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Seed Advisory

Deep Dive Workshop One – Summary Report

AusNet Services Transmission Revenue Reset 2023 –
2027

20 August 2020

Operating Expenditure



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Disclaimer

This report is only a summary of key items discussed at the deep dive workshop held on 30 June 2020. The information in this report is not necessarily reflective of the views of each attendee at the workshop, AusNet Services or Seed Advisory.



1. Introduction

1.1. Background

AusNet Services owns and operates the regulated Victorian electricity transmission network that transports electricity from where it is generated, through terminal stations and high-voltage transmission powerlines across the state, to Victoria's five lower-voltage distribution networks. The transmission network covers an area of approximately 227,600 square kilometres and serving a population of over 5.9 million people, or more than 2.1 million households and businesses.

Regulated electricity transmission network businesses must periodically (typically every five years) submit a Revenue Proposal which outlines their plans and proposed expenditure to the Australian Energy Regulator (AER) for assessment. AusNet Services is currently developing its Revenue Proposal for the five-year period from 1 April 2022 to 31 March 2027. AusNet Services will be submitting its Revenue Proposal to the AER by 31 October 2020.

As part of developing its Regulatory Proposal, AusNet Services is undertaking an extensive customer engagement program. One component of this engagement program is a series of 'deep dive' workshops with attendees including customer representatives, consumer advocates, AER representatives, consumer challenge panel representatives and other stakeholders. Many of these stakeholders are members of AusNet Services' Transmission Revenue Reset Customer Advisory Panel, which has been meeting regularly during the last 18 months.

The deep dive workshops are designed to:

- share information on AusNet Services' Revenue Proposal;
- consult on and enable open and frank discussion of key elements of AusNet Services' plans, with a focus on issues where customer feedback may inform the positions taken in AusNet Services' Revenue Proposal; and
- enable AusNet Services to consider the feedback and views of attendees while developing its Revenue Proposal and plans and respond accordingly.

AusNet Services engaged Seed Advisory to assist in the preparation and facilitation of these workshops and to develop a summary report for each workshop.

At the time of publishing this report, AusNet Services will be aiming to hold or have held the following workshops:

- Workshop 1: Operating Expenditure (*held 30 June 2020 and the focus of this report*);
- Workshop 2: Network Capital Expenditure (*scheduled 11 August 2020*); and
- Workshop 3: Information Technology and Lines Programs Capital Expenditure (*scheduled early September 2020*).

In addition to its deep dive program, AusNet Services has held or will hold the following briefing sessions that are aimed at informing stakeholders:

- Briefing Session 1: Overview of AusNet Services' transmission plans and the outlook for transmission charges during the 2023-27 regulatory period, to provide stakeholders with context for the deep dive workshops (*held 26 June 2020*); and



- Briefing Session 2: Overview of AEMO’s Final 2020 ISP, including its implications for transmission costs and AusNet Services plans during the next regulatory period (*joint AusNet Services-AEMO session, scheduled 26 August 2020*).

There are likely to be further workshops and briefing sessions held after the Revenue Proposal is submitted on 31 October 2020.

1.2. Purpose of this report

This report summarises the key items of discussion from Workshop One on Operating Expenditure, which was held on 30 June 2020 via video conference using Microsoft Teams. The workshop attendees and the organisations they represented are included in Appendix A and the complete agenda for the workshop is included in Appendix B.

In brief, the workshop agenda covered four broad areas:

- An overview and discussion of the operating expenditure proposal;
- A discussion on possible choices of operating expenditure base year for, being FY20 or FY21;
- A discussion on the proposed step change associated with the cyber security program; and
- A discussion on the proposed step change associated with the transformer oil change and regeneration work program.

The workshop was held under “Chatham House” rules, so no comments from attendees have been attributed to any one attendee. AusNet Services’ responses or comments in relation to matters raised by attendees has been noted as such.

