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Meter Replacement
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Acknowledgement of Country

We acknowledge the Traditional Custodians of the lands where the Ausgrid distribution network is located, and we pay our respects to the elders' past, present and emerging.

Our network and operations span the traditional country of 17 languages, tribal and nation groups in Sydney, the Central Coast and Hunter regions of New South Wales (NSW).

Glossary

The following abbreviations and terms are used in this plan.

- AEMC Australian Energy Market Commission
- AER Australian Energy Regulator
- AEMO Australian Energy Market Operator
- CLC Customer Load Control
- CMIG Contestable Metering Industry Group
- DNSP Distribution Network Service Provider
- LMRP Legacy Meter Replacement Plan
- MC Metering Coordinator
- MDP Metering Data Provider
- NEM National Electricity Market
- MFIN Meter Fault and Issue Notification
- MP Metering Provider
- MPD Metering Protection Device as defined by the metering annexure of the NSW SIRs
- OIAI One In All In
- SFMRP Shared Fusing Meter Replacement Procedure
- SIRs NSW Service and Installation Rules (SIRs)
- Supply point Is the service connection between a customer premises and the Ausgrid network. There
 may be more than one NMI per supply point, this is what is commonly referred to as a multiple
 occupancy.
- TIGS Temporary Isolation Group Supply

Introduction and Overview

Who is Ausgrid?

As the largest electricity distributor on Australia's east coast, we provide safe, reliable, and affordable energy to millions of homes and businesses every day.

Day-to-day we operate, maintain, repair, and build our electricity network, focusing on safety and reliability. Over the next decade, Ausgrid will move beyond just distributing electricity to transmitting it, storing it, and enabling vehicles to be charged with it. More than a network, we are a company driven by our purpose to make electricity accessible for all.

This strategic shift isn't just about keeping pace with technology; it's about leading the way, embracing developments in renewable energy, and adapting our infrastructure for the future.

We proudly employ an incredibly knowledgeable, skilled, and diverse team, making us one of NSW's most dynamic companies. Our team's commitment to delivering outstanding results and making significant advancements in our industry is what makes Ausgrid truly exceptional.



Ausgrid Network Area

Our network and operations span the traditional country of 17 languages, tribal and nation groups in Sydney, the Central Coast and Hunter regions of New South Wales.

Our network is made up of substations, powerlines, underground cables and power poles, spanning 22,275 square kilometres throughout Sydney, the Central Coast and the Hunter Valley.

Figure 1 – Ausgrid Network Area.



National Metering Reforms

On 28 November 2024 the Australian Energy Market Commission (AEMC) published its final determination on accelerating smart meter deployment.

The final rules aim to deliver an efficient rollout of smart meters to all customers by 2030, under an improved metering framework in the National Electricity Rules (NER) and National Energy Retail Rules (NERR).

The final rules will benefit consumers. They will increase the amount of information available to consumers about their energy use, allow consumers to better understand and manage their bills, and open up access to new and innovative retail service options. More broadly, the final rules will benefit all energy stakeholders by enabling a more efficient, lower-cost, and lower-emissions energy system.



The final rules deliver two core reforms plus a set of four supporting reforms, which together pave the way for universal uptake of smart meters by 2030.1

Figure 2 – AEMC Accelerating smart meter deployment reforms.²

Core reforms to deliver the benefits that smart meters offer 1 opens new possibilities for innovative products and services, expanding customers' control of and choices around their energy use **Accelerated** lower costs to customers of meter reads and installations deployment · provides for a modern, data-enabled energy system of smart underpins the cost-effective decarbonisation of the energy market meters supports better integration of CER and a safer and more secure energy system. Access to DNSPs can better manage their networks to reduce network costs for power quality data saves energy, minimises network safety risks, and lifts hosting capacity. Supporting reforms to enable the core reform program New protect customers from potential upfront charges and exit fees for new customer meters, and bill shock from unwanted retail tariff structure changes safeguards builds social licence for the smart meter acceleration program. Improving the helps maintain social license for the acceleration program customer ensures that customers can access the full suite of benefits that smart experience meters provide. Reducing · supports delivery efficiencies, and therefore cost savings, in the installation accelerated deployment of smart meters. barriers Improved helps minimise costs for industry and customers meter testing supports a 2030 universal smart meter deployment target. & inspections

Under the final AEMC rules, new regulatory arrangements will require retailers and Metering Coordinators (MCs) to replace all existing Type 5 and Type 6 metering installations ('legacy' meters) with a Type 4 ('smart' meter) meter by 1 December 2030³. The commencement date for the acceleration is 1 December 2025 and will be broken into five distinct interim periods (1 December to 30 November in each year) for regulatory reporting purposes.

The final electricity rule also introduces a new regulatory mechanism where Distribution Network Service Providers (DNSP) work with retailers, MCs, and other stakeholders to develop a Legacy Meter Replacement Plan (LMRP) showing which legacy meters will be replaced, and when.⁴

About this Legacy Meter Replacement Plan

Ausgrid has developed this Legacy Meter Replacement Plan (LMRP) as required by the NERs and in consultation with industry participants, including Electricity Retailers and Australian Energy Market Operator (AEMO) and registered MCs.

Objectives

In its final report ⁵ the AEMC defined that the objective of the LMRP was to replace all existing legacy meters (Type 5 and 6) with a Type 4 meter in a timely, cost-effective, fair, and safe way, during the LMRP period.

¹ AEMC accelerating smart meter deployment final determination information sheet

² AEMC Rule determination Accelerating smart meter deployment 28 November 2024, p 1

³ AEMC Rule determination Accelerating smart meter deployment 28 November 2024, p 9

⁴ AEMC Rule determination Accelerating smart meter deployment 28 November 2024, p 10

⁵ AEMC Rule determination Accelerating smart meter deployment 28 November 2024



The AEMC included in the final Rule objective that Distribution Network Service Provider (DNSP) LMRPs must include:

- An outline of the smart meter rollout profile. This will show the proposed groupings (for example, by postcodes or suburbs) that are scheduled for meter replacements in each 'interim period' from 2025 to 2030, and the total number of meters to be replaced in each year.
- An explanation of how the AEMC's LMRP objective and LMRP guiding principles (outlined further below) have been applied, which may include supporting information and strategies that underpin the LMRPs.
- A description of the DNSPs' consultation processes to develop the LMRPs, including who was consulted and how, what was learned through this consultation, and how the feedback shaped the plan.⁶

Guiding Principles

The following guiding principles were published as a part of the AEMC's final determination:

- Approximately 15–25 per cent of legacy meters should be planned for replacement in each interim period. An interim period is each 12-month period commencing on 1 December within the LMRP period. This principle provides clear guidance for DNSPs and affected parties when developing LMRPs and ensures the replacement program is not back ended. This would mitigate the risk that retailers do not have enough time to address unforeseen issues by the 2030 target.
- DNSPs should have regard to the overall efficiency of the LMRP, including costs and potential
 cost savings for affected market participants. DNSPs should consider grouping installations by
 postcodes, zone substations, and/or meter reading routes to support coordination and delivery
 efficiencies.
- DNSPs should have regard to the impact of LMRPs on retailers and other affected stakeholders. DNSPs are required to consult with key stakeholders, identify relevant concerns with the draft LMRP, and address those concerns in the LMRP proposal to the Australian Energy Regulator (AER). Stakeholders are expected to help shape the replacement profile to ensure it is achievable.
- DNSPs should have regard to appropriate and efficient workforce planning, including in regional areas. DNSPs are required to consider how the parties will utilise local work forces in a way that avoids moving installers every year or creating a local boom-bust cycles. Considering labour market conditions for electricians and the supply of metering components in the LMRPs will help retailers meet their obligations.⁷

Background - Ausgrid's Regulated Metering Base

There are more than 1.5 million meters, and over 400,000 load control devices installed across Ausgrid's network and in customer installations. The majority of this equipment is installed within customer installations.

Ausgrid acts as a 'metering co-ordinator' in accordance with the NER and AEMO requirements and utilises contracted metering service providers to maintain our meters and for data co-ordination. Following regulatory changes in 2017, energy retailers are generally responsible for all new meters and meter replacements in customer installations.

Meters and associated load control equipment are generally used to:

 Measure electricity usage for revenue recovery and market settlement at a retail and wholesale level:

 $^{^{\}rm 6}$ AEMC Rule determination Accelerating smart meter deployment 28 November 2024, pp. 12 - 13

⁷ AEMC Rule determination Accelerating smart meter deployment 28 November 2024, pp. 12



- · Allows for network and retail tariff optimisation; and
- Control customer 'off peak' loads.

Ausgrid meters include Type 1-4 meters (used for wholesale, network cross boundary and statistical metering points) and legacy Type 5 or Type 6 meters used for customer metering. Type 5 meters are interval meters and Type 6 meters are accumulation meters and can be electromechanical or electronic technologies.

Ausgrid also maintains customer load control equipment, either within the meter or as separate relays (operated by audio frequency signals) or time switches on the customer switchboard. Type 4 metering utilises 'smart meters', these meters also provide load control capability and are provided by contestable metering providers, and they are not within the scope of Ausgrid's responsibility.

