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DRAFT DETERMINATION – PARTICIPANT RESPONSE PACK MSWG DISCUSSION

METER CHURN PACKAGE

MDP SLP Document

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1. Proposed Changes

- SLP Metering Data Provider Services – Section 8 and Section 9

NOTE: No proposed changes have been populated please refer to mapping documents and change marked procedures. Please complete where necessary

Please include your comments in the 'Participant Comment' column below.

A. Proposed Changes to the Meter Churn Package

Item	Description	Category	Participant Comments	AEMO/MSWG Comments
1	**PROPOSED/ REQUESTED CHANGES**			
	General Use of *service level procedure* in MDP SLP and MPB SLP		Energy Australia The MDP SLP alternates between capitalised and lowercase use of Service Level Procedure, whereas the MPB uses the Rules italicised *service level procedure.* As this is a defined term in the Rules the MDP SLP needs to have all uses of *service level procedures* italicised to reflect the Rules and be consistent with MPB SLP.	AEMO agrees and has ensured that this document is correct and consistent. The term "service level procedure" is not a defined term in the Rules, rather the plural form, "service level procedures" is defined which refers to both the MDP and MP requirements as detailed in 7.14.1A of the NER.
2 (c)	This Service Level Procedure consolidates the following service level procedures and other documents relating to *Metering Data Provider* activities: i. Service Level Procedure: Metering Data Provider Services Category D for Metering Installation Types 1, 2, 3 and 4; ii. Service Level Procedure: Metering Data Provider Services Category D for Metering Installation Types 5, 6 and 7; iii. Service Level Requirement: Metering Data Provider Services Category Type 5C and 6C;and		Energex 2 (c)This document refers to the Meter Churn Data Management Procedure (should this refer to section 8 here), where as the MPB SLP refers to the FRMP churn procedure but has not meter churn data management within the document regarding the management of meters?	AEMO – this clause refers to procedures that have been consolidated into the SLP. AEMO doesn't believe the MDP SLP needs to be referenced in the MPB SLP as section 8 only provides requirements for MDP's to provide data.

Item	Description	Category	Participant Comments	AEMO/MSWG Comments
	iv. Meter Churn Data Management Procedure.			
Glossary	Glossary terms		Endeavour Additional Glossary terms: **new Metering Data Provider** - The *Metering Data Provider* that is responsible for a metering installation after a *Meter Churn*. This is the *Metering Data Provider* that is not, but is proposed to be, active in MSATS for the *connection point.* **old Metering Data Provider** - The *Metering Data Provider* that is responsible for a metering installation prior to a *Meter Churn*. This is the *Metering Data Provider* that is active in MSATS for the *connection point* prior to a *Meter Churn.* Suggested new glossary terms that are used frequently within the document. This will clarify which party is responsible for the obligations.	AEMO in consultation with the MSWG, don't consider that there is a need for these definitions. "Old" and "New" appear four times in the document in the same section and read intuitively.
Glossary	Glossary terms		Ausnet Services Glossary definition of Meter Churn should be altered to more clearly clarify what is and what isn't Meter Churn. Suggest the following changes are made, noting changes are in red: *Meter Churn* occurs where one or more	AEMO in consultation with the MSWG refer Ausnet Services to the comments in response to Ausnet Services submission on section 1.1.1 of the FRMP churn document. The definition of meter churn is accurate.

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			meters are changed or altered at a metering installation resulting in a change to the nature of metering that alters the MDFF or MDM metering data file. Please amend drafting as indicated to clarify what is and what isn't meter churn	
8.1.1	*Meter Churn* occurs when components of a *metering installation* are changed or altered resulting in a change to the nature of *metering data* produced by the *metering installation*. *Meter Churn* can also occur when components of a *metering installation* are changed and there is also a change of *Metering Service Provider(s).*		Ausgrid Delete 'also' 8.1.1 *Meter Churn* occurs when components of a *metering installation* are changed or altered resulting in a change to the nature of *metering data* produced by the *metering installation*. *Meter Churn* can also occur when components of a *metering installation* are changed and there is ~~also~~ a change of *Metering Service Provider(s).*	AEMO, in consultation with the MSWG, determined that alterations should be made to ensure consistency with associated changes to FRMP churn document. Alterations to the drafting now read as follows: *Meter Churn can result in a change to the configuration of metering data recorded by a metering installation. This change in metering data may result in an alteration to the MDFF or MDM metering data file. A change of Metering Service Provider(s) may instigate Meter Churn.*
8.1.1	*Meter Churn* occurs when components of a *metering installation* are changed or altered resulting in a change to the nature of *metering data* produced by the *metering installation*. *Meter Churn* can also occur when components of a *metering installation* are changed and there is also a change of *Metering Service Provider(s).*		Ausnet Services Similar comments to above, the proposed wording in 8.1.1 should align to the definition, remove the reference to components of a metering installation and clarify what we mean by a change of the nature of metering. Suggest the following changes are made, noting changes are in red: 8.1.1 Meter Churn occurs when	AEMO, in consultation with the MSWG, determined that alterations should be made to ensure consistency with associated changes to FRMP churn document. AEMO refer Ausnet Services to the comments above in response to the Ausgrid submission on section 8.1.1.

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			~~components of a metering installation~~ one or more meters are changed or altered at a metering installation resulting in a change to the nature of metering that alters the MDFF or MDM metering data file ~~data produced by the metering installation~~. Meter Churn can also occur when ~~components of a metering installation are changed and~~ there is also a change of Metering Service Provider(s). Please amend drafting as indicated noting: • 1.1.1 needs to align with the definition in 1.5. • The need to clarify what we mean by a change of the nature of metering. Remove the reference to components of a metering installation	
8.1.1	*Meter Churn* occurs when components of a *metering installation* are changed or altered resulting in a change to the nature of *metering data* produced by the *metering installation*. *Meter Churn* can also occur when components of a *metering installation* are changed and there is also a change of *Metering Service Provider(s).*		UE 8.1.1 Similar comments to above, meter churn should refer to the meters and not to other components of the metering installation like CTs Amend the drafting in line with the changes made to Cl 1.1.1 of the Meter Churn Procedures (Comments re 1.1.1 1.1.1 refers to meter churn as the churn of the components of a metering installation when they are changed or altered (without a change of service provider) and also	AEMO, in consultation with the MSWG, determined that alterations should be made to ensure consistency with associated changes to FRMP churn document. AEMO refer Ausnet Services to the comments above in response to the Ausgrid submission on section 8.1.1.

