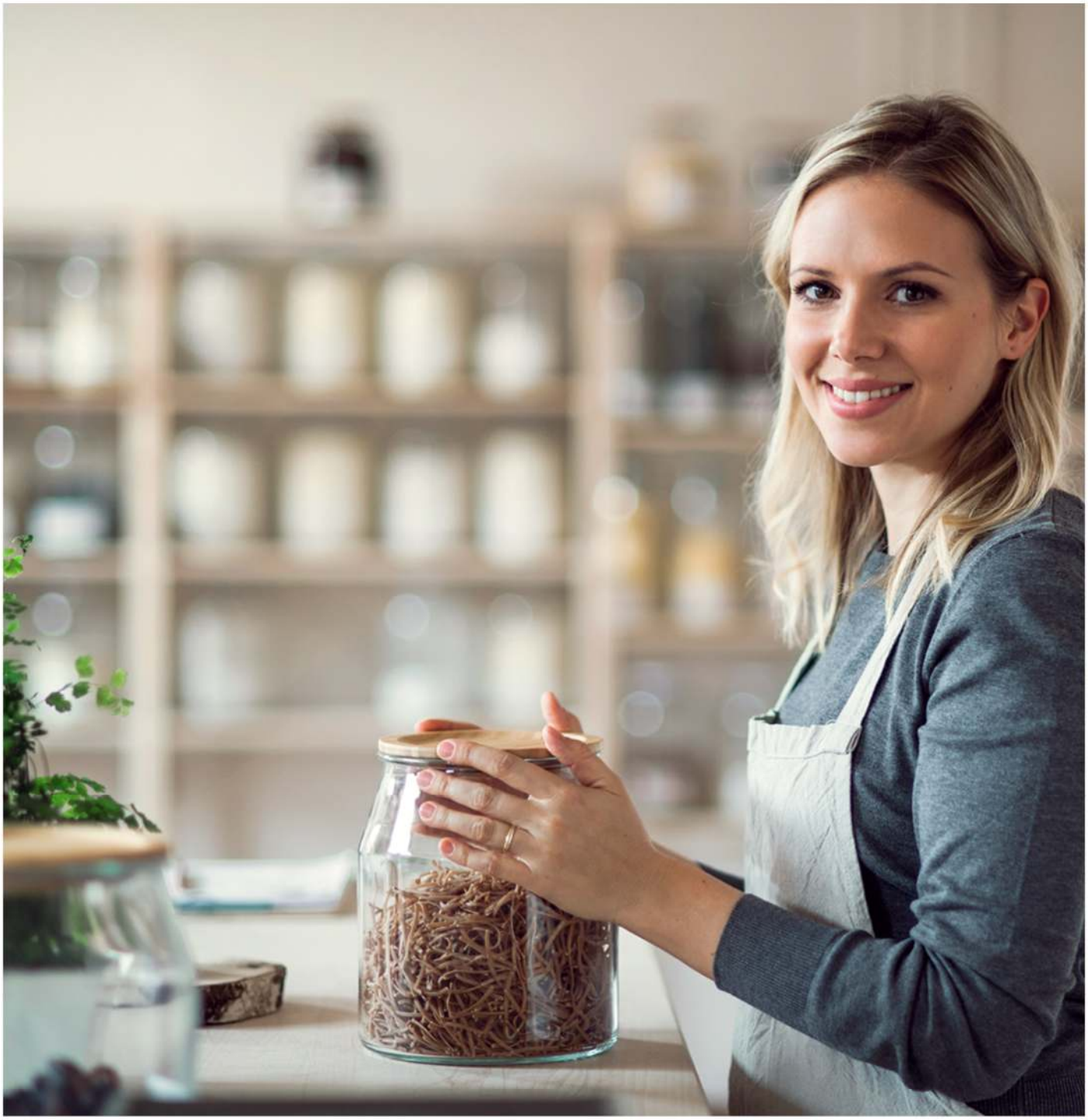

Jemena Gas Networks (NSW) Ltd

Revised 2020-25 Access Arrangement Proposal

Attachment 5.3

Response to the AER's draft decision - Operating expenditure

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Abbreviations

AA	Access Arrangement
BISOE	BIS Oxford Economics
capex	Capital expenditure
CEPA	Cambridge Economic Policy Associates
DAE	Deloitte Access Economics
ECM	Efficiency Carryover Mechanism
EI	Economic Insights
EWON	Energy and Water Ombudsman NSW
opex	Operating expenditure
PTRM	Post Tax Revenue Model
RBA	Reserve Bank of Australia
RIN	Regulatory Information Notice
UAG	Unaccounted for Gas
WPI	Wage Price Index

Overview

This document sets out our response to the AER's draft decision on our forecast operating expenditure (**opex**) for the 2020-25 Access Arrangement (**AA**) Period. It also sets out our revised opex forecast.

