#### **OFGEM Electricity interconnector policy – consultation paper**

#### Moyle Interconnector Ltd response

#### 30<sup>th</sup> March 2010

Moyle welcomes the review being carried out by the regulatory authorities and responds to the questions raised in the consultation document as follows:

# 1.1 Have we accurately captured the benefits of and demand for new interconnection? Are the projects under consideration all viable? Would they be sufficient? Are other projects being developed?

As the consultation correctly states, the question is not whether benefits exist but whether they outweigh costs.

Given the number of unknowns it is difficult to determine which of these projects are viable at this stage. Critical to the financial viability of an interconnector is the price differential between the connected markets and as prices converge it is more difficult to justify building additional interconnection. The viability of building an interconnector is clearly influenced by the level of existing interconnection and one would expect to see diminishing marginal returns – to a certain extent, viability depends on timing in relation to other interconnectors being commissioned so we would expect the projects coming into operation first will be more likely to be viable.

The Norwegian interconnector stands out as potentially being the most difficult to see proceeding due to the sheer length of cable required which presents technical difficulties and is likely to result in particularly high build costs as well as large losses across the interconnector which would erode the benefits it provides. We note that this project may link into an off-shore grid to deliver additional benefits that traditional interconnection does not.

The viability and potential benefits of these projects should become much clearer over the coming years as the BritNed and East-West interconnectors come online and the impact of market coupling on GB prices becomes clear. We note that there appears be a relative glut of projects in the development pipeline at present after a period of comparatively little activity – we feel that increases to the level of Interconnection should be carefully phased with the actual effects of each interconnector on prices/system operation being analysed to ensure that the marginal benefits of additional interconnection outweigh its costs.

With regards to whether these interconnectors are sufficient, this depends on what objective is to be achieved – is it to minimise prices in GB? Allow wind intermittency to be managed? Meet the 10% of generation target agreed by EU member states in 2002? The former two statements are key but are unknowns at this stage while the latter is irrelevant as long as the other benefits are delivered. Meeting these goals will require different levels of interconnection depending on the makeup of the future generation fleet and a clear regulatory strategy as to what GB is trying to achieve through interconnection is necessary.

It is notable that the 5 countries with the least interconnection are all on the periphery of Europe which is unsurprising due to these countries having fewer borders (so less arbitrage opportunities) and in GB and Ireland's cases are islands. The relatively high cost of interconnection between GB/Ireland and the continent means it is important that wider benefits are clearly identified with sufficient surety to avoid burdening consumers with uneconomic interconnection.

## **1.3** How can the Regional Initiative best contribute to development or implementation of policy? Do you agree with the priorities and approach outlined?

The Regional Initiative can help ensure co-ordination of access arrangements and possibly linking of auctions on different interconnectors to maximise use and allow users ease of access to desirable markets. This could be done in the relative short term and would ease the transition to any market coupling solution.

Most of the issues raised, while important in their own right, will need to be addressed before any market coupling solution can be introduced.

# 2.1 Are the target models explained in this chapter appropriate for GB? What are the issues that need to be considered? Are there alternative approaches that would be better? Will the target models effectively accommodate increased intermittency?

The central proposal to the EU target model and the one that appears to require the most changes to the GB market is day-ahead price coupling. Issues which will need to be addressed include:

- Currency issues: GB being outside of the Euro zone will present challenges and coupling with other non Euro zone countries such as Norway will mean a solution dealing with multiple currencies needs to be developed.
- Losses: new interconnectors will have different loss factors depending on their technical specification and a consistent approach to dealing with these will be required.
- Triad methodology: Market coupling will not be effective if users do not want to risk flowing in a triad period. Also, if the capacity user is not explicitly identified under market coupling then who would be liable for any TNUOS charges?
- TNUOS generation charges: It is our understanding that interconnector owners across Europe do not generally pay these charges. This may represent a barrier to efficient market coupling as it represents "pancaking" of charges.

We do not feel that these issues are insurmountable but robust solutions to the problems they present would need to be developed.

