SHANNON LNG RESPONSE TO GREEN PAPER

Introduction to Shannon LNG

Shannon LNG[1] recently commenced the planning phase of a major development which will help secure Ireland's long-term supply of natural gas.

Once the Shannon LNG facility is built, it will be logistically and physically possible to source natural gas for Ireland from a diverse worldwide range of countries and suppliers.

Shannon LNG entered into an 'option-to-purchase' agreement with Shannon Development, the regional development agency, in relation to 281 acres of the 600-acre state-owned land bank between Tarbert and Ballylongford in County Kerry. Subject to feasibility studies, technical assessments and in due course, planning and other approvals, it will become the site for a major €400 million liquefied natural gas (LNG) import terminal.

General (Global Gas Markets)

Despite much unrest in the Middle East, experience has shown over the last 20+ years that a developed and competitive market responds to supply and demand imbalances in a timely and cost effective manner. Fair competition in an open market-place can ensure that Ireland benefits from globally competitive fuel prices, including gas.

In addition, such a market-place can respond to Europe's & Ireland's growing import dependency by developing cost effective supply projects thereby increasing diversity and security of supply.

In Ireland, we are fortunate to be within economic transportation distance of over 60% of global gas reserves. Additional supplies can be attracted if Ireland encourages investments in infrastructure, such as an LNG import terminal, and ensures timely planning / regulatory processes and approvals.

Ireland in a global market

It is known that power generation and economic growth are closely linked, and that power generation is the principal driver for gas demand growth.

Existing gas production is declining or set to decline in Europe and North America. Although UK North Sea production is already rapidly declining, in Europe as a whole, including Norway, production is expected to peak in a few years and decline by the end of the decade.

The growing requirement for gas imports to both Europe and North America will promote inter-continental LNG trade, thereby creating a dynamic and competitive global gas market, see figure 1.

New supplies will come by pipeline from Russia, and by way of LNG from the Middle East, West Africa & North Africa.

In order for Ireland to compete in this global market it needs access to global supplies (both pipeline & LNG supplies) and it is crucial that an attractive investment and permitting environment is created and maintained.

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[1] A wholly owned subsidiary of Hess LNG Limited, which is a 50/50 joint venture of Hess Corporation and Poten & Partners

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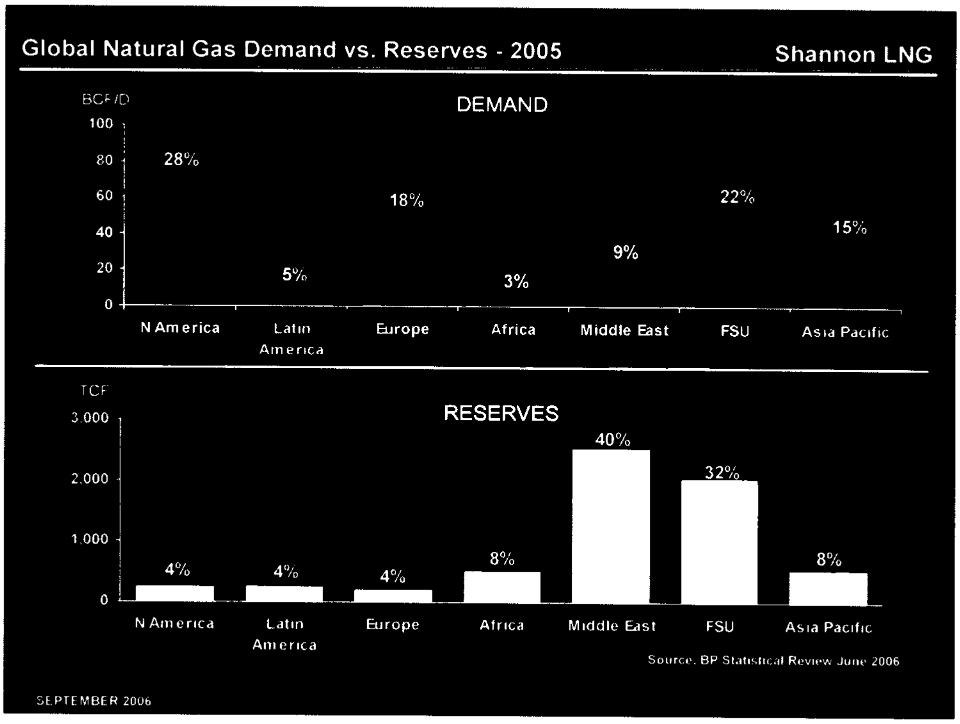
Shannon LNG believes that the Irish framework should provide:

- a beneficial investment environment,
- a fair & even handed stable regulatory system, and
- an open and competitive market.

If these fundamentals are in place, Ireland will be well placed in the increasingly global competition for energy resources and investment.

Shannon LNG supports the government's efforts towards fair competition, and congratulates the DCMNR and the CER on the successes to date. But additional steps are required:

- Care and courage is required to avoid establishing incentive mechanisms that promote investment by incumbent monopolies that discriminate against new entrants and new technology;
- The industry and investment community need effective planning and approval processes to ensure timely project development to lower risk and reduce cost to consumers.



Background to LNG

LNG is natural gas that has been cooled to a very low temperature (minus 160 degrees centigrade), at which point it becomes a liquid. It is stored and transported in insulated tanks at normal atmospheric pressure like a cold drink in a thermos flask.

Liquefying natural gas reduces the volume it occupies by more than 600 times, making it manageable for storage and transportation. LNG is produced primarily in locations where large gas reserves have been discovered; however, these reserves are often too distant from market areas to economically transport the gas by pipeline. Natural gas is liquefied at these locations and loaded on LNG tankers. LNG export sources include Algeria, Australia, Egypt, Indonesia, Malaysia, Nigeria, Oman, Qatar and Trinidad. LNG exports are also planned from a number of other countries including Norway, Russia and Venezuela.

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Shannon LNG has commenced the necessary site evaluation work to establish how best to configure and accommodate an LNG terminal on the site. This is being considered in tandem with marine investigations, to ascertain where and how best to establish berthing and offloading facilities for visiting LNG tankers. Subject to continuing validation, Shannon LNG expects to lodge a planning application with Kerry County Council in early 2007.

Economic and Security of Supply Benefits of Shannon LNG

The world has large reserves of natural gas but much of it is often located in inaccessible areas, far from markets and requiring substantial investment in pipelines, liquefaction plants and other facilities to transport the gas to the marketplace, see figure 1.

Ireland needs secure, diverse, competitively priced and environmentally friendly supplies of energy. At present, sharply declining gas production in both the UK and Ireland, coupled with escalating market demand, is driving local gas prices upwards. As the EU becomes increasingly reliant on imports from Russia and other remote areas, security and diversity of supply is increasing in importance. Direct importation of LNG into Ireland can most economically and efficiently meet these supply requirements, thereby supporting economic and social development and assisting the country in meeting national environmental targets. A Shannon based LNG terminal will provide access to multiple global gas supplies and mitigate security and diversity of supply concerns. This will lead to greater gas price competition, thereby benefiting consumers.

The gas issues raised in the Green Paper are considered below. Shannon LNG would be pleased to meet with DCMNR representatives to elaborate on these issues.

ENSURING THE SECURITY OF ENERGY SUPPLY

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?

National Energy Policy should facilitate a market response to this question rather than impose incentives for any particular fuel or technology. A transparent and predictable investment environment is the best way of achieving energy security.

As the nuclear option has been ruled out, at least for now, and existing coal technology carries severe environmental consequences, there is no realistic alternative to natural gas as the fuel of choice for power generation in the foreseeable future. Accordingly, it is important that Ireland's Energy Policy ensures that there are secure, diverse and competitively priced gas supplies available, both pipeline and LNG.

