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Anthony Mungall
OFGEM
107 West Regent Street
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Our Ref: EN01-004030

10 October 2013

Dear Anthony,

Re: RES response to OFGEM CMP213 Impact Assessment Consultation

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 almost 7GW 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 welcomes the opportunity to respond to the "*Project TransmiT: Impact Assessment of industry's proposals (CMP213) to change the electricity transmission charging methodology*" consultation document of 1 August 2013. Responses to the specific questions raised in the consultation document are set out below.

Question 1: Do you think we have identified the relevant impacts from NGET's modelling and interpreted them appropriately?

RES is content that the key areas of impact have been considered. RES particularly welcomes the observation in paragraph 4.11 which states that the modelling exercise is a platform for comparison of the relative effects of the options and should only be considered an "approximate guide" of the likely real world impacts.

Question 2: Do you have any further evidence of the impacts of the charging options not covered by NGET's analysis?

RES cannot offer significant further evidence to support assessment of the impact of the charging options. However RES would emphasise that it considers simplicity and predictability, a factor that we accept is difficult to model in terms of outturn effect, to be of paramount importance to investors and therefore the better facilitation of competition in electricity generation.

Question 3: Do you agree with our assessment of the options in terms of the strategic and sustainability impacts? In particular, are there any impacts that we have not identified?

RES is content that the key areas of impact have been considered.

Question 4: Do you think that socialising some of the cost of HVDC converter stations could lead to other wider benefits, such as technology learning? If so, please provide further evidence in this area.

RES considers that there are clear wider benefits of installation of HVDC, however these wider benefits are not the key issue in the debate around socialisation or partial socialisation of the cost of onshore HVDC converter stations. RES considers that the key issues relate to discriminatory treatment of onshore generator users behind onshore HVDC links and equivalence of treatment with onshore AC substations. RES views in this area are set down in greater detail below.

In relation to technology learning, HVDC is not commonplace within the core of the GB transmission system however its presence is likely to increase in coming years and decades as interconnection between EU member state markets develops (direct connections from the Republic of Ireland are already in progress), HVDC offshore connections start to merge to form offshore grids and regulatory initiatives such as Ofgem's ITPR project take effect. If Ofgem were to decide to socialise a proportion of the cost of onshore HVDC substations, a barrier to the deployment of this technology would be reduced and the practical assessment of the optimum approach to HVDC system operation could commence.

Question 5: Do you agree with our assessment of the options against the Relevant CUSC objectives? Please provide evidence to support any differing views.

RES does not agree with Ofgem's assessment of the options against Relevant CUSC objectives in respect of Sharing and Onshore HVDC converter aspects of its minded to position. In respect of sharing, RES remains of the view that the reduced complexity and relative predictability (by removing the non-foreseeable influence of diversity) benefits of the NGET Original provides a better balance of cost reflectivity and simplicity than the other sharing options. However, the key area where RES would request Ofgem to provide further explanation and to also revisit is in relation to allocation of cost of onshore HVDC converter stations, in which Ofgem has stated a minded to position of charging 100% of the associated costs on a locational basis. This position seems to be primarily justified on grounds of avoiding perceived discrimination against offshore transmission owner connected power stations. RES considers that Ofgem's minded to position is not justified for the following reasons.

- Discrimination against Offshore Generators: RES considers that a direct comparison with Offshore Transmission connected plant is not appropriate. Offshore projects have a high degree of influence on the design of their local transmission (effectively connection assets) and the precise level of redundancy of their design is reflected in their local TNUoS. This contrasts directly with an onshore transmission owner led investment planning of the Main Interconnected Transmission System where the generator has no influence at all and the onshore Transmission Owner pursues the most economic and efficient solution that is deliverable in order to maintain compliance with Security and Quality of Supply Standards (SQSS). RES considers that a stronger comparator for an onshore HVDC converter station that will not form part of an OFTO system is an onshore AC substation. This is because onshore HVDC converter stations are progressed because they represent the most economic and efficient deliverable means of achieving compliance with SQSS, noting additional benefits such as near-instant controllability of power flows and fully-controllable reactive power delivery. If the Ofgem minded to position were to be pursued, it would create an environment in which generators would attempt to exert influence on the relevant transmission licensees to avoid use of HVDC technology and pursue traditional AC tower line solutions resulting in greater costs to the consumer, raised environmental impact and increased delay in the delivery of renewables

