

**LEGISLATIVE COUNCIL**  
**Question on notice**

**Tuesday, 17 June 2014**

1275. Hon Robin Chapple to the Leader of the House representing the Minister for Energy.

(1) I refer to the fact that the Western Power Technical Rules (current as of 23 December 2011) are defined to apply to all users of the network. Western Power currently discovered that direct current injection into the grid may cause harm to the grid (Western Power DC Injection Stakeholder Update, document reference number DM#11927053). Western Power decided that this direct current injection issue only applies to photovoltaic (PV) systems of 30 kVA to 150 kVA. According to the Western Power Technical Rules, zero direct current injection applies to all generators and loads on the grid, and I ask:

- (a) why is Western Power only focusing on a renewable energy generators (here PV) between 30 kVA to 150 kVA;
- (b) why is Western Power not including PV systems above 150 kVA;
- (c) why is Western Power not including PV system below 30 kVA; and
- (d) why is Western Power not including all other load appliances that interact with the grid?

(2) Western Power stated in this DC Injection Stakeholder Update (document reference number DM#11927053) that it is researching about this direct current injection issue, and I ask:

- (a) how is Western Power conducting this research;
- (b) is Western Power consulting with the renewable energy industry;
- (c) if yes to (2)(b), who are they consulting with;
- (d) if no to (2)(b), can the renewable energy industry join Western Power in this research and support the decision with technically available product solutions;
- (e) if no to (2)(d), why not; and
- (f) is Western Power's research a transparent process, and how can the renewable energy industry contribute to this research?

**Answer**

(1)(a)-(c) All generators are required to comply with the Technical Rules. However, there is an exception for some DC injection for generators that comply with Australian Standard 4777-2005. Western Power is reviewing the risks and benefits of the existing Rules.

(1)(d) Western Power will be considering the impact of electrical appliances and devices that generate a small DC current as part of its review.

(2)(a)-(f) Western Power has considered the DC injection requirements of national and international electricity networks as part of its review. When Western Power has completed its review it will undertake further engagement with the renewable energy industry as part of developing an effective process for managing this issue. The Economic Regulation Authority makes the final decision on any proposed changes to the technical rules.

*M. Haba*