AusNet

Transmission Revenue Reset

TRR (2027-32)

Metering systems

Friday, 31 October 2025

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Document history

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Related documents

DOCUMENT	VERSION	AUTHOR
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Executive Summary

AusNet's transmission business is the metering coordinator (**MC**) and metering provider (**MP**) under the National Electricity Rules (**NER**) for all relevant connection points on its transmission network. In total, we have over 730 NMIs (transmission meter that is not a check meter) and 882 transmission meters. As a metering coordinator (MC), we have regulatory obligations under the NER to ensure meters provide accurate data for the purpose of market settlement and network billing. Meter data is also used to comply with regulatory reporting obligations for greenhouse emissions reporting. Finally meter data supports planning and operation of the transmission network, for example through information on power quality.

The accuracy of transmission meter data is critical to the financial settlement process in the National Electricity Market (NEM), reconciling energy supply and consumption in the market. In our roles as MC and MP we measure, recording and provide data to AEMO and registered participants for over 90 TWh per annum. Even small inaccuracies at a transmission boundary can cascade into significant financial discrepancies across multiple participants, affecting wholesale settlement, network charge allocation, and inter-network billing.

Accurate data is essential to resolve settlement disputes, maintaining confidence in market outcomes, and ensuring that participants pay — and are paid — in accordance with the energy they have traded or transported. We estimate that the wholesale energy value allocation amounts to about $7.4 billion per annum, or approximately $9.3 million per NMI.

To meet our Metering Coordinator obligations, we undertake the role of a Meter Provider to ensure transmission meters comply with the accuracy specifications required under the NER. We contract with an external service provider (Mondo) to undertake the role of Meter Data Provider. The external service provider currently uses its own technology systems to read, validate or substitute meter data, and provide the final meter data to AEMO for market settlement. Importantly, as Metering Coordinator we are ultimately responsible for the end-to-end meter service and must ensure that the physical meters are maintained and tested, and that the data produced from technology systems is accurate.

In the TRR 2027-32 period we are proposing to replace all 872 meters. These meters have reached a critical juncture of obsolescence, non-support and operational issues. The business case for physical meters is separately set out in AusNet's TRR proposal.

This business case is for digital technologies to support the transmission metering service. We are proposing non-recurrent capex for new technology systems that assist AusNet to meet our regulatory obligations for the delivery of validated and substituted data to AEMO for the purpose of market settlement. In this respect we note that the shift to multi-directional flows significantly increases the complexity of transmission meter reading and data processing. This escalates the likelihood of errors, and hence a capability uplift in our meter data systems and processes is required to maintain the accuracy of settlement data.

The initiatives to meet underlying needs include:

- Investing in a new meter reading system that integrates with modern meters. The current meter system used by our external MDP is not compatible with modern meter technology, requiring significant integration cost and time. A new meter reading system also enables the transmission business to use power quality data for operational purposes and to access raw data for validation of meter data accuracy and the calculation of transmission losses for regulatory reporting.
- Investing in a meter data storage system and data analytics system that enhance our ability to test and validate meter data. Currently, we are reliant on the external MDP in terms of data accuracy for market settlement, particularly where disputes arise. It is critical that we uplift our ability to forensically and proactively test the accuracy of meter data, given the increasing complexities arising from multi-directional flows that are likely to increase the risk of error.
- Investing in a streaming system that provides real time information to support the management of meters, improves our reporting accuracy of transmission line losses for greenhouse reporting, and potential network operational benefits.
- Investing in a meter register to support the development of more advanced meter asset management plans and reduce employee effort.

As part of this business case, we identified three options for our metering ecosystem. Option 1 was to continue with our existing arrangements where we rely on an external service provider for MDP without any investment in new meter reading, storage, data and register systems. Option 2 was to invest in new systems to deliver our metering target state. Option 3 sought to test if a reduced scope program would increase the net present value of the investments.

As detailed in Table 1 below, Option 2 was the preferred option based on the benefits from data accuracy for market settlement and greenhouse reporting, improved operational benefits from power quality data, and reduced employee effort.

