



Revised Final Plan
Attachment 8.11

Response to Draft Decision on Capex

October 2020



**Dampier Bunbury
Pipeline**

1. Response to Draft Decision on Capital Expenditure

We are investing \$159 million on the DBNGP over AA5. Our proposed capex will ensure we maintain our strong safety, reliability and service performance in AA5. This is the same level as we proposed in our Final Plan and \$31 million more than the ERA's Draft Decision.

1.1. Overview

This attachment sets out our response to the ERA's Draft Decision on capital expenditure (capex) for the DBNGP over the 2021-25 Access Arrangement Period (AA5). In particular we are responding to the following Required Amendments in the Draft Decision:

Required Amendment 10

DBP must amend the opening capital base at 1 January 2021 to \$3,327.39 million (real as at 31 December 2019). The calculation of the opening capital base is set out in Table 55 of this draft decision.

Required Amendment 11

DBP must amend the projected capital base to reflect the values set out in Table 103 of this draft decision so that the closing capital base as at 31 December 2025 will be \$3,132.07 million.

We will invest \$124 million (real as at December 2020) in AA4, consistent with our Final Plan AA4 capex and \$4 million more than the ERA's Draft Decision for AA4 capex. The key reason for the change is that we have provided additional information on our AA4 IT Sustaining Applications projects, which demonstrates that the expenditure is conforming. We have made updates to 2019 actuals, 2020 forecasts and forecast inflation to December 2020 which sees some minor movements across projects.

We propose to invest \$159 million in AA5, consistent with our Final Plan AA5 capex and \$31 million more than the ERA's Draft Decision for AA5 capex. We have closely considered the ERA's Draft Decision and the report of its technical consultant, EMCa, in developing our revised capex forecast for AA5. The key differences between the revised Final Plan and the ERA's Draft Decision capex largely reflect either updated cost information in respect of specific projects or a different view as to whether the ERA's proposed project deferrals are prudent. In particular, we have:

- Accepted half of the ERA and EMCa's proposed project deferrals into AA6;
- Accepted the proposed reduction to Compressor Station Accommodation costs;
- Updated the delivery and costs of the AGIG One ERP project, that:
 - brings forward the implementation at DBP, removing the need for an interim finance solution at DBP in the meantime;
 - shares the implementation costs at DBP with AGN; and
 - takes account of the best available market information for project costs resulting from an extensive competitive tender process completed in August 2020;
- Provided more information to support areas of capex uplift in AA5 compared to AA4;
- Revised IT costs flowing from the AGIG One IT Strategy and Roadmap detailed planning undertaken since January; and

- Updated real labour cost escalation.

The following sections provide our response to the ERA's Draft Decision for AA4 and AA5 conforming capex, which forms our revised Final Plan.

More detail on specific issues raised in the Draft Decision can be found in Attachment 8.5A Addendum to Capex Business Cases. Our response to common themes raised by the ERA across the capital program are provided in section 1.3.4 below.

1.2. ERA Draft Decision

1.2.1. AA4 Capex

The ERA has accepted \$120 million (or 97%) of our investments during AA4 as conforming capital expenditure. The ERA has not accepted \$4 million of AA4 capex on IT Sustaining Applications projects, as it did not have sufficient information to confirm these investments would be consistent with that incurred by a prudent service provider acting efficiently.¹

The ERA's technical consultant, EMCa, concluded:²

While there are material variances in the composition of DBP's AA4 projects relative to its AA4 forecast, we consider that these variances reflect reasonable reactions to changing information and circumstances.

A summary of the ERA's Draft Decision by business case category is in Table 1.1 below.

Table 1.1: Summary of the ERA's Draft Decision by AA4 Business case

Business Cases	ERA Draft Decision	ERA comments
DBP01 Compressor stations	Accept	Accepted our investment in compressor stations during AA4. ³
DBP02 Pipeline and MLV	Accept	Accepted our investment to undertake pipeline and MLV inspections during AA4. ⁴
DBP03 SCADA	Accept	Accepted our investment in SCADA during AA4. ⁵
DBP04 Health, safety and environment	Accept	Accepted our investment to undertake health, safety and environment projects during AA4. ⁶
DBP06 GEA unit control systems	Accept	Accepted our investment on GEA unit control systems during AA4. ⁷

¹ ERA Draft Decision, [528] to [535]

² EMCa Technical Report, p. xi.

³ ERA Draft Decision, [465] to [470]

⁴ ERA Draft Decision, [471] to [474]

⁵ ERA Draft Decision, [475] to [478]

⁶ ERA Draft Decision, [479] to [481]

⁷ ERA Draft Decision, [482] to [484]

Business Cases	ERA Draft Decision	ERA comments
DBP07 Compressor station accommodation	Accept	Accepted our investment on our accommodation facilities at our compressor stations along the DBNGP during AA4. ⁸
DBP09 Compressor package control system replacement	Accept	Accepted our investment on the replacement of compressor package control system replacement during AA4. ⁹
DBP10 Jandakot site redevelopment	Accept	Accepted our investment to undertake our Jandakot site redevelopment during AA4. ¹⁰
DBP11 Maximo and DMZ	Accept	Accepted our investment on Maximo and DMZ technology during AA4. ¹¹
DBP12 Safety case revisions	Accept	Accepted our investment to review and revise our safety case during AA4. ¹²
DBP13 Compressor station inspection	Accept	Accepted our investment on compressor station inspections during AA4. ¹³
DBP14 Asset management	Accept	Accepted our investment on our assessment management program during AA4. ¹⁴
DBP15 Meter stations	Accept	Accepted our investment in meter stations during AA4. ¹⁵
DBP16 Tools	Accept	Accepted our investment in our tools replacement program during AA4. ¹⁶
DBP17 Fleet and civil equipment	Accept	Accepted our investment in our fleet and civil equipment program during AA4. ¹⁷
DBP18 Turbine exhaust replacement	Accept	Accepted our investment in our turbine exhaust replacement program during AA4. ¹⁸
DBP19 Pipeline and mainline valve inspection	Accept	Accepted our investment to undertake pipeline and MLV inspections during AA4. ¹⁹