Summary of Ausgrid's regulated Type 5 and 6 metering assets are provided in Tables.1 and 2 **Error!** R **eference source not found.** below.

Table 1 – Ausgrid regulated metering and National Metering Identifier (NMI) count

Meter Type		Number Of Meters
Type 6	828,476	1,108,499
Type 5	318,969	362,883

Data as at 1 February 2025

Table 2 – Average age of Ausgrid regulated metering assets at end of FY23/24

Meter Type and Phase ⁸ Configuration	Number Of Meters	Average. Age	Std Life
Type 6 - 1 Phase	1,150,500	36.49	25
Type 6 - 3 Phase	46,986	18.79	25
Type 5 - 1 Phase	302,461	15.31	25
Type 5 - 3 Phase	89,191	14.43	25
Total	1,589,138	21.25	25

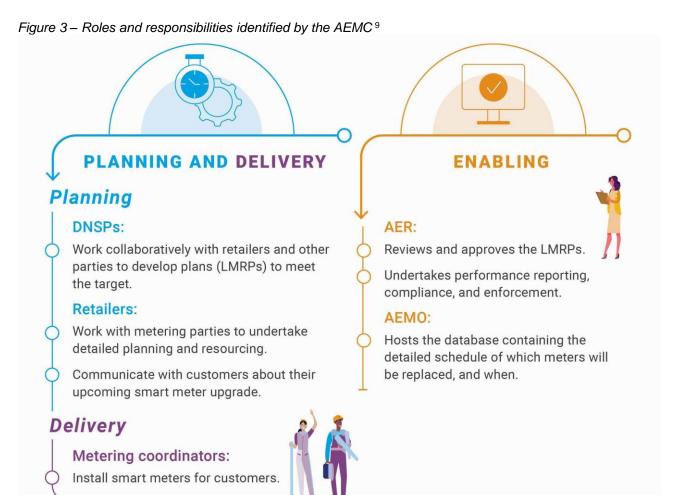
Data as at June 2024

Roles and Responsibilities

In the final determination, the AEMC identified a number of electricity industry participants and regulators and their key roles in the development, execution and overall success of the advanced meter rollout (Figure 3).

⁸ Phase refers to the number of electrical alternating current phases connected to the meter.





Approach to the Development of the LMRP

How the LMRP Principles and Objectives have been Applied

Based on the current legacy meter replacement rate, Ausgrid estimates that there will be approximately 1,000,000 NMIs to be upgraded to a Type 4 meter at the start of Year 1 of the LMRP acceleration period (1 December 2025). Ausgrid LMRP proposes the following principles to be applied across the LMRP period to meet the AEMCs objectives and guiding principles:

- Grouping NMIs via meter reading route;
- Equally distributing meter reading routes across various locations across the Ausgrid network area;
- Bundling multiple meter reading routes in geographical clusters across each area;
- Managing legacy meter replacement efficiency for MCs and route management efficiency for Ausgrid by breaking up each LMRP year into quarterly NMI allocation;
- Targeting Customer Load Control (CLC) ripple problem locations in first LMRP year;
- Targeting Hunter rural NMIs in year one, so Retailers and MCs can focus other locations. This will be approximately 30,000 NMIs to be targeted for replacement;
- Including boat and ladder routes in the first 2 LMRP years;
- Targeting a small cluster of suburbs for replacement in LMRP year 1 due to network reconfiguration.

⁹ AEMC Rule determination Accelerating smart meter deployment 28 November 2024, pp. 11Equally



Through consultation with industry participants, Ausgrid has set the general percentage splits per LMRP period (1 December to 30 November each year commencing 1 December 2025) as per Table 3.

Table 3 – Total percentage split across each LMRP period.

Year	NMIs	Allocated per annum.
1	15%	150,000
2	25%	250,000
3	25%	250,000
4	20%	200,000
5	15%	150,000
Total	100%	1,000,000

Ausgrid chairs a National Electricity Market (NEM) wide (excluding Victoria) DNSP LMRP working group which has been meeting monthly for the past 2 years. The purpose of this working group is to discuss LMRP and One In All In (OIAI) issues with a view to align LMRP strategies, AER submissions LMRP format and includes data sharing information with retailers and MCs where possible.

Route based approach

Based on the consultation with industry participants, Ausgrid has organised the allocation of NMIs through the LMRP period via meter reading route. Meter reading routes have a number of characteristics which allow for a fair and even distribution of NMIs for routine meter reading and a legacy meter replacement rollout.

In Ausgrid's distribution network meter reading routes are broken into the categories outlined in Table 4 and visualised in Figure 4:

Table 4 – Meter reading route types, description and quantity.

Route Type	Route Description	Number of Routes February 2025
Boat	Where a boat is required to access the meter.	5
CBD	Located within the Sydney Central Business District (CBD).	34
Ladder	Require a ladder to access the meter (also requires the use of a vehicle to travel between sites).	59
Remote	Remotely read legacy meters where a site visit is not required.	20
Walking	A walking meter reader travels from house to house to read meters. This is the majority of routes in Ausgrid's network.	5204
Vehicle	Routes which are arranged in such a way that a vehicle is required to efficiently move between sites (such as monthly demand meter reading routes and remote locations such as Upper Hunter and other rural locations).	940



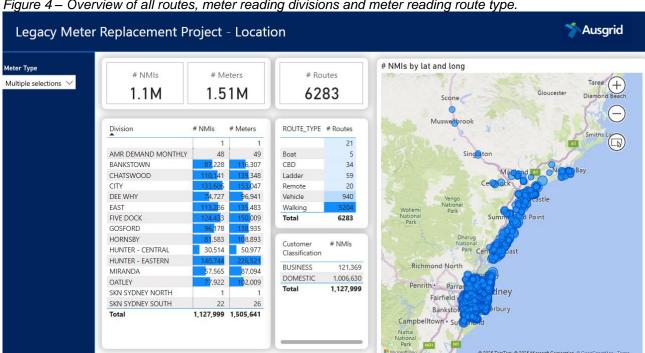


Figure 4 – Overview of all routes, meter reading divisions and meter reading route type.

Geographical clusters.

Ausgrid geographical clusters consist of the following areas (Colour in brackets indicates location on map on Figure 5):

Table 5 – Geographical area, meter reading divisions and quantity.

Geographical Area	Meter Reading Division	NMIs	Meters
	OATLEY	77,922	102,009
Sydnay South (Pad)	MIRANDA	57,565	
Sydney South - (Red)	FIVE DOCK	124,433	
	BANKSTOWN	87,228	İ
Sydney East - (Black)	EAST	113,286	135,483
Sydney East - (black)	CITY	133,606	153,047
O Los North (DLs)	HORNSBY	81,583	108,893
Sydney North - (Blue)	DEE WHY	74,727	96,941
	CHATSWOOD	110,141	139,348
Central Coast - (Green)	GOSFORD	96,178	138,935
Newcastle - (Yellow)	e - (Yellow) HUNTER - EASTERN		226,521
Upper Hunter - (Orange)	HUNTER - CENTRAL	30,514	50,977
	Total	1,127,927	1,505,564



Figure 5 - Ausgrid LMRP Geographical Regions.



"Clustering" of a number of routes in specific areas will allow for efficient replacement of legacy metering equipment by MCs and management of walking route routes by Ausgrid. Ausgrid has prepared its LMRP to include geographical clustering of current routine meter reading routes in each of the areas identified in Figures 6.a and 6.b and split by the percentages in Table 6 and 7. An example of geographical clustering which has been developed by Ausgrid is shown in Figure 6.



Table 6 – Annual percentage split across each LMRP period per geographical region.

	Annual NMIs per LMRP year								
Year	NMIs	1,000,000	Syd Sth	Syd East	Syd Nth	СС	Newcastle	Hunter	Total
		Percentage Split	31%	22%	24%	9%	12%	3%	100%
1	15%	150,000	46,164	32,832	35,433	12,790	18,716	30,514	176,450
2	25%	250,000	76,941	54,720	59,055	21,317	31,194	0	243,226
3	25%	250,000	76,941	54,720	59,055	21,317	31,194	0	243,226
4	20%	200,000	61,552	43,776	47,244	17,053	24,955	0	194,581
5	15%	150,000	46,164	32,832	35,433	12,790	18,716	0	145,936
Total	100%	1,000,000	307,762	218,881	236,221	85,266	124,776	30,514	1,003,420

Figure 6.a – Examples of a geographical cluster map for a quarter for Sydney South area (not all routes in area shown due to Microsoft Power BI limitations).

