# Compliance plan for Mercury NZ Ltd, March 2022

| Material Change Audits | |
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| **Non-compliance** | **Description** |
| Audit Ref: 1.11<br>With: Clause 16A.11<br><br>From: 01-Feb-20<br>To: 01-Feb-20 | Material change audit not conducted for the automation of the new connections process.<br>Potential impact: High<br>Actual impact: Low<br>Audit history: Once previously<br>Controls: Weak<br>Breach risk rating: 3 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are recorded as weak as the material change was not undertaken as required by the code.<br>This change has impacted Mercury's level of compliance as a minor issue was discovered post deployment, therefore the audit risk rating is low. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
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| Mercury agrees that a material change audit should have been conducted prior to the implementation of this change. Shortly after implementation, we identified a minor issue, an investigation was conducted to identify affected ICPs and we immediately worked to remedy the errors/issues. A system fix was implemented in Nov21 to address the issue. | N/A | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| All relevant team managers have been given new guidelines on the requirements of a material change audit. We will also be reviewing any upcoming projects to ensure material change audits will be conducted where necessary. Mercury has been engaging with Veritek since Jan this year to arrange a material change audit for another upcoming change which demonstrates that this instance was a human error rather than a complete lack of awareness of this code requirement. | Ongoing | |

| Relevant information | |
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| **Non-compliance** | **Description** |
| Audit Ref: 2.1<br>With: Clause 10.6,11.2 & 15.2<br><br>From: 01-Jan-21<br>To: 31-Jan-21 | Some registry discrepancies resulting in submission inaccuracies.<br>Some ICPs with distributed generation not quantified.<br>Consumption on inactive ICPs not always corrected as soon as practicable.<br>Arc provides interval data to one decimal place, which is not considered to be sufficiently accurate.<br>Generation interval data for Maraetai increments in units of 10 kWh with zero decimal places.<br>Potential impact: High<br>Actual impact: Medium<br>Audit history: Multiple<br>Controls: Moderate<br>Breach risk rating: 4 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Medium** | The controls are rated as moderate as they will mitigate risk most of the time, but there is room for errors to occur.<br>The audit risk rating medium because of the impact on settlement. 31 ICPs with corrections in 2021 were checked with an average number of impacted days being 389 and 11 ICPs impacted more than 365 days – the length of time to investigate and resolve these issues is resulting in volumes for historical periods being reallocated to fit within the 14 month wash up window. Total volume correction was over 0.5 GWh. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
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| **Some registry discrepancies resulting in submission inaccuracies.** Specific comments are included in the relevant sections of this report.<br><br>**Some ICPs with distributed generation not quantified.**<br>See comments in section 6.1.<br><br>**Consumption on inactive ICPs not always corrected as soon as practicable.**<br>See comments in section 9.5.<br><br>**Arc provides interval data to one decimal place, which is not considered to be sufficiently accurate.**<br>This issue is not limited to Mercury as a Trader and we understand ARC is working with the EA on a resolution.<br><br>**Generation interval data for Maraetai increments in units of 10 kWh with zero decimal places.**<br>See comments in section 12.7. | N/A | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above | N/A | |

| Audit trails | |
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| **Non-compliance** | **Description** |
| Audit Ref: 2.4<br>With: Clause 21 Schedule 15.2<br><br><br><br>From: 19-Mar-21<br>To: 31-Dec-21 | Audit trail not kept where SAP estimates and customer reads are made permanent estimates.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Once<br>Controls: Strong<br>Breach risk rating: 1 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are rated as strong as the audit trails around data gathering, validation and processing functions in SAP as excellent. The non-compliance is around the mass treatment of estimates and customer reads after six months in the SAS system. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
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| We will be reviewing our process on permanent estimates and our treatment of customer and estimated reads and will review what audit trails need to be put in place to become compliant here. | Dec 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | Dec 22 | |

| Electrical Connection of Point of Connection | | | |
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| **Non-compliance** | **Description** | | |
| Audit Ref: 2.11<br>With: 10.33A<br><br><br><br><br><br>From: 01-Jan-21<br>To: 21-Nov-21 | Two active ICPs with no metering installed and no unmetered load.<br>Six metered new connections had late meter certification of a sample of 20 ICPs checked. Potential population of 100 ICPs.<br>Nine reconnections of metered ICPs of a sample of 20 ICPs had late meter certification. Potential population of 148 ICPs.<br>Three ICPs reconnected and requested for the incorrect gain date from the losing trader.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple<br>Controls: Moderate<br>Breach risk rating: 2 | | |
| **Audit risk rating** | **Rationale for audit risk rating** | | |
| **Low** | The controls are rated as moderate as the reporting in place will mitigate risk to an acceptable level and additional resource is now available to manage the workload.<br>The audit risk rating is low as volume of ICPs affected is small overall. | | |
| **Actions taken to resolve the issue** | | **Completion date** | **Remedial action status** |

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| **Two active ICPs with no metering installed and no unmetered load.**<br>0000513428NR4C0 – The correct status for this ICP has now been updated. There was a delay in updating this status due to human error by new staff.<br><br>0000027221WE41D – this is a Vodafone ICP, we have been having issues arranging a site visit to verify what is on site. Meter was returned to MEP warehouse by 3rd party, but Vodafone are not aware of any work that would have resulted in the meter being removed. MEP has already removed meter from registry, but SAP isn't yet updated. This investigation is still ongoing.<br><br>**Six metered new connections had late meter certification of a sample of 20 ICPs checked.**<br>All 6 ICPs are now certified.<br><br>**Nine reconnections of metered ICPs of a sample of 20 ICPs had late meter certification.**<br>7 ICPs are now certified and 2 have switched out.<br><br>**Three ICPs reconnected and requested for the incorrect gain date from the losing trader.**<br>In each of these instances, when the switch was initiated, the customer had requested a future dated move in. The customers then later called our customer engagement centre to arrange a reconnection before the requested move in date. The reconnections were processed only 1-2 days prior to the switch date so the impact was minimal. | 2/3/22<br><br>Ongoing | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |

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| **Six metered new connections had late meter certification of a sample of 20 ICPs checked.**<br>**Nine reconnections of metered ICPs of a sample of 20 ICPs had late meter certification.**<br>This non-compliance is due to the non-compliance of the MEP. Delays are often caused by late paperwork & multiple jobs being issued if initial certification job is not completed. We will look at if our reporting can be improved and will continue to work with MEPs to improve in this area.<br><br>**Two active ICPs with no metering installed and no unmetered load.**<br>We will ensure process documentation is clear and is followed by new staff to mitigate human error. We have monthly reporting to identify active ICPs with no metering which we believe is effective in mitigating risk in most cases.<br><br>**Three ICPs reconnected and requested for the incorrect gain date from the losing trader.**<br>We will be raising this with our Customer Engagement Centre to ensure agents are mindful when processing reconnections that these must match or be later than the switch in date. | Apr 22 | |

