METERING COMPETITION
EMBEDDED NETWORKS
METER REPLACEMENT PROCESSES

PROCEDURE CONSULTATION

FIRST STAGE PARTICIPANT RESPONSE TEMPLATE PACKAGE 2

Participant: *Pacific Hydro*

Completion Date: *15 November 2016*

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1. Glossary and Framework

Please delete any rows where there are no participant comments

(note: only sections that have changed as part of Work package 2 are listed in the table below)

Clause	Heading	Participant Comments
1.2	Definitions and Interpretation	Change (c) to read: 'References to time are to *Eastern Standard Time*'.
1.3	Related AEMO Documents	The list of' Related AEMO Documents' does not include the National Metering Identifier. Also the WIGS Procedure has been deleted. I assume the MSATS Procedures is a 'catch all' for the three documents; CATS WIGS and NMI. I suggest each document be listed separately for clarity and a link provided for each document.
2.3	Metrology Procedure	Clause 2.3.2 It is suggest this clause be removed. The Unmetered Load Guideline is an independent document and should be referenced as such in its clause. The content of the Metrology Procedure: Part B is already defined in clause 2.3.
2.5.5	NMI Procedure	Suggest the following rewording: This document addresses the matters contemplated in clauses 7.8.2(d)(2), and 7.8.2(ea)(3) of the NER. It ~~sets out~~ defines the structure of *NMIs* ~~as well as~~ and the process ~~under~~ by which they are allocated. ~~and~~ It is published as an MSATS Procedure under clause 7.16.2 of the NER.

2.7	Qualification Procedure	Suggest the following rewording: The NER require AEMO to have a qualification process for the accreditation and registration of MPs, MDPs and ENMs. As ~~T~~the process is identical for each role, ~~so they are~~ it is consolidated into one document.
2.8	Metering Service Level Procedures	Suggest the following rewording: This document details the obligations, technical requirements, measurement processes and performance requirements ~~that are~~ to be ~~performed, administered and maintained~~ met by MDPs in the provision of *metering data services* for all *metering installation* types and the maintenance of ~~a~~ *metering data services databases.* AEMO has *published* two subsidiary documents to facilitate the timely and accurate ~~appropriate delivery~~ provision of *metering data*. This document details the obligations, technical requirements, measurement processes and performance requirements ~~that are~~ to be ~~performed, administered and maintained~~ met by MPs in the provision, installation and maintenance of *metering installations*.
2.9	Service Level Procedure for Embedded Network Managers	Suggest the following rewording; This document details the obligations, technical requirements and performance requirements ~~that are~~ to be ~~performed, administered and maintained~~ met by ENMs in the provision of *embedded network management services*.
2.10	Default & Deregistration Procedure	Suggest the following rewording:

		Clause 7.4.4 of the NER requires AEMO to have a default and deregistration procedure for MPs, MDPs and ENMs. Clause 7.7.3 of the NER requires AEMO to have a default and deregistration procedure for MCs. ~~under clause 7.4.4 of the NER and for MCs under clause 7.7.3 of the NER~~. As ~~T~~the processes involved are similar ~~almost identical~~, ~~so the process for all four is~~ a single ~~documented in the one~~ procedure has been produced. Key differences in the treatment of the various ~~different~~ types of default are highlighted. Where an MP's, MDP's, ENM's or MC's performance fails to meet the NER, relevant procedures under the NER, or *service level procedures* (in the case of MPs, MDPs or ENMs), this document details how AEMO will address the Breach and the consequences to the MP, MDP, ENM or MC of failing to rectify the Breach.
2.11	Exemptions	Suggest the following rewording: **2.11.1 Exemption Procedure – Metering Installation Malfunctions** AEMO is required to publish this procedure under clause 7.8.10 of the NER.~~, which~~ The procedure documents the process an MC must follow when seeking an exemption from the requirement to repair a *metering installation malfunction* within ~~tight~~ the timeframe~~s~~ imposed by the NER. **2.11.2 Exemption Guideline (Small Customer Metering Installation)** AEMO may exempt an MC from the requirement to install a type 4 *metering installation* that meets the *minimum services specification* in accordance with clause 7.8.4 of the NER. Although there is no ~~requirement~~ obligation to publish this procedure, AEMO has determined ~~that~~ it would be beneficial for Participants to ~~be aware of~~ know the process and the grounds on which AEMO may grant the exemption. This procedure is not subject to consultation under the NER.

