

Our ref:

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Contact: Lindsay Offer

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Dear Elizabeth

## November 2015 Part A - Technical Rules Amendment Submission

I refer to the Western Power request for a number of amendments to the 2011 Technical Rules submitted to the Authority on 6 November 2015.

After a review of feedback Western Power has received from various stakeholders regarding the proposed wording for the DC injection changes, Western Power submits modified wording to replace the new DC injection clause 3.2.1(g)(2).

This change occurs on page 10 in the "Proposed Changes to clause 3.2.1" section of the submission document. The modified wording applies to clause 3.2.1(g)(2), and includes the explanatory text box to be placed below that:

(2) A User connected at low voltage must not inject into the distribution system any DC component of current produced by its own equipment that exceeds 0.5% of the maximum power transfer capacity of the connection point (per phase) as specified in the relevant connection agreement.

Excessive DC injection can lead to adverse effects in AC networks, such as causing increased levels of harmonics and waveform distortion in network assets which use magnetic cores (see cl. 3.2.1(c)); and in some circumstances can cause corrosion of metallic assets.

An accuracy of 5 % applies for LV connection point DC injection measurement. Readings must be taken at normal operating temperature, under full site load, and/or full site generation output conditions; and be calculated as 2 minute averages. LV connection point DC injection measurements below 10 mA can be considered insignificant.

If you have any queries with regards to this request, please do not hesitate to contact Mr Lindsay Offer on 9326 6303.

Yours sincerely

Margaret Pyrchla

Regulatory Compliance Manager