Consumer
Challenge
Panel

CCP23

Advice to the AER on the AusNet Services Transmission Revised Regulatory Proposal and AER Draft Determination for the Regulatory Determination 2022-27

AER Consumer Challenge Panel – Sub-Panel CCP23

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Acknowledgements

CCP23 wishes to thank and acknowledge the staff from AusNet Services, who have been so generous with their time and so willing to share insights into each business and their respective Regulatory Proposals.

We also thank the AER staff for their support and guidance during this process.

Confidentiality

We wish to advise that to the best of our knowledge this Advice neither presents any confidential information nor relies on confidential information for the comments.

The Consumer Challenge Panel sub-panel CCP23

The AER established the Consumer Challenge Panel (CCP) in July 2013 as part of its Better Regulation reforms. These reforms aimed to deliver an improved regulatory framework focused on the long-term interests of consumers.

The CCP assists the AER to make better regulatory determinations by providing input on issues of importance to consumers. The expert members of the CCP bring consumer perspectives to the AER to better balance the range of views considered as part of the AER's decisions.

CCP23 is a sub-panel of the AER's Consumer Challenge Panel. The AER established the sub-panel to focus specifically on the AER's regulatory determinations for the Victorian and Queensland electricity transmission business for 2022-2027.

Acknowledgement of Country

We recognise the traditional owners of the lands on which AusNet Services operates. We respect the elders of these nations, past and present along with the emerging leaders.

1 Executive Summary

Key issues and Themes

Consumer Engagement

Seven collaborative workshops formed the essence of AusNet Services' engagement in preparing its revised revenue proposal. The workshops were held between April and July 2021, and involved a range of consumer perspectives, including households, distribution businesses, and Commercial and Industrial customers.

Once engagement was underway, from April 2021, the process was excellent with high quality, open and respectful engagement, focused on collaborative workshops. We are satisfied that engagement was at "Involve" and "Collaborate" on the IAP2 spectrum for most of the workshop activity. Importantly, we have observed that customer perspectives and advice were well incorporated into the revised proposal.

Capital Expenditure

AusNet Services' revised regulatory proposal (RPP) for capex is some 8.8% ($67 m) higher than the AER's Draft Decision. There are three main capex categories where AusNet Services has increased its capex forecast relative to its initial proposal and the AER's Draft Decision. They are Major Station Projects, Asset Replacement and Safety and Security and Compliance.

Major Station Projects: The capex changes in this category arise from changes in contracting costs, updated AEMO forecasts that moved back requirements for certain projects by a year or two, the early closure of the Yallourn Power Station (for closure in 2028 rather than 2032) and the recent publication in Victorian Government's REZ Development Plan (RDP) (August 2021).

Replacement capex: The AER rejected two major replacement capex proposals in this category; the South-West Victorian Communications Loop **(Loop**) and the 7.5% risk allowance across all replacement capex. However, AusNet Services' includes both of these items in its revised capex forecast.

CCP23 welcomes the additional information provided by AusNet Services regarding the Loop project and considers this project is in line with previous allowances and sufficient information has been provided in the RRP to justify the project. However, CCP23 does not support the 7.5% risk allowance for replacement capex applied across all the replacement capex. The project risks identified by AusNet Services are largely ones that should be regarded as 'business-as-usual' risks.

Safety and Security and Compliance - Phase Monitoring Units (PMU):

The proposed new capex for PMUs is subject to a Direction order by AEMO. CCP23 supports this inclusion although we expect the AER to consider whether the stated costs reflect efficient costs for this program and AEMO has issued a Final Direction consistent with the Draft Direction.

Contingent Projects

CCP23 has reviewed AusNet Services' proposed contingent project to replace three transformers in the Hazelwood Terminal Station in the event of significant expansion of renewable generation in the LaTrobe Valley REZ. CCP23 considers that the proposed contingent project satisfies the requirements in the Rules. Therefore we support AusNet Services' proposal.

Operating Costs

The major focus of opex considerations is the 10 'step changes' proposed by AusNet Services with a decrease for the regulatory period from the $108.7 million proposed in the initial revenue proposal to $99.3 million in the revised proposal.

Most of the proposed step changes result from exogenous requirements that are ongoing and material, satisfying step change criteria. One proposed step change, a new approach to calculating Council rates will result in about $43 million in extra rate charges over the regulatory period, however the exogenous change will be most evident in the first year of calculating rates, using the new method, thereafter rates should be more predictable and ongoing. At this stage, the nates are not accurately known so we suggest that for this regulatory period, they are treated as a "pass through" so consumers are charged actual costs.

Phasor Monitoring Unit expenditure will be required by AEMO, but we regard this as a capital project and are not convinced that the proposed $300k per year operating costs are material, so we are inclined to suggest that AusNet Services can absorb the opex component of this requirement.

Incentive Schemes

Application of Capital Expenditure Sharing Scheme (CESS) and Efficiency Benefit Sharing Scheme (EBSS) will be finalised once final capex and opex proposals are finalised. We are satisfied that both schemes will be applied in accordance with the respective approaches.

The main discussion relating to incentive schemes for AusNet Services Transmission has been about the market impact component (MIC) aspect of STPIS. The MIC measures performance against the market impact parameter, which is the number of dispatch intervals where an outage on the TNSP's network results in a network outage constraint with a marginal value greater than $10/MWh (MIC count).

AusNet is proposing that the MIC is no longer fit for purpose due to the number of exclusions stating that in 2020, 99% of counted dispatch intervals were excluded from final performance.

Following a collaborative workshop discussion, AusNet Services emailed a Proposed MIC Transitional Approach to its TRR Customer Advisory Panel, (CAP) seeking support from the CAP on its proposed approach, which would be submitted to the AER alongside its Revised Proposal on 2 September 2021.

CCP sub-panels have consistently held the view that the incentive schemes need to be reviewed

We were initially drawn, with other stakeholders, to the conclusion that the extent of the exclusions makes it clear that the current MIC scheme is not fit-for-purpose, but on further reflection this might not be the case.

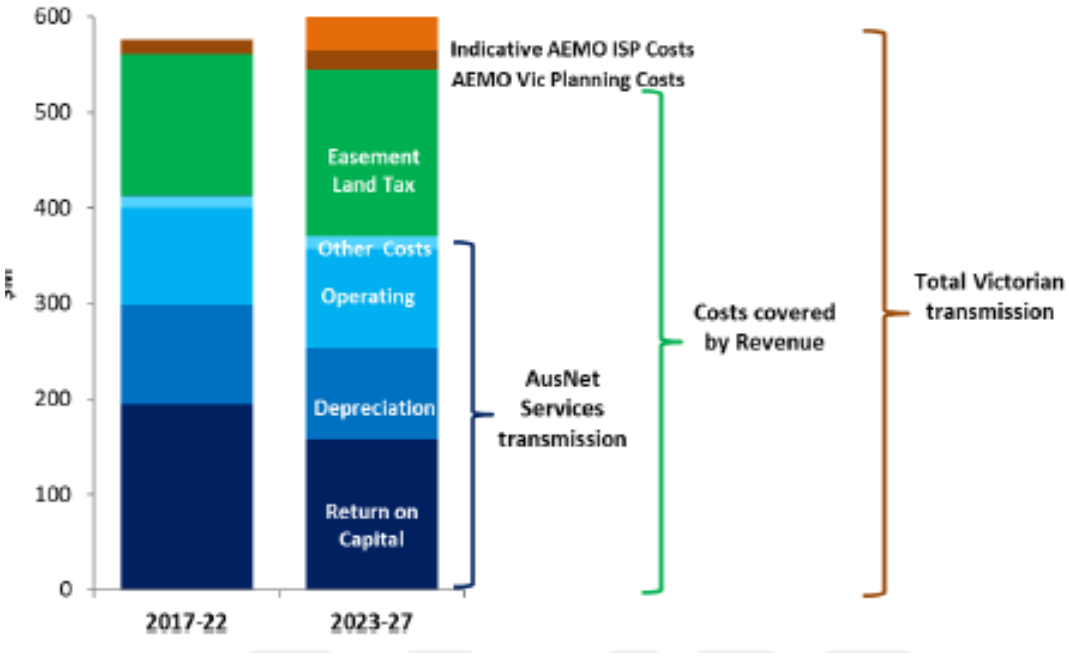
We recognise at this stage that overall review of incentive schemes will not be concluded in time for the final decision in this AusNet Services regulatory determination process, and that therefore the existing STPIS scheme including its MIC component will be used in this determination. On that basis, we support efforts to increase mutual understanding of the scheme and the exceptions regime between the AER, AusNet Services, and all consumer and other stakeholders.

2 Context

2.1 Victorian Transmission Arrangements

Less than two thirds of Transmission Use of System (TUOS) charges paid by Victorian customers are AusNet Services controllable costs, a point that AusNet Services makes clearly in its revised revenue proposal. It is a fair point, and indicates the difference between the Victorian transmission arrangement and those of other jurisdictions. It also means that there are significant transmission charges paid by customers that are outside the direct control of AusNet Services. This is reflected in figure 2.1 below.

Figure 2.1. Allocation of TUOS charges in Victoria



Source. AusNet Services revised revenue proposal

2.2 AEMO Pricing Process

The AER conducts a separate process to the AusNet Services revenue determination process to consider the Electricity Transmission Pricing Methodology 1 July 2022 to 30 June 2027 that applies to the Australian Energy Market Operator, AEMO.

In its Issues Paper on AEMO pricing,[1] the AER says:

> *The Victorian transmission arrangements are different to other regions in the National Electricity Market. As part of its functions, AEMO is responsible for providing shared transmission services. These consist of prescribed transmission use of system (TUOS) services and prescribed common transmission services. Hence, AEMO is a transmission network service provider (TNSP) under the National Electricity Rules (NER).*

Engagement on this pricing methodology is with large energy users, including BlueScope Steel, Energy Users Association of Australia, Kirkland Gold, Air Liquide and Alcoa, and Victorian electricity distributors.

[1] https://www.aer.gov.au/system/files/AER%20-%20Issues%20paper%20-%20AEMO%202022-27%20proposed%20pricing%20methodology%20-%20June%202021.pdf

CCP23 has not been involved with this process, but notes that AEMO charges are part of the final bills paid by all Victorian electricity customers.

2.3 Demand Forecasts

AusNet Services stated in its initial regulatory proposal that it has used AEMO's 2019 forecast as the latest forecast available when the proposals was submitted. AusNet Services also committed to updating its forecast in its revised proposal having regard to the impact of COVID-19 on demand and AEMO's 2020 forecast. However, AusNet Services also suggested that in its draft 2020 forecast, AEMO has overestimated the impacts of rooftop PV growth on maximum demand in several of Victoria's growth areas. AusNet Services stated: "*we intend to undertaken an assessment of whether these forecasts are fit for purpose for our Revised Revenue Proposal"* including further engagement with its consumers.

In its advice to the AER on the initial regulatory proposal, CCP23 stated that it was pleased that AusNet Services was proposing further engagement with consumers on the demand forecast. We noted AusNet Services concerns with AEMO's draft 2020 forecast; however, we also noted that AEMO has sought independent forecast from the CSIRO. The CSIRO report provides projections of the future capacity of small-scale embedded technologies namely rooftop solar, batteries and electric vehicles. CSIRO highlights improvements in the performance of its forecasting methodology particularly with reference to its short-term forecasting method and scenarios to reflect the potential impact of COVID-19 on new installations and sales.

The AER's Draft Decision noted that AusNet Services had advised the AER that it would use a new updated demand forecast in its Revised Regulatory Proposal. The AER's Draft Decision further advised that the AER intends to use AEMO's 2021 forecasts for the final decision.

AusNet Services' Collaboration Workshop 1 held on 20 April 2021 informed AusNet Services that there was some interest in reviewing the impacts of changed demand forecasting and market modelling, but this was a lower priority for most stakeholders.

AusNet Services' Collaboration Workshop 4 held on 27 May 2021 informed stakeholders on the impacts of updated demand forecasts and updated market modelling on AusNet Services' capital expenditure forecast.

In its Revised Regulatory Proposal, AusNet Services confirmed that the business had incorporated new AEMO demand forecasts and market modelling into its economic analysis. These updated demand forecasts were published by AEMO in November 2020, and take account of COVID-19 effects.

Based on the AER's comment in its Draft Decision, and the usual practice of using the latest available information in regulatory processes, we are expecting to see further amendments in the final decision based on new updated 2021 AEMO forecasts.

3 Consumer and Stakeholder Engagement

3.1 AusNet Services Engagement

AusNet Services lead-up to lodging its initial regulatory proposal in October 2020 was hampered by the initial COVID lockdowns and initial uncertainty, including how to engage without face-to-face activities. As we stated in our response to the initial proposal, AusNet Services did not prepare a draft plan or a draft proposal. We were comfortable with this approach, given the circumstances. While AusNet Services could have undertaken more engagement earlier, proactive engagement was going to be required to inform the revised revenue proposal. Having a well-planned post-lodgement engagement program has proved to be successful, noting the extraordinary nature of 2020. This is not to say that earlier engagement would not also have been successful.

