DBP provided as shown in Table 7.3; however for we have considered it reasonable for directional understanding of its salary cost allocation process and outcomes.

124 BDO report, page 7. BDO calculates both values in nominal terms, which would not be valid as current reference values, but is acceptable given that it is simply comparing the two values.

efficiency benchmark, DBP's proposed basis for its AA6 allowance presents as a highly inefficient outlier. We consider it contradictory to present DBP as efficient on a historical average basis, but to then ignore the efficiency implication of DBP's proposed 2024 adjusted base year amount.

Figure 7.3: DBP actual salary costs compared with ERA allowances over AA4 and AA5 (to date) - $m, real 2024



Source: DBP response to EMCa01. 2024 'actual' is as proposed in DBP's regulatory proposal (and includes its proposed adjustment)

Increased staff numbers and decreasing vacancy rates do not justify a base year adjustment to DBNGP salaries

575. We also noted references in the BDO report to significant increases in staffing numbers, which seemed inconsistent with the relatively stable nature of DBNGP operations and we sought further information on these in the same information request.[125] DBP provided information on its staffing numbers, as shown in Table 7.7. As can be seen in this table, DBP has increased the number of roles by around 100, from 2020 to 2025.

Table 7.7: DBP's role/position, FTEs and implied vacancy rate

Year	Role/position	Average headcount	FTE	Implied vacancy rate
2020	234		222.3	5.0%
2021	234	239	223.7	4.4%
2022	251	244	240.7	4.1%
2023	283	270	272.1	3.9%
2024	305	295	293.7	3.7%
2025 YTD	**311* + 24 = 335**		**301.7**(325.7**)**	

*Source: EMCa table derived from DBP response to EMCa18 (Q39 and Q43). DBP Note: * There are currently 24 vacancies in DBP with 19 positions being actively recruited for. ** Based all positions currently being recruited being full time.*

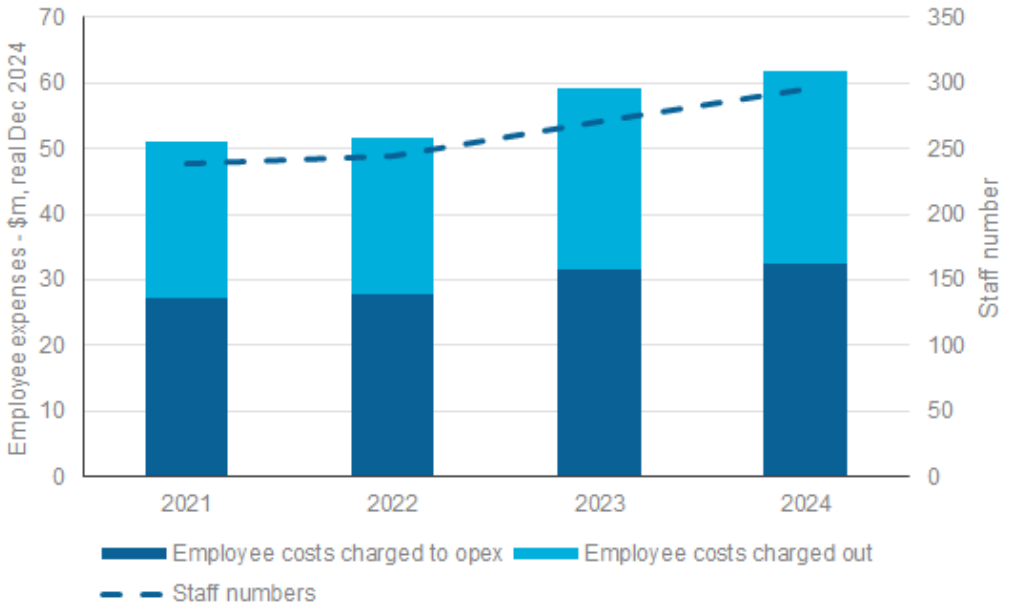
576. Figure 7.4 shows that the increase in staff numbers each year is almost entirely consistent with an increase in the employee costs charged out, once staff costs are recorded on the same accounting basis across each year, (i.e. before the proposed BDO adjustment in

[125] IR EMCa18, Question 39

2024). As described above, DBP has confirmed that employee costs charged out are largely charged to other AGIG entities, therefore it is also clear that the increased DBP staff numbers reflect an increase in the use these staff to provide services other than to DBNGP. On the other hand, when viewed on the same accounting basis across the four years, employee costs charged to DBNGP opex remain relatively flat.

577. In other words, from a DBNGP perspective, the increase in staff numbers over the recent period does not materially reflect increased requirements for DBNGP operations and management and, equally, any intentions that DBP has to further increase staff numbers does not justify an opex base year adjustment for DBNGP.

Figure 7.4: Employee cost breakdown and Staff Numbers



Source: EMCa graph derived from DBP response to EMCa18 (Q39), with EMCa adjustment to remove the proposed BDO adjustment to changeout rates

578. Part of DBP's reasoning for adding an adjustment to its 2024 salaries amount was that it had unfilled vacancies. As is shown in Table 7.7, its vacancy rate has reduced since 2020 and, while covid pandemic would have played a part in this, we consider that DBP is not justified in assuming that 100% of positions will be filled i.e. it will achieve a 0% vacancy rate in AA6.

DBP's unaudited actual 2024 salary cost is a reasonable alternative estimate to apply at this time, and is also consistent with its longer-term average cost

579. We consider that the five-year average (2019-2023) for salaries opex category of $31.8m is a reasonable representation of efficient base year instead of DBP proposed adjusted 2024 value. This is also the same as DBP's 2024 actual (unaudited) expense, before the addition of the BDO adjustment as a result of DBP's proposed lower charging-out rate.[126]

DBP's actual unaudited 2024 amount for salaries – Contractors is a reasonable update to its proposed amount

580. DBP proposed $1.6m of salaries – contractors' base year, which is based on nine months actual three months estimates. This is $0.6m more than DBP's most recent 2024 actual.

581. We consider that the efficient base year for this category is as per 2024 actual which is $1.0m.

126 i.e. actual cost of $40.3m, less $8.5m changeout rate adjustment = $31.8m.

EMCa adjusted opex for Wages & salaries

582. In the table below we provide EMCa adjusted base year 2024 for wages and salaries.

Table 7.8: DBP proposed and EMCa adjusted for base year 2024 wages & salaries - $m, real Dec 2024

Category	DBP proposed	EMCa adjustments	EMCa adjusted
Salaries	42.96	-11.20	31.76
Salaries - Contractors	1.64	-0.65	0.99
Total	**44.60**	**-11.85**	**32.75**

Source: EMCa's table derived from DBP opex model Att. 8-1 and DBP response to EMCa information request (EMCa01)

Non-field expenses

583. DBP proposed $18.4m for non-field expenses base year 2024 including $3.3m proposed adjustments to three categories: consulting, IT and insurance.

Table 7.9: DBP proposed base year 2024 for non-field opex - $m, real Dec 2024

Non-field expenses	Actual/forecast 2024	DBP Proposed adjustment	Proposed adjusted base year 2024
Consulting	3.0	0.9	3.9
IT	5.9	1.7	7.6
Insurance	3.7	0.7	4.4
Employee Expenses	1.0		1.0
Advertising	0.1		0.1
Entertainment	0.3		0.3
Office & Admin	0.8		0.8
OHS	0.3		0.3
Total	**15.1**	**3.3**	**18.4**

Source: DBP opex model – Att. 8-1

DBP's proposed consulting allowance is reasonable

584. DBP proposed $3.9m, including $0.9m adjustment, for base year consulting opex. This is lower than its 2024 actual (unaudited) amount.

585. During our onsite meeting, DBP stated that the adjustment of $0.9m for consulting is to bring it to an equivalent five-year average, rather than its actual.

586. Consulting expenditure is cyclical in nature and using the average of five years approach is reasonable. Therefore, we consider that the proposed $3.9m on its base year 2024 is reasonable.

DBP's proposed base year cost for IT is overstated

587. DBP proposed $7.6m on its IT base year. This is a combination of $5.9m actual/forecast and a $1.7m adjustment. This is 39% higher than DBP's 2024 actual (unaudited).

588. We compared DBP's proposed base year 2024 IT opex with 2024 actual which DBP provided as part of an EMCa information request as shown in Table 7.10.

Table 7.10: Comparison between proposed IT base year and 2024 actual - $m, real Dec 2024

Non-field expenses	2024 Actual (unaudited)	Proposed adjusted Base Year 2024	Variance $	Variance %
IT	5.5	7.6	2.1	39%

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

589. In its response to the EMCa Information Request (EMCa18 – Q39c) DBP provided an IT breakdown for 2024 actual ($5.5m), as shown in Table 7.11.