| Changes to registry information | |
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| **Non-compliance** | **Description** |
| Audit Ref: 3.3<br>With: Clause 10 of schedule 11.1<br><br>From: 05-Jan-21<br>To: 18-Nov-21 | 707 updates to active status for reconnections were made more than five business days after the event date.<br>72 updates to inactive - new connection in progress status were made after the initial electrical connection date.<br>320 updates to inactive statuses apart from inactive - new connection in progress were made more than five business days after the event date.<br>41,581 late trader updates.<br>388 ANZSIC code updates were not completed within 20 business days of commencement of trading.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are rated as moderate and will mitigate risk most of the time.<br>The audit risk rating is assessed to be low, as the timeliness to update the registry is consistent and controls are improved. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
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| **72 updates to inactive - new connection in progress status were made after the initial electrical connection date.**<br>Since going live with B2B in March 21 for Vector AMS and June 21 with Intellihub, we identified up a few minor issues with the application of this status. We received ICT support and fixes were put in place between Jul21 and Nov21. A report of all jobs issued between Jun21 and Nov21 was reviewed to ensure any affected jobs/ICPs were identified and corrected as necessary. We will be completing a secondary check of this list to ensure no errors have been missed.<br><br>**707 updates to active status for reconnections were made more than five business days after the event date.**<br><br>**320 updates to inactive statuses apart from inactive - new connection in progress were made more than five business days after the event date.**<br>The statuses for the 6 ICPs that had been incorrectly updated due to a system issue and batch processing have now been corrected. We have also raised separate incidents with our ICT team to investigate the cause.<br><br>**41,581 late trader updates.**<br>Our compliance for trader updates has increased from 12.45% to 37.9%. We believe that our processes are effective in most cases however, we note that there are many instances in which late updates are unavoidable (e.g. backdated switches, corrections, late notification from third parties).<br><br>**388 ANZSIC code updates were not completed within 20 business days of commencement of trading.**<br>We believe that our processes are effective in most cases however, we note that there are instances in which late updates are unavoidable (e.g. Backdated switches). | Feb 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |

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| **Management of reconnection and disconnections status updates**<br>We will be reviewing some of our weekly reports to ensure no ICPs are missed from this reporting to improve our timeliness of status updates.<br><br>**Incorrect status updates caused by system**<br>Mid last year we implemented checks of the Audit Compliance Report into our BAU processes. This was to be used to identify extremely late or incorrect updates so these could be investigated, and any corrections made in a timelier manner. Unfortunately, due to staff resources and the Covid-19 lockdowns, this was not monitored as intended. The actioning of this report will now be added into weekly updates to ensure the report is actively monitored. We will also be training additional staff on this to ensure we have adequate cover for this task. | Jun 22 | |

| **Trader responsibility for an ICP** | | | |
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| **Non-compliance** | **Description** | | |
| Audit Ref: 3.4<br>With: Clause 11.18<br><br><br><br>From: 01-Jan-21<br>To: 21-Nov-21 | A small number of invalid MEP nominations were sent.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Strong<br>Breach risk rating: 1 | | |
| **Audit risk rating** | **Rationale for audit risk rating** | | |
| **Low** | The controls are rated as strong as there are good controls in place to identify discrepancies.<br>The audit risk rating is assessed to be low, as the volume of invalid MEP nominations was very small. | | |
| **Actions taken to resolve the issue** | | **Completion date** | **Remedial action status** |
| We will review our Matrix and make any necessary updates. | | Apr 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | | **Completion date** | |
| This is a minor non-compliance. We will continue with our strong controls in this area. | | N/A | |

| Provision of information to the registry manager | | | |
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| **Non-compliance** | **Description** | | |
| Audit Ref: 3.5<br>With: Clause 9 of schedule 11.1<br><br>From: 05-Jan-21<br>To: 18-Nov-21 | 1,285 late updates for new connections (65.06% updated within five business days).<br>Three ICPs of a sample of 27 ICPs with potential late meter certification had been made "active" for the incorrect date.<br>Four of a sample of 30 new connections with date discrepancies made "active" for the incorrect date.<br>ICP 0000048279WE539 switched out at the "new connection in progress" status resulting in the consumption period with Mercury not being reconciled.<br>Potential impact: Medium<br>Actual impact: Low<br>Audit history: Multiple<br>Controls: Moderate<br>Breach risk rating: 2 | | |
| **Audit risk rating** | **Rationale for audit risk rating** | | |
| **Low** | The controls are rated as moderate as the reporting in place will mitigate risk to an acceptable level but there is room for improvement.<br>The audit risk rating is low as the automated new connection tool is working as expected and therefore the ICP update time is expected to improve. . | | |
| **Actions taken to resolve the issue** | | **Completion date** | **Remedial action status** |

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| **1,285 late updates for new connections (65.06% updated within five business days).**<br>We recognise there has been a significant increase in late update for new connections. This is largely due to both staffing shortages and the B2B issue where some statuses were being updated incorrectly. The B2B fix was put into place in Nov 21 and a full review of all jobs issued between June 21 and Nov 21 was completed to correct any affected jobs/ICPs. We will also be conducting a secondary check of our list of jobs issued between Jun21 and Nov21 to ensue no errors have been missed.<br><br>**Three ICPs of a sample of 27 ICPs with potential late meter certification had been made "active" for the incorrect date.**<br>1099581350CN318, 1002139114LCE8C, 1002147325UN75B - The active date has now been corrected for all 3 ICPs.<br><br>**Four of a sample of 30 new connections with date discrepancies made "active" for the incorrect date.**<br>0007202684RN003, 0007201529RN6A4, 1002137904UN6F8 and 1002137734LCD1F - The statuses for these ICPs have now been corrected.<br><br>**ICP 0000048279WE539 switched out at the "new connection in progress" status resulting in the consumption period with Mercury not being reconciled.**<br>As there was consumption being recorded at this ICP, volumes were still being submitted to the market under MEEN. The status for this ICP has since been corrected. | Completed | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |

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| **1,285 late updates for new connections (65.06% updated within five business days).**<br>We are currently training new staff as well as looking into what resources are available to work through current backlog and ensure work volumes are monitored effectively. We will also be reintroducing the Audit Compliance report checking as a BAU task within the team when training is complete. This should help to identify incorrect updates and any areas that may need more focus from the team.<br><br>**Three ICPs of a sample of 27 ICPs with potential late meter certification had been made "active" for the incorrect date.**<br><br>**Four of a sample of 30 new connections with date discrepancies made "active" for the incorrect date.**<br>Mid 2021 we implemented checks of the Audit Compliance Report into our BAU processes. The AC020Trader21 was intended to be monitored to identify these instances. Unfortunately, due to staff resources and the Covid-19 lockdowns, this was not monitored as intended. The actioning of this report will be added into weekly updates to ensure the report is now actively monitored. We will also be training additional staff on this to ensure we have adequate cover for this task.<br><br>**ICP 0000048279WE539 switched out at the "new connection in progress" status resulting in the consumption period with Mercury not being reconciled.**<br>We will raise this with our ICT team to determine what checks can be put in place to prevent ICPs switching out on at this status. | Jun 22 | |

| ANZSIC codes | |
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| **Non-compliance** | **Description** |
| Audit Ref: 3.6<br>With: 9 (1(k) of Schedule 11.1<br><br><br><br><br>From: 05-Jan-21<br>To: 18-Nov-21 | 1,398 ICPs with T994 ANZSIC codes.<br>17 of a sample of 21 ICPs (from a possible 125) meter category code 2/3 were incorrectly recorded as residential.<br>Five of a sample for 80 active ICPs (6% error rate) with the incorrect ANZSIC code.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are rated as moderate as they will mitigate risk most of the time.<br>This has no direct impact on reconciliation therefore the audit risk rating is low. There is an impact on reporting by the Electricity Authority. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
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| **1,398 ICPs with T994 ANZSIC codes.**<br>During the Covid-19 lockdown, our ANZSIC code reporting was deprioritised to ensure more urgent/impactful work was sufficiently covered. We have worked to bring this back down to "Pre-lockdown" numbers and will continue to review our weekly reporting.<br>**17 of a sample of 21 ICPs (from a possible 125) meter category code 2/3 were incorrectly recorded as residential.**<br>The ANZSIC codes have been changed for 16 ICPs, 1 has switched out.<br>**Five of a sample for 80 active ICPs (6% error rate) with the incorrect ANZSIC code.**<br>This is an improvement on last year and we believe we have effective processes and checking in place to mitigate errors in most cases. | Jan 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |

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| **17 of a sample of 21 ICPs (from a possible 125) meter category code 2/3 were incorrectly recorded as residential.**<br>Mid 2021 we implemented checks of the Audit Compliance Report into our BAU processes. The AC020Trader12 was intended to be monitored to identify these instances. Unfortunately, due to staff resources and the Covid-19 lockdowns, this was not monitored as intended. The actioning of this report will be added into weekly updates to ensure the report is now actively monitored. We will also be training additional staff on this to ensure we have adequate cover for this task. | Mar 22 | |

| Changes to unmetered load | |
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| **Non-compliance** | **Description** |
| Audit Ref: 3.7<br>With: Clause 9(1)(f) of Schedule 11.1<br><br>From: 05-Jan-21<br>To: 18-Nov-21 | Two ICPs with the incorrect daily kWh figure resulting in a very minor submission inaccuracy.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | I have rated the controls as moderate as the registry discrepancy process will identify most errors, but the report needs to be run regularly.<br>The audit risk rating is low due to the very minor impact on reconciliation accuracy. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
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| ICP 0000540450TE6E7 - We have been unsuccessful in obtaining any useful information on the unmetered load from the network or previous retailer. We have also reached out to the customer and will make any necessary changes if the customer is able to confirm the unmetered load details.<br>ICP 0007301973NVCDF – We will be updating our daily kWh figure in the registry and SAP to ensure for accurate submission. | Apr 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| We have a monthly unmetered discrepancy report which was not run for some months due to Covid-19 lockdowns and staff resources. We will consider part automation of this report to reduce manual effort and time. We have also added this to our weekly reporting checks so that monitoring of unmetered discrepancies is more visible. | Jun 22 | |

| Management of “active” status | | | |
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| **Non-compliance** | **Description** | | |
| Audit Ref: 3.8<br>With: Clause 17 Schedule 11.1<br><br>From: 01-Jan-21<br>To: 21-Nov-21 | Two ICPs of a sample of ten ICPs with no MEP nomination or metering recorded on the registry at the incorrect status.<br>Three ICPs of a sample of 27 ICPs with potential late meter certification had been made “active” for the incorrect date.<br>Four (0007201529RN6A4, 1002137904UN6F8, 1002137734LCD1F and 0007202684RN003) of a sample of 30 new connections with date discrepancies made “active” for the incorrect date.<br>Eight of a sample of 40 ICPs (20 reconnections and 20 reconnected with expired meter certification) updates were incorrectly updated to “active”.<br>Potential impact: Medium<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 2 | | |
| **Audit risk rating** | **Rationale for audit risk rating** | | |
| **Low** | The controls are recorded as moderate as they will mitigate risk most of the time.<br>The impact on settlement and participants is minor; therefore, the audit risk rating is low. | | |
| **Actions taken to resolve the issue** | | **Completion date** | **Remedial action status** |

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| **Two ICPs of a sample of ten ICPs with no MEP nomination or metering recorded on the registry at the incorrect status.**<br>0128950536LC139 & 0042710550PCB39 the statuses have been corrected for these two ICPs.<br><br>**Three ICPs of a sample of 27 ICPs with potential late meter certification had been made "active" for the incorrect date.**<br>See comments in section 3.5.<br><br>**Four of a sample of 30 new connections with date discrepancies made "active" for the incorrect date.**<br>See comments in section 3.5.<br><br>**Eight of a sample of 40 ICPs (20 reconnections and 20 reconnected with expired meter certification) updates were incorrectly updated to "active".**<br>0000005362UN5B0, 0000310248TU2EE, 0000671438UND75, 0000005362UN5B0 – Incorrect status updates by system.<br>0002011840CNC22 – Incorrect status update due to human error.<br>0005327660RNC40, 0005770475RNF0E, 0005932998RND24 - Incorrect status update due to human error during bulk switch to MEEN. | Jan 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| Mid 2021 we implemented checks of the Audit Compliance Report into our BAU processes. This was to be used to identify extremely late updates so these could be investigated, and any corrections made in a timelier manner. This would have assisted in identifying the backdated updates caused by system issues as well as the ICPs with no MEP or metering at active status. Unfortunately, due to staff resources and the Covid-19 lockdowns, this was not monitored as intended. The actioning of this report will be added into weekly updates to ensure the report is now actively monitored. We will also be training additional staff on this to ensure we have adequate cover for this task. | Ongoing | |

| Management of "inactive" status | |
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| **Non-compliance** | **Description** |
| Audit Ref: 3.9<br>With: Clause 19 Schedule 11.1<br><br><br><br><br>From: 05-Jan-21<br>To: 18-Nov-21 | Some ICPs with incorrect inactive statuses not identified.<br>Three ICPs no longer required at the "new connection in progress status".<br>ICP 0000048279WE539 switched out at the "new connection in progress" status resulting in the consumption period with Mercury not being reconciled.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are rated as moderate as the reporting in place will mitigate risk most of the time. I have made one recommendation for improvement.<br>The audit risk rating is low because a small number of ICPs were affected. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
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| **Some ICPs with incorrect inactive statuses not identified.**<br>We will investigate what improvements can be made to our "consumption while active" reporting (including the possibility of using HHR data) to ensure all ICPs can be identified. We will also be recommencing our checking of the Audit Compliance Report which will assist in identifying incorrect status updates.<br><br>**Three ICPs no longer required at the "new connection in progress status".**<br>We will review these ICPs and take the necessary actions.<br><br>**ICP 0000048279WE539 switched out at the "new connection in progress" status resulting in the consumption period with Mercury not being reconciled.**<br>See comments in section 3.5. | Apr 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| **Three ICPs no longer required at the "new connection in progress status".**<br>We will ensure any longstanding ICPs at this status are followed up and any necessary action taken. | Ongoing | |

| Losing trader response to switch request and event dates - standard switch | |
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| **Non-compliance** | **Description** |
| Audit Ref: 4.2<br>With: Clauses 3 & 4 of schedule 11.3<br><br>From: 01-Jan-21<br>To: 19-Nov-21 | Less than 50% of ANs had proposed event dates within five business days of NT receipt.<br>Four ANs had proposed event dates more than ten business days after NT receipt.<br>Four of a sample of 17 AN files checked contained incorrect response codes of AA.<br>Potential impact: None<br>Actual impact: None<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | I have rated the controls moderate as logic changes are being deployed without sufficient testing to identify the impact of such changes and subsequently causing non-compliance.<br>I have recorded the audit risk rating as low as the switches were completed for the correct date. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
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| **Less than 50% of ANs had proposed event dates within five business days of NT receipt.**<br>We implemented a fix on 30/11/21 to resolve this issue.<br><br>**Four ANs had proposed event dates more than ten business days after NT receipt.**<br>The incorrect AN dates were due to incorrect logic. A fix was implemented in Nov 21 to resolve this issue. ICP 0000013495EA269 was withdrawn and NT re-requested after the system fix and the subsequent AN proposed event date was correct.<br><br>**Four of a sample of 17 AN files checked contained incorrect response codes of AA.**<br>0000013495EA269 was due to human error. Our switching team will receive retraining on AN codes and process documentation will be updated to ensure for correct processing when manual processing is required.<br><br>0000035162WE2DA, 0000047820WE00A, 0000923391TU89C<br>The incorrect AN codes were used due to incorrect system logic. We have requested our ICT team to investigate the cause and work on a fix. | 30/11/21 | Identified |