Table 1- Options analysis summary

Criteria	Option 1	Option 2	Option 3
Capex ($'000, real FY25)	-	$11.3	$9.3
Opex ($00, real FY25)	-	$9.4	$9.4
NPV ($'000, real FY25)	-	$27.3	$24.3
Technically feasible	✓	✓	✓
Addresses identified need	✗	✓	(Partially)
Deliverable within timeframe	N/A	✓	✓
Preferred	✗	✓	✗

The proposed expenditure for the recommended Option 2 is $11.3 million capex and $9.4 million opex ($real 2025) as detailed in **Table 2** below. This expenditure incorporates capex and implementation opex for new cloud-based metering systems (consistent SaaS accounting standards), and ongoing licencing and support opex.

All expenditure in this business case is 100% allocated to AusNet's transmission line of business.

Table 2 - Forecast expenditure profile – Option 2 (recommended option, $million real 2025)

Cost item	RY28	RY29	RY30	RY31	RY32	Total
Capex	2.1	7.2	0.0	2.0	0.0	**11.3**
Project Implementation Opex ("propex", non-recurrent opex)	2.4	2.7	0.0	0.0	0.0	**5.1**
Ongoing Licences & Support Opex (recurrent opex)	0.0	0.3	1.3	1.3	1.3	**4.3**
Total	**4.5**	**10.2**	**1.3**	**3.3**	**1.3**	**20.7**

1. Context

A transmission meter is a high-accuracy metering installation located at transmission connection points. The meters record electricity flows between the transmission network and key market participants including generators, distribution network service providers, and large direct-connected customers. They capture interval data (typically every 5 minutes) measuring the amount and direction of energy transferred, providing the foundational data for market settlement, network billing, and operational planning. Modern meters also collect power quality data that assists in understanding the performance of the network.

In the following sections, we provide a brief summary of our regulatory obligations and the underlying value of AusNet's metering service.

2.1 Regulatory obligations

AusNet is the Transmission Local Network Service Provider (TNSP) and MC for over 730 NMIs (transmission meter that is not a check meter) comprised of 882 transmission meters that measure, record and provide metering data to AEMO and registered participants for settlements, billing and greenhouse reporting. For these meters, we have appointed Mondo as our contestable Meter Data Provider (MDP). These transmissions meters are Type 2 meters, subject to class 0.5 minimum measurement accuracy obligations, and provide 5-minute trading interval data to the MDP. The MDP is required to undertake validation and substitution of metering data in accordance with AEMO's Metrology Procedure Part B.

AusNet's transmission business is the Local Network Service Provider (LNSP) for over 98% of transmission NMIs on the Victorian transmission network, being the TNSP for most of Victorian transmission. For transmission NMIs, except interconnector NMIs, the LNSP is responsible as the MC, except where the Financially Responsible Market Participant (FRMP) nominates itself as MC. The FRMP can become the MC, where they are registered as a MC. However, no FRMPs have taken up this option, presumably to due to the need for efficiencies of scale, and the cost of MC registration with yearly auditing.

As a MC and MP, we have regulatory obligations under the NER to ensure meters produce accurate data for the purpose of network billing and market settlement for generators and retailers. Specifically, the MC must maintain the security, integrity, accuracy and overall compliance for all assigned metering installations, including all relevant Current Transformers (CTs), Voltage Transformer (VTs) and measurement circuits.

As Transmission MC, AusNet is responsible for:

- Provision, installation and maintenance of a metering installation (i.e. meters, CTs, VTs and measurement circuits).
- Integrity of the metering installations, including testing and inspection requirements.
- Collection and delivery of metering data with respect to the metering installation to the metering data provider.
- The MDP's delivery of validated or substituted metering to AEMO.
- Managing access to and the security of the metering installation, energy data in the meter, and metering data from the metering installation.

Additionally, meter data for the transmission network is used to comply with our regulatory reporting obligations for greenhouse emissions reporting. It is critical to meeting our reporting obligations under the National Greenhouse and Energy Reporting Scheme (NGERS). NGERS is the Australian government's mandatory reporting scheme for large energy users, producers and emitters, and is administered by the Clean Energy Regulator. Under the scheme, AusNet must report energy losses as part of its emissions and energy consumption data. The data on losses utilises meter data from all transmission NMIs. We note that information on losses is also required for AEMO and AER compliance reporting.

