Centrica Plc
Millstream
Maidenhead Rd
Windsor
Berkshire SL4 5GD
www.centrica.com

Adam Simms
Regulatory Frameworks
Transmission Commercial
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

3 February 2010

By email

Dear Adam,

RE: National Grid's consultation on charging for island connections

Thank you for the opportunity to respond to this Consultation Document. This is a non confidential response on behalf of the Centrica group of companies excluding Centrica Storage Ltd. We are surprised by the lack of analysis and options presented within this consultation; the consultation essentially proposes that the OFTO charging regime should be transferred to island connections without engaging in any debate about other possibilities. For example, no consideration has been given to a merchant approach or what the charging methodology would look like if a non-project specific approach is taken for island connections. It is for this reason that we believe that a further consultation is needed.

Notwithstanding the process, we believe that the costs of island connections should be targeted at the users and the offshore charging regime is one way of doing that. However, whilst there are similarities between island connections and offshore wind farm connections, we would also note there are differences that have not been explored in this consultation and as such casts doubt over whether the full application of the offshore charging regime is justifiable. One difference is the lifespan of an offshore wind farm which, under the OFTO regime, is assumed to be 20 years and on which the offshore charging methodology is based. However, the life of a wind farm located on land is likely to be different from that offshore and therefore it is questionable whether this difference should not be reflected in the charging methodology. There are also more profound differences in the types of connections such as the first substation being situated onshore in the case of an island connection but offshore in the case of an offshore wind farm. Finally, unlike the current Round 1 and Round 2 offshore wind farms, the island connections could be linking numerous demand and generation units.

There are also differences between the proposed methodology for island connections and the OFTO charging regime which we believe should be considered further. For example, with

regard to the Local Security Factor, Centrica notes National Grid's proposals to apply a Local Security Factor of 1 for connections where the loss of any one circuit would result in total loss of access to the network and a Local Security Factor of 1.8 for connections in which the loss any one circuit would not result in a complete loss of access to the network (as per the situation onshore). However, within the offshore regime specific local circuit security factors are calculated for each offshore connection. In the event that the connection is via a single cable, the local circuit security factor would be 1. For multiple cable connections, the local circuit security factor is calculated as the ratio between cable capability and the generation capacity connected to them, capped at the wider system security factor (currently 1.8). After discussions with National Grid we understand that the project specific calculation of the Local Security Factor for offshore projects cannot be replicated for island connections due to the definitions within the GBSQSS. However, this difference in treatment, despite the similarities in the type of generation, could lead to quite different TNUoS charges for island connections and offshore generators that are not situated on an island. As such we believe that there may be merit in making an amendment to the GBSQSS in order to rectify this situation.

Centrica notes National Grid's proposals to change the annuity factor to take into account the different rates of return for anticipatory investment. However, as no other options or possibilities were presented, it is difficult to examine these proposals in a comparative light and arrive at a firm conclusion. As such this is another area which we believe warrants further analysis in another consultation.

We do not believe that there is merit in pursuing a new demand zone for islands. We note National Grid's analysis shows that the demand tariff in zone 1 would be reduced by £0.22/kW. However, this reduction is just a natural functioning of the load flow model, as happens to all TNUoS tariffs when there are changes in generation and demand patterns. We do not believe that island connections should be treated any differently and as such do not believe that there is a need to create a new demand zone. We would also note the large implementation costs that would be involved in creating a new zone for demand due to the fact that Elexon would have to manually transfer all of the MPAN for all meters on the island into the new zone.

I hope these comments have been useful. If you want to discuss any element of this response, please do not hesitate to contact me on 07789 579169 or at Ricky.Hill@centrica.com.

Yours sincerely,

Ricky Hill
Industry Development Analyst
Centrica Energy

Regulatory Frameworks – Floor B3
Transmission Commercial
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

29 January 2010

Dear Adam,

NGET's consultation GB ECM-20 - Charging for Island Connection

EDF Energy welcomes the opportunity to respond to this consultation. The key messages from our response are as follows:

- EDF Energy welcomes any proposals which seek to clarify and improve the transparency and predictability of the methodology applied to calculating island connection charges and therefore improving the conditions for future investment.

- Island links should be treated in the same way as offshore transmission assets.

We will now discuss some of the specific areas on which National Grid has asked questions of the respondents.

- Should island links be treated in the same way as offshore transmission assets?

EDF Energy believes that island links should be treated in the same way as offshore transmission assets. The charging methodology used for the calculation of TNUoS tariffs in offshore transmission should therefore be adopted. This methodology would appear to be the most appropriate one for charging island connections given the technical similarities between the two.

- Is the proposal sufficient to calculate tariffs regardless of whether island links are funded by competitive tender or through expansion of an existing TO's network?

We believes the proposal is sufficient to calculate tariffs, particularly under the competitive bidding process where the costs would be necessarily transparent via a tendering mechanism by which participants will submit their proposal and all relevant information in advance. If there is no competition and subsequently the link must be completed by an expansion of an existing TO network, then the TO will need to supply sufficient information to enable meaningful calculations to be performed relating to the production of robust annuity factors (AF) for individual projects. These can be reviewed on an annual basis as more information becomes available.

- Whether the assumptions on the local security factors for island links are suitable?

EDF Energy
40 Grosvenor Place
London SW1X 7EN

Tel +44 (0) 20 7752 2200
Fax +44 (0) 20 7752 2223

We agree that the assumptions are suitable if the loss of one circuit does not result in the complete loss of access to the network and the local security factor (LSF) applied is set to the GB average of 1.8. It seems reasonable that under these circumstances the GB average is used as this ensures equal treatment of both onshore and offshore. However, if the loss of one circuit results in total loss of access the LSF is 1 (e.g., there is no partial redundancy).

- Whether changing the annuity factor (AF) is the best way to account for different rate of returns for strategic investment?

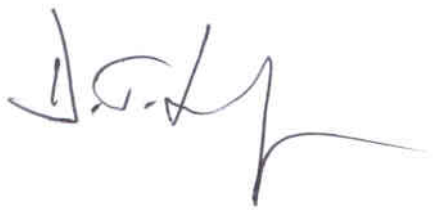
We support changing the AF on the basis that different projects will have different levels of complexity and risk profiles. The most appropriate way of reflecting this into the cost base is to vary the AF to take account of the risk profile and funding horizon for individual projects However, we also note that this has the potential to introduce volatility to tariffs which erodes some of stability expected from the LRMC based TNUoS methodology.

- Whether there is merit in pursuing the creation of new demand zones for islands or are the existing zones still appropriate?

We do not believe there is any merit in the creation of a new demand zone and support NGT's view that any benefits that would arise from the creation of a new zone(s) would be more than offset by the costs of establishing it.

If you have any queries on this response or would like to meet to discuss it further, please do not hesitate to contact Rob Rome on 01452 653170, or myself.

Yours sincerely



Denis Linford
Corporate Policy and Regulation Director

E.ON UK plc
Westwood Way
Westwood Business Park
Coventry
CV4 8LG
eon-uk.com

Paul Jones
024 76 183 383

paul.jones@eon-uk.com

Adam Sims
Regulatory Frameworks
Transmission Commercial
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

29 January, 2010

Dear Adam,

GBECM-20: Charging for Island Connections

Thank you for the opportunity to respond the above consultation. This response is made on behalf of E.ON UK.

We support National Grid's initial view on the way ahead. Our response to the individual questions posed is as follows:

Q1) Whether island links should be treated in the same way as offshore transmission assets

Yes. The reason that these transmission assets are being installed is to facilitate that connection of new generation projects. This makes this investment equivalent to that which is required to connect offshore renewable projects. To treat these assets differently from those required for offshore generators would result in undue discrimination in our opinion, as the drivers for the investment are directly equivalent.

For instance, we note that the Shetland link is essentially required to provide transmission capacity for wind projects on the islands or connecting nearby offshore. Whilst, the link is likely to have associated benefits for the local community in Shetland, it is clear that this

project is driven by the desire to export generation capacity 330km from the islands to the onshore connection point on the mainland. This makes the investment directly equivalent to a similar subsea cable connecting an offshore wind farm of comparable size and therefore should be treated in the same manner.

Q2) Whether the proposed changes to the methodology are sufficient to calculate tariffs regardless of whether island links are funded by competitive tender or through expansion of an existing TO's network

Although island link investment could be provided through a competitive tender, the decision has been taken not to do so. This has been deemed as the most efficient solution in this instance. There is no reason why this should have a bearing on the appropriate mechanism for charging generators for their use of these assets.

Q3) Whether the assumptions on the local security factors for island links are suitable

Yes. Again, there is no reason why equivalent treatment with other generation located offshore from the GB mainland is not appropriate in this instance.

Q4) Whether changing the annuity factor is the best way to account for different rate of returns for strategic investment

This proposal presumably comes about because the rate of return that an Offshore Transmission Owner is allowed is factored into the local charge for the relevant offshore generator. Therefore, this proposal is seeking to provide equivalent treatment. This could be seen as a contentious issue however if the rate of return is driven by whether or not investment is stranded or not. In other words, is there a danger that as more generators connect to use strategic investment, making it less likely to be stranded, they are exposed to a higher rate of return in their charges? If this were to be the case, care needs to be exercised in ensuring that the charging structure does not incentivise behaviour that increases the risk of stranding.

Q5) Whether there is merit in pursuing the creation of new demand zones for islands or are the existing zones still appropriate

As these connections are driven by the need to connect generation, it doesn't seem necessary to seek to identify a new demand zone. The role of specific targeted demand charges is to provide signals about where it is most appropriate to connect new demand. If it is deemed necessary to provide strong additional signals to attract industrial load onto islands (as domestic load is unlikely to respond to such signals) then a different demand zone would be appropriate. Given the apparent disruption that creating a specific demand zone would cause, the treatment as proposed seems appropriate.

Q6) Whether the methodology changes as described in Appendix 1 are appropriate

Yes, they in the main seem to deliver the intent of the proposal.

I hope the above comments prove helpful.

