**Appendix A - MC Audit Report**

**MC Audit - Contact Details**

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| **MC Details** | | |
| Organisation Name | |  |
| MC Participant ID | |  |
| MC Primary Representative | |  |
|  | Address |  |
| Email |  |
| Phone Number |  |
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| **Auditor Details** | | |
| Organisation Name | |  |
| Organisation ABN | |  |
| Auditor Name | |  |
|  | Address |  |
| Email |  |
| Phone Number |  |
| Audit Date | |  |
| Auditor’s Signature | |  |

**MC Audit - Opening Meeting (Register of Attendance)**

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| **Date** |  | | | |
| **Name** | **Position** | **Email** | **Phone** | **Signature** |
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**MC Audit - Review of previous Non-Compliances**

*Review the MC’s database/records to ensure the non-compliance items raised in the previous MC audit have been rectified.*

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| **Previous Non-Compliances Found** | | | | **Audit Outcome** | |
| **Reference Number** | **Non-Compliance Item** | **Objective Evidence** | **Non-Compliant C / M / P** | **Resolved Y / N** | **Auditor’s Comment** |
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**MC Audit - Additional Comments: Previous Non-Compliances**

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| Review any previous non-compliances from previous rounds of audits. Has the MC addressed these non-compliances? If not, why not? |

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| **MC Audit –** **Notifications, Breaches, Self-Reporting, Requests**  **Review any notifications, breaches, self-reporting and requests from or to regulatory bodies including *AEMO*, the *AER* and jurisdictional regulators.**  **e.g. Letters of No Action from the AER, RM30 reports or breach notices from AEMO, jurisdictional findings** |

**MC Audit – Review MC Processes and Procedures**

| **Audit Item** | | | **Audit Outcome** | | | | | |
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| **Question** | **Review Checklist Activity** | **NER / Procedure Ref.** | **Compliant** | **Non-Compliant** | | | **Auditor’s Comment** | **Management Response** |
| **Y, N or N/A** | **C**  **C** | **M**  **M** | **P** |
| **Meter Provider (MP) Services** | | | | | | | | |
| **1.** Can the MC provide evidence that its MPs have been appointed for the provision, installation and maintenance of the *metering installations* for which it is responsible? | Review the contractual agreement between MC and MPs to determine:   * Who they are and that the responsibilities of provision, installation and maintenance of a *metering installation* under the NER are fulfilled * That the agreement includes allthe obligations of an MP (e.g. the periodic inspection of each *metering installation* and the error testing of all *metering installation* components) * That the MC has processes or procedures to seek an update from each MP relating to on-going maintenance of *metering installations* | Clause 7.3.2(a) and 7.3.2(b)  Schedule S7.2.3 |  |  |  |  |  |  |
| **2.** Can the MC provide evidence that its MP is testing and inspecting *metering installations* in accordance with the NER or within the MC’s approved metering asset management strategy (MAMS)? | Review MC processes for testing:  Does the MC have an AEMO approved MAMS dated post Power of Choice (Dec 2017)?   * Has the MC reviewed and ensured that the MP’s test plan(s) is consistent with its MAMS? * How does the MC continuously ensure that its MAMS aligns with the MP’s test plan(s) for its metering assets? * Sight evidence that testing and inspections are actually being performed as per NER or approved MAMS and have a valid test date on the test reports. | Schedule S7.6.1 |  |  |  |  |  |  |
| **3.** How does the MC ensure that the components, and the accuracy and testing of each of its *metering installations* complies with the NER requirements? | * Review MC processes to ensure the timely testing of CTs and VTs and meters in accordance with the NER or an approved MAMS * Does the MC have an audit process to ensure that its appointed MPs are fulfilling their responsibilities in accordance with the NER and procedures authorised under the NER? * Can the MC demonstrate that they have access to test and inspection results? * Where an inspection or test has identified a non-compliance or other finding needing correction, can the MC demonstrate that corrective and preventative actions have been implemented | Table S7.6.1.2  Clause 7.3.2(c)(2) |  |  |  |  |  |  |
| **4.** Can the MC provide evidence that MP test records are retained for 7 years or 10 years where appropriate as per the NER requirements? | * Review MC processes to ensure records are retained * Review how the records are retained * Review by whom the records are retained (e.g. MC or MP on behalf of MC in the MP’s *metering register*) * Review meter transformer records to ensure relevant information is retained * Review instrument transformer records to ensure relevant information is retained * Review type test and pattern approval records are obtained in accordance with S7.4.6.1(f) | Clause 7.9.5  S7.6.1(b) |  |  |  |  |  |  |
| **5.** Review any contractual agreement between the MC and its MPs regarding the *metering register* | * Review if the agreement has provision for the MPs concerned to retain the *metering register* on the MC’s behalf? * Review if the agreement has provision for the MPs concerned to retain the test records and documents relating to each *metering installation* for the required period * Review if the agreement allows for easy access to test records by MC on request * Review if the agreement covers situations in accessing test records in the event the agreement between MC and MP is terminated or an MP ceases to exist | Schedule S7.1.1, S7.1.2  Clause 7.9.5 |  |  |  |  |  |  |
| **6.** Can the MC provide evidence that each new *metering point* is located as close as practical to the *connection point*? | * Review the contractual agreement between MC with the MPs for how this obligation is met | Clause 7.8.7 |  |  |  |  |  |  |
| **7.** Does the MC have a procedure with its MPs for making changes to parameters and settings within a *metering installation*? | * Review contractual agreements with the MPs and MDPs (where applicable) to confirm alterations to *metering installation* and report on how the MC confirms changes * Does the MC have processes to notify/obtain approval from *AEMO* where there is a change in the classification of *metering installation* type (e.g. from Type 2 to Type1)? | Clause 7.8.11 |  |  |  |  |  |  |
| **8.** Can the MC provide evidence that the required overall error calculations are performed for its Type 1 and 2 and HV Type 3 and 4 *metering installations*? | * Review the process for overall error calculations employed by the MC | Schedule S7.4.3  Table S7.4.3.2  Table S7.4.3.3  Table S7.4.3.4 |  |  |  |  |  |  |
| **9.** Can the MC provide evidence that all relevant information is provided to a new MP as part of *meter churn*? | * What process does the MC use when initiating a new *metering installation* connection? * Review what information does the MC provide to the new MP in the case of *meter churn*? | Clause 7.3.1(a)  Metrology Procedure Part A,10.3 |  |  |  |  |  |  |
| **Meter Data Provider (MDP) Services** | | | | | | | | |
| **10.** Can the MC provide evidence that its MDPs have been appointed for the collection, processing and delivery of the metering data from the *metering installations* for which it is responsible? | Review the contractual agreement or service level agreements between MC and MDPs to determine:   * Who they are * That the responsibilities of collection, processing and delivery of the metering data under the NER are fulfilled * That the agreement includes all the obligations of an MDP * The MDPs access to the meter (e.g. via a read only password for the purposes of collecting *interval metering data*) | Clause 7.3.2(d) 7.3.2(h) |  |  |  |  |  |  |
