Consumer
Challenge
Panel

CCP23 Advice to Australian Energy Regulator

Powerlink PPFP

(Preliminary Positions and Forecasts Paper)

September 2020

Consumer Challenge Panel (CCP) Sub-Panel CCP23

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1. Introduction

This Advice to the AER considers the Powerlink Preliminary Positions and Forecasts Paper (PPFP), and the processes that CCP23 has observed in the lead up to the release of this paper. We are also aware that a Draft Revenue Proposal is imminent and will build on consumer feedback from over the last 16-18 months including the PPFP. We also understand that the Draft Revenue Proposal will be close to the intended regulatory proposal to be lodged in January 2021 and as such is different from being a draft revenue proposal that other networks have produced.

We suggest that this Advice has two purposes:

- To provide a 'progress report' to the AER on CCP23 observations about Powerlink's engagement approach and key issues for the Powerlink revenue proposal
- To identify topics that are likely to benefit from further discussion before Powerlink lodges its revenue proposal.

2. Proposal Context

We recognise the context in which this revenue proposal has been developed as extraordinary with the past couple of years seeing significant drought across many areas of regional Australia, major bushfires and in 2020 the COVID-19 pandemic. This resulted in public health isolation strategies, border closures between Australian States and Territories with the resultant recession Australia's worst economic downturn in a century.

These factors and COVID 19 in particular are having impacts right throughout Australian society and consequently have many impacts on the provider of an essential service, as Powerlink is. Their initial consultation with consumers and other stakeholders was relatively straightforward with face-to-face meetings, forums and discussions. These have all had to go online from March 2020, meaning that engagement has been undertaken differently, while maintaining engagement remains critically important.

Another impact for Powerlink is the uncertainty that they now confront with forecasting, as economic impacts from virus related shutdowns and rate of recovery are unknown for businesses at all levels, agriculture and for households.

The AER has released two Statements of Expectations so far, which place expectations on all energy businesses throughout the supply chain, including transmission businesses. We anticipate that there will be further Statements of Expectation in the future, which will likely impact on Powerlink, to an extent that cannot be fully determined at this stage.

Future transmission network developments

The National Electricity Market is in transition from largely fossil fuel sources of generation to sustainable renewable generation.

Much of this generation is not despatchable. Traditional definitions of peak energy use being during the day while off-peak use is at night are being rewritten as more solar generation is installed and generating during the day. This is changing electricity flows substantially.

The installation of largely distributed renewable generation is happening at the same time as large scale fossil fuel generators are being decommissioned. Transmission lines were previously built to

accommodate the connection of these large generators to the grid to bring electricity to end use customers. While some new generation assets are being connected at the sites of previous fossil fuel generating stations, the more distributed nature of new generation is changing the nature of transmission.

New large scale solar farms and wind generation are also being connected directly to the transmission system, thereby increasing the numbers of new connections that Powerlink and other transmission network businesses are being asked to provide. Some of these can be quite complex in nature.

AEMO's Integrated System Plan 2020 (ISP2020)[1] provided a 'road-map' for the expansion of the east-coast transmission network based on an assessment of the optimal transmission links to enable the energy wholesale market to fully exploit the potential of the large scale renewable energy projects. In parallel, the AEMC and AEMO are developing the framework for progressing renewable energy zones (REZ) that may reduce the overall costs to consumers. The AEMC has also developed a framework to ensure better coordination of investment in renewable generation and transmission infrastructure.[2]

AEMO's ISP2020 identifies two transmission projects relevant to Powerlink, "QNI medium" and "QNI Large". However, both projects are cited to commence outside the 2022-27 regulatory period, being 2032-33 and 2035-36, respectively. The potential for major renewable energy zones were identified in Northern Queensland between Mackay and Cairns, and west of Brisbane.[3]

We recognise these important contextual matters because they will have an impact on Powerlink, creating levels of uncertainty that are historically uncommon for network transmission businesses.

Overall, while the focus of Powerlink's current PPFP is on developments that are expected to occur in the 2022-27 period, Powerlink's "Business Narrative", which accompanies the PPFP, provides a very useful description of the challenges facing Powerlink and its customers during the 2022-27 regulatory period and beyond. Powerlink also sets out how it intends to respond to these challenges over the 2022-27 regulatory period and commits to engaging its customers in an ongoing process of review. For example, Powerlink concludes its analysis as follows:[4]

> *Our operating environment is changing rapidly and this business narrative only reflects a portion of the challenges and opportunities facing our business.*
>
> *We will engage with customers on this narrative and update it as more information becomes available to inform the basis of our 2022-27 Revenue Proposal, due in January 2021.*

CCP23 commends Powerlink for this ongoing review, and for its linking of the business plans to the review and to its commitment to continue to engage its consumers in the process. Its recognition that consumers can add much to its understanding of the broader challenges provides a solid foundation for the preparation of its Regulatory Proposal.

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[1] AEMO, 2020 Integrated System Plan, https://aemo.com.au/en/energy-systems/major-publications/integrated-system-plan-isp/2020-integrated-system-plan-isp

[2] AEMC, *Coordination of generation and transmission investment*, Final Report, 21 December 2018. https://www.aemc.gov.au/sites/default/files/2018-12/Final%20report_0.pdf

[3] See for instance, AEMC, Renewable Energy Zones, Discussion Paper, October 2019, Figure 3.1, p 21. https://www.aemc.gov.au/sites/default/files/2019-10/EPR0073%20-%20Renewable%20Energy%20Zones%20Discussion%20Paper.pdf

[4] Powerlink, *Business narrative to support Powerlink's 2023-27 Revenue Proposal*, April 2020.

Capable of Acceptance

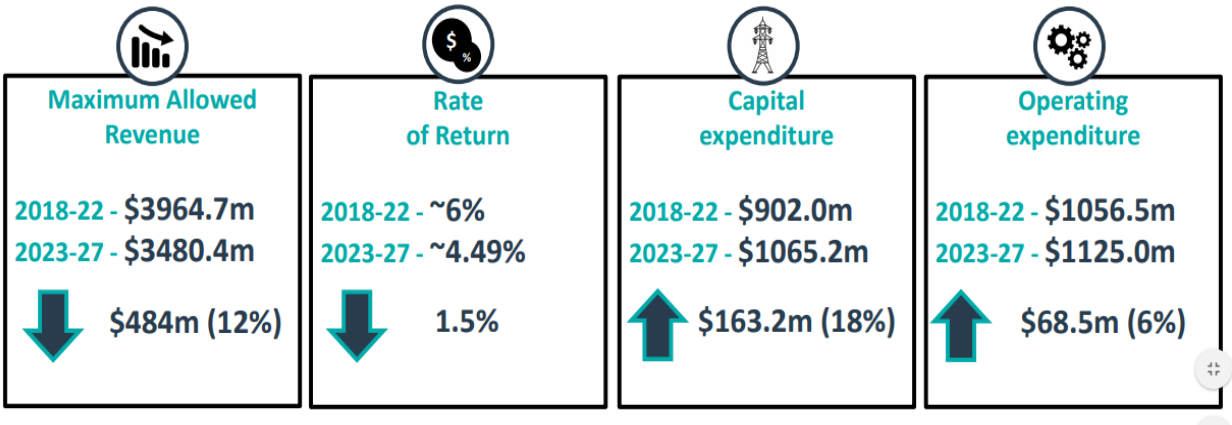
We are also aware of Powerlink's stated objective of presenting a regulatory proposal to the AER that is "capable of acceptance". We welcome this commitment and provide some comments about capability of acceptance from CCP24, who considered this question in response to the gas Access Arrangement proposal from Australian Gas Networks who also sought to lodge a review proposal that was "capable of acceptance". The relevant extract from the CCP24 statement of advice about AGN's access arrangement proposal is included as Appendix 1. We suggest that this will be a useful topic for further dialogue between consumer interests, Powerlink and the AER. CCP23 intends to utilise this CCP24 thinking when considering the Powerlink proposal's "Capability of Acceptance."

