RESPONSE BY AIRTRICITY LTD TO GREEN PAPER
"TOWARDS A SUSTAINABLE ENERGY FUTURE FOR IRELAND"
ISSUED ON 1st OCTOBER 2006

Airtricity welcomes the publication of this Green Paper as we see this as the first step in the critically important process of formulating an Energy Policy for Ireland.

Many of the issues that Airtricity has faced, along with many other investors in Irish energy over the past 10 years, can be attributable to the conflicting series of actions undertaken by the State and State-sponsored bodies with regard to the liberalisation of the electricity market and the promotion of renewable energy. The perception has been that the only policy objective has been to try to comply with European Directives. As a result individual State organisations have applied their own means of meeting this objective and this has resulted in conflict between State organisations and creation of unnecessary regulatory confusion in the investment and financial community. A clear example of this was the imposition of a moratorium on new wind connection offers by the Commission for Energy Regulation on 3rd December 2003 upon on the request by ESB National Grid. This was literally days after the Minister for Communications, Marine and Natural Resources had made an announcement regarding the importance of renewable energy for Ireland.

As a result opportunities for investment and participation by new investors in Irish energy have been lost.

Airtricity would like to specifically address the issues raised by the Green Paper as well as make a number of other points which pertain to Irish Energy Policy.

Questions for the Consultation

3.2.1 In addition to enhancing the contribution of renewable energy, what actions could be taken to further diversify the fuel mix for electricity generation and reduce dependence on oil and gas.

Ireland lacks the necessary interconnection to be able to fully exploit its own renewable energy resources and take advantage of renewable resources available in neighbouring countries. Airtricity contends that the construction of a gird of offshore turbines in the Irish Sea with interconnection of such turbines to both British and Irish power systems would enable the exploitation of offshore renewable electricity, whilst at the same time providing additional interconnection capacity between the two countries. A further benefit of such an arrangement would be the facilitation of additional onshore generation in Ireland and access to renewable sources of electricity in GB.

In this context Airtricity has proposed the construction of a Supergrid which facilities the construction of large scale offshore windfarms and could be applied in the Irish Sea.

In terms of interconnection, the Green Paper proposes the construction of one 500MW interconnector between Ireland and Wales. Airtricity contends the renewables penetration target should be set at 50% by 2020 and that measures that need to be taken to ensure the implementation of this target should then be reviewed. This would include the degree of interconnection that is required with neighbouring countries and the type of other generation plan (e.g. how much flexible open cycle generation plant) is required to enable this penetration level to be delivered.

The level and type of investment in the grid will be critical to ensuring that targets for renewables can be achieved.

Ireland has enormous potential for growing biomass material which could be used for meeting our energy requirements. The current barriers which prevent biomass playing its full part in renewable energy should be reviewed and measures taken to counteract them.

3.2.2 How can generation and transmission adequacy in the electricity sector be improved?

There are 5 key issues which deter investment in generation capacity in Ireland:-

1. Giving investors in generation plant a reasonable expectation of adequate returns on their investment. Current market structures and regulatory practices have failed to deliver this assurance, with the result that PSO backed capacity contracts have been the only mechanism by which non-incumbents have had the confidence to invest in Irish generation plant.

2. The absence of an effective support mechanism for renewables. It has taken 3 years between the consultation process on a new support mechanisms and the commencement of the REFIT support scheme. Such delays mean that developers lose confidence in developing a pipeline of projects as they incur costs in developing projects, only to have them on hold for an extended period.

3. The process and costs of obtaining a grid connection. The increasing delays in obtaining a renewable grid offer during the past 3 years are very significant, with some recent Gate 1 offers resulting in non-firm connections to the grid in 2-3 years time and firm connections to the grid unavailable until 2011 in many cases. The process of obtaining a grid offer must be speeded up for renewable generation projects. Historically grid offers were issued in 70 days. This has now extended to several years following the imposition of the Group Processing Scheme for renewable generator applications. In addition to the

timescale increase, the ability of fossil fuelled generators to connect to the grid ahead of renewable plant now exists and is clearly discriminatory. Grid connections in Ireland are also expensive, with lack of full contestability at distribution level still an issue, in keeping competitive tension on connection costs.