Yours sincerely

Paul Jones
Trading Arrangements

Fairwind (Orkney) Ltd

Reply address:
Horries, Deerness, Orkney, KW17 2QL

Tel : 01856 741267
E-mail: dennis@researchrelay.com
Date: 29th January 2010

Adam Sims
Regulatory Frameworks Floor B3
National Grid House
Warwick Technology Park
Gallows Hill
Warwick CV34 6DA

Dear Adam,

Response to NGET consultation GBECM20 –Charging for Island Connections

Thank you for the opportunity to respond to the above Consultation on Island Charging.

Whilst we are a major developer in our own right within Orkney, and therefore directly effected by any proposals, we generally share the analysis submitted by OREF.

We would, however, like to bring your attention to the fact that, both, the volatile nature of quotes and the high level of proposed TNUoS tariffs have served to drive away our previous development partners, Statkraft, from involvement in on-shore development in the islands.

We would be prepared to pay a reasonable and predictable level of TNUoS and believe that if all generating parties who use the UK grid system to export power pay towards the costs, then anomalous high charges could be avoided.

Perhaps the example of generator in Orkney of TEC 180MW paying quoted charges in January 2009 may help to put things into perspective.

Using the £61/kW figure of which around £56 would be the locational element -

Total UK Generation 75,000 MW (as TEC)
Orkney Generation 180 MW
Total locational charges assigned to generation (Whole UK) £50m
Orkney share of locational charges £10.08m
Orkney percentage share of all locational charges for UK 20.16%
Orkney percentage of all UK Generation 0.24%

The Orkney zone would be paying 84 times more than its proportion of generation on the grid.

Yours sincerely,

Dennis Gowland
Director – Fairwind Orkney Ltd

HIE
Highlands and Islands Enterprise
Iomairt na Gàidhealtachd 's nan Eilean

adam.sims@uk.ngrid.com

26/01/2010

Dear Mr Sims

Response to GB ECM-20 National Grid Consultation on Island Transmission Charging

Highlands & Islands Enterprise (HIE) is the Scottish Government's agency responsible for economic and community development across the northern half of Scotland where the renewable energy resources constitute the greatest concentration of potentially exploitable renewable energy resources in the UK. HIE along with its local partners (Shetland Islands Council, Orkney Islands Council, Comhairle nan Eilean Siar, Highland Council, Argyll & Bute Council and Moray Council) has been proactively working to reduce barriers to the development and deployment of renewables in the region for a number of years. Included in our efforts have been responses to many consultations published by National Grid where experience has taught us that our joint response on behalf of seven partners has only ever been counted as one. Given that this consultation is specific to the treatment of the Scottish Islands and that this joint response represents the views of **each** of those Islands, we hope that it will be given due recognition in terms of both weighting and 'headcount' i.e. that National Grid recognise the views of the seven respondents represented and the direct effect of any decision on charging methodologies on the social and economic development in the islands represented.

HIE welcomes the opportunity to respond to your consultation on an island TNUoS charge methodology. HIE and its local authority partners have always placed a very high priority on affordable, predictable transmission access charges for the islands which have, to date, never had a transmission charging methodology. Where there have been attempts to estimate the charge, they have been very high (in some cases prohibitive) and subject to a great deal of uncertainty. HIE is therefore very interested in your long-anticipated consultation.

We have structured our response into some background on HIE's perspective on why island charges are so important, a general introduction to the consultation and then responses to each of your questions.

The HIE perspective

HIE works closely with local authorities in its area to realise the environmental, social and economic benefits of the area's world-class renewable energy resources. As you know, the high charges to access transmission infrastructure in the north of Scotland are a source of concern for us. The dynamic of some very high charges in areas rich in renewable resources, but in peripheral areas with challenging economic conditions and sparse infrastructure, is extremely polarised in the island areas of the Western Isles, Orkney and Shetland.

Cowan House, Inverness Retail and Business Park, Inverness IV2 7GF Scotland
Taigh Mhic Comhnainn, Pàirc-Ghnìomhachais Inbhir Nis, Inbhir Nis IV2 7GF Alba
+44 (0)1463 234171 +44 (0)1463 244469 info@hient.co.uk www.hie.co.uk

We view renewable energy as a key means of generating a vibrant economy for the islands, and yet this is threatened and in some cases thwarted by high transmission charges. The Fairwind Orkney project for instance has cited high transmission charges as the major factor in frustrating development of the project. The charges mean that projects can be marginal and vulnerable to relatively small cost fluctuations in all areas of the business.

We note the desire to provide an economic "signal" but we fundamentally disagree with the notion that the signals should favour development out from what is an out-dated existing grid topology. Transmission infrastructure is designed to take electricity from its source to its destination, and the predominant source locations are very different as we move over to a low carbon economy. The UK and EU have challenging and mandatory renewable energy and carbon reduction targets. Within this context, Scotland has set itself leading edge targets. Economic signals which seek to drive renewable energy projects away from the areas of best resource are counter productive in meeting these targets.

The high costs, underwriting liabilities and the range of uncertainty and variability in the final tariffs already pose a potential strategic threat to large projects – with very little strategic investment on the table to create opportunities for collections of smaller projects which may gradually develop over time. As such it is a major barrier to entry and investment for these kind of developments, which include emerging wave and tidal technologies.

Thus the high charges make our job very, very difficult. It effectively takes money out of local communities and economies. This is especially the case for the islands because there is an exceptionally strong political and community determination to retain value in the area. For instance the Western Isles has led the UK in placing planning conditions on local content, the Shetland Isles has an enviable record on generating community income in trust from local economic activity, and Orkney is leading the world on wave and tidal research and development.

The argument put forward that high transmission charges reflect the actual cost of the link, negates any sharing benefits that other users enjoy when they access the GB market. There were good reasons why there was a move away from deep charges but the island local tariffs look similar to a deep tariff, and step back to the same kind of investment barriers they created.

HIE is also troubled by an attitude that exists in some quarters that high ROC benefits create scope for higher charges without compromising Government targets, and that access to the GB market gives the islands access to these benefits. HIE has already presented evidence to National Grid and Ofgem that despite the ROC benefits, projects on the islands are nonetheless often marginal at best as a result of higher capex and exceptionally high transmission charging estimates. ROC prices also fluctuate with market conditions and policy decisions. The ROC market is also explicitly de-linked from the electricity market – ROCs are designed to be traded separately. In addition, any 'bundling' is counter to the direction of travel for energy markets in the EU and can be viewed as counter productive to it.

The islands have also not benefited from the recent Government decision to further subsidise offshore wind with double ROCs or from Ofgem's work with the European Investment Bank to provide preferable finance terms for offshore OFTOs. The relative economics of offshore wind and island wind has therefore broken down which in turn erodes the arguments around the transmission costs providing a

differentiating cost component for projects contributing to Government targets. This is despite the fact that island wind could potentially make an earlier contribution.

Furthermore, a new link to Shetland and access to the GB wholesale energy market should reduce energy costs there. At the moment the high diesel-dominated costs are subsidised. Is there a case then for reflecting some of this benefit back to those paying for the link? This is something we wish to see examined further.

All discussions, to date, fail to adequately address island connections' function in underpinning island demand. Island demand should have implications for TNUoS , constraint payment considerations and final sums securities. The facilitation of island demand by proposed island links is currently inadequately addressed and explored by the consultation.

This is a context that you will largely be familiar with, but we feel it is relevant to our response to this consultation. The islands are the ultimate test for the TNUoS methodology which originally was designed for an interconnected mainland transmission system. An undersea link to Shetland would be charged at over £123/kW. How does this compare to the costs to access the GB market from France? Is this disparity appropriate? Would this make the Shetland charge estimate the highest in Europe? These are fundamental questions which cannot be ignored.

The consultation

We are pleased that National Grid is consulting on a TNUoS charging methodology for the islands, although clearly disappointed (although not surprised) that this is simply to say that the existing methodology will extend to the islands. There are a number of reasons that we have asked for a methodology to be developed, as follows:

- If there is no agreed methodology it is impossible for projects to understand what their charges might be.

- As noted above, for Island projects to proceed, they need to be able to fully evaluate their costs and barriers to investment in the region. Transmission charges are expected to be prohibitory. If they are, HIE needs clear sight of that in order to press for measures to mitigate – through refinement of the methodology or through extra support for projects (for instance offshore wind benefits from double ROCs in part because of the higher offshore connection costs). We cannot direct our work appropriately if there is no methodology or indicative costs.

- On examination, the islands are often treated differently to the mainland – this can be particularly frustrating where arrangements are developed on an industry-wide basis only to find that an exception is made for the islands. Examination of the issues in good time should help to flush out these issues.

We note that the consultation is quite short and that it is with a view to moving directly to implementation. It talks about refinements to the detail of National Grid's existing charging methodology and does not raise any wider questions that we would have found helpful to discuss. We would have preferred a pre-consultation that encompassed, *inter alia*,

- Indicative charges for each of the Scottish islands rather than one hypothetical island. There are only three island groups. Transparent indications should be provided for each.

- A number of sensitivities which bring out the implications of some of the refinements discussed in the consultation, such as assumptions on the expansion factor.

- The net effect of the TNUoS charging methodology and any new charging regime for variable low load factor generation.

- The knock-on effect for underwriting liabilities when using the IGUC methodology with TNUoS multipliers. Will IGUC be available to the islands? This question will probably need some input from Ofgem. This is particularly important to resolve as projects on the islands will shortly be looking at underwriting construction costs, and this is an important milestone that may prove very difficult if the underwriting amounts are very high and / or unpredictable.

- The potential for volatility in island charges.

As it is, the consultation is also written for a quite specialist audience and is not immediately accessible to the range of developers and community groups developing projects on the islands. We would very much welcome your assistance in redressing this, and note and support your willingness to present to our stakeholder groups.

Specifically we are delighted that National Grid accepted an invitation to speak to Orkney stakeholders on the 7 January. This kind of engagement is extremely useful for us in helping to disseminate business-critical intelligence and in widening out the debate and understanding each other's views.

Finally, we note that the potential application of Section 185 power on transmission charge capping for the islands remains unresolved. We appreciate that this falls outwith your remit and is a matter for DECC, but we note that the analysis undertaken for S 185 discussions was inadequate (largely due to highly questionable assumptions in respect of load factor and capital cost estimates) and is now out of date with new and significantly higher island charge estimates.