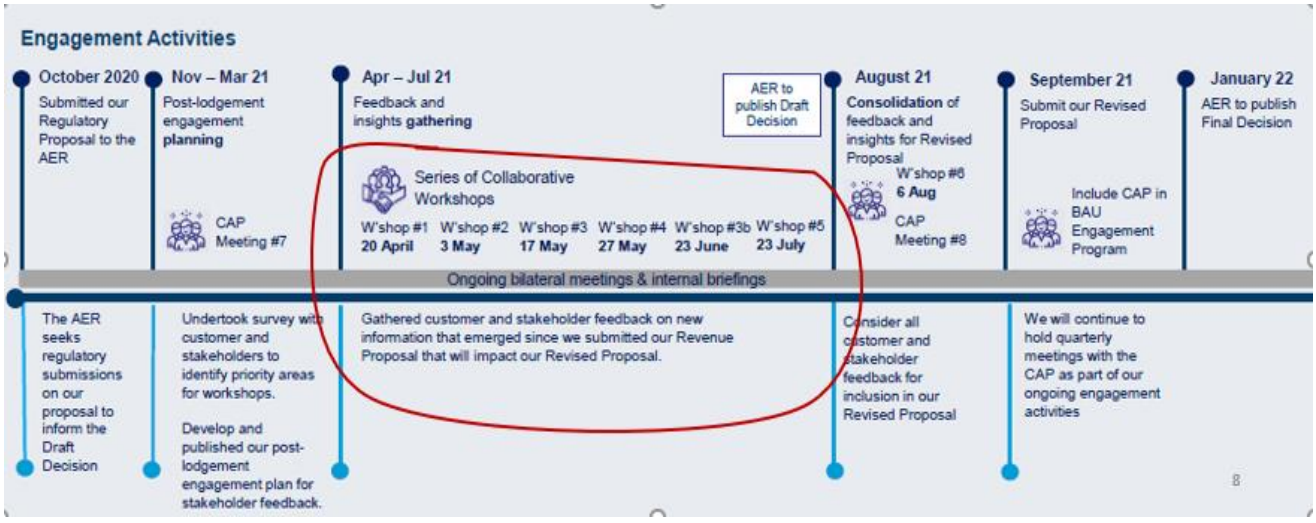
The limited pre-lodgement engagement activities were mainly in the IAP2 spectrum "Inform – Consult" range, for a limited number of engagement actions. While we did not observe bilateral discussions with large Commercial and Industrial customers, we accept AusNet Services advice that ongoing engagement occurs with these large customers.

After the initial regulatory proposal was lodged in October 2020, it was another six months until we observed engagement increasing in direction and focus. The lack of engagement in early 2021 was probably a missed opportunity.

During discussions with AusNet Services staff in March 2021, CCP23 was advised of an intention to run a series of "collaborative workshops," using the TRR Customer Advisory Panel (CAP) as the main participants. CCP23 members were able to observe each of the seven collaborative workshops that followed, and which formed the essence of AusNet Services' engagement in preparing its revised revenue proposal.

We presented the following chart from AusNet Services summarising its engagement journey at the AER hosted predetermination conference on 5th August 2021. We highlighted the collaborative workshops held April – July 2021 as being central to the engagement undertaken by AusNet Services.

Figure 3.1. AusNet Services Consumer Engagement leading to Revised Revenue Proposal



Source: AusNet Services collaborative workshop 5

At the first workshop, AusNet Services made clear that it intended its engagement approach in the lead-up to the revised revenue proposal to be mainly at the "collaborate" level of the IAP2 spectrum,[2] with 'promise to the public' of *"We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible."*

KPMG was appointed to assist with the engagement.

The first workshop served to provide an update on developments since lodgement in October 2020. KPMG subsequently reported[3] these areas of update as follows:

> *… there have been a number of changes to key information inputs which may impact on the Revenue Proposal. As a result, AusNet is developing a Revised Revenue Proposal which considers these changes. At a high level, these changes are:*
>
> - *Updated demand forecasts from AEMO*
> - *Updated market modelling information*
> - *Declining system strength across the network*
> - *The establishment of Victoria's Renewable Energy Zones (REZs) through the Victorian Government's REZ Development Plan*
> - *The closure of Yallourn power station earlier than originally anticipated*
> - *Continued refinement of project scopes and costs.*

AusNet Services asked participants about the ongoing process following the first 'catch up' workshop. Participants said that they expected:

- Transparent and efficient investment by AusNet Services transmission and clear coordination between the various parties managing the Victorian transmission service, also including AEMO, VicGrid and the Victorian Government
- Avoiding over-investment from duplication and messy transitions
- Ensuring that the transmission network remained secure, in terms of system strength during transition to more renewable generation, outage management and cyber security.

Workshop participants said that they wanted to use their time efficiently, focusing on topics involving major expenditure, significant change, and problems where solutions were not clear cut. They expected AusNet Services, as system manager and operator, to be pro-active in identifying issues of concern or interest, and in providing clear, concise information as needed.

The following workshops covered the following topics, as summarised by AusNet Services.

[2] Spectrum_8.5x11_Print (iap2.org.au)
[3] https://www.aer.gov.au/system/files/AusNet%20Services%20-%20TRR%202023-27%20-%20KPMG%20Report%20-%20AusNet%20Collaboration%20Workshop%201%20-1%20SEP%202021.pdf

Figure 3.2. Collaborative Workshop topics

Source: AusNet Services revised proposal

Topics covered by the workshops included:

- System Strength
- Relationship between AEMO and AusNet Services, an arrangement unique to Victoria
- Opex, NB Step Changes
- Capex aspects
- Incentive Schemes

Workshop 3b was a continuation of workshop 3, and specifically dealt with issues of uncertainty. Workshop 3 concentrated on system strength issues, while 3b continued exploration of implications of some system strength focused projects. Participants explored options for some of the less clear cut projects that were under consideration.

During workshop 3, participants gained clarification on the roles of AEMO and AusNet Services regarding system strength responsibilities, and asked about implications of AEMC's rule change about "efficient management of system strength on the power system".

During workshop 3b, following on unfinished system strength considerations, options for the treatment of opex cost recovery for maintenance were considered, with participants supporting the application of pass-through provisions as the best of the proposed options, given continuing uncertainty. They also considered treatment of operational costs for the Moorabool terminal station project, and preferred the

option where the capex allowance is re-forecast, ex-ante, to reflect likely timing, and Network Support Agreement (NSA) costs being treated as a pass-through. Participants thought that this option was most likely to reflect actual project costs.

We do not consider the detail of each workshop here, rather noting the role that workshop 1 played in setting the tone for further engagement, and highlighting the importance of system strength considerations, as reflected by an extra workshop being scheduled. Reporting of each workshop is provided in the attachments to the revised revenue proposal, and it is our view that these reports accurately reflect the topics covered, matters discussed, and AusNet Services responses.

3.2 Engagement Assessment

3.2.1 CCP23 observations on AusNet Services engagement

We have commented previously about the slow start to engagement by AusNet Services on the Transmission revenue proposal and recognise that there were some contributing factors. The delay in active engagement once the initial regulatory proposal was lodged was disappointing, and we recognise the overlap in regulatory process for AusNet Services with electricity distribution and transmission revenue resets.

Once engagement was underway, from April 2021, the process was excellent with high quality, open and respectful engagement, focused on collaborative workshops. The participants in the workshops represented the spread of AusNet Services transmission customers and stakeholders: large energy users, generators, and (disadvantaged) households.

Setting the agenda can be awkward, with networks not wanting to 'lead' consumers and other stakeholders, while customer representatives accept that the network has operation expertise, and so best know the uncertainties that may impact on customers. Once AusNet Services and the engaged stakeholders were comfortable with each in other in agenda setting and engagement focus, the workshop proceeded well. It is our view that AusNet Services was initially too cautious in engagement topic identification.

We observed high trust in AusNet Services by the workshop participants, and respect of the participants by the Network. There was common purpose and open debate and discussion in all workshops.

At the predetermination conference on 5 August 2021, we observed that there had been "*less or no focus, so far: depreciation, context / business narrative and Draft Determination*".

We also said "*now AusNet Services need to demonstrate engagement response in Revised Revenue Proposal. (We have good reason to expect that they will)*".

We are now satisfied that engagement was at "Involve" and "Collaborate" on the IAP2 spectrum for most of the workshop activity. Importantly, we have observed that customer perspectives and advice were well incorporated into the revised proposal.

CCP23 also encourages AusNet Services to maintain the high-quality engagement that it has demonstrated since April 2021, to embed consumer engagement as business as usual. There is a very constructive relationship that we observed between the CAP and AusNet Services, this should be nurtured.

3.2.2 CCP23 consideration of the AER's consumer engagement assessment framework

The AER has developed a table to reflect its thinking about how to assess consumer engagement by network businesses. This was included in the Draft Determination as Appendix C. At the pre-determination conference, we presented the table with our assessment of AusNet Services

engagement, colour coded. The following is similar to the assessment that we presented then, except that at the pre-determination conference we said that "High level of business engagement, e.g. access to CEO / Board" had not been evident at that time, and so the 'traffic light score' was 'red'. We have adjusted this assessment from "not evident" to "later in the process", and colour coded 'marginal green'.

The following summarises our perception of the AusNet Services transmission engagement, for the period from April 2021 to lodgement of the revised revenue proposal.

Figure 3.3. Consumer Engagement assessment for AusNet Services

Element	**Possible Assessment – Post Lodgement only**	**CCP23 Assessment of AusNet Services**
Nature of Engagement	**Consumers partner in informing the proposal**	Limited
	Relevant skill and experience of stakeholders and customers	Yes
	Impartial support provided	Option available,
	Sincerity of Engagement	Yes
	Independence of consumers	Yes
	Multiple channels used for engagement	Collab Workshops
Breadth and Depth	**Clear identification of topics and reset relevance**	Yes
	Consumers consulted on broad range of topics	Focus on some key topics
	Consumers able to influence topics	Yes
	Consumers encouraged to test assumptions	Yes
	Consumers able to access & resource independent research & engagement	Option available, not requested
Clearly Evidenced Impact	**Proposal clearly tied to expressed views of consumers (applied to RRP)**	Expected, but too early to say
	High level of business engagement, eg access to CEO / Board	Later in process

	Responded to consumer views	reference group
	Engagement impacts clearly identified	Yes
	Submissions from consumers show impact consistent with expectations	Can't say
Proof Point	**Reasonable opex and capex proposed**	Expected, but too early to say
	In line with or lower than historical costs	Probably, but too early to be sure
	In line with or lower than top down analysis	TBA – AER role
Key to Colours	**Dark Green: Strong Application** **Mid Green: Reasonable Application** **Ochre: Not Applicable or Too early** **Raspberry: Application not observed**	

Source. AER "Chart 3" and right hand column – CCP23

On the assessment of high level business engagement, the KPMG write-up says:

> *AusNet MD Presentation and Q&A AusNet's Managing Director, Tony Narvaez, thanked stakeholders for their contributions to AusNet's Revenue Proposal. Tony referenced the many changes and challenges that AusNet's transmission network is facing (including that the operating environment is highly changeable and fast-moving), and that it is a whole of industry effort to maintain a secure, reliable and affordable system throughout. Tony said that AusNet's proposal relies heavily on cost pass-throughs where costs cannot be accurately estimated, to help ensure customers are not paying more than they need to.*[4]

We observed that the Managing Director participated actively in the final workshop, and that the senior decision makers have adopted consumer input in the revised proposal, as seen in the revised proposal. Our main disappointment is that this happened very late in the engagement process.

In its documentation of the final workshop, workshop 7, AusNet Services says *"AusNet accepted all stakeholder comments. Nothing contentious or new was raised in this session."*

ANS reported "Stakeholder Feedback Stakeholders were very complimentary of AusNet's post lodgement engagement program during the workshop. Stakeholders praised:

- *AusNet's openness and honesty during the post-lodgement engagement program*
- *AusNet's willingness to be challenged and asked hard questions*
- *AusNet focusing its engagement on the topics that are important to stakeholders, even when they might not be directly relevant to the regulatory process.*

[4] Forum Friday 6th August ANS notes: https://www.aer.gov.au/system/files/AusNet%20Services%20-%20TRR%202023-27%20AusNet%20Report%20-%20AusNet%20Collaboration%20Workshop%206%20-%201%20Sept%2021.pdf

Stakeholders have been asked to provide AusNet with further feedback via a survey that will be distributed soon."

After a slow start with engagement before lodging the initial proposal, and sluggishness in setting up engagement activities post initial lodgement, the engagement from April 2021 to lodgement of the revised revenue proposal was genuine, open and constructive, with AusNet Services applying feedback gleaned from consumer perspectives engaged. The next step for AusNet Services is to build ongoing engagement into business and usual.