Regulatory Period

We note that the AER refers to the regulatory period as being 2022-27 while Powerlink refers to the period as being 2023-27. They refer to the same period. In this advice we have chosen to use the description of regulatory period as being 2022-27 as a default description, noting that where quoting Powerlink material then the period is described as 2022-27

3. Proposal Overview

The PPFP provides the following July 2020 forecast, at a high-level overview. The forecast compares current period expenditure with indicative expenditure proposals for.



Recognising that these are 'early numbers' for 2022-27, we anticipate that capital expenditure, in particular, in the lodged revenue proposal will be lower than indicated, following further revisions by Powerlink and engagement with consumer and other stakeholder interests. Both capital and operating expenditure estimates are considered in later sections of this Advice. The lower rate of return is a significant driver of the lower projected maximum revenue allowance (MAR)

Below are a number of key considerations specific to the 2022-27 Revenue Proposal, as presented by Powerlink. These have provided sound focus for consumer engagement.

4. Consumer Engagement

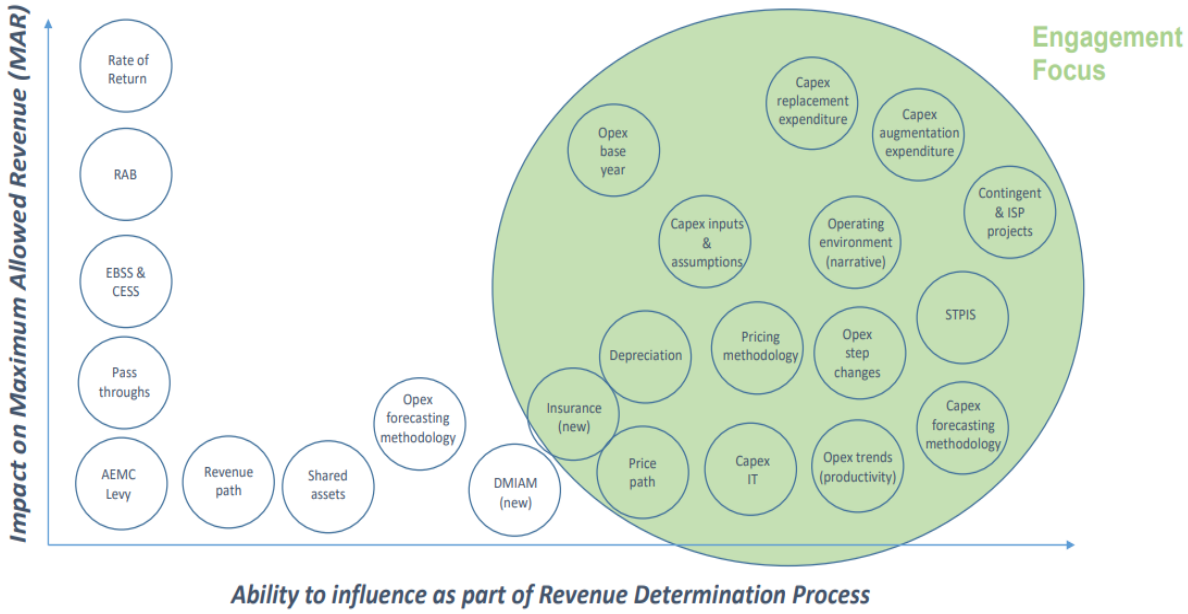
CCP23 has been observing Powerlink's engagement for a little over a year, with initial meetings and discussions occurring in July 2019.

We were also able to observe the 2019 "Transmission Network Forum" a significant annual event held by Powerlink with over 200 participants and coverage for a wide range of transmission issues. The 2019 forum included seeking initial thoughts about the regulatory proposal for 2022-27. The recent 2020 "Transmission Network Forum" was well structured and appeared to be also well received by participants in the Forum.[5]

CCP23 has also observed Customer Panel and Revenue Proposal Reference Group (RPRG) meetings, being able to attend meetings and meet participants during 2019 and joining by video-link for 2020 meetings. The Customer Panel is a significant ongoing source of consumer perspective for Powerlink. It comprises 12 members from a range of stakeholder interest areas and includes representatives with household, SME and C&I perspectives. The Customer Panel meets about quarterly for half a day. To provide greater focus for the revenue proposal, a subgroup of 5 Customer Panel members meets monthly with senior Powerlink staff as the RPRG.

One of the initial customer engagement activities undertaken in preparation for the revenue proposal was a "co-design" process that centred on a workshop in May 2019 including consumer interests stakeholders, Powerlink board and staff members. The co-design process included consideration of engagement scope as well as techniques and sequencing of consideration. The outputs of the process being the following 'map' of topic areas considered against the ability to influence decision making by Powerlink and the relative importance for maximum allowed revenue. This led to identification of the topics that would be the initial focus of the engagement process.

[5] The Forum was conducted over the internet due to COVID-19 constraints. CCP23 considers that Powerlink went to considerable effort to maximise stakeholder participation in the forum.



While CCP23 had not been appointed at the time of the co-design workshop and we were unable to observe this process, its importance has been demonstrated through the engagement we have observed both by regular reference to the focus topics and to consumer representative reference back to the priority topics during subsequent engagement. For us, the impact of this co-design process has been evident throughout the engagement strategy that Powerlink has implemented.

We are also impressed that Powerlink has made an effort to map its engagement topics against the appropriate level on the IAP to spectrum, with the business considering that it has reached the high engagement level of 'collaboration' with some topics and associated engagement. This is summarised in the PPFP with the following chart.