4. The dominance of the ESB in terms of its generation portfolio is still a major threat to small generators. On several occasions, Airtricity has seen data which would led it to believe that ESB is operating its plant on a portfolio basis and maximising its revenue even when providing a regulated market imbalance service. There has been a reluctance to provide data to the market, with the result that there is an information asymmetry between information available ESB companies and non-ESB market participants. Attempts to persuade the Regulatory Authorities to impose additional bidding rules on ESB to deal with their dominance have met with resistance and have not been implemented. The perception is therefore that, whilst dominance is recognised as an issue, regulatory authorities In Ireland, do not implement measures which would be standard practice in other jurisdictions.

5. Not sufficient recognition is taken of the importance of providing an appropriate regulatory climate to attract international investment. For example, the TSO has suggested on a number of occasions that curtailment of wind generation may be required by the system, without providing any certainty with regard to the degree of such curtailment and the circumstances under which it could occur. In addition the CER has not clarified as to the compensation arrangements that would apply to any such curtailments. As a result finance providers model for the worst case scenario and this hinders the availability of finance for generation investment.

Airtricity agrees that transmission adequacy is a further issue in the Irish market. Whilst for some time, there has been the recognition that further interconnection with Northern Ireland is desirable and interconnection with GB market would improve security of supply, there has been no proactive moves taken by the TSO to ensure that the required interconnection is put in place.

Minister Ahern announced on 24th August 2004 that he would be pressing the CER to run a competition to build the East-West interconnector on a public-private partnership. On 3rd October 2006, the CER published a letter from DCMNR stating that a competition for the design of an interconnector should be commenced immediately, with the interconnector in due course being owned by EirGrid.

Transmission adequacy in the electricity sector could be significantly improved if, once an inadequacy has been identified, the decision-making and implementation process is speeded up so that we do not face a 10 year delay between identification of an inadequacy and the commissioning of transmission lines to deal with the issue.

[3.2.3 No comment]

3.2.4 What are the challenges to greater participation by new players in the development and operation of power plants and how should they be addressed?

All the points set out in 3.2.2 are relevant in this regard. However in particular, the energy policy paper needs to address:-

The government's vision for an optimum electricity generation mix to meet environmental, sustainability and economic, security of supply targets. This is one of the key and high priority challenges that must be addressed as a matter of urgency. It will need to address both generation technologies, fuels and type of generation (baseload, mid-merit, peaking etc). Failure to optimally select a flexible generating plant portfolio will be disastrous as plant cannot generally be retrofitted or adapted once installed. If current trends continue and new fossil fuelled plant is selected purely on the basis of lowest short term generation cot, without considering other technical factors, then Ireland will have created a suboptimal portfolio of generating plant. This will be irreversible in the short to medium term.

The government then needs to define the mechanisms which will be used to deliver the targets, goals and objectives set out in the energy policy.

The government needs to demonstrate how it will ensure that all State bodies and organisations will be required to adhere to these objectives and facilitate in the delivery of these objectives.

The government needs to demonstrate how it will deal with the dominance of the ESB in the Irish market. Under the current market rules, new players in this market face a huge market/regulatory imbalance. The current rules favour ESB and challenges to rebalance require new players to commit enormous resources, with little evidence of success.

Under the SEM, the same issues apply. Whilst the current design of the market means that there should be a marked improvement in the availability and transparency of data, the issue is that there is no evidence that the Regulatory Authorities (RAs) are willing to proactively pursue practices to ensure that any attempt by ESB to exert its generation dominance will be firmly and quickly dealt with in a manner which gives certainty to financial institutions. This would be required to remove the spectre of ESB dominance from SEM and convince investors/finance providers that there is a level playing field.

Given this lack of confidence in the ability of the RAs to take effective action in the SEM, Airtricity contends that the break-up of the ESB generation portfolio, along the lines suggested in the Deloitte & Touche report would be the only way to ensure that dominance is effectively dealt with.

In the interim, the ESB should be prevented from constructing any further generation plant in Ireland. To do so, re-emphasises to potential new players that ESB will be permitted to continue its dominance and that new players are not welcome in this market.