The remainder of this response addresses your consultation questions, as follows:

Q1: Should island links be treated in the same way as offshore transmission assets?

The offshore charging regime is differentiated from the onshore charging regime (including the separation of local from wider charges) by virtue of the competitive OFTO regime. If the offshore regime proves more costly than extension of the onshore regime, then clearly we would not support this. If there does turn out to be benefits from the competitive offshore regime that flow back to communities accommodating the development, then yes, we would support that, but that very much remains to be seen.

We would like to understand the full cost implications of policy decisions on whether the links are tendered competitively by Ofgem, built as an extension to SHETL's network or tendered by the generation companies themselves. As noted we do not

feel the consultation brings out the pros and cons of these different options and we would find it extremely useful if some extra analysis could be provided to this effect.

In so far as an OFTO competitive regime would probably derail existing plans for well progressed island links, and create ongoing uncertainty on generator's costs, we would probably be minded to oppose an OFTO regime for those projects.

Q2: Is the proposal sufficient to calculate tariffs regardless of whether island links are funded by competitive tender or through expansion of an existing TO's network?

No, because final tariffs for competitively tendered projects hinge on the OFTO's bid-for revenue, which is unknown until the OFTO is appointed. This makes it more difficult for National Grid to produce indicative tariffs, but may make the final tariffs more stable if the OFTOs revenues remain unchanged for 20 years.

HIE would find it helpful if the implications of a competitive versus historical regime were elaborated upon. For instance, the revenue recovery periods are generally shorter for the OFTO regime which makes the TNUoS charge more expensive if the construction costs are otherwise equal. If island connections are treated in the same way as the offshore regime this means that the asset life for connections is assumed to be 20 years (for investment purposes) rather than the 50 year design life of the asset (and in keeping with the existing onshore overhead line methodology). This could lead to TNUoS charges for the islands being more than doubled and could lead to OFTO's making excessive profits at the expense of island generators. This could lead to island generators paying two and a half times the value of the asset rather than the c.6.25% an extension of the onshore methodology would provide and this is clearly a point against support for an OFTO style treatment of island connections.

If island connections are to be treated as spurs rather than part of the MITS there is some dubiety over whether the 1.8% 'overhead factor' should be applicable to island TNUoS charges on top of the 6.25% rate of return. HIE would argue that a full pass through of this "overhead factor" on an unmeshed, spur connection to islands is inappropriate. Uncertainty on this element serves to add further uncertainty to the calculation of tariffs.

Q3: Are the assumptions on the local security factors for island links suitable?

The consultation merely sets out the existing arrangements for local circuits, it doesn't talk specifically about the islands. In so far as the island links may wish to utilise single circuits we agree that a security factor of 1 would be appropriate.

HIE would question the point of a revised SQSS definition for offshore and, presumably, islands, which made a single circuit compliant but which was then treated differently to mainland compliant circuits for compensation purposes. What role is the SQSS playing here? It is not setting a standard to which all offshore connections must comply as variations are considered to be acceptable. This point has been put forward by Goran Strabac who advised on the offshore SQSS standard, and there has never been a satisfactory answer from Ofgem. It would be helpful for National Grid to provide a view.

Q4: Is changing the annuity factor the best way to account for different rate of returns for anticipatory investment?

This should be the same problem to address as the OFTO situation i.e. factoring in different rates of return, and therefore the approach should be consistent as far as possible. We are not sure whether the approach is consistent as set out because for the OFTO case the entire TNUoS charge is factored by a bundled OFTO revenue. In this case there is a slight adjustment to reflect a different rate of return for a portion of the asset. Whilst it seems reasonable it would be helpful to examine some examples to understand the implications – we have not as yet had an opportunity to do this ourselves.

In any event we understand that SHETL is not seeking a heightened rate of return on some modest over-sizing of island connections. This is because over-sizing has been shown to represent good value for consumers (rather than building connections discretely and sequentially).

Q5: Is there merit in pursuing the creation of new demand zones for islands?

First of all this section notes that "*it may be necessary to introduce a level of user commitment to reduce the risk of asset stranding, however this is currently more appropriately taken forward as part of the DECC consultation on transmission access.*"

This is precisely the kind of issue that the islands are faced with as an apparently same, but different, case. If the islands are good enough for locational TNUoS charging then they are good enough for the signals that are created. If demand is encouraged to expand – which is the deliberate intent of the TNUoS methodology – then surely that is the methodology acting as intended? We see absolutely no reason whatsoever why generation should be asked to secure against the methodology working as intended. This does not happen on the mainland. If the TNUoS methodology is inappropriate for the islands because it gives the wrong signals, then that is a very different question which we would be happy to debate!

As for the debate on demand zones, we are disappointed that this covers only the issue of whether the demand zones on the islands and the mainland should be merged or separate. It does not revisit in the case of the islands whether negative demand charging should be allowed. This was raised at the last Charging Issues Standing Group (CISG) but is not covered here. We have since raised it at the January CISG and note and appreciate your support on this.

To reiterate, the island generation charges are very locational, in the case of Shetland around five times the mainland cost. This is taking a substantive portion of the value of a community wind farm out of the community by a locational methodology that takes from generation and yet does not give back to demand on a like-for-like basis. The disparity between generation and demand is very stark for Shetland. We cannot understand why the Shetland community cannot be allowed to benefit from the correct negative charge of around -£27/kW when generation is expected to pay around £123/kW.

We would stress that we do not have a firm view on whether this should form a new proposal, but we are very much interested in exploring the potential benefits for the north of Scotland of allowing negative demand charges.

Finally, the consultation is rather dismissive about creating a new demand zone for the islands. We feel this could have been approached more positively and with some

evidence presented around the costs and benefits. If it is appropriate for islands to sit in a separate transmission zone(s) then it appears unacceptable that the resultant demand zone consequences can apparently be dismissed so lightly.

We hope you find our comments constructive and useful and also that you will respond favourably to the suggestions made. We look forward to viewing your actions and outcomes in due course and would welcome the opportunity to engage further on any issue raised in the consultation and our response.

Yours sincerely,

Elaine Hanton
Joint Head of Energy
Highlands and Islands Enterprise

In partnership with:
Shetland Islands Council
Orkney Islands Council
Comhairle nan Eilean Siar
Highland Council
Argyll & Bute Council
Moray Council

Adam Sims
Regulatory Frameworks – Floor B3
Transmission Commercial
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

29 January 2010

Dear Adam

GB ECM-20 National Grid consultation on island transmission charging

Thank you for the opportunity to respond to the above consultation, our response follows. Should you need any clarification I would be pleased to discuss the response with you.

Q1) Whether island links should be treated in the same way as offshore transmission assets

LWP support any mechanism which removes the existing ambiguity around island connection costs. The adoption of the charging methodology used in offshore transmission would appear to be the most appropriate one for charging island connections given the technical similarities between the two.

LWP, however, would not support island developments bearing the full costs of such connections. Islands are dissimilar to offshore in also having demand and also do not attract the same level of support under the RO. Part of the rational for island developments is the economic development of the communities in which they are developed; successful development is likely to lead to increased island electricity demand and an island project bearing the full connection costs also reduces the benefits such developments can pass through to the communities.

Q2) Whether the proposed changes to the methodology are sufficient to calculate tariffs regardless of whether island links are funded by competitive tender or through expansion of an existing TO's network

Under the competitive bidding process the costs would be necessarily transparent via a tendering mechanism. If there is no competition and subsequently the link must be completed by an expansion of an existing TO network then the TO will need to supply sufficient information to enable meaningful calculations to be performed relating to the production of robust annuity factors (AF) for individual projects.

Q3) Whether the assumptions on the local security factors for island links are suitable

LWP would like the local security factors to reflect the actual level of redundancy available rather than the UK average. The economics of island projects can be marginal, and paying for redundancy that is not necessarily available may compromise the development of some projects.

Q4) Whether changing the annuity factor is the best way to account for different rate of returns for strategic investment

LWP would prefer a mechanism with as little variability as possible, however we also wish to see an environment which provides the security around project returns which will encourage investment in island connections and a variable AF may be the best way to provide this.

Q5) Whether there is merit in pursuing the creation of new demand zones for islands or are the existing zones still appropriate

A new island demand zone would recognise the islands as a source of demand and thus differentiate them from offshore. There is a valid argument beyond this consultation that the island should not be differentiated from the North of Scotland zone from a resource, community or a transmission asset ownership points of view.

Q6) Whether the methodology changes as described in Appendix 1 are appropriate

Indicatively, the methodology would seem to be appropriate.

Yours sincerely

Simon Baker
Director, Lewis Wind Power Ltd.

ORKNEY RENEWABLE ENERGY FORUM

Office: West Castle St
Kirkwall, Orkney, KW15 1GU

www.oref.co.uk

29.1.10

Adam Sims
Regulatory Frameworks Floor B3
National Grid House
Warwick Technology Park
Gallows Hill
Warwick CV34 6DA

Dear Adam,

Response to NGET consultation GBECM20 –Charging for Island Connections

Thank you for the opportunity to respond to this very important consultation, the outcome of which may go a long way in deciding the fate of investment in renewable generation in the Islands for the foreseeable future.

We support the Government's aim to bring on more renewable generation bearing in mind the need to achieve the necessary, and ambitious, targets for both electricity from renewables by 2020 and corresponding reductions in carbon emissions.

Orkney Renewable Energy Forum is one of the first of its kind in the UK, established in 2000. Its principal aims are to promote and develop sustainable local energy resources and promote local skills and expertise. Members of the Forum include representatives of the local authority, renewable energy generators, energy experts, civil engineers, Island Development Trusts, environmental consultants, educational and research establishments, electrical engineering and construction companies, amongst others. In addition to the local members (40 full and 27 supporters), links are maintained with a growing number of companies and consultants active in the renewables sector.
OREF supports sustainable development of its renewable resources alongside its landscape, archaeology and quality of life and for the benefit for its community. The organisation places equal value on energy saving and innovative ways to encourage members of the community to become active in this and reduction of waste.

OREF is governed by a Board of Directors, which, through its Chairman, Ken Ross, has instructed me to make this response on behalf of the organisation.

We in Orkney are surrounded by some of the best resources of wind, wave and tidal power in Europe. Sites in Orkney were amongst the first in the UK to act as test-beds for the development of wind-powered generators in the early 1950s until the late 1990s. Now we are pleased to host the European Marine Energy Centre (EMEC) which is Europe's foremost accredited facility for testing marine wave and tidal devices.
Recently, a round of pilot development sites has been put out to tender by Crown Estates around Orkney and the Pentland Firth which are designed to begin exploitation of the several GW of tidal and wave power potentially available for electricity generation and export.

The connection of Orkney to the UK transmission system with significant export capacity is one of the 9 priorities for infrastructure in the Scottish National Plan.

It is vital, therefore, that generation based on and around Orkney has effective and fair access to the UK transmission grid and wider markets.

Historically, Orkney has been quoted very high rates for TNUoS ranging from £61/kW to £113/kW for a double 132kV AC connection. Latterly (2008) the £61 figure has been upheld by Grid as the most likely.

A major wind developer in Orkney cited the high figure, in February 2009, as its reason to freeze its development plans.

We agree that the charging regime, under which Island schemes have been quoted rates for TNUoS, is in need of significant reform in order to allow renewable generation to have fair and economic access to the market.

We are not convinced, however, that the proposal you have put forward, to include Island connections in the regime for charging offshore generation, is any better than the current arrangements. Indeed, there is a danger that the new proposal would lead to further anomalies when looking at the way charges are levied on generators in the UK generally.

The consultation lacks sufficient detail to allow us to support the move to consider Island charging as one and the same with offshore transmission.

A detailed response to the questions put forward in the consultation follows in the enclosed annex.

Yours sincerely,

Dennis Gowland

Vice-Chair OREF
Chairman Fairwind Orkney Ltd

ANNEX 1

1. Should Island Links be treated in the same way as offshore transmission assets?

Similarities

Both require subsea links, which may be extensive, connecting remote generation to the grid system on the UK mainland.

Differences

Whereas offshore links will be to single-point power station consisting of a large array of generators (for many years these are likely to be exclusively wind turbines) – this is not the case in Orkney.
Generation in Orkney (and to some extent the other Scottish Islands) is likely to be made up of smaller schemes (up to 100MW each) owned and operated by different parties. Though wind is likely to be the largest component until 2020 a number of dispersed marine sites, piloting new devices in wave and tidal generation, will need to have an extensive network within and around the Islands.

Each Island group has a significant population with mature industries, which need strong distribution networks to supply the demand. For offshore generation, included in the new OFTO arrangements, this does not apply.

ROCS associated with offshore wind generation are enhanced, whereas wind development on-shore on Islands will only have standard rates applied, though both would be charged as effectively offshore.

All offshore transmission assets will be part of the OFTO arrangements, whereas it is unclear whether Orkney would be part of a full tender process, or, like Shetland and the Western Isles, be under an extension of the licensed monopoly provider.

Our conclusions

We cannot see that there is any real common ground between offshore transmission assets and Island groups.
In 'lumping' Islands together with offshore wind arrays it is very likely that the needs of the offshore group would be very different to those of the Islands. As a consequence future reforms of ECM20 may well follow the needs of the bigger parties with increasing anomalies forced on the Island generators.

2. Is the proposal sufficient to calculate tariffs regardless of whether links are funded by competitive tender or through expansion of an existing TO's network?

There has not been sufficient transparency (in relation to offshore cables), certainly with existing TOs, for generators to gain enough confidence that indicative costs put up as estimates for costs of transmission assets (and therefore tariffs) will be robust enough to allow the degree of confidence necessary to allow investment decisions to be made. We are not convinced that the OFTO arrangements do much to aid this.

Generators presently on the UK network are given TNUoS tariffs which already include a degree of 'smoothing' whereby a given type of overhead line or cable provision is given a single expansion factor irrespective of the actual local costs of the works concerned. For example, the costs of running cabling under a green field site and an urban area are likely to be very different, yet costs are averaged out under the methodology governing mainland tariffs.
It cannot be other than discriminatory for Island and offshore generators to be exposed to fully cost reflective charging when most of the industry enjoy a level of 'smoothing' – this in turn places these generators to be at a severe competitive disadvantage in:

a) Predicting the likely level of TNUoS faced, when investment decisions must be made several years out from connection.
b) The levels of TNUoS levied, which are likely to be higher than if an element of smoothing was present.

3. Are the assumptions on the local security factors for island links suitable?

The assumption of a single cable (security factor) as the best 'fit' for Orkney cannot be made at this time without further analysis.

Generators should have an option to specify a double circuit and therefore a higher TNUoS charge if the risk associated with outage is such that the extra TNUoS might be economically justifiable.

Where a single circuit is used the multiplier of 1, in the methodology, would be appropriate.

4. Is changing the annuity factor the best way to account for different rate of returns for anticipatory investment?

OREF views anticipatory investment (putting in links with significant 'headroom') very positively and would like to see models where this could be undertaken and how charging would be affected - including adjusted rates of return.

Where possible some modest over-sizing should be encouraged without additional rates of return which would result in benefits to consumers where extra generation can be accommodated without the cost of additional cabling.

5. Is there merit in pursuing the creation of new demand zones for Islands?

The state of affairs where island generation is assumed by the methodology to be in a separate zone but demand in the same location is linked into neighbouring zones is puzzling.

In the islands the methodology throws up a double penalty for being located at the periphery. On the one hand generation is penalised for being remote from demand centres whilst on the other, demand charges, which should be negative, are downgraded to zero. Taking these factors into account the case for new island demand zones looks strong.

General Notes

Whether the methodology follows the current on-shore arrangements or those for offshore transmission the problem of over-recovery of locational TNUoS from island generators remains.

Given the maximum allowable recovery from UK generation (in the split with demand 27:73) and the split between locational and residual elements of TNUoS - any likely over-recovery of the overall locational part of the global receipts, due to high charges for peripheral generation, would give rise to smearing back to all generators via the residual element. In this way generators in the south of the UK are rewarded twice – once by the locational signal in the methodology and again by a further element arising from the 'penalties' on remote generators. Though the locational element by itself would be reasonable as a signal, surely the smearing back of any over-recovery to others could be a cross subsidy?

Appendix 2 (Example Generation Tariffs)

This example serves to point up the nature of the problem for generators in the islands – where a party investing in any of the zones 1-20 in the published table would be reasonably sure of its tariffs, the new zonal tariff in the island example could easily double depending on the actual cost and allowed return associate with the cable.

Finally

Reference is made in the ECM-08 consultation document (sect 4.5 p 13) that a charging consultation for Island Connections would only occur AFTER the regulatory framework for connections had been undertaken for the Isles. As far as we are aware, the Regulatory Framework, which would encompass other issues besides charging, is not yet in place.

Dennis Gowland
Vice Chair OREF
29.1.10

NG Consultation Document ECM-20 Charging for Island Connections

Response by Orkney Islands Council

1. The Council is pleased that NG has brought forward this Consultation Paper and given the Council the opportunity to respond, and particularly grateful that Hedd Roberts and Adam Sims of NG came to Orkney to give a presentation and workshop for developers and representatives of the Council. This made possible a valuable exchange of views on issues raised by, and surrounding, the Consultation paper.

2. It is appreciated that NG is keen to reduce uncertainties for renewable developers. Uncertainties about transmission charges – and indeed the variety of figures that have been spoken of over recent years – have made it very difficult for developers to plan ahead. Anything that reduces uncertainty is helpful.

3. Of course it is not just uncertainty, it is also the absolute level of transmission charges which are of critical importance, given the risk of choking off investment in the isles if charges are too high, and consequently depriving both the islands, and the country as a whole, of the benefits of the development of the islands' rich renewable resources. Realisation of the Government's carbon reduction and renewable targets will be easier if the richest resources in the country can be brought into service. In particular, Orkney has a special role to play in the development of marine energy, given the tidal currents and wave regime around the islands; and development of this new technology will only take place in Orkney waters if there is a means of transmitting energy to markets in the south.

4. The Consultation Paper does to some extent reduce uncertainty, by proposing that the offshore transmission charging regime be applied to the islands. However, since any proposed methodology must to some extent by judged by the outcomes it produces, and since there is limited information, beyond one hypothetical example appended to the Paper, of what transmission charges would be generated by the methodology, it is difficult to assess whether the proposed methodology is likely to result in an acceptable level of transmission charges, which would allow the rich resources around Orkney and the other Scottish islands to be developed.

5. The Council believes that more information of the outcomes of the methodology than is given in the Consultation Paper is required. It accepts that there some unknowns will remain, perhaps principally the cost of installing a cable between Orkney and the mainland, although it would submit that there is enough knowledge about costs of such an undertaking to produce an estimated cost range, with relevant cost factors set out to allow sensitivity tests. The Council submits that NG should do this work, in order to allow proper consultation, before making a decision on the methodology.

6. Assessment of the proposed methodology is also difficult because it is not compared with any alternative methodologies, or with the status quo, although it is accepted that the status quo is itself unclear. The Council does have some concerns about the islands being categorised as offshore transmission, since the islands clearly differ from areas designated for offshore wind farms. Apart from the fact that they are inhabited, and consume electricity as well as produce it, they are likely to host a range of different renewable projects, of differing size, going live at different dates, unlike an offshore wind farm which can have one connection point at one discrete period in time. Developing new transmission capacity for the islands is a more complex matter than developing it for a large offshore wind farm. It is accepted that the present Consultation Paper is confined to the issue of charging, nevertheless there is a concern that bracketing islands with offshore transmission will be seen as a solution for all the difficulties of achieving additional transmission capacity for the islands. There are wider grid access issues which need to be urgently resolved if the full renewable potential of the islands is to be achieved.

Consultation Paper Questions

7. Should Island links be treated in the same way as offshore transmission assets?

   As noted above, the Council is cautious about assenting to the notion that island links should be treated as offshore transmission assets. Islands are very different from offshore wind farms, not just for the obvious reason that they are inhabited, but because they are likely to host a range of renewable projects, with different technologies, different scales, and different timescales. It is also worth noting that any onshore wind energy projects in the islands would not benefit from the double ROCS available to offshore wind turbine projects.