We welcome the AER's decision to accept most aspects of our opex proposal for the 2020-25 AA period. The AER's draft decision alternative opex forecast for JGN is $1,096.6M, which is ~4.8% higher than the opex we proposed in our 2020 Plan but ~2.1% lower than the amended opex proposal we submitted on 8 October 2019.[1]

Table OV–1: Comparison of JGN's proposed opex with AER's draft decision, including DRC[1] ($2020, $M)

	JGN's 2020 Plan	Amended JGN opex proposal	AER's draft decision	Revised 2020 Plan
Forecast opex	1,045.9	1,120.5	1,096.6	1,091.7

(1) DRC = Debt Raising Costs

The areas of difference between the AER's draft decision forecast and our initial (2020 Plan) forecast are:

- Selection of base year—the AER accepted our opex forecasting method but has relied on 2017-18 as an efficient base year for opex forecasting. This increases our opex forecast, but is offset by reductions to our efficiency carryover amount.
- Inflation—the AER has used a more recent inflation forecast from the Reserve Bank of Australia (**RBA**), which impacts the escalation of base year (2017-18) into $2020.
- Rate of change—the AER has forecast a lower input cost trend than we forecast in our 2020 Plan and has also forecast lower output growth due to reductions in customer numbers and mains length flowing in from its assessment of our forecast capital expenditure (**capex**) and demand.
- Government levies specific forecast—we updated our government levies specific forecast with two additional licence fees that are subject to a 'true-up' in JGN's reference tariff variation mechanism—the pipeline licence fees and the Energy and Water Ombudsman NSW (**EWON**) fees.[2] The AER has accepted the inclusion of pipeline licence fees only.
- Debt raising costs—the AER has estimated lower debt raising costs based on its expert's (Chairmont) 2019 report.

In its draft decision, the AER noted that it considers its alternative estimate of total opex meets the opex criteria subject to JGN updating it to reflect:

- An updated demand forecast (discussed in section 13 of our Revised 2020-25 AA Proposal)
- The most up to date cost of replacement gas for forecasting the unaccounted for gas (**UAG**) allowance.

Our response to the key elements of the AER's draft decision on opex is summarised in Table OV–2. Sections 1 to 5 include more detail on our response to the AER's draft decision and our revised opex forecast.

[1] We submitted an amended opex and ECM carryover forecast to the AER on 8 October 2019 (in response to AER information request IR044. The opex forecast used 2017-18 (rather than 2018-19) as base year, in response to AER concerns that 2018-19 was not an appropriate base year due to one-off factors impacting opex in that year. See section 1 for details.

[2] We provided this in our response to Information Request IR018

Table OV–2: JGN's response to AER draft decision on opex

	AER draft decision	JGN response
Base year		
Selection of base year	Preference for 2017-18 as base year due to transformation costs impacting 2018-19 opex and ECM.	We accept the AER's draft decision.
Adjustments to base year	The AER accepted our proposed adjustments to base year, including expensing of corporate overheads. It relied on the movement in provisions reported in our AA RIN and has used a more recent inflation forecast from the RBA (August 2019 Monetary Policy).	We accept the AER's draft decision, but we have updated the 2017-18 movement in provisions to correct for an error in our AA RIN. We have also used a more up to date inflation forecast from the RBA (November 2019 Monetary Policy) and have updated the corporate overheads adjustment based on our Revised AA Proposal capex model.
Trending of base year		
Input cost trend	The AER rejected our proposal to take the average of BIS Oxford Economics (**BISOE**) and Deloitte Access Economics (**DAE**) estimate of real wages growth. It has instead relied only on the DAE forecast.	We have retained the approach in our 2020 plan—and have updated our estimate with a more up to date forecast from BISOE—as: • Statistically an average is likely to produce more accurate projections for labour costs over the period. • The AER has been inconsistent in way in it has evaluated CPI and WPI forecast expectations. Whereas it uses a best estimate of expected CPI in the PTRM and has found that this estimate need not be the same as the best estimate of outturn CPI, for WPI, it has assessed the forecaster's accuracy against outturn WPI. As both wages and CPI should be considered on an expectations basis, we think it is reasonable that both forecasts should be considered on the same basis. • Using averages is consistent with the AER's approach to use averages over a single forecasting method for electricity networks' output escalation (where it relies on an average of benchmarking models), return on debt (which is based on an average of data curves), and in assessing electricity networks' relative opex efficiency. Further explanation is set out in section 2.1.
Output growth trend	The AER has accepted our proposed method for forecasting output growth but has updated its forecast of customer numbers and mains length to reflect its draft decision on capex.	We accept the AER's method, but we have updated our customer numbers and mains length forecast in line with our Revised 2020-25 AA Proposal capex forecast.
Productivity	The AER has accepted our proposed productivity.	We have retained the approach set out in our 2020 Plan, but note the interrelationship between input cost trend and productivity.