Table 7.11: IT breakdown included in 2024 actual - $m

IT subcategory	Inclusions	2024
IT Infrastructure Cloud	[redacted]	0.68
IT Managed Service	[redacted]	2.04
IT SaaS	[redacted]	0.64
IT Service Provider Other	[redacted]	0.06
IT Software Licence	[redacted]	1.79
IT Hardware Licence	[redacted]	0.22
IT HW SW Purch <$1k	small items only	0.03
Total 2024		**5.47**

Source: DBP response to EMCa18 – Q39c

590. DBP stated in its onsite presentation that the addition of an adjustment *"Reflects actual annual IT costs without savings currently being absorbed in AA5, as approach is no longer sustainable in current economic climate"*. There is no further evidence provided to support its proposed increase or that its reported costs are not reflective of its actual costs.

591. Therefore, we consider that the most efficient base year for 2024 BST is its revealed cost of 2024 actual which $5.47m.

DBP's proposed base year adjusted cost for insurance is overstated

592. DBP proposed $4.4m on its insurance base year. This is a combination of $3.7m actual/forecast and $0.7m adjustment.

593. During the onsite meeting, DBP stated that the reason for the adjustment is because insurance premiums are reset every year in September, therefore the amount of $3.7m (actual/forecast) did not include the impact of this premium increase applied over a whole year.

594. DBP proposed another $4.9m for step change. This will bring total DBP's proposed insurance cost over AA6 to $27.1m as shown in the table below.

Table 7.12: DBP proposed insurance for AA6 - $m, real Dec 2024

Insurance	2024 actual/forecast	Proposed Adjustment	2026	2027	2028	2029	2030	Total
Base	3.7	0.7	4.4	4.4	4.4	4.4	4.4	**22.2**
Step changes			0.0	0.2	0.8	1.5	2.3	**4.9**
Total			**4.4**	**4.6**	**5.3**	**6.0**	**6.8**	**27.1**

Source: DBP opex model, att. 8-1

595. In response to EMCa information request (EMCa01), DBP provided full year 2024 including its insurance cost for the year which is $3.4m.

596. DBP has engaged [redacted] to provide insurance cost forecast for the review of its Access Arrangement for Western Australia by the Economic Regulation Authority (ERA).

597. The report summary of the insurance cost forecast is in Table 7.13 below. In the report, [redacted] provided the forecast in nominal terms, and we converted them into real December $2024 using DBP's inflation factor provided in its opex model.

Table 7.13: [redacted] summary insurance cost forecast - $m, real Dec 2024

Insurance type	2026	2027	2028	2029	2030	Total
[redacted]						
[redacted]						
[redacted]						
[redacted]						
[redacted]						
[redacted]						
[redacted]						
[redacted]						
[redacted]						
[redacted]						
[redacted]						
Total						

Source: EMCa table derived from [redacted] report, att. 8.4

The [redacted] report, provided by DBP, provides a reasonable basis for allowing for insurance costs and a base year adjustment is not required

598. The [redacted] report shows that the forecast costs for insurance premiums for AA6 will be $4.7m less than DPB has proposed. We consider that the [redacted] report amounts represent a reasonable allowance.

599. By using the base year amount of $3.74m as DBP proposed without adjustment, that brings the total of insurance premiums already in the base to $18.7m and therefore requires further $3.67m in step changes. Detailed calculation is provided in Table 7.14 below.

Table 7.14: Summary insurance premium calculation - $m, real Dec 2024

Insurance	2026	2027	2028	2029	2030	Total
[redacted] insurance forecast						
Base year (without adjustment)						
Step changes required	0.06	0.15	0.64	1.14	1.69	**3.67**

Source: EMCa table derived from [redacted] report, att. 8.4 and DBP opex model, att. 8-2.

600. A reasonable alternative allowance for AA6 step changes is $3.67 instead of $4.9m proposed by DBP.

DBP's proposed amounts for other non-field expense are reasonable

601. DBP proposed the total of $2.4m for five opex categories as shown in Table 7.15 below.

Table 7.15: DBP proposed other non-field opex - $m, real Dec 2024

Non-field expenses	Average 5 years (2019-23)	DBP proposed adjusted base year 2024
Employee Expenses	0.4	1.0
Advertising	0.0	0.1
Entertainment	0.4	0.3
Office & Admin	1.1	0.8
OHS	0.4	0.3
Total	**2.4**	**2.4**

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

602. The proposed amount is in aggregate the same as the five-year average (2019-2023) and $0.5m lower than 2024 full year actual (based on DBP response to information request - EMCa01).

603. We consider that DBP's 2024 proposed base year amounts for those opex categories are reasonable.

EMCa adjusted opex for non-field expenses

604. In the table below we show EMCa adjusted base year 2024 for non-field expenses.

Table 7.16: DBP proposed and EMCa adjusted for base year 2024 non-field expenses - $m, real Dec 2024

Category	DBP proposed	EMCa adjustments	EMCa adjusted
IT	7.61	-2.14	5.47
Insurance	4.43	-0.70	3.74
Consulting	3.89	0.00	3.89
Employee Expenses	1.01	0.00	1.01
Advertising	0.05	0.00	0.05
Entertainment	0.29	0.00	0.29
Office & Admin	0.77	0.00	0.77
OHS	0.32	0.00	0.32
Total	**18.37**	**-2.83**	**15.53**

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

Field expenses

DBP's proposed amounts for Field Expenses are reasonable

605. DBP proposes $13.4m for field opex base year 2024. That is $2.2m more than the five-year average (2019-2023) but $0.6m less than its most recent actual full year 2024 as shown in Table 7.17.

606. On reviewing DBP's historical trends, we consider that lower costs for field expenses within the five-year historical period are reasonably explainable by a combination of suppressed activity due to covid impacts and some recent increase in subsequent real costs. We also consider that DBP's 2024 actual (unaudited) would not be a valid alternative base as it represents an anomaly which we consider is likely to reflect a degree of catch-up.

607. We consider that DBP's proposed base year for this opex category is reasonable.

Table 7.17: DBP Proposed field expenses adjusted base year 2024 - $m, real Dec 2024

Field expenses	Average (2019-2023)	2024 Actual	DBP proposed Base Year 2024[127]	*Variance proposed vs 5 years average*	*Variance proposed vs 2024 actual*
Motor Vehicle	1.4	1.9	1.6	*0.2*	*-0.3*
Repairs & Maintenance	6.6	8.1	7.8	*1.2*	*-0.3*
Training & Development	1.3	1.5	1.6	*0.3*	*0.0*
Travel & Accommodation	1.9	2.5	2.4	*0.5*	*-0.1*
Total	**11.2**	**14.0**	**13.4**	***2.2***	***-0.6***

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

Government Charges

DBP has not adequately justified its proposed adjustment to Utilities Rates and Taxes

608. DBP proposes $11.6m for government charges in its opex base year. This is a combination of $10.5m actual/forecast and $1.0m adjustment.

Table 7.18: DBP proposed government charges base year 2024 - $m, real Dec 2024

Government charges	Actual/forecast 2024	DBP proposed adjustment	DBP proposed adjusted base year 2024
Utilities Rates & Taxes	4.8	1.0	5.8
Permits, Licence Fees, Rates & Taxes	5.8		5.8
Total	**10.5**	**1.0**	**11.6**

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

609. In its explanation during our onsite meeting, DBP stated that the $1.0m adjustment is because of *"higher utility charges, higher telecommunication charges (such as for the new datacentre) and higher rental expenses for certain facilities, which will occur from 2025".*

610. We sought to understand the difference between those two expenditures categories.

611. In its response, DBP explains below:

- **Utilities Rates & Taxes**; includes utility charges for electricity, water and gas, telecommunication expenses and rental expenses[128]
- **Permits, Licence Fees, Rates & Taxes;** includes government licence fees, permits and fees, and rates and taxes.

612. We compared DBP's proposed amounts with average five-years and the most recent 2024 full year.

127 DBP proposed no adjustments to it proposed actual/forecast estimate for 2024

128 It is unclear from DBP's explanation why it refers to Rates and Taxes in the title of this category and also in the category below

Table 7.19: DBP Proposed government charged adjusted base year 2024 - $m, real Dec 2024

Government Charges	Average (2019-2023)	2024 Actual	DBP proposed adjusted Base Year 2024	*Variance proposed vs 5 years average*	*Variance proposed vs 2024 actual*
Utilities Rates & Taxes	6.2	4.7	5.8	*-0.4*	*1.1*
Permits, Licence Fees, Rates & Taxes	2.4	5.8	5.8	*3.4*	*0.0*
Total	**8.6**	**10.5**	**11.6**	***2.9***	***1.1***

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

613. The table shows that DBP's proposed amount is $2.9m and $1.1m higher than the average five-years (2019-2023) and 2024 full year actual respectively.