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			refers to when components are changed and there is a change of service provider. The change of a CT or the reconfiguration of a meter to have an export stream is not the purpose of this procedure. Suggest the drafting being amended to change of meters and service provider roles at a metering installation in line with the definition in 1.5.1. UE query whether the purpose of this procedure is the DataStream aspects of a change of meter configuration without a role change. Suggest adopting drafting similar to 1.5.1)	
8.1.3 to 8.1.6	Scenarios		Origin Section. 8 Meter Churn Management Update scenarios to include MDFF application Update scenarios to include MDFF application in the commentary and diagrams. There are inconsistencies and different interpretations amongst MDPs with what is expected to be provided in the MDFF in terms of meter serial number and readings on the day of meter Churn.	AEMO have updated clause 8.1.2 to include MDFF. Amendments have been made as follows: Sections 8.1.3, 8.1.4, 8.1.5 and 8.1.6 detail the requirements that the *Metering Data Provider* must comply with for the management of *metering data* and the construction of the MDFF and *MDM data file* associated with *Meter Churn* events when a *metering installation* is changed from: (a) a type 6 *metering installation* to a new type 6 *metering installation* (Scenario 1); (b) a type 6 *metering installation* to a type 1, 2, 3, 4, or 5 *metering installation* (Scenario 2);

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				(c) a type 1, 2, 3, 4, or 5 *metering installation* to a type 6 *metering installation* (Scenario 3); or (d) a type 1, 2, 3, 4, or 5 *metering installation* to a new type 1, 2, 3, 4, or 5 *metering installation* (Scenario 4). AEMO confirm that following the final determination a review will be undertaken to consider any consequential changes to the meter serial number provided in the MDFF. Where necessary, any identified updates will be performed in line with the effective date of the Churn procedure package. AEMO confirm that both MDM and MDFF files should be sent as per the scenarios.
8.1.3	(a) The *Metering Data Provider* must have a process to ensure that: i. the final accumulation reading(s) from the removed type 6 *metering installation* is applied at the end of the *day* prior to the *Meter Churn*; ii. the start reading(s) for a new type 6 *metering installation* is applied at the start of the *day* of the *Meter Churn*; and iii. *estimated metering data* is provided for any data streams made active as a result of the		Endeavour Change clause 8.1.3.a. to: (a) The *Metering Data Provider* must have a process to ensure that: i. the final accumulation reading(s) from the removed type 6 *metering installation* is applied at the end of the *day* prior to the *Meter Churn* when sending MDM data; ii. the start reading(s) for a new type 6	AEMO refer Endeavour to the response provided to Origin's submission to section 8.1.2 above. AEMO have included MDFF into clause 8.1.2.

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	Meter Churn,		*metering installation* is applied at the start of the *day* of the *Meter Churn* when sending MDM data; and iii. *estimated metering data* is provided for any data streams made active as a result of the *Meter Churn,* Clarify that clauses 8.1.3.a.i & 8.1.3.a.ii is only applicable when sending metering data via MDM.	
8.1.3 (a) iv	New Clause		Endeavour New clause (suggest to be inserted after clause 8.1.3.a): The *Metering Data Provider* must make the data stream inactive in MSATS for the removed meter with an effective start date of the *Meter Churn* day. Suggested new clause to define how data streams for the removed meter is to be managed to ensure consistency and alignment with the meter standing data and role changes.	AEMO, in consultation with the MSWG, determined that the proposal is accepted with amendments. The amended section now reads a folllows: For Meter Churn from a type 6 metering installation to a new type 6 metering installation (scenario 1): (a) The Metering Data Provider must have a process to ensure that: i. the final accumulation reading(s) from the removed type 6 metering installation is applied at the end of the day prior to the Meter Churn; ii. the start reading(s) for a new type 6 metering installation is

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				applied at the start of the day of the Meter Churn; iii. estimated metering data is provided for any data streams made active as a result of the Meter Churn; and iv. Redundant data streams are made inactive in MSATS as a result of Meter Churn.
8.1.4	For *Meter-Churn* from a type 6 *metering installation* to new type 1, 2, 3, 4 or 5 *metering installation* (scenario 2)	**Procedure only**	Energex Clarification is required under s. 8.1.4 where the FRMP does not set themselves as the RP in the initial CR1000 and then does not initiate a meter change to type 1-4. In this scenario, the LNSP is left as RP and carries the breach in metrology, while the retailer has the customer and, if the customer does not pay for an upgrade, the retailer is under no obligation to force a meter upgrade. LNSPs currently object under "bad meter" if a "large" customer is transferring with type 6 meters. In the new process the LNSP cannot object to the transfer and hold it up until the metrology is correct. Consequently, the LNSP could be left with the basic meter and RP role. Could we seek clarification from AEMO as to whether an LNSP is permitted to raise	AEMO note that objections are not allowed in this scenario. AEMO don't regard the proposed scenario as being any different from the obligation regarding a customer's site that moves between the small to large jurisdictional boundary.

