



**Response by Energia to ACER Pre-  
Consultation on Energy Regulation**

*Energy Regulation: A Bridge to 2025*

**17 December 2013**

## **1. Introduction**

Energia welcomes this opportunity for early engagement with ACER on the very important issue of the future of energy regulation in Europe. The dynamic nature of gas and electricity markets, coupled with significant policy decisions that are driving further change in European markets, serve to highlight both the complexity and necessity of this work and we commend the initiative. Furthermore, we would welcome discussions and engagement at a local level to further explore regional issues and address significant challenges that may lie outside of the scope of work currently being undertaken by ACER.

As you will be aware, Ireland's energy market is somewhat unique in a European context. As Europe's western-most Member State, Ireland is a small island with limited interconnection to a larger island and with no direct link to mainland Europe. The internal energy market, enhanced interconnection and infrastructure investment all present different challenges in this context than they do elsewhere in Europe. In the context of the work being undertaken by ACER, we believe it will be very important to acknowledge such differences as factors to be taken account of but not necessarily remedied by this work. Instead we would urge ACER to identify regulatory principles to address common problems for the industry in the period to 2025 but that do not ignore fundamental differences and the effect of these on principles to be advanced.

Energia is part of the Viridian Group and is the largest independent energy provider on the island of Ireland. Energia has invested over €1.2 billion in generation assets since 1999, and we continue to invest up to €20m annually. Our portfolio includes two modern gas fired generating stations in Dublin and onshore wind farms all over Ireland and Northern Ireland. Our commitments to the renewable sector will reach €1 billion over the next decade. And we are a major supplier of gas and electricity to Irish and Northern Irish businesses, providing competitive supply to over 27% of the all-island business market.

In the remainder of this response we first forward some preliminary comments on the accompanying topic specific papers accompanying the "Overarching Paper" before providing brief responses to the specific questions contained in this paper.

As a member of Eurelectric, Energia also endorses the submission made on behalf of their members to ACER in response to this pre-consultation.

## **2. General Comments**

Further to those comments contained in the introduction to this submission, particularly in respect of Ireland's position in Europe and its energy market, the following example might serve to better illustrate the challenges faced and to be overcome by better regulation. In Ireland, c.98% of the natural gas required in the market is imported from Great Britain. With access to this liquid market for gas and a number of other factors, some of which are policy driven, power generation investment in Ireland has almost exclusively been in highly efficient CCGT units such that Ireland is dependent on natural gas as a fuel source for power generation and power generation is the single largest user category of gas on the island. In many

respects one might expect that Ireland is therefore well placed to accommodate significant planned increases in renewable power generation capacity and in the case of Ireland, this is almost exclusively onshore wind as the mean by which Ireland is to achieve a 40% renewable target for power generation as part of the economy's overall 20% EU binding target. However, in a small island market the cost of subsea interconnection is significantly greater than those costs in mainland Europe and with increased onshore wind capacity and declining utilisation of the interconnectors, the costs to the gas market increase exponentially.

In the electricity market, the wholesale market is heavily regulated due to the market power of the previous incumbent semi-state utility (ESB). In 2008, the wholesale market became an all-island market, Single Electricity Market (SEM), as one of the first successful attempts at market integration in Europe. Regulation of the wholesale market includes a gross mandatory pool with central dispatch by the TSO and generator's bids mandated to equal their Short-Run Marginal Cost (SRMC). To accommodate for the expected shortfall in long-run cost recovery, the electricity market also has a Capacity Payment Mechanism (CPM) based on a best-new-entrant approach. Generators' bids are scrutinised by a Market Monitor Unit (MMU) to ensure compliance with their formulaic approach to SRMC bidding. To date this formulaic approach has prevented the inclusion of gas capacity costs in generators' bids to the market and despite a recent pronouncement facilitating the overturning of the position, the regulators concurrently removed the flexible within-day gas capacity product that they had indicated could form part of the cost of generation.