⁸ ERA Draft Decision, [485] to [487]

⁹ ERA Draft Decision, [488] to [491]

¹⁰ ERA Draft Decision, [492] to [494]

¹¹ ERA Draft Decision, [495] to [497]

¹² ERA Draft Decision, [498] to [500]

¹³ ERA Draft Decision, [501] to [503]

¹⁴ ERA Draft Decision, [504] to [506]

¹⁵ ERA Draft Decision, [507] to [509]

¹⁶ ERA Draft Decision, [510] to [511]

¹⁷ ERA Draft Decision, [512] to [516]

¹⁸ ERA Draft Decision, [517] to [520]

¹⁹ ERA Draft Decision, [521] to [524]

Business Cases	ERA Draft Decision	ERA comments
DBP20 Customer reporting system	Accept	Accepted our investment to upgrade our CRS during AA4. ²⁰
DBP21 IT sustaining applications	Modify	Accepted \$2.5 million of the \$6.6 million proposed capex as conforming. The \$4.1 million not accepted relates to disallowance of: <ul style="list-style-type: none"> \$3.1 million in 2020 for the replacement of the MS Dynamics AX system, stating we should investigate alternative options to delay until the One ERP project in 2023, or bring forward the One ERP project and share costs with other AGIG businesses; and \$1.0 million in other projects that were not forecast for AA4, with the ERA stating it did not have sufficient information to determine these projects were prudent and efficient and were not the result of poor IT asset management processes.²¹
DBP22 IT security	Accept	Accepted our investment in IT Security initiatives during AA4. ²²
DBP24 Process safety	Accept	Accepted our investment on project safety initiatives and compliance upgrades during AA4. ²³
DBP25 Decommissioning	Accept	Accepted our investment in our decommissioning program during AA4. ²⁴
DBP26 Communications	Accept	Accepted our investment on communications during AA4. ²⁵
DBP27 Office relocation	Accept	Accepted our investment on our office relocation during AA4. ²⁶
DBP28 Southern communications upgrade	Accept	Accepted our investment on communications infrastructure upgrade for the southern section of the DBNGP during AA4. ²⁷
DBP29 CS1 compressor re-wheeling	Accept	Accepted our investment on compressor re-wheeling during AA4. ²⁸
DBP30 IT sustaining infrastructure	Accept	Accepted our investment on our IT Sustaining infrastructure program during AA4. ²⁹

²⁰ ERA Draft Decision, [525] to [527]

²¹ ERA Draft Decision, [528] to [535]

²² ERA Draft Decision, [536] to [541]

²³ ERA Draft Decision, [542] to [545]

²⁴ ERA Draft Decision, [546] to [549]

²⁵ ERA Draft Decision, [550] to [552]

²⁶ ERA Draft Decision, [553] to [561]

²⁷ ERA Draft Decision, [562] to [570]

²⁸ ERA Draft Decision, [571] to [576]

²⁹ ERA Draft Decision, [577] to [580]

1.2.2. AA5 Capex

The ERA has reduced our forecast capex for AA5 to \$128 million, a reduction of \$32 million or 20%. The ERA's adjustments relate to:

- Top down reductions in expenditure across a number of business cases where the ERA considered our forecast did not represent a best estimate under NGR 74(2), and based on its assessment of our capex performance in AA4, determined we could reduce costs in AA5 through a combination of finding efficiencies when delivering works and prudently deferring some of the works;
- Specific deferral of a number of asset replacements into AA6;
- Rejection of the proposed IT Enabling capex; and
- Lower labour cost escalation across the program.

For our AA5 business cases, EMCa considered that:³⁰

Except for Information and Communications technology (ICT), DBP has largely applied the same approach as it used in AA4, in developing the forecasts that it has proposed for AA5.

DBP has in all but one case provided a compelling case to take some form of action in the AA5 period. However, this does not mean that we consider the timing, scope, or cost of the work is prudent. Our adjustments are, in the main, derived from our views on the following factors:

- *DBP's track record of overstating the timing of work and consequently the likelihood of being able to prudently defer a portion of the work into AA6;*
- *our assessment that one of DBP's non-selected options is more prudent and/or cost effective than DBP's selection; and*
- *our assessment in some cases that DBP has over-estimated the cost of the proposed scope of work within the AA5 period."*

In terms of our cost estimation, EMCa found that:³¹

DBP's cost estimation is adequate, noting that most of its projects are periodic or ongoing work, and we consider that DBP will not have issues with delivering its proposed plan.

A summary of the ERA's Draft Decision by business case category is provided in [Table 1.](#) below.

