Metering Code Metrology Procedure and Mandatory Link Criteria

Introduction and Consultative Process Report

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Produced by

Metering Services,
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1 Introduction

Western Power would like to submit the accompanying proposed Metering Code Metrology Procedure and Mandatory Link Criteria for approval by the ERA. This report demonstrates Western Power's compliance with its obligations under the Metering Code ("Code"), detailing the development process of the documents, and their reasonability. Consistency of the documents in relation to the Metering Code is demonstrated in the report.

Considerable care has been taken to ensure fairness to all parties and to avoid overly complicating the Metrology Procedures and Link Criteria. Western Power has aimed at keeping the minimum content required to satisfy the Code and has also tried to avoid unnecessarily deviation from the equivalent documentation within the National Electricity Market.

2 Compliance

The Code details three areas of compliance to be satisfied by Western Power Networks, as the network operator.

These are:

- Reporting
- Process
- Consistency in relation to the Code and the Code Objectives.

The following details how compliance has been met in these areas.

2.1 Reporting

The report satisfies compliance criteria by

- Identifying the process through which the proposed documents have been developed, including details of consultation with Code participants.
- Demonstrating how the Rules and Agreement are reasonable to all parties and consistent with the Code.
- Including copies of submissions received by the network operator from retailers.

2.2 Process

The process utilised in the development of the Rules and Agreement satisfies compliance criteria by

- Seeking, and responding to, submissions from retailers concerning the proposed Rules and Agreement. This is described in more detail in the list of meetings and attendees in *Appendix A* and the description of the process in *3, Development Process*.
- Showing regard to the submissions made by retailers. A summary of submissions and their associated responses are provided in *Appendix B.*

2.3 Consistency with Code and the Code Objectives

The Rules and Agreement comply with the Code by

- Being believed by all parties to be reasonable.
- Being consistent with the code, in particular:
    - The provisions of clause *6.8, Requirements for a metrology procedure.*

- the provisions of clause 3.6, which allows the Network Operator to set out circumstances under which a communications link will be required for meter types 5 and 6.

- The provisions of Division 6.2, *Approval procedure for documents*.

3 Development Process

The proposed documents were developed by the following process:

Development of service level agreement and communication rules build pack.	During the development of previous documents general discussions were made about the information the metrology procedure would require.
From January 06	Western Power produced an internal draft of the document. This used the Victorian Metrology Procedures as a template but combined these into a single document and made modifications in accordance with the Metering Code.
April 06	In April 2006 Western Power became aware of the new draft National Electricity Market (NEM) metrology procedures and refined the format of the internal draft to align better with these.
22 May 06	Following internal review it was determined that the document was now well enough developed and the related metering data systems were stable enough to engage the retailers in direct discussion. The document was therefore issued to Alinta, Perth Energy and Synergy on the 22nd May and comments invited. A series of review workshops were then scheduled with invites sent to the retailers and the ERA.
25 June 06	Issued to the IMO for comment and to ascertain if they wished to be part of the working group.
6 June 06	The initial workshop was held. This was attended by Synergy and Western Power.
8 June 06	A new version of the draft metrology procedure and issues log was circulated to all retailers and the ERA.
13 June 06	The next workshop was held and attended by the ERA, Synergy and Western Power.
19 June 06	A new version of the draft metrology procedure and issues log was circulated to all retailers and the ERA.
21 June 06	A further review meeting was held. This was attended by the ERA, Synergy and Horizon.
22 June 06	The mandatory link criteria and metering management plan were circulated for information and comment to all retailers and the ERA.
23 June 06	The documents have been formally submitted to the ERA.

There are a few open issues at the time of submission – though agreement had been reached in principle on the issues there was insufficient time to incorporate these and obtain retailer approval prior to the submission deadline. At the meeting on the 22nd the ERA indicated that it would be possible to receive an amended version of the document before the deadline for Retailer comments. It was agreed therefore that Western Power would address the issues in the coming few weeks and submit an amended version against which the retailer's comments would be considered.