In summary, Ireland is faced with declining gas utilisation as a result of lower utilisation of gas-fired power generation, consistent with the current and planned future level of onshore wind capacity in the market. In parallel with these developments, the overall cost of gas interconnector infrastructure remains largely unchanged, (i.e. the required revenue is invariant to demand), and there are increased infrastructure investment costs associated with connecting new wind farms. Gas fired generators are therefore more reliant on capacity and ancillary services payments, due to declining market revenue, while also faced with the bizarre prospect of removal of within-day flexible gas capacity at exit to mitigate the rising tariffs associated with declining utilisation of the gas network. The change in the market, as well as being contrary to the demands of the energy market and policy, is even more unusual when one considers such a move at the entry point would not be permitted. In essence, at the same time more flexibility is required by the power sector and where this flexibility can be delivered by the gas system, regulation has removed the flexibility and risks jeopardising the underlying fundamentals of the market required to ensure a secure, sustainable and competitive energy market in a location of limited interconnection. The question of increased interconnection is also moot in such circumstances with additional increased costs difficult to justify while also ensuring security of supply in an N-1 type situation.

While on the face of it this example would appear to be a problem for the SEM and gas customers in Ireland, we believe such a scenario will have far wider implications, not as a result of its effect in Ireland but rather through its replication in other markets

across Europe as the technical constraints of systems with large amounts of renewable asynchronous generation, coupled with asynchronous interconnection, struggle to meet system technical requirements through declining energy market revenues and without access to highly flexible gas products (capacity and commodity) to support both these systems and the future integration of energy markets across Europe. With declining, or even with slowly growing, demand for both gas and electricity, the (per unit) cost of required infrastructure is also likely to trend upwards, particularly when remuneration of existing infrastructure is also accounted for.

In summary, Ireland is seen to have some idiosyncratic characteristics (e.g. island market, limited interconnection, high fuel import dependency in power generation, high level of onshore wind capacity) but in part these have given rise to an accelerated effect in respect of the changes that are to affect other European Member States and regions in the coming years. Many of the comments below focus on the issue of flexibility, revenue adequacy and the need to better understand and facilitate interaction between gas and electricity markets. Failure to deliver these objectives will almost certainly place an insurmountable barrier to the achievement of European energy and climate policy.

### **Electricity**

- Energia acknowledges the significant efforts being made to deliver an efficient functioning of the integrated European electricity market. However, we wish to submit a concern that the Third Package, the framework guidelines and network codes in particular, are based on an old model of the electricity sector with the result that necessary development towards European policy objectives are stymied as opposed to promoted under these new frameworks. This work programme should focus on mitigating such a risk but we furthermore caution against multiple successive adjustments as the need for stable and coherent policy are paramount in the investment environment pertaining to such substantial and long term investments.
- The focus on flexibility is key. Adequacy issues are important today and will continue to be so in the future with increased RES-E capacity. This is a separate and distinct issue from flexibility. At one level the features of adequacy in the technical constraints of systems will remain important (e.g. Rate of Change of Frequency (RoCoF)). Adequacy therefore, should continue to be remunerated. Whether this should be done within or outside the market is an open question that requires much consideration and analysis. This equally applies to flexibility and importantly it does not necessitate a single approach either across flexibility and adequacy, or within either category.
- Considering flexibility further, DSR would appear to be well placed to deliver an important flexible response in the market. On the other hand a market based solution to the issue of generator flexibility, particularly that provided by highly efficient CCGT units, is not as readily identifiable, particularly if such remuneration is to be based on the energy market. Therefore, the risk would

appear to be either one of inappropriate expansion of the energy market or inappropriate incentives on such flexibility.