With the recent changes to include greenhouse gas emissions in the NEO, we must give regard to all price and greenhouse gas emissions implications in establishing our plans for transmission metering for the TRR 2027-32.

2.2 Criticality of metering services

Our underlying systems and processes to validate and substitute metering are essential for accurate market settlement. Any inaccuracy in transmission meter data directly impacts generator revenue and the settlement costs for the retailers of all distribution customers (and market customers). Inaccurate financial outcomes for generators and customers can result in inefficient investment and operational decisions. Therefore, when making investment and maintenance decisions for our transmission meters, we must consider the implications of meter data accuracy to generators and market participants. This means not just considering the direct liability of service provision for failing to meet regulatory obligations but also the overall accuracy outcomes in the market. We estimate that the wholesale energy value allocation amounts to about $7.4 billion per annum, or approximately $9.3 million per NMI.

Metering data is also critical to accurate reporting of greenhouse gas emissions under the National Greenhouse and Energy Reporting Scheme (NGERS). This supports the broader role of emission monitoring in the Australian economy to assist policy makers with setting appropriate renewable targets and policies.

Metering data is used for our planning and operational activity, and is becoming more critical in the context of emerging issues such as power quality. Meter data also has the potential to be used as contingent data in the loss of primary data to improve the responsiveness of the control room to mitigate the impact of system events.

2.3 Current state

Under the NER, we must appoint a Metering Provider for the provision, installation and maintenance of the metering installation. AusNet transmission services undertake that service in-house. In consultation with AEMO, must also appoint a Meter Data Provider (MDP) to provide meter data reading services. Currently, we contract with multiple MDPs but the majority of metering points are with our ring-fenced external service provider. While we contract with an external service provider, we are ultimately accountable under the Rules to meet all of our regulatory obligations for the end to end metering services.

In our capacity as Metering Provider, we install, maintain, test and replace physical meters and the associated communications hardware. In a separate TRR business case we have identified the need to replace all 882 meters. (C-I-C).

The Meter Data Provider uses a meter reading and meter management system ((C-I-C)) to read the meter data communicated from the physical meters. (C-I-C) uses a polling technology where the system periodically sends a request to a meter to retrieve data at discrete intervals. Importantly, (C-I-C)is considered a legacy meter data management system, as it is not compatible with more modern meter technologies which use modern protocols and it was not designed to receive API driven data flows. This has limited the ability to use modern meters, and adds significant cost to retrofit meters into (C-I-C). (C-I-C) is also not configured to capture power quality data or other channels of data available in modern meters.

The Meter Data Provider also undertakes validation, estimation and substitution of raw meter data through a Meter Data Management System (C-I-C) and provides the 'corrected' data to AEMO for market settlement. The corrected data is also used for AusNet's meter data quality oversight and analytics.

Currently, AusNet is not able to directly access the raw or corrected data, and in the case of a dispute, must rely on the accuracy and integrity of the meter data systems. This limits the timeliness of AusNet to intervene proactively to address data quality issues.

Figure 2 below depicts the current state.

Figure 2 – (C-I-C)

(C-I-C)

2.3 Drivers of new investment

AusNet's current state has been sufficient to comply with its obligations under the NER and reporting obligations for reporting under the NGERS. However, there are material change factors that are driving the need for a significant change to our current state.

Multi-directional flows - higher risk of data errors

Traditional electricity networks generally assumed a predominantly one-way flow of electricity—from generators, through the transmission network, to distribution networks and end consumers. However, with the increasing integration of distributed energy resources (DERs), embedded generators, and large-scale interconnectors, electricity flows at transmission connection points have become multi-directional. This means electricity can flow both into and out of the transmission network at a single metering point, depending on network conditions, generation output, and consumption patterns.