1.3. Other related documents

This report should be read in conjunction with two key documents which are co-located on the same page of the AusNet Services’ website that contains this report. The documents will provide important information and context when reading this report and are listed as follows:

- Pre-reading materials developed by AusNet Services for the relevant workshop – this document contains background and other information provided to workshop attendees to prepare them for their workshop attendance; and
- Presentation materials developed by AusNet Services for the relevant workshop – this document contains the material presented at the workshop.



2. Key discussion items

This section contains the key items discussed at the workshop. AusNet Services' responses or perspectives provided either during or post the workshop are included where relevant and required in the shaded text boxes.

2.1. Overview of operating expenditure proposal

This section covers the discussion on the overall operating expenditure and the base, step and trend methodology. More detailed discussion on the choice of year and two key proposed step changes are separately covered in the next two sub sections.

In relation to the overall operating expenditure forecast, it was noted that:

- the majority of the proposed controllable operating expenditure was driven by the choice of base year and two key proposed step changes;
- there is a potentially large increase in council rates expected in 2020-21 (uncontrollable operating expenditure); and
- there is also an allowance for operating and maintaining new (growth) assets built during the current regulatory period at the request of the Australian Energy Market Operator (AEMO) or the Victorian electricity distributors.

Key questions and comments from attendees on the overall operating expenditure proposal included:

- Do the growth assets related forecasts include any assumptions about future AEMO Integrated System Plan (ISP) projects?
- If ISP projects are included under a 'contingent project application' what impact will that have on the forecast operating expenditure?
- What has driven the increase in council rates?
- Has the impact of COVID-19 been included in the forecasts?

AusNet Services noted the comments from stakeholders and discussed that:

- In relation to the ISP questions:
 - The specifics of the transmission planning regulatory arrangements in Victoria mean ISP related projects are procured through AEMO's planning process and are therefore not within the scope of the reset.
 - The current growth asset related operating expenditure relates to non-contestable augmentations that were delivered in the previous and current periods.
 - If there are future non-contestable ISP projects they will be included into the asset base in the subsequent regulatory period (i.e. 2028-32) and at the next transmission revenue reset the incremental operating expenditure for those new projects will be included in the future operating revenue forecasts.
- The council rates increases are driven by an anticipated change in the application of the valuation methodology that is expected to now include the value of the capital improvements at each site (i.e. the electricity assets) as opposed to just the land value. The current forecasts are based on an AusNet Services estimate only, these will be confirmed and updated in the next few months when council rate notices are issued during July and August 2020.



- The current operating cost forecasts are pre COVID-19, although the impacts currently observed have been minimal to date, with no significant future impacts on operating costs anticipated at this point. AusNet Services is in the process of updating the forecasts to reflect the impact of COVID-19. There will most likely be a future specific workshop to discuss the COVID-19 impacts and updates in detail after the Proposal is submitted so that they can be incorporated into the Revised Proposal.

2.2. The choice of base year

The discussion on the choice of base year noted that AusNet Services has a track record of efficient operating expenditure and is largely indifferent to the choice of base year but that using the most recent and up to date year of data may be preferable (i.e. 2020-21). AusNet Services also noted that while FY20 would involve complete actuals, FY21 would involve a mix of actuals and estimates upon submission, although it would be updated for complete actuals when the revised proposal was submitted. The main comments and questions from attendees included:

- What were the main factors driving AusNet Services decision as to the choice of base year? While noting that AusNet Services' stated preference for FY21 was driven by updated actuals, attendees also questioned whether other factors (discussed further below) would have an impact on our choice of base year such as COVID-19, updated benchmarking results and further FY21 actuals.
- Some noted it is hard for attendees to provide an answer on their preference of base year given the information available, including forecast data for FY21. Rather they are relying on AusNet Services to provide further and updated information and rationale for their choice of base year
- Does the choice of base year for the 2023-2027 period impact the subsequent period, i.e. 2028-2032? Are there any trade-offs for future regulatory periods that may be material?
- There was a request for the year by year model and data underpinning the assessment that AusNet Services is revenue neutral as to the choice of base year
- There were some comments and questions of detail:
 - Is the business not expecting any negative efficiency impact from COVID-19 that may impact 2020-21 expenditure?
 - If there are extended impacts on wages growth as a result of the COVID-19 induced recession will this impact the choice of base year?
 - Given that the actual operating expenditure for 2020-21 is not yet available has the business undertaken any sensitivity analysis on the range of potential actual expenditure for the year?
 - Will there be a lower expenditure due to having fewer workforce in the field and therefore lower public liability and Workcover insurance as a result?