Table 1.2: Summary of ERA's Draft Decision by AA5 Business Case

Business Cases	ERA Draft Decision	ERA comment
DBP01 Compressor stations	Modify	Accepted the need for the program but has reduced the level of proposed forecast expenditure by 20% to account for scope for deferring work to AA6 or delivering work at a lower cost. ³²
DBP02 Pipeline and MLV	Modify	Accepted the need for the program but has reduced the level of proposed forecast expenditure: <ul style="list-style-type: none"> • By 10% to account for scope for deferring work to AA6 or delivering work at a lower cost, noting two projects with a risk-ranking of 'Low' in the AA5 forecast for this business case; and

³⁰ EMCa Technical Review, p.xii

³¹ EMCa Technical Review, p.xii

³² ERA Draft Decision, [611] to [622]

Business Cases	ERA Draft Decision	ERA comment
		<ul style="list-style-type: none"> Prudently deferring the 'Pig barrel isolation valve replacement' project by two years.³³
DBP03 SCADA	Accept	Accepted our proposed SCADA program on the basis that SCADA upgrades are necessary and proposed costs are reasonable. ³⁴
DBP06 GEA unit control systems	Modify	Accepted that while some of the proposed control system replacements are necessary to maintain the integrity of the services on the DBNGP, it expected [REDACTED] units within the proposed program of replacement could be deferred beyond AA5. ³⁵
DBP07 Compressor stations accommodation	Modify	Accepted the need to refurbish the compressor stations accommodation however has reduced the forecast expenditure on a portion of the work to align it with the costs incurred for undertaking similar work over AA4. ³⁶
DBP08 Northern communications systems	Accept	Accepted our proposal to replace the northern communication system but has modified the proposed forecast expenditure to reflect ERA's estimate of the real labour cost escalation. ³⁷
DBP09 Compressor package control system replacement	Modify	Accepted that the proposed control system replacements are necessary to maintain the integrity of the services on the DBNGP, but has modified the forecast expenditure to reflect deferral of [REDACTED] package control system replacements into AA6. ³⁸
DBP10 Jandakot site redevelopment	Modify	Accepted the need to redevelop the Jandakot site, but has reduced the forecast expenditure to reflect that the site redevelopment work program is likely to be deferred by one year to allow adequate time for development approvals. ³⁹
DBP11 Maximo and DMZ	Accept	Accepted the proposed projects are necessary to maintain the integrity of the services on the DBNGP and that the proposed costs are based on reasonable estimates. ⁴⁰
DBP12 Safety case revisions	Modify	Reduced the amount of proposed expenditure based on technical advice that the revision of the safety case should be straightforward given the incremental nature of the work. ⁴¹
DBP13 Meter stations	Modify	<p>Accepted the work proposed would contribute to maintaining the safety and integrity of services on the DBNGP, as well as complying with our regulatory obligations.</p> <p>However has reduced the amount of proposed expenditure by 10% based on technical advice that we are likely to be able to prudently reduce expenditure on some projects where they are either reoccurring annual expenditures or had high annual capital costs and/or rounded-up estimates.⁴²</p>

³³ ERA Draft Decision, [624] to [633]

³⁴ ERA Draft Decision, [634] to [639]

³⁵ ERA Draft Decision, [640] to [644]

³⁶ ERA Draft Decision, [645] to [652]

³⁷ ERA Draft Decision, [653] to [658]

³⁸ ERA Draft Decision, [659] to [662]

³⁹ ERA Draft Decision, [664] to [671]

⁴⁰ ERA Draft Decision, [672] to [677]

⁴¹ ERA Draft Decision, [678] to [683]

⁴² ERA Draft Decision, [684] to [692]

Business Cases	ERA Draft Decision	ERA comment
DBP16 Tools	Modify	<p>Accepted that the regular inspection and periodic replacement of the tools and equipment used to perform work on the DBNGP is necessary for safety and integrity, as well as to comply with DBP's regulatory obligations.</p> <p>However, has reduced the amount of proposed expenditure stating we have not adequately explained the increase in the expected cost for the 'Tools' program of work between AA4 and AA5 and that the expenditure for Transmission Asset Management and Transmission Operations tools appear to relate at least in part to the addition of unregulated assets.⁴³</p>
DBP17 Fleet and civil equipment	Modify	<p>Accepted our proposed expenditure for civil equipment replacements would be incurred by a service provider acting efficiently and in line with good industry practice.</p> <p>Reduced our proposed volume for fleet replacement each year as it did not have adequate information to explain the increase in AA5 annual replacement compared to the annual replacement rate during AA4.⁴⁴</p>
DBP18 Turbine exhaust replacement	Modify	<p>Accepted proactive turbine exhaust replacements would be incurred by a service provider acting efficiently and in line with good industry practice.</p> <p>However, reduced our proposed expenditure to reflect that the planned replacements at [REDACTED] and [REDACTED] can be deferred until AA6 and to not undertake planned inspection work for [REDACTED].⁴⁵</p>
DBP20 Customer reporting system	Modify	<p>Reduced the amount of the proposed expenditure stating the lower cost option to move to a new vendor was likely to be incurred by a service provider acting efficiently and in line with good industry practice.⁴⁶</p>
DBP21 IT sustaining applications	Accept	<p>Accepted our proposed capex as reasonable but has adjusted the labour cost escalation component.⁴⁷</p>
DBP22 IT enabling	Reject	<p>Rejected all forecast IT enabling capex as the ERA was not satisfied we had adequately demonstrated the benefits of the proposed initiative are likely to be sufficient to justify the proposed capital expenditure.⁴⁸</p>
DBP23 IT security	Modify	<p>Reduced the amount of proposed expenditure because we have not provided sufficient support for the risk ranking of 'High' we have concluded for cyber security risk on the DBNGP and a large number of our capex for IT software and hardware projects appear to be 'business as usual' activities or closely related to work undertaken in AA4.⁴⁹</p>
DBP30 IT sustaining infrastructure	Modify	<p>Reduced the amount of proposed expenditure to reflect:</p> <ul style="list-style-type: none"> removal of the group services introduction program; and