necessary to meet 2020 targets. For these reasons, RES considers that the Ofgem minded to position creates the potential for discrimination between generator users located behind onshore HVDC converter stations and those not located behind onshore HVDC converter stations.

- Equivalence with onshore AC substations: We are concerned that Ofgem's minded-to position seeks to treat HVDC links substantially differently from equivalent onshore circuits in the existing charging methodology, creating an anomaly in the methodology which may artificially drive users to request inefficient solutions. We would request that Ofgem shares any evidence it has uncovered to substantiate the view that there is no analogy at all between onshore AC substations and the characteristics of onshore HVDC substations. Ofgem notes in paragraphs 6.56 to 6.58 the areas in which the CMP213 working group discussed characteristics of and services provided by an onshore HVDC converter station that bring about equivalence with onshore AC substations. Specifically, Ofgem refers to transformers, quad boosters and the reactive power benefits of Voltage Source Converter (VSC) HVDC links. These issues were discussed at length in the CMP213 Working Group and documented in the CMP 213 Working Group report. However, Ofgem makes no specific comment on these comparisons in the consultation which is surprising in light of the zero socialisation position it has adopted for onshore HVDC substations. RES would encourage Ofgem to expand on its thinking in these areas to explain how it arrived at the minded to position regarding onshore HVDC converter stations. If Ofgem is unsure as to the merits of the arguments around equivalence with AC substations (which would be understandable in light of the limited information available), it would seem to make more sense to pursue one of the charging options that considered AC equivalence on an investment-specific basis. Such an approach would seem to offer an outcome that is more in line with Ofgem thinking whilst also supporting better cost reflectivity and more effective competition in electricity generation.

In summary, RES considers that the Ofgem minded to decision better facilitates CUSC objectives a) and b) relative to Status Quo as a result of the recognition of sharing but remains of the view that the CUSC objectives would be facilitated better still through adoption of the National Grid original approach to sharing.

RES remains of the view that the Ofgem minded to position in respect of treatment of onshore HVDC converter stations that will not form part of an OFTO system does not better facilitate the CUSC objectives relative to options which partially socialise the associated costs. Specifically, RES considers that objective a) would be better facilitated through reduced discrimination between onshore generators and objective b) would be better facilitated through improved cost reflectivity through analogous treatment with appropriate components of onshore AC substations.

Question 6: Do you agree with our assessment of the options against our statutory duties? Please provide evidence to support any differing views.

RES broadly agrees with the assessment of the minded to decision against Ofgem's statutory duties other than in relation to "Furthering competition". For the reasons outlined in our response to Question 5, RES considers that Ofgem would better meet this duty through adoption of the National Grid Original approach to sharing and also through partial socialisation of onshore HVDC converter stations.

Question 7: Do you agree with our assessment that it is appropriate to implement WACM2 in April 2014? Please provide evidence to support any alternative implementation date.

For whichever WACM is ultimately pursued, RES strongly agrees that April 2014 remains the most timely and realistic timescale for implementation of CMP213. Delay to this timescale could be highly damaging to the progress of investment in renewables necessary to meet 2020 targets. RES understands that this

timescale may pose challenges relating to minimum notice periods for change in TEC to existing generators that are currently liable for Generator TNUoS charges. RES considers that such concerns should be addressed through an appropriately formed transition and implementation arrangement. This is not sufficient justification for delay to an industry change of the significance of CMP213.

I hope the points raised in this response are clear and are helpful in assisting your further thinking. If you wish to discuss, please do not hesitate to contact me.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'P. Smart', with a horizontal line underneath.

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