4 Metrology Procedure and Link Criteria Are Reasonable

The proposed Metrology Procedure and Link Criteria are considered to be fair due to:

- The documents have been developed in consultation with all market participants. Feedback has regularly been sought. Response to all feedback has been provided.
- Wherever possible the documents have remained faithful to the respective provisions of the code and related documents.
- The documents place each Participant on an equal footing.
- The documents cover all the requirements in the Code.
- The Metrology Procedure has similar content to those provided in other Australian electricity markets.
- The Link Criteria are in line with current practice.

5 Documents Consistent With The Code

These Rules and Agreement demonstrate consistency with the Code by:

- Defining the devices and methods used to:
  - Measure or otherwise determine the electricity produced or consumed at a metering point.
  - Convey the measured or determined information across communication links
  - Process the information into energy data
  - Provide access to the energy data.
- Specify the minimum requirements for meters and metering installations including
  - Accumulation meters
  - Interfaces allowing the interval data to be downloaded
  - Direct connected meters for type 4-6
  - CTs and VTs
  - Programmable settings
- Specify the procedures for validating, substituting and estimating energy data
- Being consistent with the approved asset management plan
- Specifies the date at which the procedure takes effect, which is more than three months from the date of publication.

Appendix A – Metrology Meetings

The following table lists the meetings held to discuss the Metrology procedure, the attendees and the actions resulting from the meetings:

Key:

WP	Western Power
Hor	Horizon
Syn	Synergy
Al	Alinta
PE	Perth Energy
ERA	Economic Regulation Authority

AT	Andrew Thornbury	(Western Power)
DB	Derek Ball	(Western Power)
PH	Peter Howe	(Western Power)
CW	Colin Walker	(Western Power)
KN	Katrina Novacsek	(Synergy)
MB	Mark Baxter	(Synergy)
JL	Jenny Laidlaw	(Synergy)
GP	Geoff Pearson	(Horizon)
RM	Ray Miles	(Alinta)
LG	Lisa Gagiero	(Perth Energy)
NP	Nick Parkhurst	(ERA)

Date	**Attendees**	**Actions**
6 June 06	Present: AT, DB, PH, KN, MB, JL Apologies: CW, RM, LG, NP	Discussed the issues raised by Synergy (see issues log). Main items to be addressed were: • Provide context and overview of connection points, metering points etc. that is consistent with the various documents (Code, Access Agreements etc.)

		• Determine if a connection point can be both entry and exit point – this differs from past discussions • Request for a table mapping MV90 statuses to flags issued by the metering system to understand when estimates and substitutes occur. • Request to specify long after communications fail a manual read will occur and what happens • Request for list of channels to be provided for each meter type and the NMI suffixes used • Can the retailer request and pay extra for an upgrade to a meter to include reactive energy measurement? • What type of meter would be offered as standard for TOU metering? • Can any type of interval meter also be used as an accumulation meter? • Retailers wish to have visibility of meter management plan • How is the decision reached as to which meter type is installed and who is involved in this process? • What happens when the load at a connection point varies over time? When is the meter changed and who decides? • Does a type 6 meter with interval data get treated as type 5 I nthe metering systems? • Energy units smust always include VARh and Vah • Can the three energy data channels be cross checked using a pythagorean relationship check? • If there is a problem with one channel Synergy would like the two related channels to be flagged as in error also. • Requested that retailers be consulted over meter change out plans where class of meters failed audit • Need to understand what Customer Class translates to in the HUB fields.
13 June 06	Present: AT, DB, KN, MB, JL, NP	Reviewed status of actions from first meeting. Main points added to issues log were: • Definitions and descriptive text still not correct