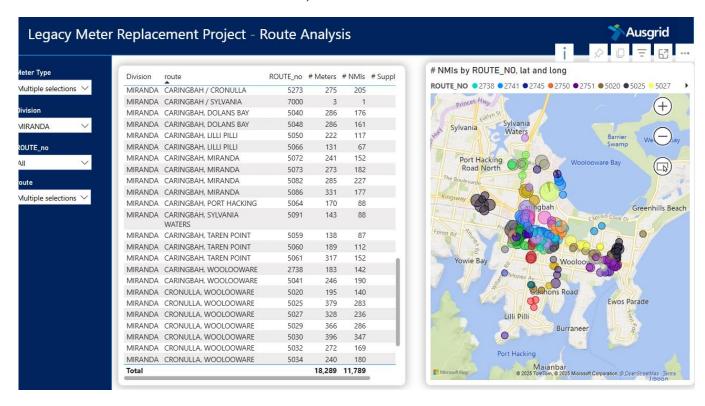
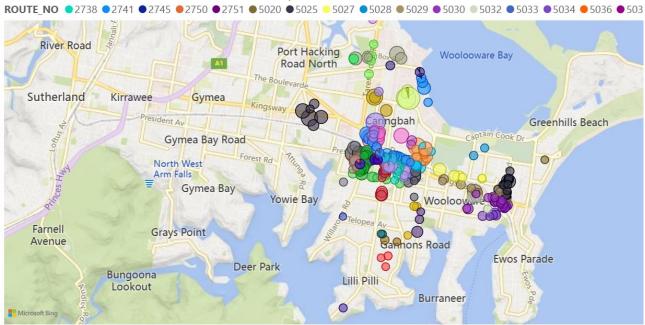




Figure 6.b – Examples of a geographical cluster map for a quarter for Sydney South area (not all routes in area shown due to Microsoft Power BI limitations).



Quarterly LMRP NMI allocation approach

Ausgrid is proposing to allocate NMIs in Market Settlement and Transfer Solution (MSATS) by using a quarterly date in the proposed LMRP field. This will assist retailers and MCs to allocate work in a concise geographical area around the same time. This will provide field efficiencies for both the MC and Ausgrid as this aligns with routine meter reading cycles. Quarterly allocation of this work will be critical to the success for shared fuse sites to ensure that MCs, retailers and Ausgrid are not overburdened with a LMRP years worth of work in a three month period.

The feedback Ausgrid received during consultation, it that is critical the AER do not use the quarterly date as a tool to measure the performance of a retailer's compliance to LMRP replacement targets.

Table 7 – Percentage split across each LMRP period per geographical region. Per Quarter.

	Quarterly NMIs Per LMRP year								
Year	NMIs	1,000,000	Syd Sth	Syd East	Syd Nth	СС	Newcastle	Hunter	Total
			31%	22%	24%	9%	12%	3%	100%
1	15%	150,000	11,541	8,208	8,858	3,197	4,679	7629	44,112
2	25%	250,000	19,235	13,680	14,764	5,329	7,798	0	60,807
3	25%	250,000	19,235	13,680	14,764	5,329	7,798	0	60,807
4	20%	200,000	15,388	10,944	11,811	4,263	6,239	0	48,645
5	15%	150,000	11,541	8,208	8,858	3,197	4,679	0	36,484
Total	100%	1,000,000							



Data provision to retailers and MCs.

Through discussion within the DNSP LMRP working group a standardised data sharing format was agreed to for the provision of high level and detailed level of data for retailers and MCs. As contestable MCs will in most cases not be a party to the NMI, NMI level data will not be provided to MCs.

The following high level data is to be provided to retailers and MCs:

- LMRP year
- LMRP version
- Number of NMIs
- Number of meters
- Postcodes targeted

The following detailed data is to be provided to retailers (for sites they are a retailer for):

- LMRP year
- LMRP version
- Retailer
- NMI
- Meter type
- Number of meters
- Suburb
- Post code

The following additional data to be provided to retailers upon request (for sites they are a retailer for):

- Route ID
- Key required (from Ausgrid meter reader key audit)
- Plug in meter
- · Next scheduled routine read date.

Ausgrid LMRP Constraints

Ausgrid has identified a number of constraints in the development of its LMRP. Some of these constraints are common across all distribution networks, whilst others are specific to Ausgrid. Some of the common constraints will have a greater impact on Ausgrid than other distribution networks. Further details on the constraints identified by Ausgrid in development of its LMRP follow.

Multi Occupancy customer installations

Ausgrid currently has 1.8M NMIs which are connected to 989K supply points. A supply point is the physical electrical service connection between a customer premises and the Ausgrid network. There may be more than one NMI per supply point, commonly referred to as a multiple occupancy. The electrical configuration of a customer's electrical installation varies by age and location due to differing service rule requirements over time and local historical network requirements.

As at February 2025, Ausgrid has a regulated meter base of 1.13M Type 6 meters and 0.37M Type 5 meters which are connected to 1.127M NMIs. These 1.127M NMIs are connected to 504K supply points.

Further analysis of supply point NMI numbers are:

- 20,588 supply points have 11 NMIs or more.
- 98,98 supply points have 10 NMIs or less.
- Maximum number of NMIs at one supply point is 749
- 180 supply points have over 200 NMIs

Further break down of supply points and NMIs can be seen in the following Table 8.



Table 8 – Number of NMIs at a supply point

Number of NMIs at a supply point	Number of Supply points	Total Type 5 or 6 NMIs #
2	54,360	107,825
3	11,070	32,784
4	7,570	29,955
5	7,112	35,269
6	3,987	23,684
7	5,890	40,903
8	2,352	18,628
9	3,751	33,543
10	2,728	27,290
Sub Total	98,820	349,881
>10	20,209	555,992
Total >1	119,029	905,873

- Some of these NMIs will have Type 4 metering already installed, these have been excluded from the numbers in this table.

Shared fuse installations

In NSW, customers wanting to connect to or alter their connection to a NSW electricity distributor must comply with the NSW Service and Installation Rules of NSW (SIRs) for any new connection or upgraded customer installation. In November 2016 the NSW government reviewed the SIRs to support the Power of Choice metering initiative. One of the changes was to mandate that all meters associated with a NMI must be able to be isolated via its own Meter Protection Device (MPD). Prior to November 2016 the SIRs allowed for up to 4 customers per service fuse so long as the maximum demand did not exceed to service fuse rating. As such, due to this allowance in the SIRs Ausgrid anticipates that the majority of multiple occupancy sites connected prior to 2016 will most likely be be connected to a shared fuse.

All advanced meters installed since November 2016 must be connected by its own MPD to isolate that NMI only.

Due to legacy rules (both the SIRs and the local supply authority rules) there is a range of differing customer switchboard connection arrangements.

One In All In (OIAI)

The current process for managing meter replacements at sites with a shared fuse is via the Temporary Isolation Group Supply (TIGS) process. The TIGS process commences when a MC identifes a shared fuse and requests the retailer for that NMI to raise a TIGS service order to the local DNSP to arrange a network planned outage for all customers connected to the shared fuse. This creates an issue whereby only one NMI's associated meters are replaced during the network planned outage of multiple customers. The impact of this is that at a site which has 10 NMIs, each customer would have 10 outages to replace all the metering on the shared fuse site. As this process is inefficent and caused multiple outages for electricity end use customers the AEMC has developed a shared fuse meter replacement procedure in its final rule determination. The AEMC's shared fuse meter replacement procedure is also known as One In All In, these terms are used interchangably in this LMRP.

In its final rule determination, the AEMC has provided particularly tight timeframes to compete meter exchanges at sites where customer NMIs and associated metering are connected to shared fuses. The AEMC has allowed 30 business days for the network to scope the shared fuse site and schedule an outage date and time. Within this 30 day period Ausgrid must raise a shared fuse notification which will be achieved by the delivery of a one way notification via a Meter Fault and Issue Notification (MFIN) to the current retailer via AEMO's Business to Business (B2B) system. From the date of this notification to the retailer the outage to replace the metering must occur within the next 25 – 65 business days. This will be particually challanging



for some commercial installations as Ausgrid cannot control when scoping service orders are sent by retailers.

Ausgrid has conducted two OIAI trials with retailers and MCs. The learnings from these trials will be critical to the success of OIAI work during the LMRP period.

On 5 September 2024, Ausgrid arranged for the first OIAI trial at 8 Roosevelt Rd, Riverwood. The site had 10 customers, nine tenant NMIs and one house lights NMI. Three of the meters onsite had already been replaced with advanced meters and Meter Family Failure MFINs have been previously raised for most of the NMIs.

This site was selected for the following reasons:

- Individual Domestic and Off Peak (OP) metering allowed for 2 meters and a shared relay to be replaced with one advanced meter for 5 of the units;
- Timber switchboard was in a suitable condition:
- Customer main switches available at the Main Switch Board (MSB);
- Enough room for 2 technicians to comfortably work on the metering panels at the same time; and
- No registered life support customers onsite.

Participants listed in Table 9 were part of the first OIAI trial.

Table 9 - Riverwood OIAI Participants.

Participants				
Retailers	Metering Coordinators			
AGL	Blue Current			
Energy Australia	Intellihub			
Origin Energy	Plus ES			
Red Energy				
Shell Energy				

On 24 September 2024, Ausgrid arranged for the second OIAI Trial at 9 Edwards Ave, Bondi. The site had 11 customers, 10 tenants and one house lights. Two of the meters onsite had already been replaced with advanced meters.

