Technical Rules Conditional Exemption Notification

Clause 3.6 Multiresidential sites inverter generation between 30 kVA and 500 kVA

Technical Rules (*Rules*) clause 3.6 outlines requirements for *small generating units* and groups of *small generating units* of aggregate rated capacity between 30 kVA and 10 MW, as assessed at the *connection point*. For those aggregating to less than 10 kVA per phase (or 30 kVA three phase), much simpler Rules clause 3.7 applies.

In the case of multi-residential sites (such as lifestyle or retirement villages, apartment buildings and complexes), the *connection point* is often shared and its owner (*User*) is the body corporate or strata management organisation, not the individual residence occupant/owner (even if the residence is free standing with its own meter). Hence, when the residence is having an inverter energy system (*IES*) installed, the capacity of that IES is added with others already installed at that *connection point* (anywhere in the village) to determine which Rules requirements are applicable. Typically, these small IES systems are installed in compliance with the Western Power Basic Embedded Generation (EG) Connection Technical Requirements.

The purpose of this exemption is to simplify the requirements for groups of *small generating units* consisting **exclusively** of IES that comply with the Basic EG Connection Technical Requirements and not exceeding the specified limits at each individual residence, with the aggregate rated capacity not exceeding (or not intending to exceed) 500 kVA. In order to take advantage of this exemption, the *connection point* owner must apply for approval using the form attached. Once approved, the User will be given a code that must be quoted by individual residents when having the Basic EG system installed so that the normally applied limit of 30 kVA can be waived.

This is in accordance with the stated objectives and the intent of the *Electricity Networks Access Code* 2004 and the *Electricity Industry Act 2004*.

Conditions for Exemption

The Users (connection point owners) that can be considered for this exemption must be:

- Connected to distribution system via a **low voltage** *connection point*, be of rated aggregate IES capacity not exceeding and not intending to exceed 500 kVA (or the *connection point* hosting capacity, whichever is lower);
- Comprise exclusively (no other sources of generation) of small IES (< 10 kVA per residence) paired with their respective loads at the individual residential units and export limited to 1.5 kW;
- Each individual IES is is installed in compliance with the Basic EG Connection Technical Requirements;
- The electrical installation for the site from the connection point to each individual residence is independently certified as built and maintained in compliance with relevant Australian Standards and Wiring Rules, particularly in relation to protection, control, wiring and earthing systems; and

• Requesting consideration under this general exemption at the time of application using attached form (or quoting the exemption identification number if one has already been obtained).

The certifying NER engineer must provide:

- A site plan; and
- A single line diagram (SLD) representing the site's internal network that demonstrates compliance to AS/NZS 3000, WAER, and WASIR requirements. At a minimum, the SLD must show:
 - a. The site's SPD, customer main switch(es), metering arrangement and switchboards;
 - b. The site's internal reticulation between the Western Power connection point and each individual resident/common property areas; or
 - c. Representation of typical unit connection point.

For all eligible Users:

- 1. The IES for each individual residential installation will be assessed under Rules clause 3.7 and the Basic EG Connection Technical Requirements;
- 2. An overall *connection point* limit will be established.

The *Users* must monitor all applications against their *connection point* and ensure the allocated limit is not exceeded. The *User* must continue to be compliant with all other applicable *Rules*, regulations, standards and network requirements. If the conditions stated above have not been met to Western Power's (as the *NSP*) satisfaction, no exemption will apply and *User* will be expected to comply with Rules clause 3.6.

Retrospective application and multiple exemptions

Where the *connection point* already contains previously approved and installed IES, details of any such systems must be provided and the total aggregate must include their rated capacity. Furthermore, review of the specific circumstances of each such application may be necessary and *Users* will be advised if further information is required at the time of application. A certification of the entire facility for compliance with relevant AS/NZS standards outlining maintenance, operation and safety, by a suitably qualified (National Engineers Register) individual will be required.

Assessment

Users that request the exemption, and are eligible in accordance with the outlined conditions, will be granted the exemption in the course of applying for connection of IES. The exemption will apply at the *connection point*, be granted to the *connection point* owner for a limited period of time and remain conditional on all other applicable *Rules* and *connection agreement* requirements being met.

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Multi residential connection point details

Please submit fully completed form below along with applications for both:

- 1) new connections, and
- 2) when seeking variations to existing connection arrangements.

A copy of completed form should be sent to <u>technical.rules@westernpower.com.au</u>.

Connection point owner / User details	
User/organisation Name:	
User/organisation Address:	
User/ organisation Contact details (name, email, phone):	
Connection point details	
Connection point NMI:	l
Connection point physical address:	
Connection point voltage:	HV / LV
Connection point type:	Overhead / Underground
Connection point metering:	single / multi meter / other



Connection point Inverter Energy Systems (IES) details

Please list details of all IES already in service at this *connection point*

Dwelling address and Unit number (or common facility name and address)	Meter number	Inverter details (Manufacturer, Model)	Year installed	AS/NZS 4777 type certified	IES 62116 type certified	Inverter Rating (kVA)	Total capacity (kVA)
				Y / N	Y / N		
				Y / N	Y / N		
				Y / N	Y / N		
				Y / N	Y / N		
				Y / N	Y / N		
				Y / N	Y / N		
				Y / N	Y / N		
				Y / N	Y / N		
				Y / N	Y / N		
Add more lines if neede	d	Aggregate	total of exist	ting IES (kVA)):	•	

Please give details of future IES proposed/expected at this connection point

Total number of residential dwellings or common facilities available for IES installation in the future (those that do not have anything installed yet, but may wish to in the future)		Expected maximum rating per site (kVA)	Total expected future capacity (kVA)
Number of residential dwellings			
Number of commercial / common facilities (swimming pool, gym, restaurant, hall, club room, etc)			
Add more lines if needed	Expected total	of future IES (kVA):	

The sum aggregate of ultimate IES capacity at this connection point: ______ kVA

Certification

This site (beyond connection point) is hereby certified as having been maintained and operated in accordance with all relevant rules, regulations, standards and safety requirements, as applicable to electrical installations.

Name:	Date:
Signature:	_ Accreditation (NER registration in Electrical field):
Contact details (phone, email) :	
WP use Exemption approval	number:

