Response to:

Treatment of Price Taking Generation in Tie Breaks in Dispatch in the Single Electricity Market and Associated Issues

Consultation Paper

SEM – 11 – 063

October 2011

Introduction

The investment decisions of wind generation across the island of Ireland were made on assumptions for expected constraint levels that were indicated at various times by the System Operators and based on the rule sets that applied at such times. This is only rational. Of this fleet of generation, SSE has invested in and operates over 500 MW. Having acted as rational investors, we regard it unreasonable that existing generators are expected to shoulder additional constraints and now curtailment levels as a result of new rule sets which were unforeseeable at the time these investments were made.

There is an urgent need to address the current methodology for applying constraints/curtailment to ensure discrimination is not occurring across existing wind farms today. On this matter it is therefore imperative that the SEM Committee reaches an expedited decision and subsequently, that any new processes arising from such decision are implemented without delay.

In addition SSE has a total of over 800MW of onshore and offshore wind farm capacity across the island in construction or with consent for development, most of which it plans connect to the two grids by 2020 in line with the respective governments targets to achieve 40% of electricity needs from renewable sources. In respect of this investment we need clear, predictable, robust, transparent and non-discriminatory processes for how and under what conditions wind generation will be dispatched down.

We are fully committed to delivering fully grid code compliant sites to both systems of Northern Ireland and the Republic of Ireland.

Hierarchy

We understand that Regulation (EC) 714/2009 on cross-border exchanges in electricity prevents a TSO from interfering with interconnector flows except for system security reasons. However in parallel with that obligation, a separate governing instrument, Directive 2009/28/EC as transposed in Ireland by S.I. No. 147 of 2011, obliges the TSO to dispatch wind within Ireland in priority to power generated from any other source, again subject only to system security requirements.

Under the EU target model for electricity which provides for a day-ahead price coupling of interconnected markets, flows across interconnectors are to be determined up to the point where price levels between markets equalise or where capacity on interconnectors is exhausted. This is to be fixed firm. Under this view, while not explicit in European legislation, it can be conceivably argued that firm fixing of flows across interconnectors at day-ahead stage gives them priority over any and all other generator units, wind including.

This however does not preclude the intra-day (within day) counter-trading on interconnectors either to exploit nearer time mispricings or simply for corporate decisions on electricity volumes. Within this provision, wind energy could be traded in a counter-trade in the opposite direction of the dominant flow across the interconnector. But the operating word here is trading by and between market participants, as anything else would make the TSO become a commercial participant in the markets.

Bearing the above in mind, SSE calls for considerable attention to be given to this issue to ensure wind energy on the system is maximised, even as cognisance is given to the restrictions on trading across interconnectors. We would recommend that the SEMC take a more in-depth look into how this would operate in realtime.

On the matter of reviewing the hierarchy as and when appropriate, we would be concerned that that this will only serve as another source of uncertainty within the industry. Given the long range trajectories of investments required, it is crucial that deep thought is given to issues now and firm decisions, with well-reasoned foundations, made. And when made they should be robust enough to be enduring.

Tie Breaks in Dispatch

SSE welcomes the decision to differentiate between constraints and curtailment and appreciates the difficulties which would arise should more than 3 constraint groups be selected. As part of this SSE would welcome more information on which substations/nodes populate each of the 3 constraints groups. But the proposal suggests that these constraints groups will be reviewed periodically, again raising the spectre of uncertainty; if the proposal is open to unwarranted change it will make the proposal much less reliable.

Another concern relates to constraints not included in the constraints list, where it is suggested that the TSOs will dispatch down wind generation units in a manner that best relieves the constraint whilst minimising the dispatching down of wind generation. This requires clarification, both on how it will be modelled and how it will be implemented in real time. A transparent approach will definitely be required for these types of constraints, particularly if they occur frequently.

The proposal indicates that wind generation which should be controllable but is not will be dispatched down in the first group. We would seek clarification as to whether this refers only to sites which have not successfully passed the dispatch test or to all sites which have not passed the full grid code compliance tests and received their operational certification? In addition we would like to understand the operational procedure to achieve this proposal; would it involve the opening of circuit breakers or would attempts be made to operators on the telephone? We have concerns that as placing a phone call to a windfarm operator may involve significant time delays in real-time, on-dutycontrol engineers in the NCC would not be predisposed to using this option. This would leave just the option of opening circuit breakers, which would be rather crude but necessary action. Nonetheless it is necessary to establish clear policy regarding this.

Regarding the ‘commissioning period’, we have concerns that the clause ‘as agreed with EirGrid’ creates a ‘get-out’ mechanism which could be open to abuse. SSE would view that a set period of time should be set for this allowable ‘commissioning period’. Commissioning periods will vary depending on the sizes of connecting wind farms.We wish to note that EirGird have already implemented a process which requires wind farms to be controllable from first export, a process which SSE has been following. SSE would like to understand how these will all be interlinked. We would be of the view that SONI should adopt the same process and timelines for grid code

compliance and controllability requirements. In addition, SONI should adopt the 2012 year-end deadline for full grid code compliance also.