Level of IAP2 Spectrum	Aspect of Revenue Determination Process
Empower *To place the final decision-making in the hands of customers and stakeholders*	
Collaboration *To partner with customers to formulate alternatives and incorporate their advice into final decisions to the maximum extent possible*	Engagement approach and evaluation (Co-design) Contingent & ISP projects Operating environment (Business Narrative)
Involve *To work directly with customers and stakeholders to ensure their concerns and aspirations are directly reflected in the alternatives developed*	Capex – Augmentation expenditure, replacement expenditure, forecasting methodology Opex – Efficient base year, step changes – cyber security and insurance Service Target Performance Incentive Scheme (STPIS) Depreciation
Consult *To obtain feedback on alternatives and draft proposals*	Capex – Key inputs and assumptions, Information Technology (IT) Opex – Forecasting methodology, trends (productivity) Price path Revenue path Pricing methodology AEMC Levy
Inform *To provide balanced information to keep customers and stakeholders informed*	Rate of return Efficiency Benefit Sharing Scheme (EBSS) and Capital Expenditure Sharing Scheme (CESS) Regulated asset base Shared assets Pass throughs

Engagement strategy to date

The mainstay of Powerlink's engagement for about the past 15 months has been its Revenue Proposal Reference Group (RPRG) which has met for about three hours for each of 8-10 meetings. This means that each of the participants of the RPRG have been engaging directly with senior Powerlink staff for somewhere between 24 and 30+ hours so far, with more detailed engagement to come particularly in association with the draft revenue proposal. This number of hours can be considered against a deep dive which might be four hours or a deliberative forum methodology which normally is of the order of magnitude 3 -4 hours. This level of direct participation would be amongst the highest of any network engagement process, outside of the AusNet Services Customer Forum, which is the focus of the NewReg trial. The Jemena Electricity Networks People's Panel is the other engagement process of which we are aware that his had comparable levels of hours of input per participant. The RPRG members all have considerable background in energy markets and bring a diversity of perspective and significant depth of understanding to the engagement.

From a methodological perspective, the RPRG has not been a negotiation process per se, which was a focus of the NewReg trial. It has been a more iterative process with Powerlink progressively presenting current thinking about key regulatory parameters to each meeting. This means that the RPRG has been able to significantly influence the thinking of Powerlink and that all parties have had the opportunity to review and revise thinking and update estimates on a rolling basis. It also means that Powerlink has not been presenting consumers with "fait accompli" decisions to simply endorse; it has been a strong two-way engagement.

This PPFP can be regarded as the third major iteration of Powerlink thinking. The previous two iterations being the focus of PPFP and Customer Forum consideration and debate

The reporting back by the RPRG to the Powerlink Customer Panel, a broader group, has also been an important part of the process allowing another phase of review of thinking and imposing a discipline on both the RPRG and the business.

What's planned?

Powerlink says that it has identified four specific topics for deeper engagement during August-December2020 "beyond broader engagement opportunities we will provide for customers and stakeholders about our PPFP / draft Revenue Proposal forecasts". These topics are:

1. Contingent reinvestment projects – RPRG discussion
2. Productivity – RPRG discussion
3. Cyber security – deep dive workshop
4. Insurance – deep dive workshop

With the engagement techniques that they plan to apply between August and December 2020 being described by Powerlink as follows:

- "Ongoing CP and RPRG meetings – 1 x CP meeting and 4 x RPRG meetings August-December.
- Transmission Network Forum – our annual Transmission Network Forum in September.
- Deep dives – we will host deep dive workshops focused on detailed exploration of a single topic related to the Revenue Proposal, for at least a 2 hour session, which will be open to customers/stakeholders beyond the CP/RPRG.
- Webinar/s – at least one webinar will be held providing an overview of the key elements of the Draft Revenue Proposal. More will be offered if there is significant interest from customers.

- One-on-one briefings – we will proactively offer these to direct connect customers, and to other relevant customers/stakeholders who have made a previous submission to recent Queensland revenue determination processes.
- Leverage existing opportunities – we will contact our Government Owned Corporation (GOC) counterparts to leverage existing engagement opportunities with their customer groups, where timely and appropriate. We also request CP members identify opportunities for us to talk directly with their members, if interested."

Just prior to lodging this statement of advice, we were able to observe the virtual Transmission Network Forum on 10 September 2020, at which it was confirmed that the Draft Revenue Proposal of the final revenue proposal will be released at the end of September, and on 15 October there will be a forum to consider this draft revenue proposal, along with a range of other engagement activities, mainly referenced above.

CCP23 observations

We have no doubt that Powerlink has made a strong commitment to engage meaningfully with customer interests and that the RPRG group has provided a deep level of engagement as topics have evolved over the past year and a half. Powerlink has succeeded in conducting a proactive, iterative and informed engagement process. We would be exceedingly surprised if Powerlink were to submit a Regulatory Proposal that was not actively shaped by the detailed consumer engagement that has been undertaken so far and that will occur in response to the Draft Revenue Proposal.

With the Draft Revenue Proposal providing the last major phase of engagement before finalising the Regulatory Proposal, we would anticipate some greater breadth to the engagement to support the depth of engagement which has happened to date, particularly with the RPRG. We suggest that there would be merit in Powerlink actively seeking some regional consumer perspective on the Draft Revenue Proposal and would anticipate that much of the engagement that has occurred with 'directly connected' commercial and industrial customers will also be reported in the revenue proposal that is lodged. While there is solid representation of C&I perspectives on the RPRG, we understand that there is ongoing dialogue between Powerlink and major C&I customers. A description of these meetings would be valuable as part of the Draft or Final Regulatory Proposal. We also suggest that some reflection of views of landowners with transmission line easements is also likely to be informative.

5. Rate of Return & Depreciation

5.1 Rate of Return

CCP23 understands that Powerlink will adopt the approach and parameters set out in the AER's 2018 Rate of Return Instrument in its Draft and Final Regulatory Proposals. We also understand that Powerlink will adopt the AER's approach to estimating inflation, noting that the AER's approach is currently under review with a final decision due in December 2020.[6]

[6] See, AER, *Review of Expected Inflation*, April 2020. https://www.aer.gov.au/communication/2020-inflation-review,

5.2 Depreciation

Powerlink has proposed to change its approach to depreciation the effect of which will be to bring forward depreciation costs into the 2022-27 period compared to the existing approach that has been used over multiple regulatory periods. This change in approach will affect the timing of the recovery of depreciation costs (as noted), but will be the same cost as the current methodology in NPV terms.

We also appreciate that Powerlink has been very transparent about the impact of this, and the revised approach has been discussed extensively with its Customer Panel, RPRG and the AER.

At the request of its Customer Panel and the RPRG, Powerlink agreed to consider how this 'step change' increase in depreciation costs could be spread over two regulatory periods rather than concentrated in the 2022-27 regulatory period. Powerlink has now submitted a proposal to the AER on how this might be achieved in order to limit the impact on consumers in the 2022-27 regulatory period.

While it is pleasing to observe Powerlink working with consumers and the AER through this process, the methodology itself raises questions about the impact of this depreciation methodology on consumer prices in a future regulatory period where there is substantial capex investment required. For example, if QNI medium is brought forward to 2030-32, consumers will be facing a significant increase in depreciation costs, which will be exacerbated by the new depreciation methodology and the "hang-over of the 2022-27 decisions. It is important that this risk is incorporated into Powerlink's proposal and the AER's decision.

6. Operating Costs

In developing its operating costs estimates, Powerlink uses the established base-step-trend methodology. In the PPFP, Powerlink identifies the classification of operating expenditure using the summary table below.