	Apologies: CW, RM, LG	• Synergy would like a process defined for the definition of parameters such as high/low bound checks • How can check and revenue meters that are in series be distinguished - they share the same NMI and report same streams. • Ensure change of meter type takes into account the contestability rules • Default reading period should be monthly. • Need text to explain how weekly readings are issued and if this impacts the SLA • Timings to be clarified for issuing of data • Dispute process requested to be 10 days to fit in with Retailer obligation to respond to ombudsman within 10 days • Needed to be clear how 15 minute readings aggregated to half hourly
21 June 06	Present: AT, CW, KN, MB, JL, NP Apologies: DB, RM, LG	Reviewed status of actions from first meeting. Main points added to issues log were: • Synergy did not feel the processing of status flags were correct – wished to see additional flags reported through (such as power outage and overflow). • Discussed process going forward. It was understood that not all issues could be addressed in remaining time so document would be submitted to ERA without full resolution of these matters. Providing document can be resubmitted with these closed out within 20 WD then retailers can submit comments on revised document and ERA would take this into consideration.

Appendix B– Issues Register

Ref	Section	Issue	Notes	Raised By	Raised On	Action On	Status
1	General	Various typographical comments received from ERA	Being progressed	ERA	25/05/2006	Metering Services	Open
2	General	Can Western Power please advise when Type 7 metering installations are expected to be included in MBS? If Type 7 installations are not going to be implemented in Release 2 then can the document make this clear.	CW: Type 7 will not be in MBS, as stated in several previous forums and documentsAT: it was agreed at meeting on the 16th that type 7 could be removed. Upon reflection current situation is covered by substitution method 74. I.e. all parties are agreed that type 7 continues to be calculated by the current method. I have therefore added a note to that effect but left the details of the other methods in place to retain compliance with the code. Needs intenral confirmation that it is ok to have in this format given not Metering Services doing type 7 calculations	Synergy	6/06/2006	Metering Services	Open
3	General	The relationships between the various metering entities mentioned (eg connection point, metering point, metering installation, check metering installation, revenue metering installation, meter, etc) is unclear – can we please get a rundown of what these entities are and how they relate to one another in the next meeting. 16/6/06 Still not right	Added text to document. Now revised to bring closer to queuing and application policy - this document attempts to clarify the relationships. Reviewed at meeting - everyone happy now.	Synergy	6/06/2006		Closed
4	General	The definitions and usage of the terms ‘estimate’ and ‘substitute’ throughout the document are very confusing. In the meeting it was stated that an estimate reading is provided when the network operator needs to provide a reading but has been unable to access the meter, while a substitute reading is	Changed section 3.4 to make clear the circumstances where estiamtion and subsitution occur CW: An estimate is a reference to a forward estimate. A substitute is a reading that is provided when either a reading could not be obtained by the NSRD or the reading obtained	Synergy	6/06/2006		Closed

Ref	Section	Issue	Notes	Raised By	Raised On	Action On	Status
		provided when the meter has been accessed but either a reading could not be taken (due to meter failure/damage) or else the reading failed validation. If this is the case can the documentation be reviewed an updated to reflect this consistently. Also, can the document specify what quality codes will be provided for estimates, substitutes and the 'deemed actuals' mentioned in the metering code. We need to be able to tell from an estimated/substituted reading whether it is due to a meter access problem (eg comms failure) or a validation failure.	failed validation and needs replacing. Revised text in accordance with this.				
5	General	This document needs to specify the quality flags and reason codes that will be provided, and what they mean in this market.	CW: Refer to NEM documentation. Metering Services agree to include an appendix with this information	Synergy	6/06/2006	Metering Services	Open
6	General	For interval readings, the document needs to explain how the various MV90 interval and channel statuses will be processed. This includes identification of which statuses may or will cause a substitute to be generated, and confirmation of which statuses (we would expect most) will be reported to retailers via reason codes.	Added in the current design reference for informationMetering Services agree to include an appendix with this information	Synergy	6/06/2006	Metering Services	Open
7	General	The document needs to explain the rules relating to meter installation types. For example, if a contestable exit point has an accumulation only meter, is this classed as a Type 6? If the meter is interval capable, but is read as a basic meter, is this a Type 6 or a Type 5? If a retailer requests enhanced technology features for an exit point (eg interval reading for a franchise residential site) then is this a Type 6 or a Type 5? How (if at	CW: Basic meter = Type 6, Interval capable, but read as basic = Type 6, Interval read = Type 5 an up, If interval and read by comms = Type 4 and up (dependant on consumption, Last note should refer to SLA	Synergy	6/06/2006	Metering Services	Closed