This shift to multi-directional flows significantly increases the complexity of transmission meter reading and data processing. We have calculated that the value of the wholesale market related to our transmission meters is about $7.4 billion annually, with export flows contributing about 40 per cent of the value at $3 billion.

Meters must accurately capture and record energy quantities flowing in both directions every 5 minutes, distinguishing between import and export volumes to ensure correct market settlement and billing. Additionally, meter data systems must manage more complex validation and estimation processes to handle variable flow patterns, potential reversal of power direction, and the impact on loss factors and network charging. These complexities require advanced metering technology, enhanced data management systems, and robust compliance frameworks to ensure that all energy transactions are correctly measured and settled.

Current state is comprised of legacy systems

AusNet's transmission meter stock is predominantly comprised of out-dated technology and communications hardware. In turn, this has limited the ability of the Meter Data Provider to use modern meter reading and management technology systems to fulfil our market settlement functions. Perpetuating the cycle, the meters we choose for replacement are limited as they need to integrate with legacy digital meter reading systems.

The combination of legacy meters and legacy data systems increase the risk of data errors particularly in a more dynamic environment of multi-directional flows. Further, the technology systems become less reliable as they age, and are not supported to the same extent as new systems, for example through vendor software updates.

Limited systems to validate meter data

Outsourcing the meter data provider function is a valuable tool to reduce AusNet's regulated costs of providing a transmission service. However, a critical issue is that the current state does not enable AusNet to independently verify the accuracy of meter reads, validation and substitution, particularly where disputes arise. Given the value of market settlement, the growing complexity of meter data, and the ageing of data systems we consider it prudent for a metering coordinator to have access to both raw and corrected data independently of the meter data provider.

Opportunities to improve our planning and operations

Modern meters provide rich data on power quality including opportunities to tap into detailed, real-time data on how electricity moves through the network. This information enables AusNet to monitor the direction, magnitude, and timing of electricity flows at various connection points, which is essential for maintaining network stability, reliability, and efficiency.

Specifically, power quality data provides opportunities to:

- **Manage network constraints**: By understanding where and when power flows are approaching or exceeding network limits, a TNSP can take proactive actions to prevent overloads and avoid outages.
- **Plan maintenance and upgrades**: Accurate flow data is used to support data on heavily used or stressed parts of the network, guiding investment decisions and prioritising asset replacements or capacity expansions.
- **Improve responsiveness:** Meter data can also be used as contingent data in the loss of primary data to improve the responsiveness of the control room to mitigate the impact of system events

Implementing new meter systems increases opportunities to stream data in real time rather than polling..

3. Needs identification

The purpose of this section is to identify AusNet's broader strategy for transmission metering services and the future state we seek to achieve in the TRR 2027-32 period. We then discuss the initiatives and the underlying needs.

3.1 Strategy in the 2027-32 period

AusNet is currently developing a broader Strategic Asset Management Strategy for the transmission metering business. This recognises the criticality of accurate, timely and diverse data on energy consumption and power flows in a more complex and dynamic energy market. The drivers identified in Section 2.3 have been a critical input to how we transition from the current state to a future state that maintains compliance with our regulatory obligations.

Central to our strategy is the replacement of all 882 transmission meters that have reached a critical juncture of obsolescence, non-support and operational issues. Further information on the need for the meter replacement program is set out in AusNet's TRR Metering Business Case. The new meters would be compatible with a comprehensive new asset management register that would improve the efficacy of managing meters.

Modern meters are incompatible with legacy meter reading and management systems. Our strategy is to invest in a meter reading platform that is cloud based and which uses modern protocols. Directly investing in the system will enable AusNet access to raw data that can be accessed in real time through a streaming service. The raw data would be provided to the MDP, with the MDP continuing to operate (C-I-C) in parallel until all meters are replaced.

Similarly, we would invest in a meter data storage system that would collect both the raw and corrected data. The data would be analysed using a new analytics system incorporating pattern recognition and correlation of variations with identifiable factors. This system would detect data errors and provide an independent verification of data in the case of disputes for market settlement.

Figure 3 identifies our current and future target state, which provides a transition path to a modern metering solution while recognising that we need to operate legacy systems until all meters are replaced.