| **11.** Can the MC provide evidence thataccess to each *metering installation* is scheduled appropriately to ensure congestion does not occur? | * Review MC’s process and procedures on scheduling access * Review any contractual agreement with MDPs to perform this on behalf of the MC | Clause 7.15.5(b) |  |  |  |  |  |  |
| **12.** How does the MC ensure that the*metering installation* clock is reset? | * Is the clock reset by the MDP when the *meter* is read, or by other means? | Clause 7.15.3(i) |  |  |  |  |  |  |
| **13.** Can the MC provide evidence that collection of *interval energy data* is collected in accordance with the NER and procedures? | * Review MC processes and procedures to check that the MC ensures:   + *Interval energy data* is collected from all Type 4A *metering* *installations*   + *Interval energy data* is collected from all Type 5 installations when the Type 5 accumulation boundary is exceeded | Clause 7.3.2(h)(2)-(4) |  |  |  |  |  |  |
| **14.** Can the MC provide evidence that *interval energy data* is collected when there is a remote communications failure? | * Review steps that the MC takes to ensure the provision of relevant *metering data* to MDP if *remote acquisition*, if any, becomes unavailable | Clause 7.3.2(h)(5) |  |  |  |  |  |  |
| **15.** *Meter* de-commissioning | * How does the MC ensure that a final read is collected by an appropriately accredited MDP when a *meter* is removed from a metering installation? * If an MP field agent removes and disposes of a metering device, providing a reading to an MDP which is subsequently provided to the market, does the MC ensure that the field agent is performing the data collection under the auspice of the accredited MDPs processes and procedures? | Metrology Procedure Part A,11.1 |  |  |  |  |  |  |
| **Check Metering (where applicable)** | | | | | | | | |
| **16.** How does the MC ensure that (where fitted) *check metering installations* have a *mathematical correlation* with the *metering installation*? |  | Clause 7.8.8(b)  Schedule S7.4 |  |  |  |  |  |  |
| **17.** Can the MC provide evidence that *check* *metering installations*are implemented to at least the minimum requirements of the NER?   * *Check Metering Installation*   (type 1)   * Partial *Check Metering*   (type 2) | * Review if the MC seeks AEMO's agreement as to the form of any proposed *check metering installations*? * Are the accuracy requirements for *check metering installations* generally the same as for *metering installations*? | Schedule S7.4.4(e)  Schedule  S7.4.4(f) |  |  |  |  |  |  |
| **Small Customer Metering Installations** | | | | | | | | |
| **18.** Can the MC provide evidence that new or replacement metering installations of a*small customer* meets the minimum services specification? | * Review to see if the MC ensures correct meters are installed at *small customer* type 4 *connection point* * Can the MC provide evidence that testing has been performed to ensure the minimum services specification is complied with? | Clause 7.8.3 |  |  |  |  |  |  |
| **19.** Can the MC provide evidence that*small customer metering data* is verified? | * Review to see if the MC have an established statistical process to verify that the *metering data* held in the *metering data services database* is consistent with that held in *small customer metering installation*? | Metrology Procedure Part A,12.5 |  |  |  |  |  |  |
| **20.** Can the MC provide evidence that for type 4A *metering installations* that are not covered by an *AEMO* exemption, the *customer* has communicated their refusal for the installation of remote communications at their *metering installation*? | * Review MCs process and procedure and check:   + how does the FRMP and/or the MP communicate to the MC that such a refusal has occurred?   + what information is provided to the MC when this occurs?   + how is this information stored / managed by the MC?   + for how long does the MC retain this information? * MC to provide total number of customer refusals, this will be provided to *AEMO* via the Audit report. | Clause 7.8.4(d), (e), (f) & (g) |  |  |  |  |  |  |
| **Meter Churn** | | | | | | | | |
| **21.** Can the MC provide evidence that for *connection points* where they are the nominated MC a metering installation is installed that is complaint with the NER? | * Review MCs process and procedures.to ensure a metering installation is installed and NEM complaint at all times * Review to see if MC has had scenarios where a connection point is left with no metering installation in place * Review to see if there is any evidence of MC policies that breach this requirement | Clause 7.8.1  and  7.8.2 |  |  |  |  |  |  |
| **22.** Can the MC provide evidence that *AEMO* is provided with the relevant details of the *metering installation* as specified in Schedule 7.1 within 10 business days? | * Review MCs process and procedures for Meter Churn * Review to see if any took longer than 10 business days | Clause 7.8.2(e) |  |  |  |  |  |  |
| **23.** Can the MC provide evidence that the use of Objection Code in MSATS have been used appropriately? | * Review MCs objections to ensure they align with requirements of the MSATS procedures |  |  |  |  |  |  |  |
| **24.** Is there any evidence that the MC commenced Meter Churn prior to being the MC in MSATS? | * Review meter install date against MC start date in MSATS * All policy and process, critically including the appropriate use of MSATS CRs, must provide for the establishment of the MC for the market load in MSATS prior to undertaking any Meter Churn |  |  |  |  |  |  |  |
| **25.** Does the MC have a process to review meter installations that have been reported via the METERERR weekly report? | * AEMO’s reporting via this code indicates meters that have been entered into Market Systems as a type 5 or 6 meter. * MC’s need to investigate the NMI’s to ensure the meter installation is correct and take appropriate actions if it is not correct.   MC’s need to provide a summary of the reasons for the type 5 or 6 meter installations. |  |  |  |  |  |  |  |