Ref	Section	Issue	Notes	Raised By	Raised On	Action On	Status
		all) does the metering installation type change with changes in customer load, both up and down? If a <34kW site is interval read and Metering decide to use remote comms, then does the Type change from 5 to 4? What are Synergy's metering/meter reading options for new/existing contestable sites, and how are these options reflected in the installation types and the datastreams provided?					
8	General	The document needs to explain what datastreams (including suffix details) will be provided as a minimum for each installation type, and for both import and export.	CW: yes we need to provide. Metering Services agree to include an appendix with this information	Synergy	6/06/2006	Metering Services	Open
9	General	The document needs to make clear that estimation and substitution are carried out on readings for a datastream, eg for those substitution methods that use historical data the readings for the datastream are considered, not just those of the current physical meter.	CW: agree	Synergy	6/06/2006		Closed
10	1.3.1	Is this correct or will at least part of the procedure only come into effect with Release 2?	Changed the text here. Type 7 is the bit under discussion - added in clauses to state that everyone has elected to make the existing systems the meterin instalaltion/database and substitution to be performed under method 74. See 2.	Synergy	6/06/2006	Metering Services	Open
11	1.4.1	The Metering Code (incorrectly) defines a NMI as the unique identifier of a metering point, not the unique identifier of a connection point. Is the assumption here that the Metering Code will be corrected to match this document and others (eg the CTC)?	Yes	Synergy	6/06/2006		Closed
12	1.5.1	The document references need to be updated.	Done	Synergy	6/06/2006		Closed
13	1.8.3(b)	Refers to section 3.12 of the code – should be section 3.11	Done	Synergy	6/06/2006		Closed

Ref	Section	Issue	Notes	Raised By	Raised On	Action On	Status
14	1.7.1	This list of metering installation components does not match the one given in the Metering Code. How can a connection point be a component of a metering installation when several metering installations can exist for a connection point?	Amended text	Synergy	6/06/2006		Closed
15	2	'check metering installation' – definition does not make sense ('…..validation process and meeting.')	Now revised	Synergy	6/06/2006	Metering Services	Closed
16	2	'connection point' – we have previously been advised that a connection point is either an entry point or an exit point, but never both.	Now revised	Synergy	6/06/2006	Metering Services	Closed
17	2	'metering point' – definition is different from the Metering Code. Does a check meter have its own metering point or does it have the same metering point as the corresponding revenue meter?	Code is inconsistent – implies metering point associated with revenue meter but that check and revenue have individual metering points.	Synergy	6/06/2006		Closed
18	2	'data stream' – definition is confusing – suggest 'Means a stream of data associated with a metering point, identified by a NMI and a NMI suffix. A metering point can have multiple data streams.'	Done	Synergy	6/06/2006		Closed
19	2	Can you please provide a definition for 'meter reading period'	Done	Synergy	6/06/2006		Closed
20	2	'interval energy data' – VAh and VARh readings would also be regarded as interval energy data.	Done	Synergy	6/06/2006		Closed
21	2	'standing data' – should refer to a connection point rather than a metering installation	Done	Synergy	6/06/2006		Closed
22	3.1.1	Remove 'distribution' from the second line – the procedure should cover metering points directly connected to the transmission network.	Done	Synergy	6/06/2006		Closed
23	3.2.2(a)	Should also refer to reactive and apparent	Done	Synergy	6/06/2006		Closed

