

# CONNAUGHT ALTERNATIVE TECHNOLOGY

*"Naturally Better Energy Solutions"*

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Thursday, 02 November 2006

Commission For Energy Regulation  
Plaza House,  
Belgard Road,  
Tallaght,  
Dublin 24

Dear Mr. Paul Hogan,

I enclose herewith my comments relating to the issues and proposals raised in the Consultation Paper "Arrangements for Micro Generation" "CER/06/190".

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'P. Ballard', enclosed in a white rectangular box.

Paul J Ballard  
Proprietor: Connaught Alternative Technology  
RBN: 300293

## Introduction

You make a clear statement that “The Commission for Energy Regulation (the Commission) has a duty under the Electricity Regulation Act, 1999 to promote the use of renewable, sustainable or alternative forms of energy. In addition, the Commission has a duty to encourage the efficient use and production of electricity. The promotion of the use of micro generation, as detailed in this paper, can help to achieve these goals.” You go on to speculate that “Government policy in relation to renewable plant combined with technology advances and increased awareness of environmental issues will undoubtedly lead to greater penetration of smaller scale generation in the coming years. This will include more installations of micro generation installed in domestic homes and small businesses as customers seek ways to reduce their energy bills in a climate of increasing energy costs.” It is unfortunate then that the “Arrangements for Micro Generation” fall short of actually doing very much to help the cause of micro generation in Ireland. There is little if anything in this paper that actually promotes the use of micro-generation it appears merely to facilitate it.

### 2.1 Technical Considerations

*The Commission seeks comments on ESNB proposal to set initial penetration limits of 40% of the total installed micro generation capacity on the existing low voltage substation.*

I see no problem with setting such a limit on the existing low voltage substation where the capacity of that substation is such that it will allow attachment of at least one and preferably more than one micro-generation scheme. There must be a safety net for the micro-generators who are in remote locations but with good wind or water resource and who would be capable of supplying, at times, perhaps two or three times their own consumption level. If they happen to share a substation with only one or two other people then the 40% limit may, in such circumstances, bar them from grid connection.

The ESNB must also maintain a publicly available database on the Internet from which potential micro-generators, or their system supplier, can readily see whether or not the 40% limit will be breached by a new addition. This will also provide transparency in the implementation of the requirement.

### 2.2 Notifying The Network Operator

*The Commission is of the view that the approach adopted for the installation of micro generation units should ensure timely information is provided to ESNB minimising the risk that noncompliant units will be installed and aiding management of the networks in a climate of increasing micro generation.*

*The Commission requests comments on the “inform, consent and fit” approach from interested parties.*

I see no objection to the intended approach, indeed, there are a number of good reasons why it should be adopted and these include providing the information required by the Network Operator to produce reliable Operational Research.

#### 2.3.1 Informing ESNB of Installation

*The Commission requests comments on ESNB’s proposed approach to the implementation of the inform, consent and fit approach in Ireland. In addition, comments are requested regarding the Commission’s alternative approach as outlined above and, in particular, whether a register of approved micro generation units should be maintained and if so who is the appropriate body to do this.*

The consent process must be both transparent and predictable and cannot be “policed” in any way by the DSO other than through establishing the criteria for consent. It should be possible for those engaged in the design & supply of micro-generation systems to say with certainty that a specific micro-generator system can be grid-connected. For these reasons I would agree with the Commission’s alternative approach but would recommend that in the long-term the National Standards Authority of Ireland be involved in agreeing an Irish Mark of Micro-Generation Conformity which would guarantee acceptance by ESBN and place the responsibility for register maintenance with the NSAI.

If, in the interests of expediency in the short-term, the register is maintained by ESBN then the register must be publicly available via the Internet and must show **all** units submitted for type approval and for those for which type approval was not granted they must precisely specify the failure conditions resulting in refusal.

### **2.3.3. Enforcement and Practical Implications**

*The Commission requests comments on the proposed consenting and fit processes outlined above. Comments are also sought on the area of enforcement and practical considerations in relation to informing interested parties of the need to inform ESBN of the intended installation of micro generation.*

No comments.

### **2.3.6 Licensing & Levy Order**

*The Commission seeks comments on the principle and level of the proposed application fees and the exemption from payments in respect of the Levy Order for micro generators.*

The principle and level of the proposed application fee appear to be reasonable & justifiable. The exemption from payments in respect of the Levy Order is also entirely correct.

### **3.5 Commission’s View**

*The Commission requests comments on the payment options for exported energy and metering options outlined above and any other proposals on payments.*

This is where we have the biggest problem! It is simply not going to be acceptable to individuals who are making an investment in micro-generation that they are not compensated in any way for spillage. In my experience these people can be equally divided between those that are seeking to reduce their energy costs and those seeking to reduce their carbon emissions. By their very nature, micro-generation will utilise renewable energy sources thus helping the nation to achieve its carbon targets in due course. Furthermore, they will reduce the dependency on hydrocarbon energy sources that will become more and more expensive (not to mention scarce) in the next 10 years. Where is the recognition and reward for this? There is no grant aid available for micro-generation as with the Greener Homes scheme and these people are making investments of many thousands of euro with payback periods of 10 to 20 years where is the recognition and reward for this?

I understand the difficulties that you have postulated and appreciate that the timing is probably not good with respect to the potential introduction of “Smart Meters” BUT the do nothing option is unacceptable. You make the point that electricity theft is hard to detect with meters running backwards and potentially indicating a net export from micro-generation and thus you discount options on that basis. It is, however, acceptable for “the State” to steal electricity from micro-generation? This is how my customers will view it.

If, as you say, initial take up will be slow– a reason for justifying the 40% cap on substations – then the potential for “over compensation” is small. The simplest method before Smart Meters are introduced is to allow net metering in some form and to compensate spillage at the same price as

consumption – after all it costs ESBN very little in distribution cost before they receive payment for its consumption (most spillage will be used in a very local area).

If you compensate micro-generators at less than their consumption cost then there is little incentive to reduce consumption on their part and increase their commitment to surplus generation thus losing an opportunity to displace future costs in Power Generation. It is estimated that micro-generation may entirely displace the need for additional new National Generation facilities and may even facilitate the closure of some of the older less efficient power stations.

If net metering is not introduced then micro-generators should be given the option to have a Smart Meter immediately. This can all be couched in suitable terms and conditions so that any national standard Smart Meter process isn't compromised by the early use of a meter by micro-generators. It would also provide a test bed for the inevitable issues that ESB would face in changing their business processes and embedding new ways of working. The current cost of a Smart Meter is between €60 & €70 more than a standard credit meter. That would seem to be a small price to pay by ESBN for the opportunity to gain early insight into what they can do!