| Preventative actions taken to ensure no further issues will occur | Completion date | |
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| We will be focussing on reducing the risk of human error by providing additional training and updating process documentation. We will ensure extra scrutiny is placed on testing before any minor fixes are implemented to ensure they address and resolve the issue completely. | Ongoing | |

| Losing trader must provide final information - standard switch | |
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| **Non-compliance** | **Description** |
| Audit Ref: 4.3<br>With: Clause 5 of schedule 11.3<br><br>From: 01-Jan-21<br>To: 19-Nov-21 | One CS breach.<br>One E2 breach.<br>Three WR breaches.<br>Average daily consumption calculation will be incorrect if the last read is more than six months prior to the end date.<br>One ICP with an average daily consumption figure greater than 200 kWh calculated incorrectly.<br>31 CS files sent with the incorrect last read date due to human error.<br>Two CS files were sent with a last read date after the period of supply.<br>One ICP was sent with the incorrect last read date<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | I have rated the controls moderate as logic changes are being deployed without sufficient testing to identify the impact of such changes and subsequently causing non-compliance.<br>The audit risk rating is assessed to be low, the gaining trader requested dates were applied for the CS and E2 breaches. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
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|---|---|---|
| **One CS breach.**<br><br>**One E2 breach.**<br><br>**31 CS files sent with the incorrect last read date due to human error.**<br><br>**One ICP was sent with the incorrect last read date**<br>The above breaches are all due to human error. We will be providing further training to staff and updating all process documentation to ensure there is sufficient guidance for manual processing to reduce instances of human error.<br><br>**Three WR breaches.**<br>These 19 WR breaches were delayed due to appearing in our second daily breach report which was not actively monitored. The team is now reviewing both reports daily to ensure for timely processing.<br><br>**Average daily consumption calculation will be incorrect if the last read is more than six months prior to the end date**<br><br>**One ICP with an average daily consumption figure greater than 200 kWh calculated incorrectly**<br>Our ICT team are currently looking into the incorrect ADC calculations. We will also be reviewing our ADC calculation logic to ensure we are compliant in all cases.<br><br>**Two CS files were sent with a last read date after the period of supply.**<br>We will raise this issue with our ICT team to investigate and correct our logic to ensure only reads during our period of supply are considered when switching. | Apr 22<br><br>Dec 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| We will be focussing on reducing the risk of human error by providing additional training and updating process documentation. We will ensure extra scrutiny is placed on testing before any minor fixes are implemented to ensure they address and resolve the issue completely. | Ongoing | |

| Retailers must use same reading - standard switch | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 4.4<br>With: Clauses 6(1) and 6A Schedule 11.3<br><br>From: 23-Jul-21<br>To: 03-Oct-21 | Four of the 12 ICPs sampled were not supported by two actual reads.<br>Three RR breaches.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | Controls are recorded as moderate, and I have recommended that the requirement to have two actual reads to support RR requests is reinforced with the teams who raise them.<br>The audit risk rating is low because the number of RRs issued is small. . |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| **Four of the 12 ICPs sampled were not supported by two actual reads.**<br>All teams who are involved in the RR process have been reminded of the requirements to support all requests with 2 actual readings. We will look into how this step was missed in these instances and implement any process checks or changes as necessary.<br><br>**Three RR breaches.**<br>We believe our current processes are effective in most cases to mitigate RR breaches. For these 3 cases (only 2 ICPs as two of the RR breaches relate to the same ICP), it took some time to obtain 2 actual reads. The RR process was started as soon as practicable after obtaining the reads. | Jun22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | N/A | |

| Losing trader provides information - switch move | | | |
|---|---|---|---|
| **Non-compliance** | **Description** | | |
| Audit Ref: 4.8<br>With: Clause 10 of schedule 11.3<br><br>From: 01-Jan-21<br>To: 19-Nov-21 | Four of a sample of 19 AN files checked contained incorrect response codes of AA.<br>22 ANs has a proposed event date before the gaining trader's requested date.<br>One AN file had proposed event dates more than ten business days after NT receipt.<br>19 WR breaches.<br>Six E2 breaches.<br>37 T2 breaches.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 2 | | |
| **Audit risk rating** | **Rationale for audit risk rating** | | |
| **Low** | I have rated the controls moderate as logic changes are being deployed without sufficient testing to identify the impact of such changes and subsequently causing non-compliance.<br>The audit risk rating is assessed to be low, the gaining trader requested dates were applied correctly in the CS file and the reads were correct. . | | |
| **Actions taken to resolve the issue** | | **Completion date** | **Remedial action status** |

| | | |
|---|---|---|
| **Four of a sample of 19 AN files checked contained incorrect response codes of AA.**<br>1 example was due to human error. The team have been reminded of the correct use of AN response codes and process documentation will be updated as necessary to assist when manual file processing is required.<br>The remaining 3 are with our ICT team for investigation. Once the cause has been identified, we will test thoroughly to ensure any fix implemented will address the issue completely.<br><br>**22 ANs has a proposed event date before the gaining trader's requested date.**<br>**One AN file had proposed event dates more than ten business days after NT receipt.**<br>The incorrect proposed event dates were due to a logic issue which has since been fixed.<br><br>**19 WR breaches.**<br>These 19 WR breaches were delayed due to appearing in our second daily breach report which was not actively monitored. The team is now reviewing both reports daily to ensure for timely processing.<br><br>**Six E2 breaches.**<br>Three of these E2 breaches were missed due to appearing in our second daily breach report which was not actively monitored. The team is now reviewing both reports daily to ensure for timely processing. The other 3 were delayed due to withdrawal attempts.<br><br>**37 T2 breaches.**<br>These 37 T2 breaches were delayed due to appearing in our second daily breach report which was not actively monitored. The team is now reviewing both reports daily to ensure for timely processing. | Dec 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| We will be focussing on reducing the risk of human error by providing additional training and updating process documentation. We will ensure extra scrutiny is placed on testing before any minor fixes are implemented to ensure they address and resolve the issue completely. | Ongoing | |

| Losing trader must provide final information - switch move | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 4.10<br>With: Clause 11 of schedule 11.3<br><br>From: 01-Jan-21<br>To: 19-Nov-21 | Average daily consumption calculation will be incorrect if the last read is more than six months prior to the end date.<br>Two ICPs with an average daily consumption figure greater than 200kWh per day calculated incorrectly.<br>Eight files sent with an incorrect last read date and read type of "E".<br>ICP 1000596369PCDBA was sent with the incorrect last read.<br>Ten files sampled of a possible 26 CS files were sent with a last read labelled incorrectly as an actual.<br>All five files sampled of a possible 35 CS files were sent with a last read date after the period of supply.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | I have rated the controls moderate as logic changes are being deployed without sufficient testing to identify the impact of such changes and subsequently causing non-compliance.<br>The audit risk rating is assessed to be low, the gaining trader requested dates were applied for the CS and E2 breaches. . |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|