⁴³ ERA Draft Decision, [693] to [703]

⁴⁴ ERA Draft Decision, [704] to [710]

⁴⁵ ERA Draft Decision, [711] to [717]

⁴⁶ ERA Draft Decision, [718] to [724]

⁴⁷ ERA Draft Decision, [725] to [731]

⁴⁸ ERA Draft Decision, [732] to [737]

⁴⁹ ERA Draft Decision, [738] to [744]

Business Cases	ERA Draft Decision	ERA comment
		<ul style="list-style-type: none"> our demonstrated ability to prudently defer replacement of assets, allowing for longer replacement intervals which result in cost deferrals with minimal increased risk.⁵⁰

1.3. Our Response to the Draft Decision

1.3.1. AA4 Capex

The ERA did not accept all of our AA4 capex in its Draft Decision. We have provided the additional information sought by the ERA on our AA4 IT Sustaining Applications projects, which demonstrates that the expenditure is conforming. We have also made updates to 2019 actuals, 2020 forecasts and forecast inflation for 2020, which sees some minor movements across projects.

A summary of our response to the ERA's Draft Decision by business case is set out below in Table 1.3.

Table 1.3: Summary of ERA's Draft Decision and our response on Capital Expenditure

Business Cases	ERA Draft Decision	Our Response	Our comments
DBP01 Compressor stations	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP02 Pipeline and MLV	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP03 SCADA	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP04 Health, safety and environment	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP06 GEA unit control systems	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP07 Compressor station accommodation	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP09 Compressor package control system replacement	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.

⁵⁰ ERA Draft Decision, [745] to [755]

Business Cases	ERA Draft Decision	Our Response	Our comments
DBP10 Jandakot site redevelopment	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP11 Maximo and DMZ	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP12 Safety case revisions	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP13 Compressor station inspection	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP14 Asset management	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP15 Meter stations	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP16 Tools	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP17 Fleet and civil equipment	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP18 Turbine exhaust replacement	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP19 Pipeline mainline valve inspection	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP20 Customer reporting system	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP21 IT sustaining applications	Modify	Modify	We have provided more information on the replacement of our finance system and applications renewals and upgrades. Further detail is set out in Attachment 8.5A Addendum to Capex Business Cases, DBP21 IT Sustaining Applications Addendum 1 and Addendum 2.
DBP22 IT security	Accept	Modify	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP24 Process safety	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP25 Decommissioning	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP26 Communications	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.

Business Cases	ERA Draft Decision	Our Response	Our comments
DBP27 Office relocation	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP28 Southern communications upgrade	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP29 CS1 compressor re-wheeling	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.
DBP30 IT sustaining infrastructure	Accept	Accept	No change to the ERA's Draft Decision. Minor updates of 2019 and 2020 capex.

1.3.2. AA5 Capex

The ERA's Draft Decision has accepted 80% of our proposed capex for AA5. We do however maintain that the required capex in AA5 is \$159 million. In determining that we need to invest \$159 million in AA5, we have:

- Accepted half of the ERA and EMCA's proposed project deferrals into AA6;
- Accepted the proposed reduction to Compressor Station Accommodation costs;
- Updated the delivery and costs of the AGIG One ERP project, that:
 - brings forward the implementation at DBP, removing the need for an interim finance solution at DBP in the meantime;
 - shares the implementation costs at DBP with AGN; and
 - takes account of the best available market information for project costs resulting from an extensive competitive tender process completed in August 2020;
- Provided more information to support areas of capex uplift in AA5 compared to AA4;
- Revised IT costs flowing from the AGIG One IT Strategy and Roadmap detailed planning undertaken since January; and
- Updated real labour cost escalation for new data available since the ERA's Draft Decision, but applying the same methodology as the ERA. This is discussed in our response on operating expenditure found in Attachment 7.5.

A summary our response to the ERA's Draft Decision by business case is found in [Table 1.4](#) below.

Table 1.4: Summary of ERA's draft decision and our response to the draft decision on Capital Expenditure

Business Cases	ERA Draft decision	Our Response	Our comments
DBP01 Compressor stations	Modify	Modify	We have deferred some planned program of works to AA6 but have not accepted the ERA's Draft Decision reductions in full.