3	Glossary Term: Meter Register Status Code	A code used in MSATS to ~~delineate~~ identify the status of a *meter*. See also section 4.11.3 of the CATS Procedures.
3	Glossary Term: MSATS Procedures	The CATS Procedures, WIGS Procedures, MDM Procedures, NMI Standing Data Schedule, NMI Procedure and Part A of the NEM RoLR Processes collectively. The word 'PROCEDURE" has been struck out in the National Metering Identifier changed marked document. Should the definition read; Collectively, the CATS, WIGS, MDM, NMI Standing Data Schedule, National Metering Identifier and Part A of the RoLR Process.

2. Default & Deregistration Procedure (MP, MDP, ENM, MC)

Please delete any rows where there are no participant comments

Clause	Heading	Participant Comments
1.3	Related AEMO Documents	As this document is deals with breaches of the NER, applicable procedures under the NER and failures to meet conditions of accreditation, shouldn't these documents be included in the 'Related AEMO Documents'?
2	BREACH OF THE NER OR PROCEDURES UNDER THE NER	Suggest the following rewording: The failure of an MP, MDP, ENM or MC to comply with the NER or any applicable procedures under the NER, or a failure to meet a condition of accreditation, (**Breach**) may come to AEMO's attention following compliance audits of the MP, MDP, ENM or MC ~~compliance~~, information in AEMO systems and records, complaints from affected Participants or End Users, or through self-reporting.
3	DETERMINATION OF TYPE OF BREACH	Suggest the following rewording: ~~One of the matters that~~ AEMO must determine, at the conclusion of a Review,~~-~~ ~~is~~ what type of Breach has been committed by the relevant MP, MDP, ENM or MC.
3.1	Immaterial Breach	Suggest the following rewording: An Immaterial Breach ~~includes~~ is a Breach that does not have a material adverse effect on either:

		(a) AEMO's ability to perform its functions or comply with its obligations; or (b) other participants' ability to perform their services and conduct their business operations or fulfil their regulatory obligations. ~~the services and business operations, or regulatory obligations, of other Participants.~~
3.2	Significant Breach	Suggest the following rewording: A Significant Breach includes a Breach, or a series of Breaches taken together, that if not remedied, is, or are, likely to have a material adverse effect on ~~one or more of the following~~: (a) AEMO's ability to perform its functions or comply with its obligations; and (b) other participants' ability to perform their services and conduct their business operations or fulfil their regulatory obligations. ~~the services and business operations, or regulatory obligations, of other Participants~~. The deletion in the first paragraph is made as the 'and' connecting (a) and (b) implies both AEMO and a participant must be materially adversely effected. So it cannot be 'one' of the following. Or should it be 'or' between (a) and (b)?
3.3	Material Breach	Suggest the following rewording: A Material Breach includes one or more of the following: (a) a Breach, or a series of Breaches taken together, that has, or have, a material adverse effect on: (i) AEMO's ability to perform its functions or comply with its obligations; (ii) other participants' ability to perform their services and conduct their business operations or fulfil their regulatory obligations ~~the services and business operations, or regulatory obligations of other Participants~~; or (iii) both paragraphs (i) and (ii); (b) a breach of a Jurisdictional requirement in the *metrology procedure*;

		(c) the cessation of any activity ~~that~~ the ~~-~~relevant MP, MDP, ENM or MC has been appointed to perform, other than as strictly required by the NER or in applicable procedures under the NER; ~~and~~ (d) any act that AEMO reasonably considers to be unethical. In (c) who appoints the MP, MDP, ENM or MC to perform an activity; AEMO or a participant? Suggest this be included in the clause.
5	REVIEW OF CAPABILITY FOR ONGOING COMPLIANCE	If an MP, MDP, ENM or MC has not remedied the breach referred to in the Notice of Breach within 7 days after the issue of the notice, AEMO will conduct a review to assess the relevant MP's, MDP's, ENM's or MC's capability for ongoing compliance with the NER or applicable procedures under the NER as required by clause 7.4.4(c)(2) of the NER, or clause 7.7.3(c)(2) (**Review**). Is the 7 days referred to in the clause above business or calendar days?
5.1	Remediation Plan	Should the participants affected by the Breach also be made aware of or be involved in developing the remediation plan and agree to it?
5.4	Other Relevant Considerations	AEMO may take ~~any~~ other relevant matters into consideration, such as the conduct of the relevant MP, MDP, ENM or MC after receiving the Notice of Breach, including the level of co-operation and assistance provided to AEMO during its Review.
6.1	Material Breach	Suggest the following rewording: If AEMO determines ~~that~~ the Breach is a Material Breach, the action AEMO ~~will~~ takes will vary in the case of an MC, from that taken against an MP, MDP or ENM.
6.1.2	MC	(c) The notice to the Appointers will be substantially in the form contained in **Appendix C.** (Reference to other appendices is 'bolded').