This site was selected for the following reasons:

- Individual domestic meter to be replaced with one advanced meter for 10 of the units and House lights;
- Timber switchboard was in a suitable condition;
- Customer sub main isolation available at the MBS;
- Enough room for one technician to comfortably work on the metering panels at a time;
- No registered life support customers onsite.

Participants listed in table 10 were part of the second OIAI trial.

Table 10 - Bondi OIAI Participants

Table 10 – Bonul OlAl Participants.				
Participants Participants				
Retailers	Metering Coordinators			
AGL	Blue Current			
Energy Australia	Intellihub			
Origin Energy	Plus ES			
Red Energy				
DODO				



The two OIAI trials Ausgrid conducted with the other market participants proved the concept that the AEMCs shared fuse replacement procedure is a solution for replacing metering connected to a shared fuse. A number of key learning were identified during these trials, which included:

- Coordination of works is important:
- Appropriate equipment must be provided to technicians by the metering businesses:
- The importance of effective communication between technicians;
- Benefits of standard procedural arrangements between MCs;
- · Potential to minimise duplication of tasks: and
- Confirmation that the network should develop a form for handover to MCs after the network isolation and hand back when MCs require re-energisation.

Ausgrid is committed to continue to look at efficiencies for the replacement of metering connected to shared fuses and will continue to work with inductry participants with the intention to conduct more OIAI trials at more complex installations.

The timing of retailers raising OIAI scoping service orders will be critical to the success and workforce management for Ausgrid, MCs and retailers. Due to the large expected number of OIAI, works must be evenly scheduled across each LMRP period. The risk in the process is that Ausgrid cannot control when retailers send their MCs to site and once the shared fuse is identified the AEMC shared fuse meter replacement procedure commences. It takes just one retailer to send a scoping service order to trigger the AEMC shared fuse meter replacement procedure. Ausgrid will continue to work closely with retailers to work through process to ensure workloads are evenly maintained though each LMRP period for installation where a OIAI is required.

Figure 7 identifies the scale of work likely required at installations where the AEMC's shared fuse meter replacement procedure may be required.

The green line in *Figure 7* shows that if all OIAI scoping service orders were received by Ausgrid in the first month of an LMRP period this would equate to Ausgrid having to arrange 492 network planned outages a week for a three month period due to the timing obligations defined in the NER. There would then be no further work for for the teamarranging and conducting these outages until the commencement of the next LMRP period.

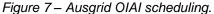
The blue line in *Figure 7* below shows that if all OIAI scoping service orders were received by Ausgrid evenly over a three month LMRP period this would equate to Ausgrid having to arrange 246 network planned outages a week for a five month period due to the timing obligations defined in the NERs. There would then be no further work for for the outage team arranging and conducting these outages until the commencement of the next LMRP period.

Both the green and blue lines in *Figure 7* are not preferred options for the industry as it creates inefficient process and poor utilisation of resources.

The black line in *Figure 7* shows that if all OIAI scoping service orders were received by Ausgrid evenly over an LMRP period this would equate to Ausgrid having to arrange 123 network planned outages a week over the LMRP period. This creates the most efficient use of resources for the MC, retailers and Ausgrid. Ausgrid currently completes approximately 50 TIGS outages a week. Ausgrid believes that the OIAI process will be more resource intensive than the current TIGS for both MC, retailers and Ausgrid.

Ausgrid will continue to work closely with retailers to work through process to ensure workloads are evenly maintained though each LMRP period for installation where a OIAI is required.





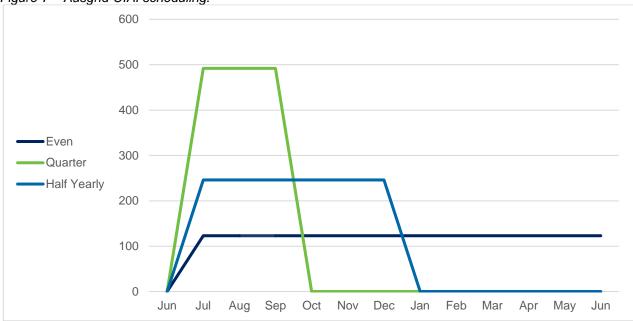


Table 11 - Number of OIAI outages to be scheduled

OIAI Scoping orders received	Per 7 Day	Per Bus Day	Per Week
All at once (Quarter)	70	98	492
Evenly over a 3-month			
period (half year)	35	49	246
Evenly over a year	18	25	123

Proposed quarterly allocation in MSATS

Ausgrid is proposing to allocate NMIs in MSATS by using a quarterly date in the proposed LMRP field. This will assist retailers and MCs in allocating work in a concise geographical area around the same time. In turn, this will provide in field efficiencies for both the MC for meter replacement works and improve efficiency for meter reading route scheduling and other Alternate Control Services (ACS) works for Ausgrid.

Quarterly allocation work will be critical to the success of OIAI for shared fuse sites to ensure that MCs and Ausgrid are not obligated to complete an LMRP year's worth of work in a three month period. Ausgrid continues to work with retailers to determine the most efficient way to manage OIAI workloads.

The example below illustrates why quarterly scheduling is preferred:

Meter reading route contains 300 NMIs with legacy meters.

- Without quarterly scheduling
 - Retailer 1 and 2 issue work to MC in quarter 1 and 200 NMIs have meters replaced, retailer 3 and 4 issue work to MC in quarter 4, 80 NMIs have meters replaced and the remaining 20 have site defects identified and updated in MSATS.
 - The MC can also cause the same issue identified above if attending in different quarters though out the LMRP year.

This causes the routine meter reading for quarter 2 and 3 to be very inefficient as Ausgrid is only reading 100 NMIs (instead of initial 300).

- With quarterly scheduling.
 - If Retailer 1, 2, 3 and 4 all issue work to MCs in a specific quarter, e.g. quarter 1. Using the same data above by the end of quarter 1 the number of NMIs in the route has reduced from 300 to 20 NMIs.



- This allows Ausgrid to review the route efficiency and not send a walking meter reader, instead Ausgrid can move these remaining 20 NMIs onto a car route or other strategy.
- If Ausgrid allocated 10 routes in the same area to a specific quarter and all legacy meters that could be replaced (i.e. no site defects) all remaining NMIs can be moved into a car route. E.g. 10 routes with 20 NMIs remaining in a local area the car route would contain 200 NMIs

From feedback received during consultation, it is critical that the AER does not use the quarterly date stored in MSATS as a tool to measure the performance of a retailer's compliance to Ausgrid's LMRP replacement targets.

Rural sites

Ausgrid does not have the same magnitude of remote rural sites as some other distribution networks. At the start of the acceleration period, Ausgrid is expecting to have approximately 30k NMIs in the upper hunter area. These will include a range of sites such as large towns (eg. Singleton, Muswellbrook) and long remote rural feeders. Ausgrid's LMRP strategy for these sites was discussed with a number of participants via our consultation meetings and general feedback was to arrange to get these NMIs replaced either prior to acceleration or during the first LMRP period.

Customer Load Control (CLC) issues

CLC is used to switch ripple relays, and receivers in meters at customer premises that are typically connected to storage hot water heaters. The CLC equipment in zone substations produce a series of audio frequency signals, that are injected onto the high voltage network.

This type of equipment has been used since the 1950s and at that time customer equipment had very little harmonic content, which did not affect the CLC equipment. However, over the past 20 years, the harmonic content on customer equipment has increased, which has been producing an increase in electrical loading on Ausgrid's aged CLC equipment. For example, fridges now have variable speed drives instead of induction motors, and computers, televisions and other equipment have switch-mode power supplies. This type of equipment, although much more efficient, does have a harmonic component which adversely affects CLC equipment.

At several zone substations, the CLC load has increased such that it is overloading the switchgear/HV fuses supplying the CLC equipment. This often requires restrictions to normal network operation to protect the safety of personnel working at those site. This is expected to increase over coming years.

The load on the CLC equipment is proportional to the number of connected customers. Attempts have been made to alleviate the CLC load by switching customers to other zone substations, however the benefits are only short term, possibly transferring the overload to other zone substations, or compromising reliability outcomes.

In some zone substations, personnel access is restricted due to the risk of overload of CLC equipment or switchgear for the CLC equipment. These zones have the highest priority for action.

Replacing the legacy metering equipment which uses the CLC ripple technology with an advanced meter which switches the load using time switches will alleviate the electrical loading on the CLC equiplment in Ausgrid zone substations. The following suburbs will be targeted for replacement in year one of Ausgrid LMRP to alleviate the CLC equipment issue:

- Meadowbank (Sydney North region)
- Revesby (Sydney South region)
- Mona Vale (Sydney North region)
- Maroubra (Sydney South region)
- Clovelly (Sydney South region)
- Thornton (Newcastle region)



- North Head (Sydney North region)
- Norah Head (Central Coast region)

Access and legacy key systems

Access to customer switchboards is going to be an ongoing issue for the rollout of advanced metering. Customer private locks, seized doors/gates, vegetation, unrestrained animals, aggressive customers and other obstructions are common reasons why Ausgrid meter reading staff cannot access our metering equipment to obtain a meter read.