Total operating expenditure (opex)		
Controllable opex		**Non-controllable opex**
Direct operating and maintenance expenditure	**Other controllable opex**	**Other operating expenditure**
• Field maintenance • Operational refurbishment • Maintenance support • Network operations	• Asset management support • Corporate support	• Debt raising • Network support • Insurances • AEMC Levy*

* We are considering alternative ways to treat the AEMC Levy.

CCP23 considers this to be a useful approach. It means that for the 2022-27 period, about 10% of operating costs are non-controllable and that about 90% are consequently controllable by the business. We recognise that about two thirds of total operating expenditure relates to ongoing

operation and maintenance of the transmission network and so while controllable to an extent, are certainly not discretionary expenditure.

Base year

Year two of the current period, 2018/19 is proposed as the base year for the 2022-27 regulatory period. Powerlink explains that this is its lowest actual year of total operating costs and closest to the current AER allowance. They also state that it meets expectations of a 'revealed costs' approach and importantly is reflective of what could conceivably be called a "typical year", with no major virus, bushfire or other major weather events adding to costs.

CCP23 accepts these arguments and recognises that at this point of the regulatory process using 2018/19 is a base year makes sense. Our main consideration is that it is quite some distance from 2023, the first year of the next regulatory period. Consequently we anticipate that there may be argument for revision of this base year later in the regulatory process.

Step changes

CCP subpanels have generally considered that there are three broad criteria for assessing whether a proposed expenditure meets the requirements for a 'step change,' and these were stated by CCP17[7] these being:

1. "Legitimate obligations or capex / opex trade-offs.
2. Something that is new and exogenous, meaning that is imposed from outside of the business.
3. Recurrent, or likely to be recurrent, it cannot be a one-off cost.

A proposed expenditure that meets either the first or second criterion, as well as the third criterion, is highly likely to be justified as a step change, being an increase in operating expenditure that customers will pay for. We also observe that step changes can be negative, providing savings customers, but in practice there are very few examples of a negative step change."

We will use these broad principles to test step changes that are proposed in the Draft Revenue Proposal and subsequent Revenue Proposal. For now we recognise that there has been considerable discussion within Powerlink and involving their RPRG about potential step change proposals with up to 27 different potential step changes having been considered.

It is testament to the engagement processes that has been undertaken that a much smaller number of step changes are still under active consideration these being step changes associated with cyber security and transmission ring fencing. We recognise that the AEMO National transmission fee continues to grow and that this was mooted initially as a potential step change. We suggest that this is an issue for AER to resolve as it is common across all network businesses and is clearly exogenously determined, so non-controllable for the NSP.

It is our understanding that insurance costs also remain an active question. This is an expenditure that could well change between now and 2022. We accept that insurance premiums are rising substantially at the moment, and may rise significantly over the next couple of years. It is also apparent that insurance premiums tend to follow something of a cycle and may will be trending

[7] https://www.aer.gov.au/system/files/Consumer%20Challenge%20Panel%2017-%20Submission%20on%20the%20Victorian%20Electricity%20Distribution%20Regulatory%20Proposal%202021-26%20-%20June%202020_3.pdf

down from current levels during the 2022-27 period as market supply liquidity improves in response to market demand. It is not clear to us how Powerlink plans to address this issue.

CCP23 also notes that the AER is developing guidance notes for networks on its proposed treatment of insurance coverage event applications.[8] In its consultation paper, the AER indicates its assessment of a pass through event will consider whether the level of insurance cover is "prudent and efficient", and whether there is an "efficient allocation of risks between the Network Service Provider and its customers".[9] We will be interested in how Powerlink takes account of these matters in determining the extent of its insurance coverage.

Trend

Powerlink estimates rate of change, or trend, changes for output, price and productivity factors. At the time of writing, September 2020, impacts of COVID-19 are still unknown and largely unpredictable so there is clear difficulty in confidently predicting trend changes, particularly for output. Consequently we expect that trend revisions will be necessary up to the final decision this revenue period, and potentially beyond.

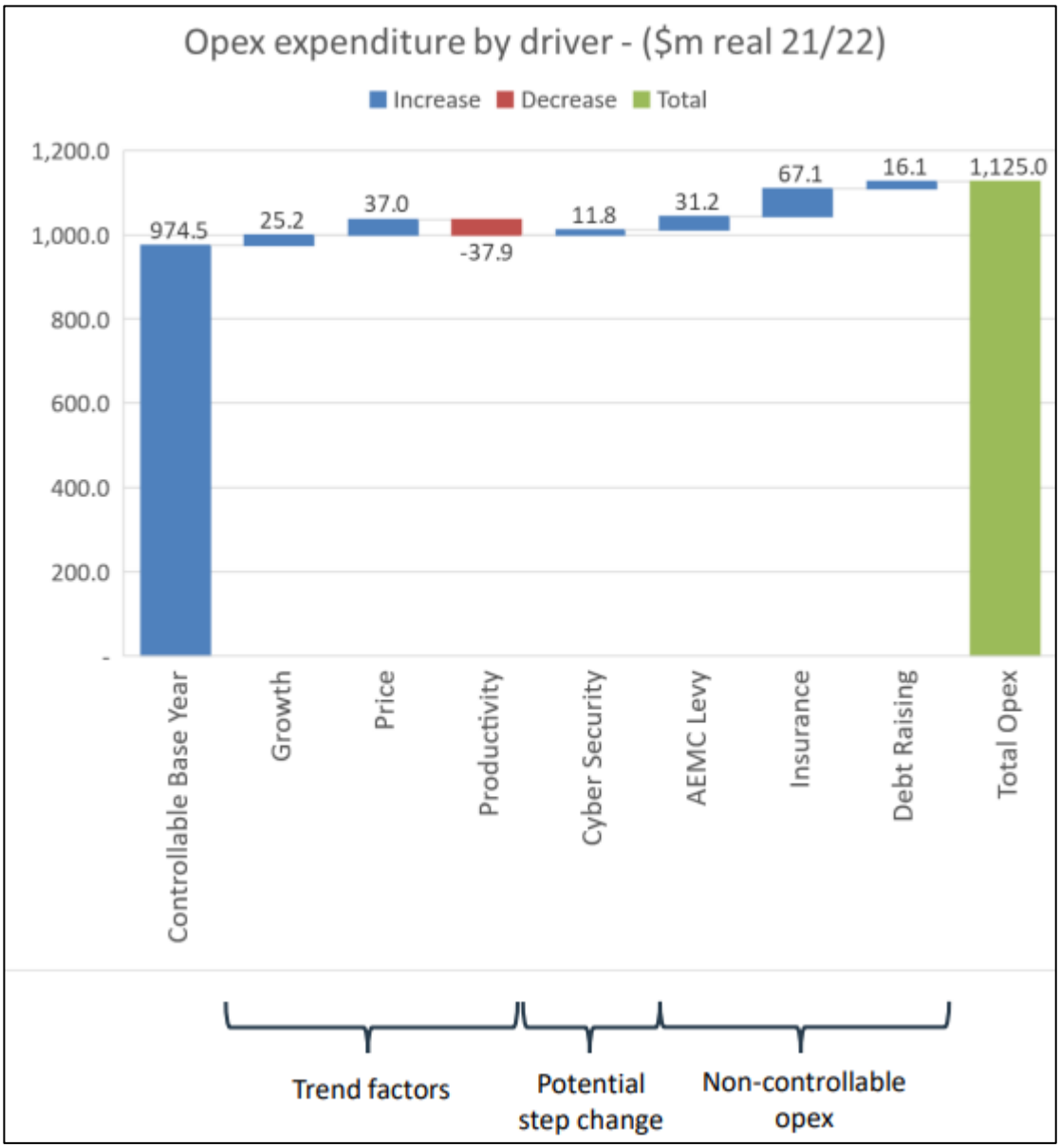
Noting the climate of uncertainty, it is also crucial that planning for an essential service continues on a best estimates basis and we consider that Powerlink is applying appropriate forecasting methodology.