An issue for Moyle and Ireland is that market coupling will require changes to, or need to work around the SEM market design. Continuous intra-day trading will present challenges as SEM does not facilitate intra-day trading at present although a modification to address this is to be progressed.

It is difficult to see how the target model would cope with wind/intermittency since it involves coupling at day-ahead stage and the amount of wind energy is not known at that stage. This is a

particularly important issue for the island of Ireland and we note that details around this are still to be finalised. A large volume of wind generation is being developed in what is a relatively small market which makes the solution for dealing with intermittency particularly critical for managing the Irish systems.

2.2 What should be our approach to firmness of interconnector capacity? Should this vary between new and existing interconnectors, or between regulated and exempt? What are the categories of costs and benefits from changing approach, where should they fall and can they be quantified?

The key issues to be addressed from interconnector owner's perspective are:

- There is a risk of incurring excessive costs to provide firmness
- Interconnector capacity firmness is reliant on firmness of the transmission system

Given that market coupling/implicit auctions is the preferred EU target model and this requires physical firmness then one would envisage that physical rather than financial firmness would be adopted. This approach would keep traders both physically and financially whole at a similar cost to providing financial firmness alone. A barrier to this approach is that it would require interconnector owners to trade energy and this is typically precluded under interconnector licences.

Fully firm capacity rights should only apply after capacity has been nominated. It is not clear to Moyle how a different approach would work as one cannot predict how any particular capacity holder would behave.

Currently Moyle capacity is not firm but most outages are planned well in advance and unplanned outages account for only 0.3% of availability (for market coupling we would assume capacity needs to be firm from day-ahead stage). Lack of firmness is therefore not a particular issue for Moyle as this represents greater reliability than most forms of generation.

The paper mentions that capacity would be more valuable to users if it was firm. Given Moyle's very high levels of reliability (and that we would expect similar of new interconnectors) the financial benefit to users of capacity being offered as firm may not be that significant. In light of this we would not expect users to bid more for firm capacity so would not anticipate any increased revenues from offering firm capacity to cover the cost providing firmness. As NGIL has argued, it has no obligation to offer full firmness in EU legislation and the cost could be excessive – offering full firmness is therefore not particularly beneficial to interconnector owners at present.

For market coupling to be a worthwhile exercise we would expect that the resultant savings made by consumers should be significantly greater than the cost of providing firm capacity. Since consumers should reap the benefits of market coupling we feel it would be reasonable for the cost of firmness to be borne by consumers. The paper mentions that this socialised approach would result in Interconnector owners not being incentivised to maximise availability of capacity as it results in risk being removed. Currently Moyle and IFA do not earn any revenue in the event of an outage which incentivises both to maximise availability – this would continue to be sufficient incentive to maximise availability if the additional cost of providing physical firmness was socialised.

If firm interconnector capacity was to be a requirement then firmness of the transmission system would also be necessary. For example, Moyle has a single line feed to the UK transmission system so any outage at this point results in an outage and financial loss to Moyle. It would therefore be discriminatory if a requirement for interconnector capacity to be firm was introduced and the relevant TSO did not have to bear any of these costs.

Wind power may also cause problems with firmness as it is not certain how much wind there will be at day-ahead stage. The TSO may adjust the interconnector transfer capacity in the event of a security of supply problem. Any firmness regime would need to cover this with appropriate allocation of costs. This is likely to be a real issue as the level of wind generation increases.

# 2.3 Should we seek regional solutions rather than individual project solutions for access rules, such as through a broader North West European solution for market coupling? What are the priority areas for greater regional co-ordination?

It is Moyle's view that access rules should be aligned across the region. A single solution will not be possible as rules will differ due to technical, market and regulatory differences but the aim should be to standardise as many areas as possible.

Co-ordinated access rules would help facilitate co-ordination of capacity auctions and eventual market coupling. Moyle would expect that a regional solution to access rules would simplify the process for users and make it more likely that additional users will have access to and trade across multiple interconnectors thereby increasing interconnector usage. Similar access rules for interconnectors may help facilitate different types of regulation and ensure that no interconnector has an unfair competitive advantage due to its form of regulation.