Ausgrid currently conducts 4.8 million routine meter reads per annum. Ausgrid's average current total no read skip codes (skip code is a code the meter reader enters into their handheld device when they do not read the meter) is around 5.6% and the no read skip codes due to site acess issues is around 4.8%. Ausgrid's routine meter readers provide comments if they cannot perform a routine meter read. As Ausgrid meter readers carry master keys for Ausgrid approved customer locks, they are able to access these sites. Ausgrid meter reading statitics show that 3% of the no access skip reasons are due to locked gate, locked meter board, meter inside or vacant no access.

Ausgrid routine meter reading is conducted anytime within a three day window of the next scheduled read date, which makes arranging access with customers difficult. Ausgrid expects that retailers and MCs should have a better opportunity to access some of these sites via customer appointments.

For decades, Ausgrid had allowed customers to secure their electrical switchboard/meter boxes with approved locking systems for which Ausgrid and its contractors have master keys to allow access to discharge its metering and network obligations. Ausgrid has developed a Deed for MCs to access Ausgrid master keys to open customer electrical switchboard owned locks at customer premises to assist MC obtaining access to some of these sites where approved locking systems are installed. To date, two MCs have executed the deed and have access to these master keys. Two other MCs are in the processes of executing the deed.

Plug In Metering

Plug in metering systems were a common whole current metering system used by most distribution networks in Australia during the 1990s. Plug in metering systems were a method of metering where the distribution network owned the meter and the customer owned, installed and maintained the plug in meter base. Meters that could be connected to these bases consisted of single phase single element mechanical meters and single phase dual element electronic meters (to allow for controlled load circuit and associated tariff). Plug in metering was phased out in Australia in the mid 2000s. Replacement of plug in metering systems, particularly at multiple occupancy sites will be a challenge depending on the plug in base configuration (ie. busbar connected bases), metering configuration and two element metering. The AEMC's OIAI solution will help alleviate some of these isses as all meters would be required to be replaced at the same time.

As at Feburary 2025, Ausgrid's current plug in meter population is approximately 398,990 for single phase single element meters and 21,641 for single phase dual element meters. Ausgrid expects to provide some indication in the data provided to retailers that plug in metering is associated with a NMI in the aditional date field that will be provided.

Aged sites and site remediation

Being one of the oldest electrical networks in Australia, many customer installations within the Ausgrid network area will have a number of electrical and customer installation issues impacting the replacement of legacy metering. For example aged switchboards, securing of switchboards/meter panels, asbestos meter panels, spacing and poor condition of wiring are common reasons why legacy metering cannot be replaced with advanced metering without significant rectification. There are other factors such as salt air and heat damage which will contribute to slow deterioration of customer installations.

Ausgrid has been in discussion with the NSW Government over the past few years in an attempt to develop a framework for remediation of customer electrial installations to allow the replacement of legacy metering.



The introduction of the recording of site defects in MSATS in the AEMC's final rule determination, will allow Ausgrid to continue to work with the NSW Government in an attempt to provide consumers with options to assist in rectification of site defects and allow advanced meters to be installed.

Ladder and boat routes

Ausgrid has five boat routes and 59 ladder routes which are scheduled to be read every quarter. These routes are expensive to maintain and Ausgrid has included these routes in the early stages of the the LMRP. Boat routes are scheduled for LMRP year 1 and ladder routes in LMRP year 2. Descriptions of each of these routes are as follows:

- Boat Where a boat is required to get to the sites to read metering;
- Ladder Routes which require a ladder to be used to access the metering (this will also involve the
 use of a vehicle to travel between sites:

Network reconfiguration (transfer of customers between zone substations)

Ausgrid is looking to reconfigure the zone substation connection arrangement for a number suburbs located near the Hawkesbury River. The suburbs impacted by this reconfiguration are Fishermans Point, Bar Point, Mooney Mooney, Milson Island and Milsons Passage. This area is currently being supplied from Somersby Zone substation and is a radial supply. The current feeder route is through a highly forested area and to improve the reliability of supply to this area Ausgrid is routing another feeder from Berowra Zone substation. The existing feeder from Somersby Zone substation will be used as a back up supply to the area.

Ausgrid is targeting advanced meter deployment in this area due to the CLC frequency mismatch between Berwora (750Hz) and Somersby (1050Hz) Zone substations. Due to the frequency differences, the CLC relays in this area will no longer be operable and controllable by Ausgrid's CLC system once transferred to Berowra Zone substation.

There are approximately 480 NMIs to be transferred to Berowra Zone, of which 129 NMIs have controlled load and is proposed to be included as a part of Ausgrid's LMRP year 1 NMI allocations.

Consultation and Engagement

How we engaged with Stakeholders

As required by the final AEMC rule by no later than 28 February 2025, and before submitting their LMRP proposals to the AER, DNSPs are required to:

- provide a draft of their LMRPs to affected retailers and MCs;
- provide a schedule specifying the legacy meters and corresponding NMIs to be replaced in each interim; period under the LMRP (the LMRP meter replacement schedule) to affected retailers and MCs; and
- invite feedback on the draft LMRP from affected stakeholders.¹⁰

Questions and issues posed by Ausgrid to Retailers and MCs during consultation sessions included:

- Ausgrid would like to provide additional information to retailers and MCs by allocating NMIs per LMRP year and by quarter.
- Should Ausgrid consider targeting lower socio-economic areas for meter replacements? Should this be included in the first two LMRP years?
- What are your thoughts on bulk estimation of meter reads if routes become inefficient?
- We also posed questions to retailers and MCs regarding the AEMC's shared fusing meter replacement procedure which is now a defined process in the Rules.

Ausgrid Legacy Meter Replacement Plan – Consultation Draft. For Official use only

 $^{^{10}}$ AEMC Rule determination Accelerating smart meter deployment 28 November 2024, pp. 13 - 14



- What are your thoughts on allocating all work at a particular site to the original MC to make the meter replacement more efficient?
- A scoping procedure needs to be developed by industry to ensure all MC/MP metering and protection solutions will fit at existing sites. Should this be developed by the Contestable Metering Industry Group (CMIG)?
- Co-ordination of lighting in switch rooms where there are multiple MCs. Should the original MC be responsible for arranging this?
- Where Ausgrid determines that the OIAI cannot proceed due to isolation difficulties, should this be recorded in MSATS, if so by whom and should the retailer defect notification process commence?
- Currently there are some retailers who will not raise service orders to their MC for multiple occupancy sites where they do not have a customer for the NMI. Can you please confirm your position now and for the acceleration period.
- If an MC/MP does not attend an OIAI outage, should the retailer be charged for the OIAI? The retailer will then need to arrange for another OIAI or TIGS outage and pay again for the outage.
- Ausgrid also discussed with participants support that would be required to assist with some of the proposals suggested by Ausgrid. These were:
- Ensure that the AEMO consultation on the LMRP field includes the capability to identify NMI per year and quarter. This could be done by a date field or a second character (e.g. 1-1 = LMRP year 1 quarter 1).
- Ensure the DNSP has visibility of site defects in MSATS.

Ausgrid also discussed various issues with participantssurrounding isolation difficulties, which will be faced by Ausgrid when attempting to isolate a site so an OIAI can be conducted. There will be instances where a scoping SO is raised by the initial retailer and upon arrival to scope the site Ausgrid may determine that the Service Protective Device (SPD)/Fuse arrangements may not be suitable for conducting the isolation. In this instance the Scoping SO will be closed off and the TIGS will not proceed. Ausgrid will need to defect the customer. Ausgrid is continuing to discuss the treatment of this issue with industry participants.

How we engaged with electricity industry participants.

In April and May 2024 Ausgrid arranged for LMRP/OIAI consultation sessions with our larger retail partners and three large MC businesses. A LMRP/OIAI slide pack was developed by Ausgrid and used to communicate our draft LMRP/OIAI strategy to theses business. Each session lasted approximately two hours and at the end of the session, the slide pack was provided to each member who attended the sessions. The slide pack has been included in this LMRP as Attachment 3. These sessions were a mixture of face to face and Microsoft Teams meetings.

On 9 July 2024, we used our standard retailer contact list which is sourced from AEMO Retail Operations Contact List (ROCL) and sent the following correspondence to all our retailer partners.

Dear Retailers,

As you may be aware on 4 April 2024, the Australian Energy Market Commission (AEMC) published a draft determination and draft rule for the Accelerating smart meter deployment rule change.

<u>Accelerating smart meter deployment | AEMC</u>

As a part of this draft rule change there is requirement for Distribution Network Service Providers (DNSPs) to develop, consult and publish a Legacy Meter Replacement Plan (LMRP) which will be used by retailers to schedule the replacement of legacy DNSP metering equipment over the LMRP period. This LMRP must be approved by the Australian Energy Regulator (AER). Ausgrid would like to provide you an invitation to discuss our proposed LMRP with your business.

If you would like to discuss Ausgrid's LMRP, please respond to this email and we will contact you to arrange a session.