What is appropriate for large energy markets in terms of defining the optimum percentage of each fuel in the portfolio may not be appropriate for Ireland. A small market, such as Ireland, faces challenges in achieving the scale for the necessary investments in each fuel sector. In order to achieve the necessary economies of scale to support infrastructure investment, segmental percentages should not be assigned to each fuel sector. As LNG can be sourced from various countries, it can provide supply diversity to compete with oil or coal for power generation purposes.

What actions should be taken to create strategic storage capacity in the gas sector?

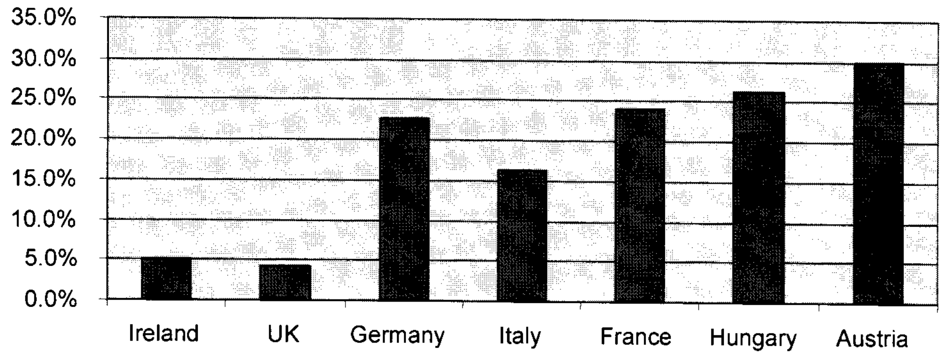
High levels of gas storage capacity are generally available in European countries which import almost all of their natural gas requirements such as France, Spain, Germany and Italy. The UK has traditionally had lower levels of storage due to the historically high levels of offshore indigenous production. However, with declining production, the UK is now considering whether it should put commercial structures in place to support additional storage capacity[2].

As Ireland is currently importing over 85% of its natural gas requirements and is likely to continue to do so in the long term (i.e. without LNG and after the Corrib field is depleted) gas storage should be investigated, both for strategic and commercial requirements. The Shannon LNG terminal proposal could be configured to facilitate gas storage. Figure 2 below compares storage capacity versus annual demand for a number of European countries. The low UK/Ireland storage capacity figures reflect the historical access to North Sea reserves, but this is now changing rapidly.

Ireland's Energy Policy should facilitate a market / industry response for the provision of strategic storage and flexibility to meet variations in demand. There are suitable models for this in the oil industry. Shannon LNG would be pleased to discuss this with DCMNR representatives.

Figure 2 Storage Capacity as a % of Annual Demand

Source: Ilex Consulting Report to DTI, April 2006 and BP Statistical Review of World Energy 2006



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

From a security of supply and national strategic investment perspective, the safest place to locate power generation assets for Ireland is in Ireland. If Ireland relies on power generation capacity in other EU member states it exposes itself to individual member state regulatory and political risk, fuel supply risk in that country and the risk of infrastructure failure in the member state, all of which would be outside Ireland's control. Few EU countries have lower risks than Ireland, so why increase risk by investing abroad?

[2] UK DTI Report on Gas Security of Supply: The Effectiveness of Current Gas Security of Supply Arrangements, October 2006

If power generation assets are based in Ireland, the primary risk is fuel supply, which the industry / market have shown can be managed competitively and efficiently, at least as well, if not better than other EU countries, especially if direct access to global gas reserves is available here.

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

Ireland already has some of the best commercial licensing terms in the world. Unfortunately, the geological risk has been shown to be very high and, combined with the Corrib delays, has dampened enthusiasm for offshore exploration.

New geological ideas and models for the under-explored areas should be encouraged, developed and promoted.

Given the existing level of dependence on imported fossil fuels, what needs to be done to enhance contingency measures?

The best way to manage the dependence on fossil fuels is to encourage market and multilateral international solutions by facilitating transparent and predictable markets. For instance, Shannon LNG wishes to build infrastructure in Ireland to import LNG from a growing and diversified world-wide market. No subsidies or grants were sought; but it is crucial that a level commercial playing field be established and maintained to facilitate competition between fuels and the diverse sources of supply.