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			an objection as the RP with the following code “Declined” the description as defined in the CATS procedure: Identified party declines to perform service. For use by nominated new party to indicate that they decline to act in the role they have been nominated for – the instance we would use this is when a Retailer raises a CR 1xxx on a LARGE site with BASIC metering and DO NOT nominate themselves as the RP in the CR1xxx – in the CATS procedure page 58 it indicates that the “new” RP can raise the Objection? For a 6800 or 6801 that we receive – if the FRMP has not nominated themselves as the RP prior to raising a 6800/6801 then as the LNSP are we permitted to raise an objection with the following objection reason “NOTAPRD” (currently the FRMP nominates themselves as the RP in the 6801/6800) – the description as defined in the CATS is as follows: Not approved to operate in the LNSP area The meter provider is not accredited or authorised to operate in a LNSP area. The same objection could be used for a participant who is not approved to operate in a particular jurisdiction This code is used by the LNSP. The instance we would use this is when the current FRMP raises a 6800/6801 because they are upgrading the site from BASIC to COMMs and have not nominated themselves as the RP prior to raising the CR6800/6801 or is this permitted as the site is not being won by another Retailer and therefore the current FRMP is not required to win the	

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			role of RP? Confirming that if a Retailer is trying to win a site that they cannot nominate themselves as the RP first then follow through with CR1xxx – for example R1 is the current FRMP R2 become the RP by taking RP role. This allows R2 to engage with an MPB as they are now the RP. R2 then raise a CR1xxx nominating themselves as the FRMP along with changing metering participants.	
8.1.4 (a) i	i. the final accumulation reading(s) from the removed type 6 *metering installation* is applied at the end of the *day* prior to the *Meter Churn*; and		Endeavour the final accumulation reading(s) from the removed type 6 *metering installation* is applied at the end of the *day* prior to the *Meter Churn* when sending MDM data; and Clarify that this clause is only applicable when sending metering data via MDM	AEMO refer Endeavour to the response provided to Origin's submission to section 8.1.2 above. AEMO have included MDFF into clause 8.1.2.
8.1.4 (a) ii	ii. the start reading(s) for the new type 1, 2, 3, 4, or 5 *metering installation* at the start of the *day* on the *day* of the *Meter Churn*; and		Endeavour Change clause 8.1.4.a.ii to: the start reading(s) for the new type 1, 2, 3, 4, or 5 *metering installation* is at the start of the *day* on the *day* of the *Meter Churn*; and Grammar error	AEMO, in consultation with the MSWG, agreed with the principal and determined that the clause should be amended as follows: the *meter data* for the new type 1, 2, 3, 4, or 5 *metering installation* commences at the start of the *day* on the *day* of the *Meter Churn*
8.1.4 (a) ii	ii. the start reading(s) for the new type 1, 2, 3, 4, or 5 *metering installation* at the start of the		Ausnet Services	AEMO refer Ausnet Services to the AEMO comments in response to the Endeavour submission on 8.1.4 (a) ii

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	day on the *day* of the *Meter Churn*; and		8.1.4 (a) ii. the start reading(s) for the new type 1, 2, 3, 4, or 5 metering installation is applied at the start of the day ~~on the day~~ of the Meter Churn; Please correct drafting error for consistency	above.
8.1.4 (a) iii	iii. estimated metering data is provided for any data streams made active as a result of the Meter Churn, for a new type 5 metering installation;		UE 8.1.4 (a) (iii) query why there is a need to specify providing estimated data for meter churn situations when the MDP has the obligation to provide a complete set of data for the day anyway. Suggest that the requirement is not just for a new type 5 meter but a type 1-5 meter. Amend drafting to a 'a new type 1-5 metering installation'	AEMO note that the current obligations on MDP's for type 1-4 metering installations do not require MDP's to provide forward estimations as the meters are being read daily not monthly or quarterly. Being read daily enables AEMO to use this data for settlement. Monthly or quarterly read meters do not have data daily hence the need for forward estimation to accommodate for settlements.
8.1.4	For *Meter Churn* from a type 6 *metering installation* to new type 1, 2, 3, 4, or 5 *metering installation* (scenario 2): (a) The *Metering Data Provider* must have a process to ensure that: i. the final accumulation reading(s) from the removed type 6 *metering installation* is applied at the end of the *day* prior to the *Meter Churn*; and ii. the start reading(s) for the new type 1, 2, 3, 4, or 5 metering installation at the start of the day on the day of the Meter Churn; and iii. *estimated metering data* is provided for any data streams made active as a result of the *Meter Churn,* for a new type 5 *metering installation*;		Ausgrid There are no start readings for interval metering 8.1.4 For *Meter Churn* from a type 6 *metering installation* to new type 1, 2, 3, 4, or 5 *metering installation* (scenario 2): (a) The *Metering Data Provider* must have a process to ensure that: i. the final accumulation reading(s) from the removed type 6 *metering installation* is applied at the end of the *day* prior to the *Meter Churn*; and ~~ii. the start reading(s) for the new type 1, 2, 3, 4, or 5 metering installation at the~~	AEMO refer Ausgrid to the AEMO comments in response to the Endeavour submission on 8.1.4 (a) ii above.

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			~~start of the day on the day of the Meter Churn; and~~ iii. *estimated metering data* is provided for any data streams made active as a result of the *Meter Churn,* for a new type 5 *metering installation*;	
8.1.4 (a) iii	iii. *estimated metering data* is provided for any data streams made active as a result of the *Meter Churn,* for a new type 5 *metering installation*;		Jemena query why there is a need to specify providing estimated data for meter churn situations when the MDP has the obligation to provide a complete set of data for the day anyway. Suggest that the requirement is not just for a new type 5 meter but a type 1-5 meter Amend drafting to a 'a new type 1-5 metering installation'	AEMO note that current obligations on MDP's for type 1-4 metering installations do not require MDP's to provide forward estimations as the meters are being read daily not monthly or quarterly. Being read daily enables AEMO to use this data for settlement. Monthly or quarterly read meters do not have data daily hence the need for forward estimation to accommodate for settlements.
8.1.4 (c)	New Clause		Endeavour New clause (suggest to be inserted after clause 8.1.4.b): The *Metering Data Provider* must make the data stream inactive in MSATS for the removed meter with an effective start date of the *Meter Churn* day. Suggested new clause to define how data streams for the removed meter is to be managed to ensure consistency and alignment with the meter standing data and role changes.	AEMO, in consultation with the MSWG, determined that the proposal should be included as proposed - inclusion as follows: The *Metering Data Provider* must make the data stream inactive in MSATS for the removed meter with an effective start date of the *Meter Churn* day.
8.1.5 (a) iii	iii. the start reading(s) reading for the new type 6 *metering installation* is applied at the start of the *day* following the *day* of the *Meter Churn*.		Endeavour Change to clause 8.1.5.a.iii to:	AEMO refer Endeavour to the response provided to Origin's submission to section 8.1.2 above. AEMO have included MDFF into clause 8.1.2.