6.2	Non-Material Breach	A Non-Material breach; if it is not a material Breach then it is either an Immaterial Breach or a Significant Breach. Suggest the section is titled: Immaterial or Significant Breach
6.2.1	Actions taken by AEMO	If the Breach is not a Material Breach, the types of action AEMO could take include: (a) issue a low level warning or high level warning; (b) apply close monitoring of the relevant MP's, MDP's, ENM's or MC's performance for a limited or indefinite time; (c) request regular reporting from the relevant MP, MDP, ENM or MC; (d) impose additional requirements, provided that they do not restrict the relevant MP's, MDP's, ENM's or MC's provision of services in accordance with their accreditation and registration; or (e) any combination of the above. Please confirm the above actions are applicable to both an Immaterial and Significant Breach.
6.2.2	Warnings	If it is not a Material Breach then it is either an Immaterial or Significant Breach. Therefore 6.2.2(c) seems irrelevant as (a) has already taken into account the type of Breach and therefor the effect of the Breach on AEMO and/or participants.
7.1	Relevant Considerations	Suggest the following rewording: When ~~considering~~ determining what action to take under section 6.1 or 6.2, AEMO will take into consideration the following matters, as a minimum: (a) the extent of the failure of an MP's, MDP's, ENM's or MC's self-regulation, compliance or quality system and whether AEMO is reasonably confident the system could continue to operate and in what capacity; ~~such that AEMO is not~~

		~~reasonably confident that it could reasonably operate on an ongoing basis, and in what capacity;~~
8.1.2	Non-Material Breach	A Non-Material Breach; if it is not a Material Breach then it is either an Immaterial Breach or a Significant Breach. Suggest the section is titled: Immaterial or Significant Breach
APPENDIX A	NOTICE OF BREACH	The 7 days referred to here are calendar or business days? Reference to timing in other clauses in the procedure is to business days.
APPENDIX B	METERING COORDINATOR DEFAULT NOTICE	As above

3. Exemption Procedure (Metering Installation Malfunctions)

Please delete any rows where there are no participant comments

Clause	Heading	Participant Comments
2.2	Timing of Application	In the previous document, Default & Deregistration Procedure (MP, MDP, ENM, MC), references to the Appendices were bolded. It is not bolded here.
2.3	AEMO's Determination	Suggest the following rewording: Within 2 *business days* of receipt of an application for exemption, AEMO will: (a) assign a unique ID number to the application, or verify the ID ~~identification~~ number provided by the applicant where the application is for an extension of an existing exemption; ~~for an application for an extension to an existing exemption;~~ (b) provide the applicant with confirmation of receipt; (c) review the application and, where necessary, request additional information; and (d) determine whether to approve the application and communicate that determination to the applicant by the end of the second *business day* ~~of~~ from receipt of the application or additional information requested (whichever is the later).
2.5	Grant of Exemption	(a) The Current MC to provide a rectification plan in the form specified in section 3 for the rectification of the *metering installation malfunction* by a specified date.

		(b) The Current MC to complete the rectification of the *metering installation malfunction* by a specified date. Rule 7.8.10 (c) requires the *Metering Provider* to provide a plan for the rectification of the metering installation. (c) If an exemption is provided by *AEMO* under this clause 7.8.10, the the *Metering Provider* must provide *AEMO* with a plan for the rectification of the *metering installation*.
2.7	Extension to Exemption	In the previous document, Default & Deregistration Procedure (MP, MDP, ENM, MC), references to the Appendices were bolded. It is not bolded here.
2.8	Current MC's Obligations during the Exemption Period	In clause (b) should affected participants (e.g. FRMP, MDP, LNSP), other than AEMO, also be kept informed of the rectification plan?
3.1	Timing	Where it is practicable to do so, the Current MC may provide a draft of the MP's rectification plan with the ~~it's~~ application for exemption.
APPENDIX A	APPLICATION FOR EXEMPTION	Suggest item 15 in the application read: 'Has the draft MP rectification plan been provided?'