Business Cases	ERA Draft decision	Our Response	Our comments
			Further detail is found in Attachment 8.5A Addendum to Capex Business Cases, DBP01 Compressor Stations.
DBP02 Pipeline and MLV	Modify	Modify	We have deferred some planned program of works to AA6 but have not accepted the ERA's Draft Decision reductions in full. Our reasons are set out in section 141.3.4 below and found in Attachment 8.5A Addendum to Capex Business Cases, DBP02 Pipeline and MLV.
DBP03 SCADA	Accept	Accept	We have accepted the ERA's Draft Decision but have made slight modifications to the total proposed forecast figure to account for labour cost escalation adjustments.
DBP06 GEA unit control systems	Modify	Accept	<p>We have reviewed our program in light of our most recent view of asset condition and availability of spares, and accept the ERA's Draft Decision that we can defer replacement of [REDACTED] units to 2026 without materially impacting risk. Though the deferred units will be at or beyond their technical life by the end of the AA5 period, we consider it likely we can salvage sufficient spare parts from the [REDACTED] GEA control units we will replace during the period to be able to manage the risk of failure among the [REDACTED] deferred units for another 12 months.</p> <p>Will continue to monitor the performance of the GEA control systems during the AA5 period, and reserve the right to bring forward replacement of the three deferred units if we identify any emerging material risks or significant underperformance.</p>
DBP07 Compressor stations accommodation	Modify	Accept	We have accepted the ERA's Draft Decision but have made slight modifications to the total proposed forecast figure to account for labour cost escalation adjustments.
DBP08 Northern communications systems	Accept	Accept	We have accepted the ERA's Draft Decision but have made slight modifications to the total proposed forecast figure to account for labour cost escalation adjustments.
DBP09 Compressor package control system replacement	Modify	Modify	We have deferred the planned replacement of [REDACTED] control systems to AA6 but have not accepted the ERA's Draft Decision reductions in full. Further detail is found in Attachment 8.5A Addendum to Capex Business Cases, DBP09 Compressor package control system replacement.
DBP10 Jandakot site redevelopment	Modify	Modify	We have modified our timelines to bring forward the approvals process but have not accepted the ERA's Draft Decision to stage the redevelopment into AA6. Further detail is found in Attachment 8.5A Addendum to Capex Business Cases, DBP10 Jandakot site redevelopment.
DBP11 Maximo and DMZ	Accept	Accept	We have accepted the ERA's Draft Decision but have made slight modifications to the total proposed forecast figure to account for labour cost escalation adjustments.
DBP12 Safety case revisions	Modify	Reject	We have not accepted the ERA's Draft Decision to reduce the costs of this project. Further detail is found in Attachment 8.5A Addendum to Capex Business Cases, DBP12 Safety case revisions, to support the total cost proposed in our Final Plan.

Business Cases	ERA Draft decision	Our Response	Our comments
DBP15 Meter stations	Modify	Reject	We have not accepted the ERA's Draft Decision to reduce the costs of the Meter Stations program of work. Our reasons are set out in section 1.3.4 below and Attachment 8.5A Addendum to Capex Business Cases, DBP15 Meter stations.
DBP16 Tools	Modify	Reject	We have not accepted the ERA's Draft Decision to reduce the costs of Tools in AA5. Further detail is found in Attachment 8.5A Addendum to Capex Business Cases, DBP16 Tools to support the total cost proposed in our Final Plan.
DBP17 Fleet and civil equipment	Modify	Reject	We have accepted the ERA's Draft Decision on our civil equipment replacement but have not accepted the ERA's Draft Decision to reduce the annual volumes of our fleet replacement. Further detail is found in Attachment 8.5A Addendum to Capex Business Cases DBP17 Fleet and civil equipment to support the proposed volumes of fleet replacement in our Final Plan.
DBP18 Turbine exhaust replacement	Modify	Modify	We have accepted the ERA's Draft Decision to not go ahead with our planned inspection of one of the exhaust units in 2021 but maintain it would not be prudent to defer AC exhaust unit replacements to AA6 as per the ERA's Draft Decision. Further detail is found in Attachment 8.5A Addendum to Capex Business Cases, DBP18 Turbine exhaust replacement.
DBP20 Customer reporting system	Modify	Reject	We maintain our preferred option is prudent and efficient. Further detail is found in Attachment 8.5A Addendum to Capex Business Cases, DBP20 CRS.
DBP21 IT sustaining applications	Accept	Modify	We are seeking an increase of \$8 million of project costs in addition to the forecast expenditure approved by the ERA on the basis of a recently completed competitive tender process. Further detail is found in Attachment 8.5A Addendum to Capex Business Cases, DBP21 IT sustaining applications – Addendum 1 – One ERP.
DBP22 IT enabling	Reject	Reject	We have not accepted the ERA's Draft Decision and continue to propose to include forecast capex for our IT Enabling program of works. Further detail is found in Attachment 8.5A Addendum to Capex Business Cases, DBP22 IT Enabling.
DBP23 IT security	Modify	Modify	We are seeking an increase of \$1 million of project costs in addition to the forecast expenditure approved by the ERA. Further detail is found in Attachment 8.5A Addendum to Capex Business Case, DBP23 IT security.
DBP30 IT sustaining infrastructure	Modify	Accept	We have accepted the ERA's Draft Decision on IT Sustaining Infrastructure in AA5.

1.3.3. Project deferrals

In response to the ERA's Draft Decision, we have undertaken another detailed review of our AA5 capex program. We are conscious of the impact of our capex program within and across regulatory cycles and the need to reduce impact on customers to the maximum extent that we can.

Our review incorporated new asset and condition information available since we locked in our AA5 program late last year. Following our review, we have identified the following opportunities to defer some costs into the AA6 period where we have assessed this to be safe and at no material risk to our reliability. This is approximately half of the deferrals outlined in the ERA's Draft Decision. In particular:

- four projects relating to the Compressor Stations program of work;
- a one year deferral of the pig barrel isolation valve replacements and one other project under the Pipeline and MLV program of work;
- planned replacement of [REDACTED] GEA control systems; and
- planned replacement of [REDACTED] compressor package control systems.