We note that for prices growth, there are two major factors at play, these being labour and materials costs. We anticipate that both of these will be impacted by COVID-19 implications with labour in particular likely to be lower due to the current economic recession and likely slow to moderate growth in the post COVID economic recovery.

The following chart from the PPFP summarises Powerlink's perspective on operating cost changes for the next regulatory period.

[8] See AER, *Consultation paper, Guidance note on key matters the AER is likely to have regard to when assessing an insurance coverage event application*, August 2020. https://www.aer.gov.au/system/files/AER%20-%20Insurance%20coverage%20pass%20through%20event%20consultation%20paper%20-%20August%202020.pdf

[9] Ibid, p 3.

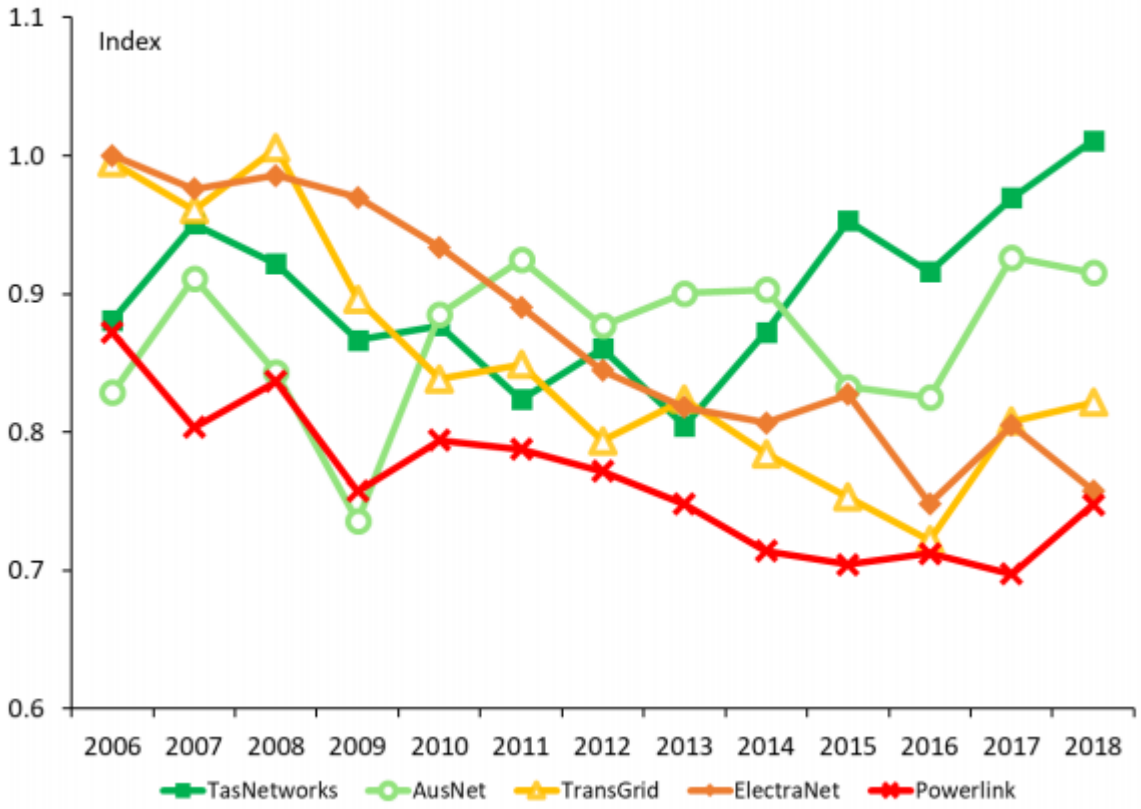


We note that productivity results in a decrease of the order of about 0.14% from the base year, the only decrease in opex category expenditure.

Noting that benchmarking[10] for Powerlink does not indicate a high level of efficiency, we suggest that there is likely to be options for improvement in productivity and resultant improved outcomes for customers with the forthcoming considerations of the Draft Revenue Proposal and Final Revenue Proposal.

[10] AER, Transmission Benchmarking Report 2019, November 2019. https://www.aer.gov.au/system/files/D19-187224%20AER%202019%20transmission%20network%20service%20provider%20benchmarking%20report%20-%20November%202019.PDF

Electricity transmission productivity levels by state, 2006–2018



We also aware that Powerlink and the AER have been in discussion about how the benchmarking is applied to Powerlink and comparability of data sets used for benchmarking modelling, with an implication being that Powerlink's productivity may be better than this table indicates. We look forward to reviewing this question with the release of the 2020 transmission benchmarking report.

7. Capex

7.1 Capex Overview

Powerlink's capex program needs to be considered in the context of the prevailing economic conditions. Improving the affordability of energy services is a key element to a sustainable economic recovery for Queensland. At the same time, Powerlink's capex program must respond to the extensive changes in the energy market with the expansion of renewable energy, battery and related technologies.

In the regulatory periods before the current period, Powerlink undertook a massive capital investment program. This program greatly expanded Powerlink's regulatory asset base (RAB) and contributed to an average capex productivity decline of -2.22% per annum between 2006 and 2018. The most recent benchmarking report suggests that Powerlink has reduced this decline, reflecting the significant reduction in capex during 2018-22 compared to 2013-17[11]

[11] Economic Insights, *Economic Benchmarking Results for the Australian Energy Regulator's 2019 TNSP Annual Benchmarking Report*, September 2019, Table 4.5 p 27.

CCP23 therefore welcomes Powerlink's current engagement with their customers and the AER as part of Powerlink's progressive refinement of their capex plans. As a result of this more intensive review process, Powerlink advises that the forecast value of its RAB over 2022-27 will decline.[12] This will, over time, contribute to the improvements in productivity while providing scope for investment in transitioning to the new energy market.

However, CCP23 is concerned the proposed capex for 2022-27 is 18% higher than the expected capex in the current 2018-22 regulatory period despite a forecast of negative growth in transmission delivered demand (see section 7.2 below). It is important, for instance that demand growth and RAB growth are considered together to avoid repeating the disconnection of the two factors in the 2008 to 2014 period (in particular). Recent productivity gains are at risk along with the opportunity for Powerlink to address the new market challenges without increases in transmission prices.

