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Our Ref: EN01-003285

26 September 2012

Dear Jamie and Andrew

**Re: Response to Consultation on Proposed Constraint Groups arising from SEM-11-105**

RES has been developing wind projects on the island of Ireland since the early 1990s, having developed 14 operating wind farms in Northern Ireland and 4 operating wind farms in the Republic of Ireland, totalling over 241MW. RES currently owns or operates over 134MW of wind capacity across the island. In addition, RES has 90MW of wind capacity in development with planning consent in Northern Ireland and a further 35MW of new wind generation currently in the planning system. RES has been an established presence at the forefront of the wind energy industry for over three decades. Our core activity is the development, design, construction, financing and operation of wind farm projects worldwide. With a portfolio of more than 6.5GW constructed and several gigawatts under construction and in development, RES continues to play a leading role in what is now the world's fastest growing energy sector. RES is also involved other energy sectors including offshore wind, wave, tidal, biomass and photovoltaic power.

RES welcomes the opportunity to respond to the SEM Committee consultation paper entitled, "Proposed Constraint Groups arising from SEM-11-105" of 28 August 2012 ("the Constraint Groups consultation document"). The following paragraphs set out RES' view of the key issues arising from the SEM Committee's proposals.

***Methodology (section 3.1)***

The assumed contingency for Security Constrained Optimal Power flow analysis is N-1 (normal system minus one circuit) but which includes "the loss of a double circuit line in Northern Ireland". We seek clarification as to how this can be reconciled with the fact that a constraint requirement can arise for the loss of a circuit under maintenance conditions (N-M-1) yet this is not modelled in the analysis. The Operational Standard for Security of Supply<sup>1</sup> for the NIE System, EPM-1, requires the transmission system to be secure for the loss of one circuit under normal and maintenance conditions which we interpret to mean that the security level required is N-M-1. If this is the case, we would request the Security Constrained Optimal Power flow analysis to be rerun and include N-M-1 contingencies to avoid giving optimistic results regarding the possibility of a constraint group in Northern Ireland.

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<sup>1</sup> <http://www.soni.ltd.uk/upload/Security%20&%20Planning%20Standards%2010%20EPM-1.pdf>

### *Constraint Group 3 Northern Ireland -2014-1016 and beyond (section 4.3.2)*

The boundary formed by the Coleraine-Kells 110kV circuit, Coolkeeragh-Magherafelt 275kV double-circuit and Omagh Tamnamore 110kV circuits (currently 2 and expected 3 by 2018) is a well known potential constraint boundary enclosing the NW of Northern Ireland for the loss of the Coolkeeragh-Magherafelt 275kV double-circuit. The Constraint Groups consultation document notes that “with an absence of certainty about the timing of both generation build, and particularly new network investment, such studies are dependent upon the assumptions employed” but goes on to conclude that no constraint group was identified. It is however unclear what assumptions were made to reach that conclusion. It would be helpful if the assumptions on network build and maximum generation that were used in the Security Constrained Optimal Power flow analysis for Northern Ireland could be confirmed in a format similar to that used in figures 4, 5, 6, 7, 8 and 9 in the Constraint Groups consultation document.

### *Special Protection Schemes (SPS)*

Although the Constraint Groups consultation is not about SPS it is noted SPS have a similar function and effect as the TSO dispatch actions on the proposed constraint groups. It is reasonable to expect that the principles applicable to SPS e.g. treatment of compensation for generators with firm or non-access should be aligned to SEM rules. In Northern Ireland, quite a number of wind farms SPS were established under individual connection agreements and it is not certain if they closely followed the SEM principles. For instance if a generator that is subject to an SPS attains full firm access but continues to be constrained by the SPS operation due to subsequent generation connected at the same node (but which does not have an SPS) will the generator be given compensation under SEM rules? We recommend that there be a separate consultation to formalise arrangements for SPS and ensure that they are clear and aligned to SEM rules. This would also facilitate the orderly development of SPS in future, if required ahead of deep network reinforcement.

RES seeks to be clear and constructive in all consultation responses and I hope you find the above comments consistent with these objectives. If you wish to discuss this response or any other relevant matter, please do not hesitate to contact me.

Yours sincerely,

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