SMA Solar Technology AG | Sonnenallee 1 | 34266 Niestetal | Germany
Phone: +49 561 9522-0 | Fax: +49 561 9522-100 | Internet: www.SMA.de | E-mail: info@SMA.de
Register court: Amtsgericht Kassel HRB 3972

Declaration of Conformity according to AS4777.2 and EN 60335-1

The Windy Boy WB 1100LV grid connected inverter complies with the following required standards Grid Connection of Inverter Systems in Australia:

Standards	Test type	Comments
AS4777.2 clause 4.1	**General** Electrical safety in accordance to IEC 60335-1:2001 mod. + A1:2004 EN 60335-1:2001 + A11:2001 + A1:2004 EN 50366:2003	complies
AS4777.2 clause 4.2	**Compatibility with electrical installations** The inverter has voltage and frequency in accordance with AS 60038 (230VAC, 50Hz).	complies
AS4777.2 clause 4.3	**Power flow direction** In either direction.	noted
AS4777.2 clause 4.4	**Power factor** The Power factor is within the range of 0.8 and 0.95.	complies
AS4777.2 clause 4.5	**Harmonic currents** The harmonic current stays within the required limits.	complies
AS4777.2 clause 4.6	**Voltage fluctuations and flicker** Maximum permissible voltage fluctuation (expressed as a percentage of nominal voltage at 100% power) and flicker. According to EN 61000-6-2:2005 and EN 61000-3-3:2007.	complies
AS4777.2 clause 4.7	**Impulse protection** After applying the impulse, the test inverter was tested for normal operation. The inverter operated normal. There is no significant change in the performance of the test inverter.	complies
AS4777.2 clause 4.8	**Transient voltage limits** The transient voltage stays within the required limits.	complies
AS4777.2 clause 4.9	**DC current injection** The inverter does incorporate a mains frequency isolating transformer.	complies

Declaration of Conformity according to AS4777.3

Standards	General and Safety Requirements and Grid Protection Requirements	Comments
AS4777.3 clause 5.1	**General** The device includes an automatic disconnecting facility for photovoltaic installations (over-/under-voltage, over-/under-frequency and anti islanding).	complies
AS4777.3 clause 5.2	**Disconnect device** The unit provides galvanic separation. The unit is switched off rendu-dant by the high power bridge of the inverter and the relays in line and neutral.	complies
AS4777.3 clause 5.3	**Voltage and frequency limits (passive anti islanding protection)** Over-/under-voltage, over-/under-frequency and disconnection-/ reconnection-time is within the required limits.	complies
AS4777.3 clause 5.5	**Active anti – islanding protection** Test circuit according to AS 4777.3. Grid voltage equal to nominal load, load +/-5% and load match plus 10%.	complies
AS4777.3 clause 5.6	**Reconnection procedure** The unit provides monitoring of the voltage, frequency and synchro-nisation. If one of these conditions is not met, then the unit is not switching on.	complies
AS4777.3 clause 5.7	**Security of protection settings** Settings – only available with password for the service personal.	complies
AS4777.3 clause 5.8	**Compliance with grid protection requirements** A range of local load conditions as required i.e. light electronic load, load match and load match plus 10% was tested. The inverters tripped within the required time (less than 2 seconds) under all local load conditions.	complies

Conclusions:
The WB 1100LV Grid Connected inverter was tested for compliance with requirements of the"Australian guidelines for Grid Connection of energy systems via inverters". Based on the testresults for the tested inverter it complies with the requirements of AS4777 parts 2 & 3 for Grid Connection of Energy Systems via Inverters.

Test House Details:		
Bureau Veritas E&E Product Services GmbH Businesspark A96, 86842 Türkheim Germany	TÜV Süd Product Service GmbH Mergenthalerallee 27 D-65769 Eschborn Germany	**Only for** AS4777.2 clause 4.1

The compliance of the WB 1100LV according to Australian Standards AS 4777 was tested at Bureau Veritas and TÜV Süd and can be reviewed in the test report 08TH0259-AS4777.x_0 (AS4777) and in the electrical safety test report 71344328-1 (AS4777.2 clause 4.1).

Niestetal, 22.07.2009
SMA Solar Technology AG

i. V. Tobias Henne
(Director, Product Management
Solar Inverters)