With specific respect to new renewable generation, whilst such generation is entitled to priority dispatch, under the proposed rules of SEM, this plant will only be entitled to priority dispatch in the event it is a price taker. Price taking renewable plant will be subject to the bidding activities of dominant generators. It is therefore critical to ensure that the bidding of such dominant generators does not adversely disadvantage renewable generation.

3.2.5 How, and over what timeframe, should Ireland pursue greater electricity interconnection with Europe?

Airtricity contends that greater electricity interconnection with Europe has the following advantages:-

1. It improves security of supply by enabling Irish electricity customers to access a large pool of electricity generated using a wider source of fuels than is possible in Ireland.

2. Provided that the electricity interconnectors are operated to highest standards, it reduces the chances of Irish customers losing supply as a result of plant failure in a relatively isolated island generation system.

3. Economies of scale of larger generation plant, than can be prudently operated in Ireland, or obtained from larger electricity markets.

4. The potential limitations on the quantity of variable output renewable generation can be fully removed, if there is access to transport this electricity to larger markets at times of high output. This enables the full potential of indigenous renewable resources to be exploited to the benefit of Ireland.

5. The combination of interconnection, with large offshore windfarms enables many of the benefits set out above to be captured and in addition enable the offshore wind generation potential to be realised.

Airtricity has been in discussions with several governments in Europe and with the European Commission to explain the benefits of its offshore wind development proposal, called Supergrid. It has been warmly received.

Airtricity would propose that the Irish government in conjunction with neighbouring jurisdictions, establish an expert working group comprising industry leaders on this subject and relevant competent authorities to assess the potential of greater interconnection and report back to the respective governments with firm proposals for its implementation.

Provided such an export working group was established quickly and given tight deadlines for delivery of its report, from discussions with other industry experts in this field, Airtricity believes that a “modest” Irish Sea “spine” Supergrid could be commissioned by 2012, with a more comprehensive SuperGrid to continental Europe generating by 2015.

3.2.6 What measures could be taken to encourage the exploitation and production of indigenous energy resources?

1. Other than the Corrib gas field, most indigenous energy resources tend to be relatively small-scale and dispersed across the country.
   In terms of electricity generation, the electricity grid was designed to enable a small number of large generation stations, located around the coast close to fuel import facilities, to transport energy away from these generation centres towards nodal points across the country, from where it is distributed at lower voltages to customers. Fuller exploitation of smaller scale dispersed generation will require the network to be designed, modified and operated in a different manner. The government should ensure that the necessary technical studies are undertaken to enable the full exploitation of indigenous renewable energy resources (e.g. offshore and onshore wind, biomass etc) and not to have the use of these resources for electricity generation artificially constrained to comply with the current modus operandi.

   In addition, incentives should be offered to generators to embed their generation facilities close to demand nodes and therefore avoid the need for further investment in extensive transmission networks. This would encourage the exploitation of local indigenous renewable energy resources.

2. The fuel component of indigenous natural resources (e.g. wind, water, biomass) tends to be free or low cost in comparison to the cost of fuel for fossil fuel generation. Conversely the capital required per MW of installed capacity, to convert such resources into electricity tends to be higher than for a fossil fuel generation plant. This means that existing electricity markets which are designed to provide short term price signals related to gas or coal prices are inappropriate for such indigenous renewable generation. Whilst the volatility of such markets enables adjustment and substitution of fossil fuel quantities and mix, such price signals threaten the ability of indigenous renewable generators to generate sufficient revenue to service the relatively high debt service requirements of their finance providers. The recent REFIT scheme cleverly provided a revenue “floor” (albeit at quite a low level) which definitely provided comfort to the financiers of such generation projects. A similar type of “floor” pricing is a pre-requisite in any replacement scheme to REFIT, which would assist in the exploitation of indigenous energy sources. Such floor needs to be reviewed annually, not with CPI, but with the increase in costs of a developer. Recently

wind turbine prices and grid connection costs have escalated significantly faster than the rate of inflation.

