

**Field      Engineering and Technology****Review of *Renewable Energy Systems* unit standards**

<b>Subfield</b>	<b>Domain</b>	<b>ID</b>
Renewable Energy Systems	Renewable Energy Systems – Design	27428
	Renewable Energy Systems – Installation and Maintenance	27432, 27439, 27440, 27444

The Skills Organisation has completed the review of the unit standards listed above.

**Date new versions published**

**July 2014**

**Planned review date**

**December 2016**

**Summary**

The Skills Organisation has completed a review of the Renewable Energy Systems unit standards listed above. The review was conducted for the purpose of ensuring that the standards reflect industry best practice.

The review group consisted of industry experts and training providers, with additional input occurring via a wider email network consultation group.

There are further Renewable Energy Systems unit standards under review.

The main outcome of the changes is an updating of the content to align with legislation and industry standards. The changes also reflect recent developments in photovoltaic technology and installation practice. The reviewed standards provide improved alignment with the New Zealand Certificate in Renewable Energy System Design (Level 4) with strands in Grid-connect Systems (Photovoltaic) and Stand-alone Systems (Photovoltaic), and optional endorsements in Wind Energy Systems and Micro-hydro Systems [Ref: 1938] and the New Zealand Certificate in Renewable Energy System Installation (Level 4) with strands in Grid-connect Systems (Photovoltaic) and Stand-alone Systems (Photovoltaic), and optional endorsements in Wind Energy Systems and Micro-hydro Systems [Ref: 1939].

**Main changes**

- Development of new standard 28196, *Solve basic problems in photovoltaic apparatus and systems*.
- Updating of content to provide closer alignment with the relevant Australian/New Zealand (AS/NZS) and New Zealand (NZS) standards, and with changes in photovoltaic technology and industry practice.
- The entry information of the unit standards was updated to remove any references that were not required.
- The credit value of unit standard 27428 was increased to 7 credits to allow for additional content.

The last date for assessment of superseded versions of the reviewed unit standards is

31 December 2015. Results will not be accepted where the assessment date is after the last date for assessment of superseded versions.

### Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
<b>A</b>	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
<b>B</b>	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
<b>C</b>	Major changes that necessitate the registration of a replacement standard with a new ID
<b>D</b>	Standard will expire and not be replaced

Engineering and Technology > Renewable Energy Systems > Renewable Energy Systems - Design

ID	Title	Level	Credit	Review Category
27428	Demonstrate knowledge of grid-connect Renewable Energy System components, owner requirements and metering <b>Demonstrate knowledge of grid-connected photovoltaic system components, distributor requirements and metering</b>	4	5  7	B

Engineering and Technology > Renewable Energy Systems > Renewable Energy Systems – Installation and Maintenance

ID	Title	Level	Credit	Review Category
27432	Demonstrate knowledge of photovoltaic arrays mounting requirements	4	5	B
27439	Demonstrate knowledge of Photovoltaic Technology <b>Demonstrate knowledge of photovoltaic technology</b>	4	10	B
27440	Install, commission and maintain grid connected Photovoltaic Power Systems <b>Install, commission and maintain grid-connected photovoltaic power systems</b>	4	15	B
27444	Demonstrate knowledge of requirements for connecting Photovoltaic arrays <b>Demonstrate knowledge of requirements for connecting photovoltaic arrays</b>	4	3	B
<b>28196</b>	<b>Solve basic problems in photovoltaic apparatus and systems</b>	<b>4</b>	<b>5</b>	<b>New</b>