	AER draft decision	JGN response
Specific forecasts		
Unaccounted for gas (**UAG**)	Accepted our forecast UAG costs, but has instructed JGN to update the estimate based on the most up to date cost and volume data.	We accept the AER's draft decision. We have updated the forecast of UAG costs in line with the AER's instructions.
Government levies	Partially accepted our forecast of government levies but has renamed these costs 'licence fees' to ensure consistency with the 'licence fee factor' in JGN's tariff variation mechanism (discussed in attachment 15.1). It does not consider that EWON fees should form part of the 'licence fee factor'. On this basis it has not removed EWON fees from base year opex, meaning that a specific forecasts of these costs is not required.	We accept the AER's draft decision. We accept the specific forecast of government levies (now termed licence fees and mains tax) to include only mains tax, authorisation fees, and pipeline fees. We accept the AER's decision that EWON fees should not form part of the licence fee factor, and have kept these fees within base year opex.
Debt raising costs	The AER has substituted our estimate of debt raising costs with its own.	Our consultant (CEG) has identified significant errors in Chairmont's analysis that the AER has relied on in coming to its draft decision. Additionally, the analysis is based on a non-transparent approach which we cannot validate or comment upon. On this basis we do not accept the AER's draft decision. We have retained our current approach and developed an updated forecast of debt raising costs, based on the method that we proposed in our 2020 Plan. More details are included in section 3.3.
Step changes		
Corporate overheads	Accepted JGN's half year adjustment to ensure JGN's proposed change to treatment of corporate overheads is not overstated in 2020-21.	We accept the AER's draft decision. We have updated the step change to align with the updated base year adjustment for corporate overheads.
Pigging and inspection costs	The AER has accepted our proposed change in treatment of pigging and inspection costs from capex to opex.	We accept the AER's draft decision.

Attachments

Table OV–3 lists the attachments to our Revised AA Proposal which provide further information on our response to the AER's draft decision and our revised opex forecast.

Table OV–3: Revised 2020 AA Proposal attachments on our forecast opex

Attachment	Name	Author
5.1	Opex model	JGN
5.2	RFM – Pigging costs	JGN
5.3	Response to draft decision - opex	JGN
5.4	Review of the Australian Energy Regulator's approach to JGN's cost escalators	CEPA

Attachment	Name	Author
5.5	Review of AER wage forecast comparison	BISOE
5.6	Labour cost escalation forecasts to 2024-25	BISOE
5.7	The cost of arranging debt issues	CEG

1. Base year opex

The AER has rejected JGN's Initial 2020-25 AA Proposal to use 2018-19 as base year opex and has instead accepted our amended proposal to use 2017-18 as the base year to forecast JGN's opex requirement over the 2020-25 AA period.[3]

In its draft decision the AER has explained that because JGN's non-recurrent transformation costs impact expenditure in 2018-19, its preferred approach is to choose an alternative base year uninfluenced by these factors.[4] As noted by the AER in its draft decision, we provided the AER with revised opex, Efficiency Carryover Mechanism (**ECM**) and PTRM models to provide our understanding of its approach to adopt 2017-18 as our base year.[5]

In our Revised 2020-25 AA proposal we continue to use 2017-18 as our base year to forecast our 2020-25 opex requirement as accepted by the AER. Recognising the interrelationship between our opex forecast and ECM, we have also accepted the AER's draft decision on the ECM carryover amount and have updated it for 2018-19 audited opex (see Attachment 10.1 for our ECM model).

Our revised forecast of base year opex is provided in Table 1–1.

Table 1–1: Forecast base year adjustments ($2020, $M)

	AER draft decision	JGN revised proposal
Reported base year (2017-18) opex	183.1	183.3
Add opex associated with expensing corporate overheads	16.8	16.7
Less opex on items forecast using specific forecast (licence fees and mains tax, UAG, debt raising costs) and movement in provisions	(26.9)	(27.0)
Adjusted 2017-18 base year opex	**173.0**	**173.0**
2017-18 to 2019-20 increment as per AER's opex model	4.2	4.2
Adjusted 2019-20 base opex before trending	**177.2**	**177.2**

There are some minor differences between our revised base year opex forecast and the AER's draft decision:

- We have used a more up to date estimate of inflation from the RBA to convert nominal base year opex to $2020.
- We have updated the value of expensing corporate overhead costs (which takes effect from 1 January 2021) consistent with our updated estimate of forecast capex.[6]
- We have updated 2017-18 base year opex to correct movements in provisions which were reported incorrectly in our AA RIN.

[3] We submitted an amended opex and ECM carryover forecast to the AER on 8 October 2019 (in response to AER information request IR044. The opex forecast used 2017-18 (rather than 2018-19) as base year, in response to AER concerns that 2018-19 was not an appropriate base year due to one-off factors impacting opex in that year. See section 1 for details

[4] AER, *Attachment 6: Operating expenditure | Draft decision – Jemena Gas Networks (NSW) Ltd Access Arrangement 2020-25*, November 2019, page 6-24

[5] We provided this in our response to Information Request IR021 and IR044.

[6] The expensing of previously capitalised corporate overheads is derived in our capex model based on AER's method of using 75% of the historical average capitalised corporate overheads and 25% of variable overheads linked to direct capex. A more detailed explanation can be found in our response to Information Request IR018.

2. Trending the base year

In its draft decision, the AER has accepted our proposal to use three rate of change components to adjust base year opex—input cost growth, output growth and productivity—but has made a number of adjustments to our forecasts. We discuss the AER's draft decision on these components and our response in the following sections.

2.1 Input cost growth

The AER has accepted our assumption on the relative weighting of labour and non-labour costs within our opex (59.7%:40.3%), but has rejected our proposal to take the average of BISOE and DAE estimates of real wages growth.

This represents a departure from the AER's usual approach, whereby it forecasts real wages growth using an average of the utilities industry real Wage Price Index (**WPI**) growth forecasts for the relevant jurisdiction provided by its consultant (DAE) and the forecasts submitted by the network business (in our case BISOE).