4 Rate of Return, Depreciation and Inflation

From our review of the AusNet Services revised proposal, it appears that AusNet Services has adopted the AER's Draft Decision across the board regarding these financial parameters, albeit updating some numbers in response to new information.

We appreciate this approach being taken by AusNet Services, and have no further comment on these matters.

5 Capex

5.1 Changes in Capex in the Revised Regulatory Proposal (RRP)

AusNet Services' RRP proposes a capex allowance of $820m. This is $22m greater than its original RP. More significantly, AusNet Services' RPP capex is $66m (8.8%) higher than the AER's Draft Determination of $754m. Given this increase, CCP23 has undertaken a more detailed investigation of the proposed capex.

As illustrated in Table 5.1 below, the main differences between the AER's Draft Determination and AusNet Services' RPP relate to major station projects, asset replacement and safety, security and compliance.

Table 5.1: Summary of changes in capex since the Initial Regulatory Proposal

	Initial Regulatory Proposal (IP) $m	AER's Draft Decision (DD) $m	AusNet Services' RPP $m	Difference: AER DD and AusNet RPP %
Major station projects	424	422	445*	+5.5%
Asset Replacement	213	173	209	+20.8%
ICT	84	83	82	-
Safety Security & Compliance	54	54	62	+14.8%
Non-network	22	22	22	-
Total	**798**	**754**	**821**	**8.8%**

*Excludes the proposed contingent project

CCP23's comments below will focus on the three categories of capex that are highlighted in the table above.

We have considered the AER's Draft Decision for the ICT and non-network categories and accept the AER's Draft Decision and AusNet Services' RRP on these two capex categories.

The small differences between the AER's Draft Decision and AusNet Services' RRP in these two capex categories are largely a function of the AER's decision to limit the growth in external contractor costs to CPI. CCP23 agrees with the AER that the network can manage its total external contractor costs, even if the wages of the contracted labour component of these costs increase above CPI (see also discussion on wage and contractor costs below).

5.2 Major Station projects

In its response to AusNet Services' initial proposal, CCP23 largely accepted the proposed capex for major station projects given the importance of the nominated stations to the effective implementation of the Integrated System Plan (ISP). CCP23 also noted that AusNet Services' planning approach was appropriate.

The AER largely accepted AusNet Services' initial proposed capex for major station projects in the Draft Decision. Similarly to the CCP23's conclusions, the AER indicated that AusNet Services had reasonably justified the need for the major station projects, stating:[5]

> *"We consider that AusNet Services has reasonably justified the need for these major station projects, as there is a risk that an asset failure at these stations will affect the safety and reliability and security of the network."*

The AER also noted that AusNet Services *"adopts good industry practice"* in identifying and quantifying the impacts of failure of aging assets on its service delivery capacity and that AusNet Services has *"likely identified the efficient costs of major station projects".*[6]

However, the AER also noted that the information provided by AusNet Services to justify its proposed major station projects was likely to change in the RRP due to ongoing developments in the Victorian generation mix, state government policy and updated costing and demand forecasts.

AusNet has cited the following drivers for revision of its major station capex in the RRP:

- The announcement by EnergyAustralia in March 2021 that it would retire Yallourn Power Station (capacity of 1.450MW) in mid-2028 instead of 2032.
- The Victorian Government's proposals for a $1.6 billion clean energy package, the Renewable Energy Zone (REZ) Development Plan, and the establishment of a new entity, VicGrid, to facilitate the connection of REZs to the transmission grid and administer a $540m funding package[7]
- AusNet Services' progressive refinement of the costs and scope of the proposed major station projects and project risk costs, including updates arising from the Regulatory Investment Test (RIT-T) process for several projects.
- Updated demand and energy forecasts by AEMO in December 2020 and the subsequent update of AEMO's market modelling.
- The potential impact of additional network support costs that may be required to manage outages throughout AusNet Services project construction periods.

Across all the major station projects there is a **net change** in major station capex of some $21m over the 2023-27 regulatory period. [8]

Table 5.2 below summarises the more significant changes in AusNet Services' forecast of major projects.

Table 5.2: Key changes in AusNet Services' forecasts of major station projects.

Major Station Project	Initial RP $M	RPP $m	Change $M	Comment
Horsham Terminal Station SVC Replacement	31.4	0.0	-31.4	Postponed due to REZ development plan (RDP)
Moorabool Terminal Station Circuit Breaker Replacement	18.1	28.2	10.1	Change in costs, deferred by 2 years due to lower demand

[5] AER, *Draft Decision, 2022-27 AusNet Services Transmission,* Attachment 5, p 14.
[6] AER, *Draft Decision, 2022-27 AusNet Services Transmission,* Attachment 5, p 14
[7] See for instance, Media release *"New Projects to Accelerate Victoria's Renewable Energy Zones",* August 2021, https://www.lilydambrosio.com.au/media-releases/new-projects-to-accelerate-victorias-renewable-energy-zones/
[8] AusNet Services, *2023-27 Revised Revenue Proposal*, September 2021, Table 3-3, pp 44-45.

Major Station Project	Initial RP $M	RPP $m	Change $M	Comment
Loy Yang Power Station & Hazelwood 500kV Circuit Breaker replacement Stage 2	0.0	16.4	16.4	Loy Yang closure brings forward economic case
Sydenham Terminal Station 500kV GIS Replacement	63.2	79.7	16.5	Change in costs, deferral due to lower demand & Integration with Western Vic Transmission Project.
Shepparton Terminal Station B2 & B3 Transformer Replacement	17.0	37.1	20.1	Change in scope & costs

Source: Extract from AusNet Services, *2023-27 Revised Revenue Proposal*, Table 3-3, p 44 -45. Note: this is a subset of the total list of changes in Table 3-3, and includes only the major changes.

Importantly, AusNet Services states that although the total major station capex cost has increased by $21m, there will be minimal impact on total revenue because of the postponement of some major projects to later in the 2023-27 regulatory period.

The deferral of some major station capex has also contributed to smoothing the overall capex profile for 2023-27 thus reducing delivery risk. AusNet Services' Consumer Panel supports this approach. Other key developments in the RRP, and listed in Table 5.2 above, also have the support of AusNet Services' Consumer Panel. These changes include:

- In response to the Panel's concerns about the potential overlap between AusNet Services major station projects and the ISP and the state government's REZ Development (RDP) stage 1), AusNet has:
    - Changed in scope and timing of the Sydenham Terminal Station rebuild to achieve synergies with the Western Victorian Transmission ISP project (WVTP). Integrated delivery with the WVTP will reduce reliability risk and overall cost.
    - Removed the Horsham Terminal Station SVC replacement capex, as a result of the Victorian Governments Stage 1 RDP, with a reduction in total capex during 2023-27 period of $31.4m
    - Included $8m for replacement capex (see below), which had previously been included by the Victorian Government's RDP Directions Paper (issued in February 2020), in order to ensure early delivery of the project.
- Following discussions with the Panel, AusNet Services has removed the expected network support cost elements of its capex and opex program. There is considerable uncertainty about the level of these costs and the Panel proposed that rather than include these estimates in it ex-ante forecasts, AusNet Services should recover any costs through network support pass through rules in the NER (NER 6A.7.2). AusNet Services estimated the network support costs to be around $20m.[9]

CCP23 appreciates the extensive and open consultation by AusNet Services on these changes, and the implications for both the capex and opex forecasts. We consider that AusNet Services has responded to consumer concerns in its RRP.

[9] See AusNet Services, *2023-27 Revised Regulatory Proposal*, Table 3-6, p 55.

Specific Issues with the Major Station Projects

Horsham terminal station SVC replacement:

AusNet Services states that due to the poor condition of the existing terminal station, there is *"considerable network risk associated with the continued operation of the SVC"*[10] during the 2023-27 regulatory period and before the RDP solution is in place. Failure of the SVC will lead to significant voltage control issues and potentially to constraints on Murraylink and renewable generation in North West and Western Victoria, leading to both supply issues and higher prices to consumers.

AusNet Services is therefore investigating whether an economic and technically feasible non-network solution is available to manage this risk over the short term. Alternatively, AEMO may issue Directions to ensure stability of the system.

AusNet Services states that the potential costs to AusNet Services of managing this risk are uncertain. If additional costs are incurred, AusNet Services proposed to pass through these costs using the arrangements under the network support pass through rules.

CCP23 regards this as a reasonable response to the risks involved in AusNet Services decision to cancel/postpone the replacement of the Horsham terminal station SVC.

Expected closure of Yallourn Power Station (YPS):

AusNet Services states that the early closure of the YPS in 2028 will increase the criticality of network assets connecting other generation sources, including interconnectors. To address this, AusNet Services reviewed some four major projects to assess if they should be brought forward into the 2023-27 regulatory period. Of these four, two projects were identified as potentially viable options to be considered by the Customer Panel. They were:

- The Loy Yang Power Station and Hazelwood Terminal Station (HWTS/LYPS) 500kV circuit breaker replacement Stage 2 at an additional capex of $16m (see Table above)
- Asset replacement works at the Hazelwood Terminal Station with an estimated cost of $45m.[11]

Following discussion with its Panel, AusNet Services' revised proposal includes the HWTS/LYPS project. The Panel however, considered that the asset replacement works at the Hazelwood Terminal Station should be proposed as a contingent project, depending on the extent of new generation developed in the region during 2023-27.

CCP23 considers these are reasonable proposals to address the risks posed by the early closure of the YPS, and the uncertainty of the timing of the developments in the region.

Impact of changes in AEMO demand forecasts and energy forecasts:

AusNet Services' Customer Panel sought an update an update to the RP following AEMO's revised demand forecasts (December 2020). AEMO's revised demand forecasts are higher than the 2019 demand forecast for the state as a whole. AusNet Services, however, highlighted the importance of considering the impact in specific parts of the network where it had proposed replacement projects. The economic analysis indicated that the impact of the changes to the demand forecast was not sufficient to change the economic timing of these projects.[12]

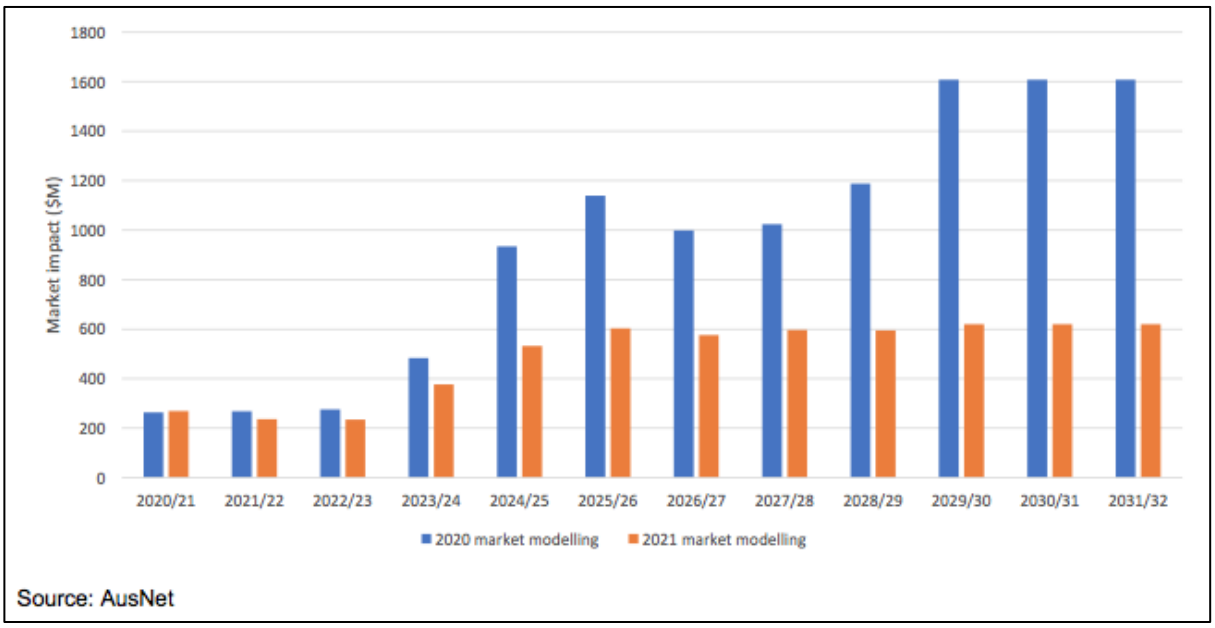
[10] AusNet Services, *2023-27, Revised Regulatory Proposal,* September 2021, p 50
[11] AusNet Services, *2023-27, Revised Regulatory Proposal*, September 2021, p 56
[12] There was one exception, the East Rowville Terminal Station, where significant declines in forecast demand would delay the need for replacements by one year. However, AusNet Services' RP had already included this

CCP23 considers that AusNet Services has undertaken the necessary economic evaluation of the impact of AEMO's changed demand forecast and has responded appropriately.

