

14 July, 2005

Bob Hanna
Chief Technical Advisor
Department of Communications, Marine and Natural Resources

Dear Mr Hanna,

Energy Research, Development and Demonstration – Consultation Paper

1. Introduction

ESB National Grid (ESBNG), as Transmission System Operator for Ireland is pleased to have the opportunity to respond to the Department's Consultation Paper on Energy Research, Development and Demonstration (R, D & D) dated April 2005.

ESB National Grid has been supporting research and development in power systems for many years. ESBNG is a member of the Electricity Research Centre in University College Dublin and also supports relevant research in other institutions. We understand that the ERC is making a detailed submission in response to the Consultation Paper. ESBNG broadly supports the overall approach of the ERC in this matter.

As is evidenced by our support for the ERC and for research in other institutions, ESBNG is keenly aware of the importance of a thriving R & D capability in Ireland in the field of energy and especially electricity. A thriving R D & D capability in the energy sector will not only help Ireland and the rest of the world achieve goals in the development of energy conversion, distribution and use but will also contribute to the enhancement of the country's scientific and technical capability, which are essential to sustained economic progress.

2. Building capacity and the need for long-term commitment to R & D

Ireland, along with the rest of the world, faces challenges in the supply, distribution and use of energy in the context of sustainable economic progress. Many of the challenges are unique to Ireland. Given the importance of research in achieving national objectives in the energy field, the building and maintaining of effective research capability in Ireland is essential. To build and maintain a thriving and effective research community will require commitments to long-term investment in research and oversight structures to ensure that the investment in research delivers long-term value.

3. EU Perspective

ESB National Grid is aware of the need to leverage the research and development capabilities across the European Union to achieve the research goals of the Union, especially where these are of particular relevance to Ireland. This will require a strong research and development

capability in Ireland together with effective participation by Ireland in the governing structures of EU research initiatives. In this context, the European Commission has recently invited expressions of interest in participating in an advisory council for a Technology Platform dealing with Smart Electricity Networks which it is proposed to establish under the 7th Framework Programme. ESBNG has submitted an expression of interest directly and also in conjunction with the ERC and with ETSO, the association of European Transmission System Operators.

4. International Collaboration

ESBNG has been a long-time participant in international collaborative activities and exchanges of technical information. We therefore fully support the need for international collaboration in research and development.

Effective Irish involvement in international collaboration in R & D requires that firstly Ireland has the capacity to participate effectively in international research initiatives. This further emphasises the need to build and maintain research capability.

The second requirement for effective Irish involvement is the need for involvement in the various international agencies that establish international R & D programmes. Effective Irish involvement in advisory, oversight and other bodies will require that the Irish contribution to international R & D is both effective and is seen to be effective

Notwithstanding the value of participation in international research, Ireland does face unique challenges and cannot depend on international efforts to achieve research and development goals.

5. Institutional and Governance Options

The Department has suggested three options for co-ordination of R & D effort. ESB National Grid supports the criteria for a co-ordinating body set out in paragraph 3.2 and supports the Department's preferred option of an energy research co-ordination council, served by a small secretariat (Option 2).

It will be important to ensure that the co-ordinating body's membership will be such that it

1. can identify the research, development and demonstration needs that are critical for Ireland;
2. will have a clear understanding of the existing and potential future capacity for useful research, development and demonstration and
3. will be aware of relevant international research, development and demonstration activities.

ESBNG, as Transmission System Operator, has a key role in identifying research needs and in assessing the impact or potential value of research initiatives in the field of electrical energy. Accordingly, we would welcome any opportunity to participate in an energy research co-ordination council.

6. All-Island Perspective

The field of energy has always been at the forefront of north-south co-operation in Ireland, and this is reflected in existing research activities, especially in term of co-operation between academic institutions north and south. The Transmission System Operators recognise the value of a joint approach to identifying appropriate R and D goals and stimulating a co-operative approach to identifying appropriate institutions or agencies to carry out the R and D

work. We would envisage that this co-operation would continue through the co-ordinating body mentioned above either by giving the body an all-island scope, or by ensuring regular co-ordination and exchanges of information with the appropriate bodies and persons in Northern Ireland.

7. Funding

As mentioned above, ESB National Grid contributes to the support of the research and development activities of the ERC and other institutions. However, it must be recognised that as a regulated entity its ability to provide financial support is constrained. It is noted that the Commission for Energy Regulation has a duty to encourage research and development in areas related to renewable, sustainable and alternative forms of energy and energy efficiency. It is obviously a matter for the Commission how it discharges this duty, and it is noted that the Commission is also a member of the ERC. The Commission may choose to require the allocation by ESBNG (and/or other licensed and regulated bodies) of an appropriate level of funding to R & D.

8. IEA Observations

ESBNG endorses the IEA Review recommendations with regard to energy R & D as reported in Appendix 1 of the Consultation Paper. However, we believe that there is significant scope for demonstration projects in the energy sector and not just in the transport sector. The implementation of the IEA recommendations can best be achieved through the establishment of an effective energy research co-ordination council, as proposed in the Consultation Paper.

9. Conclusion

ESB National Grid is pleased to offer the comments above in response to the Department's Consultation Paper. We are available for any further discussion with the Department that might be helpful, and we would be pleased to participate in a public seminar on the topic, as suggested in Section 10 of the Consultation Paper.

We suggest that you contact Mr. Paul Smith, Telephone 01-7026492, email paul.smith@ngrid.ie for any further discussion with regard to energy research, development and demonstration policy.

Yours sincerely,

Paul Smith
Power System Development and Maintenance
ESB National Grid