4. MSATS Procedures: National Metering Identifier

Please delete any rows where there are no participant comments

Clause	Heading	Participant Comments
1.1	Purpose and Scope	This ~~document~~ National Metering Identifier Procedure (**Procedure**) is an MSATS Procedure. It sets out the structure for ~~National Metering Identifiers (*NMIs*)~~ to be used in the ~~National Electricity Market (*NEM*)~~, ~~and~~ details ~~metering~~ D~~d~~ata streams for each category of *metering installation* and addresses the matters contemplated in clauses 7.8.2(d)(2), and 7.8.2(ea) (eb) & (ec) of the NER. ~~It does not attempt to address Market Settlement and Transfer Solution (MSATS) issues in relation to network tariffs and billing data streams.~~ Suggest the following rewording: The *NMI* is a unique identifier for each *connection point* within the NEM; an index against which other essential data can be managed. It is crucial to the accurate management of End User registration and transfer, *connection point* change control, and data aggregation and transfer.
2.2	Issue of NMIs by LNSPs and ENMs	(ii) The ENM must apply to AEMO for a *NMI* prior to assuming responsibility for the *child connection point.* AEMO will either issue a *NMI* to the ENM for that *child connection point* from the ENM's allocated list or a unique *NMI* from an available range.
3	NMI STRUCTURE	(ii) Character letters "O" and "I" are not permitted in order to avoid confusion

		with numbers 0 and 1. Suggest the following: Where alphas are permitted "O" and "I" are not permitted in order to avoid confusion with numbers 0 and 1. (iii) "W" is ~~a~~ reserved and ~~character~~ to be used as the fifth character ~~digit~~ of the allocated identifier for wholesale *transmission connection metering points* only. It may only be used if the *NMI* is allocated from an alphanumeric block. Item (e) has no content.
4	NMI REGISTERS	NSPs and ENMs must maintain a register of *NMIs* assigned by them to *connection points* ~~of~~ and *child connection points*.
5	NMI CHECKSUM	(b) The NMI Checksum is a mandatory field ~~whenever~~ on a Change Request ~~is~~ submitted to MSATS. ~~by batch or through the browser *NMI* is manually entered into MSATS.~~ In (c) there is nothing for item (iii).
7.2	Wholesale Connection Points	(b) For wholesale *connection point~~s~~* a *NMI* must be assigned to each individual physical or logical metering point which that contributes to the wholesale *connection point*. This requirement is to facilitate a drill down to data streams where AEMO is obliged to audit or otherwise investigate *energy* data flows for a wholesale *connection point*.
10	NMI RULES	The ENM is required to verify that the *NMI* is associated with the correct *embedded network,* ~~and~~ the correct Parent NMI~~,~~ and have the same TNI Code as the Parent NMI in ~~AEMO's customer transfer system (~~MSATS ~~system)~~.

		Rule 3 ~~4. 5~~. All communications ~~to and from~~ ~~with~~ between Participants ~~and Metering Service Providers inclusive of Financially Responsible Market Participant RMP accounts must~~ shall include the *NMI* identifier. What of new connection and allocate NMI service orders that only require the address?
10.1	Data Delivery to AEMO (MSATS System)	This section does not appear to be in the document.
10	Rule 2	Rule 2. 3. A *NMI* cannot be changed or reallocated to another *connection point*. *NMIs* cannot be changed or reallocated to accommodate changes to Participant IT systems, changes to assumed associations, changes to Network Tariffs, changes to LNSP network boundaries or ENM changes or because an LNSP's or ENM's allocation system has changed. *NMIs* cannot be changed where a Child NMI becomes a directly connected to a *distribution network* or reverts to an *embedded network* connection. The above implies that a NMI at a child connection point in an embedded network cannot be changed (i.e. abolished and a new NMI allocated) but must remain the same whether the connection point is on or off market. Is this correct?
12.1	One End User metered on the secondary side of transformer	Why the change from lower voltage to secondary?
13.4	Three Datastream Meter with Single Measurement Element	**Three Datastreams ~~Register~~ One Meter with Single Measurement Element**
14	ENERGY DIRECTION FLOWS	If POOL is being replaced by *market i*n the text, the diagram will also need to

		change.

