

Rules Update Guide: Energy & Water for Offices

Issued: 25th March 2020

1 Introduction

With the release of the latest major version of *NABERS Energy and Water for Office Rules* (v4.0) and the first version of *NABERS Metering and Consumption Rules* (v1.0), Assessors will notice that significant changes have been made. However, most of these changes are either clarifications or structural and cosmetic in nature. Changes of a technical nature are summarised in this Guide.

The purpose of this Guide is to:

- Answer basic questions Assessors may have about the content, the documents and the update process.
- Explain the reasoning behind the creation of the new *NABERS Metering and Consumption Rules*.
- Highlight those significant technical changes that have been made as a result of the update from version 3.2 to version 4.0 of the *NABERS Energy and Water for Office Rules*.

2 What is the transition period?

NABERS Energy and Water for Office Rules (v4.0) and *NABERS Metering and Consumption Rules* (v1.0) were published on 25th March 2020. With the release of these documents, a transition period of just over eight (8) weeks began that will **end on Friday, 22nd May 2020**.

Rating applications lodged **during the transition period** must conform to the requirements of either:

- *NABERS Energy and Water for Office Rules* (v3.2); or
- *NABERS Energy and Water for Office Rules* (v4.0) AND *NABERS Metering and Consumption Rules* (v1.0).

Rating applications lodged **after the end of the transition period** must conform to *NABERS Energy and Water for Office Rules* (v4.0) and *NABERS Metering and Consumption Rules* (v1.0).

Assessors must take care when choosing to conform to *NABERS Energy and Water for Office Rules* (v3.2) to ensure that they are able to lodge the application before the end of the transition period. Assessors are advised to retain a copy of *NABERS Energy and Water for Office Rules* (v3.2) for the purpose of a Level 2 audit.

Note: For rating applications completed as part of a Commitment Agreement used to conform with Section J of the National Construction Code 2019 (NCC2019), it is permitted to continue using *NABERS Energy and Water for Office Rules (v3.2)* until such time as when the NCC is next reviewed or updated. For more information, contact the NABERS Team.

3 What has changed?

Most changes made within both documents fall into one of three categories:

- Stylistic – Changes to the look of tables, internal referencing and list hierarchy for consistency.
- Structural – Changes made to the location of content and entire sections to improve document flow.
- Clarification – Changes made to content to provide clarity on concepts, requirement and application of information, to improve readability and reduce misinterpretation.

There are several technical changes made in both documents that Assessors will need to familiarise themselves with outlined under the headings below.

Non-cumulative metering systems

Section 3.4.4.3 of *NABERS Metering and Consumption Rules (v1.0)* contains new content that deals with non-cumulative metering systems.

In principle, data from these types of meters can only be used for an inclusion if the data can be reconciled against an energy or water balance from its parent utility metering system.

It should be noted that if used for an exclusion, an energy or water balance is not required.

Assessors should also note:

- When undertaking an energy or water balance for a non-cumulative metering system, virtual meters cannot be used for this balance;
- Where data from a non-utility, non-cumulative metering system may be missing, no adjustments can be made.

Utility vs Non-utility metering systems

The structure of *NABERS Metering and Consumption Rules (v1.0)* is split between how to treat data from utility metering systems and non-utility metering systems. As a part of this, new content for concepts and meter types have been added, including:

- Definition entries for *utility*, *utility metering system* and *non-utility metering system*;
- Section 3.4.4.2 dealing with cumulative meters, including pulse meters with an onboard counting mechanism;
- Section 3.4.4.3 dealing with non-cumulative meters;
- Section 3.4.4.4 dealing with “soft” meters or equipment sensors;
- Section 3.4.4.5 dealing with virtual meters;
- Definition entry for Cloud Metering System;
- Definition entry for Remote Meter Reading System (RMRS) and Section 6.3.4 which deals with RMRS validation requirements.

The requirements for the treatment of utility metering system data remains unchanged with few structural adjustments. Content on the treatment of non-utility metering data has been added, which is based on that of utility metering data.

Treatment of non-cumulative data has also been added and it should be noted that this data cannot be adjusted in any way.