From this email we received seven requests from smaller retailer businesses for a LMRP/OIAI session. Over the month of July we arranged sessions with each of these retail businesses. Each session lasted approximately two hours and at the end of the session, the slide pack was provided to each member who attended. All of these sessions were conducted via Microsoft Teams.

Table 12 outlines the industry participants Ausgrid met with to outline Ausgrid's draft LMRP and OIAI strategy.

Table 12 – LMRP Consultation Industry Participants

Participant	Role		
Blue Current	MC		
Plus ES	MC		
Energy Australia	Retailer		
AGL Energy	Retailer		
Intellihub	MC		
Origin Energy	Retailer		
Red Energy	Retailer		
Alinta Energy	Retailer		
Globird Energy	Retailer		
Powershop	Retailer		
1st Energy	Retailer		
Ampol Energy	Retailer		
Diamond	Retailer		
Momentum	Retailer		
Shell Energy	Retailer		

How we responded to feedback

Following consultation sessions with industry participants and other parties on the development of Ausgrid's LMRP and OIAI plans most participants provided detailed feedback on Ausgrid's proposal. This feedback has been consolidated in Table 13.

Table 13 – LMRP Consultation Industry Participants

Issue	Feedback we received	How we responded to the feedback
Allocating NMIs per LMRP year and by quarter.	All participants acknowledged the preference by Ausgrid to allocate the NMI's per LMRP year and quarter. This quarterly proposal is a guideline only to assist in providing efficiency for retailers, MC and Ausgrid.	Ausgrid is still proposing to allocate quarterly dates in MSATS as per Table 17. Ausgrid would like to make it clear to the AER that this quarterly allocation in MSATS must not be used by the AER for determining a retailers
	The main concern from participants is that the AER may see this quarterly slicing as to what the retailers will need to report on to the AER. Some participants' preference is for NMIs to be allocated to	compliance to the LMRP. This must still be assesed by the AER on an LMRP annual basis. As this proposed quarterly date is a proposed date, Ausgrid will continue to work with retailers and MCs to provide the most



Issue	Feedback we received	How we responded to the feedback
	financial year as prescribed by the rules as this provides greater flexibility and suitability for workforce management. Most participants stated that if there is a quarterly scheduling or not, we strongly feel a quarterly schedule should not in any way be taken as mandatory for meter exchange in that quarter.	effective process to ensure meter replacements are conducted efficiently.
Percentage splits per LMRP year.	In most cases participants agreed on the splits provided by Ausgrid.	Ausgrid will contintue to allocate NMIs in the following percentage split: Year 1 – 15% Year 2 – 25% Year 3 – 25% Year 4 – 20% Year 5 – 15%
Feedback on Ausgrid's guiding principles.	 All participants agreed with Ausgrid's proposal of implementing the following guiding principles: Breaking up NMIs via meter reading route. Disbursing exchanges across geographical clusters. Larger suburbs be allocated in each LMRP year Multi Occupancy sites be evenly spread across each LMRP period. 	Ausgrid will continue to develop its LMRP using the guiding principles outlined in this LMRP.
Provision of additional information to retailers and MCs.	All participants agreed to Ausgrid's proposal for high level data. Additional information retailers and MCs suggested would be useful included: • Site hazards (e.g. aggressive animals or customers). • Key information. • Global Positioning System (GPS) coordinates • Site pictures	Ausgrid will provide retailers and MCs access to high level data as proposed in this LMRP. Additional information: Ausgrid has implemented an 'aggressive animal/customer process' with retailers. Ausgrid will be conducting a "key audit" over a two routine read period (six months), where Ausgrid meter readers will record whether a key was used to access the metering for a NMI. This will not identify the key that was used (eg. Customer key, Ausgrid key), just that a key was used.



Issue	Feedback we received	How we responded to the feedback
		Ausgrid has uploaded GPS coordinates into MSATS where legacy metering is installed on the NMI.
		Current Ausgrid meter reading hardware does not support taking or loading a picture which could be used by participants for identifing potential site issues prior to visiting the site.
Targeting lower socio-economic suburbs for meter replacements in the first two LMRP years.	There was no support from any of the participants we consulated with a view to target lower socio economic suburbs.	Ausgrid has removed any analysis for allocation of NMIs in its LMRP based on socio economic factors.
Bulk estimation of legacy meter reads if routes become inefficient.	There was minimal support for bulk estimated meter readings.	Ausgrid will continue to attempt to read legacy meters, regardless of how inefficient the manual walking route may become.
Network access to defect data in MSATS.	All participants supported LNSPs having access to defect data if supported by the NERs.	The AEMCs final rule allows for LNSPs to have visability of defect information contained in MSATS.
Allocating work to the original MC to make the meter replacement more efficient.	The majority of participants we consultated with, advised that the metering arrangements they have are volume base and there is some exclusive contracts in place, which would not permit them electing to use a different MC.	Ausgrid will need to asses the impact this will have when developing OIAI strategies.
Scoping procedure needs to be developed by industry to ensure all MC/MPs metering and protection solutions will be able to be installed at existing sites.	Most participants we consultated with, agreed that some form of installation practice should be developed to support the LMRP rollout at multiple occupancy installations. Of those who agreed it was suggested CMIG would be the most appropriate party to develop this procedure.	Ausgrid will support development of an industry practice which may be developed to support the accellerated roll out of advanced metering.
Co-ordination of lighting in switch rooms where there are Multiple MCs. Should the Original MC be responsible for arranging this?	There was varying feedback on how this item would be addressed. Some participants agreed that the original MC should provide this, whilst others thought each MC should provide their own as per their own safe work policies. There were also suggestions that Ausgrid should provide this service, however the same safe work issues apply to this strategy as well.	Access, isolation, lighting and time of work to support OIAI at multiple occupancy sites continue to be a challenge that industry will continue to work through. Ausgrid will support the development of these tasks.
Where Ausgrid determines that the OIAI cannot proceed due to	This point raised a lot of discussion with participants.	Ausgrid will continue to work with the AEMO B2B working group to



Issue	Feedback we received	How we responded to the
15500	- recuback we received	feedback
isolation difficulties. Should this be recorded in MSATS? If so by whom, and should the retailer defect notification process commence?	Many asked why the initial MC would not have identifed this issue. The initial MC identifed that the site had a shared fuse, once identifed the MC would report this back to their retailer to arrange a network planned outage. The MC would not look at where the network would conduct the isolation, and this would only be determined by Ausgrid when we visited the site to plan the outage. Most participants agreed this could be an issue and would require further industry discussion on what would happen in this event.	devlop a practice to support this issue. It should be noted that this is not expected to be a large number of sites, but it will occur.
Currently some retailers will not raise service orders to their MC for multiple occupancy sites where they do not have a customer for the NMI. Can you please confirm your position now and for the acceleration period.	Retailers had a mixed response to their current and proposed service order allocation processes. Some retailer systems supported the allocation of the work and others may need to make system changes to implement.	Whilst this point was highlighted in Ausgrid's response to the AEMC's draft determination, the AEMC left it with the retailers to determine how service order works would work for the acceleration period. Ausgrid will continue to work with indusrty participants to determine appropriate methods to ensure OIAI outages maximise efficiency for retailers, MCs and Ausgrid and minimise outages for customers.
If an MC/MP does not attend a OIAI outage, should that retailer be charged for the OIAI? The retailer will then need to arrange for another OIAI outage and pay again for the outage.	A high majority of participants suggested that if a retailer does not participate in a OIAI then they should not be charged for the outage. The AEMC had made it clear in their final rule that the retailer has to appoint the MC within a specified timeframe or risk a civil penalty. However the final rule does not mandate that the retailer must arrange for their MC to attendd the outage, instead if they choose not to, they will have to fund a secondary outage at a higher cost.	Ausgrid agrees with the feedback from retailers on the levying of fees for a OIAI and will develop pricing and practices which will only levy fees to retailers who attend a OIAI outage.
Raising OIAI requests from small retailers. Ausgrid would like to encourage smaller retailers to not specifically focus on multiple occupancy sites (e.g. sites with Shop Flat, Unit etc in address) and let Ausgrid coordinate replacement	The smaller retailers Ausgrid spoke with were happy to consider this arrangement so long as it didn't impact their contacts and MC agreements.	Ausgrid will continue to work with all retailers to work through the most efficient method of scheduling OIAI outages to support all industry participants.



Issue	Feedback we received	How we responded to the feedback
schedules through the year with the larger retailers so efficient workloads can be managed. We note that the shared fuse flag in MSATS may be unknown for many multi occupancy sites. FRMP's would be notified by MFIN's when they would be required to raise a SO to the MC and Ausgrid for the OIAI outage. We note that it is the retailers' obligation to comply with the NER of replacing metering during the LMRP year.		
Access to Ausgrid metering master keys.	All participants appreciated Ausgrid developing a deed of agreement with the MPs for Metering Keys, as this will greatly assist with exchanges.	So far two MCs have returned the deed and have been issued Ausgrid metering keys. Two other MCs have expressed interest and are reviewing the deed.
Other Feedback	One participant raised questions with regard to Ausgrid's resourcing strategy to support OIAI. One retailer requested additional	Ausgrid is developing OIAI strategies and procedures to support the network planned outages required for OIAI. Ausgrid has been working with
	data about their controlled load sites.	retailers with regard to additional data to support retailers and MCs in the accellerated rollout of advanced meters.