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			the start reading(s) reading for the new type 6 *metering installation* is applied at the start of the *day* following the *day* of the *Meter Churn* when sending MDM data. Clarify that this clause is only applicable when sending metering data via MDM	
8.1.5 (a) iii	iii. the start reading(s) reading for the new type 6 *metering installation* is applied at the start of the *day* following the *day* of the *Meter Churn*.		Acumen Delete "reading" after "the start reading(s)" As per above (FRMP Churn Document 3.2.1 d) iii), clarity about what date an MDP should COM an interval to interval exchange would be beneficial, ie. Day after install. **Comment for FRMP Churn Doc** MDPs are supposed to have a full days data in order to com a meter change. Therefore, this should state 'the meter change date plus 1'. However, this also needs to bear in mind commercial terms (contract start dates). I.e. the MDP should be comming a transfer on install date plus 1, or the contract start date, whichever is later. Appreciate the commercial aspect is not a problem for the rules to define.	AEMO agree with the proposal, changes made as follows: the start reading(s) for the new type 6 *metering installation* is applied at the start of the *day* following the *day* of the *Meter Churn*. AEMO – MDP's do have to provide a full day's worth of data and will sub zeros for the first half of the day of meter install, as per scenarios in MDP SLP section 8.
8.1.5	For *Meter Churn* from a type 1, 2, 3, 4, or 5 *metering installation* to new type 6 *metering installation* (scenario 3): (a) For jurisdictions where reversion from a type 1, 2, 3, 4 or 5 *metering installation* to a type 6 *metering installation* is permitted, the *Metering Data Provider* must have a process to ensure that: i. the final reading(s) from the removed type 1, 2, 3, 4, or 5 metering installation is applied at the end of the day of the		Ausgrid There are no final readings for interval metering 8.1.5 For *Meter Churn* from a type 1, 2, 3, 4, or 5 *metering installation* to new type 6 *metering installation* (scenario 3): (a) For jurisdictions where reversion from	AEMO, in consultation with the MSWG, determined that the clause refers to the requirement for the MDP to provide data for the entire day, but no more than that day. Amendments have been made as follows: *For jurisdictions where reversion from a type 1, 2, 3, 4 or 5* metering installation *to a type 6* metering

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	Meter Churn; ii. the *metering data* for the period of the *Meter Churn day* between commissioning of the new *metering installation* and the end of the *day* of the *Meter Churn* is provided as zeroes with a quality flag of F; and iii. the start reading(s) reading for the new type 6 *metering installation* is applied at the start of the *day* following the *day* of the *Meter Churn*.		a type 1, 2, 3, 4 or 5 *metering installation* to a type 6 *metering installation* is permitted, the *Metering Data Provider* must have a process to ensure that: i~~. the final reading(s) from the removed type 1, 2, 3, 4, or 5 metering installation is applied at the end of the day of the Meter Churn;~~ ii. the *metering data* for the period of the *Meter Churn day* between commissioning of the new *metering installation* and the end of the *day* of the *Meter Churn* is provided as zeroes with a quality flag of F; and iii. the start reading(s) reading for the new type 6 *metering installation* is applied at the start of the *day* following the *day* of the *Meter Churn*.	installation *is permitted, the* Metering Data Provider *must have a process to ensure that:* *i.* *the final reading(s) from the removed type 1, 2, 3, 4, or 5* metering installation *ceases at the end of the* day *of the* Meter Churn*;*
8.1.5 (a) iv	New Clause		Endeavour New clause (suggest to be inserted after clause 8.1.5.a): The *Metering Data Provider* must make the data stream inactive in MSATS for the removed meter with an effective start date of the day following the *Meter Churn* day. Suggested new clause to define how data streams for the removed meter is to be managed to ensure consistency and alignment with the meter standing data and role changes.	AEMO, in consultation with the MSWG accepted the proposal with amendments as follows: the data stream for the removed meter is made inactive in MSATS with an effective start date of the day following the *Meter Churn* day.
8.1.6 (a) i	For *Meter Churn* from a type 1, 2, 3, 4, or 5 *metering installation* to new type 1, 2, 3, 4, or 5 *metering installation*		Ausgrid Should read:-	AEMO, in consultation with the MSWG accepted the proposal with