Embedded networks

Embedded networks were briefly referenced in *NABERS Energy and Water for Offices (v3.2)*. This update has expanded on content dealing with embedded networks, and includes the following additions:

- Definition of ‘embedded network’ in both documents;
- Confirmation regarding whether meters are utility or non-utility meters for the purpose of NABERS ratings;
- Validation of non-utility meters within an embedded network – Section 6.2.3 of *NABERS Metering and Consumption Rules (v1.0)*;
- Documentation requirements if the premises contains an embedded network – Section 9.5.1 of *NABERS Metering and Consumption Rules (v1.0)*.

Data requirements for non-utility gas metering systems

When calculating gas consumption as part of adjusting gas utility consumption data, Assessors now have two options for the pressure correction factor, depending on how the data is to be used.

For gas metering systems that are to be used for inclusions, Assessors may use either—

- the meter pressure correction factor, or
- the utility’s pressure correction factor.

For gas metering systems that are to be used for exclusions, Assessors may use either—

- the meter pressure correction factor, or
- a default value of ‘1’.

Default heating values based on State/Territory

The table of default heating values for gas metering systems has been updated, and a default heating value for Tasmania has been added.

The figures in this table are used for adjusting gaps during the billing period for gas accounts and have been updated based on the Australian Government Department of the Environment and Energy’s *Guide to the Australian Energy Statistics 2017*.

Checking CT meters in place to avoid shutdown

The contents of this section previously discussed how Assessors could validate CT meters where the network cannot be shutdown. This has now been reduced and simplified.

The Rules now stipulate that a qualified and licenced electrician must be engaged to conduct the validation and complete the validation record. As a guidance note, two acceptable methods for verification have been included:

- Use of a portable power meter to record consumption of the metered circuit over a period of time; or

- Use of a clamp-on ammeter or similar device to identify the average current in the circuit being metered.

What is the NABERS Metering and Consumption Rules?

The biggest change made to NABERS *Energy and Water for Offices – The Rules (v3.2)* is the removal of content on metering, the validation of meters and treatment of consumption data. This removed content was used as the basis for a new NABERS Rule document: *NABERS Metering and Consumption Rules (v1.0)*.

The purpose behind the creation of this new document is to consolidate the requirements on metering and consumption that are common to various ratings and building types (not just offices). This will have several benefits:

- Ensuring a consistent approach to metering and consumption data regardless of the building sector;
- Allowing for quicker, more efficient updating of NABERS Rules;
- Aiding in the development of new NABERS rating tools by allowing for efficient scaling.

In future, all content relating to metering and consumption data within other NABERS Rule documents of other building types (e.g. Shopping Centres, Hotels and Apartment Buildings) will be removed and incorporated into the *NABERS Metering and Consumption Rules*.

Note: While most requirements in *NABERS Metering and Consumption Rules* will apply to all building types, it is acknowledged that building type-specific requirements may need to be added to the *Metering and Consumption Rules* in order to account for variations. This will be done progressively and in due course as further Rules are revised.

Are the documentation requirements easier to understand?

In order to assist Assessors in ensuring they retain all required documentation for a rating application, all documentation requirements have been consolidated into one chapter within the main body of the Rules. These chapters are:

- Chapter 8 in *NABERS Energy and Water for Office Rules (v4.0)*.
- Chapter 9 in *NABERS Metering and Consumption Rules (v1.0)*.

Assessors should familiarise themselves with these documentation requirements as they will serve as required evidence for a Level 2 audit.

4 What about other outstanding issues?

During the development of these documents, NABERS has identified several areas where improvements to the Rules could be made. These items were found to be out of scope of the current project and, due to time constraints, could not be included in this update.

These items have been captured and flagged for either a future minor update, major update or ruling.

NABERS encourages any and all feedback on its Rules, rulings and processes to be directed to the NABERS mailbox at:

nabers@environment.nsw.gov.au

5 What is the team working on next?

NABERS is now working on updating the *Thermal Metering Ruling*.

In addition, NABERS is working on a major version update for the *NABERS Energy and Water for Shopping Centres Rules* in preparation for the release of the new NABERS online rating submission platform.

6 Who can I talk to if I have any questions regarding this update?

If you have any questions regarding the release of *NABERS Energy and Water for Office Rules (v4.0)* and *NABERS Metering and Consumption Rules (v1.0)*, this Guide or the work of NABERS on the Rules, please contact Andrew Buchel at

Andrew.Buchel@environment.nsw.gov.au

Contact us

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