

Customer Forum – Week 5

Metering

11 July 2018



Overview

- ▶ **Topic significance & objective of presentation**
- ▶ **Smart Metering Benefits: Overview**
- ▶ **Metering benefits – storyboarding and Explore tool**
- ▶ **Metering revenues**
- ▶ **Next steps**

Topic significance and objective

▶ Topic significance

- › AusNet Services has proposed that metering be in scope of negotiation
- › we are seeking the Forum's view on the reasonableness of metering charges and whether they represent value for customers, having regard to the benefits offered by AMI
- › Many of these benefits relate directly to customer experience (e.g. remote connection/disconnection, reduced risk of electric shock).
- › We note the AER considers this out-of-scope for the purposes of the New Reg process.

▶ Objective of presentation

- › Highlight the benefits of smart metering to the network and customers
- › Set out forecast metering charges for 2021-25.

The forecasts presented in this slide pack are **preliminary** and will be refined over the course of the process.

Smart Metering Benefits: Overview



Access to Data

AusNet Services has recently re-launched a customer friendly meter data portal, 'My Home Energy' that enables customers to understand when energy is consumed in their home and track behavioural changes.

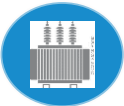
- 750 daily visits during July 2018
- \$223 saving per switching customer



Remote Services

Smart Meters enable connection (turn on) and disconnection (turn off) to be performed remotely which customers benefit from through reduced service charges.

- \$1.7m customer savings per annum



Network

AMI data allows more informed augmentation decisions by revealing customer load against the capacity of the surrounding assets for connections. Asset replacement programs are also more targeted due to availability of AMI data.

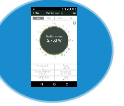
- \$36m augex saved since 2014
- \$7m repex saved since 2016



Safety

AMI data is used to improve safety across our network including identifying network fault locations more accurately, removing unsafe installations and identifying low voltage faults, mitigating electrical incidents.

- 70% less shocks since 2013
- \$7.5m value of statistical life saved



Innovation

Smart meters allow distributors and retailers to trial innovative new products and services such as solar alerts, monthly billing, demand response, flexible tariff and smart home energy services.

- >800 solar alerts issued since 2017
- \$456 potential saving per customer



Energy Theft

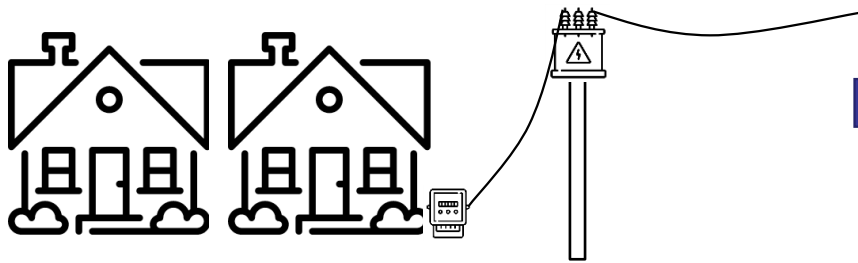
AMI and PQ data is being used to detect "non-technical losses" – or energy theft. Our analytics detects theft of energy from sites that have bypassed the meter or otherwise interfered with the supply.

- 15,000,000 kWh identified since 2015
- \$2m avoided retailer charges

Metering benefits – storyboarding and Explore tool



Better Network Investment Decisions



As population density increases, augmentation of existing infrastructure is eventually required.



There is plenty of capacity for new houses!



AMI data allows informed augmentation decisions by observing customer load against the capacity of the surrounding assets.

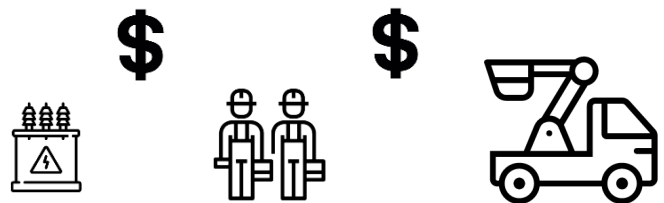


This Customer might need augmentation..

Pre-AMI Network Planning was based around estimates of network capacity.

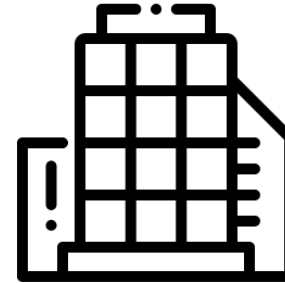


Network augmentation savings are passed onto customer. At least \$36 million saved from asset cost, reducing customer's current and future bills.