Similarly, AusNet Services examined the impact of AEMO's revised forecast of energy demand. AEMO's December 2020 energy forecast was significantly lower than the 2019 energy forecast largely due to the inclusion of Victoria's Solar homes program for distributed PV in AEMO's central scenario.

The assessment of AEMO's revised energy forecast indicated that the proposed Sydenham Terminal Station switchgear replacement could be postponed 1 year (from 2024-25 to 2025-36. see table above) due to a decrease in the market impact. This impact is illustrated in Figure 7.1 below.

Figure 5.1: Market impact of 2020 energy forecasts on the Sydenham Terminal Station



Source: AusNet Services, *2023-27 Revised Regulatory Proposal*, September 2021, Figure 3-15, p 59.

CCP23 considers that AusNet Services has responded to request of its Panel to assess the impact of AEMO's changed demand and energy forecasts and has adopted an appropriate solution in conjunction with the Panel.

5.3 Replacement Capex

AusNet Services' initially proposed replacement capex of $213.4m for the 2023-27 regulatory period. CCP23 advised the AER that it should not accept some aspects of the replacement capex proposal. In particular, the proposed risk allowance of 7.5% applied across all replacement capex. CCP23 considered that risk allowances were reasonable for large projects with uncertain costs and timing such as the major station projects but was not required for replacement capex as a whole given much of the replacement was business-as-usual activity where the costs should be reasonably known and incorporated into the capex forecast.

The AER's Draft Decision reduced this allowance to $173m. The AER accepted that AusNet Services had adopted a relatively prudent approach to forecasting replacement capex. However, the AER did not accept:

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delay so it did not change the RRP. See: AusNet Services, *2023-27, Revised Regulatory Proposal*, September 2021, pp 56-57.

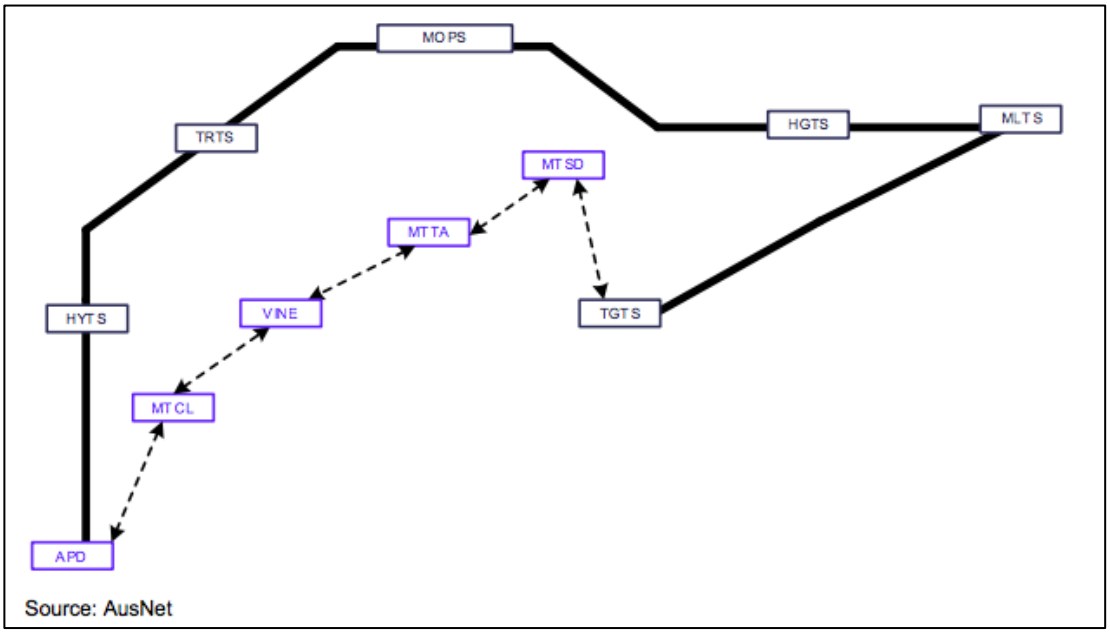
- The proposed South-West Comms Loop Upgrade project. The AER stated that this was not driven by an asset replacement need.
- The proposed 7.5% risk allowance for the asset replacement program, stating that this was more relevant to major station projects.

AusNet Services has not accepted the AER's Draft Decision on these two issues. AusNet Services' revised replacement capex is $209m, some 21% above the AER's Draft Decision. AusNet Services' has provided additional information in the RRP as explained briefly below.

South-West Comms Loop:

The current state of the communication loop is illustrated in Figure 7.2 below

Figure 5.2: Technologies currently deployed on the SW Comms Loop



Source: AusNet Services, *2023-27 Revised Regulatory Proposal*, September 2021, Figure 3-16, p 62.

The solid line in Figure 7.2 above represents the sections of the Loop where optical fibre ground wire (OPWG) is already installed. The dashed line represents the section currently relying on microwave radio. These two lines represent the 'physical layer' of the communications path. The majority of AusNet Services' communication network throughout the state now relies on OPGW technology.

AusNet Services advises that currently, (SDH/PDH)[13] equipment is used to process and transmit data throughout the whole Loop. However, the SDH/PDH equipment is in poor to very poor condition and there have been multiple equipment failures. This level of failure rate has the potential to affect the reliability and security of the transmission network in the future. In addition, it is becoming harder to maintain and source replacement components from suppliers while, in parallel, the demand for its data services will increase as renewable energy expands in the region.

It is, therefore, no longer efficient to replace SDH/PDH equipment with like for like and AusNet Services is progressively replacing SDH/PDH equipment throughout its network with MPLS-TP[14] equipment. OPGW is capable of supporting MPLS-TP equipment, as is microwave radio towers *if* bandwidth requirements are relatively small or the cost of optical fibre installation is high. However, in the South-West region, the

[13] SDH/PDH is synchronous digital hierarchy/plesiochronous digital hierarchy
[14] MPLS-TP is Multiprotocol Label Switching – Transport Profile

existing communication system is already operating at capacity and is expected to come under increasing pressure.

In its evaluation of the options, AusNet Services first noted that during 2017-2020, a similar communication upgrade project worth some $36m was installed and this was accepted by the AER as a replacement project. In response to the AER's concerns, AusNet Services also conducted an economic assessment of the current proposal. Two broad alternatives (with some sub-options) were considered. They were:

- Constructing additional microwave towers to increase capacity; or
- Replacing existing microwave towers with optical fibre cable

The results of AusNet Services evaluation are set out in Table 5.3 below. In brief, the preferred option (Option 4) identified in this analysis is to replace 20 assets per year add new optical fibre link. This $21m project is therefore included in AusNet Services' RRP.

Table 5.3: South-West Comms Loop options analysis

Option Number	Option Description	Capex	Opex	Risk Cost	Present Value	PV Cost Ratio (compared to BAU)
Option 1	BAU - Do nothing different	$0	$318,654	$56,146,101	$37,836,944	1.000
Option 2	Replace 10 assets per year add new optical fibre link	$21,000,000	$96,000	$10,054,915	$31,237,126	1.211
Option 3	Replace 20 assets per year add additional radio links	$26,000,000	$67,500	$7,069,862	$34,936,968	1.083
Option 4	Replace 20 assets per year add new optical fibre link	$21,000,000	$67,500	$7,069,862	$29,936,968	1.264
Option 5	Replace 20 assets per year add additional radio links start year 5	$26,000,000	$157,500	$16,496,345	$35,208,613	1.075
Option 6	Replace 20 assets per year add new optical fibre link start year 5	$21,000,000	$157,500	$23,330,546	$36,327,974	1.042

Source: AusNet

Source: AusNet Services, *2023-27 Revised Regulatory Proposal*, September 2021, Figure 3-17, p 64.

While CCP23 had some initial concerns with this project, we acknowledge that AusNet Services has now provided a clearer explanation of the project and its economic evaluation. CCP23 concludes that it is in the long-term interests of consumers generally for the project to proceed as a replacement project

However, we remain concerned that AusNet Services did not pursue the Victorian Government to include this cost in the government's funding under the RDP. CCP23 understands that at least some costs for the upgrade were initially included in the RDP Directions Paper in February 2020. However, the project has been removed from the August 2021 RDP. AusNet Services explains this as follows:[15]

> *"For the SW Comms Loop project we have worked with the Victorian Government to ensure the RDP does not overlap with our asset replacement plans. This has led to $8 million of "Bring forward costs" from the RDP, which had been included in the RDP Directions Paper released in February 2020 to ensure the SW Comms Loop project was delivered as soon as practicable. However, because AusNet's proposed economic timing reflects the earliest possible completion data, no provision is required in the RDP. Consistent with this, the SW Comms Loop has not been included in the Stage 1 projects announced on 3 August 2021"*

[15] AusNet Services, 2023-27 *Revised Regulatory Proposal*, September 2021, p 50.

CCP23's question to the AER is to clarify is whether the positive evaluation of the OPWG option (relative to the more microwave towers option) is dependent on, or at least substantially affected by, the prospect of expanded communication requirements under the REZ program.

Subject to this assessment by the AER, CCP23 accepts the South-West Comms Loop proposal as a replacement capex proposal.

Risk Allowances

AusNet Services RP included $14.9m (around 7.5%) in a 'risk allowance' in addition to its total underlying replacement program costs. This additional risk cost applied across all replacement capex. This is a similar to the allowance applied to its major station projects, with AusNet Services arguing that the same type of risks apply to the replacement capex program.

CCP23 advised the AER that it did not agree with this aspect of AusNet Services' proposal. While we agreed that a risk allowance was reasonable for the major projects category, CCP23's view was that replacement capex was in the main an ongoing activity where costs and risks should be well understood by the network, and addressing this was a normal part of the network's cost assessments.

The AER's Draft Decision came to a similar conclusion. The AER suggested that contrary to AusNet's position, there was no evidence that volume and price risks are asymmetrical. For example, the AER stated that some costs might be higher and some lower than forecast.

The third risk category identified by the AER related to project scope, contractor delay and weather. The AER stated:[16]

> *"However these are unlikely to significantly affect AusNet Services replacement program as it has more capacity to adjust the timing and order of its replacement activities within its program to maintain overall costs and avoid cost over-runs across the period."*

For these reasons, the AER removed the $14.7 million risk allowance from AusNet Services' asset replacement program

AusNet Services states that: [17]

> *"We broadly accept the AER's reasoning in the Draft Decision in relation to volume and price risks for our asset replacement program …One exception relates to condition assessments, where our experience indicates that this volume related risk is likely to be asymmetric "*.

However, AusNet Services does not agree with the AER's reasoning in relation to the scope and delivery risks, claiming again that the replacement program faces similar risks to its major station program. For example, they state that there are site specific issues that affect the cost outcomes "asymmetrically". Moreover, these risks are increasing as it becomes more difficult and costly to obtain outage agreements from AEMO for planned outages.

Other factors claimed by AusNet Services to justify the risk allowance include new design standards, latent site conditions, technological change or obsolescence, asset condition risk and system strength issues. They also claim that these risks are only known and/or quantified at the detailed design stage and deferring asset replacement programs cannot offset the costs. As further evidence submitted by AusNet Services', a review of 80 asset replacement projects indicated that the estimated cost at completion was very similar to the P50 cost estimate when this included the 7.5% risk allowance.[18]

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[16] AER, *Draft Decision, 2022-27 AusNet Services Transmission,* Attachment 5, p 25.
[17] AusNet Services, 2023-27 *Revised Regulatory Proposal*, September 2021, p 66.
[18] AusNet Services, 2023-27 *Revised Regulatory Proposal*, September 2021, Table 3-8, p 69.

CCP23 has considered AusNet Servcies' revised proposal but remains concerned with a 7.5% risk allowance being applied across all of its replacement category activity.

If AusNet Services' experience is that the P50 cost **plus** the 7.5% risk allowance approximates the actual costs observed, then this should be built into the basic unit forecast costs, not presented as an ex-post addition to all replacement capex unit costs. This would also facilitate benchmarking the efficiency of the relevant costs.

Alternatively, it may be the result of specific risks adding **asymmetrically** to specific project costs. If this is the case, and the project timing and scope cannot be changed (as suggested by the AER) then AusNet Services can set this out in an individual project business case. This would add significantly more transparency then a 'global' additional cost to all replacement capex projects.

Overall, therefore, CCP23 agrees with the AER that timing and scope risk can generally be mitigated. Moreover, the reasons given by AusNet to justify a global risk allowance are very largely common to business-as-usual replacement activity. AusNet Services should be aware of these costs and build them into the ex-ante unit costs of individual projects.

CCP23 continues to support the AER's position that the proposed 'risk cost' addition to the cost of replacement activity should not be allowed.

Safety, Security and Compliance

AusNet Services initially proposed a total of $54.2m for this capex category an increase of 47% over the expected actual capex in the current regulatory period reflecting increased expenditure in areas such as insulator replacement and communication assets in the 2023-27 regulatory period. However, this increase was offset in part by decreases in capex in other areas of this category.