The deferred projects outlined above will need to be completed early on in the AA6 period. Therefore, these cost savings do not represent efficiencies (i.e. delivering the same outcome for lower cost and have an immaterial impact on the prices paid by our customers). As a prudent operator, we will continue to monitor the risk and drivers for these projects and may still need to deliver them during the AA5 period if the risk becomes untenable.

1.3.4. The ERA's top-down reductions do not reflect best estimates

While we will endeavour to deliver our programs for the lowest sustainable cost, we do not consider the ERA's deferral and reduction of AA5 capex in its Draft Decision is the best possible forecast available in the circumstances. Our customers highly value 100% reliability of the DBNGP and reductions of the level proposed by the ERA will have a material impact on the risk to the safety and reliability of the DBNGP in AA5 and beyond.

The \$31 million reduction to our AA5 capex (representing 20% of the proposed program, and around 1% of the total value of our regulated asset base) impacts the price our customers will pay by less than \$0.01/GJ, but materially reduces the risk of supply interruption from the DBNGP. We therefore consider this reduction to our AA5 capex forecast is not commensurate with the increased risk.

In particular, we disagree with the level of top-down reductions the ERA has applied across the Compressor Stations, Pipeline and Mainline Valves and Meter Stations programs of work, to account for prudent deferrals and cost savings the ERA assumes we can make during AA5, based on our performance in AA4. This is because:

- improvements in our asset information and forecasting accuracy over AA4 are reflected in our AA5 capex program;
- the ERA's cost reductions do not take into account prudent acceleration of works that may be required in AA5, based on the requirement to do so in AA4; and
- our forecast provides the best estimate of costs in the circumstances.

Attachment 8.5A Addendum to Capex Business Cases sets out our detailed response for each of the business cases where the ERA has modified or rejected the proposed AA5 capex in our Final Plan. Further information is also provided in the remainder of this section.

1.3.4.1. Improved asset information and forecasting accuracy

In its technical review, EMCa found that our “*governance and management system does not appear to have been changed significantly from its approach at the beginning of the AA4 period.*”⁵¹ The ERA has also applied this reasoning, stating: ⁵²

The ERA considers that the extent of the variance between DBP’s estimated actual capital expenditure and forecast expenditure at the business case level raises doubt about the reliability of DBP’s capital expenditure forecasts. The ERA has taken into account the variance between DBP’s actual capital expenditure and forecasts during AA4 when evaluating the proposed capital expenditure for AA5. Specifically, the variance between actual capital expenditure and forecasts during AA4 has been taken into account in determining the efficient amount of capital expenditure for the ‘Compressor stations’, ‘Pipeline and mainline valve’, ‘Meter stations’ and ‘IT sustaining infrastructure’ business cases for AA5.

In making these statements, the ERA and EMCa do not recognise the improvements we have made in our forecasting approach between AA4 and AA5. Instead the inference is that, because of the variations between AA4 forecast and actual capex, it could be expected that there will be significant cost variance at the business case level and significant underspend in planned pipeline related work in AA5.

We highlight that our governance and management system continues to see prudent and efficient delivery of capex. This is supported by the ERA’s acceptance of 97% of our actual capex (100% in relation to pipeline related work) in its review of AA4, consistent with the views formed in previous AA periods. The 3% that was not accepted was on the basis the ERA did not have sufficient information to conclude the capex was consistent with that of a prudent service provider acting efficiently. This deficiency in information has been addressed by Addendum 1 and Addendum 2 to the IT Sustaining Applications business case provided in Attachment 8.5A to this revised Final Plan.

Importantly, we highlight that EMCa found that there was only a small variance at the five year program level of required expenditure.⁵³

Our program governance arrangements facilitate dynamic review of project need, scope, risk, prioritisation and scheduling opportunities. This appropriately identifies not only opportunities to prudently defer projects, but also ensures that new and emerging issues and risks can be addressed. We consider it unreasonable to assume that all of the projects identified at the outset of a five year period will go ahead and that no new projects will be required, as acknowledged by the ERA.⁵⁴

We therefore don’t consider that changes between actual and forecast information provides a reasonable basis to inform forecast capex for AA5. This is particularly given that total actual capex was relatively consistent with forecast and the detail provided in our business cases (discussed in the next section).

⁵¹ EMCa Technical Review, [115]

⁵² ERA Draft Decision, [459]

⁵³ EMCa Technical Review, pp.14 - 15

⁵⁴ ERA Draft Decision, [463]

We have improved our forecasting approach for AA5

We have implemented a number of improvements to our five year capex program forecasting, planning and approval process leading into AA5. This is an area we have had significant focus on in response to feedback received during the AA4 determination process (notably from EMCa) regarding the limitations of our forecasting approach.⁵⁵

We have worked extensively on projects included as part of our AA5 forecast to provide more accurate estimates and information. We submit the bottom-up build used to develop the forecast is more robust and has a greater degree of certainty than achieved during the AA4 review. We have considered opportunities to find synergies across the entire portfolio of capex projects, as well as to defer projects to future years, resulting in significantly less opportunity to find even further efficiencies or savings.

On this basis, we have a different view to the ERA and its technical consultant EMCa's observation that our governance and management system does not appear to have been changed significantly from our approach at the beginning of the AA4 period.⁵⁶

For example, when developing the AA5 forecasts we have incorporated more clearly defined project scopes, provided options analyses, and considered a more detailed testing of deliverability.⁵⁷ Though we are still seeking further improvements over AA5, our business cases, asset management strategies and supporting information is in a significantly more advanced stage of their project lifecycle than compared with AA4.