## **3.1** Does this chapter capture the key issues in regulation of new electricity interconnectors? Should we assume that all new interconnectors will seek exemptions?

The key issues are providing correct investment signals while ensuring Interconnector owners are incentivised to maximise Interconnector use and thereby the benefit passing through to consumers. If a regulated approach is taken to developing interconnection it will important for regulators to take a collaborative approach to decisions such as to the level of interconnection needed, what markets to connect and the timing of this.

We would expect developers to seek exemptions as otherwise there may be insufficient incentive against the substantial risk and investment required to build an interconnector.

## **3.2** Of the options set out, which are preferable and why? What are the key considerations in taking forward any of the options

Both the uncapped and regulated cap options are unlikely to result in the optimum level of interconnection being built as the Interconnector owner is not rewarded for the wider benefits of

interconnection. With Option 2 in particular, returns are capped but there is no protection against the risk of under-recovery – exposure to all the downside with limited upside is unlikely to be overly attractive to developers and will result in underinvestment.

The regulated cap and floor option or the regulated approaches look to be preferable. These options should remove sufficient risk to stimulate higher levels of interconnection to be built than under the merchant approach while ensuring that additional wider benefits are delivered.

It is important under these approaches that any licences granted would include the obligation to maximise both congestion revenue and use of the interconnector. The removal of risk granted by options 3 and 4 may under-incentivise the interconnector owner to maximise interconnector use - this is a greater risk under the regulated approach but would also be a problem under option 3 if the cap on revenue is low in relation to demand for capacity or if the floor is too high. The cap would need to be set at a suitable level to challenge the IC owner while at the same time not allowing excessive returns to be made – one approach could be that the interconnector owner is allowed to retain a percentage of revenue above the cap which would ensure they remain motivated to increase revenues/usage. At most the floor should be set at a level that allows the Interconnector owner to recover its capital and operating costs - with capital costs being calculated on a 100% debt basis – i.e. no allowed equity return.

This would motivate the Interconnector owner to maximise its revenues and ensure they are not being rewarded for simply building an interconnector. As set out below we feel that a combination of approaches would be feasible and required to ensure the optimal level of interconnection is built.

Whichever approach to regulation is taken will require a collaborative approach between the regulators at each end of the connection with due regard for the interconnector owners obligations in each connected market.

### 3.3 Is it feasible to have a mixture of different approaches for different interconnectors – such as some exempt and others regulated? If not, why and how should this be resolved?

We do feel that it is possible to have mixture of different approaches and that this will be important for efficient development of future interconnection. While sufficient demand/price differentials currently exist to motivate merchant interconnectors to be built this will not be the case as more interconnection is commissioned, market coupling develops and market prices converge. At that point, if the clearly identified and quantifiable wider benefits of further interconnection are sufficient then the regulatory approach should be adopted to deliver the optimal level of interconnection.

New regulated interconnection represents a risk to any unregulated (i.e. operated under anything other than option 4) interconnectors as their returns will be eroded – this would be a concern to any party considering whether to build an interconnector. A mechanism to offset these risks would help encourage development. One option would be to allow merchant interconnector developers to opt into a form of regulation from the point in time where a fully regulated interconnector is commissioned (with the aim of delivering wider benefits rather than capturing congestion rents). It would be important that any mechanism takes a multi-year approach to determining an allowed



return to prevent developers from capturing all the profits in the early years without any risk of future losses. The diagram below helps explain this approach:

The lower allowed return may not be enough to cover future costs if the merchant interconnector owner has withdrawn the profits of prior years but responsibility to ensure the business can survive should rest with the owner. This would provide some comfort against the risks of future regulated interconnection while still leaving a degree of risk with developers.

It will be important that any new regulated interconnectors do not have any unfair competitive advantage over existing interconnectors and regional co-operation on interconnector development including aligned access rules and auction arrangements would assist with this.