| | | |
|---|---|---|
| **Average daily consumption calculation will be incorrect if the last read is more than six months prior to the end date.**<br>**Two ICPs with an average daily consumption figure greater than 200kWh per day calculated incorrectly.**<br>Our ICT team are currently looking into the incorrect ADC calculations. We will also be reviewing our ADC calculation logic to ensure we are compliant in all cases.<br><br>**ICP 1000596369PCDBA was sent with the incorrect last read.**<br>The switch for this ICPs was withdrawn and switch out reads have been reversed there no impact to the market or other participants. We will investigate this further to determine why the incorrect read was used and will work with ICT to implement any required fixes.<br>• **Eight files sent with an incorrect last read date and read type of "E".**<br>• **Ten files sampled of a possible 26 CS files were sent with a last read labelled incorrectly as an actual.**<br>• **All five files sampled of a possible 35 CS files were sent with a last read date after the period of supply.**<br>These issues will be raised with our ICT team to investigate. We will work with them to implement any required fixes. | Dec 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| For all above issues, we will be working with our ICT team to investigate any implement any required fixes. We will ensure thorough testing is conducted to ensure all known issues are resolved. | Dec 22 | |

| Gaining trader changes to switch meter reading - switch move | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 4.11<br>With: Clause 12 Schedule 11.3<br><br>From: 16-Aug-21<br>To: 28-Oct-21 | One of the ten RRs sampled was not supported by two actual reads.<br>22 RR breaches.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | Controls are recorded as moderate, and I have recommended in **section 4.4**, that the requirement to have two actual reads to support RR requests is reinforced with the teams who raise them.<br>The audit risk rating is low because the number of RRs issued is small. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| **One of the ten RRs sampled was not supported by two actual reads.**<br>Our current process is to raise RRs only if this is supported by two actual reads. ICP 0000050247WE4BB was due to human error and the switch team have been reminded of the requirements of supporting all RRs with two actual reads.<br>**22 RR breaches.**<br>We believe our current processes are effective in most cases to mitigate RR breaches. For these 22 cases (some are double ups for the same ICP), it took some time to obtain 2 actual reads. The RR process was started as soon as practicable after obtaining the reads. | Mar 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| **One of the ten RRs sampled was not supported by two actual reads.**<br>All teams who are involved in the RR process have been reminded of the requirements to support all requests with 2 actual readings. We will look into how this step was missed in these instances and implement any process checks or changes as necessary. | Mar 22 | |

| Withdrawal of switch requests | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 4.15<br>With: Clauses 17 & 18 of schedule 11.3<br><br>From: 01-Jan-21<br>To: 18-Nov-21 | Five sent with the incorrect withdrawal code of a sample of 21 rejected NWs.<br>140 NA breaches.<br>26 SR breaches.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Strong<br>Breach risk rating: 1 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | I have rated the controls as strong as Mercury controls are robust but due to the complexity of these types of withdrawals there will always be some late switch withdrawals and acceptances.<br>The audit risk rating is low as the volume of backdated switch withdrawals is low in relation to the overall volume of switches processed and the processing of these increases the submission accuracy. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| **Five sent with the incorrect withdrawal code of a sample of 21 rejected NWs.**<br>The team have been reminded of the correct use of withdrawal codes and process documentation will be updated as necessary to assist when manual file processing is required.<br><br>**140 NA breaches.**<br><br>**26 SR breaches.**<br>We will continue with our strong controls in this area. Late AW and NW files are often unavoidable but necessary meaning 100% compliance in this area is not attainable. | Mar 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| We will be focussing on reducing the risk of human error by providing additional training and updating process documentation. We will ensure extra scrutiny is placed on testing before any minor fixes are implemented to ensure they address and resolve the issue completely. | N/A | |

| Metering information | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 4.16<br>With: Clause 21 of schedule 11.3<br><br><br><br><br>From: 01-Jan-21<br>To: 19-Nov-21 | Eight files sent with an incorrect last read date and read type of "E".<br>Ten files sampled of a possible 26 CS files were sent with a last read labelled incorrectly as an actual.<br>One switch move switch sent with incorrect last read.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | I have rated the controls moderate as logic changes are being deployed without sufficient testing to identify the impact of such changes and subsequently causing non-compliance.<br>The audit risk rating is assessed to be low, as the effect on reconciliation will be minor. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| **Eight files sent with an incorrect last read date and read type of "E".**<br>See comments in section 4.10.<br>**Ten files sampled of a possible 26 CS files were sent with a last read labelled incorrectly as an actual.**<br>See comments in section 4.10.<br>**One switch move switch sent with incorrect last read.**<br>See comments in section 4.10. | N/A | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | N/A | |

| Distributed unmetered load | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 5.4<br>With: Clauses 11(1) of schedule 15.3, 10.14 & 15.13<br><br>From: 01-Mar-21<br>To: 28-Feb-22 | Submission errors found in six databases. The specific findings are detailed in the DUML database audit reports.<br>Potential impact: High<br>Actual impact: High<br>Audit history: Multiple<br>Controls: Moderate<br>Breach risk rating: 6 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **High** | The controls are rated as moderate as Mercury are working with the customers to improve the level of accuracy.<br>The impact is assessed to be high, based on the kWh differences found in the DUML audits. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| Rotorua Lakes DC – RLC are currently working to fix the discrepancies identified in the recent DUML audit.<br>Masterton DC – We are working closely with Masterton who are currently conducting a full review of their DUML database. Once this has been completed, we will be ensuring any discrepancies identified in the audit have been resolved and that regular reviews of the database are conducted to ensure ongoing accuracy.<br>Selwyn DC – The LED roll out project completion and subsequent database updates are due to be completed by May 22. This was the main cause of the audit discrepancies and we expect a significant improvement in the database accuracy to reflect in the next DUML audit.<br>Invercargill CC – We have requested ICC to complete a full database review. Once this has been completed, we will be ensuring any discrepancies identified in the audit have been resolved and that regular reviews of the database are conducted to ensure ongoing accuracy.<br>Vodafone – Mercury has been in regular contact with Vodafone to address the wattage discrepancies identified in the last audit. The next audit is due to be completed in April. | Ongoing | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | N/A | |

| Electricity conveyed & notification by embedded generators | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 6.1<br>With: Clause 10.13<br><br>From: 11-Jan-21<br>To: 31-Dec-21 | While meters were bridged, energy was not metered and quantified according to the code for five ICPs.<br>Some ICPs with distributed generation not quantified.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | Controls are rated as moderate as they are sufficient to reduce the risk most of the time.<br>The audit risk rating is low because bridging only occurs where a soft reconnection cannot be performed after hours and the customer urgently requires their energy supply for health and safety reasons. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| **While meters were bridged, energy was not metered and quantified according to the code for five ICPs.**<br>Mercury will continue to bridge meters on an as need basis in the best interest of our customers. In some cases, bridging is unavoidable which means compliance is unattainable. We have strong processes in place to ensure all consumption is quantified and reported in a timely manner.<br>**Some ICPs with distributed generation not quantified.**<br>This continues to be a challenging area with some customers often refusing import/export metering. We have received some suggestions from the auditors on how to combat this and will look into working with distributors where necessary. We have reporting and processes in place to follow up on generation sites without metering however staffing shortages has meant this process has not been prioritised. Now the team is fully staffed we will be looking at what we can do to ensure all backlog is cleared and the report is reviewed and actioned regularly. | N/A<br><br>Jun 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | N/A | |

| Responsibility for metering at GIP | | | |
|---|---|---|---|
| **Non-compliance** | **Description** | | |
| Audit Ref: 6.2<br>With: Clause 10.26 (6), (7) and (8)<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | 13 meter certification expiry dates were updated late.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Weak<br>Breach risk rating: 3 | | |
| **Audit risk rating** | **Rationale for audit risk rating** | | |
| **Low** | The controls are assessed as weak as no updates occurred within the required timeframe.<br>The risk is low because the meters were appropriately certified at all times. | | |
| **Actions taken to resolve the issue** | | **Completion date** | **Remedial action status** |