- Finally, one has to consider the significant infrastructure investment costs associated with some of the proposed solutions to address the issue of flexibility and overall market change. Substantial new investment costs in flexibility, substantial new investment costs to accommodate RES-E capacity, lower utilisation of conventional generation capacity and lower utilisation of gas capacity infrastructure all indicate rising end-prices for consumers. Encouraging retail market competition cannot fully mitigate the reality of this situation, in fact its effect is considered likely to be small. Electricity market investments are long-run, costly investments wherein the risk of stranding such investments is an undesirable outcome for Europe's long-term policy objectives. Therefore proper cognisance has to be given to ensuring the revenue adequacy of new and existing investments, as well as to the changing nature of electricity markets across Europe and the apparent inconsistency in calls for the industry to do more with less. To the extent that there is a long term change to be brought about in the market as a result of these energy package and network codes, consideration to a period of transition may be appropriate.

### **Gas**

- The increased use of gas in power generation can be supported without recourse to the role it is to play in facilitating RES-E due to its emissions profile relative to other fossil fuels. Its relative ability to support the growth of RES-E generation is a further feature to support its further development in Europe.
- As already stressed, flexibility in power generation will be increasingly important and while flexible gas-fired units can provide this flexibility in theory, the market and regulation needs to facilitate this to a far greater extent than it does today. The requirement for flexibility in the current network codes needs to be adopted on a system-wide basis. Flexibility at entry without such flexibility at exit will stymie the facilitation of RES-E capacity and introduce inefficiencies into both electricity and gas markets in Europe. The recent experience in Ireland of the removal of within-day capacity at exit is a stark example of this and is impossible to reconcile with the central dispatch of the market and ambitious requirements to support a c.40% onshore wind target on the island, which includes an instantaneous penetration rate of 75%.
- Flexible within-day gas capacity (entry and exit), as well as access to flexible and liquid commodity markets (e.g. NBP), will be critical to ensure the gas plants can support planned RES-E development. The balancing network code only goes some of the way to achieving this outcome.
- An overall lack of consistency in approach between electricity and gas markets, including their proposed developments through network codes, is of significant concern and should urgently be addressed. We acknowledge that

this work programme has identified these requirements and support its continued development both at an ACER, regional and national level.

- The issue of existing and new infrastructure has already been briefly addressed. In an Irish context, a small island market almost exclusively dependent on gas imported from GB, the infrastructure requirement is already a costly one. The options to develop alternative sources of gas are limited and so far have been balanced against the detrimental effects on revenue recovery (and tariffs) for the existing infrastructure by the regulator. It is also difficult to align declining consumption of gas in the power sector, due to lower utilisations, with increased investment. Given the current structure of the gas market in Ireland and the technical capacity of the system (1-in-50 standard) the CMP and CAM network codes are considered to be of limited if any benefit to power generators, particularly as the flexibility benefits they are to deliver are deemed to apply only at entry.
- Finally, for the foregoing reasons, access to further markets is likely to be of limited, if any, benefit to gas users in Ireland, with the physical cost of providing such integration likely to be prohibitory and unnecessary in light of the current levels of interconnection to access the NBP.

### **Consumers and Distribution Networks**

- It is first important to recognise that customers will pay more to deliver the European vision for energy policy. The required changes come at a significant cost with the benefits unlikely to outweigh these costs in the short or medium term. As already discussed, enhanced retail market competition can deliver some benefits but these are likely to be small in the overall context of the costs of overall market change.
- Customer education and engagement should be the initial focus of work in this area. Customers, at least in Ireland, do not have a good understanding of energy concepts or of energy markets. Their engagement in the retail market requires this initial hurdle to be overcome and evidence to date suggests that some positive steps on behalf of those charged with protecting customers' interests, the regulatory authorities, should be taken in furtherance of this objective. This education role should also extend to the objectives and changes to be brought about by European energy policy, including the role to be played by smart meters, particularly to residential customers. To date, the approach of the European Commission appears to have been to delegate this education role to Member States who have discharged it to varying degrees. Education will be necessary to meet the challenges in a number of the stated objectives, including enhanced retail competition, demand side participation, and smart metering.
- The role of the DSO in Ireland has not undergone the same change as observed in other European countries (e.g. active management of their networks) and as such no comment is submitted in respect of this aspect of the paper.