SSE agrees with the proposal that constraints be alleviated first where both constraint and curtailment issues arise. We support the three categories of constraints groups, viz. generation units with FAQ of 66% and above, with FAQs between 33% and 66% (inclusive) and with FAQs below 33%. However we do not believe that temporary connections should be included with this last category. Our resoning for this is explained in the section on temporary connections following.

Regarding curtailment we would support the pro-rata application **only** on the basis that all wind farms, regardless of firm status, are compensated for curtailment. It is fact that curtailment is a system-wide issue and very dependant on how the system is operated in real time, hence firm access and the conditions resulting in curtailment are unrelated.

Over the last two years the SO's have begun to better understand the scenarios surrounding curtailment events, with studies such as the Facilitation of Renewables indicating new sets of criteria. These studies are still on-going and will discover new limitations and mitigation measures against curtailment. As such it makes it increasingly difficult for both existing generation and planned generation to predict the likely levels of curtailment, putting a significant risk on the financing of these projects. It is our strong view that the System Operators, responsibility to operate the system in an safe, secure and efficient manner, are best placed to manage this area of risk. This they can do by deploying advanced smart grid technologies which would enable the maximisation of generation from renewable sources, ensuring curtailment events are minimised. We do not believe that it should be left to generators to cover the costs of curtailment as such events are entirely outside their control.

Grid Code Compliance

SSE supports the current initiative from the TSOs to place additional emphasis on enforcing existing grid code obligations on incumbent and new generating units. However this will only work under a regime of true partnership between generators and developers on one hand and the TSOs on the other. Otherwise the stated objective to get all relevant sites to grid code compliance by 2013 would be unattainable. To illustrate this need, at present EirGrid requests 10 days notice for scheduling any pre-grid or grid tests. This is clearly infeasible for wind generators. Such a requirement would need revision to allow more flexibility and responsiveness and ideally dedicate an NCC resource to respond to testing requests exclusively.

Furthermore we agree with the TSOs keeping the grid codes under review in order to ensure that future generation portfolios continue to support the satisfactory operation of the system. However this must be conducted in a considered manner. This is even more pertinent in Northern Ireland . Current experience regarding a specific site where grid interface tests had been agreed 12 months ago now sees those being modified and goal posts are being moved. A clear change control process to the grid codes is urgently needed. There is a need to ensure that there are no changes to rules of engagement with wind farms once agreed and any additional requirements being created in the grid codes are not retrospective.

Temporary Connections

SSE is disappointed to see that temporary connections are being so significantly disadvantaged in this proposal. Generation developers make decisions to connect on temporary connections for various reasons relating to timeline issues, grid infrastructure deliverability, costs and levels of constraints. Temporary connections have enabled generating sites (both renewable and conventional) to take advantage of early connection dates. Historically, at the time such decisions were made to connect on temporary bases it would not have been evident that such sites would become so significantly disadvantaged in connection to constraints. SSE believes that sites which are on temporary connections should be studied in the ITC programme and temporary FAQs should be determined, which should subsequently be used in the constraint group categories outlined in the consultation. This should be done until such sites move to their planned permanent connections. The results of such studies would clearly indicate the levels of constraints which are directly linked to the inferior temporary connection options. For intermittent generation such as wind, a developer may then be able to conduct a cost benefit analysis which may determine that the temporary connection is a more economical connection method, leading to a more economical and less environmentally impacting connection method. We would argue that this represents a more efficient way manage these connections.

Modelling Issues

It is imperative that modelling and real-time implementation of the approved rule sets are closely matched. Developers rely on these studies to determine project viability. A developer needs to have confidence in the results of the studies otherwise financing and approval of projects to move forward is restricted. The studies need to be completed in sufficient time so that developers can make best use of the results given that in majority of projects significant investments will not be made until clarity exists. It is a known fact that in the current economic climate financing of large projects is increasingly difficult.

All said, SSE appreciateS the amount of work involved in producing these reports but would request the SOs accelerate the programme as much as possible. We would point out here that every day these reports are not available creates knock-on delays to energisation of these new wind generation sites.

Northern Ireland

The omission of a ruleset on constraint group categories in NI does not give us confidence. It is clear that EirGrid have considered their options in depth but as the process in the North is so different we are disappointed to see little information on how the same issues will be adopted by SONI. There is no indication of the amount of MWs that would fall into each of, or if any, categories. However, to date developers have been informed that all sites which have their MECs matching their TUOS MECs will have firm access, but no such information has been given on future projects.

SSE believes that projects should be given merit of dispatch linked to the date their generation application was deemed complete by the SOs. One of the principle criteria for deeming an application complete is planning permission for the generator. SSE would be interested in

understanding if this methodology of applying constraints could be applied by SONI, or if categories within the constraints groups will be applied in Northern Ireland also.

Quantity of PTG charged PFloor in an Excess Generation Event

SSE supports the proposal to charge PFloor to a pro-rated down quantity of generation which equals System Demand.