| | | |
|---|---|---|
| For the new Turitea Wind Farm GIP (LTN2201MRPLGG), the metering calibration certification was completed on 28th May 2021, but this site was not generating until early Sept 2021. Meter calibration certificates and installation certificates were not ready until the final onload test was performed on 8th Sept 2021. Mercury received the certificates on 22 Sept 2021 and updated the NSP register immediately. The ATH has taken 28th May 2021 as the certification date.<br><br>For all other 12 GIPs, all these points are certified with more than 1 revenue meter, mainly due to the number of generating units at these 12 power stations. Each unit revenue meter has its own test routine and can be months or years out from another unit under one GIP. Mercury has been proactively engaging ATH to re-certify each unit revenue meter, however we can only update the NSP register based on the nearest due dates of all unit revenue meter certificates under the same GIP. This can be somewhat misleading that an old certification date was updated months or years after, which in fact we simply picked the date from the next due unit revenue meter certificates for NSP register.<br><br>The calculated "days between cert and update" assumed that there is only 1 metering system per GIP, which is unrealistic to our generating environment where all power stations have multiple sets of revenue meter certification with different certification and expiry dates. We believe this is more of a technical non-compliance due to updating limitations and we believe our processes and controls are strong. | N/A | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | N/A | |

| Collection of information by certified reconciliation participant | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 6.5<br>With: Clause 2 Schedule 15.2<br><br>From: 16-Apr-19<br>To: 31-Dec-21 | ICP 0000033002TC7DD was not interrogated within the maximum interrogation cycle.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Once<br>Controls: Strong<br>Breach risk rating: 1 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are rated as strong. One ICP was not read during the maximum interrogation cycle and site visits to resolve the issue has been delayed in part by the COVID-19 lockdowns.<br>The impact is assessed to be low, because only one meter is affected. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| ICP 0000033002TC7DD is a one-off unique case. We will provide any necessary support to the MEP to resolve this. | Date | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| We will continue with our strong controls in this area. | N/A | |

| Derivation of meter readings | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 6.6<br>With: Clause 3(2) Schedule 15.2<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | Customer reads are not being validated against another set of validated meter reads before being considered permanent estimates after six months.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: once<br>Controls: Strong<br>Breach risk rating: 1 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are recorded as strong because customer reads are being correctly flagged as estimate reads in SAP however the SAS system uses all readings (actual and estimated) as available for use in calculating historic estimates.<br>The risk is rated as low, as number of customers reads used is small relative to the total number of reads. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| Until this audit, our treatment of estimated and customer reads has been considered compliant. We were unaware our current processes did not meet the code requirements for permanent estimates. We have discussed this with the auditors and will begin working on changing our permanent estimate process to become compliant. | Dec 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | N/A | |

| NHH meter reading application | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 6.7<br>With: Clause 6 Schedule 15.2<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | Not all reconnection reads are being applied from 0000hrs on the day of a registry status change to "active".<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: once<br>Controls: Strong<br>Breach risk rating: 1 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are recorded as strong because most reads are being correctly applied in SAP.<br>The risk is rated as low, as the number of reads where the read date and time is not being correctly applied is limited to some relating to the reconnection process where an existing estimated read for another purpose (such as Move In) is present in SAP for the same day. |

| **Actions taken to resolve the issue** | **Completion date** | **Remedial action status** |
|---|---|---|
| We will be investigating the ICP in this example to determine what changes are required to fix this issue. | Dec 22 | Investigating |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| Our controls and processes in most instances are strong. This issue relates to a very specific circumstance and the impact is low. We will liaise with our ICT team to implement any logic changes required to resolve this issue. | Dec 22 | |

| Interrogate meters once | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 6.8<br>With: Clause 7(1) and (2) Schedule 15.2<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | The best endeavours requirement was not met for 152 ICPs not read during the period of supply.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Strong<br>Breach risk rating: 1 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are recorded as strong because they have been improved during the audit period.<br>The risk is rated as low, as number of customers not read during the period of supply is small relative to the customer base. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| This is an area of strong control for Mercury. During this audit period we also experienced additional difficulties due to Covid-19 lockdowns & restrictions, however, we believe our controls have mitigated risk in most cases and will continue to be effective in the future. | N/A | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| We will continue with our strong controls. | N/A | |

| Correction of HHR metering information | | | |
|---|---|---|---|
| **Non-compliance** | **Description** | | |
| Audit Ref: 8.2<br>With: Clause 19(2) Schedule 15.2<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | HHM interval volumes not aligned with accumulating register reads<br>Potential impact: Medium<br>Actual impact: Low<br>Audit history: None<br>Controls: Moderate<br>Breach risk rating: 2 | | |
| **Audit risk rating** | **Rationale for audit risk rating** | | |
| **Low** | The controls are recorded as moderate because there is room for improvement for the HHM profiled ICPs.<br>HHM interval data is used by the RM in the process to produce seasonal shape files for all NHH retailer to use for HE calculations – any errors in this data impacts all NHH retailers.<br>The impact on settlement and participants is minor; therefore, the audit risk rating is low. | | |
| **Actions taken to resolve the issue** | | **Completion date** | **Remedial action status** |
| The few examples where HHM intervals did not align with accumulating register reads were limited to meter replacement scenarios only. The impact is low as we already check the consistency between interval data and register reads. For the initial Jan 2022 submission, only 0.6% of HHM intervals were estimated. We have also received confirmation from Vector Metering regarding data attainment- "On average, day one attainment is typically 98.4 – 98.7%, day three to five attainment is typically 99.3 -99.5% and past day five, the attainment increases further. "<br>We have raised the referred meter change examples with ICT to review the logic and implement any necessary changes. In addition, we will follow up with MEP to investigate ICPs where data has not been provided at times of meter replacement. | | Dec 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | | **Completion date** | |
| As above. | | N/A | |

| Identification of readings | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 9.1<br>With: Clause 3(3) Schedule 15.2<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | No visible audit trail present for the change in treatment of estimated and customer reads in the calculation of historic estimate (HE) volumes within SAS or SAP.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Twice<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The management of reads including any changes to reads robust within SAP. The controls regarding permanent estimates at six months are considered weak, but overall, the controls are recorded as moderate because this section considers all estimations and permanent estimates.<br>The mass treatment of all estimated and customer provided reads as available for use in the calculation of historic estimate volumes once older than six months without an audit trail being present is non-compliant, as users within SAP validating meter reads with periods between reads being greater than six months are not aware of the impact these updates are making to the HE calculations. The impact is rated as low in the absence of any firm data to quantify further. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| See comments in section 2.4. | N/A | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | N/A | |

| Meter data used to derive volume information | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 9.3<br>With: Clause 3(5) of schedule 15.2<br><br>From: 02-Jan-21<br>To: 31-Dec-21 | Raw meter data is rounded upon receipt and not when volume information is created.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Twice<br>Controls: None<br>Breach risk rating: 5 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | There are no controls to prevent rounding of raw meter data, the system is designed to round as soon as the data arrives.<br>There is impact to the Switch loss process as rounded reads are being provided to gaining retailers who do not round reads in their system therefore will recognise the switch read as requiring correction via the RR process – the increased RR activity is an impact to both Mercury and other participants. The impact is rated as low because most other retailers have implemented a 1 kWh threshold before an RR is sent. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| We have previously explored our options to achieve compliance here and the resolution would require extensive system changes and would impact many of our billing and reconciliation processes. This is a high resource, high risk change that would have very little impact on the market and other participants. We have raised this with our ICT department again to investigate alternate solutions. | Dec 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above | N/A | |