We highlight EMCa found our procurement practices are consistent with good industry practice and that our risk ranking tool is a satisfactory means of prioritising and re-prioritising work.⁵⁸

As these improvements highlighted above are reflected in our forecast AA5 capex program, we expect to see less variability between our capex forecast estimates and actual expenditure for AA5. Our investment governance process will continue to deliver a prudent and efficient work program that are based on best estimates and the latest information available to the business.

We have also engaged an independent firm with extensive experience in the energy and utilities industry to review our governance planning process to find further opportunities for refinement that are aimed at achieving:

- improvements to our data management, leading to robust reporting;
- embedded regular review processes to track and monitor our performance against the forecast AA5 capex program; and
- enhanced communication processes to ensure project managers are kept updated on their project developments.

The review was finalised in September 2020 and implementation of these recommended changes is expected in October 2020.

While there will always be some movement in the works required, particularly later in the period as we respond to new information and circumstances, our planning approach in AA5 is much more mature than it was in AA4. Therefore we do not think that it is appropriate to take into account the variance between our actual expenditure and forecasts during AA4 as the basis for evaluating

⁵⁵ ERA Draft Decision, [465]

⁵⁶ EMCa Technical Review, p.24

⁵⁷ The lack of these was a criticism highlighted by EMCa during the AA4 review.

⁵⁸ EMCA Technical Review, p.108

the proposed expenditure for AA5 for the Compressor Stations, Pipeline and Mainline Valve and Meter Stations business cases.⁵⁹

1.3.4.2. ERA's cost reductions do not take into account prudent acceleration of works

We consider that the ERA has not adequately taken into account programs of work that may need to be accelerated during AA5. In our annual planning process, we continually refresh the risk ranking based on any new information available or changes in circumstances. This ensures projects identified are deferred and accelerated where prudent, and to allow us to respond to significant unplanned events which may occur over a five-year access arrangement period.

In addition to being able to prudently defer or deliver some works at a lower cost, there will also be circumstances where assets fail prematurely, or the costs to undertake works will be higher than forecast. We have numerous examples of this occurring across our AA4 program, many of which have been outlined to the ERA and EMCa in response to requests for further information and have largely been accepted by the ERA as conforming capex.

Specifically, of the 19 business cases where our estimated actual capex for AA4 was more than the forecast capex, the ERA considered it conforming capex for 18 of these. The exception was the IT Sustaining Applications projects as discussed in section 1.3.1 above, of which we have provided more information in support.

Therefore, the ERA's one-sided adjustment which only considers prudent deferral or delivery of work at a lower cost is not appropriate. In determining the best estimate of capex, the ERA should also reflect the need for prudent acceleration of works that may occur during AA5. We are also undertaking a number of new or periodic, high value works in AA5. While we have sought independent assistance in the costing of these works, some of them have not yet been market tested. Given the current economic situation, it is possible there will be a shortage of the skills required to deliver these works and therefore we may incur higher costs than currently forecast.

Again, this supports an assessment of detailed business cases as the most appropriate information to inform forecast capex over AA5.

1.3.4.3. Our forecast meets the requirements of NGR 74

While the ERA and EMCa have provided a high level explanation of their top-down reductions, we note that EMCa was not able (due to it being outside EMCa's scope) to conduct a full review of all the projects associated with our forecast program of works over AA5. As such, we do not consider EMCa's assumption that the top down percentage of the forecast costs, ultimately adopted by the ERA, could be deferred to the AA6 period without materially impacting risk has been arrived at on a reasonable basis.

We note that we are already investing at an elevated level of around \$30 million per annum in 2019 and 2020 compared to previous averages of around \$25 million per annum as it has become clear that \$25 million per annum is not sufficient to maintain current levels of risk. This in turn puts at risk the continued strong safety and reliability performance that our Shippers value, but has only a minor impact on price.

However, we have sought to defer some projects as per the ERA and EMCa's advice. We submit that our revised forecast has been arrived at on a reasonable basis as it considers historical performance, incorporates expenditure optimisation assumptions, and is founded on a detailed assessment of asset condition and the risk associated with deferring some projects.

⁵⁹ ERA Draft Decision, [459]

Our forecast therefore provides the best estimate in the circumstances and therefore meets the requirements of NGR 74.

1.4. Summary

1.4.1. Our performance in AA4

We have invested \$93 million of capex during AA4 up to the end of 2019 and are forecasting to invest a further \$31 million in 2020, totalling \$124 million by the end of the period, which is consistent with our Final Plan. We have provided additional information on our IT Sustaining Applications initiatives where they were not accepted in the ERA's Draft Decision. A summary of our AA4 capex is provided in [Table 1.2](#).