Sometimes sites would be augmented earlier than required, as we didn't have granular load data.

Quality of Service – Before AMI



Prior to AMI, the call centre requires more customer participation to understand a problem and diagnose the fault. Fault trucks were dispatched more frequently and took longer to determine and find the fault.

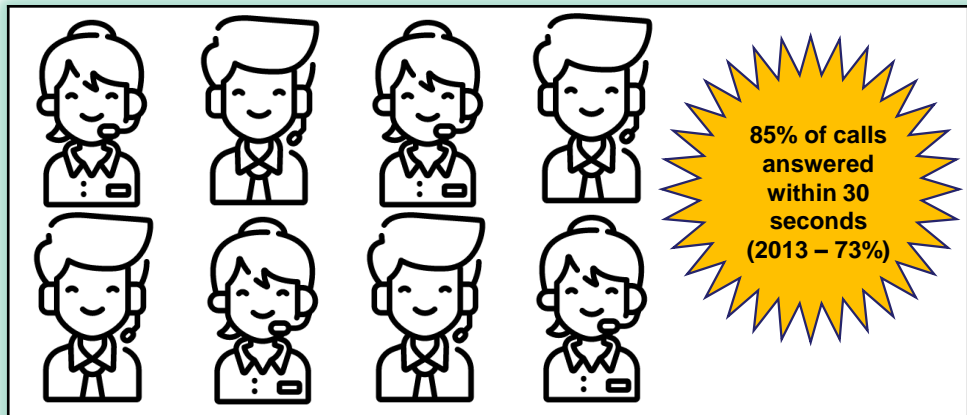
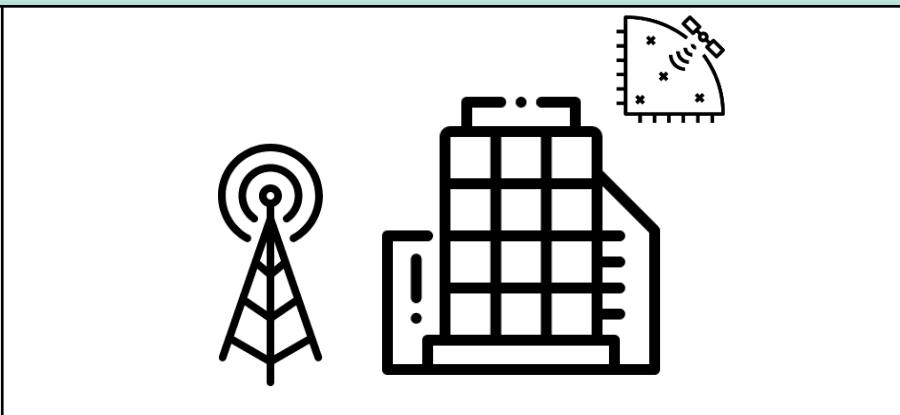
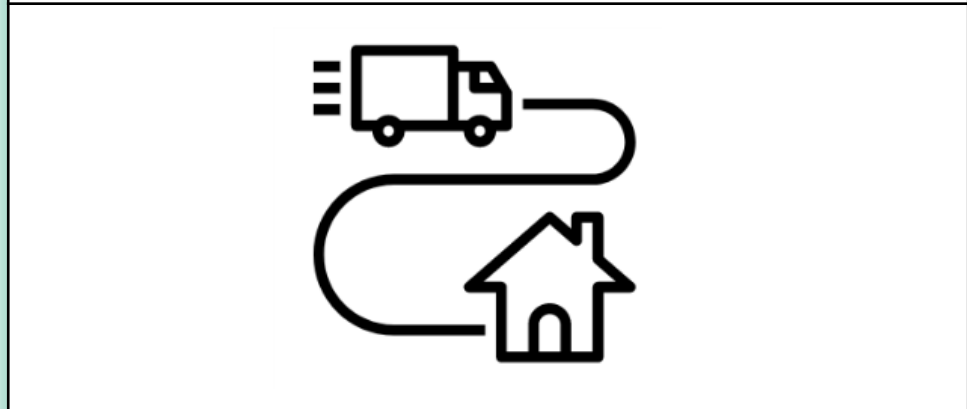

The Control Room logged all faults, along with various network alerts. Lack of detailed data made it difficult to find the fault and prioritise highest impacted customers.