Strengthening transmission capacity is demonstrably a more complicated business than connecting a large offshore wind farm, and the Council is concerned lest resolution of the charging issue on this basis comes to be regarded as resolving all the grid access issues for the islands. In particular, given the likely pattern of renewable development referred to above, there are issues about how the application process will be triggered, and how securitisation of project costs will work , when a range of smaller projects, rather than one large one, are seeking a grid connection.

In addition, the Council believes that there is insufficient information on the outcomes of the proposed methodology to assess whether or not it is suitable for the islands. It should be possible to provide better information on outcomes than the one hypothetical example appended to the paper.

Finally, there are no alternative methodologies by which to assess whether or not treating islands as offshore transmission assets is the most suitable way of deriving transmission charges.

8. Is the proposal sufficient to calculate tariffs regardless of whether island links are funded by competitive tender or through expansion of an existing TO's network?

It would have been easier to have answered this question if the Consultation Paper had provided more information, in an accessible form, on the precise process for calculating tariffs, and had derived estimated tariffs for the three island groups, rather than simply giving one hypothetical example. The method for procuring new links should not, on the face of it, affect the ability to calculate tariffs, although the Council notes that this question reflects an acceptance of a purely cost-reflective tariff, rather than one that ensures that the renewable resources of the islands can be developed, for the benefit of the islands and of the country as a whole. Funding by competitive tender does introduce some uncertainty for developers, since the transmission charge cannot be calculated until the tender price is known, at which stage developers will have to have their own plans at an advanced stage.

9. Are the assumptions on the local security factors for island links suitable?

The Council understands that the proposal for single circuit links for islands is based on economy for those liable for cost-reflective charges, and that it entails non-firm

connections without compensation for cable outages (although compensation would be payable in the case of faults to the entire system.) Given the amount of renewable resource in the area, and the likelihood of substantial on-going increases in renewable generation around the islands once the initial technical problems associated with marine renewable are overcome, the Council is not convinced that single circuit links represent the most economic approach. There is a need to make provision for spare capacity. The immediate economies involved in a single circuit link would need to be balanced against the strong likelihood of similar investment needing to be repeated within a relatively short timescale.

Much would depend on the economies involved in installing a double circuit relative to the cost of repeating investment in a single circuit after a short period. In addition, Orkney's location near to the Scottish Mainland, combined with the marine resources around the islands, raises the possibility of more complex grid configurations (for example a ring circuit to the east and west of the Pentland Firth) than are encompassed in the relatively abstract approach in the consultation paper. The Consultation paper does not provide any information on this and without such information it is not possible to definitively answer this question.

10. Is changing the annuity factor the best way to account for different rates of return for anticipatory investment?

In the Council's view anticipatory investment in grid capacity is fully justified by the rich renewable resources around the islands, and is an appropriate and necessary mechanism for giving confidence to developers and investors that they will be able to market energy produced in the area, especially when energy will come from a variety of different size schemes, going live on different timescales, each of which on its own may be unable to trigger the application mechanism for additional grid capacity. The Council is therefore in favour of providing appropriate mechanisms to encourage anticipatory investment, although it is concerned about the disincentive effect of raising transmission charges which are already likely to be at a relatively high level in the islands. The consultation paper does not detail the impact on charges of varying the annuity factor.

11. Is there merit in pursuing the creation of new demand zones for islands?

Given the problems involved in delivering additional transmission capacity to the islands, and the costs involved, encouraging demand in the islands by means of an attractive tariff for users makes economic sense, and clearly also assists development in the islands. Whether or not creation of new demand zones is pursued, should be decided in the light of this objective. Practical issues such as the need to manually transfer MPAN for all meters in the island are no doubt of some relevance but should not be given undue weight. The information provided in the Consultation Paper is not really sufficiently comprehensive to judge whether separate demand zones for the islands would be worthwhile, and more systematic assessment of this option is needed.

It is noted that the worked example in Appendix 2 assumes a separate generation zone, although this assumption and its implications are not picked up in the text of the consultation paper.

12. Conclusion

In conclusion the Council believes that the Consultation Paper, which it welcomes, is useful as far as it goes, but that it raises a number of issues about transmission charging, and grid access for the islands generally, which require more detailed analysis. These issues are of vital concern to Orkney, which wishes to see the development of a major renewables industry in the islands, a development which has already substantially started. This development is of major importance not just to the islands, but will also make a substantial contribution to achieving national carbon reduction targets.

The Council is keen to take part in further and on-going discussion with National Grid, and other stakeholders, on this matter, through the formation of an appropriate forum.

OIC
January 2010

Adam Sims
Regulatory Frameworks, Floor B3
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

18th January 2010

adam.sims@uk.ngrid.com

Dear Adam,

Consultation on Charging for Island Connections

The Renewable Energy Association is pleased to comment briefly on this consultation. As you are aware our members work on all types of renewable power and heat projects some of these being on islands with weak or nonexistent electrical connection to the mainland electricity system.

Whilst we are broadly happy with the concept of using a similar methodology for charging for island connections to that used for offshore transmission we have reservations about a few details of your proposal. Our responses to the specific questions asked follow.

Q1) Should island links should be treated in the same way as offshore transmission assets?

Broadly speaking we think that this is the right approach.

Q2) Is the proposal sufficient to calculate tariffs regardless of whether island links are funded by competitive tender or through expansion of an existing TO's network?

We think that the proposal appears in principal to cater for links funded as part of the licensed network as well as links constructed as a result of a competitive exercise. We note that in this case if the result of the competitive exercise is a cost for the link that is different from what a regulated cost might have been, it is reasonable that this cost difference is felt by the users of the link.

Q3) Are the assumptions on the local security factors for island links suitable?

It is not completely clear into which category partial loss of access fits although it appears that if there is any access at all left after the loss of a single transmission circuit the security factor of 1.8 is used. We are not convinced that this is a fair treatment of island links as there may be some cases where the remaining capacity following the loss of the single new link is an order of magnitude or

more lower than the capacity of the link. It seems inequitable in these cases to charge as though there was any material redundancy in the connection to the system.

On the related issue of firmness of access which you address here we do not agree that where an economic assessment has determined that only one circuit is the optimum solution, the connection should not be financially firm. This is quite different from situations where a user has chosen to have a standard of connection lower than the norm and therefore justifiably enjoys less firm access.

Q4) Is changing the annuity factor the best way to account for different rate of returns for anticipatory investment?

This is our main disagreement with the proposed methodology. If we understand the proposal correctly you are suggesting that the charge for the link ought to be varied if it is categorised as anticipatory investment and therefore an above the norm rate of return is allowed if it is well utilised and a below the norm return is earned if it is underutilised.

Whilst reserving our position on that method of providing incentives, if it is adopted the clear intention is to provide an incentive for the Transmission Owner to be rewarded for making anticipatory investment that turns out to be well used and to provide some pain for the transmission owner if the anticipatory investment is underutilised. It was never intended to make users of that investment pay more or less than the norm according to how well the Transmission Owner judged the need for it. We therefore do not agree with adjusting the charge for a link that is "anticipatory investment" according to the return that the TO is allowed on it. This is clearly distinct from cases where the link is built under a competitive process where the clear intention is for users to benefit from that competition.

It should be noted that if the proposal on this were to be adopted it would have to apply to anticipatory investments that did not constitute island links as well.

Q5) Is there merit in pursuing the creation of new demand zones for islands?

We think that in principal there is merit in creating separate demand zones for islands as in many cases the transmission related costs of supplying demand there would be considerably less than on the mainland end of the link.

We are not going to comment on the wording of the new methodology statement at this stage.

Please let me know if you would like to discuss any of these comments further.

Yours sincerely

Gaynor Hartnell

Director of Policy, REA.

RWE Supply & Trading

Adam Sims
Regulatory Frameworks, Floor B3
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

Contact Bill Reed
Phone Phone 01793 893835
Email bill.reed@rwe.com

Swindon, 29th January 2009

Email: adam.sims@uk.ngrid.com

Consultation Document GB ECM-20 - Charging for Island Connections

Dear Adam

Thank you for the opportunity to comment on the consultation document - Charging for Island Connections (GB ECM-20). This response is provided on behalf of the RWE group of companies, including RWE Npower plc, RWE Supply and Trading GmbH and RWE npower renewables, a fully owned subsidiary of RWE Innogy GmbH.

The consultation proposes that charges for island connections are based on the offshore arrangements. Whilst this may or may not be the correct approach, the NETS SQSS currently appears to envisage that the islands and associated connections form part of the main onshore interconnected transmission system and, until this is changed, there would appear to be no basis for charging for these any differently.

Furthermore, while the island links may superficially resemble offshore connections, the inclusion of demand with island based generation suggests that these links are more analogous to onshore transmission lines. However, there may be a case for treating an island link like an offshore connection under the charging methodology if the island link is required exclusively for a single generation project and the link is not compliant with the onshore provisions of the NETS SQSS.

Our response to the specific questions raised in the consultation document is included in Attachment 1.

If you wish to discuss any aspect of our response, please do not hesitate to contact me.

Yours sincerely

By email

Bill Reed,
Market Development Manager
RWE Supply & Trading GmbH

RWE Supply & Trading GmbH
Swindon Branch
Windmill Hill Business Park
Whitehill Way
Swindon SN5 6PB
United Kingdom
T +44(0)1793/87 77 77
F +44(0)1793/89 25 25
I www.rwe.com
Registered No. BR 7373
VAT Registration No. GB 524 921354

Consultation Document GB ECM-20 - Charging for Island Connections

Attachment 1: Response to the specific questions

Q1) Whether island links should be treated in the same way as offshore transmission assets

We do not believe that island links should be treated in the same way as offshore transmission connections. While there may be superficial resemblances between island transmission and offshore transmission networks there are also significant differences. In particular island links may comprise a number of users including multiple generation projects and, most importantly demand. It is essential that the charging arrangements recognise these differences.

Further we note that in the absence of demand the offshore links may be considered as essentially radial connections between the islands and the rest of the main onshore interconnected transmission system. However, when there are multiple generators together with demand users the island links themselves should also be considered to be part of the main onshore interconnected transmission system.

