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Attn: Grant McEachran

Ofgem
RIIO – Electricity Distribution
3rd Floor Cornerstone
West Regent Street
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Dear Sirs,

Consultation on the cost of the new energy solution for Shetland

Thank you for the opportunity to contribute views on the presented proposals.

Question 1: Do you have any views on the costs of the preferred SNES?

We can see that an assessment has been made of the proposals arising from the SNES process but it is not clear that the costs of the preferred solution have been equitably or suitably compared with alternatives. Shetland Aerogenerators Ltd was a 'Lot 2' bidder in the SNES process. As part of the tender process we were asked to offer a price at discount to the outcomes of 'Lot 1' for the supply of MWh. At the recent public consultation events held in Shetland National Grid said their bid does not include the cost of electricity at the DSO busbars. Ofgem officers at the same event said otherwise but this inconsistency is a cause for concern. The reasoned decision to decline to present a detailed breakdown of cost nonetheless prevents external scrutiny of the recommended proposals. It may be premature to award any contract until this is resolved.

Question 2: Do you have any views on whether the recommended solution represents the optimal level of cost efficiency currently available?

The recommended solution may not represent the optimal level of cost efficiency available. The SNES process recognised the possibility of a transmission-scale electricity connection between Shetland and Mainland GB. In the event of such a transmission connection then the SNES arrangements would change state. The SNES process had an inbuilt condition to avoid the UK consumer facing unnecessary cost. The potential existence of a Shetland-GB transmission connection is still inadequately factored. We recognise that a definite solution for Shetland needs to be put in place and that the contractual certainty of the SNES process contrasts with the political uncertainty of the Viking Wind Farm project, upon which the proposed Shetland-GB transmission connection is predicated. However, in any scenario where the transmission connection happens then the scale of the financial consequences are so major as to justify continuing to amend the SNES process to cope with that possibility. If £40 million of incentives per annum are required then it would be worthwhile and appropriate to see whether this huge cost to consumers could be mitigated by contribution to a different project. The accommodation could be achieved by granting a phased contract to the successful SNES bidders (NGSLL-Aggreko) allowing the recommended SNES to proceed but with break clauses put to allow a different outcome if external factors lead to a Shetland-GB transmission connection becoming certain. The costs of proceeding in this manner would be sunk for the early phases but as these are mostly investigative then these can be accepted as reclaimable (on an actual costs basis). The potential saving considerably outweighs the losses that might be incurred.

If NGSLL-Aggreko reach the agreed milestones and are ready, or reasonably require, to expend substantial finances for major infrastructure then the status of the Shetland-GB transmission connection can be assessed and a view taken as to whether it is better to continue or review how UK consumer funds are applied.

It might appear reasonable to say that the Viking Wind Farm project could have participated in the SNES process but the SNES tender documentation did not enable wider strategic values and benefits to be bid or assessed nor could the Viking Wind Farm project be expected to abandon the current processes intended to bring about the certainty currently absent.

This would be consistent with Ofgem’s Strategic Wider Works process.

If the incentives identified for the recommended SNES project were applied to an alternative transmission connection then that would have a material impact on the charging regime for that link, which in turn would have a material impact on the cost of energy produced from projects in Shetland that might export energy to the UK transmission system while still providing the supply to Shetland consumers required. The scale of potential generation is at least an order of magnitude greater than that pertaining to the SNES and so would bring benefit to many more UK consumers for the same cost.

We can agree this recommended SNES represents an optimum solution in the absence of a transmission connection and so can be used as the ‘opportunity cost’ for comparison if applied to a transmission link.

Example Shetland project generation bid price	£50 / MWh	£60 / MWh	£70 / MWh
Example bid required with current TNUoS applied	£80 / MWh	£90 / MWh	£100 / MWh
Example bid with SNES incentive reapplied to transmission connection	£65 / MWh	£75 / MWh	£85 / MWh

An example 400MW project selling electricity would charge UK consumers over £23 million less per annum than obliged with current TNUoS. ($400\text{MW} * 8760 \text{ hrs} * 45\% \text{ CF} * £15 = £23,652,000$). Applying the £40 million SNES incentive to the transmission cable would deliver the same benefits and return more than half the cost burden in savings. Given the scale of this potential difference, it is appropriate to consider adjusting the SNES delivery to allow break points where an optimal solution can be followed which may not have been available today.

Question 3: Do you have any views on whether the proposed incentive arrangements are sufficient to maximise the availability of the service, and to minimise increases in cost to consumers on an ongoing basis?

We are particularly concerned how the recommended solution might impact our existing generation assets. SSE Networks expressed willingness to share some outcomes of the system modelling undertaken within the tender assessments but the short timescale of this consultation process has not left enough time to request, receive, review and analyse such information in order to present robust conclusions as to how the SNES might change our connection output profiles. We accept it will probably be positive or neutral but we have no certainty. Extracted outcomes would probably have been inadequate anyway and we would probably have required full modelling to be confident of our circumstances so we cannot say we are satisfied that the recommended SNES maximises availability of the service if the service includes facilitating existing generation infrastructure. We would still like to see full detailed modelling on how the recommended SNES will affect our assets.

We note National Grid as System Operator has just consulted on how to best facilitate the evolution of future balancing services markets and understand how best to facilitate a whole system approach to managing the network (SNAPS). That explicitly considers how to encourage generators to provide systems needs such as system inertia, frequency response, black start, etc. We have turbines capable of contributing elements of these ancillary services but are unable to do so due to grid code constraints. We are concerned that the SNES will ‘fix’ Shetland and prevent future opportunities for the Shetland system to gain access to these ancillary services while equivalent projects on the GB mainland become able.

We note under the SNES there would be three control rooms supporting the operation of the SNES. We have a general concern that this may be inefficient and likely to impact restoration of customer supplies in times of fault.

Yours faithfully,

Angus Ward
Director