AusNet Services noted the discussion and commented that:

- The forecast of 2020-21 operating expenditure is based on three months of actual data and reflects our most up-to-date expectation of forecast expenditure. Notwithstanding this, the business will remain revenue neutral to the choice of base year, regardless of the outcome of FY21 expenditure. What will change will be the split between Efficiency Benefit Sharing Scheme (EBSS) versus operating expenditure forecasts in the total revenue forecast.
- Our Revenue Proposal will reflect our most up to date forecast of FY21 operating costs. Actual operating costs will be available at the time of our Revised Proposal and will be reflected in the AER's final decision
- The choice of base year for the 2023-27 period should not impact the subsequent regulatory period outcomes, i.e. 2028-2032 as these will be based on updated actual operating expenditure and forecasts at the time.
- The business will prepare and provide the requested operating cost and EBSS models underpinning the data presented.
- In relation to the detailed questions:
 - There are unlikely to be any material impacts on operating expenditure due to COVID-19.
 - Wage growth reductions are not expected to materially impact the base year analysis. Any wage growth reductions will be reflected in the updated trend assumptions which are expected to become available in August / September.

2.3. Cyber security step change

The discussion on the need for a possible step change in relation to cyber security clearly acknowledged the context of an increasing risk of cyber security related attacks and the critical nature of the electricity transmission infrastructure.

The general discussion and questions from attendees covered the following areas:

- The context and need for further cyber security related enhancements was generally accepted.
- Some noted that there needs to be a transparent, strong, and clear narrative on why this expenditure and work is of benefit to consumers, this will also help with building confidence and trust.
- Others noted that whilst important, this is a highly technical and specific area and that it is difficult for attendees to provide any comment on the accuracy or reasonableness of this expenditure.
- Some commented that further information may be required to better inform any comments, for example benefits and risks of a total expenditure vs capital expenditure vs operating expenditure approach, the timing of any expenditure and some sensitivity analysis on the financial impacts of the options considered.
- A comment was made that rather than looking at the systemic implications of a cyber attack using a financial analysis approach (e.g. best net present value) that a 'resilience frame' approach should be used.
- Information was sought on the status of the new regulatory obligations and what might be delaying their introduction.
- There was an acknowledgement that even in the absence or delay in the development of a formal regulatory instrument or direction from AEMO there is a



need to continue to develop cyber security capabilities. However, others noted that where possible it would make sense to have an integrated and consistent framework across transmission systems (noting the growing degree of integration and interconnectedness).

- There were queries about the nature and types of risks, for example:
 - What is the nature of the greatest risk, i.e. which particular parts of the network (and associated information technology) are higher priority for preventing a cyber-attack?
 - What does the risk look like as a proportion of domestic versus foreign state attackers?
- Some queried if there are opportunities to collaborate and work with other networks to reduce costs and share in lessons learnt?
 - Including, are there any lessons to be learnt from the smart meter roll out in Victoria, e.g. firmware?
- There was a conceptual discussion and query as to why the provision of a secure and safe system is not part of business as usual and a 'duty of care'?
 - In other words, why is it not absorbed within business as usual expenditure instead of passing it through to consumers?
 - Some noted the possible lack of clarity on what risks and costs a transmission company should reasonably absorb as part of business as usual and what are costs incurred that create additional benefits for consumers.