614. While there have been increases in such costs, and DBP evidences a more than doubling of costs for Permits, Licence Fees, Rates and Taxes, DBP's proposed adjustment for Utilities Rates and Taxes represents 22% increase for this component. While DBP provided information regarding some line item increases in response to our information request[129]' we considered this insufficient to support over-riding 'actual costs' through an increase that would add approximately $5m to its allowance over AA6.

615. We consider that the reasonable amount for the base year is its revealed cost of 2024 full year actual which is $10.5m. This amount is similar to DBP's proposed 2024 (actual/estimate) without its proposed $1.0m adjustment and $1.9m more than its recent average costs (2019 to 2023).

EMCa adjusted opex for Government Charges

616. In the table below we show EMCa adjusted base year 2024 for government charges.

Table 7.20: DBP proposed and EMCa adjusted for base year 2024 government charges - $m, real Dec 2024

Category	DBP proposed	EMCa adjustments	EMCa adjusted
Utilities Rates & Taxes	5.8	-1.1	4.7
Permits, Licence Fees, Rates & Taxes	5.8	0.0	5.8
Total	**11.6**	**-1.1**	**10.5**

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

Reactive Opex

DBP's proposed allowance is higher than its 2024 actual expenditure and the additional amount is not justified

617. DBP proposed $1.3m on reactive maintenance base year. This is $0.3m more than its 2024 full year unaudited actual of $1.0m. It is reasonable to consider that the updated actual amount supersedes DBP's proposed amount which was comprised of 9 months actual and 3 months forecast.

618. We consider that the reasonable base year for its reactive maintenance is its revealed cost of full year 2024, which is $1.0m.

[129] IR18, part of response to question 43

7.4 Assessment of Bottom-up opex

7.4.1 GEA and Turbine Overhauls

619. DPB proposes $32.8m for GEA and turbine overhauls for AA6, which is $2.8m lower than DPB spent in AA5.

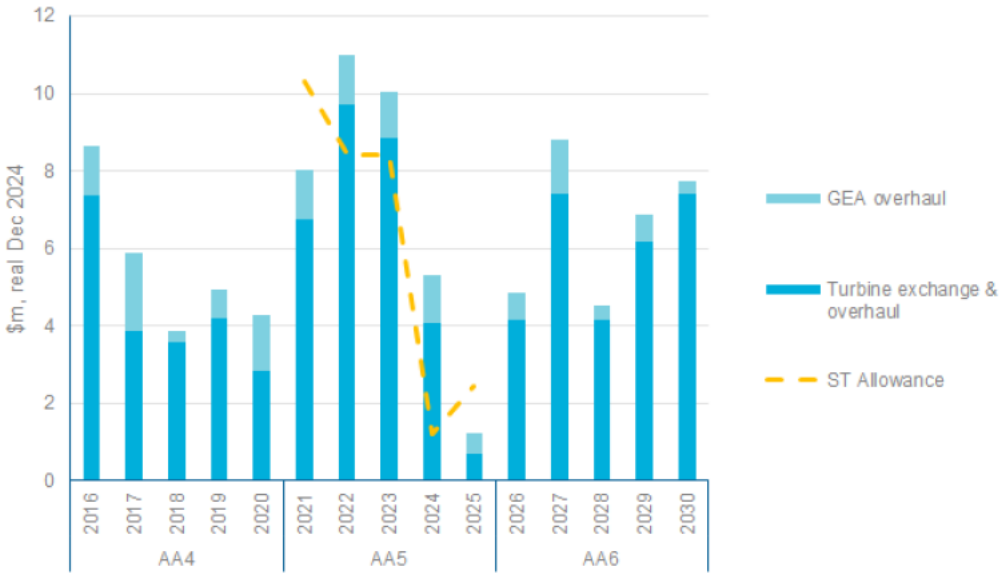
620. Table 7.21 shows DBP's proposed expenditure for AA6 compared with AA5 while in Figure 7.5 we compare its proposed with historical expenditures and the ERA's allowance for AA5.

Table 7.21: DPB proposed GEA & turbine overhauls compared with AA5 - $m, real Dec 2024

Category	Total AA5	2026	2027	2028	2029	2030	Total AA6
GEA overhaul	**5.5**	0.7	1.4	0.4	0.7	0.4	**3.5**
Turbine exchange & overhaul	**30.1**	4.2	7.4	4.2	6.2	7.4	**29.3**
Total	**35.6**	**4.9**	**8.8**	**4.5**	**6.9**	**7.8**	**32.8**

Source: DBP response to EMCa18, Q40

Figure 7.5: DPB proposed GEA & turbine overhauls compared with AA4 and AA5 - $m, real Dec 2024



Source: DBP response to EMCa18, Q40

621. We assess each proposed expenditure in the subsection below.

GEA overhauls

Proposed expenditure is prudent

622. DBP has proposed $3.5m to replace GEA's in AA6 which are at end of life and no longer fit for purpose[130]. This is less than what DBP spent in AA5.

623. The project will reduce the requirements for maintenance and overhauls of GEA's compared to AA5.

624. The proposed AA6 Opex for GEA overhauls align with the schedule set out in Business Capex DBP35 and is prudent.

[130] Business Case Capex DBP35: Power generation and management

Turbine exchange & overhaul

What DBP proposes

625. DBP proposes a total of $29.3m, including $22.0m for turbine exchange and overhauls expenditures. The balance is an allowance for premature failure and varnish removal unit.

Table 7.22: DBP proposed for Turbine overhauls - $m, real Dec 2024

	2026	2027	2028	2029	2030	Total AA6
Turbine exchange and overhaul	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Premature failure		[redacted]			[redacted]	[redacted]
Varnish removal unit	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total	**4.16**	**7.41**	**4.16**	**6.16**	**8.11**	**29.28**

Source: DBP Opex Business Case, att. 8.2, pg.4

Proposed allowance for turbine exchange and overhauls is prudent

626. Compressor turbine units are covered by extended warranties, conditional on DBP following the OEM's maintenance and overhaul requirements[131]. These warranties offer reduced cost repair for premature failure and exchange at maximum run-hours. The proposed program is aligned with OEM requirements.

627. The costs for turbine overhauls are also largely driven by OEM costs in accordance with warranty terms and conditions. The costs proposed are in line with costs incurred in AA5 on a per unit basis and are therefore reasonable.

628. Therefore, the proposed program and the cost of $21.98m for AA6 are prudent and reasonable.

DBP's proposal overstates a reasonable allowance for premature failures; but its proposed allowance for varnish removal is prudent

629. DBP proposes to include a provision for [redacted] premature failures in AA6, on the basis that there were [redacted] premature failures in total across AA4 and AA5.

630. There are several factors which would be expected to result in the premature failure trend reducing due to reduced stress being placed on the compressor units, including:

- DBP's comprehensive overhaul program;
- Lower forecast throughput; and
- Forecast increasing Perth Basin production.

631. [redacted]

632. DBP's proposal to remove varnish build-up from turbine components is prudent.

633. In summary, the reasonable expenditure for turbine exchange & overhaul opex for AA6 is $26.0m after a reduction of [redacted].

EMCa adjusted opex for GEA and Turbine overhauls

634. In the table below we show the resulting alternative forecast for GEA and turbine overhauls.

Source: Insert-source-details

[131] Business Case Opex DBP01: Turbine overhauls

Table 7.23: EMCa adjusted for GEA and turbine overhauls - $m, real Dec 2024

Category	DBP proposed	EMCa adjustments	EMCa adjusted
GEA overhaul	3.5		3.5
Turbine exchange & overhaul	29.3	-3.3	26.0
Total	**32.8**	**-3.3**	**29.5**