| Half hour estimates | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 9.4<br>With: Clause 15 Schedule 15.2<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | HHR volumes are estimated as zero in order to create a placeholder in the AV-090 and AV-140 files where data not yet provided by the HHR data collectors in time for submission.<br><br>Potential impact: Medium<br>Actual impact: Medium<br>Audit history: None<br>Controls: Moderate<br>Breach risk rating: 4 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Medium** | Controls around HHR estimations for unrecoverable data are strong however the process to estimate zero volume for outstanding or late HHR data does not meet the reasonable endeavours threshold for HHR submission accuracy.<br>There are only a few ICPs / meters where this zero-value estimation occurs for the initial submission however as this data is also used by the RM to produce seasonal shape files for all NHH retailers to calculate HE volumes the impact is medium. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| We have strong processes in place where historical consumption is available. The number of ICPs where zero- value estimates have been used is solely for new ICPs where there is no historical consumption available. This accounts for a very small percentage of the total ICPs we have under the HHR profile (~0.13% per month) and only occurs in the initial submission. We have now implemented a new process for switched ICPs which we believe should meet the reasonable endeavours requirement. | Mar 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| We have implemented a new estimation process for newly switched in ICPs. This process will use the ICP's annual usage provided by the previous retailer to estimate the missing consumption. | Completed Mar 22 | |

| NHH metering information data validation | | | |
|---|---|---|---|
| **Non-compliance** | **Description** | | |
| Audit Ref: 9.5<br>With: Clause 16 Schedule 15.2<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | Not all inactive consumption is being identified and investigated.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: None<br>Controls: Strong<br>Breach risk rating: 1 | | |
| **Audit risk rating** | **Rationale for audit risk rating** | | |
| **Low** | The validation controls are generally strong but could be improved for the management of inactive consumption.<br>SAP Inactive consumption report only calculated consumption between 2 actual reads and where the disconnection read is estimated the report does not identify these ICPs and any read differences between the estimated disconnection read and the next actual read. The impact is assessed as low. | | |
| **Actions taken to resolve the issue** | | **Completion date** | **Remedial action status** |
| **Not all inactive consumption is being identified and investigated.**<br>We will investigate what improvements can be made to our reporting (including the possibility of using HHR data) to ensure all ICPs can be identified. | | Dec 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | | **Completion date** | |
| As above. | | N/A | |

| Electronic meter readings and estimated readings | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 9.6<br>With: Clause 17 Schedule 15.2<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | Clock synchronisation and event reports not reviewed for all MEPs.<br>Voltage on the load side of a disconnected meter event is not sent by all AMI MEPs.<br><br>Potential impact: Medium<br>Actual impact: Low<br>Audit history: None<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are recorded as moderate because event information is only dealt with if the MEP sends additional correspondence.<br>The impact on settlement and participants is minor because most issues are identified; therefore, the audit risk rating is low. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| **Clock synchronisation and event reports not reviewed for all MEPs.**<br>We have contacted ARC and FCLM to confirm file paths for these files and will liaise with our ICT team to ensure the files are retrieved successfully and made available for the team to review.<br><br>**Voltage on the load side of a disconnected meter event is not sent by all AMI MEPs.**<br>Until Nov 21 we were receiving monthly reports from Intellihub for Metering Events which included these, we have reached out to Intellihub to continue providing these reports. The first report has since been received for the team to review going forward.<br>We have also been in touch with the remaining MEPs to ensure this information is being sent and to confirm file paths for these reports. We will liaise with our ICT team to ensure the files are retrieved successfully and made available for the team to review. | May22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | N/A | |

| Creation of submission information | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 12.2<br>With: Clause 15.4<br><br>From: 01-Jan-21<br>To: 31-Jan-21 | At least 25 ICPs have solar generation but submission is not occurring as mentioned in Section 2.1.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Once<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement.<br>The impact on settlement and participants is minor; therefore, the audit risk rating is low. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| See comments in section 6.1. | N/A | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | N/A | |

| Accuracy of submission information | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 12.7<br>With: Clause 15.12<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | Inaccurate submission as follows:<br>• precision of grid generation volumes for Maraetai generation station is insufficient as volumes are reported in increments of 10 kWh,<br>• non-solar distributed generation submitted using PV1 profile code,<br>• two ICPs with the incorrect daily kWh value,<br>• 15 ICPs at the incorrect statuses causing submission inaccuracies,<br>• some switch meter reads incorrectly labelled and one incorrect switch read<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | Controls are rated as moderate because they are effective most of the time.<br>The impact is assessed to be low as there number of errors is low. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| **precision of grid generation volumes for Maraetai generation station is insufficient as volumes are reported in increments of 10 kWh**<br>We will investigate the data consistency with the meter provider and request the necessary amendments.<br><br>**Non-solar distributed generation submitted using PV1 profile code**<br>We will investigate what system changes are required to allow for the correct submission of all distributed generation.<br><br>**Two ICPs with the incorrect daily kWh value**<br>See comments in section 3.7.<br><br>**15 ICPs at the incorrect statuses causing submission inaccuracies**<br>See comments in sections 3.5 3.8 3.9.<br><br>**some switch meter reads incorrectly labelled and one incorrect switch read**<br>See comments in section 4.10. | Dec 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |
| As above. | N/A | |

| Permanence of meter readings for reconciliation | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 12.8<br>With: Clause 4 Schedule 15.2<br><br>From: 01-Jan-21<br>To: 31-Jan-21 | All estimated reads treated as permanent estimates after six months, but the Code requires Mercury to use reasonable endeavours to get meter readings for at least 12 months.<br>Some estimates were not replaced by revision 14.<br>Potential impact: Medium<br>Actual impact: Low<br>Audit history: Three times<br>Controls: Moderate<br>Breach risk rating: 4 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Medium** | The controls are recorded as moderate because in trying to the mitigate risk of large amounts of FE still being present in the 14-month revision this process has impacted the prescribed process for calculating historic estimate (HE) volumes.<br>The impact on settlement and other participants is moderate as the treatment of all estimated reads as permanent estimates for historic estimate calculated does distort the NHH submissions between months impacting the calculation of UFE month to month; therefore, the audit risk rating is medium. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| **All estimated reads treated as permanent estimates after six months, but the Code requires Mercury to use reasonable endeavours to get meter readings for at least 12 months.**<br>Until this audit, our treatment of customer and estimated reads has been considered compliant. We were unaware our current processes did not meet the code requirements for permanent estimates. We have discussed this with the auditors and will begin working on changing our permanent estimate process to become compliant.<br><br>**Some estimates were not replaced by revision 14.**<br>Backdated switches paired with Covid-19 lockdowns and restrictions meant we were unable to obtain validated meter readings in all instances before R14 however we believe our controls in this area are strong. | Dec 22 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |

| | | |
|---|---|---|
| **All estimated reads treated as permanent estimates after six months, but the Code requires Mercury to use reasonable endeavours to get meter readings for at least 12 months.**<br>We will be raising this with ICT to make the necessary changes to our process around permanent estimates to become compliant. | Dec 22 | |