3. Whilst in designing a market, many different factors are taken into account, it is likely that unintended or perverse factors may militate against exploitation of renewable indigenous energy sources. Airtricity would therefore contend that an obligation be placed on suppliers to purchase a percentage of their sales from indigenous renewable electricity generation. This will create demand pull for such generation and ensure that where the market does not enable such generation to be delivered, demand from suppliers will. A system of penalties for failure to meet such obligation would be required to generate the incentive for compliance and provide financial headroom for investment in such facilities. It could be similar to the UK ROCs scheme, without necessarily being fully fungible with such market.

4. The indigenous renewable energy sources exploited to date have largely been centred on onshore wind. It is clear that over the period of this Energy Policy offshore wind, biomass and tidal could make a significant contribution. Solar and wave technologies perhaps face a greater hurdle.

[3.2.7 – no comment]

3.2.8 Does the Green Paper generally set out the right policy directions for security of energy supply?

Whilst the Green Paper highlights some of the key issues to be tackled in terms of security of energy supply, it underestimates the value and contribution that can be provided by renewable generation.

A 30% renewables target by 2020 for electricity generation has been caveated as being “subject to technical considerations”. There are three issues with this statement:-

1. The figure for renewables penetration should be set as an obligation and not a target. It is too easy to explain away the missing of a target. An obligation upon all States bodies to meet a figure by a certain date is much more compelling and can be used as a lever to force recalcitrant States bodies to comply with measures to ensure the obligation is met, with the threat of penalties.

2. The figure of 30% penetration by renewables is a poor reflection of the ambition of the Green Paper. Whilst there is always the argument that targets or obligations should be set within limits to have a reasonable opportunity to meet them, it is clear that a non-stretching target can generate an incrementalist and minimalist approach to meeting such figure. If Ireland were merely to achieve a 30% renewables penetration figure by 2020, it would still be relying on 70% of its electricity to come from fossil fuel sources. Ireland will still be exposed to the vagaries of

fossil fuel pricing at a time of increasing scarcity and volatility of fossil fuels. Most other EU states **currently** have an exposure to fossil fuels for electricity generation which is at or below the target that Ireland is setting itself for 2020. These other EU States all have measures in place to reduce their exposure to fossil fuel exposure further between now and 2020. Ireland must therefore adopt a figure of at minimum 50% of its electricity to come from renewable sources by 2020, to ensure it is not at a competitive disadvantage with its European competitors. In this context the Oireachtas Joint Committee on Communications, Marine and Natural Resources in its Seventh Report in its "Review of Energy" published in June 2006 proposed to "set a target of 21% by 2010 and at least 50% by 2050". This implies a figure in excess of 30% by 2020.

The adoption of a stretching 50% figure for renewables penetration would require a more radical "out of the box" review of how the generation plant mix, interconnection and daily system operation would have to change to facilitate reaching this figure and in the process opportunities for optimisation, cost reduction may be "forced" to be uncovered, something which would be missed in trying to reach a more modest target, taking a more incrementalist/minimalist approach.

3. The target of 30% by 2020 has been caveated as being "subject to technical considerations". No such caveat should be contained in the Energy Policy paper. Industry experts, including Garrad Hassan's report to the NI and RoI Regulators on the maximum penetration of wind in the Irish electricity system (published in 2003), point out that there are no technical limits to the penetration of wind in an electricity system. Payments should be made for all curtailment of wind generation. The present position where curtailment is mooted without any cap or compensation would make financing of wind projects impossible. If measures are adopted as set out in paragraph 1 above, curtailment should not be necessary. Compensation should apply until a saturation point in the future where supply exceeds demand and the capabilities of storage and export. The higher the penetration, the more changes needs to be made to the existing mode of system operation and the greater amount of more flexible generation plant is required by the system. The insertion of technical caveats opens the potential for system operators to uncover reasons why such renewable penetration figures cannot be attained. A firm obligation forces technical staff to come up with solutions to such problems, rather than use such problems as barriers and obstacles to reaching penetration figures.

3.2.9 **What can be done to improve the pace and range of development of renewable energy resources for electricity generation on a sustainable basis?**

There are five areas where steps could be taken by the government to address the issues raised in this question.