How we engaged with community representatives.

- The Customer Consultative Committee (CCC) is Ausgrid's overarching body for engaging with customer advocates and provides a forum for committee members to advocate for all Ausgrid customers by:
- Contributing to tangible improvements for customers, long-term positive customer impacts and sustainable customer benefits.
- Identifying customer opportunities as part of the energy transition and utilising Ausgrid's existing assets, strategic priorities, and future regulatory processes.
- Holding Ausgrid to account for delivering on customer regulatory commitments.
- Developing key policy and regulatory framework submissions independently or with Ausgrid.
- Documenting the independent views of customer advocates to submit for broader industry consultation as required.

The CCC is represented by the following members

- Louise Benjamin (independent)
- Gavin Dufty (St Vincent de Paul Society)
- Mark Grenning (Energy Users Association of Australia)
- Jan Kucic-Riker (Justice and Equity Centre)
- Colby Taylor (independent)
- Leah Tucker (Business NSW)

CCC observers included;

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- Tim Askew (Hunter Joint Organisation)
- Rory Campbell (Energy and Water Ombudsman NSW)
- Helen Sloan (Southern Sydney Regional Organisation of Councils)

Further information on the Ausgrid CCC can be found on this webpage. https://www.ausgrid.com.au/In-your-community/Community-Engagement/Customer-consultative-and-specialist-committees

Ausgrid did not present the full retailer/MC slide pack, rather a summary of the AEMC's acceleration rule change, the general principles and objectives and Ausgrid's strategy on meeting these objectives. The committee was informed to contact Ausgrid if they were interested in any further information on the rollout or development of Ausgrid's LMRP.

Ausgrid's regulatory team meets with the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) on an ongoing basis to provide updates from NSW distributors and updates from the DCCEEW. These meetings provide support to the NSW DCCEEW to assist in policy decisions for the residents of NSW. As a standing agena item at these meetings Ausgrid provided updates on the AEMC's acceleration rule change, the general principles and objectives and Ausgrid's strategy on meeting these objectives. Issues such as customer switchboard remediation was also another relevant topic.

Attachment 1 - Advanced Meter Rollout Profile

Ausgrid Annual and Quarterly Profiles

Table 14 - Percentage split across each LMRP period per geographical region. Annual

Annual NMIs per LMRP year										
Year	NMIs	1,000,000	Syd Sth	Syd East	Syd Nth	СС	Newcastle	Hunter	Total	
		Percentage Split	31%	22%	24%	9%	12%	3%	100%	
1	15%	150,000	46,164	32,832	35,433	12,790	18,716	30,514	176,450	
2	25%	250,000	76,941	54,720	59,055	21,317	31,194	0	243,226	
3	25%	250,000	76,941	54,720	59,055	21,317	31,194	0	243,226	
4	20%	200,000	61,552	43,776	47,244	17,053	24,955	0	194,581	
5	15%	150,000	46,164	32,832	35,433	12,790	18,716	0	145,936	
Total	100%	1,000,000	307,762	218,881	236,221	85,266	124,776	30,514	1,003,420	

Table 15 – Percentage split across each LMRP period per geographical region. Per Quarter.

Table	Table 15 – Percentage split across each LMRP period per geographical region. Per Quarter. Per LMRP year Quarterly NMIs									
			·							
Year	NMIs	1,000,000	Syd Sth	Syd East	Syd Nth	СС	Newcastle	Hunter	Total	
			31%	22%	24%	9%	12%	3%	100%	
1	15%	150,000	11,541	8,208	8,858	3,197	4,679	7629	44,112	
2	25%	250,000	19,235	13,680	14,764	5,329	7,798	0	60,807	
3	25%	250,000	19,235	13,680	14,764	5,329	7,798	0	60,807	
4	20%	200,000	15,388	10,944	11,811	4,263	6,239	0	48,645	
5	15%	150,000	11,541	8,208	8,858	3,197	4,679	0	36,484	
Total	100%	1,000,000								

Attachment 2 - Annual Advanced Meter Rollout Schedule

High Level Data – Annual Break Down

Table 16 – Annual rollout data.

LMRP Year	NMI Count	Meter Count	Post codes targeted
Year 1 (Dec25-	189.879	267.818	2035,2077,2034,2036,2325,2095,2315,2137,2330,2234,2114,2218,2213,2333,2019,2211,2112,2103,2046,2212,2263,2221,2250,
Nov 26)	105,075	207,010	2322,2031,2337,2027,2226,2262,2257,2317,2028,2025,2102,2327,2323,2318,2138,2326,2094,2319,2220,2217,2233,2335,2316,
1101 20)			2024,2232,2101,2104,2328,2336,2032,2225,2329,2321,2256,2334,2261,2320,2105,2324,2076,2222,2023,2214,2083,2020,2258,
			2029,2135,2093,2207,2106,2113,2084,2022,2775,2047,2223,2219,2018,2026,2849,2030,2082,2209,2216,2229,2140,2208
Year 2 (Dec26-	246,196	335,485	2000,2026,2067,2230,2144,2229,2250,2040,2320,2217,2141,2283,2041,2261,2216,2207,2011,2022,2075,2289,2281,2251,2029
Nov 27)			,2107,2077,2030,2280,2070,2259,2073,2126,2069,2038,2106,2305,2068,2085,2086,2127,2066,2219,2039,2071,2079,2101,
			2257,2159,2010,2082,2128,2045,2081,2108,2267,2158,2321,2024,2074,2084,2290,2125,2228,2154,2231,2143,2080,2120,2083
			,2208,2284,2775,2025,2218,2130,2064,2292,2007,2050,2140,2021,2264,2023,2335,2260,2100,2008,2037,2205,2291,2299,
			2421,2028,2057,2060,2087,2224,2072,2076,2221,2256,2324,2102,2027,2049,2162,2199,2200,2227,2232,2258,2262,2323
Year 3 (Dec27-	246,022	323,242	2200,2031,2131,2220,2060,2011,2009,2010,2232,2065,2223,2093,2261,2121,2228,2210,2021,2257,2096,2089,2120,2233,2304
Nov 28)	,	,	,2324,2199,2033,2064,2250,2227,2303,2008,2285,2259,2061,2263,2133,2007,2023,2132,2100,2284,2298,2119,2295,2032,
			2024,2251,2077,2136,2130,2092,2027,2068,2063,2062,2076,2118,2287,2190,2293,2292,2043,2256,2066,2000,2286,2196,2193
			,2296,2224,2143,2294,2025,2134,2026,2260,2050,2318,2222,2297,2291,2278,2090,2038,2302,2135,2045,2322,2046,2191,
			2319,2211,2316,2221,2229,2094,2099,2162,2022,2040,2218,2029,2209,2034,2317,2305,2198,2095,2194,2212,2192,2289,2018
			,2035,2125,2258,2321,2323,2282,2300,2059,2141,2214,2213,2163,2028,2197,2234,2016,2067,2195,2208,2226,2308,2315
Year 4 (Dec28-	195,453	256,660	2017,2088,2010,2194,2205,2122,2195,2287,2300,2015,2020,2099,2190,2261,2074,2192,2256,2282,2100,2216,2113,2280,2162
Nov 29)	,	,	,2250,2076,2259,2018,2285,2114,2087,2290,2072,2196,2140,2197,2112,2043,2016,2198,2251,2135,2200,2071,2191,2208,
			2306,2044,2209,2193,2217,2042,2263,2207,2257,2220,2086,2007,2136,2219,2121,2000,2163,2206,2199,2232,2223,2090,2141
			,2073,2258,2222,2137,2065,2302,2028,2291,2119,2021,2049,2260,2284,2264,2307,2070,2067,2046,2289,2097,2299,2069,
			2045,2138,2060,2050,2085,2305,2089,2101,2210,2066,2108,2143,2092,2106,2161,2221
Year 5 (Dec29-	249,941	321,647	2204,2099,2065,2066,2037,2042,2290,2260,2090,2111,2196,2127,2135,2203,2134,2016,2259,2046,2138,2112,2206,2047,2323
Nov 30)	,	,	,2264,2113,2140,2210,2097,2049,2050,2101,2291,2299,2250,2032,2222,2209,2193,2224,2232,2110,2048,2018,2262,2122,
			2219,2060,2039,2036,2017,2251,2195,2089,2322,2062,2265,2130,2208,2021,2304,2044,2321,2287,2008,2216,2320,2307,2143
			,2137,2285,2000,2207,2258,2257,2261,2300,2298,2214,2229,2163,2205,2010,2305,2324,2162,2045,2094,2289,2263,2043,
			2132,2033,2136,2220,2100,2212,2022,2316,2035,2064,2284,2213,2141,2067,2172,2190,2319,2221,2200,2227,2282,2077,2223
			,2075,2303,2278,2326,2088,2095,2302,2120,2114,2283,2040,2086,2093,2103,2315,2068,2038,2121,2031,2074,2081,2107,
			2085,2256,2061,2293,2318,2041,2069,2072,2076,2280,2292,2084,2281,2073,2317,2015,2007,2063,2070,2087,2080,2102,2228
			,2294,2158,2096,2009,2119,2335,2071,2082,2083,2296,2159,2234,2295,2106,2118,2019,2128,2286,2026,2092,2104,2306,
			2020,2029,2059,2079,2108,2154,2230,2028,2125,2144,2226,2233,2267,2297,2011,2030,2231
	I	l .	