Trucks are dispatched to area of fault, however often needed to patrol the area to find fault location.

Field workers have less information to help them find and resolve the fault.

Quality of Service – After AMI

	
<p>AMI Data provides the call centre with “real time” outage information to better inform customers. Decisions are made faster, and require less input from the customer. Less Fault Trucks are called as a result.</p>	<p>AMI meters also provide “quality of supply” information that can help us to prevent faults before they occur improve safety.</p>
	
<p>The Faults Trucks are better equipped to respond to a Fault, knowing where go - reducing response time.</p>	<p>Field workers have better information about the fault, reducing different possibilities to the underlying fault. Issues are quickly resolved.</p>

Reducing Risk of Serious Electric Shocks

40 serious shocks avoided in 2017

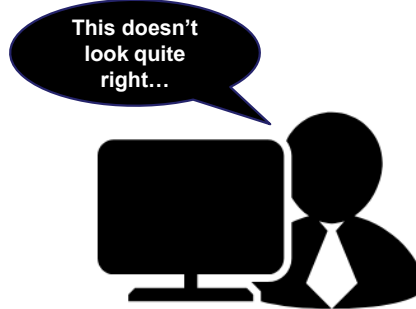


Severe deterioration of supply can result in electricity being trapped in the house.

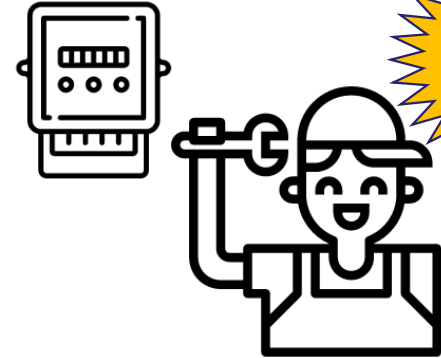
Impacts can be serious shock or electrocution.

In 2012, this occurred 90 times.

AMI



Algorithms analyse AMI data and the network operations team review irregularities in Power Quality – before a shock occurs.

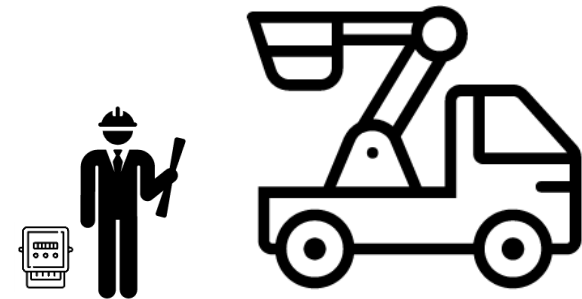


Trucks can be dispatched from AMI Data irregularities. Issues are resolved before they risk hurting our customers. This is in addition to the 22,000 sites defected during the AMI Rollout.

Pre- AMI



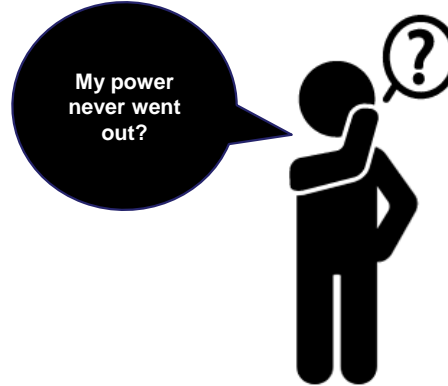
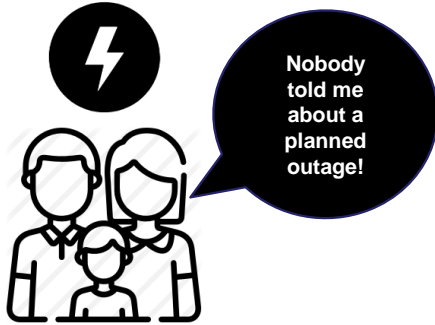
AusNet Services is notified of a Customer who has experienced a shock within their household.



Fault truck is dispatched to remove hazard.

Planned Outage - Customer Notifications

Pre AMI



To maintain network reliability, planned outages must occur. Sometimes the network is reconfigured and this can alter which supply of electricity a Customer receives. Occasionally this can cause an instance where a customer is not notified during a planned outage.

The opposite is true where customers are incorrectly notified...



In both instances, customers are inconvenienced. Customers will call AusNet Services where they will identify the error and update our systems.