1. Planning – currently there are significant differences in the criteria used by planning authorities across the country to assess planning applications for development of renewable energy resources for electricity. Whilst the recent guidelines issued by the Dept of Environment, Heritage and Local Government assist in this regard, positive statements issued in the Government's Energy Policy Paper can, critically input to the local planning process through County Development Plans. In this regard, the UK government recently produced in its Review of Energy Policy; "A Statement of Need" in respect of renewable generation. A similar approach might be warranted.

   In addition, the UK government has proposed that where a renewable generation project would require planning permission for both the generation facilities and an export overhead line, the planning process may deal with both applications at the same time to avoid undue delay at a later stage. The developer in Ireland should have the option of instructing the ESB to parallel their grid application for lines, at the same time as that for the windfarm.

   Although planning permissions can be granted for period of longer than 5 years, that is unusual and most wind farms have 5 year planning permissions. An application for extension can only be made before expiry of the planning permission and if "substantial works" have been carried out (Sect 42 Planning and Development Act 2000). The issue arisies in the meaning and understanding of substantial works and each County Council has its own definition e.g. all on site civil works, roads only, roads and bases, turbines on order etc. In any instance a very significant outlay by a developer is required just to keep the permission alive.

   Many projects are facing expiry of their planning permissions mainly caused by the long delays in obtaining grid connection offers. Even those projects which have grid connection offers face long delays (sometimes years) in connecting during which their planning permissions may expire. Many banks are reluctant to lend monies to enable civil works to be carried out because there is a risk that the project will not proceed if the grid connection itself fails to obtain planning permission/wayleaves and thus it is a vicious circle.

   Ultimately what is required is a change in law to enable planning permissions to be extended pending grid connection offers being made. In the interim, it is imperative for the Minister to issue specific direction to the local authorities of what should be accepted to meet the definition of substantial works to enable the period of planning permissions to be extended.

2. Grid Infrastructure Development – As can be evidenced by the latest EirGrid Forecast Statement (2006-2012), the available capacity for new generation to connect to the Irish grid is limited, especially when compared to the demand for generation nodes on the system. The situation is reflective of an underinvestment in transmission infrastructure and the current approvals process for investment. Only after generator applications are received, processed, have offers issued and executed, will the required deep reinforcement works be considered. Very often Airtricity has generating plant that can be constructed in one year but the required grid upgrades would take 5-8 years to complete. This is a reactive grid connection approach.

   A more proactive approach would be to identify in advance the likely regions where there are renewable resources which will be developed for electricity generation and proactively invest in/modify the grid in those regions to be able to offer connection capacity promptly upon such applications, without waiting for a connection queue to emerge. This approach is currently being actively considered by the regulatory/governmental authorities in GB.

3. The establishment of a renewables support scheme, the purpose of which would be to enables renewable generation to have a “floor price” to assist in the financing of the relatively high capital costs of renewable generation and remove the uncertainty in revenues associated with volatile energy markets.

   To date such schemes have been piecemeal and relatively short-term in nature. A more coherent long term approach is required to persuade developers to invest in the upfront cost of preparing projects for the planning and grid connection application processes.

4. The application of realistically higher floor prices to encourage the development of less commercial renewable sources of energy. In this regard the failure of the AER VI scheme to effectively promote offshore wind development and the omission of offshore wind development from the REFIT scheme should be noted. This is a missed opportunity for Ireland to develop a core competency in an area, where we have a natural resource advantage. This opportunity is now being exploited by the UK, Germany and the Netherlands.

5. An obligation on all relevant authorities, including regulators, grid owners and grid operators to ensure that all measures proposed by such bodies are tested against the criteria of whether they promote the development of renewable energy resources for electricity generation and where there is a conflict against other priorities, that there is a mechanism for resolution of such conflict, whilst still enabling renewable penetration obligations/targets/figures to be achieved.

6. Please see our previous comments in question 3.2.4 with regard to the vulnerability of renewable generation, as a price-taker, in a generation

market dominated by the ESB. Unless such dominance is dealt with effectively, this will prove to be an obstacle in the development of renewable energy resources.

3.2.10 In addition to electricity generation, what actions should be taken to develop renewable energy usage in the transport and heat sectors?