Ref	Section	Issue	Notes	Raised By	Raised On	Action On	Status
		energy					
24	3.5.3(b)	The time limits here should tie in with the minimum times specified to access/repair a meter, to ensure that readings are never lost.	Added text to document to clarify	Synergy	6/06/2006		Closed
25	3.7.2	Should be '… in Schedules 1, 2 and 3 respectively'	Done	Synergy	6/06/2006		Closed
26	3.8.2	Agreed in meeting to remove this section	Done	Synergy	6/06/2006		Closed
27	3.9.9	'within a reasonable period of time' is too vague – WP suggested this should be in accordance with the Asset Management Plan, of which details would be provided in the next meeting. Should also state that the replacement/recalibration program is carried out in consultation with the retailer(s).	Added requirement to issue proposed plan to retailers within period Now made it by consultation	Synergy	6/06/2006	Metering Services	Closed
28	4.3.1	Interval data is not always collected on a daily basis for types 1-4. Also, the document should mention that remote interval readings are often taken on a weekly basis.	Now allows other periods by agreement - position here remains the default for new installations. Spelt out that default is monthly and that thorugh info may be sent more frequently only charged as monthly	Synergy	6/06/2006		Closed
29	4.3.3(b)	Not clear what this means – would the interval data be collected regularly, on an ad-hoc by request basis, or what? What would be provided to retailers?	Amended text	Synergy	6/06/2006		Closed
30	4.3.6	Can you please provide an example, and be specific about the cutoff time (eg 5pm, midnight or whatever it is)	Done	Synergy	6/06/2006		Closed
31	4.4.4 – 4.4.5	The document needs to include a table listing the various interval/channel status codes generated by MV90 and what action will be taken in response to each. In some cases (eg pulse overflow or status register full) some action should always be taken.	CW: refer 6	Synergy	6/06/2006	Metering Services	Open
32	4.4.9	This clause is not always true and should be removed.	Done	Synergy	6/06/2006		Closed

Ref	Section	Issue	Notes	Raised By	Raised On	Action On	Status
33	4.4.10	Unclear what this clause means. Why do the substituted values need to be agreed with the code participant for 4.4.6(b) and 4.4.7(b) but not in other cases, and how is this actually done in practice?	Decided wasn't needed and removed	Synergy	6/06/2006		Closed
34	5.6.1	What periods given?	Ref to metering code added	Synergy	6/06/2006		Closed
35	8	Where is the equivalent of this section for types 1-4?	Section has been amended. Requirements same for 1-5 so no extra section needed - just change to headings	Synergy	6/06/2006	Metering Services	Closed
36	8.22-8.23	These are repeats of sections 8.10 and 8.11	Removed	Synergy	6/06/2006		Closed
37	9	Introduction should refer to Type 6, not Type 8	Done	Synergy	6/06/2006		Closed
38	11.2	The validation of the VAh and VARh datastreams (where provided) should also be documented here.	Clauses now made generic	Synergy	6/06/2006		Closed
39	11.2	The document needs to specify how the 'rolling up' of channel and interval status for 15 minute intervals into 30 minute trading intervals is managed (eg precedence of status values where there is a mixture over a 30 minute period).	CW: Info in Interval Readings Functional Spec for Metron. Some specific provisions added	Synergy	6/06/2006	Metering Services	CLosed
40	11.2	Where there are Wh, VAh and VARh channels on a meter the validation should include a check that the readings for the three channels correlate (ie sqr(VAh) = sqr(Wh) + sqr(VARh), within some reasonable tolerance).	CW: check with Charlie	Synergy	6/06/2006	Metering Services	Open
41	11.2.1(c)	How are these maximums determined/maintained, and are they available to retailers in the standing data?	Stored as IT system parameters – for discussion Process to determine how these will be set will be defined in separate forum.	Synergy	6/06/2006		Closed
42	11.2.1(d)	How in practice are the validation method and associated tolerances agreed with the retailer, and how does a retailer know what they are (ie are they available in standing data)?	Stored as IT system parameters – for discussion. Process to determine how these will be set will be defined in separate forum.	Synergy	6/06/2006		Closed