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

7.4.2 Inspections & Other Asset Management

What DBP has proposed

635. DBP proposes $33.0m for inspections and other asset management for AA6.

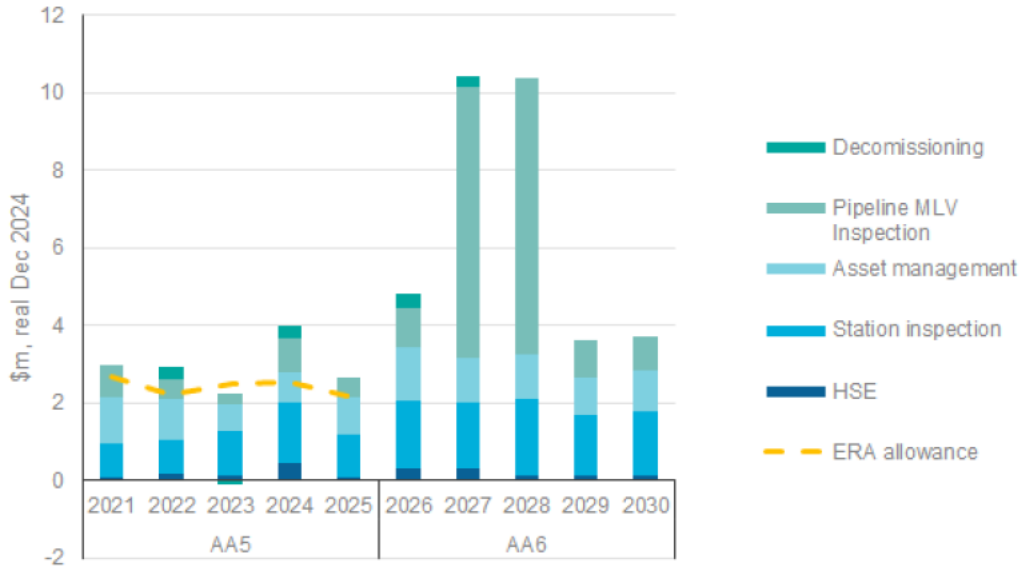
636. Table 7.24 shows DBP's proposed inspection and other asset management in AA6 and Figure 7.6 shows a comparison between its AA6 proposed expenditure allowance with actual/estimated AA5 expenditure and ERA's allowance for AA5.

Table 7.24: DPB proposed inspections and other Asset Management compared with AA5 - $m, real Dec 2024

Category	Total AA5	2026	2027	2028	2029	2030	Total AA6
HSE	**0.9**	0.3	0.3	0.1	0.1	0.1	**1.0**
Station inspection	**5.6**	1.7	1.7	2.0	1.6	1.7	**8.7**
Asset management	**4.7**	1.4	1.1	1.1	0.9	1.0	**5.6**
Pipeline MLV Inspection	**3.0**	1.0	7.0	7.1	1.0	0.9	**17.0**
Decommissioning	**0.5**	0.3	0.3				**0.6**
Total	**14.7**	**4.8**	**10.4**	**10.4**	**3.6**	**3.7**	**33.0**

Source: DBP response to EMCa18, Q40

Figure 7.6: DPB proposed inspections and other Asset Management compared with AA5 - $m, real Dec 2024



Source: DBP response to EMCa18, Q40

637. The graph shows a significant increase, particularly in pipeline MLV inspection forecast expenditures in AA6 compared with DPB's actual expenditure and ERA's AA5 allowance.

Health, safety and environment (HSE)

DBP's proposed expenditure for HSE is reasonable

638. DBP proposes to spend $0.98m during AA6. This is a similar amount to what DBP has spent in AA5 which is $0.91m as shown in its response to EMCa information request (EMCa18 – Q40).

639. In its Opex Business case (Opex DBP04), DBP states that the amount will cover a 'business as usual' level of HSE works and that it will undertake the essential VOC and BTEX monitoring project to improve safety outcomes for its staff and the public, and environmental outcomes. DBP states that it aligns with its Risk Management Framework, asset management principles, vision objectives and regulatory requirements including the Safety Case.

640. The breakdown of this cost is as shown in Table 7.25 below.

Table 7.25: DBP proposed HSE - $m, real Dec 2024

Category	2026	2027	2028	2029	2030	Total
BAU HSE	0.13	0.13	0.13	0.13	0.13	**0.64**
VOC and BTEX monitoring	0.17	0.17				**0.35**
Total	**0.30**	**0.30**	**0.13**	**0.13**	**0.13**	**0.98**

Source: DBP Opex Business case, Att. 8.2

641. On the basis of the information DBP provides, we consider the proposed amount for HSE in AA6 is reasonable.

Station inspection

What DBP proposes

642. DBP proposes a total of $8.7m for station inspection in AA6, which is 56% more than DBP spent in AA5.

643. In its opex business case (DBP13), DBP states that it has begun expanding inspections to cover additional assets towards the end of the AA5 period and proposes to continue this more thorough inspection program during AA6, including:

- Structural inspection of buildings and assemblies that house and support assets.
- Gas engine/compressor exhaust and air inlet inspections.
- Vent attenuator inspections.
- Land contamination.

644. In Table 7.26, we show DBP's proposed expenditure for station inspections.

Table 7.26: DBP proposed Station inspection - $m, real 2024

Inspection type	2026	2027[132]	2028	2029	2030	Total
Compressor sites	0.73	0.75	0.94	0.63	0.65	3.70
Meter stations	0.98	1.01	1.06	0.82	0.98	4.83
Contamination	0.07	0.03	0.03	0.03	0.03	0.19
Total	**1.77**	**1.78**	**2.03**	**1.47**	**1.66**	**8.72**

Source: EMCa table, derived from DBP opex Business Case, table 1.8, pg. 45

645. The proposed inspection profile is shown in Table 7.27 below.

Table 7.27: DBP proposed station inspection (units)

Inspection type	2026	2027	2028	2029	2030	Total AA6 units
Compressor sites						
Pressure vessels	[redacted]					
Pressure relief valves	[redacted]					
Structural & vent attenuators	[redacted]					
Exhaust/air inlet	[redacted]					
Compressor bundles	[redacted]					
Subtotal						
Meter stations						
Pressure vessels	[redacted]					
Pressure relief valves	[redacted]					
Structural & vent attenuators	[redacted]					
Subtotal						
All sites						
Contamination	[redacted]					

Source: DBP opex business case (DBP13), Table 1.3, pg. 39

DBP's proposed allowance for inspections at compressor sites is reasonable, but its allowance for metering stations should cover only 'Existing Stations'

646. We reviewed and assessed both options that DBP has provided in its business case:

- Option 1 – Maintain compliance inspection obligations of pressure vessel, relief valves and compressor rotor bundles. The estimated cost for this option is $7.7m.
- Option 2 – Expand the inspection program to cover additional mechanical/rotational assets, structures and site contamination. This is DBP's preferred option and will cost $8.7m.

647. We consider that the station inspection regime proposed for AA6 is prudent in the light of issues discovered during AA5 as set out in its Business Case (Opex DBP13), including some soil contamination not previously identified). There is a reasonable case made for utilisation of additional condition information which will potentially reduce the need for reactive work as well as reducing risks. An exception is set out in the paragraph below.

[132] The amount in 2027 from DBP's Business Case is slightly different from the amount that DBP has proposed in its Opex model for unexplained reasons (i.e its components do not sum to the stated total). DBP's total proposed expenditure (per its opex model) is $8.66m

648. In regard to inspections at meter stations, there are 26 Existing Stations[133] out of a total of 67 inlet and outlet stations on the DBNGP for which the operations and maintenance costs cannot be recovered from shippers under clauses 6.11 and 6.12 of the Reference Service Terms and Conditions T1, P1 and B1.

649. As DBP has not provided a list of sites at which works are proposed during AA6 in response to IR EMCa18 Q41, we consider that a reasonable alternative allowance is for inspections at meter station to be reduced pro-rata to the proportion of Existing Stations, i.e. for the allowance for meter stations to be reduced to 39% of the proposed allowance.

650. In Table 7.28 we show the adjusted amount, taking account of the required adjustment to meter stations.

Table 7.28: EMCa adjusted Station inspection - $m, real 2024

Station inspection	2026	2027	2028	2029	2030	Total
Compressor sites	0.73	0.75	0.94	0.63	0.65	**3.70**
Meter stations	0.38	0.39	0.41	0.32	0.38	**1.88**
Contamination	0.07	0.03	0.03	0.03	0.03	**0.19**
Total	**1.18**	**1.17**	**1.39**	**0.97**	**1.06**	**5.77**

Source: EMCa

Asset management

What DBP has proposed

651. DBP proposes $5.6m for asset management in AA6. This is $0.9m more than DBP spent in AA5.

652. DBP's proposed asset management allowance is set out in the table below.

Table 7.29: DBP proposes asset management opex - $m, real Dec 2024

Activity	2026	2027	2028	2029	2030	Total
Engineering and operational works	0.55	0.30	0.31	0.20	0.31	**1.66**
Management of change	0.50	0.50	0.50	0.50	0.50	**2.50**
Asset preservation	0.34	0.34	0.34	0.24	0.24	**1.48**
Total	**1.38**	**1.14**	**1.14**	**0.94**	**1.04**	**5.63**

Source: DBP opex business case (DBP14), Table 1.4, pg. 62

DBP's proposed allowance for asset management is reasonable

653. After reviewing its opex business case (DBP14, we consider that the proposed Asset Management programs are consistent with good industry practice and therefore the proposed expenditure of $5.63m is reasonable.