In respect of transport, an obligation should be placed on transport fleets which operate low mileages in urban centres to utilise electricity powered vehicles, with the electricity used purchased from suppliers which source the bulk of their electricity from renewable generation sources.

In addition, private motorists should be encouraged when purchasing replacement vehicles to purchase those which are either powered exclusively by electricity or from a hybrid electricity/fossil fuel mechanism. VRT, road vehicle tax and excise duty on fossil fuels are mechanisms by which such incentivisation could take place. This would be similar to the measures used to persuade motorists to move from leaded to unleaded petrol.

3.2.11 [no comment]

3.2.12 What additional policy measures should be introduced to significantly expand energy RTDI and what are the priority areas of research, which need to be targeted?

Traditionally energy research funds have been channelled through semi-state companies or through agencies such as SEI. Neither of these mechanisms is particularly effective. The key failing is that such State or semi-State enterprises are not exposed to the full commercial brunt of issues faced by fully independent enterprises. The result is that research tends to be rather theoretical with little applied research which could be of more immediate commercial value to Irish industry.

Whilst both applied and theoretical research is important, it is critical that industry, other than represented through semi-state companies, is represented in the decision-making process in terms of grant prioritisation. To date we have seen no forum for involving industry, other than through UCD's ERC. We would urge the government to set up a forum/mechanism to increase the involvement of industry in energy RTDI.

3.2.13 In light of the government's Science, Technology and Innovation Strategy, what needs to be done to radically expand national research capacity.

There are two key aspects to this question. The first is to introduce the electricity industry to undergraduates and get them excited about its

prospects. The electricity industry faces a worldwide image problem, as being a boring “utility” and as a result few of the more motivated and intellectually gifted undergraduates are attracted to it. The result in any companies is an aging workforce, with little new talent. Airtricity’s experience is that once staff join the renewables industry, most are extremely excited and motivated by it. So it is clearly an image problem amongst college undergraduates.

At post-graduate level, the key is to get a centre of excellence in electrical research where there is critical mass. If there is a dispersal of such experience and talent amongst different academic institutions, it will be more difficult to attract and retain the necessary high calibre research and academic staff.

[3.2.14 No comment]

3.2.15 Do we need to choose between mandatory targets and better incentives for renewable electricity and energy efficiency – or is a mix of both the best way forward?

There is clearly a role for greater energy efficiency. However energy efficiency by itself will have a very limited impact on decreasing Ireland’s current over-exposure to imported fossil fuels for electricity generation. Ireland is facing very significant risks to its national competitiveness from the unbalanced fuel mix used in electricity generation. This overly heavy orientation towards fossil fuels as part of the generation mix has to be addressed by the imposition of mandatory targets or obligations for generation of electricity from renewable sources and support mechanisms as described in earlier sections.

3.2.16 Does the Green Paper generally settle right policy directions for energy sustainability?

The Energy Policy developed from this Green Paper needs to have a harder edge in terms of the degree of renewables penetration to be delivered by 2020. The figure needs to be stated as an obligation, the penetration level should be at minimum 50% and the delivery/implementation mechanisms to ensure this figure is delivered need to be spelled out in detail. Paragraph 1.1.18 of the Green Paper sets out that some 14 State agencies are involved in the delivery of energy policy. However it is not clear that there is one agency responsible and accountable for delivering the renewable energy target and with the authority to ensure that it is delivered, including resolving any policy conflicts which could be used as obstacles in its delivery.

All these issues need to be resolved to ensure that the Energy Policy delivers. We cannot afford to be in a similar position in 2020 as we are today in respect of our generation fuel mix. Ireland is not in a sustainable position with regard to energy and the Energy Policy must ensure that Ireland does fully exploit its natural renewable energy

resources and remove itself from its exposure to imported fossil fuels with the attendant pricing volatility.

3.2.17 In the context of liberalisation of the Irish energy market, what further actions should be taken to develop more fully competitive electricity and gas markets and what specific barriers need to be overcome?

There is no competitive electricity market in Ireland. The ESB dominates the generation and supply sectors and is also the owner of the transmission and distribution grids. Some 10 years after the original EU Directive which attempted to ensure that former integrated utilities would be broken up to enable competition to take place in the electricity markets, Ireland's electricity market is still dominated by a vertically integrated utility which still dominates generation and supply markets.