Figure 3 – (C-I-C)

(C-I-C)

3.2 Identified needs

In this section, we articulate the need for new capability consistent with our overarching metering strategy.

Integration of meter reading systems with modern meters

Our decision to replace aged and outdated meters necessitates investment in new metering software. The need arises from the inability of the current (C-I-C) system to seamlessly integrate with modern meters. The costs of integrating modern meters into the current (C-I-C) system are very high, with an estimated cost (C-I-C). Further, as a legacy system, (C-I-C) cannot collect the channels of power flow data available from modern meters including information on SAG, SWELL, harmonic, zone subs, and power quality data (voltages and conditions).

Most modern meter manufacturers offer meter reading and data management services as cloud-based solutions bundled with their hardware sales. This "cloud-enabled metering" model simplifies integration, speed of deployment and reduces upfront costs. The data also captures vital power quality information from the modern meters into a single system. The cloud-based solution offered by the meter manufactures also include meter management capabilities which allow remote reprograming of the meters.

A further advantage of investing in a new system is the ability for AusNet to access raw data, rather than relying on the meter data provider. As discussed below, this data can be input directly into a meter data storage solution that can be used for analytics to enhance meter data integrity.

Access to raw and corrected meter data to verify accuracy of data

As a metering coordinator, AusNet has obligations to ensure that meter settlement data is accurate, and we must resolve any disputes from financial participants. Currently, we appoint an external service provider as our meter data provider who use their own systems to read, verify or substitute data, and to provide the information to AEMO for market settlement.

Under the current arrangements, we are wholly reliant on the meter data provider and its' systems to ensure accurate data, and we must use their data to investigate issues that are raised by financial participants and any queries in respect to NGERs reporting. As data complexity grows with multi-directional flows, we see a need to be more proactive in monitoring the quality of metering data, which requires access to raw and corrected data in a storage system and a data quality system that can detect issues early through features such as analytics.

Access to power quality data in real time

Modern meters collect information on power quality in real time. This information improves our network operations and planning including managing network constraints, identifying augmentation and replacement needs to ensure more targeted programs, and enhancing operational decisions such as switching and responding to faults.

3.3 Initiatives to meet identified need

Table 3 identifies five initiatives that address the identified needs and their estimated cost. In the next section, we discuss the options assessment that guides our investment program based on maximising net present value.

Table 3 – Initiatives to meet identified needs ($m, real 2025)

System or Application	How addresses identified needs	Capex
Meter reading system	The initiative requires AusNet to invest in a cloud-based meter reading software that is compatible with modern meters. The software would collect raw energy consumption and demand data, and also information on power quality such as voltage, SAG, and harmonics.	(C-I-C)
Meter storage system	This initiative would enable AusNet to hold, store, and maintain metering standing data. It would also have functionality to perform estimates and substitutions on an 'as needed' basis to verify data in the case of disputed market settlement data.	(C-I-C)
Meter data and analytics	This initiative would utilise the data in the storage system to proactively improve data integrity. Data analytics would be used to identify meter data abnormalities, and analytics would help diagnose issues early.	(C-I-C)
Meter streaming	This initiative aims to transition from interval-based polling to real-time streaming of transmission and sub-transmission meter data. By enabling live data feeds, it will enhance network visibility, support faster fault detection, and improve operational responsiveness. Currently, delays in identifying communication faults and limited access to switching records hinder performance. Streaming will improve data quality, support compliance (e.g. NGER reporting), and allow stakeholders - including network control and sustainability teams - to proactively monitor events, validate power quality, and reduce reliance on manual processes.	(C-I-C)
Meter asset register	This initiative involves creating a centralised register for approximately 882 transmission meters, capturing details such as meter specifications, current transformers, voltage transformers (VTs), market participant data, and historical records. It supports planning and scheduling activities and ensures compliance with NER Chapter 7 and relevant Australian standards.	(C-I-C)

4. Options consideration

This section provides an overview of the investment options considered in the context of the identified needs and initiatives detailed in Sections 3.2 and 3.3.