In addition, while there may be technical characteristics that result in offshore links that resemble offshore connections, the NETS SQSS onshore standards should apply to these links. In developing the charging arrangements the development of the NETS SQSS standards with respect to island links requires detailed consideration.

The only circumstances where there may be a case for treating the island link like an offshore connection under the charging methodology is if the island link is required exclusively for a single generation project and the link is not compliant with the onshore provisions of the NETS SQSS.

Q2) **Whether the proposed changes to the methodology are sufficient to calculate tariffs regardless of whether island links are funded by competitive tender or through expansion of an existing TO's network**

We believe that the island links should be regarded as part of the main onshore interconnected transmission system and should be funded through the existing charging arrangements under the relevant Transmission Owner price control.

We do not believe that a case has been made for specific arrangements to be applied to island links and we do not support the creation of specific tender arrangements for such links. Indeed we are concerned that such arrangements may undermine the existing price control based regulatory regime for designated onshore transmission owners. We also concerned that the regulatory uncertainty created by competitive arrangements may delay the construction of such infrastructure.

Q3) **Whether the assumptions on the local security factors for island links are suitable**

We believe that the methodology currently applied for the onshore derivation of tariffs for the main interconnected transmission system should apply in a consistent manner for island connections.

Q4) **Whether changing the annuity factor is the best way to account for different rate of returns for strategic investment**

We believe that this question relates to the nature of the price control and allowed revenue for any strategic investment. In principle we do not support speculative strategic investment. Rather we believe that some form of user commitment is required in order to provide appropriate signals to invest in transmission infrastructure. This user commitment may require that a user to under write a proportion of the investment requirement.

In some circumstances it may be possible for the transmission owners to undertake work that is anticipatory in nature. However, we believe that this type of investment together with the methodology for revenue recovery should be considered as part of the price control review. We do not believe that the transmission owners should be given higher rates of return for works that are required under the terms of their licence.

Q5) **Whether there is merit in pursuing the creation of new demand zones for islands or are the existing zones still appropriate**

The creation of differential zones is a matter for the zonal review that occurs periodically mainly as a result of the price control review. We believe that there may be a case for new generation zones if there is significant generation connecting to the particular island link.

Q6) **Whether the methodology changes as described in Appendix 1 are appropriate**

As noted above we do not support the treatment of island links as offshore transmission connections where there is also demand. Consequently we do not believe that the methodology changes as described in Appendix 1 are appropriate.

We believe there are significant differences between island links and offshore connections. However, we note that the relatively small levels of demand and the intermittent nature of the generation that may connect suggest that the onshore NETS SQSS and charging arrangements may need to reflect the specific characteristics of island links.

Mr Adam Sims
Ntaional Grid
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

29 January 2010

Dear Adam,

CONSULTATION RESPONSE
GB ECM 20 National Grid consultation on Island charging

Scottish Renewables is the trade body for the renewable energy industry in Scotland. We represent nearly 280 members all of whom want to see renewables a success in Scotland. You can find out more by visiting our website www.scottishrenewables.com.

Many thanks for the opportunity to respond to your consultation on an island TNUoS charge methodology. Scottish Renewables (SR) works closely with stakeholders in Scotland and has an issue-specific grid group to debate grid and regulatory matters. On this occasion we have shared ideas closely with Highlands and Islands Enterprise (HIE) and other island-based stakeholders. Our response mirrors theirs in many aspects, although we have reflected some specific membership concerns in this response.

SR's response is structured into some background on the industry's perspective on island charges, a general introduction to the consultation and then responses to each of your questions.

SR perspective

SR works on behalf of its membership which spans the length and breadth of the renewable energy industry in Scotland as well as a large body of renewable energy stakeholders. Scotland clearly has a pivotal role to play in meeting government renewable energy targets. The social, environmental and economic returns on the investment is also central to Scotland's own domestic circumstances and future health.

The Scottish Islands in turn have the potential to make a very significant contribution not only to Scottish, UK and European targets, but to supporting the economic and community health of these peripheral areas. SR recognises that National Grid cannot actively favour any one area or technology. However we feel that the current charging methodology goes the other way in favouring the existing status quo, and actively discouraging generators remote from centres of demand.

3rd Floor, 49 Bath Street, GLASGOW, G2 2DL Telephone 0141 353 4980 Fax 0141 353 4989
Email info@scottishrenewables.com Web site www.scottishrenewables.com

As you know, the high charges to access transmission infrastructure in the north of Scotland are a source of concern for us. The dynamic of some very high charges in areas rich in renewable resources, but in peripheral areas with challenging economic conditions and sparse infrastructure, is extremely polarised in the North West island areas of the Western Isles, Orkney and Shetland.

We note the desire to provide an economic "signal" but we fundamentally disagree with the notion that the signals should favour development out from what is an out-dated existing grid topology. Transmission infrastructure is designed to take electricity from its source to its destination, and the predominant source locations are very different as we move over to a low carbon economy.

The high costs, underwriting liabilities and the range of uncertainty and variability in the final tariffs can also often only be borne by large projects – with very little strategic investment on the table to create opportunities for collections of smaller projects which may gradually develop over time. As such it is a major barrier to investment for these kind of developments, which include emerging wave and tidal technologies.

Granted this may reflect the actual cost of the link, but this negates any sharing benefits that other users enjoy when they access the GB market. There were good reasons why there was a move away from deep charges but the island local tariffs look quite similar to a deep tariff, and step back to the same kind of investment barriers they created.

SR is also troubled by an attitude that we suspect exists in some quarters that high ROC benefits create scope for higher charges without compromising government targets, and that access to the GB market gives the islands access to these benefits. HIE has already presented evidence to National Grid and Ofgem that despite the ROC benefits projects on the islands are nonetheless often marginal at best. Statkraft announced last year that it was pulling out of its Orkney development saying that "*Unfortunately, due to the high level of TNUoS costs to connect from Orkney to the mainland, the project is not financially feasible presently*." ROC prices also fluctuate with market conditions and policy decisions. The ROC market is also explicitly de-linked from the electricity market – ROCs are designed to be traded separately.

The islands have also not benefited from the recent government decision to further subsidise offshore wind with double ROCs or from Ofgem's work with the European Investment Bank to provide preferable finance terms for offshore OFTOs. The relative economics of offshore wind and island wind has therefore broken down which in turn erodes the arguments around the transmission costs providing a differentiating cost component for projects contributing to government targets. This is despite the fact that island wind could potentially make an earlier contribution.

Furthermore a new link to Shetland and access to the GB wholesale energy market should reduce energy costs there. At the moment the high diesel-dominated costs are subsidised. Is there a case then for reflecting some of this benefit back to those paying for the link?

3rd Floor, 49 Bath Street, GLASGOW, G2 2DL Telephone 0141 353 4980 Fax 0141 353 4989
Email info@scottishrenewables.com Web site www.scottishrenewables.com

This is a context that you will largely be familiar with, but we feel it is relevant to our response to this consultation. The islands are the ultimate test for the TNUoS methodology which originally was designed for an interconnected mainland transmission system. The latest estimates for local tariffs alone for Shetland and the Western Isles are over £100/kW and over £50/kW respectively. There are no up-to-date TNUoS estimates for Orkney but earlier indications suggest in the region of £60/kW. How do these costs compare to the costs of accessing the GB market from neighbouring countries? If it is cheaper to generate and supply the GB market from say, France, is this right?

The consultation

We are pleased that National Grid is consulting on a TNUoS charging methodology for the islands, although clearly disappointed (although not surprised) that this is simply to say that the existing methodology will extend to the islands. There are a number of reasons that we have asked for a methodology to be developed, as follows:

- If there is no agreed methodology it is impossible for projects to understand what their charges might be.

- Stakeholders need to be able to understand the barriers to investment in their areas. They need to understand if transmission charges are prohibitory and if they are what they can do to mitigate that – through refinement of the methodology or through extra support for projects (for instance offshore wind benefits from double ROCs in part because of the higher offshore connection costs). They cannot direct their work appropriately if there is no methodology or indicative costs.

- On examination, the islands are often treated differently to the mainland – this can be particularly frustrating where arrangements are developed on an industry-wide basis only to find that an exception is made for the islands. Examination of the issues in good time should help to flush out these issues.

We note that the consultation is quite short and that it is with a view to moving directly to implementation. It talks about refinements to the detail of National Grid's existing charging methodology and does not raise any wider questions that we would have found helpful to discuss. We would have preferred a pre-consultation that encompassed, *inter alia*,

- Indicative charges for each of the Scottish islands rather than one hypothetical island.

- A number of sensitivities which bring out the implications of some of the refinements discussed in the consultation, such as assumptions on the expansion factor.

- The net effect of the TNUoS charging methodology and any new charging regime for variable low load factor generation.

- The knock-on effect for underwriting liabilities when using the IGUC methodology with TNUoS multipliers. Will IGUC be available to the islands? This question will probably need some input from Ofgem. This is particularly important to resolve as projects on the islands will shortly be looking at underwriting construction costs, and this is an important milestone that may prove very difficult if the underwriting amounts are very high and / or unpredictable.

3rd Floor, 49 Bath Street, GLASGOW, G2 2DL Telephone 0141 353 4980 Fax 0141 353 4989
Email info@scottishrenewables.com Web site www.scottishrenewables.com
Scottish Renewables Forum Limited. A company limited by guarantee in Scotland Number 200074Registered Office 302 St Vincent Street, Glasgow, G2 5RZ

- The potential for volatility in island charges.

As it is, the consultation is also written for a quite specialist audience and is not immediately accessible to the range of developers and community groups developing projects on the islands. We would very much welcome your assistance in redressing this, and note and support your willingness to present to island stakeholder groups.

Finally, we note that the potential application of Section 185 power on transmission charge capping for the islands remains unresolved. We appreciate that this falls outwith your remit and is a matter for DECC, but we note that the analysis undertaken for S 185 discussions may now be out of date with new and higher island charge estimates.

The remainder of this response addresses your consultation questions, as follows:

Q1: Should island links should be treated in the same way as offshore transmission assets?