For example, around $933.6 million ($real 2021/22) or 88% of Powerlink's current total capex proposal of $1065.2m for 2022-27, is based on its network non load-driven capex. This is 25.5% more than its non load-driven capex for the 2017-22 regulatory period. Powerlink states that the main driver of this additional reinvestment expenditure is the increasing number of steel lattice transmission towers as the age of these towers and risk of corrosion increases.[13]

We are looking for evidence that this replacement program is not only prudent and efficient with respect to the replacement of the existing assets, but that the replacements are 'fit for purpose' to adapt to the new energy market and security requirements.

For example, CCP23 will look to see whether the replacement program contributes to the future development of the Renewable Energy Zones (REZ) or is consistent with the most recent Integrated System Plan (ISP). AusNet Services, for instance, has identified in their draft capex plan the parts of their replacement capex which would be changed if certain projects identified in the ISP proceed.

Similarly, the ICT investment should clearly demonstrate how it will drive efficiency for existing operations but also be 'fit for purpose' to meet the operational and security control requirements arising from the changes to the energy market including the Queensland Government' climate transition strategy to reach 50% reduction in emissions compared to 2005 by 2030 and zero net emission target by 2050.[14]

CCP23 will be looking to the AER to also undertake a holistic review of Powerlink's capex program with a focus on demonstrated efficiency and prudency of its replacement capex proposal but also whether the replacement capex and the ICT programs reflect a coordinated effort to adapt to the new energy market and cyber security issues.

In this context we note the current capex forecast methodology debates concerning top-down versus bottom up forecasting, repex modelling and the like. We recognise that Powerlink and the AER have worked together to better understand the forecast capex methodologies and we expect

[13] Powerlink, *Preliminary Positions and Forecasts Paper Supporting Document*, August 2020, p 14.
[14] See for instance, https://www.qld.gov.au/__data/assets/pdf_file/0026/67283/qld-climate-transition-strategy.pdf.

that Powerlink's proposed 'hybrid' approach, with a greater emphasis on bottom up forecasting, will better reflect the issues raised by the AER in its determination of the 2017-22 capex allowance.[15]

Our concern is that the focus on the forecasting modelling methodologies will distract from a holistic view of efficiency and adaption. The long term interests of consumers are best served at this time by also considering a total system perspective – how do all the components of the capex fit together to drive improvements In overall efficiency and to support the adaption of the transmission system to the future market conditions at least cost.

In this context, and recognising the complexities and uncertainties that Powerlink is facing over the next decade, we strongly encourage Powerlink to continue to engage with consumers and the AER to refine their capex proposal. Affordability for all consumers, operational efficiency and adaption of the business to meet future supply reliability challenges should be central objectives to this discussion.

The following sections will consider a number of discrete elements of the capex forecast, but our comments below should be taken within the broader context of a more holistic assessment of the total program as outlined above.

7.2 Demand Forecast

The PPFP forecasts that delivered demand over the 2022-27 period will be flat. Powerlink's 2019 Transmission Annual Planning Report[16] suggests that transmission delivered energy will decline at the rate of -0.7% per annum[17] over the next 10 years while overall electricity generation output would increase slowly by 0.5% per annum. This difference between overall generation and delivered energy arises from the development in solar farms and wind farms connecting directly to the distribution networks. The transmission delivered summer peak is forecast to increase slowly by 0.5% per annum over the next 10 years.

CCP23 is pleased to see that Powerlink is working closely with AEMO on the development of these forecasts as this will ensure greater consistency and confidence in the forecasts, notwithstanding the vagaries of forecasting. We expect that these forecasts will be further updated as the impacts of COVID-19 and the implementation of Queensland's emission reduction program are better understood.

Overall, therefore, we consider that Powerlink's forecasts for annual and peak delivered demand are reasonably consistent with third party forecasts (AEMO) and confident that Powerlink's robust processes will respond to any further changes between now and its Revised Regulatory Proposal (RRP).

In particular, CCP23 would like Powerlink's forecast of delivered demand to include a more detailed analysis of:

- The impact of the State Government's climate transition strategy and of the national energy market changes on their delivered demand forecasts and associated capex requirements.

[15] For example, in its 2017 Determination, the AER did not agree with Powerlink's forecast of the mean asset replacement life for transmission towers and based on this difference, the AER reduced Powerlink's replacement capex forecast by some $53.4m. See: AER, *Final Decision, Powerlink transmission determination 2018-18 to 2021-22*, Overview, April 2017, Table 3.8, p 25.

[16] Powerlink, *Transmission Annual Planning Report*, December 2019.

[17] Based on the medium economic growth rate forecast. For details, see ibid, Table 2.2, p 30.

- The impact of the proposed transmission pricing reforms as set out in the Transmission Pricing Consultation Paper.[18] Powerlink highlights in the paper that changes in pricing arrangements *"will inform optimum investment and should result in customers being better off in the long term"*. [19]

7.3 ICT Capex

The CCP understands that Powerlink is continuing to develop its ICT program for 2022-27 and will be engaging in further consultation on the important issue of cyber security plan prior to submitting its Regulatory Proposal. ICT has become a significant component of network expenditure and CCP is pleased to see that Powerlink will continue to engage with consumers on the next stages of the program.

In reviewing the ICT proposal, the CCP23 will be drawing on its concerns with other network ICT proposals. For example, some of the areas that we have identified and will be considering when evaluating Powerlink's program are:

- Gaps in the overall ICT strategy and how it accommodates the objectives of enhancing operational efficiency, responding to security threats and adapting the network for the future.
- Overly complex and/or ambitious ICT programs with associated heightened risk of delivery capability in terms of timing, resources and outcomes.
- Poorly developed business cases for individual ICT projects including poor definition of the problem to be solved and the assessment of benefits and costs in consumer terms.
- Lack of outcome measures specified in advance of the program implementation to enable an ex-post assessment of the costs of the project and the delivery of the promised benefits for consumers.
- Absence of a transparent performance reporting mechanism that can provide confidence for consumers regarding the delivery of the benefits.
- Clear information in the regulatory proposals to demonstrate that the benefits of past ICT investments are realised, e.g savings in operational costs.
- Independent assessment of (a) whether the ICT program is consistent with international best practice[20] and (b) whether the ICT project meets the requirements of the Australian Energy Sector Cyber Security Framework (AECSF).

We will also be looking for some consistency with the AER's guidance on non-network ICT capex assessment approach for distribution businesses that was published in November 2019.[21]

7.4 Contingent Projects

Given the large size of many transmission projects and the uncertainty of timing around the implementation of the ISP, the AER's contingent project framework provides an important

[18] Powerlink, *Transmission Pricing Consultation Paper*, July 2019.
[19] Ibid, p 9.
[20] For example, by applying a recognised digital maturity assessment model to ensure that the ICT strategy aligns with the business and operating models and the future state of the company.
[21] AER, *Non-network ICT capex assessment approach*, November 2019. https://www.aer.gov.au/system/files/AER%20-%20Guidance%20Note%20-%20Non-network%20ICT%20capex%20assessment%20approach%20for%20electricity%20distributors%20-%2028%20November%202019.pdf

mechanism to ensure uncommitted projects are recognised but the associated capital is not included in the RAB until and unless the project proceeds.