The AER accepted the proposed capex in this category, subject to a small change arising from the difference in the external labour cost forecast. The AER's alternative forecast was $53.7m.

AusNet Services accepted the AER's revised forecast in its RRP with the exception of a new project, the **Phasor Monitoring Units** (PMUs), which are now included in the RRP forecast capex for safety, security and compliance.

This project arises from a Draft Direction by AEMO, which requires AusNet Services to replace 1 PMU and install 19 new PMUs at various locations on the transmission network. The PMUs will assist AEMO in its market and power system security functions.[19] Although the timing of the Direction is uncertain, AusNet Services believes that most of the expenditure will be required in the 2022-23 regulatory year.

AusNet Services revised proposal includes forecast capex of $10m for PMU installation, based on AEMO's Draft Direction.

As noted above, the timing of the project is still uncertain. In addition, CCP23 understands that the AER and AEMO are in discussion on the economic analysis that is required to support the Direction.

CCP23 considers that this project is a regulatory requirement and, in principle CCP23 supports the inclusion of the PMU project into the capex forecast. However, this support is contingent on the AER's examination of the efficiency of the proposed costs and the requirements in AEMO's Final Direction.

[19] AusNet Services, 2023-27 *Revised Regulatory Proposal*, September 2021, p 71.

5.4 Internal Wage and External Contracting Costs escalation

***Internal wage escalation*:**

The AER's Draft Determination accepted AusNet Services initial proposal for internal labour escalation rates based on the EGWWS (Electricity, Gas, Water and Waste Services) price index. CCP23 also considered the internal labour cost escalation rates were reasonable.

AusNet Services adopted the AER's Draft Decision in relation to internal labour cost escalation after adjusting for the most recent forecasts. CCP23 accepts this is a reasonable approach.

***External contracting costs*:**

AusNet Services' initial proposal forecast an annual increase above CPI in the labour cost component or external contracting costs. AusNet Services states that this increase reflected projections from its primary contractors, limited ability to adjust the use of contractor service and expected material increase in demand for skilled workers.

CCP23 did not accept this proposal, particularly given the then most recent RBA forecast for 'very slow growth in wages'. It was also rejected in the AER's Draft Decision. The AER made reference to its historical practices in which escalation has not been applied to external contracted labour costs (total contracting costs were escalated at CPI). The AER states it would need AusNet Services to provide 'compelling evidence' to alter its position. The AER also stated that AusNet Services could be flexible in its external contracting costs such that the total cost would remain within CPI escalation limits.

While AusNet Services does not agree with the AER's Draft Decision on contracting costs, it accepts the AER's forecast for this reset.

Nevertheless, AusNet Services intends to revisit this matter at the next reset.[20] In doing this, AusNet Services notes cites the RBA's August 2021 Statement of Monetary Policy (SMP), based on expected post-covid growth in pressure on wages.

For example, AusNet Services RRP disputes CCP23 and the AER's conclusions by reference to specific comments in the SMP. In particular, the RBA cites potential capacity constraints in the residential and non-residential private and public investment. AusNet Services includes the following extract from the SMP: [21]

> *"…This volume of investment activity could result in price and wage pressures emerging more quickly than anticipated; restricted interstate labour mobility would exacerbate this."*

While CCP23 recognises that AusNet Services has accepted the AER's revised forecast of contracting costs (as discussed above), we also highlight that AusNet Services appears to have ignored the RBA's caution on this forecast in the same August 2021 SMP about the degree of uncertainty in its forecast of wages. The first and final sentences in the section cited above are, respectively:[22]

> *"The sudden nature of the resulting changes in demand and supply in the economy and the possibilities of sharp reversals as borders reopen (exacerbated by uncertainty about when this will occur), means there is considerable uncertainty around the future behaviour of wages and prices".*

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[20] AusNet Services, *Revised Regulatory Proposal, 2023-27*, September 2021, p 75.
[21] AusNet Services, *Revised Regulatory Proposal, 2023-27*, September 2021, p 75.
[22] See RBA, *Statement of Monetary Policy*, Chapter 5 'Economic Outlook', August 2021, p 77.

…

"Alternatively, capacity constraints could result in projects being rationed or delayed, resulting in lower output growth than otherwise. "

Given the RBA's caution about the direction and extent of GDP and wage growth paths, CCP23 recommends the AER adopts the position it has taken in the Draft Decision, namely that it will continue to apply its existing approach in the absence of compelling evidence to change. The degree of uncertainty in the RBA's forecasts means that there is no such 'compelling evidence' to support a change in approach.

5.5 CCP23 Observations

AusNet Services' revised regulatory proposal (RPP) for capex is some 8.8% ($67 m) higher than the AER's Draft Decision. There are three main capex categories where AusNet Services has increased its capex forecast relative to its initial proposal and the AER's Draft Decision. They are Major Station Projects, Asset Replacement and Safety and Security and Compliance.

Major Station Projects: The capex changes in this category arise from changes in contracting costs, updated AEMO forecasts that moved back requirements for certain projects by a year or two, the early closure of the Yallourn Power Station (for closure in 2028 rather than 2032) and the recent publication in Victorian Government's REZ Development Plan (RDP) (August 2021).

Replacement capex: The capex changes in this category relate largely to AusNet Services business-as-usual activity. The AER rejected two major replacement capex proposals in this category; the South-West Victorian Communications Loop **(Loop**) and the 7.5% risk allowance across all replacement capex. However, AusNet Services' includes both of these items in its revised capex forecast.

CCP23 welcomes the additional information provided by AusNet Services regarding the Loop project and considers this project is in line with previous allowances and sufficient information has been provided in the RRP to justify the project. However, CCP23 does not support the 7.5% risk allowance for replacement capex applied across all the replacement capex.

The project risks identified by AusNet Services are largely ones that should be regarded as 'business-as-usual' risks, and AusNet Services should have sufficient historical information to include these in its forecasts of base unit costs. In addition, in many cases the risks would be symmetric. AusNet Services should have sufficient flexibility in its replacement program to modify the scope or change the timing of these replacements. If there are individual, very large replacement projects that cannot be modified, then an individual business case should be set out in AusNet Services' proposal that clearly justifies an additional risk allowance.

Safety and Security and Compliance - Phase Monitoring Units (PMU):

The proposed new capex for PMUs is subject to a Direction order by AEMO. CCP23 supports this inclusion although we expect the AER to consider whether the stated costs reflect efficient costs for this program and AEMO has issued a Final Direction consistent with the Draft Direction.

Contracting costs

CCP23 has reviewed AusNet Services' RRP discussion on contractor costs. While AusNet Services has accepted the AER's Draft Decision on this matter, they propose to further investigate the issue in the next regulatory period. At this stage, CCP23 supports the AER's position.

Engagement on the RRP changes

Overall, CCP23 acknowledges that AusNet Services has discussed the AER's Draft Determination with its Consumer Panel and explained the changes to its RRP. For example, AusNet Services accepted the Panel's recommendations that AusNet Services:

- Remove network support costs from the ex-ante capex forecast and treat these costs as pass-through costs given the degree of uncertainty around the level of costs.
- Treat a major project in the Gippsland region that depended on connection of significant new renewable generation as a contingent project, rather than including it in the ex-ante cape forecast.
- Consider overlaps between the capex plans and the ISP and the Victorian Governments REZ Development Plan (RDP), leading to the removal of one major transmission project from the forecast capex and changes to the cost and/or timing of other projects.
- Consider the impact of AEMO's revised demand and energy forecasts, although this did not lead to a change in the proposed capex.

These changes indicate that AusNet Services has constructively engaged with its Consumer Panel (and others) on the RRP and, in the main, the RRP capex reflects the outcomes of this engagement.

5.6 Contingent Project Proposal

AusNet Services did not propose any contingent projects in its RP, and consequently, it was not discussed in the AER's Draft Decision.

The early closure of Yallourn Power Station (see above) and the designation of Gippsland as a renewable energy zone present new opportunities and challenges for the extensive transmission assets located in the La Trobe Valley.

Because of the design and substantial capacity of the transmission network within the La Trobe valley, new renewable energy generation in this location does not present the same network constraint issues as it might in other areas.

Nevertheless, as set out in the section above on major projects, there is an economic justification for replacing circuit breakers at the Loy Yang Power Station and the Hazelwood terminal station.

AusNet Services also states that: *"it may be economic to replace transformer assets at the Hazelwood terminal station, depending on the extent of new generation that connects in the region".*[23] In particular, three of the four 500/220 kV transformers are in poor condition having been in service since the 1970s.

In addition, the connection of new renewable energy in the region will place additional strain on the system, accelerating the date for economic replacement. Nevertheless, the timing remains uncertain. AusNet Services states:[24]

> *"We estimate that committed generation capacity of 1,550 MW prior to the closure of YPS [Yallourn Power Station] or 3,000 MW after the closure of YPS, to the 22kV network in the Latrobe Valley would mean it is economic to replace the HWTS transformers during the next regulatory period."*

[23] AusNet Services, *Revised Regulatory Proposal, 2023-27*, September 2021, p 77.
[24] AusNet Services, *Revised Regulatory Proposal, 2023-27*, September 2021, p 78.

AusNet Services defines the scope of the proposed contingent project as: *"the replacement of the A2, A3 and A4 transformers and the associated primary and secondary equipment at HWTS with new assets providing similar service levels".* [25]

In accordance with the requirements of the Rules (NER 6A.8.1c), AusNet Services has defined the contingent project trigger event as follows:[26]

1. New generation capacity exceeding an aggregate of 1,550 MW (prior to the closure of Yallourn Power Station) or 3,000 MW (after the closure of the Station) is committed at the current or future connection points on the 220kV Latrobe Valley transmission networks
2. Completion of a RIT-T to address the identified need of "Maintain reliable, safe and secure prescribed transmission network services in accordance with the capital expenditure criteria.
3. The AER determines that the proposed investment satisfies the RIT-T
4. A commitment from AusNet to proceed with the project, subject to the AER amending the revenue determination pursuant to the NER.

Replacing these three transformers is a major replacement project and will cost approximately $45m ($2021-22). It will, however, ensure that the La Trobe transmission network can reliably deliver a large quantity of renewable energy to Melbourne.

CCP23 has reviewed the proposed contingent project and consider that it meets the statutory requirements. The project trigger is:

- Reasonably specific and capable of objective verification
- If the event occurs it is reasonably necessary to achieve the capital expenditure objectives
- The costs relate to a specific location rather than the transmission network as a whole
- It is sufficiently described for the revenue determination to be amended
- It is probable during the regulatory period, but not certain and the timing and the costs are not certain

The Trigger event also includes satisfactory completion of a RIT-T and a commitment by AusNet Services to proceed with the project, conditional on the AER amending the revenue determination.

CCP23 therefore concludes that the proposed contingent project should be approved. Customer representatives and other stakeholders also support this approach to the project.

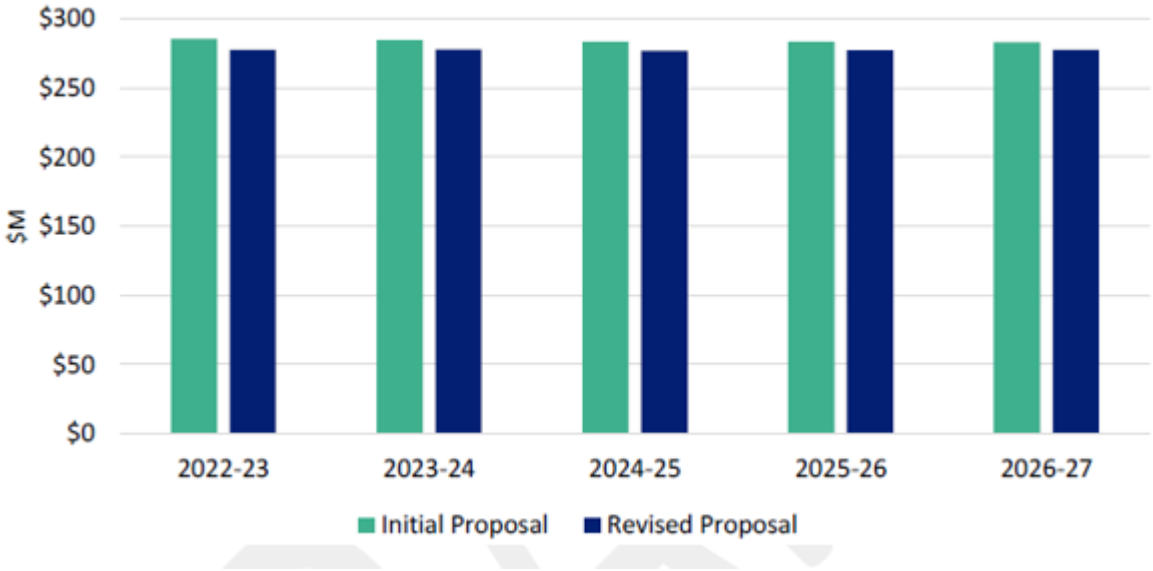
[25] AusNet Services, *Revised Regulatory Proposal, 2023-27*, September 2021, p 78.
[26] AusNet Services, *Revised Regulatory Proposal, 2023-27*, September 2021, p 78.