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	(scenario 4): (a) The *Metering Data Provider* must have a process to ensure that: i. the final reading(s) from the removed type 1, 2, 3, 4, or 5 *metering installation* is applied up to the commissioning of the new *metering installation* on the *day* of the *Meter Churn*;		i. the final reading(s) from the removed type 1, 2, 3, 4 or 5 metering installation is collected up to the point the metering is removed. NB The existing MDP has no control of an lost data between the time their meter is removed and the new metering is commissioned.	amendments as follows: *the final reading(s) from the removed type 1, 2, 3, 4, or 5* metering installation *is collected up to the removal of the old* metering installation *on the* day *of the* Meter Churn*;*
8.1.6	For *Meter Churn* from a type 1, 2, 3, 4, or 5 *metering installation* to new type 1, 2, 3, 4, or 5 *metering installation* (scenario 4): (a) The *Metering Data Provider* must have a process to ensure that: … iii the *Metering Data Provider,* related to the new *metering installation,* must obtain *metering data* for the period of the *Meter Churn day* between the start of the *Meter Churn day* and the commissioning of the new *metering installation* from the *Metering Data Provider* related to the old *metering installation* and combine it with the *metering data* for the period of the *Meter Churn day* between the commissioning of the new *metering installation* up to the end of the *Meter Churn day*. The *Metering Data Provider* related to the new *metering installation* must deliver *metering data* for the whole *day* of *Meter Churn*.	**Procedure only**	Energex iii. the *Metering Data Provider,* related to the new *metering installation,* must obtain *metering data* for the period of the *Meter Churn day* between the start of the *Meter Churn day* and the commissioning of the new *metering installation* from the *Metering Data Provider* related to the old *metering installation* and combine it with the *metering data* for the period of the *Meter Churn day* between the commissioning of the new *metering installation* up to the end of the *Meter Churn day*. **The *Metering Data Provider* related to the old *metering installation* must release the part-day *metering data* to the new party as soon as the meter is physically exchanged.** The *Metering Data Provider* related to the new *metering installation* must deliver *metering data* for the whole *day* of *Meter Churn* The outgoing MDP should release the part-day data to the new party as soon as the meter is exchanged (i.e. when the	AEMO, in consultation with the MSWG accepted the proposal with amendments, the new clause iv has been added, as follows: The *Metering Data Provider* related to the old *metering installation* must release the part-day *metering data* to the new *Metering Data Provider* within 2 business days of the *Meter Churn*;

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			final read process has been completed) and not wait until the transfer of MDPs is completed.	
8.1.6 (a)	For Meter Churn from a type 1, 2, 3, 4, or 5 metering installation to new type 1, 2, 3, 4, or 5 metering installation (scenario 4): (a) The Metering Data Provider must have a process to ensure that: iii the *Metering Data Provider,* related to the new *metering installation,* must obtain *metering data* for the period of the *Meter Churn day* between the start of the *Meter Churn day* and the commissioning of the new *metering installation* from the *Metering Data Provider* related to the old *metering installation* and combine it with the *metering data* for the period of the *Meter Churn day* between the commissioning of the new *metering installation* up to the end of the *Meter Churn day*. The *Metering Data Provider* related to the new *metering installation* must deliver *metering data* for the whole *day* of *Meter Churn*.		Metropolis Where this occurs, the new MDP will be responsible for providing data to market for the day of the meter churn. The new MDP must rely on the old MDP to provide churn data in a very short timeframe. If the data is not provided, the new MDP must generate Substitute data, however the new MDP does not have any history to base these Substitutes on, so only a Type 18 would be acceptable. This is not an appropriate solution for large numbers of sites. Metropolis proposes that the solution to this is that the MDP change occurs at the end of the meter change day. The outgoing MDP will have history, and be able to generate meaningful Substitute data while the Churn Data process is enacted	AEMO, in consultation with the MSWG, refer Metropolis to the response provided to the Energex submission on 8.1.6 above.
8.1.6 (a) iii	iii. the *Metering Data Provider,* related to the new *metering installation,* must obtain *metering data* for the period of the *Meter Churn day* between the start of the *Meter Churn day* and the commissioning of the new metering installation from the *Metering Data Provider* related to the old *metering installation* and combine it with the *metering data* for the period of the *Meter Churn day* between the commissioning of the new *metering installation* up to the end of the *Meter Churn day*. The *Metering Data Provider* related to the new *metering installation* must deliver *metering data* for the whole *day* of *Meter Churn*.		Ausgrid Replace with:- 'removal of the previous metering'. NB The existing MDP has no control of an lost data between the time their meter is removed and the new metering is commissioned. iii. the *Metering Data Provider,* related to the new *metering installation,* must obtain *metering data* for the period of the *Meter*	AEMO, in consultation with the MSWG accepted the proposal with amendments as follows: *the* Metering Data Provider, *related to the new* metering installation, *must obtain* metering data *for the period of the* Meter Churn day *between the start of the* Meter Churn day *and the removal of the old* metering installation *from the* Metering Data Provider *related*

Item	Description	Category	Participant Comments	AEMO/MSWG Comments
			Churn day between the start of the *Meter Churn day* and the ~~commissioning of the new metering installation~~ from the *Metering Data Provider* related to the old *metering installation* and combine it with the *metering data* for the period of the *Meter Churn day* between the commissioning of the new *metering installation* up to the end of the *Meter Churn day*. The *Metering Data Provider* related to the new *metering installation* must deliver *metering data* for the whole *day* of *Meter Churn*.	*to the old* metering installation *and combine it with the* metering data *for the period of the* Meter Churn day *between the removal of the old* metering installation *up to the end of the* Meter Churn day*. The* Metering Data Provider *related to the new* metering installation *must deliver* metering data *for the whole* day *of* Meter Churn*.*
8.1.6 (a) v	v. where *Meter Churn* results in a change to the recording of *metering data* from 30 minute to 15 minute intervals, the 15 minute intervals of *metering data* from the commissioning of the new *metering installation* to the end of the *Meter Churn day* are to be aggregated to form 30 minute *interval metering data*;		UE 8.1.6 (a) (v) says: where Meter Churn results in a change to the recording of metering data from 30 minute to 15 minute intervals, the 15 minute intervals of metering data from the commissioning of the new metering installation to the end of the Meter Churn day are to be aggregated to form 30 minute interval metering data; The new MDP must request the 30 minute Interval data from the OLD MDP, and then it must combine it with the 15 Minute data from its own meters for the remainder of the Churn day, and create a 30 Minute interval stream to publish to Market participants. However the very next day the MDP has a full day of 15 minute data and now publishes that data stream as 15 Minute data. This means that the Systems for the MDP, LNSP and FRMP must be designed to hold data at both 30 and 15 minute intervals for the same Datastream	AEMO, in consultation with the MSWG, noted that this requirement has not changed from the original Meter Churn Data Management Procedure. All participants should be operating in accordance with this now.