We note that there was no stakeholder consultation prior to AER changing its existing approach of using an average.

The reasoning provided by the AER for its change in approach is that the WPI growth forecasts provided by DAE have been more accurate than those provided by BISOE. Its analysis is based on WPI growth forecasts reports for the 2007 to 2018 years.[7]

We engaged CEPA and BISOE to undertake a review of the AER's analysis. Their reports are included as Attachment 5.4 and Attachment 5.5, respectively.

CEPA has correctly pointed out the inconsistency in the AER's approach on estimating WPI and CPI expectations.[8] In the case of assessing CPI forecasting measures the AER notes that:[9]

> *"We are required to estimate expected inflation in our regulatory framework, but the inflation outcome may turn out to be different to the original expectation. A difference between an initial expectation and the ultimate outcome does not necessarily mean that the expectation was not the best possible expectation available at the time"*

However, the AER has not applied the same principle to assessing WPI measures. In particular, the AER notes that:[10]

> *"…we recently analysed the accuracy of these two forecasters over the period 2007 to 2018 and found BIS Oxford over forecast WPI growth. Consequently, we do not consider BIS Oxford's WPI, nor an average of BIS Oxford's and Deloitte's represents the best forecast in the circumstances. We have forecast labour price growth using only Deloitte's forecasts"*

CEPA concludes that as both wages and consumer price inflation should be considered on an expectations basis, it is reasonable that forecasts should be considered on the same basis. Therefore, CPI and WPI should be assessed in the same way, i.e. either by choosing the most accurate measure against outturn, or the most appropriate for forecast expectations.

CEPA also notes that whilst DAE may have a lower absolute mean error over a certain period, it is not necessarily true that it has always had a lower absolute mean error compared to BIS at all times. Therefore it cannot be

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7 AER, *Attachment 6: Operating expenditure | Draft decision – Jemena Gas Networks (NSW) Ltd Access Arrangement 2020-25*, November 2019, page 6-30

8 CEPA, *Review of AER's approach to JGN cost escalators*, 19 December 2019 (included as Attachment 5.4 of our Revised 2020-25 AA Proposal).

9 AER, *Regulatory treatment of inflation – Final Position,* December 2017, page 20

10 AER, *Attachment 6: Operating expenditure | Draft decision – Jemena Gas Networks (NSW) Ltd Access Arrangement 2020-25*, November 2019, page 6-22

concluded that DAE is a better measure based on its performance over a particular time period. We agree with CEPA and consider that an average of the two measures is likely to lower any significant bias in forecast measures.

CEPA also notes that there is precedent in other areas of the AER's decision making for using averages across estimates or forecasts:[11]

> *For estimating the allowed return on debt, the AER averages data from three third party data providers: the RBA, Bloomberg and Thomson Reuters.[12] In their averaging the AER puts equal weight on each of the data providers. The AER concluded that a decision to put equal weight on all providers was justified as each provider had unique strengths and weaknesses, an equal weight was intuitively reasonable, and any weighting scheme would rely on contentious assumptions.[13]*

We also note that the AER uses four models in its opex benchmarking for electricity networks.

CEPA has undertaken is own assessment of the accuracy of DAE and BISOE forecasts against national outturn WPI. It relied on two statistical measures to assess the forecasts, namely, root mean squared error (RMSE) and mean absolute error (MAE). CEPA notes:[14]

> *Regarding the mean error, a statistic the AER also looked at, we agree with the AER that this can be useful in determining whether a forecaster is under-/over-forecasting compared to outturn (although this can also be observed through graphing the data). However, beyond this we do not consider that the mean error provides much valuable information for assessing the accuracy of results given the issue that positive and negative differences can cancel out.*

Based on its analysis, CEPA concludes the RMSE and MAE for the average forecast are similar (to one decimal place) as those for DAE's forecasts – RMSE is slightly lower for the average and MAE is slightly higher.

CEPA concludes:[15]

> *In addition, as we cannot assess the accuracy of DAE's and BISOE's forecasts for NSW, we do not consider that there is compelling evidence that solely using DAE's forecasts would be better than using the average across DAE's and BISOE's forecasts for NSW (or any of the other states).*

We also provided BISOE an opportunity to both review AER's analysis[16] and also to update its WPI forecasts for 2020-25 based on latest macroeconomic data and outlook.[17] Its reports are included as Attachments 5.5 and 5.6, respectively.

The key conclusion from BISOE is that departing from the AER's previous approach—of averaging the projections produced by DAE and BISOE for growth in the all-industries and the EGWWS real WPI) and instead relying only on the DAE projections for these series—*is statistically likely to result in a worse outcome (in terms of forecast accuracy)*.[18] BISOE found the following issues with the AER's analysis:[19]

- *The approach undertaken by the AER attaches an equal weight to all forecasts, irrespective of their forecast horizon. For example, they equally weight a projection for the current year with a projection for five years ahead. Given the inherent uncertainty surrounding forecasting, and the*