5. Qualification Procedure

Please delete any rows where there are no participant comments

Clause	Heading	Participant Comments
3.5.1	Inadequate Responses or Missing Information	If AEMO considers that any response is inadequate or supporting documentation is missing, AEMO will notify the applicant and, unless AEMO reasonably considers that AEMO has sufficient information to commence a pre-production assessment in accordance with section 3.6, the application will be placed in abeyance until the requested ~~further~~ response or documentation is received.
No 3.5.2	Application in Abeyance	If AEMO has advised an applicant that its application is in abeyance in accordance with section 3.5.1, the applicant has 3 months to provide the ~~further~~ response or documentation requested by AEMO. If the applicant fails to provide the ~~further~~ response or documentation, the application will be deemed to have been withdrawn.

6. Service Level Procedure – Embedded Network Manager

Please delete any rows where there are no participant comments

Clause	Heading	Participant Comments
2.1	Embedded Network Management Services	'E*mbedded network management services'* is a defined term in the NER and therefore a NER requirement. Suggest the following rewording: Under the NER, the ENM must provide *embedded network management services*. The following is a list of those services: a) provide market interface services for *child connection point* End Users, which are services that link End Users to the *NEM* systems, for example: (i) create Child NMI; (ii) maintain Child NMI CATS Standing Data; and (iii) maintain the Network Tariff Code for Child NMIs; b) upon request from a *retailer*, apply to AEMO for *NMIs* for *child connection points* in the *embedded network* for which they are the ENM; c) register Child NMIs in MSATS; d) provide the MC, FRMP, and EENSP with the *NMI* of the *child connection*

		point; e) establish and maintain the *NMI Standing Data* for its Child NMIs within MSATS; i) allocate Embedded Network Codes for their Child NMIs in MSATS; f) act in the Role of LNSP in MSATS for its *child connection points*; g) maintain and manage relevant *EN wiring information* and *meter* arrangements; h) assign a DLF to each *child connection point* in MSATS; i) provide AEMO with a list of all DLFs for all their *child connection points* indicating which ones were calculated by the EENSP; and j) maintain a register of all allocated Child NMIs. In the provision of these *embedded network management services* the ENM must: (a) comply with all directions from AEMO to fulfil any obligation under this Procedure; (b) co-operate in good faith with AEMO, all *Registered Participants,* MPs, MDPs and other ENMs*;* (c) ensure any information collected by the ENM is kept confidential and secure in accordance with the NER and only provided to persons entitled to have such access.
2.2	Use of Sub-Contractors	Where an ENM engages a sub-contractor to perform any of its obligations specified in the NER or this Procedure, the ENM must: Delete 'must' at the beginning of (a) to €

3.2	Embedded Network Information	Is there a time limit that the information referred to in this section must be maintained?
4.1	NMI Allocation	Indicative TNI Codes for the *parent connection point* ~~is~~ are available to the ENM through the MSATS C1 report.

7. Unmetered Load Guideline

Please delete any rows where there are no participant comments

Clause	Heading	Participant Comments
3	DISCLAIMER	~~merely~~ reflects an agreement to use a value that facilitates the calculation of *energy* consumed by that Unmetered Device when calculating *metering data* for that Unmetered Device; and
4.1	Generally	(iii) A list of relevant *Australian Standards* or International Standards against which the test measurements and test methodology were undertaken. (iv) A brief description of the Unmetered Device conditioning to provide confidence that the tests reflect its normal and stabilised operating conditions.

8. Other Issues Related to Consultation Subject Matter

Document	Clause	Heading	Participant Comments
Default and Registration Procedure	**6.1.1**	MP, MDO or ENM	The clause references the 'relevant' MP, NDP, ENM. When referencing multiple parties in other documents the word 'relevant' is not always used. Is there any significance in using the word 'relevant'?
Qualification Procedure	**3.3**	Application Fees	Pacific Hydro supports the introduction of the Application Fees for MP, MDP and ENM accreditation.