

Compliance plan for Meridian Energy Wellington CC DUML April 2024

Deriving submission information			
Non-compliance	Description		
<p>Audit Ref: 2.1</p> <p>With: Clause 11(1) of Schedule 15.3</p> <p>From: 01-Jan-24</p> <p>To: 31-Mar-24</p>	<p>Under submission of 88.04 kWh occurred for January 2024 for 1001152339CKE9F, because the load was calculated based on 49.9 kWh per day but should have been based on 52.74 kWh.</p> <p>The database was found not to be accurate within $\pm 5.0\%$. Based on the field audit total annual consumption is estimated to be 398,300 kWh higher than the DUML database indicates before dimming is accounted for. The actual amount of under submission is likely to be closer to half this volume, because just over half of the lights in the database are dimmed. Each dimmed light is dimmed by an average of 50%.</p> <p>115 items of load had no lamp make, model, lamp and gear wattage recorded. 20 are feedback signs and 95 are IoT Access Point/Gateways. The expected wattage is to be confirmed.</p> <p>The total effective wattage is rounded to the nearest whole number. For example, a 27W light dimmed by 50% is recorded as 14W rather than 13.5W. This could result in estimated over submission of 10,822 kWh per annum across all the dimmed lights.</p> <p>Lights which are dynamically dimmed have the full wattage recorded in the total effective wattage field in RAMM, which will result in over submission.</p> <p>The monthly database extract provided does not track changes at a daily basis and is provided as a snapshot.</p> <p>Potential impact: High</p> <p>Actual impact: Unknown</p> <p>Audit history: Multiple times</p> <p>Controls: Weak</p> <p>Breach risk rating: 9</p>		
Audit risk rating	Rationale for audit risk rating		
High	Overall, the controls are rated as weak, because the database was confirmed not to be accurate within $\pm 5\%$. The impact is assessed to be high, based on the kWh differences described above.		
Actions taken to resolve the issue		Completion date	Remedial action status
Meridian has advised WCC of the inaccuracies identified and has requested for corrections to be made.		9/04/2024	Identified
115 items of load – WCC has advised, they are not luminaires; they have a single nominal operating wattage which is mapped		10/04/2024	

<p>to the total effective wattage and the total wattage in the power return.</p> <p>The total effective wattage is rounded to the nearest whole number – WCC has advised that their system does round up to the closet whole number. They have approached the platform developers to see if this is something that can be amended.</p> <p>Lights which are dynamically dimmed – WCC has advised, the lights are statically dimmed, and the dimmed wattage shows in the total effective wattage field in Ramm.</p>	<p>10/04/2024</p> <p>10/04/2024</p>	
Preventative actions taken to ensure no further issues will occur	Completion date	
<p>Meridian will continue to follow up with WCC regularly to have the inaccuracies corrected.</p> <p>We have assessed our processes and tools to account for historic lamp installations and changes to the database at a daily level. There are checks in place comparing month to month data to identify any material changes and confirm details for these. These are accounted for in monthly submission.</p>	<p>13/10/2024</p> <p>Ongoing</p>	

Description and capacity of load		
Non-compliance	Description	
<p>Audit Ref: 2.4</p> <p>With: Clauses 11(2)(c) and (d) of Schedule 15.3</p> <p>From: 01-Feb-24</p> <p>To: 28-Feb-24</p>	<p>115 items of load had no lamp make, model, lamp and gear wattage recorded.</p> <p>Potential impact: Low</p> <p>Actual impact: Low</p> <p>Audit history: Multiple times</p> <p>Controls: Moderate</p> <p>Breach risk rating: 4</p>	
Audit risk rating	Rationale for audit risk rating	
Medium	<p>Controls are rated as moderate, as they are sufficient to ensure that almost all items of load have wattage and description information recorded.</p> <p>The impact is estimated to be medium, based on the number of exceptions identified.</p>	
Actions taken to resolve the issue	Completion date	Remedial action status
<p>WCC has advised, they are not luminaires; they have a single nominal operating wattage which is mapped to the total effective wattage and the total wattage in the power return.</p>	10/04/2024	Identified
Preventative actions taken to ensure no further issues will occur	Completion date	

All load recorded in database			
Non-compliance	Description		
Audit Ref: 2.5 With: Clauses 11(2A) of Schedule 15.3 From: 01-Jan-24 To: 31-Mar-24	30 additional lamps in the field were not recorded in the database from a sample of 568 items of load. Potential impact: High Actual impact: Unknown Audit history: Multiple times Controls: Weak Breach risk rating: 3		
Audit risk rating	Rationale for audit risk rating		
Low	The controls are rated as weak due to the quantity of missing lights relative to the sample size. The impact is expected to be low, based on an estimate of the unreported consumption using the average load across all lights in the database.		
Actions taken to resolve the issue		Completion date	Remedial action status
Meridian has advised WCC of the inaccuracies identified and has requested for corrections to be made. WCC has advised that they will perform site visits to confirm data before updating the database		9/4/2024	Identified
		10/04/2024	
Preventative actions taken to ensure no further issues will occur		Completion date	
Meridian will continue to follow up with WCC regularly to have the inaccuracies corrected.		13/10/2024	