11 CEPA, *Review of AER's approach to JGN cost escalators*, 19 December 2019, page 10

12 AER, *Rate of Return Instrument*, December 2018

13 AER, *Draft – Rate of Return Guidelines – Explanatory Statement, page*, July 2018, page 58.

14 CEPA, *Review of AER's approach to JGN cost escalators*, 19 December 2019, page 11

15 Ibid, page 12

16 BISOE, *Review of AER wage forecast comparison*, December 2019

17 BISOE, *Labour Cost Escalation Forecasts to 2024-25*, December 2019

18 BISOE, *Review of AER wage forecast comparison*, December 2019, page 3.

19 Ibid, page 3

> *fact that this uncertainty increases with the length of forecast horizon, it is important to consider performance by forecast horizon.*

And: [20]

- *The dataset used by the AER in its analysis is asymmetric. In some cases, forecasts from the same firm were drawn from consecutive months (and we would expect these forecasts to be very similar given the timing), which will result in these particular forecasts effectively having a higher-than-average weight in the calculations of forecast performance. The overweighting of these forecasts (and implied underweighting of others) could result in biased results.*

BISOE also found that DAE's *apparent* superior forecasting record is not due to superior modelling of utility sector wages. It was actually the result of its incorrect modelling of the relationship between utilities and all-industries wages, which was offset by its over-estimation of all-industries wages-–these two errors effectively off-set each other, resulting in an apparently better forecast performance for the EGWWS WPI.

BISOE notes that:[21]

> *When looking at the historical forecast performance of both firms together, the average forecast performance is materially better than either firm individually. This is because the tendency to understate the EGWWS gap from DAE is offset against the tendency to overstate the EGWWS gap by BISOE.*

On the basis of the conclusions by CEPA and BISOE, we do not consider that the approach adopted by the AER in its draft decision to forecast real wages growth will result in the best forecast or estimate possible in the circumstances.

Our revised opex forecast therefore adopts the same methodology as the forecast in our 2020-25 AA Proposal.

We have updated our forecast using a more recent forecast of real labour cost growth by BISOE (Attachment 5.6) and the DAE forecast that the AER has relied on in its draft decision. We note that CEPA has also identified that DAE has made an error in its application of Fisher equation to NSW data in its report. For EGWWS the DAE report shows 2.7% nominal WPI which when considered along with its 2.3% CPI assumption should result in a real WPI of 0.4% and not 0.2% as reported in its report.[22] However, we do not have access to DAE unrounded estimates and are unable to update our opex model (Attachment 5.1) to reflect this. The AER in its final decision for JGN should use the correct estimates.

The AER has stated that DAE will provide it with updated labour price growth forecasts after the draft decision that it will use in its final decision. We note that as this report will be received after we submit our Revised 2020-25 AA Proposal, we won't get the opportunity to review or comment on the updated DAE report.

Our input cost adjustments are based on forecast real price increases for labour of between 0.4% and 0.6% per annum for the 2020-25 period, as detailed in **Table 2–1**.

Table 2–1: Forecast input cost growth 2020-25

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
BIS Oxford real labour forecast (A)	1.16%	1.14%	1.33%	1.51%	1.44%	
Deloitte Access Economic real labour forecast (B)	0.17%	0.55%	0.41%	0.48%	0.67%	

[20] BISOE, *Review of AER wage forecast comparison*, December 2019, page 3

[21] BISOE, *Review of AER wage forecast comparison*, December 2019, page 22

[22] CEPA, *Review of AER's approach to JGN cost escalators*, 19 December 2019, page 15.

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Average real labour forecast (C = (A+B)/2)	0.67%	0.84%	0.87%	1.00%	1.05%	
Labour contribution to Price growth trend (D)	59.70%	59.70%	59.70%	59.70%	59.70%	
Adjusted real labour forecast (E=D x C)	0.40%	0.50%	0.52%	0.60%	0.63%	
Real other forecast (F)	0.00%	0.00%	0.00%	0.00%	0.00%	
Price growth trend (E+F)	**0.40%**	**0.50%**	**0.52%**	**0.60%**	**0.63%**	
Input cost growth ($M, 2020)	**0.7**	**1.6**	**2.5**	**3.6**	**4.7**	**13.2**

2.2 Output growth

The AER's draft decision has accepted our methodology for forecasting output growth trend which is based on weightings determined by our consultant, Economic Insights (**EI**). However, it has updated our forecasts of customer numbers and mains length to reflect its draft decision on capex and demand.

Our revised opex forecasts adopts the same methodology that we adopted in our 2020 Plan, and that the AER accepted, but includes updated customer numbers and mains length data to reflect our revised capex and customer number forecasts.

The results are detailed in Table 2–2. This translates to a 1.31% to 1.47% annual increase in opex due to output growth over the 2020-25 period.