Ref	Section	Issue	Notes	Raised By	Raised On	Action On	Status
43	11.2(f)	Need a specific list of MV90 interval and channel statuses here, along with the corresponding action (eg ignore, reject, investigate and possibly reject). Is 'Power failure' the same as 'Power outage'? If it is, the readings should not be rejected (although the status must be reported to retailers as a reason code).	CW: refer to 6	Synergy	6/06/2006	Metering Services	Open
44	11.3-11.4	Similar comments to those above for 11.2 apply		Synergy	6/06/2006	Metering Services	Closed
45	11.2-11.4	The document needs to be specific about what happens if a reading fails the min/max validation checks – the reading should be assessed by someone in these cases and not automatically rejected and substituted.	As per 3.4.5 – always manually reviewed	Synergy	6/06/2006		Closed
46	12.1	Just a heading – remove	Done	Synergy	6/06/2006		Closed
47	12	See General comments above about 'estimation' and 'substitution' – the section needs to be reworded to use these terms consistently.	Done Text amended to make this clear	Synergy	6/06/2006	Metering Services	Closed
48	12	If a reading for one channel only of a 3 channel meter fails validation, then if possible the other two channels should be used to derive the required reading – where this is not possible the readings for all three channels should be estimated, to prevent the generation of spurious power factors. Similarly, where one channel of a two channel (Wh and VARh) meter fails validation or is missing, both channels should be estimated to prevent problems with power factors.	CW: This is not in line with NEM standards. See 40.	Synergy	6/06/2006	Metering Services	Open
49	12	The document should state clearly that methods 11-18 are used for Types 1-4, while 51-56 are used for Type 5 metering	Done	Synergy	6/06/2006		Closed

Ref	Section	Issue	Notes	Raised By	Raised On	Action On	Status
		installations.					
50	12.3.4	Need to be more specific - there is no 'status flag' in the NEM12/NEM13 format. We would expect that different quality flags should be used for an estimate, a substitute and a deemed actual (if used), but if the difference can be derived from the reason codes then this is also OK.	CW: Refer to NEM documentation. See 5 and 6.	Synergy	6/06/2006	Metering Services	Open
51	12.4.2	Can you please provide an example to further explain this method.	Done	Synergy	6/06/2006		Closed
52	12.4.4, etc	Several references to 'network operator172', etc?	Done	Synergy	6/06/2006	Metering Services	Open
53	12.4.10	The last line in the table is incomplete	Done	Synergy	6/06/2006		Closed
54	12.4.14	Change 'in accordance with an approved metrology procedure' to 'by a method agreed to by the network operator and the affected code participant.'	Done	Synergy	6/06/2006		Closed
55	13.1.1(g)	Can't find clause 7.9.4(b) in the Metering Code	Copied by mistake from other document - deleted	Synergy	6/06/2006		Closed
56	13.3.1	This is Schedule 9, not 10	Done	Synergy	6/06/2006	Metering Services	Closed
57	13.4.3(c)	What standing data field does 'Customer Class' relate to? How is it maintained, and how would a value of 'Other' be treated? Also, the numbering starts at (ii).	CW: Relates to property type Values the same as for property type	Synergy	6/06/2006	Metering Services	Closed
58	1.3.4	New section on the realtionship and definiotns of objects such as metering points is still not not correct.Some work on clarifying this was doen under the access agreeemnt discussions.	New definitons are in the applications and queueing policy. Defintions and descriptions will be lifted from there.	Synergy	13/06/2006	Metering Services	Closed
59	General	Remove terminology "metering data" - only relevant in the NEM	Replaced everywhere with energy data	Synergy	13/06/2006	Metering Services	Closed
60	General	references to SWIS are wrong - this is a WA wide metrology procedure	Changed text to state MP applies where the Code applies. Ongoing discussion as to whether this procedure can apply to Horizon as it stands. Changed text to say applies "where WP is the	Synergy	13/06/2006	Metering Services	Closed