### **3. Consultation Questions**

***Q1. Do you agree with this overall approach? Would your emphasis be any different?***

As already stated, in general Energia supports both the initiative of ACER in this regard and the proposed approach. As identified in the paper, there are to be “unknown unknowns”, as well as “known unknowns” but it is important that the analysis focusses on identifying regulatory changes that can best facilitate or adapt to future changes, particularly in response to European policy. It is presently unclear that the Third Energy Package, framework guidelines and network codes are suitably focussed on and adaptable to the fundamental changes to the European energy market foreseen. There is a valid concern that the approach outlined to date is overly reliance on a view of energy markets that is outdated and premised on a conventional fossil fuel market for generation. The work to be undertaken by ACER needs to strike the correct balance between harmonising markets that are fundamentally different and face different challenges, with delivering a common unified approach. Two overarching objective that needs to be prioritised are; 1) the interaction of the gas and electricity markets and the delivery of real, within day flexibility in both markets; and, 2) the appropriate remuneration of generation capacity for the distinct energy market, adequacy and flexibility benefits they provide to the system.

A timeline of analysis to 2025 is welcomed as a reasonable balance between prudence and pragmatism to achieve realisable results.

***Q2. Do you agree with this broad analysis and/or do you have further suggestions?***

Again we agree with the broad analysis presented and support the acknowledgment of the interrelationship between gas and electricity markets, and the role of flexible markets and market design in support of RES-E generation capacity. An important feature that ACER may wish to consider further in the analysis is the issue of network costs. While network investment will continue to be required, declining or a changing profile of utilisation of these assets will present challenges and in the future it is unclear whether energy cost or network costs will form the majority of end-user prices. It is also important to consider to the extent that flexibility is to be a central feature of energy markets that energy only markets are an appropriate means of remuneration of current and required infrastructure, including capacity. It is submitted that future changes are likely to require further reliance on out of the market payments, albeit they may be market based, in the form, for example, of capacity payments and ancillary services payments which are likely to become increasingly important without diluting the importance of the underlying capacity adequacy.

**Q3. Do you think the list of suggested measures is complete or do you have further suggestions?**

- *Do you think that the requirements for infrastructure investment in gas are the same as in electricity?*
- *What further ideas do you have on the future role of consumers?*

In response to this question it is possible to present a brief summary of some of the key points made in this submission.

1. The operation and design of electricity and gas markets require greater coherence and interlinkage.
2. Consistency of the objectives to be pursued and how they are to be delivered requires close scrutiny, particularly for highly efficient, flexible gas fired generation. These changes may require a more radical review of energy markets and certainly calls into question whether an approach based on an out-dated view of markets dominated by conventional thermal generation. Notwithstanding this, any consideration of the stranding of such assets, which are to play an important role in support of RES-E capacity, should not be countenanced. Furthermore, should the stranding of such assets be observed it should be taken as a signal of the failure of the current approach, precipitated by inconsistencies between the model and objectives to be achieved.
3. Infrastructure investment in gas and electricity should be particularly focussed on areas where the available technical capacity is insufficient to allow for the required level of flexibility. In the gas market within-day flexibility at entry and exit are of paramount importance to ensure an efficient functioning of both it and the electricity market. It is also important to note that infrastructure requirements and costs of an island market such as Ireland are fundamentally different from mainland Europe, both in terms of the cost (higher) and potential benefits (arguably lower due to physical limitations on integration with other markets).
4. The costs of the changes foreseen in European energy policy are costly and this needs to be understood by customers. Enhanced competition at retail and wholesale level will unlikely fully mitigate the costs of change which, given the nature of the necessary investments, will endure over at least the medium-term and likely to 2025.
5. Education of the customer is key. The customer can, and in some instances must, play an important role in the delivery of European energy market policy objectives. For the most part, customers have been ignored to date and this situation needs to be addressed as a priority in the first instance.