Table 1.2: Summary of AA4 Capex (\$million, December 2020)

	Final Plan	ERA Draft Decision	Revised Final Plan	Variance to Final Plan	Variance to Draft Decision
Compressor Stations	26.0	26.2	25.7	-0.3	-0.5
Pipeline and MLV	6.3	6.3	6.2	-0.1	-0.1
SCADA	1.9	1.9	2.0	0.1	0.1
HSE	0.2	0.2	0.3	0.1	0.1
GEA Control Systems	0.5	0.5	0.5	0.0	0.0
Compressor Station Accommodation	2.5	2.5	2.5	0.0	0.0
Northern Communications	0.0	0.0	0.0	0.0	0.0
Compressor package control systems	6.5	6.6	6.5	-0.1	-0.1
Jandakot Redevelopment	0.5	0.5	0.5	0.0	0.0
Maximo and DMZ	1.4	1.4	1.3	-0.1	-0.1
Safety Case Revisions	0.5	0.5	0.5	0.0	0.0
Compressor Station Inspections	2.6	2.6	2.8	0.2	0.2
Asset management	2.7	2.7	3.0	0.2	0.2
Meter Stations	26.4	26.6	27.2	0.7	0.6
Tools	1.2	1.2	1.2	0.0	0.0
Fleet and vehicle	5.3	5.3	5.3	0.1	0.0
Turbine exhaust	0.0	0.0	0.2	0.2	0.2
Pipeline and MLV inspections	13.1	13.1	12.6	-0.5	-0.5
CRS	0.8	0.9	0.6	-0.2	-0.2
IT Sustaining Applications	6.6	2.5	6.7	0.1	4.2
IT Enabling	0.0	0.0	0.0	0.0	0.0
IT Security	1.4	1.4	1.2	-0.3	-0.3
Process safety	0.0	0.0	0.0	0.0	0.0
Decommissioning	0.2	0.2	0.2	0.0	0.0
Communications	2.4	2.4	2.4	0.0	0.0
Office relocation	4.2	4.2	4.2	0.0	0.0
Southern Communications	7.0	7.0	7.0	0.0	0.0
CS1 rewheeling	1.3	1.3	1.3	0.0	0.0
IT Sustaining Infrastructure	1.8	1.8	1.9	0.0	0.0
	123.3	119.7	123.7	0.4	4.0

1.4.2. AA5 Capex

Our revised Final Plan capex forecast is \$159 million over the next AA period, which is \$31 million (or 20%) more than the ERA's Draft Decision, but consistent with our Final Plan. It reflects that we have:

- Accepted half of the ERA and EMCA's proposed project deferrals into AA6;
- Accepted the proposed reduction to Compressor Station Accommodation costs;
- Updated the delivery and costs of the AGIG One ERP project, that:
 - brings forward the implementation at DBP, removing the need for an interim finance solution at DBP in the meantime;
 - shares the implementation costs at DBP with AGN; and
 - takes account of the best available market information for project costs resulting from an extensive competitive process completed in August 2020;
- Provided more information to support areas of capex uplift in AA5 compared to AA4;
- Revised IT costs flowing from the AGIG One IT Strategy and Roadmap detailed initiative planning undertaken since January; and
- Updated real labour cost escalation.

A summary of our revised capex forecast is provided in Table 1.3.

Table 1.3: Summary of AA5 Capex Forecast (\$'000, December 2020)

Business Case	2021	2022	2023	2024	2025	Total AA5
Compressor stations	9,330.3	5,255.4	5,898.8	7,404.9	6,022.4	33,911.8
Communications	15,344.3	15,377.5	-	-	-	30,721.9
Compressor unit controls systems	-	4,717.0	4,727.3	4,737.5	2,373.9	16,555.7
Pipeline and MLV	2,051.2	1,685.7	2,409.9	1,733.3	1,042.4	8,922.5
Jandakot	772.2	-	-	5,913.4	2,119.5	8,805.1
GEA unit control systems	920.9	-	1,387.3	2,780.7	1,393.4	6,482.3
Meter station	1,953.3	1,394.6	1,603.2	1,400.7	1,584.3	7,936.1
IT Enabling	3,889.5	1,790.8	-	-	-	5,680.3
All other	17,857.3	5,503.0	4,655.4	7,000.6	5,100.8	40,117.1
Total	52,119.1	35,724.1	20,681.8	30,971.0	19,636.7	159,132.8

A comparison of total AA5 capex by business case compared to our Final Plan and the ERA's Draft Decision is provided in Table 1.4.

Table 1.4: Comparison of Final Plan, Draft Decision and Revised Final Plan AA5 Capex (\$ million, December 2020)

	DBP Final Plan	ERA Draft Decision	DBP Revised Final Plan	Variance to Final Plan	Variance to Draft Decision
Compressor stations	36.7	29.3	33.9	-2.7	4.6
Pipeline and MLV	9.7	6.8	8.9	-0.8	2.2
SCADA	1.9	1.9	1.9	0.0	0.0
GEA control systems	8.4	6.5	6.5	-1.9	0.0
Compressor stations accommodation	5.2	4.7	4.6	-0.5	-0.1
Northern communications system	30.8	30.8	30.7	-0.1	-0.1
Compressor package control systems	19.0	14.2	16.6	-2.4	2.3
Jandakot redevelopment	8.6	4.7	8.8	0.2	4.1
Maximo and DMZ	2.3	2.3	2.3	0.0	0.0
Safety case revisions	0.5	0.3	0.5	0.0	0.2
Meter stations	8.0	7.2	7.9	0.0	0.8
Tools	1.7	1.3	1.7	0.0	0.3
Fleet and civil equipment	4.8	4.3	4.8	0.0	0.5
Turbine exhaust replacement	5.0	3.1	4.9	-0.1	1.7
CRS	2.9	2.3	2.9	0.0	0.6
IT Sustaining Applications	3.4	3.4	11.0	7.6	7.6
IT Enabling	5.3	0.0	5.7	0.4	5.7
IT Security	1.8	1.5	2.4	0.6	0.9
IT Sustaining Infrastructure	4.1	3.1	3.2	-0.9	0.1
Total	159.9	127.8	159.1	-0.8	31.3