6 Operating Costs (opex)

6.1 Overview

The total opex costs proposed by AusNet Services in the revised revenue proposal are lower than the costs initially proposed.

Figure 6.1: revised proposal opex comparisons, initial and revised proposals



Source AusNet Services RRP page16

This proposed opex expenditure, excluding easement land tax and debt raising costs of $511 million for the next regulatory period is 6% lower than the initial AusNet Services proposal and 16% higher than the AER's Draft Decision. The AER Draft Decision included no expenditure "place holder" decisions for significant proposed step change cost proposals, so we do not regard the aggregate opex Draft decision as being directly comparable with AusNet Services revised proposal, though many components are comparable.

6.2 Base Year

That there has been some reduction in base year actual costs and so this means that there is a reduction in base year opex.

The AER accepted 2020-21 as the appropriate base year, as was proposed by AusNet Services, we accept 2020-21 as being the appropriate 'base year' for the 2023-27 regulatory period.

6.3 Step Changes

6.3.1 AusNet Services step change proposals

AusNet services proposed five step changes in its initial proposal, and an additional five were added in the revised proposal. This is a significant number of proposed operating cost increases, and dominates considerations of the opex aspects of the revised revenue proposal.

Early this year, CCP17 summarised its view of four criteria for assessing whether a proposed expenditure meets the requirements for a step change[27]:

- Legitimate obligations or capex / opex trade-offs.
- Something that is new and exogenous, meaning that is imposed from outside of the business.
- Recurrent, or likely to be recurrent, it cannot be a one-off cost.
- Material cost increase, being increases in costs for an existing recurrent item that an efficient business could not readily absorb into its cost structure.

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. Step changes can be negative, providing savings for customers, but in practice there are very few examples of a negative step change.

The fourth criterion, materiality, is potentially more subjective. A material cost increase is an increase in costs for an existing recurrent item that an efficient business could not readily absorb into its cost structure. It is also a function of the AER and consumer expectations that a 0.5% operating cost productivity 'dividend' be provided by network businesses to incentivise dynamic operating cost efficiency.

On 23rd July 2021, ANS presented to the collaborative workshop the following as a summary of its thinking at that time about step changes. The revised Revenue proposal is $14M lower than the 23rd July version, so there is good evidence that AusNet Services has sought to reduce controllable opex up to the point of lodgement of the revised proposal. This reflects listening to customers, and intent to reduce operating costs, notwithstanding the observation that a significant proportion of the proposed step changes are exogenous to AusNet Services control.

Figure 6.2, AusNet Services opex step changes

Status	Step change	Revenue Proposal ($M)	Draft Decision ($M)	Preliminary Revised Proposal Forecast ($M)	Discussion areas
Included in Revenue Proposal	5 minute settlement	0.9	✓0.9	0.9	n/a
	ICT cloud	2.3	✓2.3	2.3	n/a
	Cyber security	27.9	×0	27.9	For your information
	Environmental Protection Act (EPA) Amendments	3.2	×0	3.2*	For your information
	Council rates	71.5	×0	51.9*	For your information
New step changes arising post Revenue Proposal	AEMO's participant fees	n/a	n/a	10.7	**Collaboration**
	Bushfire insurance premiums	n/a	n/a	7.6	**Collaboration**
	Phasor Monitoring Units (PMUs)	n/a	n/a	2.5*	For your information
	State budget tax and levy (new Mental Health Levy and Land Tax increases)	n/a	n/a	7.2	For your information
	Network support	n/a	n/a	0	Validate that our approach reflects feedback from previous workshop
Total		**106**	**3**	**114**	

Source: AusNet Services revised proposal

[27] Page 57. https://www.aer.gov.au/system/files/CCP17%20-%20Submission%20on%20the%20Victorian%20EDPR%20Revised%20Proposal%20and%20draft%20decision%202021-26%20-%20January%202021_3.pdf

We have considered each proposed step change from AusNet Services against these four criteria, and summarise our observations in the table below. Further detail on some Step Change proposals follows the table.

Figure 6.3: Step Change Assessment summary ($M, real 2021-22)

Item	Initial Proposal - ANS	Draft Decision - AER	Revised Proposal - ANS	Criteria met? / Comment
IT Cloud	2.27	2.27	2.3	O, R, M. AER and ANS agree
5 Min Settlement	3.86	0.87	0.9	E Not sure about R or M
Cyber Security	27.87	0.00^	28.2	E, O, M. Accept as a step change
Council Rates	71.48	0.00^	43.3	E, R, M. But we think better treated as a "pass through."
EPA	3.19	0.00^	2.0	E, R, M. Accept as a step change
New for Revised proposal				
AEMO participant fees			6.5	E, R, M. Accept as a step change
Bushfire insurance			7.6	E, R, M. Accept as a step change
Land Tax			3.3	E, R, M. Accept as a step change
Mental Health levy			3.6	E, R, M. Accept as a step change
PMU Opex			1.5	E. Maybe recurrent both CCP not convinced that cost is 'material'
Total	108.67	3.14^	99.3	

Note: ^ denotes 'placeholder' decision from AER with acceptance of the category of expenditure as a 'step change' and further information requested.

Source: AER Draft Determination and AusNet Services regulatory proposals

Criteria code:

- O = Opex / capex trade off
- E = Exogenous / externally imposed
- R = Recurrent
- M = Material
- ? = CCP23 uncertainty about whether this item meets step change criteria

6.3.2 Step change considerations

IT Cloud

The AER accepted AusNet Services' proposed step change for IT cloud. We consider this to be the most straightforward of the step change proposals, and it is supported by CCP23.

5-minute settlement

The AER accepted the AusNet Service proposed step change for 5-minute settlement step change, but determined a more efficient cost. The revised proposal is in line with the Draft Decision, being $0.9m, a significant reduction from the original proposal of $3.86m.

Considering the criteria that we have established, this is an exogenously applied and required responsibility. We are not convinced that the costs for complying with 5-minute settlement are necessarily ongoing costs. It might be better regarded as a category specific forecast for now. Neither are

we convinced that the cost of $0.9m is "material". If this step change is not a category specific item, then it is only marginally "material".

Cyber Security

This proposed step change is second largest proposed and is substantial.

AusNet Services summarises the current status of cyber security in its revised proposal:

> *In December 2020, the Minister for Home Affairs introduced the Security Legislation Amendment (Critical Infrastructure) Bill 2020 to Parliament. The Bill seeks to expand the scope of the Act to include critical infrastructure entities in a wider range of sectors, as well as:*
>
> - *Accelerating the need for AusNet to reach a Maturity Indicator Level (MIL) of MIL3 or an equivalent standard;*
> - *Having broader cost impacts on AusNet, as it will introduce new security measures across governance, physical security, supply chain and personnel.*
>
> *As the Bill has not yet passed through Parliament, we have not proposed an opex step change to address the broader cost impacts noted above. However, we have proposed an allowance to reflect the efficient costs of increasing our Maturity Indicator Level from MIL2 to MIL3, as this is a known requirement that will be introduced.*

We accept that cyber security is of growing importance. The Economist magazine reported on the growth in cyber crime in May 2021:[28]

> *Even as rates of most crimes remain low in rich countries, cyber-crime—crime committed mostly or entirely by digital means—is on the rise. That includes internet fraud, identity theft and ransomware attacks, like the one suffered by Colonial, where victims' files are locked up until money is paid…*
>
> *Chainalysis, a cyber-security firm, says the amount paid in Bitcoin ransoms increased by 311% last year compared with 2019, to around $350m. Victims are usually businesses but increasingly include governments and their departments, including the police.*

Energy networks are a regular focus for cyber attack. Responding to cyber threat is a genuine exogenously applied cost for energy network businesses and we are satisfied that the expenditure proposed by AusNet Services is within a 'reasonable range' of expenditure.

Council Rates

This is the largest of the AusNet Services proposed step changes, with the initial proposal seeking $71.48m, which has been revised down to $43.3m in the revised proposal. The AER Draft Decision accepts that the council rates will nee dot be paid, but reflected uncertainty about the actual amount to be paid.

The AusNet Services revised proposal includes the following background comments:

> *As a result of a 2017 amendment to the Valuation of Land Act 1960, the Valuer General of Victoria (VGV) is now the sole valuation authority to conduct annual valuations of all rateable land in Victoria for council rating and taxing purposes. This change took effect in December 2017. For the valuations as at 1 January 2018 and 2019, the VGV continued to use the council's historical approach, whereby the CIV (improved value of rateable property) is not reflective of the value of infrastructure improvements. At the time of the Initial Proposal, the VGV advised that the valuations as at 1 January 2020 (for the rates notice for 2020-21) would be the first year that the*

[28] Ransomware attacks like the one that hit Colonial Pipeline are increasingly common | The Economist

VGV would have sufficient resources to conduct valuations for utility infrastructure sites, including for AusNet."

Council rates are levied on "improved value" of AusNet Services properties, and this notion has been debated and contested. In 2014, AusNet Services appealed to VCAT against the allocation of improved value rates (VCAT AusNet Electricity Services v Whittlesea CC [2014] VCAT 1637). The appeal was rejected, and so AusNet Services is obliged to pay Council rates on improved value of its properties.

AusNet Services has provided the following anticipated cost estimate for Council rates over the 5 years of the next regulatory period

Figure 6.4 Revised Proposal – Council rates step change ($M, real 2021-22)

	2022-23	2023-24	2024-25	2025-26	2026-27	Total
Council rates	8.7	8.7	8.7	8.7	8.7	43.3

Source: AusNet Services Revised Revenue Proposal

We observe that the 'out years' charges have not been indexed, other than for CPI, Local Government may elect to increase these costs in real terms over the regulatory period

There is little doubt for us that this is an externally imposed increase in costs that AusNet Services needs to pay. The classification of this cost is clouded by the likelihood that once the first rates are issued using the new methodology, costs for subsequent years should be more predictable, notwithstanding the potential for real rate increases.

We are not fully satisfied that the actual Council rates costs are known at time of writing this submission, and so are thinking that if the actual costs are still unknown at the time of the AER's final decision it may be better treated for the purposes of a revenue allocation as a 'pass through' event, rather than a step change. A pass through has the advantage that customers pay for the known cost that is passed on to AusNet Services, rather than paying for estimated costs. Noting that the uncertainty relates mainly to the initial application of new methodology, we anticipate that Council rates will be embedded in base year costs for regulatory periods beyond 2027.

Environmental Protection Act amendments (EPA)

The AER draft decision asked AusNet Services for greater detail about how this levy would be calculated. We understand that AusNet Services and the AER have discussed this charge and agreed to applying a 'risk based' methodology to calculate the charge, rather than using an industry benchmarking approach, for which there is not an adequate time frame for robust data.

AusNet Services has proposed a lower cost estimate of $2m in the revised proposal. We regard this as a legitimate step change.

AEMO Participant Fees

AEMO recently completed its Electricity Fee Structure Review, whereby it determined to reallocate a portion of its core NEM fees from market customers to TNSPs for the first time. This change will be applied from 2023-24, and will result in AEMO invoicing AusNet for an allocation of its core NEM fees on an annual basis.

This change in invoicing arrangements for this charge is not expected to increased cost for customers to pay through their electricity bill, but it does mean that TNSPs have these costs shifted to them.

We accept this as a legitimate step change.

Bushfire Insurance

Each recent CCP sub-panel has observed rising insurance premiums for bushfire risk, and AusNet Services is no different. Its bushfire insurance premiums will almost certainly rise. There are two aspects of insurance cost increases being regarded as a pass through that need further consideration.

1. Are insurance costs likely to decline before the end of the 2023-27 regulatory period as insurance cost premium changes have been cyclical for many years, loosening when the number of global underwriters expands, among other factors? Using historical trends it would be suggested that insurance premiums will decline before 2027, and so this is not a step change. Premiums may increase, they may decrease but we suggest that it would be very optimistic to expect insurance costs for bushfire risk insurance to fall before 2027. Bushfire risk is increasing for both severity and frequency of bushfires globally.
2. Is the increase a step change? Insurance costs are a known component of any prudent business, so they are not an exogenous shock. All network businesses can reasonably expect insurance costs to rise, so are the insurance cost increases material enough to be regarded as a step change? We accept that the cost increases are of an order of magnitude greater than prudent budgeting.

AusNet Services accurately summarised the collaborative workshop discussion, in the revised proposal as follows. *"Given the market-driven nature of these increases, and the AER's decision to approve a bushfire insurance step change for the Victorian electricity distributors, stakeholders did not express concern about funding the increases through a step change."*

We are satisfied that Bushfire Insurance increase is a step change.