Powerlink has provided some initial indication to the RPRG of its expectations regarding potential contingent projects. What is clear from this analysis is that most of the contingent projects identified in its 2017 regulatory proposal did not eventuate or were postponed. These projects were augmentation projects and as circumstances changed, there was no immediate need for these projects to proceed. As a result, consumers were not faced with funding assets that did not materialise.

CCP23 understands that the capex forecast included in the PPFP does not include contingent project capex and we accept that this is reasonable at this stage of the development of the Regulatory Proposal. However, we note:

- It is important that these projects, along with an estimate of the costs and benefits are included in the Regulatory Proposal as consumers need to be aware of potential increases in capex. The initial cost-benefit studies by AEMO should provide an early perspective on these costs and benefits. However, there is room for improvements in these estimates as indicated by the increases in costs for the Energy Connect process.
- The QNI Minor project has been identified in the ISP and has already proceeded through all the stages of the RIT-T assessment process. The ISP 2020[22] suggests that this project should now proceed in 2021 and the costs and benefits should therefore be included in Powerlink's 2022-27 the Regulatory Proposal.

Recently, Powerlink has asked the AER to allow the contingent project option for augmentation capex to be available for large-scale replacement capex proposals.

CCP23 would encourage the AER to consider Powerlink's request for contingent reinvestment projects. Our view is that a significant proportion of new capex is allocated to replacement capex. With the many potential developments in the transmission system driven, for instance, where there is considerable uncertainty regarding future demand, developments in generation and the ISP program.

AusNet Services' analysis (AusNet's regulatory process follows similar timing to Powerlink) of the potential impact of the ISP on their replacement program also demonstrates the benefit to consumers of broadening the application of the contingent project framework to include large replacement capex projects, just as the AER has done with respect to the application of the regulatory investment test (RIT-T).

It is important, however, for there to be careful consideration of the definitions of the 'trigger events' for implementing a contingent replacement project as CCP23 would not like to see wide-spread use of this mechanism for replacement capex, in part because the contingent project expenditure generally has less consumer scrutiny than the formal regulatory review process.[23]

[22] See for instance, AEMO: *2020 Integrated System Plan, Final*, July 2020. AEMO states on p 14: "*QNI Minor, a minor upgrade of the existing interconnector, adding over 150 MW thermal capacity in both directions, on track to be commissioned in 2021-22"*

[23] However, we acknowledge that there have been significant improvements in the RIT-T review process generally through the refinement of the AER's RIT Guidelines.

Appendix 1

Conclusions and Capability of Acceptance

CCP24 re Australian Gas Networks Access Arrangement proposal, SA

From early discussions between AGN and CCP24, AGN was clear that they intended to lodge an Access Arrangement proposal with the AER that was "capable of acceptance."

At the public forum we raised this intention of capability of acceptance saying that "AGN's aim was to lodge an Access Arrangement that would be 'Capable of Acceptance' by the AER, customers and stakeholders." We concluded our presentation by saying that we would take the question of capability of acceptance very seriously and would give further consideration to what it meant in practice. We presented Indicative criteria that we would use in our Advice in responding to whether the AGN Access Arrangement was capable acceptance, these criteria being:

- Demonstrated consumer support across the diversity of consumer interests, particularly with the 'hydrogen journey'
- Addresses affordability concerns
- Follows AER guidelines and regulatory models
- Efficient business expenditure
- Demonstrated, responsive leadership engagement
- Further engagement re market expansion capex, Vulnerable Customer Strategy, Innovation Incentive Scheme

We observed that the notion of a regulatory proposal being "capable of acceptance" is not new, indeed a search of the term "capable of acceptance "on the AER website[24] yielded 4621 results though the full term applied to about 100 of the results generated. From a brief review of the results it is apparent that the term has had currency since about 2016. The term has mainly been used by consumer groups, CCP subpanels and network businesses and has been overwhelmingly associated with network regulatory proposals and was also actively used in the 2017 review of rate of return guidelines.

CCP9 concluded their Advice to the AER in February 2018 regarding the ElectraNet revised revenue proposal for 2018-23:

> "we would also like to thank the members of ElectraNet's consumer advisory panel for the work they have put into ensuring that Electra net achieves its ambition of a 'no surprises' proposal, that is 'capable of acceptance' by the regulator."

We note that AGN also presented its Victoria and Albury Access Arrangement proposal in 2017 with the express intent that it be capable of acceptance, which was largely supported by CCP11 (Victorian Gas Reset for 2018-2022) in its response to the AGN Vic AA Proposal said:

> "AGN has stated that 'Our overarching objective is to submit a plan that delivers for customers, is underpinned by effective stakeholder engagement and is capable of being accepted by the AER.' Overall, CCP11 considers that AGN has clearly met its objective of

[24] Search undertaken on 2/8/2020

presenting an Access Arrangement Proposal which is underpinned by effective stakeholder engagement."

We are not aware of any specific AER documentation that seeks to specify the practical meaning of 'capable of acceptance' in a network regulatory process though it is our experience that AER decision-makers are eager to see regulatory proposals that are lodged after a development process that has included active and robust consumer engagement and quantifiable indications of consumer support for what is lodged.

We suggest that the notion of 'capable of acceptance' has perhaps been more aspirational than pragmatic to date and that this Access Arrangement proposal from AGN requires active consideration of the meaning of capable of acceptance and then assessment of the extent to which the AGN proposal meets the stated intent as was implications for a proposal that is at or near capability of acceptance.

But what does "Capable of acceptance" mean in practice?

There are some examples of processes that seek to embed consumer engagement in network regulatory process that are worth considering briefly before returning to the praxis question about the practice of 'capability of acceptance' in Australia.

"Other" instances of 'capable of acceptance.'

This is not a comprehensive review of potentially relevant examples but touches base on some of the more widely quoted examples in the current Australian energy network context.

1. Scottish Water and WICS

In regulating the water industry in Scotland, the Water Industry Commission of Scotland (WICS) in agreement with Scottish Water and a key consumer group (now Citizens Advice Scotland) agreed to an approach whereby a Customer Forum, jointly appointed by the three parties, would negotiate a regulatory proposal with Scottish Water. The regulator, WICS advised that a proposal with documented agreement from the Customer Forum, would be accepted provided key parameters were within "tram tracks," the ranges determined through consultation and prior to the commencement of the negotiation process.

2. RIIO 2

The U.K.'s Office for Gas and Electricity Markets, Ofgem, now uses a regulatory process referred to as RIIO, meaning: Revenues = Incentives + Innovation + Outputs.