AMI

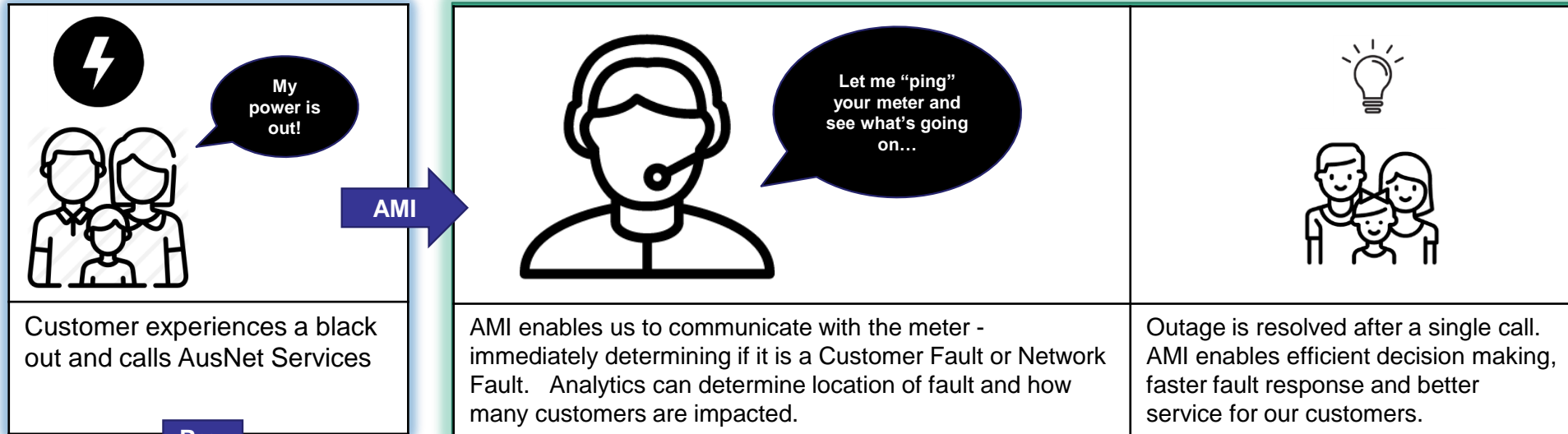


AMI Data allows AusNet Services to determine which substation a customer is connected, alerting us if a customer's site is not correctly assigned.