| **Reconciliation participants to prepare information** | | | |
|---|---|---|---|
| **Non-compliance** | **Description** | | |
| Audit Ref: 12.9<br>With: Clause 2 Schedule 15.3<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | ICP 1002125124LCA15 not submitted as HHR where the metering installation category is 3 and the billing capacity is 500 kVA.<br>Some unmetered load calculations were incorrect.<br>ICP 0005011390CNB4E incorrect multiplier applied to HHR volumes by EDMI from December 2017 to July 2021.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Once<br>Controls: Moderate<br>Breach risk rating: 2 | | |
| **Audit risk rating** | **Rationale for audit risk rating** | | |
| **Low** | Controls are rated as moderate because they are effective most of the time.<br>The impact is assessed to be low as the number of errors is low.<br>The audit risk rating is also low for the incorrect compensation factor, as this affected only a single ICP however not all periods have been able to be corrected via available revision cycle. As this was a Meter installation Category 3 ICP this error also had an impact to the seasonal shape files used by all NHH retailers for submission which were incorrect for periods prior to the 7-month washup to correct this error. | | |
| **Actions taken to resolve the issue** | | **Completion date** | **Remedial action status** |

| | | |
|---|---|---|
| **ICP 1002125124LCA15 not submitted as HHR where the metering installation category is 3 and the billing capacity is 500 kVA.**<br>This has since been corrected from the date of the meter upgrade.<br><br>**Some unmetered load calculations were incorrect.**<br>See comments in section 3.7.<br><br>**ICP 0005011390CNB4E incorrect multiplier applied to HHR volumes by EDMI from December 2017 to July 2021.**<br>Mercury reported a self-breach to the EA when we were notified of this error. We have processed corrections for Jun20 – May21 and are waiting to hear from the EA on our proposed resolution for the Dec17 – May20 period which was outside of the R14 revision cycle. | 10/03/2022 | Identified |
| **Preventative actions taken to ensure no further issues will occur** | **Completion date** | |

| | | |
|---|---|---|
| **1002125124LCA15**<br>We were awaiting a new customer contract following a meter upgrade before the account set up could be completed. We have reminded the team to ensure the profile and submission type is updated as necessary regardless of any customer account delays.<br><br>**0005011390CNB4E**<br><br>EDMI have provided the below assurance to confirm there are no further instances of this and that this error will not occur in future:<br><br>*"When this meter was originally installed in 2017, a load check was completed with the installer and the load check matched the installers figures. However, our systems at the time required us to manually apply the multiplier when completing the load check, so this incorrectly applied multiplier was missed.*<br><br>*Since then, our systems have been upgraded so all multipliers are automatically applied. This means in the future, if a multiplier was to be incorrectly applied, it would become immediately apparent during the load test as the meter was installed.*<br><br>*I apologies for this not being found until now. However, this issue has now been fixed for this site and the multiplier has been correctly applied. This has been confirmed by comparing the data against the original load test taken back in 2017. A 100% check on all sites has been completed to identify any further issues of this nature, which is how this site was identified originally."* | Completed | |

| Historical estimate process | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 12.11<br>With: Clauses 4 and 5 Schedule 15.3<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | Historic estimate calculations incorrect for five scenarios.<br>Potential impact: Medium<br>Actual impact: Medium<br>Audit history: Once<br>Controls: Moderate<br>Breach risk rating: 2 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Low** | The controls are recorded as moderate because they mitigate risk most of the time but there is room for improvement.<br>The impact is recorded as low overall because:<br>• scenario A and C the incidence is low, and the impact is the volume is apportioned across one fewer day,<br>• scenario G relates to I direction volume being apportioned using the RPS seasonal adjustment daily shape values instead of PV1 / EG1 and the volumes impacted are small, and<br>• scenario I & M – the retrospective treatment of SAP estimate reads as permanent estimates for the calculation of HE; the distortion of apportionment of volume by the inclusion of these estimated reads is moderate when applied across a large number of ICPs. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| Scenario A – A second example was provided to the auditors to show correct HE calculations. We will be investigating the ICP in the initial example to determine what changes are required to fix this issue.<br><br>Scenario C – We will be investigating the ICP in this example to determine what changes are required to fix this issue.<br><br>Scenario G – We will investigate what system changes are required to allow for the correct submission of all distributed generation.<br><br>Scenario I & M – Until this audit, our treatment of estimated and customer reads has been considered compliant and our examples provided for HE scenarios I & M have also been considered compliant. We were unaware our current processes did not meet the code requirements for permanent estimates. We have discussed this with the auditors and will begin working on changing our permanent estimate process to become compliant. | Dec 22 | Identified |

| Preventative actions taken to ensure no further issues will occur | Completion date | |
|---|---|---|
| Scenario A & C – Upon completion of our investigation, we will liaise with our ICT team to implement any required changes to ensure consumption is calculated and apportioned correctly.<br><br>Scenario G – We will investigate what system changes are required to allow for the correct submission of all distributed generation.<br><br>Scenario I & M – We will liaise with our ICT team to implement the required changes to ensure our processes around permanent estimates are compliant. | Dec 22 | |

| Forward estimate process | |
|---|---|
| **Non-compliance** | **Description** |
| Audit Ref: 12.12<br>With: Clause 6 Schedule 15.3<br><br>From: 01-Jan-21<br>To: 31-Dec-21 | The accuracy threshold was not met for all months and revisions.<br>Potential impact: Medium<br>Actual impact: Medium<br>Audit history: Multiple times<br>Controls: Moderate<br>Breach risk rating: 4 |
| **Audit risk rating** | **Rationale for audit risk rating** |
| **Medium** | Controls are rated as moderate, as they are sufficient to ensure data is within the accuracy threshold most of the time.<br>The audit risk rating is medium as the initial forward estimates for some ICP that have transitioned to embedded networks were greater than the Gateway volumes for the associated embedded network causing distorted UFE allocations amongst all retailers for the embedded networks concerned. Forward estimates are washed up through the revision process once a validated actual reading is available. |

| Actions taken to resolve the issue | Completion date | Remedial action status |
|---|---|---|
| We believe that we have strong controls in place as shown by high attainment percentages across the board. Processes remain in place to correct data as actual data is obtained and submissions are corrected via the washup process. Elements of the non-compliance such as irregular balancing area shapes are outside the control of Mercury and as such should not be contributing towards our rating. | N/A | Identified |

| Preventative actions taken to ensure no further issues will occur | Completion date | |
|---|---|---|
| Mercury uses the industry profile shape as a default however we don't always receive the profile shapes for the new embedded networks. Mercury has recently changed the process where no profile shape is available to use a ratio factoring to ensure data in not over/under reported. | Dec 21 | |

| Historical estimate reporting to RM | | | |
|---|---|---|---|
| **Non-compliance** | **Description** | | |
| Audit Ref: 13.2<br>With: Clause 10 of Schedule 15.3<br><br>From: May-20 to Jul-20 r14, Dec-20 r7, and Apr-21 to Jun-21 r3 | Historic estimate thresholds were not met for some revisions.<br>Potential impact: Low<br>Actual impact: Low<br>Audit history: Multiple times<br>Controls: Strong<br>Breach risk rating: 1 | | |
| **Audit risk rating** | **Rationale for audit risk rating** | | |
| **Low** | The controls are rated as strong as the thresholds were met, and processes are in place to make estimated readings permanent.<br>The audit risk rating is low, because Mercury were reasonably close to the target in all cases. | | |
| **Actions taken to resolve the issue** | | **Completion date** | **Remedial action status** |
| Covid-19 lockdowns and restrictions have had an impact on our read attainment which in turn has affected our revision targets. Our current processes and controls are strong. | | N/A | Identified |
| **Preventative actions taken to ensure no further issues will occur** | | **Completion date** | |
| Our current processes are strong however we are continuously looking at ways to improve read attainment. | | Ongoing | |