Under this model a network business that presents a regulatory proposal that has the support from robust consumer engagement, can be accepted and fast tracked through the regulatory process. This approach provides rewards to the network business which include reputational benefit, reduced costs in meeting (standard) regulatory requirements as well as capacity to get to market early particularly for major capital projects with improved capacity to go to market when contractor prices may be more favourable to the network business. Consumers gain much greater transparency throughout the regulatory process and confidence that they are paying an efficient and reasonable price for network services.

3. NewReg

The New Reg: "Towards Consumer Centric Energy Network Regulation" approach paper of March 2018 provided the first objective for this trial as being:

"to successfully apply the proposed process to produce a revenue proposal that reflects consumer preferences and provides the regulator with a proposal with which it will be able to substantially agree."

To the best of our knowledge the "NewReg" trial did not go to the point of seeking to specify what the practical implications for the regulator were in dealing with a proposal with which it could substantially agree.

It is worth noting that the AER issued 10 guidance papers specifically designed to assist AusNet Services and their Customer Forum in the negotiations

Factors indicating Capability of Acceptance

From the three examples briefly summarised above and from other discussions, we suggest that good regulatory practice would suggest that the AER could regard a network proposal as capable of acceptance where the following minimum criteria were met:

- The business presented a clear business narrative – clearly describing where the proponent wants to take the business, and why this will be good for consumers;
- Meaningful engagement with consumers and other stakeholders. This will include clear descriptions of engagement processes that were undertaken to ensure that a diversity of perspectives was achieved, clear evidence that advice from customers and stakeholders was heard, including the advice that the network may not have wanted to hear. Clear documentation of how input from customers and stakeholders has been applied in the regulatory proposal.
- Supporting documentation from consumer groups and stakeholders identifying where agreement has been reached, including through negotiation.
- Evidence that the network business has critically assessed the options available to it, (e.g. non-network solutions, shorter and longer term options etc), and is looking for the best value for customers.
- Engagement is not always about price reductions, other factor including local differences, service quality and reliability can also be important.
- AER analysis has been undertaken by applying the standard regulatory models including roll forward model, PTRM and other relevant models. Benchmarking is also an important consideration, though this is less of an option for gas businesses.
- Ideally the key parameters of the proposal fall within previously agreed ranges.
- The proposal passes the "pub test" i.e. it is reasonable compared to the past performance of the business, comparisons with peers and consumers have reason to be generally accepting of the price and service impacts.

Business Expectations about Capable of Acceptance

Turning attention now towards a business's possible expectations of capability of acceptance, we suggest that a business could expect the AER to ratify the following aspects of an acceptable revenue proposal:

- the proposal is compliant with the rules
- the forecasts for demand and other relevant factors are reasonable
- the expenditure proposed is regarded as efficient and sufficient to provide necessary services

- the outcomes for customers, including indicative price paths are in line with reasonable expectations and benchmark favourably with peers and with historical performance of the business

For a business we opine that the benefits of a proposal being capable of acceptance are that there is not significant further work to be done, so a lighter regulatory 'touch' reduces the costs that it needs to bear, the business can get on with earlier planning for new projects and there is also 'reputational capital' for the business in being able to go to customers and the public more generally as being credible and trustworthy – attaining a 'social license to operate'.

AER options for a proposal that is considered to be Capable of Acceptance

The question that still remains largely unanswered is what the AER is able to do with the regulatory proposal if the capable of acceptance criteria apply that are similar to this set of criteria. We note that whereas Ofgem or WICS have clarity about fast tracking or some other form of preferential regulatory response for a well-developed regulatory proposal with strong customer support, this option does not overtly exist under the Australian energy rules.

So, what are the options that the AER has for the Australian network business that lodges a proposal that is capable of acceptance? We suggest that there are the following options:

1. The AER Board can accept that the proposal, as an integrated package, is capable of acceptance and issue a decision to say that the proposal as lodged is accepted as both the draft and final decision.
2. The AER teams (opex, repex, augex, forecasting etc) apply their standard models to the regulatory proposal and the proposal is accepted if the results from applying the various regulatory models fall within an implicit, reasonable range.
3. The AER teams apply the standard models and also conduct more detailed investigation of major expenditure items that are proposed, e.g. opex step changes, major new network capital expenditure, non-network capex, e.g. IT. The AER could then issue a draft decision accepting all elements of the proposal except for a small number of specific items require further consideration and then indicate to the business that would accept the revised proposal once the specific items had either been revised by the network or documented support for the original proposal was provided from a robust consumer engagement processes

Consideration of Capability of Acceptance of the AGN AA proposal.

In considering the question about whether the AGN Access Arrangement proposal is capable of acceptance we return to our initial list of criteria that we said we would use to consider the proposal, at the public forum:

- Demonstrated consumer support across the diversity of consumer interests, particularly with the 'hydrogen journey'
- Addresses affordability concerns
- Follows AER guidelines and regulatory models
- Efficient business expenditure
- Demonstrated, responsive leadership engagement

- Further engagement re market expansion capex, Vulnerable Customer Strategy, Innovation Incentive Scheme

based on the discussion above we add to this list the following 2 additional criteria:

- the business presented a Clear business narrative –
- Evidence that the network business has critically assessed the options available to it.

In this advice we have identified 5 aspects of the AA proposal that are pending further action:

1. Consumer engagement regarding the market expansion issues and associated stranded asset risk.
2. AGN delivering the commitment to further engagement regarding vulnerable customer strategy, up to the per customer cost ceiling supported during phase 2 and 3 engagement as well as some demonstrated AGN contribution
3. AGN delivering the commitment to further engagement regarding their innovation strategy and innovation allowance
4. Review of productivity proposal by AER
5. Reasonable revisions of demand forecasts based on further understanding of COVID-19 impacts

This then leads to our assessment of AGN's proposal, against the criteria that we have identified in the public forum, augmented and which we consider to be consistent with both the current standing of regulation in Australia and other relevant processes.

Assessment factor	**CCP assessment**
Clear business narrative	Criteria met. Note focus on three vision elements and future of gas issues including hydrogen leadership
Demonstrated consumer support with diversity of consumer interest	Criteria met. Consumer engagement applied a number of methodologies and demonstrated very strong consumer support
Demonstrated, responsive leadership re engagement	Criteria met
Addresses affordability concerns	Criteria met with the proposed price path
Evidence of critical assessment of a range of options available to the network	criteria met
Follows AER guidelines, regulatory models across the proposal	To be assessed by the AER
Efficient business expenditure	Criteria met, pending AER assessment of efficient base year and annual productivity rate for opex and efficient capex.
Commitment to further engagement on 4 topics: stranded asset risk, COVID-19 impact on demand forecasts, vulnerable customer strategy and innovation incentive scheme	Criteria met, pending undertaking targeted engagement on the four topics in a timetable that enables engagement output to be included in a revised 2021-26 AA proposal, in January 2021

Figure 25. Source CCP analysis

If:

- AGN delivers on our suggested commitments outlined above – based on past performance and recent discussions with AGN we expect they will, and
- AER's review of the Final Plan shows that it meets all of the AER rules requirements,

then we believe the AGN AA proposal is capable of acceptance.