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			– This will in all likelihood be expensive to build and test (and it is likely that very parties do it properly now)- Why can't more practical, if slightly less accurate approach be adopted for this situation – where the churn data is converted to 15 Minutes by a simple process of halving the 30 minute readings. Considering that UE tariffs (and most likely other tariffs) are based on 30 Minute intervals and that AEMO Settlement is in 30 minute intervals – There ought to be no difference from a financial transaction perspective, but there will be a benefit in terms of system implementation complexity and cost reduction. AEMO should consider the capability of all parties to meet the clause as currently drafted. UE strongly recommend that a simpler approach be adopted to save on unnecessary cost increases. The data stream from a meter should not vary on the churn day to the next day ie from the 30 min data to 15 min data the following day.	
8.1.6 (a) vi	For *Meter Churn* from a type 1, 2, 3, 4, or 5 *metering installation* to new type 1, 2, 3, 4, or 5 *metering installation* (scenario 4): (a) The *Metering Data Provider* must have a process to ensure that: v. estimated metering data is provided for any data streams made active as a result of the Meter Churn, for a new type 5 metering installation;		Jemena It is not clear why the obligation only applies to a type 5 metering installation. We suggest obligation expanded to include new type 1-5 metering installation.	AEMO note that the current obligations on MDP's for type 1-4 metering installations do not require MDP's to provide forward estimations as the meters are being read daily not monthly or quarterly. Being read daily enables AEMO to use this data for settlement. Monthly or quarterly read meters do not have data daily hence the need for forward estimation to accommodate for

Item	Description	Category	Participant Comments	AEMO/MSWG Comments
				settlements.
8.1.6 (a) vi	For *Meter Churn* from a type 1, 2, 3, 4, or 5 *metering installation* to new type 1, 2, 3, 4, or 5 *metering installation* (scenario 4): (a) The *Metering Data Provider* must have a process to ensure that: vi. estimated metering data is provided for any data streams made active as a result of the Meter Churn, for a new type 5 metering installation;		UE 8.1.4 (a) (iii) query why there is a need to specify providing estimated data for meter churn situations when the MDP has the obligation to provide a complete set of data for the day anyway. Suggest that the requirement is not just for a new type 5 meter but a type 1-5 meter. Amend drafting to a 'a new type 1-5 metering installation'	AEMO note that the current obligations on MDP's for type 1-4 metering installations do not require MDP's to provide forward estimations as the meters are being read daily not monthly or quarterly. Being read daily enables AEMO to use this data for settlement. Monthly or quarterly read meters do not have data daily hence the need for forward estimation to accommodate for settlements.
8.1.6 (a) ix	New Clause		Ausgrid New clause required to cover responsibility for final substitutions for gap between removing existing metering and commissioning new metering. ix. the Metering Data Provider, related to the new metering installation, must create final substituted data for the period between the existing metering being removed and the commissioning of the new metering installation.	AEMO, in consultation with the MSWG, determined that the new clause (x) should be added as follows: the *Metering Data Provider,* related to the new *metering installation,* must create final *substituted metering data* for the period between the existing *metering installation* being removed and the commissioning of the new *metering installation.*
8.1.6 (b) i	For *Meter Churn* from a type 1, 2, 3, 4, or 5 *metering installation* to new type 1, 2, 3, 4, or 5 *metering installation* (scenario 4): (b) Where the *Metering Data Provider* is changing as a result of the *Meter Churn*, the *Metering Data Provider* must have a process to ensure that: i. for the removal of type 1, 2, 3, or 4 metering equipment, the old Metering Data Provider must provide the new Metering Data Provider with the final metering data from		Metropolis Same as 8.1.6 (a)	AEMO refer Metropolis to the response to the Energex submission to section 8.1.6 above.

Item	Description	Category	Participant Comments	AEMO/MSWG Comments
	the removed metering equipment in accordance with section 6 of this Procedure;			
8.1.6 (b) iii	For *Meter Churn* from a type 1, 2, 3, 4, or 5 *metering installation* to new type 1, 2, 3, 4, or 5 *metering installation* (scenario 4): (b) Where the *Metering Data Provider* is changing as a result of the *Meter Churn*, the *Metering Data Provider* must have a process to ensure that: … iii where *metering data* is not available for the whole *day* of *Meter Churn*, *metering data* is *substituted,* in accordance with the *metrology procedure*: Part B*,* for the *day* of *Meter Churn* until actual *metering data* becomes available. This ensures continuity of *metering data* for the *day* of *Meter Churn*;	**Procedure only**	Energex iii. where *metering data* is not available **or has not been provided by the *Metering Data Provider* related to the old *metering installation*** for the whole *day* of *Meter Churn*, *metering data* is *substituted,* in accordance with the *metrology procedure*: Part B*,* for the *day* of *Meter Churn* until actual *metering data* becomes available. This ensures continuity of *metering data* for the *day* of *Meter Churn*; Amendment is required so that the new MDP who is still awaiting the part-day churn from the old MDP can final substitute prior to receiving the actual data.	AEMO considers the clause is sufficient in its current wording. It provides the new MDP the ability to substitute when they do not have data for the whole day. The reason may be that the old MDP has not sent the data but AEMO consider that it doesn't need to be stipulated
8.1.6 (b) iii	iii where metering data is not available for the whole day of Meter Churn, metering data is substituted, in accordance with the metrology procedure: Part B, for the day of Meter Churn until actual metering data becomes available. This ensures continuity of metering data for the day of Meter Churn;	**Procedure only**	Endeavour where *metering data* is not available for the whole *day* of *Meter Churn*, then the new *Metering Data Provider* must substitute the *metering data* ~~*metering data is substituted*~~*,* in accordance with the *metrology procedure*: Part B*,* for the *day* of *Meter Churn* until actual *metering data* becomes available. This ensures continuity of *metering data* for the *day* of *Meter Churn*; Updated clause to clarify that this	AEMO, in consultation with the MSWG, agreed with the submission, changes to the wording made as follows: where *metering data* is not available for the whole *day* of *Meter Churn*, the new *Metering Data Provider* must substitute the *metering data* in accordance with the *metrology procedure*: Part B*,* for the *day* of *Meter Churn* until actual *metering data* becomes available. This ensures continuity of *metering data* for