Electricity Generation
Contrary to the public statements made after the recent discussions between CER and ESB regarding divestment of plant, Airtricity's analysis shows that the permission for ESB to build a new CCGT plant will actually increase ESB's share of the generation output on the island. ESB is being "required" to divest itself of the ownership of "must run" PSO supported peat-fired generation, from PSO supported emergency generation plant and from Great Island and Tarbert generation plant which are coming to the end of their useful lives. The combined output from all these plants is 2.4 TWh/annum. The new CCGT at Aghada is likely to produce in excess of 3.1 TWh/annum. ESB is therefore disposing of must run, emergency generation plants (which are leased) and unprofitable and inefficient mid 1960s vintage oil-fired plants and receiving permission to build a state of the art gas fired CCGT plant.

The government has lost the opportunity to utilise the natural attrition of the demise of Tarbert and Great Island generation plants to provide the "headroom" for new entrants to come into the Irish market and enable a "natural wastage" effect to occur and for ESB's share of the generation market to occur. Instead ESB has been permitted to increase its share of the generation output.

AIrtricity contends that the only mechanism to ensure that there is real competition in the Irish electricity market is to ensure that the recommendations of the Deloiite & Touche report are implemented in full and that ESB's generation portfolio is spilt into three parts with one part retained by the ESB and the two other portfolios auctioned to third parties. Without such a break-up, ESB will continue to dominate generation in Ireland, will act as a deterrent to new investors and will not enable generation competition to put cost pressure on ESB PG. The Deloitte & Touche report highlighted that ignoring fuel mix, current

higher costs and poor availability of the ESB has contributed to €100 million/anum higher electricity costs for the Irish consumer compared to comparable costs using international benchmarks.

Supply Competition

ESB PES currently supplies around 14TWh out of a total market of 24 TWh, a market share in the order of 58%. It is still by far the most dominant supplier in the market. This excludes the volumes sold by a wholly owned ESB subsidiary, ESBie. As a result ESB dominates the supply market. The result is that there is very limited competition in the supply market, other than in the large industrial sector.
Apart from being such a dominant force and using its economies of scale to the disadvantage of smaller market participants. ESB's dominance also means that other companies which wish to invest in generation plant in Ireland are fully exposed to the wholesale market pending the growth of a supply business. This deters new entrants to the generation market.

Airtricity would therefore agree with Deloitte and Touche that the only mechanism by which real competition can be introduced into the supply market in Ireland would be to split up ESB's supply business into three units (including ESBie) and for two of these units to be sold off to third parties to enable them to be used as a "hedge" for investment in generation assets.

Networks

ESB's ownership of the networks business has been used as a mechanism to frustrate the connection of new generation assets to the system, which would provide competition to ESB's generation assets. In particular this has taken the form of procrastination over the timeliness to provide connection offers for renewable generation projects (which commenced with ESB's insistence in December 2003 that no further renewable generation offers should be issued) combined with ESB's dogged resistance to the introduction of full contestability for all grid connections; the result of which has been to impose unreasonable delays and costs on renewable generation developers and the Irish consumer.

In addition, even with the establishment this year of EirGrid as an "independent TSO" it is clear that ESB's ownership and maintenance of the grid enables it to control the grid investment programme and its maintenance schedules, which again can be used to frustrate non-ESB generation plants from connecting to the grid and create short-term difficulties for non-ESB suppliers with the importation of power into the State by manipulating the capacity of interconnectors at short notice.

Airtricity strongly supports the view of Deloitte & Touche that to remove any perception of a conflict of interest between the owner of the grid and its generation and supply subsidiaries, there should be "complete

legal and ownership separation of ESB Networks (TAO, DAO, DSO) from the ESB Group and its retention in State ownership."

Regulatory Framework
There is no stakeholder involvement in the development of the Regulatory Framework in Ireland. As a result there is a perception that the Regulatory Authorities tend to be dominated by the most immediate issues which arise from government and from dealing with the dominant incumbent.