No not necessarily. Islands serve demand and the extension of the transmission system out to the islands will create new Grid Supply Points (GSPs). This looks more like an extension of the Main Interconnected System (MITS) out to the islands as it does generation on the end of a spur. Demand on the island benefits from the extra security and physical access to the GB wholesale electricity market.

Notwithstanding the above, the offshore charging regime is differentiated from the onshore charging regime (including the separation of local from wider charges) by virtue of the competitive OFTO regime. If the offshore regime proves more costly than extension of the onshore regime, then clearly we would not support this. If there do turn out to be benefits from the competitive offshore regime that flow back to communities accommodating the development, then yes, we would support that, but that very much remains to be seen.

We would like to understand the full cost implications of policy decisions on whether the links are tendered competitively by Ofgem, built as an extension to SHETL's licence or tendered by the generation companies themselves. As noted we do not feel the consultation brings out the pros and cons of these different options and we would find it extremely useful if some extra analysis could be provided to this effect.

In so far as an OFTO competitive regime would probably derail existing plans for well progressed island links, and create ongoing uncertainty on generator's costs, we would probably be minded to oppose an OFTO regime for those projects.

Q2: Is the proposal sufficient to calculate tariffs regardless of whether island links are funded by competitive tender or through expansion of an existing TO's network?

No because final tariffs for competitively tendered projects hinge on the OFTO's bid-for revenue, which is unknown until the OFTO is appointed. This makes it more difficult for National Grid to produce indicative tariffs, but may make the final tariffs more stable if the OFTOs revenues remain unchanged for 20 years.

3rd Floor, 49 Bath Street, GLASGOW, G2 2DL Telephone 0141 353 4980 Fax 0141 353 4989
Email info@scottishrenewables.com Web site www.scottishrenewables.com
Scottish Renewables Forum Limited. A company limited by guarantee in Scotland Number 200074Registered Office 302 St Vincent Street, Glasgow, G2 5RZ

SR would find it helpful if the implications of a competitive versus historical regime were elaborated upon. For instance, the revenue recovery periods are generally shorter for the OFTO regime which makes the TNUoS charge more expensive if the construction costs are otherwise equal.

Q3: Are the assumptions on the local security factors for island links suitable?

The consultation merely sets out the existing arrangements for local circuits, it doesn't talk specifically about the islands. In so far as the island links may wish to utilise single circuits we agree that a security factor of 1 would be appropriate.

SR would question the point of a revised SQSS definition for offshore and, presumably, islands, which made a single circuit compliant but which was then treated differently to mainland compliant circuits for compensation purposes. What role is the SQSS playing here? It is not setting a standard to which all offshore connections must comply as variations are considered to be acceptable. This point has been put forward by Goran Strabac who advised on the offshore SQSS standard, and there has never been a satisfactory answer from Ofgem. It would be helpful for National Grid to provide a view.

Q4: Is changing the annuity factor the best way to account for different rate of returns for anticipatory investment?

This should be the same problem to address as the OFTO situation i.e. factoring in different rates of return, and therefore the approach should be consistent as far as possible. We are not sure whether the approach is consistent as set out because for the OFTO case the entire TNUoS charge is factored by a bundled OFTO revenue. In this case there is a slight adjustment to reflect a different rate of return for a portion of the asset. Whilst it seems reasonable it would be helpful to examine some examples to understand the implications – we have not as yet had an opportunity to do this ourselves.

In any event we understand that SHETL is not seeking a heightened rate of return on some modest over-sizing of island connections. This is because over-sizing has been shown to represent good value for consumers (rather than building connections discretely and sequentially).

Q5: Is there merit in pursuing the creation of new demand zones for islands?

First of all this section notes that "*it may be necessary to introduce a level of user commitment to reduce the risk of asset stranding, however this is currently more appropriately taken forward as part of the DECC consultation on transmission access*."

This is precisely the kind of issue that the islands are faced with as an apparently same, but different, case. If the islands are good enough for locational TNUoS charging then they are good enough for the signals that are created. If demand is encouraged to expand – which is the deliberate intent of the TNUoS methodology – then surely that is a the methodology acting as intended? We see absolutely no reason whatsoever why generation should be asked to secure against the methodology working as intended. This does not happen on the mainland. If the TNUoS methodology is inappropriate for the islands because it gives the wrong signals, then that is a very different question which we would be happy to debate!

3rd Floor, 49 Bath Street, GLASGOW, G2 2DL Telephone 0141 353 4980 Fax 0141 353 4989
Email info@scottishrenewables.com Web site www.scottishrenewables.com
Scottish Renewables Forum Limited. A company limited by guarantee in Scotland Number 200074Registered Office 302 St Vincent Street, Glasgow, G2 5RZ

SR notes that HIE is stimulating a debate on negative demand charging. SR is interested in this debate but its primary concern is to mitigate the effect on investment of extremely high TNUoS charges.

If you have any queries regarding the response please do not hesitate to contact Scottish Renewables.

Yours faithfully,

Calum McCallum
Director of Business Development
Scottish Renewables

3rd Floor, 49 Bath Street, GLASGOW, G2 2DL Telephone 0141 353 4980 Fax 0141 353 4989
Email info@scottishrenewables.com Web site www.scottishrenewables.com

SCOTTISHPOWER
Energy Wholesale

Adam Sims
Transmission Commercial
National Grid House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

15 January 2010

Dear Adam,

GB ECM-20 Consultation Document
Charging for Island Connections

Thank you for the opportunity to respond to this Consultation Document. This response is submitted on behalf of ScottishPower Energy Management Ltd, ScottishPower Generation Ltd and ScottishPower Renewable Energy Ltd.

ScottishPower does not support the proposed methodology for charging for island connections.

The proposed methodology would introduce charges which would

- Seriously threaten the delivery of renewables targets and achieving Scotland / UK aspirations to be world leader in marine and tidal technologies
- Signal the end of BETTA and an effective competitive energy market in GB
- Introduce discriminatory charging on island generators which would be subject to legal challenge
- Reintroduce a deep transmission tariff for island generators with the associated barriers to investment
- Result in volatile and unpredictable charges for island generators which will deter investment
- Demonstrate the inappropriateness of the current DCLF ICRP charging methodology in meeting the challenges of delivering government policies on de-carbonisation of generation and security of supply

Although physical comparisons may be drawn between the connection of offshore generation and the connection to islands, no justification has been provided why their charging arrangements should be similar when there are material differences in the investment approval process and security of supply issues between the two types of connection.

Extension of the methodology for charging for offshore generation is not appropriate for transmission connections to islands which, unlike offshore generation, are inhabited and have relatively significant amounts of customer demand.

A fundamental difference is that offshore generators currently may receive 2 ROCs for their generation output in part to offset the increased cost of connection to the transmission system reflected through the offshore charging methodology. Therefore, it is clear that government policy makers saw a distinction between island connected and offshore renewables. Island sited renewable generators will not have access to the compensation of 2 ROCs and therefore island connections should be treated in the methodology as if connected by overhead lines.

The transmission infrastructure triggered by the connection of generation in island locations could provide increased security of supply to island consumers compared to the present situation and should be treated as part of the National Electricity Transmission System.

I hope you find these comments useful. Should you have any queries on the points raised, please feel free to contact us.

Yours sincerely,

James Anderson
Commercial and Regulation Manager

SCOTTISHPOWER
Energy Wholesale

Q1 Should island links be treated in the same way as offshore transmission assets?

ScottishPower does not believe that it is appropriate to treat island links in the same way as offshore transmission assets. The key difference being that island links serve to provide an increased level of security of supply to consumers in addition to facilitating the export of generation from the islands. Offshore transmission assets serve only to bring ashore electricity from offshore generation sites and are, in effect, generation spurs to the National Electricity Transmission System.

The development of renewable energy on island sites is likely to reduce the dependency of island consumers on expensive on-island generation, lowering its load factor to uneconomic levels and leading, ultimately, to closure. Island consumers will therefore become dependent on the island connection to secure their electricity supply due to the intermittent nature of renewable generation.

In particular, as most island connections will have a demand GSP connected on the island, island connections will not meet the definition of local circuits and therefore only the assets on-island required for the sole purpose of connecting the generator should be charged as local assets.

Island sited generation will not benefit from 2 ROCs per MWh for its output in the same way as offshore generation currently does. It is therefore less well able to meet the high locational TNUoS cost reflected through the offshore charging methodology. The cost of meeting the Renewable Obligation is shared across GB to reflect the wider societal benefits of low carbon generation. It would therefore be discriminatory to expect generation located in one particular geographical area to bear an unfair proportion of the costs of the electricity transmission system in helping to deliver against that Obligation.

Q2 Is the proposal sufficient to calculate tariffs regardless of whether island links are funded by competitive tender or through expansion of an existing TO's network?

Where island connections are funded through expansion of an existing TO's network, the expansion factor for the line should be calculated within the average expansion factors in accordance with the Use of System Charging Methodology 2.31 to 2.41. In particular, identifying the specific costs of an island connection will result in additional workload for the TO over and above that required for the existing methodology whereby overhead costs may be allocated across a number of projects without affecting the accuracy of the expansion factor.

Q3 Are the assumptions on the local security factors for island links suitable?

It would clearly be inefficient for a transmission link to an island to be used solely for a generation connection and not to provide enhanced security of supply for demand customers. However, if island connections are to be treated as generator connections and the generator chooses the security level, then island demand customers could have a lower level of security of supply than mainland demand customers as the result. This is contrary to the general presumption that a change to the connection of one user should not affect another user's connection rights. Both generators and consumers in island connections will enjoy a reduced level of security compared to the GB average Locational Security Factor of 1.8 and should receive an appropriate discount on their TNUoS charges.

Q4 Is changing the annuity factor the best way to account for different rate of returns for anticipatory investment?

The user should not be subject to higher charges due to the mechanism adopted by the regulator to incentivise the construction of specific transmission assets. Adjusted rates of

return reflect the balance of risk between the Transmission Owner (TO) and the regulator of early deployment of assets and are intended to facilitate the early connection of generation to achieve government policy targets. It would be inappropriate to penalise the generator for attempting to help meet these aims. An island generator would be fully contracted for the transmission capacity in its connection agreement and would be required to provide user commitments sums. Only any unused capacity could be described as “anticipatory” and should be subject to incentivised rates of return which should not be recovered from the generator.