The AER's guidance note – "Non-network ICT capex assessment approach" of November 2019 notes that non-recurrent expenditure should have a positive net present value unless a compliance requirement, or unless strong customer support and willingness to pay is demonstrated. In all cases, it is expected that timing and scope options of the investments (to demonstrate prudency) and options for alternative implementation approaches, systems and service providers (to demonstrate efficiency) will be evaluated. Assessment is to be made of the discounted costs against the benefits of the programme.

As per the AER guidelines, we have examined credible options for delivery of our metering regulatory obligations as set out in the remaining chapter.

4.1 Options analysis

Table 4 describes 3 options to fully or partially address identified needs, and which are technically feasible. We examined the relative net benefit of delivering our metering requirements through our existing metering infrastructure, through the full suite of initiatives discussed in section 3.3, and a targeted suite of those initiatives.

Table 4 - Summary of options

OPTION	SUMMARY
Option 1: Maintain current state architecture	Maintain the existing metering systems, including integrating new physical meters with existing systems.
Option 2: Deliver metering systems target state, aligned with metering strategy	Invest in new metering systems including meter reading, meter storage, meter data analytics, meter data streaming and a new meter asset register
Option 3: Implement targeted initiatives in metering strategy	Same as Option 2, but delay implementation of meter streaming system.

We have applied cost-benefit analysis to determine the preferred option. In terms of costs, we have considered the implementation cost (capex and project opex) and ongoing licencing and support opex costs in real dollar terms. We have then assessed the benefits of each initiative. In effect, the benefits relate to the value in meeting the identified needs. The benefits include:

- Avoided settlement errors - Avoided market settlement and emissions reporting errors
- Avoided integration costs - Avoided customisation cost of integrating replacement meters into the existing meter reading system.
- Productivity improvements - Reduced employee effort for manual calculations/management – improved employee efficiency
- Better Data Quality & Compliance Obligation (Qualitative) - Sustainable management of metering data

Our NPV analysis has considered the benefit over the RY2028 to 2038 period (a 10-year period).

4.2 Option 1: Maintain current state

This option proposes to maintain the existing meter infrastructure, and continue to integrate new meter technology with legacy systems. As a base case "do nothing" option, qualitative examination of the advantages and disadvantages of this option are set out in **Table 5** below.

Table 5 – Advantages and disadvantages of Option 1

Advantage	Disadvantage
• This reduces the costs of implementing new systems. • Continues the current arrangements to externally source the meter data function, limiting internal resources to perform additional oversight functions.	• Given the increasing complexity with meter data, the existing systems are likely to result in more errors over time, and reduced time to correct errors. • There is less time and independent information for AusNet to resolve disputes with settlement data. • There is a high cost and increased time to integrate modern meters with legacy meter systems. • AusNet will not be able to fully access rich information on power quality that provides operational and compliance reporting accuracy for greenhouse emissions.

We note that while there are no incremental capex or opex costs associated with the option, it does not address the identified needs detailed in Section 3. This option also does not generate any quantified benefits such as reducing errors in market settlement, improved compliance reporting, and productivity improvements. For this reason the NPV value is zero under Option 1, and effectively is a counter-factual to assess the net present value of Options 2 and 3 against.

4.3 Option 2: Deliver metering systems target state

This option proposes to invest in the suite of 5 initiatives identified in Section 3.3, to deliver the metering systems target state detailed in Section 3.1. This program includes meter reading, meter storage, meter data analytics, meter data streaming and a new meter asset register. We note that under this option, the meter data provider would continue to use existing digital systems for legacy meters and would utilise the new meter reading software to provide data for settlement for new meters. The advantages and disadvantages of this option are set out in **Table 6**.

Table 6 - Advantages and disadvantages of Option 2

Benefits	Disadvantage
• As meter data becomes more complex, the meter storage and data analytics Improves ability of AusNet to detect and interrogate settlement errors from metering data, reducing the time to settle disputes and reduce compliance risks. • Implementing a new metering system reduces the cost and time of integrating with legacy digital systems. • Access to power quality data in real time improves compliance with reporting requirements, and improves operations by being able to access power quality information. • Improved asset management of meters through an accurate meter register.	• Higher costs than Option 1. • More complex metering environment. • Higher operational costs with taking on a proactive supervisory role of meter data provided for settlement.

