Proposed Changes to the Measurement and Verification (M&V) Specifications

Summary of changes for stakeholder information session
The M&V Method under Victorian Energy Upgrades

Introduced June 2017

112 projects

39 projects
134,000 tCO2e
$12.4 M project costs
$2.68 M value in VEECs

73 projects (earlier stages)
Since the M&V method was introduced the VEU team and the Essential Services Commission (ESC) have been working closely with stakeholders to support use of the M&V method.

Based on this experience and stakeholder feedback, revisions to the M&V method have been proposed in order to make the method more user-friendly.
Creating a more user-friendly M&V method

Changes will allow one project to:

• include multiple essentially identical upgrades at multiple essentially identical premises

• use multiple methods of certificate creation

• use utility data of different length time intervals for the same measurement boundary

• choose different length time intervals for different measurement boundaries

• start operating/reporting period measurements for one measurement boundary before upgrades in other measurement boundaries are complete
Changes are intended to:

Allow businesses to roll an upgrade out across multiple essentially identical premises with a smaller step change in administration requirements.
Allowing multiple essentially identical upgrades at multiple essentially identical premises

What will change?

• One project may include multiple premises.
• Multiple premises require one
  – scoping plan
  – project plan
  – impact report

What will stay the same?

• Site specific information required for each premises
  – measurement boundary
  – site constants
  – energy model
• Measurement must occur at each site
• The address of all sites in the project must be known at project scoping
A large fast food chain with 40 locations wants to upgrade their space heating. All of their locations currently have electric resistance heaters of various capacities, sized according to the size of premises. Locations have different seating capacities, and some differences in floorplan. However, each location is a stand-alone site with only electric heating, and heating degree days show a strong correlation with heating energy.
Allowing multiple essentially identical upgrades at multiple essentially identical premises

Example: A single scoping plan is submitted detailing

**for the project**

- Project name
- Contact details of the AP
- Indicative commencement date
- Service affected (heating at all premises)
- Energy source affected (electricity at all premises)
- Description of consistent measurement boundary choice
- Statement that no premises is required to do this for compliance reasons

**for each premises**

- Address
- Equipment to be removed
- Equipment to be installed
Allowing multiple essentially identical upgrades at multiple essentially identical premises

Example: A single project plan is submitted detailing

for the project

- Intention to use forward creation of VEECs
- Risk management plan which shows the project team
- Indicative implementation start time
- Indicative completion date
- M&V Plan

for each premises

- A cost estimate
- Estimated CO2e reduction
- Site specific elements of M&V plan
  - Site description
  - Measurement boundary (whole site)
  - Site constant(s)
  - Variable(s)
  - Model description
- Indicative date for commencement of works
- Baseline period dates
- Operating period dates
Allowing multiple *essentially identical* upgrades at multiple *essentially identical* premises

Example: A single impact report is submitted detailing

**for the project**

- Declaration from independent AM&VP
- Written justification of the steps and decisions in calculations

**for each premises**

- CO2e + assoc. calculations
- Site constant(s)
- Details of measurement boundary
- Baseline energy model
- Accuracy factor
- Operating energy model
- Evidence that models satisfy statistical requirements
- Evidence that time intervals are valid
- Report from AM&VP
Consultation Questions:

• Is the current limit on forward creation practical with multiple premises? (3 times/project)

• Are there other practical barriers to the proposed changes?

Consultation submissions in writing by Friday June 14th
Energy.upgrades@delwp.vic.gov.au

We invite feedback on these questions as well as on other aspects of the method which will allow easier, broader use.
Changes are intended to:
Allow a single premises to use a combination of VEEC creation methods, selected as appropriate for each measurement boundary.

Example:
A single premises project has two distinct measurement boundaries. One energy efficiency initiative is not eligible for forward creation of VEECs because it is behaviour based.

They are able to use forward creation of VEECs for a hardware upgrade, and annual creation of VEECs for the behavioural changes.

Note: projects with multiple essentially identical upgrades shall use the same method of VEEC creation for these upgrades.
Changes are intended to:
Allow a single measurement boundary to use data of different time interval lengths at times when data is limited by utility billing cycles.

Example:
A gas energy efficiency project is using utility billing data to construct a baseline energy model. Utility bills cover periods of 31, 28, 31, 29, 45, 17, 31, 31, 29, 33, 28, and 30 days.

A model is made using the utility data, while accounting for these non-uniform periods.
Changes are intended to:
Allow a single premises with more than one measurement boundary to use different length time intervals in creating models, selected as appropriate for each measurement boundary.

Example:
- A single premises project has two distinct measurement boundaries in which they intend to install two different upgrades.
- Each measurement boundary contains a mains gas supply.
- Both are billed monthly, but one gas supply has a submeter which records hourly data.

The project is able to use the hourly data where they have it, creating a detailed model, and use the monthly data for the other upgrade.
Changes are intended to:
Allow a single premises with more than one measurement boundary to begin making measurements for the reporting/operating period when not all upgrades in other measurement boundaries are complete.

Example:
• A large industrial premises wishes to upgrade lighting in 20 identical 24-hour storage warehouses.
• Each warehouse has a dedicated measurement boundary and no interactive effects with the others.
• The project plans to use sampling to determine the effects of the multiple identical upgrades.
• The warehouse lighting is upgraded over a period of five months.

Measurements of reporting period energy on upgraded warehouses are able to be made before the final lighting upgrade is finished.
Topics to be considered for future changes
Topics to be considered for future changes to M&V

- Streamlining administration
- Most difficult aspects?
- Most time/resource intensive aspects?
- AM&VP assessment?
- Most time/resource intensive aspects?
- How often do you do this?
- Through RERT or another market signal?
- Does this conflict with M&V method requirements?

We invite feedback on these questions as well as on other aspects of the method which will allow easier, broader use.

The treatment of renewable energy and renewable energy export under the M&V method will be considered in a separate process.
Thank you

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