Item	Description	Category	Participant Comments	AEMO/MSWG Comments
			obligation is only on the new MDP	the *day* of *Meter Churn*;
8.1.6 (c)	(c) Where the *Metering Data Provider* is changing as a result of the *Meter Churn* and there is a delay in the change of the *Metering Data Provider* role in MSATS: i. the old *Metering Data Provider* must provide *substituted metering data* in accordance with the *metrology procedure*: Part B with a quality flag of 'S' and a reason code of 37 (meter under churn) in the *MDFF* until the new *Metering Data Provider* becomes the *Metering Data Provider* in MSATS; and ii. the new *Metering Data Provider,* when it becomes the *Metering Data Provider* in MSATS, must provide actual *metering data* for the period of *substitution* in (c)(i) above.	**Procedure only**	Endeavour Change to clause 8.1.6.c: ~~(c) Where the *Metering Data Provider* is changing as a result of the *Meter Churn* and there is a delay in the change of the *Metering Data Provider* role in MSATS:~~ ~~i. the old *Metering Data Provider* must provide *substituted metering data* in accordance with the *metrology procedure*: Part B with a quality flag of 'S' and a reason code of 37 (meter under churn) in the *MDFF* until the new *Metering Data Provider* becomes the *Metering Data Provider* in MSATS; and~~ ~~ii. the new *Metering Data Provider,* when it becomes the *Metering Data Provider* in MSATS, must provide actual *metering data* for the period of *substitution* in (c)(i) above.~~ The *Metering Data Provider* must make the data stream inactive in MSATS for the removed meter with an effective start date of the *Meter Churn* day. Suggested new clause to define how data streams for the removed meter is to be managed to ensure consistency and alignment with the meter standing data and role changes.	AEMO in consultation with the MSWG agree with the proposal. The section has been updated as follows: (c) Where the *Metering Data Provider* is changing as a result of the *Meter Churn* and there is a delay in the change of the *Metering Data Provider* role in MSATS: i. the *Metering Data Provider* must make the data stream inactive in MSATS for the removed meter with an effective start date of the *Meter Churn* day.

Item	Description	Category	Participant Comments	AEMO/MSWG Comments
			Removed the obligation to provide substituted metering data via MDFF to align with MDM metering data obligations which would end when the data streams are made inactive.	
8.1.6 (c)	(c) Where the *Metering Data Provider* is changing as a result of the *Meter Churn* and there is a delay in the change of the *Metering Data Provider* role in MSATS: iii. the old *Metering Data Provider* must provide *substituted metering data* in accordance with the *metrology procedure*: Part B with a quality flag of 'S' and a reason code of 37 (meter under churn) in the *MDFF* until the new *Metering Data Provider* becomes the *Metering Data Provider* in MSATS; and		Ausgrid Clause needs to either be deleted or make reference to MDM to AEMO in addition to MDFF.	AEMO refer Ausgrid to the response to the Origin submission on 8.1.2 above. AEMO have included MDFF into clause 8.1.2. A new clause ii added to 8.1.6 as follows: (c) Where the *Metering Data Provider* is changing as a result of the *Meter Churn* and there is a delay in the change of the *Metering Data Provider* role in MSATS: i. the old *Metering Data Provider* must provide *substituted metering data* in accordance with the *metrology procedure*: Part B with a quality flag of 'S' and a reason code of 37 (meter under churn) in the *MDFF* until the new *Metering Data Provider* becomes the *Metering Data Provider* in MSATS; ii. the old *Metering Data Provider* must provide *substituted metering data* in accordance with the *metrology procedure*: Part B with a read type flag of 'S' in the MDM until the new *Metering Data Provider* becomes the

Item	Description	Category	Participant Comments	AEMO/MSWG Comments
				Metering Data Provider in MSATS; and iii. the new *Metering Data Provider,* when it becomes the *Metering Data Provider* in MSATS, must provide actual *metering data* for the period of *substitution* in (c)(i) and (ii) above.
8.1.6 (c)	i. the old *Metering Data Provider* must provide *substituted metering data* in accordance with the *metrology procedure*: Part B with a quality flag of 'S' and a reason code of 37 (meter under churn) in the *MDFF* until the new *Metering Data Provider* becomes the *Metering Data Provider* in MSATS; and		UE 8.1.6 (c) (i) UE currently does not utilise a type 37 reason code and will need to build into its IT systems. UE is not in a position to make these system changes until the Nov 2015 release. UE note that AEMO have made no comment on the effective date on this Churn Pack. UE is not in a position to comply with the type 37 reason code until late in 2015 and hence considers that the Churn Procedures and the MP SLP could continue with an earlier date of effect to assist with the discrepancy between the NER and the AEMO Procedures. The date of effect of the MDP SLP should be clarified to be Nov 2015 release.	AEMO note that the reason codes referred to in the UE submission have been effective from May 2014, with the final determination of the associated procedure published in Nov 2013. Effective date of May 2014 was selected as implementation to allow participants to incorporate new codes. The effective data for the implementation of changes to this procedure will be considered through the second round of consultation.
New Section			Endeavour New section Appendix A:	AEMO consider that the diagrams and the text are complete and that a new appendix is not required.