Pipeline MLV Inspection

What DBP has proposed

654. DBP proposes $17.0m pipeline MLV inspection in AA6. This is $14.1m greater than DBP spent in AA5. The increases are in 2 major areas:

[133] Attachment to response to EMCa08 Metering and www.agig.com.au/customeraccess/DBNGP Pipeline Description

Table

- In line inspections (ILI) of piggable pipeline assets which are required every 10 years
- Increased inspections of interfaces between above and below ground pipework due to issues identified during AA5[134].

655. In its opex business case (DBP19), DBP sets out the pipeline inspection schedule to reflect its AA6 expenditure forecast as shown in Figure 7.7.

Figure 7.7: AA6 Inspection schedule for pipeline and MLVs

DBP's forecast AA6 pipeline and MLV inspection schedule

- 10-yearly ILI of the CSBP lateral in 2026
- Early (8-year) ILI of the Kwinana Junction to Wagerup West section of the mainline
- 10-yearly ILI of the Mainline and loop-line in 2028
- 10-yearly ILI of Mainline South (remaining piggable section), Worsley Loop Pipeline Gas (WLPG) Loop and Southern Loop, Russel Road, Rockingham, Pinjar, Kemerton, Wellesley and Worsley laterals in 2027
- Five-yearly DCVG surveys of unpiggable pipelines not covered under the reactive dig ups resulting from previous ILI results (see DBP02: Pipeline and mainline valves) – [redacted] surveys are planned over AA6 the period
- 10-yearly piping inspection under insulation and within buried pits
- Five-yearly inspection of piping interfaces – [redacted] compressor stations, [redacted]-meter stations and [redacted] MLVs per year
- 12-yearly inspection of pressure vessels at MLVs – [redacted] per year
- Five-yearly inspection of pressure relief valves – [redacted] per year
- Five-yearly inspection of buried pits – [redacted] per year

Source: Business case DBP19

656. DBP's detailed proposed costs are set out in Table 7.30.

[134] Business Cases Capex DBP02 Pipeline and Mainline Valves and Opex DBP19 Pipeline and Mainline Valve Inspections

Table 7.30: DBP costs assessment on its proposed pipeline MLV inspection in AA6 - $'000, real Dec 2024

Category	Measure	2026	2027	2028	2029	2030	Total
ILI	*Kms*						
	Cost						
DCVG	*Units*						
	Unit cost						
	Cost						
Above/below ground	**Cost**						
Pressure vessel	*Units*						
	Unit cost						
	Cost						
Pressure relief valve	*Units*						
	Unit cost						
	Cost						
Buried flanges	Cost						
Buried pits	*Units*						
	Unit cost						
	Cost						
Total		**1,040**	**6,980**	**7,142**	**907**	**904**	**17,045**

Source: DBP opex business case (DBP14), Table 1.8, pg. 85

DBP's proposed expenditure for inspections is reasonable

657. DBP has demonstrated that its proposed expenditure allowance is derived from a detailed schedule of requirements for this period. Certain inspections are required on cycles that exceed the length of a regulatory period and therefore can lead to fluctuations in the required expenditure, as is the case for AA6 with a significant 10-yearly inspection due in this period. Moreover, DBP has provided sound evidence of the interface issues that it identified from its inspections during AA5 and which justify significant further inspections for these issues continuing through AA6.

658. We consider that the proposed inspection schedule is prudent and that the associated expenditure forecast is reasonable.

Decommissioning

What DBP has proposed

659. DBP forecasts to spend $0.65m during AA6 for decommissioning of assets which are no longer required to comply with statutory or contractual obligations. This compares with $0.53m in AA5.

660. DBP has identified eight sites for full decommissioning in AA6, as shown in Figure 7.8.

Figure 7.8: DBP list of sites selected for decommissioning

DBP sites selected for decommissioning

- CS10 [redacted] units 1 and 2
- Redundant equipment at the Wagerup facilities
- Westlime meter station
- Oakley Road meter station
- Mondarra Meter Station (interconnects with the Parmelia Pipeline)
- Temporary diesel engine alternators
- Run 6 and 8 shutdown valves at Pinjar Power Station
- Buried sump tank in the Dampier Facilities compound

Source: DBP business case

661. DBP has provided option analysis in its business case, including:

- Option 1 – Decommissioning which is forecasted to cost $0.65m as preferred option
- Option 2 - Do not proactively decommission assets which is forecasted to cost $1.5m to 'make safe', plus ongoing costs

DBP's proposed allowance for decommissioning is reasonable

662. DBP has demonstrated that its proposed expenditure is based on a specific schedule of sites identified for decommissioning. Decommissioning is the prudent course of action and in this case also lower cost.

663. We consider that DBP preferred option (Option 1) is reasonable.

EMCa adjusted opex for the Inspections & Other Asset Management

664. In the table below shows the resulting alternative forecast for the Inspections & Other Asset Management.

Table 7.31: DBP proposed and EMCa adjusted Inspections & Other Asset Management - $m, real Dec 2024

Category	DBP proposed	EMCa adjustments	EMCa adjusted
HSE	1.0		1.0
Station inspection	8.7	-2.9	5.8
Asset management	5.6		5.6
Pipeline MLV Inspection	17.0		17.0
Decommissioning	0.6		0.6
Total	**33.0**	**-2.9**	**30.1**

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

7.5 Assessment of proposed step changes

What DBP has proposed

665. DBP proposes $17.3m for four opex step changes in AA6 as shown in Table 7.32.

Table 7.32: DBP proposed opex step changes - $m, real Dec 2024

Opex step change	2026	2027	2028	2029	2030	Total
Insurance premium costs	-	0.2	0.8	1.5	2.3	**4.9**
IT sustaining applications	1.5	1.9	1.6	1.6	1.6	**8.3**
IT sustaining infrastructure	0.1	0.3	0.4	0.5	0.5	**1.8**
Cybersecurity initiatives	0.1	0.5	0.5	0.5	0.5	**2.3**
Total	**1.8**	**2.9**	**3.4**	**4.2**	**5.0**	**17.3**

Source: DPB opex model, Att. 8-1

7.5.2 Insurance premium opex step change

A step change for insurance costs is warranted, but DBP's proposal would result in an allowance that exceeds that forecast by its insurance adviser

666. DBP proposes a step changes of insurance premium of $4.9m in AA6.

Table 7.33: DBP proposed insurance premium base and step changes amounts - $m, real Dec 2024

Insurance	2026	2027	2028	2029	2030	Total
DBP proposed step changes	0.00	0.20	0.85	1.55	2.34	**4.94**

Source: DBP Opex Model, att. 8-2

667. As discussed in section 7.3.3 DBP proposes a base year adjustment and a step change both of which together are to cover its forecast increase in insurance costs. Since the insurance cost allowance derives from both aspects of DBP's proposal, we reviewed them together in section 7.3.3, where we found that the resultant insurance cost allowance would exceed the forecast that DBP's advisers had provided.

668. We therefore proposed an alternative base year adjustment and an alternative step change in which we find that a reasonable step change is $3.67m instead of $4.9m. We reproduce the annual step change amounts consistent with this finding in Table 7.34 below.

Table 7.34: EMCa proposed adjusted insurance premium step changes - $m, real Dec 2024

Insurance	2026	2027	2028	2029	2030	Total
EMCa proposed step changes	0.06	0.15	0.64	1.14	1.69	**3.67**

EMCa table derived from [redacted] Report, att. 8.4 and DBP Opex Model, att. 8-2.

7.5.3 IT sustaining applications step change

DBP's proposed opex step change for IT sustaining applications fails to account for the business operational benefits of the IT investments made in AA5

669. DBP proposes $8.28m step change for IT sustaining applications. This implication of DBP's IT capex is shown in its capex business case (DBP21 – IT sustaining applications)[135] and primarily arises from investments that it has already made in AA5.

670. In calculating this net opex impact, DBP has accounted for increases in IT opex due to increased licence and subscriptions costs such as for Platform as a Service (PaaS) and Software as a Service (SaaS). DBP has offset against these costs, the costs for those licences and subscriptions that were included in its base year opex that it no longer requires.

135 DBP21, table 1.4, pages 280 and 281

671. While DBP's calculations pertaining to the IT domain are reasonable, we consider that this overstates the net cost impact for DBP. As we discuss in section 5.3.6, DBP made major investments in business systems providing corporate, commercial and technical support including its OneERP development, a new billing system, new HR systems and Maximo business process redesign. In business cases provided to us, DBP has not quantified realisation of the benefits from these but as a minimum we would expect them to offset higher IT operating costs and they should also provide opex efficiencies that justify the capital investments that have been made.

672. The opex step changes that DBP proposes commence in 2026, therefore confirming that they flow from investments made in AA5; except to a very minor extent, they are not dependent on DBP's ICT plans for AA6.