Investment required to deliver Option 2 is estimated to be $11.3 million capex and $9.4 million opex ($real 2025). As Software-as-a-Service solutions are anticipated to be implemented, this cost incorporates $5.1 million of project implementation opex ("propex") per International Financial Reporting Interpretations Committee (IFRIC) guidance accounting guidance. The expenditure profile is shown in **Table 7**.

Table 7 - Forecast expenditure for Option 2 ($'million, real 2025)

Cost item	RY28	RY29	RY30	RY31	RY32	Total
Capex	2.1	7.2	0.0	2.0	0.0	**11.3**
Project Implementation Opex ("propex", non-recurrent opex)	2.4	2.7	0.0	0.0	0.0	**5.1**
Ongoing Licences & Support Opex (recurrent opex)	0.0	0.3	1.3	1.3	1.3	**4.3**
Total	**4.5**	**10.2**	**1.3**	**3.3**	**1.3**	**20.7**

This option is assessed as realising significant quantified benefits including:

- (C-I-C)
- (C-I-C)

Based on assessed program costs and quantified benefits, or analysis has found that this Option has an NPV of $27.3 million over a 10-year period.

4.4 Option 3: Implement targeted initiatives

This option evaluates whether the inclusion of systems that relate primarily to operational performance provide additional benefits. We have tested whether the exclusion of the meter streaming system would increase the net present value. Essentially this is Option 2 without the meter streaming system, and consequently captures the same advantages and disadvantages, with the exception of being unable to capture metering data in real time. Therefore, it has the disadvantage of not being able to access power quality data to use for real time control of the network.

Option 3 increases AusNet's costs in providing a meter service relative to Option 1, but has lower capex than Option 2. The overall incremental cost is estimated at $9.3 million capex and $9.4 million opex with the expenditure profile shown in **Table 8**. While this option has lower costs than Option 2, there is a significant reduction in benefits. Our analysis has found that it has an NPV of $24.3 million, lower than in Option 2.

Table 8 - Forecast expenditure for Option 3 ($'million, real 2025)

Cost item	RY28	RY29	RY30	RY31	RY32	Total
Capex	2.1	7.2	0.0	0.0	0.0	**9.3**
Project Implementation Opex ("propex", non-recurrent opex)	2.4	2.7	0.0	0.0	0.0	**5.1**
Ongoing Licences & Support Opex (recurrent opex)	0.0	0.3	1.3	1.3	1.3	**4.3**
Total	**4.5**	**10.2**	**1.3**	**1.3**	**1.3**	**18.7**

5. Preferred option

Table 9 shows an overall assessment of each option against the identified capability needs for metering digital systems, and how well each option will address that gap. Option 2 completely satisfies the capability gap. Option 3 provides improvements for accessing power quality data metering data, but only partially satisfies the capability gaps as we would not have access to meter streaming data.

Table 9 - Summary of options assessment against identified needs

Identified capability gaps	Option 1	Option 2	Option 3
Integration of meter reading systems with modern meters	No	Yes	Yes
Access to raw and corrected meter data to verify accuracy of data	No	Yes	Partially
Access to power quality data in real time	No	Yes	Partially

Table 10 provides a summary of findings from our options analysis. It shows that Option 2 is the preferred option as it delivers the highest NPV, addresses each of the identified needs, and can be delivered in the timeframe. The costs of this option are 100% attributable to AusNet's transmission business, and incorporate capex and implementation opex for the required new metering systems, and ongoing licencing and support opex.

Table 10- Options analysis summary

Criteria	Option 1	Option 2	Option 3
Capex ($'000, real FY25)	-	$11.3	$9.3
Opex ($00, real FY25)	-	$9.4	$9.4
NPV ($'000, real FY25)	-	$27.3	$24.3
Technically feasible	✓	✓	✓
Addresses identified need	✗	✓	(Partially)
Deliverable within timeframe	N/A	✓	✓
Preferred	✗	✓	✗