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			Suggest that the four diagrams in section 8 are repeated here as examples with dates and times shown in the diagrams. There were some confusion on how to read the diagrams and examples with dates and times shown would clarify any misunderstanding.	
9.5	**Non-public telecommunications networks** 9.5.1 The use of a non-public *telecommunications network* for the collection of *metering data* by a *Metering Data Provider* is subject to approval by *AEMO*. 9.5.2 The *Metering Data Provider* must provide, to the reasonable satisfaction of *AEMO*, information demonstrating that the use of the non-public *telecommunications network* enables the *Metering Data Provider* to meet the requirements of the *Rules*, *metrology procedure*: Part A , *metrology procedure:* Part B and this Service level procedure, which must include, but not be limited to: (a) obtaining and maintaining compliance with the relevant recognised technical standards and licensing authority requirements; (b) obtaining and maintaining appropriate software licences to operate the non-public *telecommunications network*; (c) the implementation and nature of security controls for the ongoing operation and		Ausnet Services Regarding section 9.5 AusNet Services recognises that telecommunications networks represent a critical part of every MDP's business. Therefore, it is appropriate for AEMO to subject telecommunications networks to the same rigours as applied to other MDP systems (and for that matter MPCs that remotely transfer data to backend systems). However, applying obligations on non-public telecommunications networks disproportionately burdens businesses with purpose built infrastructure when the same risks often apply to all telecommunications networks. Accordingly, there is a need to balance these obligations, and remove any heavy handed obligations. Fundamentally, non-public telecommunications networks are now no different from wireless telecommunications products widely available to businesses in the public domain. Previously, dial-up modems	AEMO note that the NER requires AEMO to approve alternative communication networks (i.e. non – public) not all communication networks. AEMO agree with Ausnet Services regarding the removal of (e) (ii) as the requirement is already considered elsewhere in the procedure.

Item	Description	Category	Participant Comments	AEMO/MSWG Comments
	management of the non-public *telecommunications network*; (d) available bandwidth that supports the *collection* and management of *metering data*; (e) disaster recovery provisions related to: i. non-public *telecommunications network* redundancy; ii. alternative *metering data collection* arrangements during failure of all or part of the non-public *telecommunications network*; and iii. time synchronisation of *metering installations* operated through the non-public *telecommunications network*. (f) processes for the commissioning of *metering installations* and provision for commissioning failure management; (g) installation and maintenance of the non-public *telecommunications network*, including: i. compliance with relevant safety standards and work practices; ii. compliance with telecommunications technical standards; and iii. training and skill requirements of installation and maintenance personnel.		supported by phone lines were commonly used for Type 1-4 meters. These phone lines were subject to dozens of telecommunications regulations guaranteeing minimum service levels and standards. Today, meters are supported by 3G and 4G wireless services offered by any number of telecommunications re-sellers and wholesale network providers. Even consumer protections that apply to individual customers of mobile data services do not apply to MDPs purchasing wholesale services arrangements (often known as M2M arrangements). As such, it is incumbent on every MDP business to negotiate adequate terms and conditions from any telecommunications company (including re-sellers who aggregate bandwidth). Many of the same conditions/risks apply equally to both public and non-public telecommunications networks. Each MDP must negotiate with their telecommunications provider (including Telstra) appropriate terms with regard to security arrangements (e.g. locking cabinets, encrypting VPN traffic), available bandwidth, service availability and disaster recovery. In regards to these aspects there is no difference between public and non-public telecommunication networks, and AEMO has no basis for needing to approve one but not the other. AusNet Services strongly suggest the following changes are made, noting changes are in red and additional reasons are in green:	

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			9.5 ~~Non-public~~ Telecommunications networks ~~9.5.1 The use of a non-public telecommunications network for the collection of metering data by a Metering Data Provider is subject to approval by AEMO.~~ (this clause is overly heavy handed in comparison to other obligations in section 9) 9.5.2 The Metering Data Provider must provide, to the reasonable satisfaction of AEMO, information demonstrating that the use of the ~~non-public~~ telecommunications network enables the Metering Data Provider to meet the requirements of the Rules, metrology procedure: Part A , metrology procedure: Part B and this Service level procedure, which must include, but not be limited to: (a) obtaining and maintaining compliance with ~~the relevant recognised~~ ACMA's technical standards and licensing authority requirements; (ACMA is the technical regulator of telecommunications network in Australia and audits telecommunications networks accordingly) ~~(b) obtaining and maintaining appropriate software licences to operate the non-public telecommunications network;~~ (software licencing in support of telecommunications is a complicated, commercial matter) (c) the implementation and nature of security controls for the ongoing operation	

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			and management of the ~~non-public~~ telecommunications network; (d) available bandwidth that supports the collection and management of metering data; (e) disaster recovery provisions related to: i. ~~non-public~~ telecommunications network redundancy; ~~ii. alternative metering data collection arrangements during failure of all or part of the non-public telecommunications network; and~~ (even if a public telecommunication network failed an alternative metering data collection would be required meter data obligations, this could involve manual meter reading via the optical port or a communication module change) iii. ~~time synchronisation of metering installations operated through the non-public telecommunications network.~~ (time synchronisation is a meter issue and not a telecommunications issue and as such it is no different between public and non-public telecommunications networks, and further RPs and MDPs are already subject to obligations to ensure minimum standard of meter time synchronisation) (f) processes for the commissioning of metering installations and provision for commissioning failure management; (g) installation and maintenance of the ~~non-public~~ telecommunications network, including: i. adequate contractual terms with	

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			telecommunication service providers; and ~~i. compliance with relevant safety standards and work practices;~~ (ACMA audits this) ~~ii. compliance with telecommunications technical standards~~ (where this impacts spectrum use ACMA audits this)~~; and~~ ~~i~~ii. training and skill requirements of installation and maintenance personnel.	
9.5			UE 9.5 The section on a non public telecommunication network should be removed. The MDP is collecting and processing data, it is the RP role which may be better placed to ensure that the metering installation and the service providers comply with the requirements. The MDP role is not the party selecting the telecommunications methodology. The MDP obligations should be around the meter data quality and should be outcome focused. Sub clause (e) should be deleted, the MP SLP notes that the public telecommunications are not fully redundant and the MP may be requested to provide some data but not all data. The drafting for any non public telco should not be more onerous than the recognition in 4.27.3 that where any telecommunication network fails, it may not be practical to collect the data manually. Remove section 9.5.	AEMO note that NER 7.14.1A (c) (1), (2) states that AEMO must have procedures for requirements for the systems and processes for the collection, processing and delivery of metering data by MDP's. Where the collection is through an alternative telecommunication network AEMO have an obligation to approve the use of that telecommunication network for remote acquisition of metering data.

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