AusNet Services noted the discussion, acknowledged the need for further information and analysis and a strong narrative on customer benefits in the Revenue Proposal and provided the following comments:

- The main cyber related risks are from remote access attacks from sophisticated and well-funded cyber criminals, whilst also noting that data integrity and safety are also very important. The business must however be prepared for all types of attacks from different attackers, and a "one size fits all" approach will not work. Rather there need to be different layers of defense.
- The recommended option (option two) is the best option not only from a financial/Net Present Value (NPV) perspective but also because it provides the greatest degree of flexibility to adapt to the highly dynamic and changing environment by utilising cyber security service providers rather than solely involving in-house capital investment. It would be unsustainable to have a fully insourced approach; a balanced mix between in-house core capabilities supplemented with external expertise is a more sustainable and flexible approach.
- There is already an ongoing degree of collaboration and intelligence sharing across the industry and with government, academia and other industries where possible and practical. The business has agreements in place with academic organisations to assist in the provision of advanced research to help evolve and develop the required capabilities.

- AusNet Services and other electricity network are engaging regularly with the Department of Home Affairs and AEMO regarding the nature and timing of the new obligations. AusNet Services will present the most up to date view of the status of the obligations in its Revenue Proposal
- AusNet Services' current expenditure levels do not reflect the capabilities needed to meet the anticipated new regulatory obligations and manage the risks presented by an evolving cyber security threat landscape. The proposed step up in expenditure is required to meet these new obligations and maintain the reliability and security of the transmission network during the next regulatory period. Under the regulatory framework, these costs may therefore be recovered from customers, subject to AER approval.

2.4. Transformer oil step change

The presentation on the transformer oil change regeneration works program outlined how an oil additive had caused corrosion to a number of transformer assets and possible options to address this issue. The discussion and key questions from attendees covered the following areas:

- There were queries on the nature of the problem and the approaches to addressing it, including:
 - Is there recourse to the supplier given that the original oil was not fit for purpose?
 - Can insurance cover this cost or issue?
- Similar to the discussion on cyber security, there was a conceptual discussion and query about the allocation of costs and risks between consumers and the business. In other words, why this is not absorbed within business as usual expenditure instead of passing it through to consumers?
- Some queried if this same problem was being experienced by other utilities (transmission or distribution) in Australia or overseas.
- Further information or detail was requested in relation to the options analysis:
 - A query relating to the consistency (or otherwise) between key assumptions used in this and the cyber security analysis, most notably the Weighted Average Cost of Capital (WACC) and the Value of Customer Reliability (VCR) assumptions.
 - What are the implications for transformer lives for each of the 3 options? Can implementing option two for example, lengthen the initial lives for the transformers?

AusNet Services noted the discussion and acknowledged the need for further consideration of some issues in the Revenue Proposal and provided the following comments:

- The question in relation to manufacturer responsibility and liability will need to be further considered internally though this is not expected to be a practical recourse due to the time elapsed since the assets were purchased and the nature of the issue.



- This issue was due to an industry-wide supplier defect not as a result of AusNet Services' approach to asset management. To this end, other utilities business have this same issue, AusNet Services is aware of at least two other Australian networks with the same issue.
- AusNet Services notes it has appropriate insurance however this covers failure of assets and not historical supplier defects. In addition, it is preferable to manage this risk proactively rather than relying on insurance cover in the event of an asset failure.
- While there is a valid customer question around how much cost and risk they are exposed to, the regulatory framework is clear that recovery of this type of expenditure, provided it can be demonstrated that it is an efficient and prudent solution and the costs are not captured elsewhere in the forecast expenditures.
- In relation to the specific queries on the options analysis:
 - There is no difference in the WACC for the two step changes discussed at the workshop, the apparent difference was purely due to rounding. The differences in VCR is because the VCR applied to the cyber security business case was Victoria-wide given a cyber-attack was assumed to occur across the State, while the VCR in the Transformer Oil business case was targeted to specific at-risk transformer sites where location-specific VCRs have been calculated..
 - The theoretical (or maximum) transformer lives for each of the three options is the same. For example, implementing option two will not extend the maximum asset life, rather it will reduce or remove the risk of a shorter asset life due to corrosion.