The average annual growth rate net of productivity is 0.61%. This sits comfortably within the range of -0.71% to 0.74% which the AER considered acceptable in its draft decision.[23]

Table 2–2: Forecast output growth 2020-25

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Customer Numbers	1.46%	1.34%	1.31%	1.29%	1.32%	
Mains length	1.48%	1.39%	1.34%	1.32%	1.33%	
Forecast output growth	**1.47%**	**1.37%**	**1.32%**	**1.31%**	**1.32%**	
Forecast output growth ($M, 2020)	**2.6**	**5.1**	**7.6**	**10.1**	**12.7**	**38.1**

2.3 Productivity

The AER reviews expenditure proposals in entirety by considering a total cost outlook of a business. On opex it considers the overall opex proposal inclusive of base year, rate of change and productivity. This is because while some businesses may have low base opex they may propose a high rate of change or significant step changes. In case of JGN the AER has accepted our proposed productivity improvements, averaging 0.74% per annum over the 2020-25 AA period. This improvement is higher than the AER's final decision on industry wide productivity of 0.5%.[24] JGN proposed the higher productivity with the understanding that AER would apply average of DAE and BIS WPI forecasts. If the AER continues with its DAE only approach then it will undercompensate JGN for its forecast costs by applying a higher productivity but not adequately compensating it for the costs it needs to incur

[23] AER, *Attachment 6: Operating expenditure | Draft decision – Jemena Gas Networks (NSW) Ltd Access Arrangement 2020-25*, November 2019, Table 6.7, page 6-31.

[24] AER, *Final decision paper: Forecasting productivity growth for electricity distributors*, March 2019.

to improve productivity. We recommend the AER applies a 0.5% productivity adjustment if it is to apply a DAE estimate only. CEPA also notes in its report:[25]

> *" JGN's proposed opex productivity target is higher than what the AER assumes for electricity distributors (0.5%), however the AER uses the same WPI forecast for the electricity distributors."*

And: [26]

> *"The AER is proposing to adopt the 0.74% productivity target JGN set out in its proposal. The 0.74% target is based on modelling undertaken by Economic Insights in 2019.*
>
> *Economic Insights use WPI and producer price indices to deflate historical opex. This means that the Economic Insights' time trend (coefficient) captures the residual changes in opex over time not explained by the output drivers or annual changes resulting from input price changes."*

For our opex model purposes we have still adopted 0.74% per annum productivity estimate along with the input escalation based on average of DAE and BISOE. This is because it is consistent with our 2020 Plan opex forecast.

Table 2–3 details our forecast productivity adjustments for the 2020-25 period.

Table 2–3: Forecast productivity adjustment 2020-25 ($2020, $M)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Productivity adjustment	**(1.3)**	**(2.7)**	**(4.1)**	**(5.6)**	**(7.0)**	**(20.7)**

2.4 Total trend

Table 2–4 shows the forecast rate of change adjustments, excluding inflation, over the 2020-25 period. These costs will increase our opex by 3.5% in 2020-25 period compared to our base opex.

Table 2–4: Forecast rate of change ($2020, $M)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Input cost trend	0.7	1.6	2.5	3.6	4.7	13.2
Output growth trend	2.6	5.1	7.6	10.1	12.7	38.1
Productivity	(1.3)	(2.7)	(4.1)	(5.6)	(7.0)	(20.7)
Total opex trend	**2.0**	**4.0**	**6.0**	**8.1**	**10.4**	**30.6**

Our forecast opex trend is $6M greater than the AER forecast in its draft decision. This is due to:

- differences in our approach to forecasting input cost growth which accounts for $7M, and
- our revised capex and demand forecasts which impacts our forecast of output growth, which accounts for a reduction of $1M.

[25] CEPA, *Review of AER's approach to JGN cost escalators*, 19 December 2019, Page 4

[26] Ibid, Page 6

3. Specific forecasts

Our 2020-25 AA Proposal included specific forecasts of UAG costs, government levies and debt raising costs. In its draft decision, the AER has partially accepted our specific forecasts of these items—it has made a number of adjustments to our forecasts and requested some updates to reflect more up to date information. We discuss the AER's draft decision on these components and our response in the following sections.

3.1 Unaccounted for gas costs

In its draft decision the AER stated that it accepted our UAG cost forecast subject to us updating the:

- forecast of total gas receipts to reflect its draft decision on forecast demand
- escalation factors we applied to forecast the cost of replacement gas to reflect information relating to 2019 that has become available since we submitted our 2020-25 AA Proposal.

In line with the AER's instructions, we have:

- updated our forecast of gas receipts to reflect the AER's draft decision on forecast demand, which required us to update our demand forecast with 2018-19 actual data (see Attachment 13.1)
- updated the escalation factors applied to forecast the cost of UAG using more up to date information.[27]

The methodology that we have used to forecast UAG costs is otherwise unchanged from our 2020-25 AA Proposal.

We consider that the above information supports the AER adhering to its draft decision which accepted this element of our AA proposal.

3.2 Government levies

In its draft decision the AER made the following changes to our forecast of government levies:[28]

- Instead of 'government levies' it termed these costs 'licence fees' to ensure consistency with the 'Licence Fee Factor' in JGN's tariff variation mechanism. The costs included in the Licence Fee Factor are trued-up, so that only the costs we actually incur on these items are passed through to consumers (discussed in Chapter 14 of our Revised 2020 Plan).
- It included pipeline licence fees within its specific forecast of 'licence fees' because these costs form part of the Licence Fee Factor in JGN's tariff variation mechanism. In our 2020-25 AA Proposal opex forecast, we had captured these costs within our base year opex. The AER's draft decision forecast of licence fees therefore includes: mains tax, IPART authorisation fees and pipeline licence fees.
- For mains tax, the AER considered that using the revealed costs in the base year does not accurately capture the mains tax we accrued in 2017-18, so it instead relied on the dataset which we provide annually to KPMG to forecast our mains tax liability. It escalated its forecast of mains tax in line with the inflation figures it used in its opex forecast (discussed in section 1).
- It developed an alternative estimate of IPART authorisation fees using the most recent invoice (2015-16)
- It removed pipeline licence fees from our 2017-18 base year opex, and based the specific forecast of these fees on the most recent invoices we have received (in 2018-19).