673. As the minimum allowance therefore for the business efficiency benefits that should arise from DBP's AA5 ICT investments, and recognising that some increase in opex may be required, we consider it reasonable to offset its 2026 proposed opex step change of $1.5m and to maintain that as an annual benefits realisation offset throughout AA6 to account for opex efficiencies made prior to this time. Therefore, this reduces the proposed opex step change by $7.5m as shown in Table 7.35.

Table 7.35: DBP proposed and EMCa adjusted on IT sustaining applications - $m, real Dec 2024

	2026	2027	2028	2029	2030	Total
IT sustaining Applications - DBP proposed	1.52	1.89	1.63	1.63	1.63	8.28
less allowance for business benefits	*-1.50*	*-1.50*	*-1.50*	*-1.50*	*-1.50*	*-7.50*
EMCa adjusted IT sustaining step change	**0.02**	**0.39**	**0.13**	**0.13**	**0.13**	**0.78**

Source: EMCa table derived from DBP response to EMCa18 – Q44 and capex Business Case BC21

7.5.4 IT sustaining infrastructure

DBP's proposed opex step change for its IT sustaining infrastructure is not reasonable

674. DBP proposes an opex step change of $1.81m for IT sustaining infrastructure.

675. As we discuss in section 5.3.6, AGIG has embarked on a major program to rationalise its IT infrastructure, including a 'West Coast Data Centre' that has a dual purpose of providing primary IT infrastructure to DBP and backup infrastructure to AGIG's east coast operations. DBP claims that this 'AGIG OneIT' initiative will provide efficiencies, however the proposed step increase in opex, together with its significant proposed capex investment, is not consistent with the 'recurrent' nature of ICT infrastructure requirements for the DBNGP, DBP's definition of this expenditure as being to 'sustain' its infrastructure platform.

676. The claimed efficiency of this solution should not manifest as increased costs to DBNGP. We also note, in DBP's response to an information request (EMCa18, Q39c), that its current IT opex already includes base year ICT infrastructure expenditure of $2.04m for services outsourced to [redacted], but that it has now ceased these services as it insources. DBP's proposed opex step change shows no evidence for having netted off such savings.

677. We consider that the proposed step change for IT sustaining infrastructure is not reasonable as DBP has not demonstrated a need that is prudent and efficient for costs that are greater than what is already included in its base year actual opex.

7.5.5 Cybersecurity initiatives

DBP's proposed opex step change for its cyber security program is reasonable

678. DBP proposes $2.28m step change for its cybersecurity initiatives. This also the opex impact of its proposed IT cybersecurity capex (DBP23).

679. We assessed DBP's proposed cyber security program in section 6.8.4, and find that its program and proposed (capex and opex) expenditure is reasonable. Its proposed opex step change is consistent with this finding and accordingly, we consider that it is reasonable.

7.5.6 EMCa adjusted opex step changes

680. In Table 7.36 we show the resulting alternative forecast for opex step changes.

Table 7.36: DBP proposed and EMCa adjusted for opex step changes - $m, real Dec 2024

Category	DBP proposed	EMCa adjustments	EMCa adjusted
Insurance premium costs	4.9	-1.3	3.7
IT sustaining applications	8.3	-7.5	0.8
IT sustaining infrastructure	1.8	-1.8	0.0
Cybersecurity initiatives	2.3	0.0	2.3
Total	**17.3**	**-10.6**	**6.7**

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

7.6 Assessment of rate of change (trend)

7.6.1 DBP's proposal

681. DBP has not proposed an output growth trend factor nor a productivity improvement trend factor for its opex BST forecast.

682. DBP has proposed an allowance for real labour cost escalation, which we discuss below.

7.6.2 Real cost escalation factor

DBP's proposed real labour cost escalation rate is reasonable

683. DBP proposes labour cost escalation using the same method as applied in previous ERA final decision, where DBP uses the available data of the Western Australia Wage Price Index (WPI) forecast from 2024/25 to 2027/28 and less the WA Treasury's Perth CPI forecast. This results in an increase of an average 0.67% per annum.

Table 7.37: DBP proposed labour cost escalation

Measure	Average
WA Treasury WPI Forecast	3.31%
Less Inflation	*-2.63%*
Annual labour cost escalation	**0.67%**

Source: DBP Access Arrangement Information (Final Plan 2926-2030), table 8.2, pg.76

684. We have confirmed that DBP's method is consistent with the method applied previously by the ERA and that the source of its input data provides for the real cost escalation amount that DBP has proposed.

685. We therefore consider that DBP's proposed labour cost escalation of 0.67% p.a. is reasonable.

7.7 Conclusions

7.7.1 Implied adjustments

686. In Table 7.38 we show DBP's proposed aggregate opex over AA6, with the adjustments that we propose to each component in this allowance and the resulting alternative forecast.

Table 7.38: Summary EMCa adjustments to DBP proposed opex for AA6 - $m, real Dec 2024

Category	DBP proposed	EMCa adjustment	EMCa adjusted
Wages & Salaries	229.1	-60.9	168.2
Field expenses	67.1	0.0	67.1
Non-field expenses	109.7	-24.8	84.9
Government Charges	57.9	-5.6	52.3
System Use Gas[136]	116.6	0.0	116.6
Reactive maintenance	6.3	-1.2	5.2
GEA & Turbine overhauls	32.8	-3.3	29.5
Inspections & Other Asset Management	33.0	-2.9	30.1
TOTAL	**652.5**	**-98.5**	**554.0**

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

687. In Table 7.39 we present the resulting alternative opex forecast on a year-by-year basis and in Figure 7.9 we illustrate this by reference to DBP's long-term opex trend information.

Table 7.39: EMCa adjusted opex AA6 year by year - $m, real Dec 2024

Category	2026	2027	2028	2029	2030	TOTAL
Wages & Salaries	33.2	33.4	33.6	33.9	34.1	**168.2**
Field expenses	13.4	13.4	13.4	13.4	13.4	**67.1**
Non-field expenses	15.8	16.7	16.9	17.5	18.0	**84.9**
Government Charges	10.5	10.5	10.5	10.5	10.5	**52.3**
System Use Gas[137]	23.1	22.0	22.3	22.5	26.7	**116.6**
Reactive maintenance	1.0	1.0	1.0	1.0	1.0	**5.2**
GEA & Turbine overhauls	4.9	5.6	4.5	6.9	7.8	**29.5**
Inspections & Other Asset Management	4.3	9.9	9.8	3.0	3.1	**30.1**
TOTAL	**106.2**	**112.4**	**112.1**	**108.6**	**114.6**	**554.0**

Source: EMCa table derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

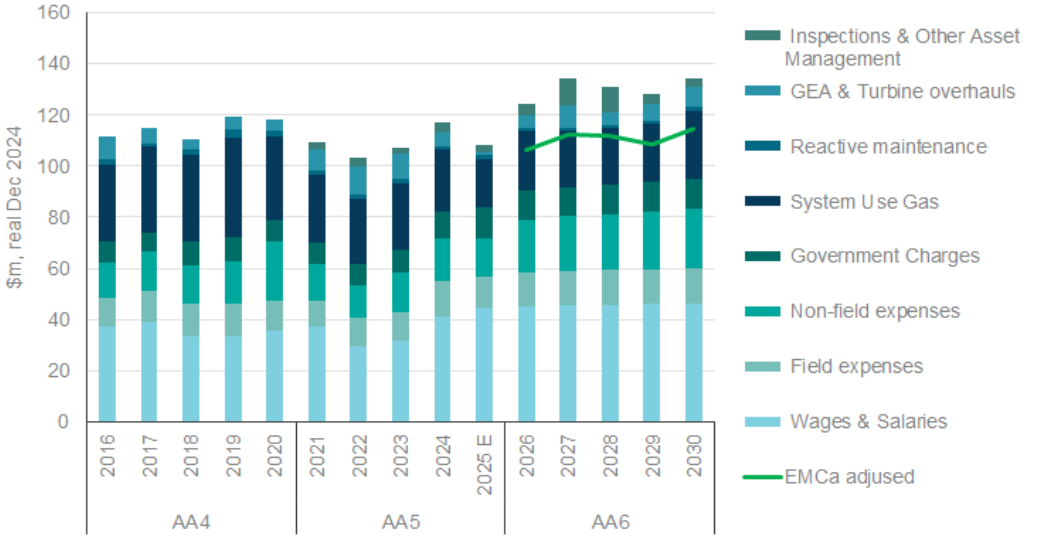
688. The alternative opex forecast that we propose is an average of $110.3m per year, which compares to DBP's AA5 actual for the three years to 2023 of $106.7m per year.[138]

136 Not reviewed (out of scope)

137 Not reviewed (out of scope)

138 As discussed in section 7.2 we average this over three years to 2023 which excludes the amount for 2024, because DBP has adjusted the basis for this year.