High Level Data – Quarterly Break down

Table 17 – Quarter rollout data.

LMRP Year	MSATS LMRP Date	NMI Count	Meter Count	Post codes targeted
Year 1 (Dec25- Nov 26)				
Year 1 Quarter 1	28/02/2026	44,596	64,737	2114,2213,2211,2112,2212,2322,2027,2337,2028,2262,2025,2323,2330,2328,2336,2263,
				2329,2333,2023,2214,2029,2113,2022,2324,2321,2849,2030
Year 1 Quarter 2	30/05/2026	48,300	66,019	2035,2137,2333,2330,2103,2046,2315,2263,2102,2138,2317,2036,2101,2104,2261,2105,
				2034,2032,2135,2262,2106,2084,2047,2140
Year 1 Quarter 3	31/08/2026	49,179	72,124	2095,2036,2234,2325,2019,2315,2226,2257,2035,2094,2233,2316,2335,2232,2225,2256,
				2334,2032,2034,2330,2083,2020,2093,2321,2320,2775,2326,2018,2317,2082,2229,2250,
				2318,2031,2216
Year 1 Quarter 4	30/11/2026	47,804	64,938	2077,2034,2218,2221,2250,2031,2327,2325,2318,2326,2319,2220,2217,2024,2317,2321,
				2076,2324,2320,2222,2323,2330,2258,2035,2207,2335,2333,2337,2336,2223,2219,2328,
				2026,2329,2334,2022,2209,2208,2216
Year 2 (Dec26- Nov 27)				
Year 2 Quarter 1	28/02/2027	60,773	78,522	2000,2067,2040,2320,2041,2251,2038,2068,2066,2039,2069,2257,2010,2045,2321,2130,
				2064,2007,2050,2335,2260,2008,2037,2011,2421,2074,2060,2070,2071,2072,2057,2073,
				2075,2076,2324,2021,2049,2199,2217,2259
Year 2 Quarter 2	30/05/2027	63,749	85,690	2000,2144,2141,2011,2075,2289,2070,2259,2073,2305,2250,2127,2069,2071,2067,2128,
				2074,2290,2143,2775,2292,2140,2291,2299,2256,2057,2010,2162,2200,2258
Year 2 Quarter 3	31/08/2027	60,932	84,648	2026,2230,2229,2250,2281,2107,2280,2106,2085,2086,2022,2101,2108,2084,2228,2231,
				2029,2024,2100,2087,2224,2075,2102,2227,2232
Year 2 Quarter 4	30/11/2027	60,742	86,625	2217,2283,2261,2216,2207,2029,2077,2030,2022,2126,2219,2026,2079,2159,2082,2081,
				2267,2158,2024,2125,2154,2080,2120,2083,2208,2284,2025,2218,2021,2264,2023,2205,
				2028,2221,2027,2262,2323
Year 3 (Dec27- Nov 28)				
Year 3 Quarter 1	29/02/2028	61,953	81,596	2200,2011,2060,2010,2257,2089,2199,2285,2061,2284,2287,2190,2043,2256,2286,2196,
				2143,2278,2090,2021,2211,2162,2000,2198,2212,2322,2323,2065,2282,2059,2141,2214,
				2213,2163,2197,2195,2210
Year 3 Quarter 2	30/05/2028	59,566	72,781	2131,2009,2065,2064,2303,2008,2263,2133,2007,2259,2132,2136,2130,2068,2063,2062,
				2292,2066,2193,2000,2134,2050,2060,2291,2038,2135,2045,2046,2191,2302,2040,2089,
				2305,2194,2192,2289,2090,2296,2010,2300,2016,2059,2067



LMRP Year	MSATS LMRP Date	NMI Count	Meter Count	Post codes targeted
Year 3 Quarter 3	31/08/2028	62,818	84,606	2232,2093,2228,2096,2021,2233,2250,2227,2304,2023,2031,2100,2298,2251,2092,2024,
				2027,2293,2224,2296,2294,2025,2026,2260,2297,2229,2094,2099,2022,2029,2010,2302,
				2034,2032,2095,2261,2028,2234,2226
Year 3 Quarter 4	30/11/2028	61,685	84,259	2220,2031,2223,2261,2121,2210,2120,2324,2033,2119,2295,2077,2032,2076,2118,2304,
				2318,2222,2259,2024,2319,2316,2221,2322,2218,2209,2317,2260,2298,2018,2035,2125,
				2258,2021,2321,2034,2022,2208,2308,2315
Year 4 (Dec28- Nov 29)				
Year 4 Quarter 1	28/02/2029	53,921	71,607	2010,2122,2300,2190,2256,2113,2162,2114,2197,2112,2198,2200,2016,2209,2257,2220,
				2121,2000,2163,2199,2232,2223,2141,2222,2196,2302,2291,2119,2042,2021,2067,2017,
				2050,2143,2161,2195
Year 4 Quarter 2	30/05/2029	50,658	63,785	2017,2088,2194,2192,2280,2250,2251,2290,2306,2193,2195,2282,2196,2016,2206,2090,
				2208,2256,2065,2191,2018,2089,2060,2015
Year 4 Quarter 3	31/08/2029	44,239	60,257	2205,2020,2261,2074,2216,2076,2018,2285,2282,2072,2071,2290,2217,2207,2219,2073,
				2028,2260,2284,2070,2088,2289,2069,2208,2305,2060,2210,2220,2066,2223,2044,2221
Year 4 Quarter 4	30/11/2029	46,635	61,011	2287,2015,2195,2099,2100,2259,2087,2140,2043,2135,2196,2191,2044,2208,2263,2042,
				2086,2007,2136,2258,2192,2137,2209,2010,2049,2264,2016,2307,2046,2097,2017,2299,
				2141,2045,2138,2206,2018,2085,2101,2285,2108,2000,2020,2050,2092,2106
Year 5 (Dec29- Nov 30)				
Year 5 Quarter 1	28/02/2030	92,815	117,419	2204,2037,2111,2260,2135,2134,2046,2138,2112,2206,2203,2047,2323,2113,2193,2110,
				2122,2039,2322,2049,2130,2321,2304,2320,2137,2140,2298,2324,2264,2045,2299,2132,
				2136,2285,2316,2319,2208,2077,2326,2120,2114,2040,2038,2121,2081,2041,2050,2195,
				2080,2158,2317,2119,2335,2082,2287,2067,2159,2083,2118,2318,2000,2079,2154,2196,
				2042,2076,2125,2250,2286,2305,2070,2209,2280,2283,2291,2292,2300,2303
Year 5 Quarter 2	30/05/2030	56,867	74,857	2099,2042,2097,2101,2210,2299,2259,2048,2049,2262,2290,2219,2209,2044,2287,2195,
				2216,2307,2196,2207,2204,2208,2000,2205,2285,2305,2203,2094,2043,2263,2289,2008,
				2100,2095,2282,2010,2086,2093,2103,2107,2085,2084,2087,2102,2096,2106,2092,2104,
				2108,2050,2130
Year 5 Quarter 3	31/08/2030	56,317	70,409	2065,2090,2127,2016,2196,2290,2050,2291,2140,2251,2089,2060,2143,2259,2008,2195,
				2257,2300,2260,2214,2261,2163,2042,2010,2162,2210,2212,2000,2213,2141,2172,2044,
				2190,2200,2289,2320,2048,2303,2322,2285,2075,2302,2017,2283,2304,2324,2315,2282,
				2323,2293,2287,2264,2280,2281,2292,2062,2007,2318,2299,2015,2294,2284,2305,2316,





LMRP Year	MSATS	NMI Count	Meter Count	Post codes targeted
	LMRP Date			
				2009,2319,2321,2068,2296,2298,2049,2265,2295,2317,2066,2128,2306,2059,2286,2307,
				2061,2063,2144,2267,2297,2021,2067,2250
Year 5 Quarter 4	30/11/2030	43,942	58,962	2066,2264,2250,2032,2222,2224,2232,2018,2036,2017,2062,2265,2065,2021,2209,2259,
				2258,2229,2060,2208,2033,2220,2210,2022,2035,2064,2284,2067,2221,2227,2223,2010,
				2261,2278,2088,2089,2263,2251,2031,2074,2075,2090,2256,2068,2260,2061,2069,2072,
				2257,2073,2076,2262,2323,2063,2070,2228,2071,2234,2019,2015,2026,2020,2029,2172,
				2230,2000,2028,2083,2226,2233,2011,2030,2049,2204,2216,2231,2283

Attachment 3 – Ausgrid LMRP and OIAI Consultation Slide Pack