Land Tax

The Victorian State Budget for 2020-21 increased land tax rates.

This is a clear example of a step change: exogenously determined, ongoing and material.

Mental health and wellbeing surcharge

AusNet Services explains this levy in its revised proposal. *"The Victorian Budget 2021-22 also introduced a mental health and wellbeing surcharge. The surcharge will take effect on 1 January 2022 and be imposed on businesses by way of a payroll tax surcharge on wages paid in Victoria. A rate of 0.5% will be levied on businesses with a national payroll above $10 million, with an additional 0.5% for businesses with a payroll above $100 million. Our national payroll is above $100 million, so a total rate of 1% will apply to us."*

This is also a clear example of a step change.

Phasor Monitoring Units (PMUs)

AusNet expects AEMO to require upgrading or replacing one PMU, and installing new PMUs at 19 locations on the transmission network. The purpose of this is to allow AEMO to undertake its system security functions.

CCP23 accepts that AusNet Services will need to implement the AEMO directive. However, we regard this as primarily a capital expenditure program. The operating cost is estimated as being $300k per year. We are not convinced that this is a 'material' opex cost, and so question whether it warrants being an opex step change. This perspective is based on our assessment of 'materiality,' recognising that there is no definitive decision rule to determine what is 'material.' The proposed step change is 0.29% - less than one third of one percent - of the total opex budget proposal (excluding easement land tax and debt raising costs), we do not regard this modest expenditure as "material." We encourage AusNet Services to absorb this cost and for the AER to consider this option.

Other considerations

Network support costs to manage declining system strength were mooted by AusNet Services as a step change. In table 1.1 of the revised proposal, AusNet Services states: "*We have not included network support costs in our opex forecast and will instead use cost pass through arrangements to recover these costs. This approach has reduced our Revised Proposal's opex forecast by approximately $50 million."* We regard this as appropriate where the AER is satisfied that additional, material costs are incurred, AusNet Services should also collaborate with the CAP should they be considering seeking any additional network support costs.

AusNet Services also suggested in early engagement that it may seek a step change in order to respond to potential changes in the ring fencing guideline. This guideline has not yet been finalised, and so AusNet Services says that it may seek a late step change to cover any increased costs resulting from guideline changes that add additional costs. CCP23 suggests that this too should only occur after consultation with consumers, likely through the CAP.

6.4 Trend

We note that the AER and AusNet Services largely agree on:

- A 0% real output growth
- Real price growth being the average of Deloitte Access Economics and BIS Oxford Economics (BISOE) estimates, though we opine that in a post COVID environment, real price growth, economy wide is likely to be lower than these estimates, particularly those of BISOE.
- A Productivity growth forecast of 0.31%

CCP23 accepts these trend estimates.

6.5 Category Specific Forecasts

The original proposal included category specific forecasts of $902.88m. This figure was adjusted to $902.66m in the Draft Determination, and in the revised proposal it is $902.4m. These shows minimal change over the three iterations of this item. The change that has occurred has been to apply a debt raising rate of 8.0 basis points compared to the initial proposal's 8.5 basis points.

This expenditure is dominated by the easement land tax of $868.05m, which is exogenously imposed. So while this category accounts for significant costs for consumers, there are minimal options for cost reductions.

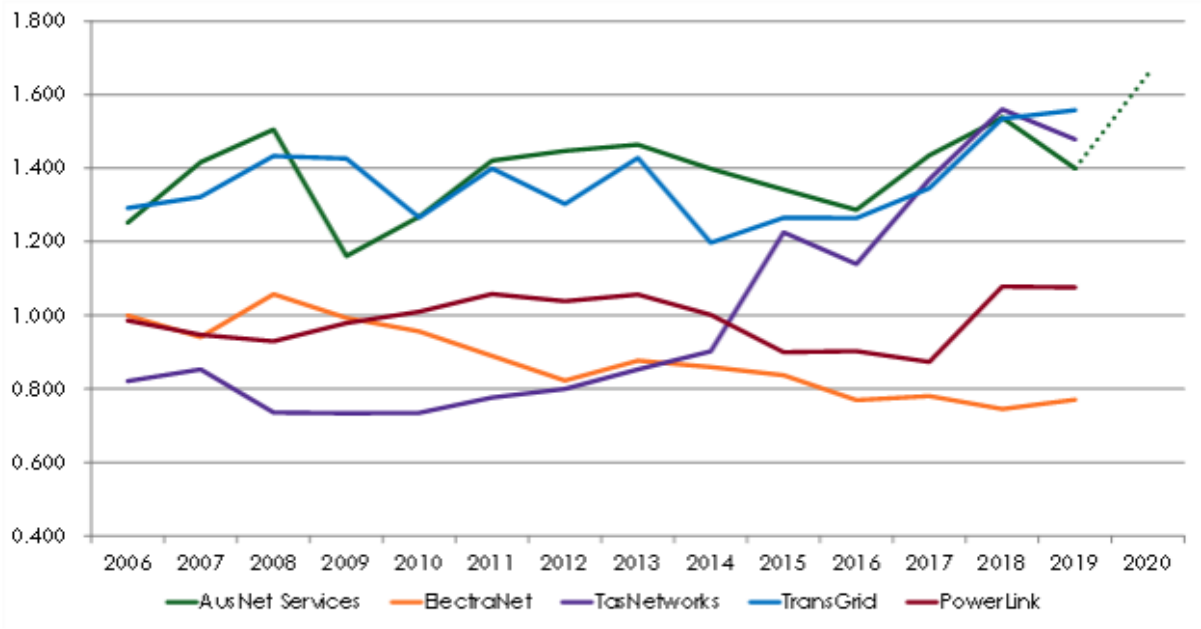
6.6 Opex Productivity

AusNet Services has benchmarked well for opex productivity using the AER's annual benchmarking reports since the reports were first produced. In the revised proposal, they included the following figure indicating an expectation of a significant improvement in opex MPFP in the benchmarking report to be published later this year.

AusNet Services productivity compares well to its TNSP peers, but they should as a transmission network with higher population density than any other Australian transmission network.

The lack of a challenging productivity improvement target is a matter that we encourage AusNet Services to take up internally and with its customers, and it is a factor in our suggestion that the very modest opex associated with PMU's be absorbed into the opex budget.

Figure 6.5 Opex MPFP index, actual and forecast



Source. AusNet Services revised proposal

7 Incentive Schemes

Incentive schemes are a component of incentive based regulation, and complement the AER's approach to assessing efficient costs. These schemes provide important balancing incentives under the AER's revenue determination, to encourage AusNet Services to pursue expenditure efficiencies, while maintaining the reliability and overall performance of its network.

7.1 Available incentive schemes

The following incentive schemes can be applied to an electricity transmission business:

- Opex Efficiency Benefit Sharing Scheme (EBSS)
- Capital Expenditure Sharing Scheme (CESS)
- Service Target Performance Incentive Scheme (STPIS)

All three of these incentive schemes apply to AusNet Services in the current 2017-22 regulatory control period.

There is also potential for a Demand Management Innovation Allowance Mechanism (DMIAM). While not strictly an incentive scheme, the AER's draft decision includes the DMIAM in its list of incentive schemes.

In its Regulatory Proposal, AusNet Services proposed that all three incentive schemes as well as the DMIAM should apply in the coming 2023-27 regulatory control period.

Section 3 of the AER's draft decision provides an overview in regard to incentive schemes. The AER discusses its draft decisions on each incentive scheme in further detail in attachments 8 (EBSS), 9 (CESS), 10 (STPIS) and 11 (DMIAM) to its draft decision.

In response to the AER's draft decision, AusNet Services discusses incentive schemes in section 9 of its Revised Revenue Proposal.

7.2 The purpose of incentive schemes

Once the AER has determined how network revenues will be calculated, networks have an incentive to provide services at the lowest possible cost, because returns are determined by the actual costs of providing services. If networks reduce their costs to below the AER's forecast of efficient costs, the savings are shared with their customers in future regulatory periods through the EBSS and CESS. The STPIS ensures that the network is not simply cutting costs at the expense of service quality.

Incentive schemes should encourage network businesses to make efficient decisions. Opex and capex incentive schemes are intended to provide a mechanism for the regulated business to keep its opex and capex spending as low as possible. The incentive schemes encourage businesses to make efficient decisions on when and what type of expenditure to incur, and meet service reliability targets. The business benefits financially from cost savings, while sharing some of those benefits with customers.

The extent to which incentive schemes meet their objectives depends on how well they are designed.

- Well-designed incentive schemes incentivise the business to find additional sources of efficiency that could not have been envisaged at the time of the regulatory proposal and determination.
- Badly-designed efficiency schemes reward businesses for cost savings that should have been in the base proposal, either because the proposal and determination over-estimated costs in the

first place or because it should have been reasonable at that stage to see that the expenditure was not required or could be deferred.

The role of AEMO as transmission planner in Victoria is unique in the NEM. It means that planning decisions that in other NEM jurisdictions are made by the TNSP are not within the scope of AusNet Services as transmission system operator in Victoria. The incentives on AusNet Services as a TNSP must take this into account, ensuring that the incentive scheme applies only to services that are provided by AusNet Services as a regulated TNSP within the scope of decision-making available to the TNSP, and not those that are within AEMO's scope.

At a public forum held on 16 October 2020 as a Predetermination Conference on the Victorian Electricity Distributors' proposals for the Regulatory Determination 2021-26, the AER stated that it was scoping a review of the various incentive schemes, and would advise stakeholders when this has progressed further.[29] Given the potential for efficiency schemes to give distribution and transmission businesses rewards that are not in the long-term interests of consumers, we strongly support the AER undertaking the review in regard to both distribution and transmission businesses, and we urge the AER to assign a high priority to this work program in 2021-22. Our comments below are predicated on the current schemes continuing to apply, as we cannot at this stage anticipate any changes to the schemes that may be proposed pursuant to the AER's review of incentive schemes.

7.3 Opex Efficiency Benefit Sharing Scheme (EBSS)

The EBSS is intended to provide a continuous incentive for network businesses to pursue efficiency improvements in opex, and to share these fairly between network businesses and consumers. Consumers should benefit from improved efficiencies through lower network tariffs in future regulatory control periods.

The AER's Framework & Approach paper for AusNet Services stated:

- We intend to apply the EBSS to AusNet Services in the 2022–27 regulatory control period if we are satisfied the scheme will fairly share efficiency gains and losses between the business and consumers.
- This will occur only if the opex forecast for the following period is based on the business' revealed costs.
- Our transmission determination for AusNet Services for the 2022–27 regulatory control period will specify if and how we will apply the EBSS.

In our advice to the AER on the AusNet Services Regulatory Proposal, we supported application of the EBSS on the basis that it is genuinely based on business' revealed efficient opex costs and will fairly share efficiency gains and losses between the business and consumers. We stated that the AER should apply the EBSS if and only if it is satisfied that this is the case.

The AER's draft decision was to include EBSS carryover amounts totalling $39.5 million ($2021– 22) from the application of the EBSS in the 2017–22 regulatory control period. This is $1.4 million ($2021–22) higher than AusNet Services' proposal of $38.1 million ($2021– 22). This difference was said to reflect adjustments that the AER made to apply the scheme correctly.

In its Revised Regulatory Proposal, AusNet Services accepted the AER's draft decision approach to calculating the EBSS carryover amount, while updating the forecast opex for the EBSS in the 2023-27 regulatory period to reflect its Revised Proposal's forecast opex.

[29] See https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/citipower-determination-2021-26/draft-decision#step-71952, AER presentation slide 11.

We expect the EBSS carryover amount to be finalised when the opex figures are finalised.

7.4 Capital Expenditure Sharing Scheme (CESS)

The CESS aims to incentivise businesses to undertake efficient capex throughout the regulatory control period by rewarding efficiency gains and penalising efficiency losses (each measured by reference to the difference between forecast and actual capex).

The AER's Framework & Approach paper set out the AER's intention to continue to apply the CESS as set out in its capex incentives guideline to AusNet Services in the 2022–27 regulatory control period.

In our advice to the AER on the AusNet Services Regulatory Proposal, we supported the AER's intention to continue to apply the CESS on this basis.

The AER's draft decision was to apply a CESS revenue increment amount of $5.1 million ($2021–22) from the application of the CESS in the 2017–22 regulatory control period. CESS revenue increments arise as a result of an under-spend in capex against the forecast for the relevant period (in this case, the 2017–22 regulatory control period). The AER stated that the CESS revenue increment that it calculated ($5.1 million) differed from the revenue increment that AusNet Services proposed ($6.4 million), because the AER applied updated modelling inputs.

In its Revised Regulatory Proposal, AusNet Services proposed a CESS revenue increment of $8.6 million ($2021–22) for the next regulatory period. AusNet Services noted that its proposed CESS numbers are higher than the AER's draft decision, primarily because the actual 2020-21 capex is lower than the estimate included in the Initial Proposal and the AER's draft decision. The lower forecast was said principally to reflect the impact of COVID-19 on AusNet Services' capital works programs, which led to some planned expenditure being deferred.