Ref	Section	Issue	Notes	Raised By	Raised On	Action On	Status
			metering service provider" which hopefully covers whichever way the debate goes.				
61	2.7.9	Meter class reference is confusing. The test applies to multiple types since the same physical meter type may be used in several types of metering installation. Rephrase to make it clear that we are discussing physical classes of meter.	Introduced concept of "testing class" being a collection of meters of the same physical type treated as a single class for testing purposes.	Synergy	13/06/2006	Metering Services	Closed
62	2.7.10	Code Participant not Market Particiapnt	Revised text throughout	Synergy	13/06/2006	Metering Services	Closed
63	2.7.10	Make it clear the planning is in consultation with Retailer not just notifed to them	Changed to read "in consultation"	Synergy	13/06/2006	Metering Services	Closed
64	3.3.1	Default must be monthly not daily	Changed to be monthly.	Synergy	13/06/2006	Metering Services	Closed
65	3.3	Still not clear what defaults will apply and how weekly is addressed	Defaults to be monthly but operator may send data (for types 1-5) more frequently - however still charged as monthly.	Synergy	13/06/2006	Metering Services	Closed
66	3.3	Must make clear that once a meter is contestible it must always remain constestible	Agreed - changing text to reflect this	Synergy	13/06/2006	Metering Services	Closed
67	3.3	Wanmt more clarity on the handling of type 6 meters with interval capability in MBS. If this is treated as type 6 still does it appear as type 6 in MBS or would it need to be type5 to be processed correctly?	Meter is type 6 as far as accuracy requirements etc. However MBS will treat it as type 5. In practice this means it is treated as type 5 as far as the retailer is concerned. But, for testing of the meter etc. it would still use the type 6 standards.	Synergy	13/06/2006	Metering Services	Closed
68	3.3.4	Confirm if it is possible for Retailer to ask type 6 to have interval readings and then switch back to accumulation at later date - other forums have indicated this wouldn't happen	This cannot happen. Text has now been updated	Synergy	13/06/2006	Metering Services	Closed
69	3.3.7	change midnight to 23:59:59 for clarity.	Done	Synergy	13/06/2006	Metering Services	Closed
70	3.3.9	The text does not exactly match the metering code. Rather than repahrase suggest reference out to clause in Code instead	Have stated defintions as per metering code except those listed below and then removed items that are defined as per the metering code	Synergy	13/06/2006	Metering Services	Closed
71	Definitions	Need to rephrase intorduction to make precedence with Code clearer	Have stated defintions as per metering code except those listed below and then removed	Synergy	13/06/2006	Metering Services	Closed

Ref	Section	Issue	Notes	Raised By	Raised On	Action On	Status
			items that are defined as per the metering code.				
72	3.11	Retailers have 10 days to respond to ombudsman - need dispute process to reflect this and guarantee response within this period	Done - text in this area has been revised	Synergy	13/06/2006	Metering Services	Closed
73	11.2 et al.	There is an error in the formulae for validation of revenue meters vs check meters. System is actually comparing against the average of R and C values not against the R value.	Revised text throughout	Western Power	13/06/2006	Metering Services	Closed
74	Misc	Where check and revenue meter are in series and both are identical how can we determine which is the revenue meter	Standing data is different - NMI suffix also differs. E.g. check meter may be E1, Revenue F1. Proposed to include list of suffixes etc. in build pack. Open issue around hanlding of upgrades to small meters. Won't be issue for new installations	Synergy	13/06/2006	Metering Services	Open
75	Misc	We want a process tro be put in place for defining high and low bounds for validation checking of meter readings	Not in scope of this document	Synergy	13/06/2006	Metering Services	Closed
76	General	It is hard to see how there will ever be any estimates given the defintion and the IMO timetable. Is this correct?	Not quite - estiamtes can be produced for type 6 meters to meet IMO settlement timetable. However for most meters most of the time there are no estiamtes.	Synergy	13/06/2006	Metering Services	Closed
77	3.3	Meter reading frequency for basic meters must not be changed without consultation with the retailer.	Confirmed. Whiles types 1-5 may be collected at differenct frequencies (e.g. weekly) than specified type 6 reading cycle won't change without consultation	Synergy	15/06/2006	Metering Services	Closed