It is critical that the views of all market participants are fully taken into account, not only during formal consultations, but at a more strategic level. It is common in other jurisdictions that there is a Board or other formal process for the involvement of stakeholders to influence the strategic priorities of Regulatory Authorities.

Airtricity would urge the Energy Policy to review the role, functions and structure of the current regulatory authorities for effectiveness and inclusion in delivering vibrant, competitive and sustainable electricity and gas markets.

As part of this review, the Energy Policy should incorporate best practice from other jurisdictions including for example, Commission meetings be held in an open public forum, with minutes published and circulated.

3.2.18 What policy measures and targets should be introduced to reform institutional arrangements and market structure, particularly in the electricity and gas sectors?

Airtricity believes that there are three areas to tackle here;

1. Reform of Regulatory structure. As set out in 3.2.17, Airtricity would propose that a stakeholder Board should be instituted to enable market participants to have a real influence in the development of the effectiveness of the Regulator.
2. We would agree with Deloitte & Touche's recommendation that "we recommend that a single organisation should be given explicit remit and accountability for developing and sponsoring renewable generation issues". Such a body would be charged with resolving conflicts with other State bodies in resolving policy conflicts which could "de-rail" the achieving renewable energy penetration levels set out in Energy Policy.
3. The current SEM market has no stakeholder involvement in the monitoring of its effectiveness. It is critical that as in other markets, a Board of senior executives from market participants are given a forum to enable the future direction of the SEM market to be debated.

3.2.19 While a significant proportion of our energy prices are determined by international oil and gas prices, what actions can be taken domestically to reduce the cost of electricity and gas to consumers?

By enabling the maximum exploitation of indigenous renewable energy sources, the government will be shielding Irish consumers from the commodity price volatility associated with international oil and gas markets. Many renewable generation technologies lend themselves to selling electricity prices at relatively stable prices and so provide a natural hedge against international oil and gas prices.

3.2.20 State-owned enterprises (e.g. ESB, BGE BnM) have played a central role in the development of the energy sector. How should the role of State-owned energy enterprises respond to the challenges of meeting our energy needs in the future?

This is primarily a matter for the shareholder. However from a competitive market standpoint, it needs to be absolutely clear that State-owned enterprises have no advantage or privileged position with regard to governmental or regulatory actions or attitudes.

If there is any suspicion that there is not a “level playing field” outside investor interest and provision of finance for investment in the electricity and gas sectors will be adversely impacted.

In order to ensure that there is no residual suspicion of such position by these companies, actions to favour the smaller, independent, non-incumbents in any conflict with State-owned incumbents should be considered to re-balance current perceptions.

As part of the review of the shareholder of these State-owned enterprises, the government should assess the benefit of keeping in State ownership those parts of these organisations which operate in competitive market sectors. Privatisation of these parts of the organisations should be actively considered. The privatisation of State-owned assets which form part of a natural monopoly (e.g. electricity or gas grids) has additional challenges which would require more stringent and effective regulation before privatisation could be considered for these assets.

3.2.21 What further action should be taken to alleviate fuel poverty?

The benefits of any legacy fuel contracts or the allocation of carbon credits should be recovered from incumbents to remove any distortions in the SEM market, through a Legacy Benefit

Adjustment (LBA). The proceeds of this LBA could be funnelled equally through to all customers through a reduction in PSO, or targeted more specifically towards alleviating fuel poverty, through direct grants to improve the poor fuel efficiency in many Irish homes or through enhancements to fuel payments made to those subject to fuel poverty.

3.2.22 Does the Green Paper generally set the right policy directions for enhancing the competitiveness of the Irish energy sector?

Airtricity has set out above the structural reforms of the generation and supply markets which would be required to improve competitiveness and the importance of separating out the grid from the ownership of the ESB.

In addition, reforms of the Regulatory authorities and governance of the SEM market are required to ensure there is alignment of the regulatory and market priorities with market participants.

Finally, it is critical to establish a body responsible and accountable for the successful implementation of the Energy Policy. Absent such a process, the Energy Policy is liable to be ignored and current difficulties with conflicting policy priorities will ensure the targets/obligations/figures set out in the Energy Policy will be missed.