| **Exemption Management** | | | | | | | | |
| **26.** Can the MC provide evidence of where they apply for an exemption from *AEMO* where a malfunction of the *metering installation* cannot be rectified within:   * 2 business days   (type 1, 2 & 3)   * 15 business days (*small customer metering installation* premise) * 10 days   (other metering installations) | * Review the MC's process for exemptions relating to metering installation malfunctions * Review NMI history of exemptions requested and check:   + has MC applied for the exemption within a reasonable timeframe compared to rectification periods set in the NER?   + have affected participants been notified?   + has the *metering* installation been rectified within the approved exemption timeframe?   + has a rectification plan been provided to *AEMO*?   + has *AEMO* revoked any exemptions? | Clause 7.8.10 |  |  |  |  |  |  |
| **27.** Can the MC provide evidence that for approved exemptions a rectification plan has been submitted by its MP to *AEMO*?  **Note:** if one was not submitted by the MC as part of the original application | * Review the MC's process and/or contractual agreement in place with MPs to ensure a rectification plan is provided to *AEMO* | Clause 7.8.10(c) |  |  |  |  |  |  |
| **28.** Can the MC provide evidence that for *small customer metering installations,* where there was no existing public telecommunications network, the MC has sought an exemption and received an approval from *AEMO*? | * Review the MC's process for managing type 4A exemptions * Review NMI history of exemptions requested and check:   + has *AEMO* approved all?   + the meter installed is capable of remote communication?   + has the MC installed communications for rejected applications? | Clause 7.8.4(a) and 7.8.4(b) |  |  |  |  |  |  |
| **29.**  Can the MC provide evidence that for any type 4 to type 4A reversions of metering installations has been done so in accordance with the NER? | * Review all type 4 to type 4A metering installation reversions:   + verify the reason as to why it was reverted. Does the reason align with what is allowed in the NER or did *AEMO* provide a valid exemption approval? | Clause 7.84(d) |  |  |  |  |  |  |
| **Security of and Access to Metering Installations and Metering Data** | | | | | | | | |
| **30.** Can the MC provide evidence that steps are taken to ensure its *metering installations* are secured against tampering? | * Which items in a *metering installation* require to be secured? * What actions should be taken by the MP in the event that a broken seal is found? * How does the MC ensure that this is done? * What other security measures if any, are implemented by the MC:   a) In the case of wholesale customers in substation environments?  b) For retail *metering installations*? | Clause 7.3.2(e)(3) and 7.15 |  |  |  |  |  |  |
| **31.** Can the MC provide evidence that *AEMO* has unrestrained access to *metering installations* for the purpose of random audits? | *AEMO* Audits:   * Does the MC notify customers whose *metering installations* have been selected for audit by *AEMO* (assuming *AEMO* has provided the required notification)? * Does the MC assist in ensuring access is provided to audit staff for such audits? * How does the MC provide access to *metering installations* in substations for its MPs? | Clause 7.9.3(e1) |  |  |  |  |  |  |
| **32.** Can the MC provide evidence that the *energy data* protected from local or remote access by a suitable password and security controls? | * Does the MP provide read only and write passwords for access to the *meter*? * Has the MP forwarded copies of read and write passwords to *AEMO* for security purposes? * Has the MC/MP provided read only passwords to any retail customers if requested? | Clause 7.15.3 |  |  |  |  |  |  |
| **33.** Access to *energy data* recorded by a *metering installation* | * Which person(s) can the MC permit access to customer *metering data*? * Under what circumstances can the customer or their representatives have access to *metering data*? | Clause 7.15.5 |  |  |  |  |  |  |
| **34.** Access to *small customer* *metering installations* (whole current) | * Which parties may only authorise remote reconnection or disconnection of a *small customer* from the electricity supply? * Under what conditions can the MC arrange a planned interruption to a customer's supply? | Clause 7.3.2(i) |  |  |  |  |  |  |
| **Local Network Service Provider (LNSP) Services** | | | | | | | | |
| **35.** Can the MC provide evidence that the LNSP has local access to the *metering installation* or *connection point* for the purposes of *reconnecting* or *disconnecting* of the *connection point*? | * Review processes and procedures to confirm how does the MC ensure the LNSP has local access | Clause 7.3.2(g) |  |  |  |  |  |  |
| **36.** How does the MC provide assistance to the LNSP to accommodate the installation of a *network device* within the *metering installation*? | * Review if LNSP has requested to install network devices and if so how the MC dealt with this | Clause 7.8.6(d)  Metrology Procedure Part A,11.2 |  |  |  |  |  |  |
| **Other Observations** | | | | | | | | |
| **37.** Were there any other observations that the auditor wishes to report on? |  |  |  |  |  |  |  |  |

**MC Audit - Exit Meeting (Register of Attendance / Final Comments)**

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| **Date** |  | | | |
| **Name** | **Position** | **Email** | **Phone** | **Signature** |
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| **Auditor’s - Final Comments** | | | | |
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| **MC’s Management - Final Comments** | | | | |
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**aPPENDIX b - MC Audit - Summary Report**

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| Independent Auditor’s summary of audit |

**Table B.1: Non-Compliance Summary**

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| **Reference Number** | **Items of Non-Compliance** | **Non-Compliant C / M / P** | **Resolved**  **Y / N** |
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