We expect the CESS amount to be finalised when the capex figures are finalised.

7.5 Service Target Performance Incentive Scheme (STPIS)

The purpose of the STPIS is to provide incentives to TNSPs to provide greater transmission network reliability when network users place greatest value on reliability.

There are three STPIS components that are applicable to AusNet Services:

- service component (SC), which incentivises TNSPs to reduce the frequency of unplanned outages and the time taken to return the network to service
- market impact component (MIC), which incentivises TNSPs to minimise the financial impact of outages on the dispatch of generation
- network capability component (NCC), which incentivises TNSPs to identify transmission network limits and increase their capability by undertaking projects with a capital cost of less than $6 million and which are likely to result in a material benefit.

AusNet Services' revenue proposal accepted the AER's Framework & Approach proposal to apply version 5 of the STPIS for the next regulatory control period.

AusNet Services' proposal raised an issue with the parameter 'Loss of Supply Event Frequency' that it maintained would result in an asymmetric scheme. This issue was not raised by AusNet Services in its submission to the AER's Preliminary Framework and Approach. AusNet Services said that it would propose an alternative methodology in its revised proposal.

The AER responded in its Issues Paper that it did not consider that the STPIS is an asymmetric scheme. One of the key features of the STPIS is that a TNSP can only keep its reward under the STPIS if the service

level improvement is retained in subsequent regulatory control periods. If the improvement is not maintained, the TNSP will need to return the earlier reward to the network users. Hence, a TNSP can only earn a reward for service improvement results once. Consumers, however, receive ongoing benefits from the earlier service level improvements, because the performance targets are increased to that level in the next regulatory control period—for the next five years.

In our advice to the AER on the AusNet Services Regulatory Proposal we stated that our view was to support the AER's response in its Issues Paper that a TNSP can only earn a reward for service improvement results once, and therefore it may not be appropriate to propose an alternative methodology.

Regarding the market impact component (MIC), AusNet Services stated in its Revenue Proposal that it continued to be of the view that a review of the MIC assessment is required. AusNet Services submitted that the closure of thermal generation and the increase in renewable generation had significantly reduced the opportunities for AusNet Services to schedule outages. The AER set out its position in response to this issue in its Framework and Approach. The AER did not consider there is an immediate need to review the MIC. The AER considered that the incentive is operating appropriately, encouraging network management or investment to address network constraints. Until these constraints are addressed, penalties will accrue to the TNSP. Once these constraints are addressed, bonuses will be earned by the TNSP.

AusNet Services set out in its Regulatory Proposal its interpretation of exclusion clauses, and sought the AER's view on these exclusions.

AusNet Services also indicated that it intended to use a network pass through to manage planned outages on its network.

In its draft decision, the AER's methodology differed from that of AusNet Services in regard to the service component (SC) and the market impact component (MIC).

7.5.1 Service component

The AER's draft decision did not accept AusNet Services' proposed cap and floor values.

The AER did not accept the view of AusNet Services that an alternative method for calculating the large loss of supply sub-parameter should be adopted if AusNet Services incurred zero events in 2020.

In its Revised Proposal, AusNet Services adopted the draft decision's approach to calculating SC targets, caps, and floors for the forthcoming period.

AusNet Services further stated:

> *We do not agree with the AER's reasons for rejecting our proposed adjustments to the large Loss of Supply parameter target. However, because the average of 2016-20 data produces an identical target to that applying in the current period, we are not proposing an adjustment in this Revised Proposal. While we acknowledge the AER's observations in its Draft Decision, we maintain our view that an effective incentive scheme should always provide an opportunity for rewards as well as penalties. We therefore encourage the AER to address the case where a TNSP's performance is approaching the performance frontier in its upcoming incentive schemes review.*

We concur with the view that the case where a TNSP's performance is approaching the performance frontier should be addressed in the AER's upcoming incentive schemes review.

7.5.2 Market impact component

The AER's draft decision did not accept AusNet Services' proposed performance target for the market impact parameter.

This matter was discussed with stakeholders at AusNet Services' Collaboration Workshop 5 that was held on 23 July 2021, and which we attended.

The market impact component (MIC) provides an incentive to TNSPs to minimise the impact of transmission outages that can affect wholesale market outcomes. The MIC measures performance against the market impact parameter, which is the number of dispatch intervals where an outage on the TNSP's network results in a network outage constraint with a marginal value greater than $10/MWh (MIC count).

One of the statements presented by AusNet Services at Workshop 5 was that in 2020, 99% of counted dispatch intervals were excluded from final performance.

AusNet has helpfully included with its Revised Proposal reports on each of the workshops that it held with stakeholders, including Workshop 5. The report on Workshop 5 includes the following statements:

- AusNet is proposing that the MIC is no longer fit for purpose due to the number of exclusions.
- Stakeholders supported AusNet's preferred option – being the AER outlining a pragmatic interpretation of the exclusions in the TRR determination. Stakeholders felt that the current MIC scheme is not fit-for-purpose and should be used as a "transitionary arrangement" while the scheme is revised to avoid or drastically reduce the need for exclusions (which they felt shouldn't be needed if they are part of the normal operating environment).
- Stakeholders suggested that AusNet seek a "statement of joint understanding" with the AER, classifying the MIC as a transitional arrangement with a view to working with the AER on updating the scheme. AusNet noted that it supported a request from the ENA to revise this scheme which the AER rejected. Participants asked AusNet to share this submission and the AER's response.
- AusNet agreed that a statement of joining understanding with customers and stakeholders would be helpful to further engagement with the AER and committed to working with its Customer Advisory Panel to develop this.
- AusNet agreed to circulate copies of correspondence between ENA and the AER regarding the former's request for a review of the scheme.

Following the workshop, AusNet Services emailed a Proposed MIC Transitional Approach to its TRR Customer Advisory Panel on 5 August 2021, seeking support from the CAP on its proposed approach, which would be submitted to the AER alongside its Revised Proposal on 2 September 2021.[30] To facilitate this, AusNet Services stated that it would welcome feedback by 18 August 2021 (i.e. an indication of support or suggested changes). A further reminder requesting feedback was sent to the CAP on 19 August 2021, seeking feedback by 23 August 2021. We are not aware of any feedback sent.

AusNet Services' Collaboration Workshop 6, held on 6 August 2021, summarised feedback from previous workshops, including Workshop 5, and sought and obtained confirmation from stakeholders that their feedback had been captured accurately.

CCP sub-panels have consistently held the view that the incentive schemes need to be reviewed This is reflected in the report from Collaboration Workshop 6 which states that stakeholder discussion included

[30] See Appendix 9E to the Revised Revenue Proposal

supporting comments from CCP members that incentive schemes need to be reviewed (while protecting consumers' interests). We note that the statement of AusNet Services at Workshop 5 that 99% of counted dispatch intervals were excluded from final performance was a significant factor that led to the outcome that stakeholders felt that the current MIC scheme is not fit-for-purpose. We agree that the optics of a scheme where outcomes are driven by exclusions are not good. However, we also see perspective that one can either

(a) Count the number of dispatch intervals where an outage on the TNSP's network results in a network outage constraint with a marginal value greater than $10/MWh, and then exclude most of them based on exclusion criteria; or

(b) Apply the exclusion criteria at the time of counting, so that those dispatch intervals that meet exclusion criteria are excluded from the count in the first place.

These two counting methods should reach the same conclusion. Option (b) might have better optics, but might also be less transparent than option (a). This while we were initially drawn with other stakeholders to the conclusion that the extent of the exclusions makes it clear that the current MIC scheme is not fit-for-purpose, on further reflection this might not be the case.

We recognise at this stage that overall review of incentive schemes will not be concluded in time for the final decision in this AusNet Services regulatory determination process, and that therefore the existing STPIS scheme including its MIC component will be used in this determination. On that basis, we support efforts to increase mutual understanding of the scheme and the exceptions regime between the AER, AusNet Services, and all consumer and other stakeholders.

We note that the AER wrote in its draft decision:

> *We have met with AusNet Services to gain a better understanding of the issues raised in the revenue proposal. We consider that the decision on exclusions should be considered as part of the annual STPIS compliance review. AusNet Services is seeking clarification on the interpretation of these exclusions specific to their application in Victoria. We will work with AusNet Services to provide clarification on the interpretation of these exclusions before the commencement of the next regulatory period.*

We encourage the AER and AusNet Services to bridge the gap to the extent possible between those statements of the AER and the request of AusNet Services for "a pragmatic and transparent application of MIC exclusions in the 2023-27 regulatory control period, which largely codifies existing AER approach".

We also concur that: "Stakeholders were supportive of the need for a continued incentive to encourage AusNet to optimise outage planning." It is important that within the existing regulatory regime consumer stakeholders do not lose the benefits of reducing wholesale market prices that could arise if AusNet Services adopted non-optimal outage planning.

Regarding AusNet Services' proposed transitional approach, we expect the AER to consider the extent to which the proposed approach is compatible with the existing scheme, and to focus on the objective of ensuring that the application of STPIS in the coming regulatory period is in the long term interests of consumers.

7.5.3 Network Capability Component (NCC)

No Network Capability Incentive Parameter Action Plan (NCIPAP) project proposal was submitted in the initial AusNet Services Regulatory Proposal. AusNet Services indicated that it may propose projects if it identifies any in its revised revenue proposal. In its Revised Regulatory Proposal, AusNet Services has identified a potential project that could facilitate improvements in the capability of transmission assets

that would result in improved capability of the transmission system when users place the greatest value on its reliability. We encourage the AER to consider the suitability of this project under STPIS.

7.6 Demand Management Innovation Allowance Mechanism (DMIAM)

The Demand Management Innovation Allowance Mechanism (DMIAM) provides transmission network service providers with an allowance to undertake innovative projects related to demand management projects. Its application to TNSPs was finalised in May 2021.

AusNet Services indicated in its Regulatory Proposal that it considered that the DMIAM should be applied to it during the forthcoming regulatory control period.

In its Framework & Approach, the AER stated that it expected to develop and apply a DMIAM to AusNet Services for the 2022–27 regulatory control period. In our advice to the AER on the AusNet Services Regulatory Proposal, we supported the application of the DMIAM on that basis.

In accordance with its Framework & Approach, the AER's draft decision was to apply the DMIAM to AusNet Services for the 2022–27 regulatory control period, without any modification.

In its Revised Proposal, AusNet Services accepted the AER's Draft Decision to apply the DMIAM for the 2023-27 regulatory control period, which applies the mechanism as set out in the F&A paper. In particular, the AER proposed a maximum allowance of $200k + 0.1% total annual building block revenue requirement. AusNet Services has included the DMIAM allowance in its revenue requirement for its Revised Proposal, calculated in accordance with the scheme.

The Revised Proposal also helpfully set out in Table 9-5 a set of proposed demand management innovation projects for the 2023-27 regulatory control period.

We continue to support the application of the DMIAM.

Appendix 1 – Acronyms and Abbreviations

Acronym/Abbreviation	Meaning
$ nominal	These are nominal dollars of the day
$2021-22 real	These are dollar terms as at 30 June 2022
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
ARR	Annual Revenue Requirement
ATO	Australian Tax Office
Augex	Augmentation expenditure
Capex	Capital expenditure
CBD	Central Business District
CCP	Consumer Challenge Panel
CESS	Capital Efficiency Sharing Scheme
CPI	Consumer Price Index
DER	Distributed Energy Resources
DB / DNSP	Distribution Business / Distribution Network Service Provider
DM / DR	Demand Management / Demand Response
DMIA	Demand Management Incentive Allowance
DMIAM	Demand Management Innovation Allowance Mechanism
DMIS	Demand Management Incentive Scheme
DUOS	Distribution Use of System
EBSS	Efficiency Benefits Sharing Scheme
EV	Electric Vehicle
ICT	Information and Communication Technologies
ISP	Integrated System Plan
MIC	Market Impact Component (of STPIS)
MPFP	Multilateral Partial Factor Productivity
MW	Megawatt
NCC	Network Capability Component
NCIPAP	Network Capability Incentive Parameter Action Plan
NEL	National Electricity Law
NER	National Electricity Rules (or Rules)
Opex	Operating and Maintenance Expenditure

PV	Photovoltaic (Solar PV)
RAB	Regulatory Asset Base
RBA	Reserve Bank of Australia
RCP	Regulatory Control Period
Regulatory control period	the period commencing 1 April 2022 and ending 30 March 2027
Regulatory Proposal	Regulatory proposal submitted under clause 6.8 of the NER
Repex	Replacement capital expenditure
STPIS	Service Target Performance Incentive Scheme
TNSP	Transmission Service Provider
TRR CAP	Transmission Revenue Reset Customer Advisory Panel
WPI	Wage Price Index