Figure 7.9: EMCa adjusted compared with DBP proposed AA6 and DBP historical trends - $m, real Dec 2024



Source: EMCa graph derived from DBP's opex model, Att. 8-1 and EMCa Information Request (EMCa01)

8 ASSET LIFE ASSUMPTIONS

DBP has adopted the same asset life assumptions as for AA5. These are reasonable.

8.1 Introduction

689. We have been asked to review the asset lives used for the depreciation schedules. [139]

8.2 What has DBP proposed

690. DBP has proposed no change for its depreciation and asset life assumptions for AA6. Details of DBP proposed asset life is the table below.

Table 8.1: DBP proposed economic lives and asset categories for AA5 (years)

	Economic Asset Life
Pipeline	42 (capped at 2063)
Compression	30
Metering	30
Other Depreciable	10
Computers and Motor Vehicles	5
Cathodic/Corrosion Protection	15
SCADA, ECI and Comms	10
Building	50

Source: DBP Tariff model, att. 14.1

8.3 Assessment and finding

691. DBP's proposed asset lives are consistent with those that ERA approved in AA5[140], and which in turn are consistent with the advice in our AA5 report to ERA. We consider that our previous advice stands and that, in adopting asset life assumptions as approved by the ERA, its AA6 assumptions are reasonable.

[139] Under the heading 'Future of Gas' DBP has also adopted an economic depreciation mechanism with an objective of maintaining price stability. We have not been asked to review this, though we observe that DBP states in its Final Plan that it has maintained the status quo, and that this represents the method agreed with ERA for AA5. (Final Plan, page 5)

[140] ERA Final Decision, Table 173, p.359

APPENDIX A – REVIEW FRAMEWORK

693. In this appendix we firstly provide a summary of the requirements of the National Gas Law (NGL)[141] and the National Gas Rules (NGR)[142], and describe the review framework (based on the requirements of the NGL and NGR) that we have applied in our assessment of the capex and opex proposals included in DBP's revised access arrangement.

694. We have not been requested by the ERA to document compliance of the capex and opex proposals with the individual rules and tests included in the NGR as a part of our assessment.

A.1 National Gas Law and National Gas Rules

695. As the owner (service provider) of a covered pipeline, DBP is required to submit a full AA to the ERA and to obtain its approval for the price and non-price terms and conditions of access to the reference service(s) DBP provides through the DBNGP.

696. When assessing the Access Arrangement, the ERA is required to have regard to:

- the Access Arrangement provisions set out in Part 8 of the NGR;
- the price and revenue regulation provisions set out in Part 9 of the NGR; and
- the National Gas Objective (NGO) and the revenue and pricing principles (RPP) set out in sections 23-24 of the NGL.

697. Of particular relevance in this context are the provisions the ERA is required to consider when assessing the capex and opex elements of DBP's AA5 Proposal, which are set out in Part 9 of the NGR. An overview of these provisions is provided below.

A.1.1 Capex provisions

698. By virtue of the operation of rules 77(2)(b) and 78(b)[143], the ERA is required to carry out both:

- an ex-post assessment of the capex incurred (or to be incurred) by DBP in AA4 to determine whether it satisfies the conforming capex criteria in rule 79(1); and
- an ex-ante assessment of the capex DBP proposes to incur in AA4 to determine whether it is likely to satisfy the conforming capex criteria in rule 79(1).

699. Conforming capex is defined in rule 79(1) as capex that satisfies the following criteria:

- the capex 'must be such as would be incurred by a prudent service provider acting efficiently, in accordance with good industry practice, to achieve the lowest sustainable cost of delivering services' (the 'prudent service provider test') (r. 79(1)(a)), and
- the capex must be justifiable on one of the following grounds (r. 79(1)(b)):

141 The National Gas Access (WA) Act 2009 adopts a modified version of the National Gas Law (National Gas Access (Western Australia) Law).

142 Under the National Gas Access (Western Australia) Law, the National Gas Rules applying to Western Australia is version 1 of the National Gas Rules, as amended by the AEMC in accordance with its rule making power under section 74 of the National Gas Access (Western Australia) Law.

143 Rule 77(2) sets out how the opening value of the capital base at the commencement of a new AA period is to be calculated, while rule 78 sets out the value of the capital base during the AA period is to be calculated. In short, these two rules only allow conforming capex to be rolled into the value of the capital base.

a. the overall economic value of the expenditure is positive (the 'economic value test') (r. 79(2)(a)) [144]; or

b. the present value (PV) of the expected incremental revenue exceeds the PV of the capex (the 'incremental revenue test') (r. 79(2)(b)) [145]; or

c. the capex is necessary to:

- maintain and improve the safety of services (r. 79(2)(c)(i)); or
- maintain the integrity of services (r. 79(2)(c)(ii)); or
- comply with a regulatory obligation or requirement (r. 79(2)(c)(iii)); or
- maintain the service provider's capacity to meet levels of demand for services existing at the time the capex is incurred (r. 79(2)(c)(iv)); or

d. the capex is divisible into two parts, with one part referable to incremental services and justifiable under 79(2)(b) and the other part referable to a purpose under 79(2)(c) and justifiable on this basis (r. 79(2)(d)).

700. Conforming capital expenditure that is included in an access arrangement revision proposal must be for expenditure that is allocated between:

- reference services;
- other services provided by means of the covered pipeline; and
- other services provided by means of uncovered parts (if any) of the pipeline, in accordance with rule 93.

701. Finally, in determining whether capex is efficient and complies with other criteria prescribed in the rules, rule 71 states that the ERA may, without embarking on a detailed investigation, infer compliance from the operation of an incentive mechanism or any other basis the ERA considers appropriate. It must, however, consider, and give appropriate weight to, submissions and comments received.

Conforming capex vs non-conforming capex

702. Where the capex proposed by DBP (in whole or in part) is found to:

- satisfy rule 79, it will be considered conforming capex for the purposes of rules 77(2) and 78 and rolled into the capital base (i.e. it will be included in the derivation of the reference tariff(s)); or
- not satisfy rule 79, it will be considered non-conforming capex and excluded from the capital base (i.e. it will be excluded from the reference tariff(s)).

703. In this context that while non-conforming capex cannot be recovered through the reference tariff(s), DBP may still undertake this form of capex and either:

- recover that expenditure, or a portion thereof, through a surcharge (r. 83) or a capital contribution (r. 82); or
- include the investment in a notional fund, referred to as the 'speculative capital expenditure account', which may be rolled into the capital base at a later date if the capex is found to satisfy the conforming capex criteria (r. 84).

Opex provisions

144 Rule 79(3) sets out the matters to be considered when applying the economic value test. In short, this rule only allows consideration to be given to the economic value directly accruing to the service provider, gas producers, users and end-users when determining whether the overall economic value of the capex is positive.

145 Rule 79(4) sets out what is to be considered when applying the incremental revenue test. In short, this rule requires: a tariff to be assumed for the incremental services based on (or extrapolated from) prevailing reference tariffs, or an estimate of the reference tariffs that would have been set for comparable services if those had been reference services; and incremental revenue to be taken to be the gross revenue to be derived from the incremental services less incremental opex; and the discount rate is to be based on the rate of return implicit in the reference tariff.

704. The criteria the ERA is required to consider when assessing DBP's proposed opex for AA5 are set out in rule 91 of the NGR, which is reproduced below:

Operating expenditure must be such as would be incurred by a prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of delivering pipeline services.

705. The forecast of required operating expenditure of a pipeline service provider that is included in the full access arrangement must be for expenditure that is allocated between:

- reference services;
- other services provided by means of the covered pipeline; and
- other services provided by means of uncovered parts (if any) of the pipeline, in accordance with rule 93 (allocation of total revenue and costs).

706. In a similar manner to capex, rule 71 states that in determining whether opex is efficient and complies with other criteria prescribed in the rules, the ERA may, without embarking on a detailed investigation, infer compliance from the operation of an incentive mechanism or any other basis the ERA considers appropriate. It must, however, consider, and give appropriate weight to, submissions and comments received.