Ireland's dependency on natural gas is not an unreasonable risk provided there are adequate and diverse supplies of natural gas available.

Direct importation of LNG greatly reduces the diversity of fuel supply risk and it can significantly reduce the negative environmental impact and energy inefficiencies of coal. It also delays consideration of the nuclear question in Ireland for the foreseeable future.

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

The question as to whether Ireland should rely to such a great extent on the UK, which is itself opting for a nuclear response to falling indigenous reserves, for security of gas supply should be highlighted and discussed. With potentially 70% of electricity generation being gas fired in Ireland by 2020, and the UK highlighting that they may face a new supply - demand gap by 2015[3], Ireland should take greater control of this issue.

Ireland is in a different position than the UK, which has many different supply points of natural gas into its grid combined with diverse supply sources, including LNG. In the long term, without an independent and diverse gas supply, almost all of Ireland's gas will be delivered through one supply point (the UK). Such risk is unacceptable in the long term.

ENHANCING THE COMPETITIVENESS OF ENERGY SUPPLY

[3] UK DTI Report on Gas Security of Supply: The Effectiveness of Current Gas Security of Supply Arrangements, October 2006

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In the context of liberalization 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?

The introduction of the All-Ireland gas market is welcomed, and hopefully this will occur with no pan-caking of tariffs in transporting gas from south to north, and vice versa.

Ireland will increasingly be competing in a global market for natural gas supplies. An attractive investment regime and stable regulatory and permitting framework is essential to compete in this environment.

Measures that establish incentive mechanisms for investment by incumbent monopolies which discriminate against new entrants should be avoided. To put this in context, Shannon LNG only asks that it can compete on a level playing field with UK piped gas. There should be open, direct and un-subsidised competition between natural gas entry points to Ireland.

As gas demand in Ireland grows, due to Ireland's end of supply chain position, it will be costly to rely on new UK LNG facilities and pipelines to meet Ireland's security of supply requirements. The transportation costs of this gas will be expensive. The lower cost solution, and proper strategic response, is to build the energy facilities in Ireland (lower transportation costs) with the added objective and benefit of having direct access to global competitive supplies.

As the global LNG industry is partly driven by economies of scale, there would be significant benefits for consumers if suppliers of LNG into Ireland also had economic access to the UK and European natural gas markets. This would benefit consumers in Ireland in that gas transiting through Ireland would decrease unit transportation costs and the unit costs of an LNG regasification facility would also be reduced, thereby benefiting consumers. A competitive transportation tariff for exports of gas to the UK should be developed to facilitate this requirement.

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

With the exception of the comments made herein, we consider that the current market structure for natural gas in Ireland is reasonably conducive to promoting gas on gas competition through new entry points. We would caution against changes to the current entry transmission tariff structure, as what is required for investment is a stable and predictable regulatory regime.

More effective permitting processes should be introduced to ensure timely project developments in the gas and electricity sectors. This lowers project risks and costs and helps to promote new investment in Ireland for the benefit of consumers.

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

Greater utilization of infrastructure should be encouraged. Over €700 million has been spent on extending and reinforcing the gas transmission infrastructure in recent years, including reinforcement of the UK-Ireland interconnector and the Pipeline to the West and the South-North Pipeline. Natural gas demand growth over this period has been relatively flat and some of the infrastructure is underutilized. Market structures could be put in place to utilise this infrastructure to export natural gas from Ireland to the UK – this would benefit Irish consumers in that it would increase total demand across the system, thereby lowering unit transportation costs.

Additionally, greater competition at a wholesale level should be encouraged. Shannon LNG intends to compete at a wholesale level against natural gas piped from the UK using a range of attractive products. Government policy should foster the creation of a level playing field to encourage open competition. Existing policy does not adequately address this issue.

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

For the natural gas market, we consider that the Green Paper should include initiatives to establish a more cohesive regional gas market including Northern Ireland, the UK and nearby parts of Europe, with particular emphasis on competitive transit tariffs. This would facilitate greater throughput of gas, provide economies of scale and lower unit costs for consumers.