A potential concern could arise where an island connection is provided to meet the combined needs of a number of generators. If the TO is incentivised to provide an early connection date for one of the generators, it would be unfair for those generators seeking later connection dates to face charges including the premium return to the TO for providing that earlier connection for another user.

Q5 Is there merit in pursuing the creation of new demand zones for islands?
There would be no merit in creating new demand zones for islands.

The creation of new demand zones for the islands would be contrary to the Electricity Act 1989 (Uniform Prices in the North of Scotland) Order (2005)[1] which requires that ”A holder of a transmission licence which authorises it to participate in the transmission of electricity in any part of the North of Scotland shall ensure that the charges payable by a supplier for use of its transmission system for the purpose of supplying any domestic premises in that area do not take into account the geographical location within that area of the premises.”

The proposed treatment of demand within this proposal highlights the failure of the existing charging methodology to pass the full benefits of connecting demand in areas of abundant generation through to customers. The application of a de-minimus level of demand charge of £0/kW (£0/kWh) to avoid the introduction of negative demand tariffs results in inconsistent treatment of demand and generation. Generation is currently exposed to the full locational signal. The inclusion of negative TNUoS tariffs in the current methodology exacerbates the impact of the locational signal on generators in positive charging zones.

The point raised at 4.4 re generators providing user commitment in case demand on the islands increases to exceed generation is unacceptable on a number of levels. Firstly, as the generation is likely to be intermittent and alternative on-island generation may have closed, customers will be dependent on the sub-sea line for security of supply; there will not be a reduced requirement for the line. Secondly, at no other point on the transmission system is generation required to provide user commitment against the risk that local customer demand may change. This risk is wholly outwith the generator’s control and cannot be managed or hedged in any way by the generator. To introduce such a requirement would be discriminatory to island based generators. National Grid’s introduction of this concern serves to highlight the material difference between offshore generation and island sited generation.

[1] Statutory Instrument 2005 No.490

Inveralmond House
200 Dunkeld Road
Perth PH1 3AQ

Adam Sims
Regulatory Frameworks, Floor B3
National Grid
Gallows Hill
Warwick CV34 6DA

Tel: 01738 456107
Fax: 01738 456415

29 January 2010

Dear Adam

GB ECM-20 Charging for Island Connections

This response to consultation document GB ECM-20 is made by Scottish and Southern Energy (SSE) and is not confidential.

The stated motivation for this consultation document is, in our view, flawed and potentially misleading. Firstly, the consultation appears to be “future-proofing”. It proposes a strategic change to the charging methodology to accommodate transmission licensees that have not yet been identified and that would be appointed under a revised regulatory regime that has not been determined. As we describe below, we are not aware of any tangible proposals for transmission licensees other than the three existing licensees or future offshore transmission owners (OFTOs).

In addition to this, and specifically in relation to the Scottish islands, the consultation appears to suggest that there are no existing charging arrangements for customers in these areas. This is clearly not correct and, hence, could be considered misleading. The Scottish islands have, since privatisation, been included within the geographic area of existing transmission and distribution licences, and there are both demand and generation customers on the islands. The current transmission charging methodology is used to derive the Transmission Network Use of System (TNUoS) charges paid by these customers.

Given this, it would appear that the proposals under consultation would affect current and future users, both generation and demand, connected to the existing systems of the onshore transmission licensees. We understand that this modification proposal seeks to replace the

existing charging arrangements with an extension of the unsatisfactory charging arrangements for offshore generation users to encompass some onshore generation and demand users. In the first instance, this would impact on customers on the Scottish islands. The consultation document is unfortunately vague on the criteria on which this arrangement would be applied and, hence, future customers that might be affected.

We are opposed in principle to this modification proposal which, in our opinion, constitutes undue discrimination. To be clear, we do not believe that there is a case for fragmenting the charging methodology such that onshore demand and generation users (or classes of user) are charged using different approaches.

In respect of the specific charging arrangements for offshore generation users, we are also mindful of the Authority's determination on GB ECM-08:

> "…the arrangements are aimed at the short to medium term development of an offshore regime for the development of confirmed R1 and R2 offshore transmission connections, explicitly in the form of radial networks through single circuits or circuits with partial redundancy relative to the amount of generation connected to them. In terms of future development, we note that NGET has a licence obligation to keep all aspects of its charging methodology under review at all times (SLC C5 (1)). This requires NGET to consider whether any future development of offshore transmission circuits (e.g. Round 3) would necessitate changes to the charging methodology."

In light of this, we were expecting National Grid to consider how to remove differences in the charging methodology between onshore and offshore users, and not seek to introduce further differences.

Why is this modification required?

The consultation document clearly states that the modification is required because *"there is currently no clarity on what charging arrangements apply for transmission assets other than those of the current three licensees or future OFTOs"*.

We are not aware of any transmission assets under development by parties other than the current three licensees or future OFTOs, and in particular any proposals for granting new transmission licences for island connections. As the consultation document notes, the Authority decided in March 2009 to modify Scottish Hydro Electric Transmission Limited's (SHETL) price control allowance to establish an appropriate level of funding for the Western Isles connection and has recently consulted on this, and funding for the Shetland connection, as part of the enhanced transmission investment incentives workstream. In addition, we note that the Western Isles is already connected to the national electricity transmission system with a Grid Supply Point (GSP) at Stornoway.

Without this modification, the charging arrangements that already apply for the transmission assets of the current three (onshore) transmission licensees (including Stornoway GSP) would continue to apply to the island connections. This is no different to any other reinforcement of the

electricity transmission system; for example, the analogous proposed £250 million mid-Wales transmission spur. If there are reasons why the current charging arrangements are 'inappropriate' – and hence transmission users situated on islands should have different charging arrangements to, for example, transmission users situated in mid-Wales or Anglesey – then this needs to be explained before this modification proposal is progressed further.

Why is it appropriate to treat island links as offshore transmission?

The consultation document states that *"island connections and offshore transmission networks are likely to be technically very similar, with long subsea cable connecting intermittent generation"* and, from this, concludes that it would be expected that island connections are treated the same as OFTO assets for charging purposes.

There are some technical similarities between offshore transmission and the proposed island connections but, as the table below illustrates, there are also technical similarities with onshore transmission. At a high level, in terms of length, voltage and the provision of a service of demand users, the proposed island connections are more similar to the onshore system (of which the island connections are, and will continue to be, an interconnected part) than point-to-point OFTO assets.

	OFTO[1]	**Onshore**	**Island[2]**
Length (km)	10-50	Up to 150	150-350
Voltage (kV)	132 / 145 AC	132 / 275 / 400 AC; proposed HVDC[3]	HVDC
Users	Generation only	Generation & Demand	Generation & Demand

There are no compelling technical similarities that exist between island connections and OFTO assets, particularly once the requirements of demand users are taken into account. Thus it is not an obvious next step that the charging arrangements for transmission demand and generation users situated on islands should be different from other demand and generation users connected to the same network. If there are clear reasons why island connections should be treated the same as OFTO assets for charging purposes then, again, this needs to be explained before this modification proposal is progressed further.

[1] The transmission assets associated with nine offshore windfarms are currently being tendered through the offshore transmission tender process.
[2] The proposed connections to the Western Isles and Shetland.
[3] For example, in East Anglia or the so-called 'bootstraps'.

Does different treatment constitute undue discrimination?

This proposed modification to the charging methodology would clearly establish two classes of user for charging purposes:

§ Demand and generation users connected to the current three onshore licensees' assets (except where those users are located on some, but not all, islands[4]); and

§ Generation users connected to OFTO assets and some, but not all, demand and generation users with island connections owned by the current three onshore transmission licensees.

The key difference between the charging methodologies for these classes of demand and generation user would be that one class would be charged on an historic cost and the other class would be charged on a future cost basis. Such different treatment of demand and generation users clearly raises the question of whether or not this constitutes undue discrimination.

The background to the charging arrangements for offshore generation users was the legislative framework established in the Energy Act 2004. The provisions of the Energy Act 2004 include a clear definition of offshore transmission: *"means the transmission within an area of offshore waters of electricity generated by a generating station in such an area"*. This is distinct and separate from the legislative provisions in relation to the interconnected transmission system, of which island links do, and will continue to, form a part.

In the context of implementing this new statutory framework, the new charging arrangement for offshore generation users were developed and implemented. The differences between this and the existing charging methodology were identified and discussed. On the question of undue discrimination, the Authority concluded that:

> "While we recognise that the charging arrangements of GBECM-08 may have deficiencies we consider that the modification delivers a better solution and results in more cost-reflective local charging signal for generators than is achievable at the moment."

It is hard to interpret this as a ringing endorsement of the approach.

The OFTO regulatory regime, including the charging arrangements, is specifically associated with offshore transmission. We do not agree with the premise of this consultation that as the charging arrangements for offshore generation users have been accepted to not constitute undue discrimination it follows that extending these arrangements to onshore demand and generation users would also not constitute undue discrimination. The two classes of user are very different, and hence separate consideration is required.

To reiterate, it is an important consideration that the background to offshore transmission was legislative reform. No such reform has taken place in respect of transmission connections to the Scottish islands. Rather, the existing legislation includes specific provisions to ensure that

[4] For example, the consultation is not clear on the impact of this modification proposal on current and future generation and demand users on the Isle of Wight or Anglesey.

customers located in remote areas receive an equal service and are not exposed to penal charges. It is against this background that we would advise National Grid to give serious consideration to the legality of introducing different charging arrangements for a small subset of onshore transmission customers.

To conclude, we do not believe that this modification proposal has been justified and, moreso, that the stated similarity for charging purposes between users of island connections and users of OFTO assets has been explained. Consequently, it is our initial view that extending the existing different treatment of offshore generation users to onshore generation and demand customers constitutes undue discrimination. Notwithstanding our comments on undue discrimination, we also believe that extending the offshore charging regime to onshore connections would not be consistent with the current legislative framework.

We urge National Grid, in accordance with its licence obligations, to reconsider its approach to use of system charging and introduce a stable, non-discriminatory methodology that is more consistent with the developments in the industry.

Yours sincerely,

Aileen McLeod
Regulation Analyst