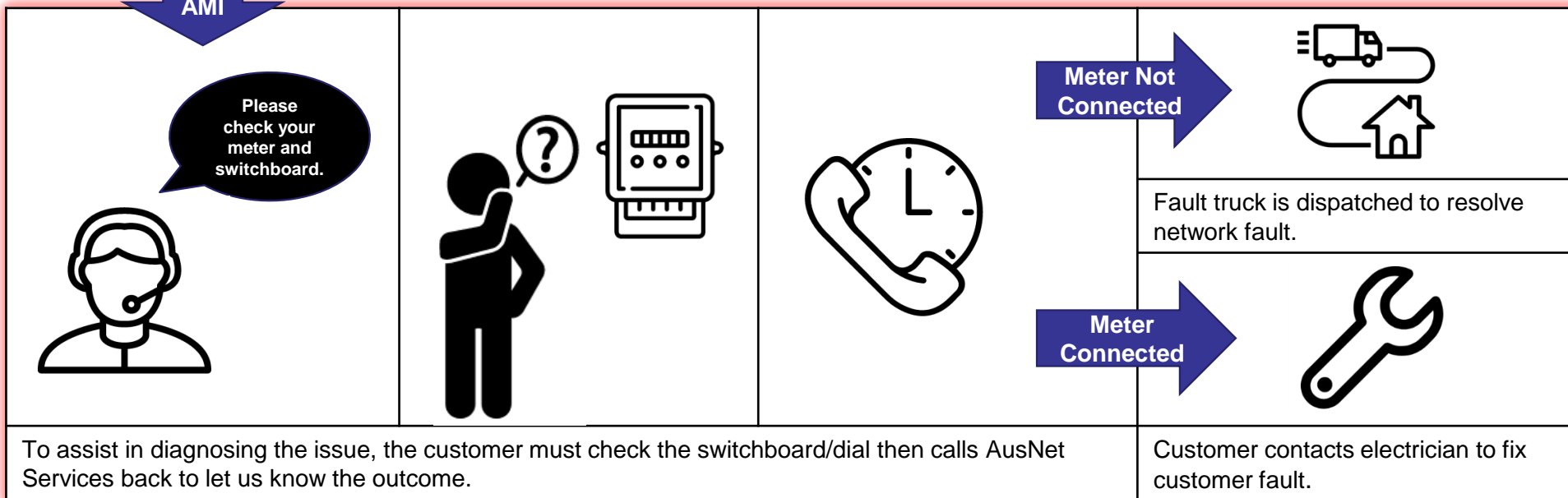


Our Customer Cross reference tool provides confidence that the correct customer's are being notified.

