

COOL POWERS RESPONSE:

Dear Paul,

My comments on the above are as follows;

1. The reference to 40% of the total installed micro generation capacity in paragraph 2.1 needs to be simplified and clarified. If this is to be implemented it should be described as along the follow lines;
 - a. To enable ESNB look into the effects of voltage rises across the network for both micro generation and for larger generators it is proposed to limit the total installed capacity of grid-connected micro-generators to the equivalent of 40% of the capacity of the low-voltage (10/20kV) sub-stations serving each individual distribution grid.
 - b. ESNB will report to CER on their findings in this regard twelve months after the introduction of these arrangements to enable CER to review this limit.
 - c. To enable this to operate ESNB will make the capacity of low-voltage sub-stations serving each individual distribution grid and the total installed capacity of all micro-generators connected to each individual grid available to all interested parties within two weeks of request.
 - d. The limit will be imposed on the basis of the capacity of installed and commissioned micro-generators only. This is to prevent the possibility of restrictions being applied on the basis of consents that have not been acted upon.
2. The reference to a register of approved micro-generation units in paragraph 2.3.1 is partly addressed in para 1d above. This register will need to be continually updated to take account of lapsed approvals and decommissioned micro-generators. This would be avoided if the register is limited to commissioned and operating micro-generators only – though I can see difficulties in determining which micro-generators are operating and which are not.
3. It is my belief that the cost to all of the administrative burdens and the like arising from the 40% will be far greater than the cost to all of the impact of unrestricted micro-generator capacity on network voltages. I suggest that this limit should be introduced only if and when it is shown to be necessary by ESNB to the satisfaction of the CER and not beforehand. I suggest that the limit be waived for a trial period of two years (say) to enable ESNB to asses this issue on the basis of practical experience.
4. The reference to a register of approved types of micro-generators in paragraph 2.3.1 raises the question of approval in general. I have just completed an investigation of the merits of purchasing one of the Windsave wind turbine micro-generator units currently in sale in the B&Q outlet in Tallaght. I was advised by B&Q that an independent consultant would be employed by them to advise me if my home was suitable for this unit. On investigation it transpired that this consultant was commissioned to advise only on health and safety related matters which, in my view, represent only part of the issue of suitability. On yet further investigation I found that these units are not suitable on commercial or economical grounds for use in most urban areas because of their low useful output and short lifespan. Apparently B&Q did not consider this to be important.

CER will have to be very careful indeed about approving any particular micro-generator types to avoid becoming embroiled in disputes about the overall “suitability” of such units. Indeed, I believe that CER has an obligation to protect the general public from the endeavours of manufacturer’s and salesmen whose primary interest is in selling micro-generators regardless of their overall “suitability” for the job. If nothing else CER should issue “health warnings” for these devices stating that approval by CER does not imply that the unit in question is suitable on any grounds other than its potential impact on network voltage. They should recommend that all other issues (wind regimes, solar radiation, match between power output and demand and useful lifespan) should be very carefully considered before purchase.

5. I have concerns that Commission’s view about metering will have the effect of delaying the introduction of net or smart metering. The proposal that there should be no compensation for exported units will have a huge effect on the economics of most micro-generation installations. The overwhelming case for permitting grid-connection for micro-generators is to eliminate the use of costly and inefficient off-grid accumulators by allowing operators to use the grid as a much more cost effective and efficient alternative accumulator. This case collapses completely if there is no compensation for exported units. It is like replacing conventional accumulators (batteries) that have an operating efficiency in the region of 50-60% with accumulators that have an efficiency of 0%. It is vital to the development of micro-generation in Ireland that proper use is made of the grid to enable surplus output to be fully accounted for. My suggestion in this regard is that licensed suppliers, such as Cool Power Limited, should have the option to purchase surplus power from micro-generators in return for appropriate compensation or payment. This will require the use of smart metering and remote access such as that currently in use in the Green Building. It is essential that the suppliers concerned are given a facility to read such meters directly using GSM technology or SA.
6. My final concern arises in connection with the reference to micro-generators being installed by “authorised installers”. This is discussed in section 2.3.3 which refers to an “authorized installer” being registered with “an authorized body approved by the Commission” and complying with ECTI regulations. This clearly needs to be addressed as a matter of urgency as full clarification is required on this front before any installations can proceed. It is, for example, critically important for my company, Cool Power Limited, to establish precisely what is needed for us to become “authorized installers”.

I hope this is a help.

Best wishes.

Tim Cooper

Cool Power Ltd

Ireland’s only authorized operator of grid-connected solar powered electricity generators

Address; Cambridge Mews, Sandycove Avenue East, Dun Laoire, Ireland

Landline (Temporary): 01 2808647 Mobile phone: 087 2459964

E-mail: Woodstock@tinnet.ie Webpage: <http://www.tim-cooper.com>