[27] [redacted]

[28] Our forecast of government levies included mains tax and IPART Authorisation fees – see Attachment 6.1 of our 2020-25 AA Proposal.

In addition, the AER has instructed JGN to update its Licence Fee Factor in the tariff variation mechanism to remove a true-up of EWON fees (discussed in Chapter 14 of our Revised 2020 Plan). On this basis it has not removed EWON fees from base year opex, meaning that a specific forecasts of these costs is not required.

We have accepted the AER's draft decision on specific forecasts. In Table 3–1 we have summarised the forecasting approach for licence fees, mains tax and EWON fees.

Table 3–1: Forecasting method for licence fees, mains tax and EWON fees in the 2020-25 AA

Item	JGN's 2020 Plan	AER draft decision	Revised 2020 Plan	Note
Mains tax	Specific forecast	Specific forecast	Specific forecast	Subject to true-up as part of Licence fee Factor in JGN's proposed TVM for 2020-25
Authorisation fees (IPART)	Specific forecast	Specific forecast	Specific forecast	
Pipeline licence fees (DPE)	Opex base year	Specific forecast	Specific forecast	
EWON fees	Opex base year	Opex base year	Opex base year	Not subject to a true-up.

3.3 Debt raising costs

In its draft decision, the AER has substituted our forecast of debt raising costs with its own estimate based a report by Chairmont[29] which relies on an 'informal' market survey. We do not consider it fair for regulatory decisions to rely on an approach that is based on informal surveys that cannot be reviewed by JGN as part of its response to the draft decision —such an approach is in contrast to AER's own principles of transparency and predictability that it applies in its decision making.

The AER's draft decision discusses compensation for indirect debt raising costs and PTRM timing benefits in SAPN's proposal–these issues were not raised by JGN. We are not satisfied by the reasoning provided to us in relation to lowering our debt raising cost estimates.

We asked CEG to review the AER's draft decision and Chairmont's report and it has found errors in Chairmont's visual data interpretation of publicly available data, and in its regression analysis.[30] It points out that Chairmont made critical errors in visual data interpretation and concludes that there is no reasonable basis where the publicly available data assessed by Chairmont supports its conclusion of 30 basis points (to be amortised over nine years).

CEG has also recommended use of pre-tax WACC for amortisation as opex is treated as a tax deduction in the PTRM and that there is a tax deduction for 100% of this compensation. We have updated our new estimate of direct debt raising costs as 8.46bppa based on CEG's updated analysis (included as Attachment 5.7).

3.4 Summary of our specific forecasts

As detailed in sections 3.1 to 3.3, we have updated our specific forecasts in our Revised AA Proposal opex forecast:

- To address the AER's instructions to update our forecast of UAG costs
- The AER's draft decision on government levies
- An updated estimate of debt raising costs – calculated in PTRM.

29 Chairmont, *Debt raising costs,* June 2019

30 CEG, *The cost of arranging debt issues - a report for Jemena Gas Networks*, December 2019 (included as Attachment 5.7 of our Revised 2020-25 AA Proposal).

Table 3–2 details our forecasts for the 2020-25 period for the above three cost categories of other opex.

Table 3–2: Forecasts for other cost categories 2020-25 ($2020, $M)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
UAG	28.7	27.3	29.0	29.5	29.1	143.6
Licence fees (including mains tax)	4.7	4.7	4.7	4.7	4.7	23.5
Total (exc. DRC)	**33.4**	**32.0**	**33.7**	**34.2**	**33.8**	**167.1**
Debt raising costs	1.7	1.7	1.7	1.7	1.7	8.6
Total (inc. DRC)	**35.1**	**33.7**	**35.5**	**35.9**	**35.5**	**175.7**

Notes - DRC = debt raising costs

Our forecast category specific opex is $11M lower than the AER forecast in its draft decision. This is due to:

- The update of UAG costs and our demand forecast, accounting for -$14M
- Our updated estimate of debt raising costs +$3M

4. Step changes

In its draft decision, the AER accepted both of the step changes that we proposed for the next AA period:

- a negative step change to ensure that the cost of expensing corporate overheads for the first year 2020-21 is not overstated, and
- a positive step change to expense future pigging costs that are currently capitalised.

We accept the AER's draft decision, but have updated our negative step change for corporate overhead costs as half of the annual expensed corporate overheads included in the adjusted base opex (in section 1). Except for this, our forecast of step changes is consistent with our 2020-25 AA Proposal and the AER's draft decision.

Table 4–1: Forecasts step changes 2020-25 ($2020, $M)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Pigging and inspection costs	0.0	0.0	3.3	1.3	3.1	7.7
Negative corporate overheads	(8.3)	0.0	0.0	0.0	0.0	(8.3)
Total	**(8.3)**	**0.0**	**3.3**	**1.3**	**3.1**	**(0.6)**

5. Revised proposal opex forecast

Our revised forecast opex (excluding debt raising costs) for the 2020-25 AA period is $1,092M, which is approximately $5M lower than the AER's draft decision, and $29M lower than our 2020-25 AA amended proposal. Table 5–1 provides a comparison of JGN's proposed opex with the AER's draft decision.