A. Workshop attendees

Name	Organisation
Simon Elias	Air Liquide
Nick Eaton	Alcoa
David Markham	Australian Energy Council
Adam Petersen	Australian Energy Regulator
Adam Rapoport	Australian Energy Regulator
Claire Preston	Australian Energy Regulator
Jane Kelly	Australian Energy Regulator
Tennant Reed	Australian Industry Group
Bridgette Carter	BlueScope Steel
Elizabeth Carlile	CitiPower & Powercor & United Energy
Roshanth Sivanathan	CitiPower & Powercor & United Energy
Bev Hughson	Consumer Challenge Panel
David Prins	Consumer Challenge Panel
Mark Henley	Consumer Challenge Panel
Frances G Meese	Victorian Government (Department of Environment, Land, Water and Planning)
Raif Sarcich	Victorian Government (Department of Environment, Land, Water and Planning)
Steve Foster	Victorian Government (Department of Environment, Land, Water and Planning)
Shelley Ashe	Energy Consumers Australia
Andrew Richards	Energy Users Association of Australia
Rudi Strobel	Jemena
David Headberry	Major Energy Users
Gerard Reilly (invited observer)	Powerlink
Matthew Myers (invited observer)	Powerlink
Gavin Dufty	St Vincent de Paul
Ad Wolst	AusNet Services
Adrian Sharp	AusNet Services
Alex Payne-Billard	AusNet Services



Name	Organisation
Ana Erceg	AusNet Services
Catherine Gip	AusNet Services
Charlotte Eddy	AusNet Services
Jacqueline Bridge	AusNet Services
John Dyer	AusNet Services
Keith Hopkins	AusNet Services
Paul Ascione	AusNet Services
Peter Caccaviello	AusNet Services
Robert Ball	AusNet Services
Samantha Scanlon	AusNet Services
Tom Hallam	AusNet Services
Victoria Draudins	AusNet Services
Peter Eben	Seed Advisory



B. Workshop Agenda



2023-27 Transmission Revenue Reset - Deep Dive #1

Objective

The purpose of the session is to:

- Provide an overview of our proposed operating expenditure (opex) forecast
- Consult on our customers' preferences in terms of proposed base year
- Discuss in detail two key step changes being proposed and collect feedback.

Agenda

AGENDA	
Workshop:	AusNet Services Deep Dive #1
Date:	Tuesday 30 June 2020
Time:	12:00-2:30pm
Location:	Microsoft Teams meeting
Security:	Public
Pre-Reading:	Provided 25 June
Facilitator:	Peter Eben, Seed Advisory
Presenters:	Tom Hallam, General Manager Regulation Rob Ball, Principal Economist Victoria Draudins, Senior Economist Sam Scanlon, Technology Planning and Regulatory Lead Ad Wolst, A/Chief Information Security Officer Paul Ascione, A/General Manager Engineering – Transmission and Distribution

Timing	Item	Presenter
12:00 (10 min)	Welcome and introductions	Peter Eben / Tom Hallam
12:10 (5 mins)	Overview of opex proposal	Rob Ball
12:15 (15 mins)	Initial feedback on overall opex proposal	All
12:30 (10 mins)	Choice of opex base year	Victoria Draudins
12:40 (10 mins)	Open discussion on opex base year	All
12:50 (10 mins)	Proposed cyber security expenditure	Ad Wolst / Sam Scanlon
1:00 (40 mins)	Open discussion on cyber security expenditure	All
1:40 (10 mins)	Break	



Timing	Item	Presenter
1:50 (10 mins)	Proposed opex step change for transformer oil regeneration works	Paul Ascione
2:00 (25 mins)	Open discussion on step change for transformer oil regeneration works	All
2:25 (5 mins)	Next steps	Peter Eben / Rob Ball
2:30 pm	Meeting close	

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