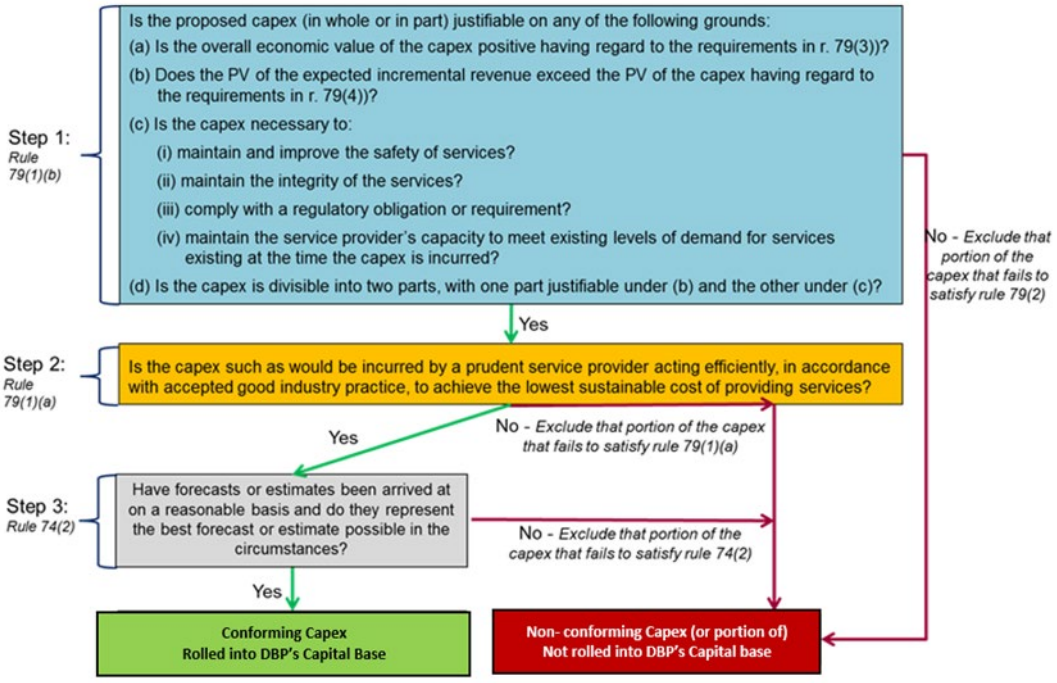
A.1.2 Assessment framework

707. An overview of the frameworks we have used to assess DBP's capex and opex proposals is provided below.

Capex assessment framework

708. The framework we have used to assess whether the capex incurred (or to be incurred) by DBP in AA4 and its proposed capex for AA5 can be considered conforming capex is depicted in the figure below.

Figure A.1: Capex assessment framework



709. As the figure above highlight highlights, the framework consists of three steps, which are based on the specific requirements set out in rules 79 and 74(2). Where there is discretion as to which ground is relevant under rule 79(2), we have based our assessment on the grounds that DBP has identified, and we have reviewed the evidence DBP has provided in

support of this ground. Further detail on the matters we have considered in each step is provided below.

Step 1: Is the expenditure justifiable on a ground set out in rule 79(2)?

710. The first matter we have considered when assessing DBP's capex proposal is whether the expenditure can be justified on any of the grounds set out in rule 79(2).

711. For those capex projects (or a portion thereof) that DBP has claimed the economic value is positive (r. 79(2)(a)) or that the expenditure satisfies the incremental revenue test (r. 79(2)(b)), we have had regard to a range of matters, including:

- rules 79(3) and 79(4), which set out how the economic value of a project and the present value of incremental revenue are to be calculated; and
- the analysis DBP provided in support of its claim and its underlying assumptions.

712. For those capex projects (or a portion thereof) where DBP has claimed the expenditure is necessary to maintain the safety or integrity of the services, comply with a regulatory obligation and/or maintain the capacity to meet existing levels of demand (r. 79(2)(c)), we have, amongst other things, had regard to:

- DBP's Asset Management Plan (AMP);
- DBP's Safety Case (Safety Case) and the formal safety assessments (FSA) carried out by DBP;
- the Gas Standards (Gas Supply and System Safety) Regulations 2000;
- Australian Standard AS2885 (Pipelines – Gas and Liquid Petroleum Pipelines);
- other regulatory requirements that DBP is required to comply with; and
- the analysis DBP provided in support of its claim and its underlying assumptions.

713. As the figure above indicates, if the capex project in whole, or in part, is found to:

- be justified under rule 79(2), we have then considered whether it satisfies the prudent service provider test in rule 79(1)(a) (Step 2); and
- not be justified under rule 79(2), then we have deemed the expenditure to be non-conforming capex.

Step 2: Does the capex satisfy the prudent service provider test in rule 79(1)(a)?

714. The second matter we have considered is whether the proposed expenditure on capex projects that are justified under rule 79(2) is 'such as would be incurred by a prudent service provider acting efficiently, in accordance with good industry practice, to achieve the lowest sustainable cost of providing the service'.

715. In conducting this assessment, we have considered a range of matters (some of which are more or less relevant to particular projects or programmes of work), including:

- the project governance framework employed by DBP, the key elements of which are DBP's: business planning process; AMP and Safety Case; investment governance arrangements; IT strategy and AMP; forecasting methodology; procurement policies; and risk management plan;
- the project management and procurement processes employed by DBP on particular projects and the nature of any outsourcing arrangements it has entered into (e.g. competitive tender or related party transaction);
- DBP's capability to deliver the proposed projects efficiently in the time proposed;
- the extent to which DBP has adequately assessed and accounted for any benefits from productivity or efficiency enhancing programs (benefits realisation);
- the actual costs incurred by DBP in AA4 relative to what it has proposed for AA5;
- DBP's compliance with Australian standard AS2885; and

- benchmarking of approaches and/or costs against other gas pipelines and/or regulated businesses provided by DBP.

716. As the figure above indicates, where the expenditure in whole, or in part, is found to:

- satisfy the prudent service provider test, we have considered whether the proposed expenditure satisfies rule 74(2) (Step 3); and
- not satisfy the prudent service provider test, then we have excluded that portion of the expenditure that is deemed to fail this test.

Step 3: Do any forecasts or estimates comply with rule 74(2)?

717. The final matter we have considered is whether the forecasts or estimates underlying those capex projects that are justifiable under rule 79(2) and satisfy the prudent service provider test, have been arrived at on a reasonable basis and represent the best forecast or estimate possible in the circumstances, as required by rule 74(2).

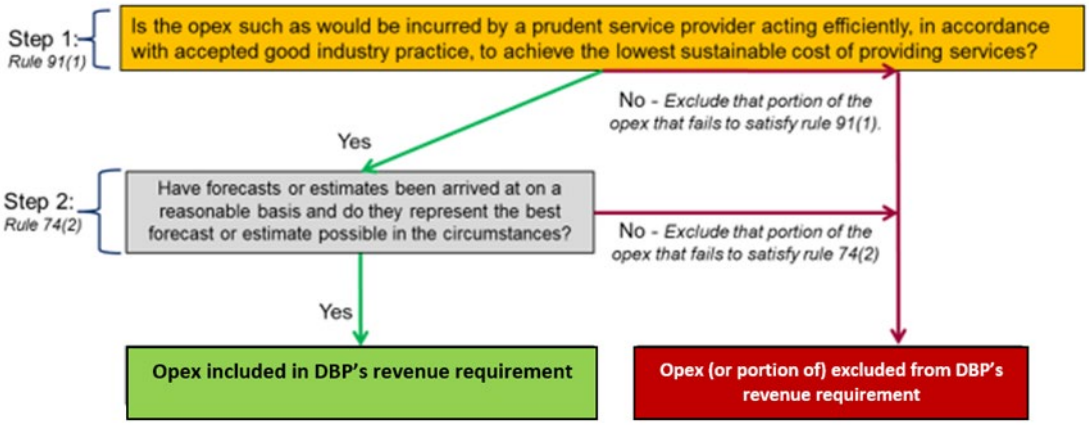
718. As the figure above highlights, where the forecasts and/or estimates are found to:

- satisfy this rule, the proposed expenditure has been deemed to comply with the conforming capex criteria; and
- not satisfy this rule, then we have excluded that portion of the expenditure that fails to satisfy this rule, on the grounds that a prudent service provider would not expect to incur this expenditure (r. 79(1)(a)).

A.1.3 Opex assessment framework

719. The figure below sets out the framework we have used to assess DBP's proposed AA5 opex.

Figure A.2: Opex assessment framework



720. The questions considered under steps 1 and 2 of this framework are broadly the same as those considered under steps 2 and 3 of the capex assessment framework. The matters that we have considered when applying this framework are therefore largely the same as those set out in the earlier section of this Appendix, albeit focused on opex rather than capex.

721. The only additional matters that we have considered under Step 1 of this framework, which are not relevant to capex are:

- the methods used by DBP's parent company (the AGIG) to allocate corporate overheads to the DBNGP and the extent to which:
- AGIG provides services that justify this as an expenditure item recoverable through regulated tariffs; and
- there is any overlap in services provided by DBP and the AGIG; and

- the nature of any discretionary opex projects proposed by DBP (e.g. business development and marketing) and the extent to which these projects are expected to yield a net economic benefit for consumers.