Unplanned Customer Outage – AMI Benefits



Pre-AMI

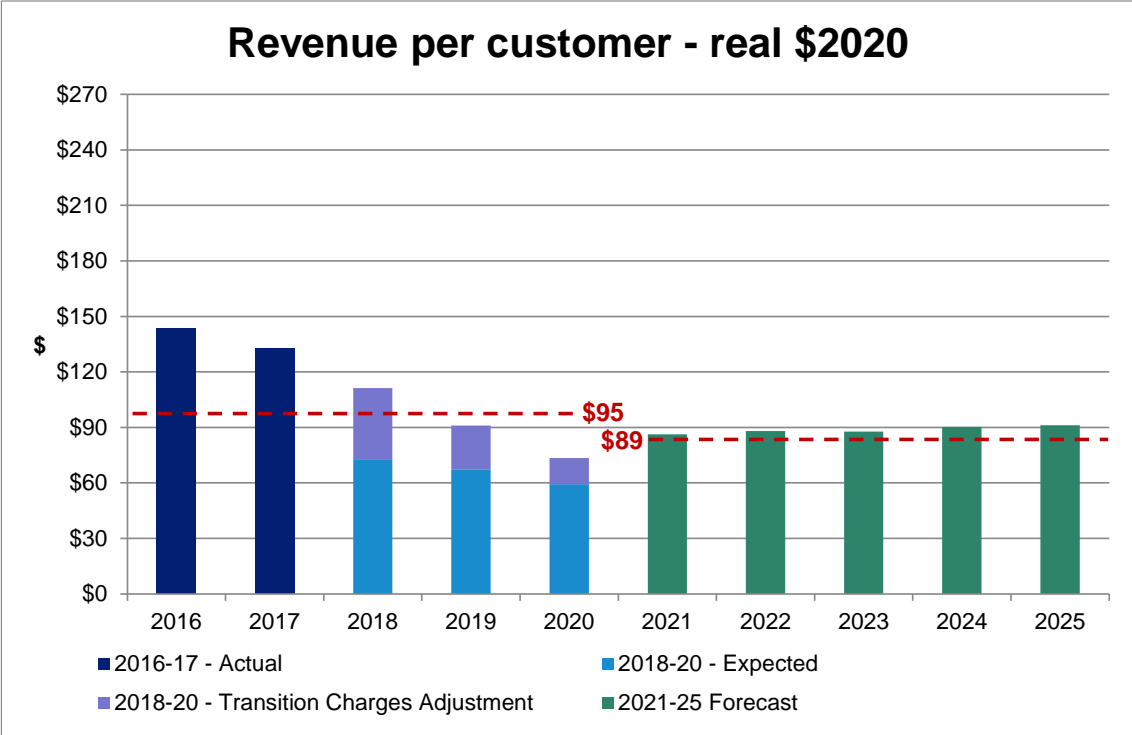


Metering revenues



Indicative metering revenue per customer

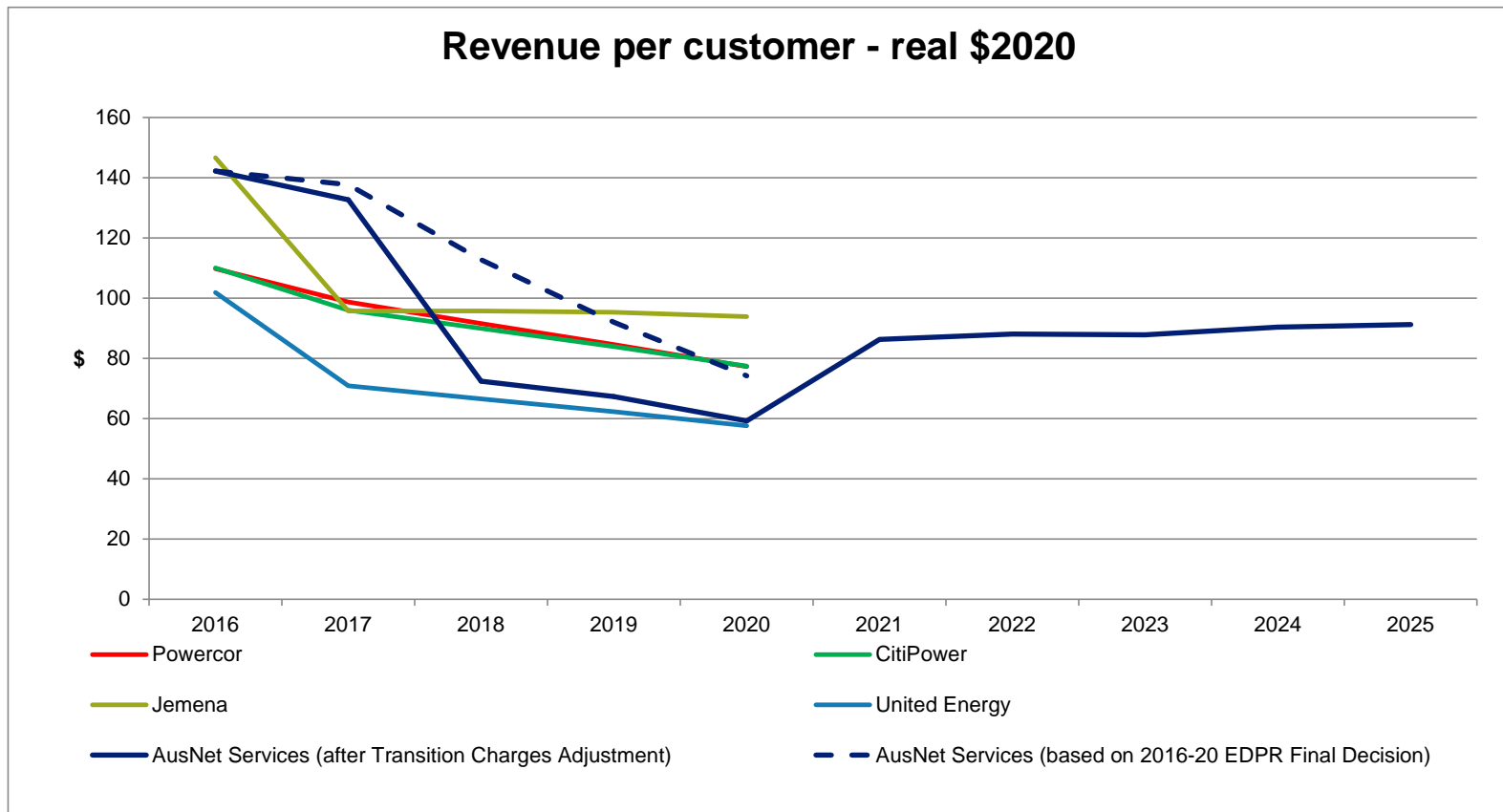
- ▶ Revenue per customer expected to decline, on average, from \$95 in 2016-20, to \$89 in 2021-25
- ▶ Increase between 2020 and 2021 in part reflects Telstra 3G to 4G transition costs



Note: Transition Charges Adjustment reflects revenue handed back to customers due to over-recovery that took place during 2011-15 period

Metering revenues – comparison with other Vic. distributors

- ▶ Charges in 2020 are forecast to be \$59 (or \$74 pre- Adjustment), compared to an average of \$77 across the other four distributors



Note: Transition Charges Adjustment reflects revenue handed back to customers due to over-recovery that took place during 2011-15 period

Next steps

- ▶ **Customer Forum to identify what further information, if any, is needed to form a view on the reasonableness of the forecast metering charges**
- ▶ **The Customer Forum may wish to prepare questions on this topic for its stakeholder engagement**
- ▶ **We are interested in the Forum's views on how we should communicate Smart Metering benefits to our customers.**

Appendix: Breakdown of 2016-20 metering revenues

- ▶ **2017 revenues are approximately \$95M**
 - › Opex accounts for \$23M (24%) of this revenue
 - › The cost of the ‘sunk’ asset base accounts for a significant part of the remaining 76%