Database accuracy	
Non-compliance	Description
Audit Ref: 3.1 With: Clause 15.2 and 15.37B(b)	The database was found not to be accurate within $\pm 5.0\%$. Based on the field audit total annual consumption is estimated to be 398,300 kWh higher than the DUML database indicates before dimming is accounted for. The actual amount of under submission is likely to be closer to half this volume, because just over half of the lights in the database are dimmed. Each dimmed light is dimmed by an average of 50%. 115 items of load had no lamp make, model, lamp and gear wattage recorded. 20 are feedback signs and 95 are IoT Access Point/Gateways. The expected wattage is to be confirmed. The total effective wattage is rounded to the nearest whole number. For example, a 27W light dimmed by 50% is recorded as 14W rather than 13.5W.

<p>From: 01-Jan-24 To: 31-Mar-24</p>	<p>This could result in estimated over submission of 10,822 kWh per annum across all the dimmed lights.</p> <p>Lights which are dynamically dimmed have the full wattage recorded in the total effective wattage field in RAMM, which will result in over submission.</p> <p>Potential impact: High</p> <p>Actual impact: High</p> <p>Audit history: Multiple times</p> <p>Controls: Weak</p> <p>Breach risk rating: 9</p>		
Audit risk rating	Rationale for audit risk rating		
High	Overall, the controls are rated as weak, because the database was confirmed not to be accurate within ±5%. The impact is assessed to be high, based on the kWh differences described above.		
Actions taken to resolve the issue		Completion date	Remedial action status
<p>Meridian has advised WCC of the inaccuracies identified and has requested for corrections to be made.</p> <p>115 items of load – WCC has advised, they are not luminaires; they have a single nominal operating wattage which is mapped to the total effective wattage and the total wattage in the power return.</p> <p>The total effective wattage is rounded to the nearest whole number – WCC has advised that their system does round up to the closet whole number. They have approached the platform developers to see if this is something that can be amended.</p> <p>Lights which are dynamically dimmed – WCC has advised, the lights are statically dimmed, and the dimmed wattage shows in the total effective wattage field in Ramm.</p>		<p>9/04/2024</p> <p>10/04/2024</p> <p>10/04/2024</p> <p>10/04/2024</p>	Identified
Preventative actions taken to ensure no further issues will occur		Completion date	
Meridian will continue to follow up with WCC regularly to have the inaccuracies corrected.		13/10/2024	

Volume information accuracy		
Non-compliance	Description	
<p>Audit Ref: 3.2</p> <p>With: Clause 15.2 and 15.37B(c)</p> <p>From: 01-Jan-24</p> <p>To: 31-Mar-24</p>	<p>Under submission of 88.04 kWh occurred for January 2024 for 1001152339CKE9F, because the load was calculated based on 49.9 kWh per day but should have been based on 52.74 kWh.</p> <p>The database was found not to be accurate within $\pm 5.0\%$. Based on the field audit total annual consumption is estimated to be 398,300 kWh higher than the DUML database indicates before dimming is accounted for. The actual amount of under submission is likely to be closer to half this volume, because just over half of the lights in the database are dimmed. Each dimmed light is dimmed by an average of 50%.</p> <p>115 items of load had no lamp make, model, lamp and gear wattage recorded. 20 are feedback signs and 95 are IoT Access Point/Gateways. The expected wattage is to be confirmed.</p> <p>The total effective wattage is rounded to the nearest whole number. For example, a 27W light dimmed by 50% is recorded as 14W rather than 13.5W. This could result in estimated over submission of 10,822 kWh per annum across all the dimmed lights.</p> <p>Lights which are dynamically dimmed have the full wattage recorded in the total effective wattage field in RAMM, which will result in over submission.</p> <p>The monthly database extract provided does not track changes at a daily basis and is provided as a snapshot.</p> <p>Potential impact: High</p> <p>Actual impact: Unknown</p> <p>Audit history: Multiple times</p> <p>Controls: Weak</p> <p>Breach risk rating: 9</p>	
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<p>Lights which are dynamically dimmed – WCC has advised, the lights are statically dimmed, and the dimmed wattage shows in the total effective wattage field in Ramm.</p>	<p>10/04/2024</p>	
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