Table 5–1: Comparison of JGN's proposed opex with AER's draft decision ($2020, $M, inc DRC)

	2020-21	2021-22	2022-23	2023-24	2024-25	Total
2020-25 AA amended proposal	210.6	221.9	227.8	228.1	232.1	1,120.5
AER draft decision	207.4	218.0	222.9	222.4	225.9	1,096.6
Revised 2020-25 AA proposal	206.0	214.9	222.0	222.6	226.2	1,091.7

To recap, our Revised 2020-25 AA Proposal opex forecast reflects:

- The AER's preference to use 2017-18 as base year, although we have updated it to correct movements in provisions which were reported incorrectly in our AA RIN.
- An updated base year opex adjustment to account for the expensing of previously capitalised corporate overhead costs (which takes effect from 1 January 2021). The updated adjustment reflects our updated estimate of forecast capex.
- A more up to date estimate of inflation from the RBA to inflate base year opex to $2020.
- Our proposed methodology for forecasting input cost growth, which is different to the approach proposed by the AER in its draft decision.
- Our revised capex and demand forecasts which impacts our forecast of output growth, although we have continued to apply the same methodology that the AER has accepted.
- Updates to UAG costs which the AER has instructed us to make in order for it to accept our UAG cost forecast
- The AER's draft decision on specific forecasts
- Our estimate of debt raising costs
- The AER's draft decision on step changes, although we have updated our negative step change on corporate overheads to be consistent with the base year opex adjustment of expensing corporate overheads.

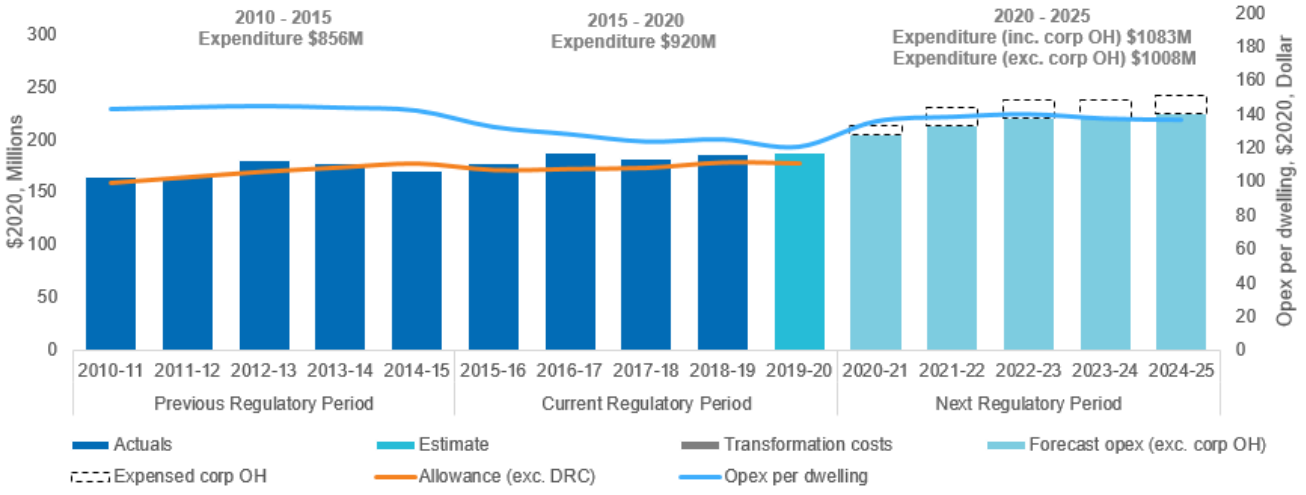
Our revised opex proposal reflects the minimum funding necessary to deliver the operating programs that support the services our customers' value.

Table 5–2 provides a build-up of each component of our opex forecast for the 2020-25 AA period.

Table 5–2: Opex forecast for 2020-25 AA period ($2020, $M, exc. DRC)

				2020-25 period					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	Total
Base year opex	183.3			187.6	187.6	187.6	187.6	187.6	937.8
Additional opex associated with expensing corporate overheads				16.7	16.7	16.7	16.7	16.7	83.3
Less opex on items forecast using specific forecast (licence fees, UAG, debt raising costs)	(27.0)			(27.0)	(27.0)	(27.0)	(27.0)	(27.0)	(135.0)
Adjusted Base Opex	**156.3**			**177.2**	**177.2**	**177.2**	**177.2**	**177.2**	**886.1**
Trending the base opex				2.0	4.0	6.0	8.1	10.4	30.6
Specific forecasts				33.4	32.0	33.7	34.2	33.8	167.1
Step changes				(8.3)	0.0	3.3	1.3	3.1	(0.6)
Total				**204.3**	**213.2**	**220.3**	**220.9**	**224.5**	**1,083.1**

Figure 5–1: Historical and forecast opex 2010-11 to 2024-25 ($2020, $M, exc. DRC)



Notes - DRC = Debt raising costs, OH = Overheads