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Dear stakeholder

Update on the SWW Final Needs Case for the Western Isles electricity transmission project and potential next steps

This letter provides an update on the current Final Needs Case for Scottish Hydro Electric Transmission's (SHE-T) proposed project to build a 600MW electricity transmission link between the Western Isles and mainland Scotland.[1]

SHE-T's Final Needs Case submission of August 2018 stated that the need for the project was conditional upon the Stornoway and Uisenis Wind Farms[2] (which could be up to 369MW in total) being awarded Contracts for Difference (CfD) in the 2019 auction. In our March 2019 consultation we stated that we were not minded-to approve the Final Needs Case for a 600MW transmission link. We set out that we did not consider that it would be in consumers' interests to approve a 600MW transmission link to the Western Isles based only on SHE-T's stated condition that both Stornoway and Uisenis Wind Farms secured CfDs in the 2019 auction. We set out that we considered that the Final Needs Case put forward by SHE-T risked consumers paying for a significantly underutilised link and thus may not represent long term value for money for existing and future Great Britain (GB) consumers. We stated that, subject to no material changes to the information we had reviewed, we would approve a revised submission for a 450MW transmission link, if SHE-T's stated condition was met. Alternatively, we would consider the case for a 600MW transmission link to the Western Isles if consumers were more appropriately protected from the additional costs of funding a potentially significantly oversized link.

In light of the outcome of the CfD auction,[3] SHE-T's stated condition has not been met. We consider in these circumstances that, before reaching a decision on the Final Needs Case, it would be in the interests of consumers for Ofgem to consider any revised Final Needs Case that SHE-T may wish to submit. Any revised Final Needs Case submission will require review and consideration to ensure it provides appropriate evidence to support the proposal and that it represents long-term value for money for GB consumers. If we receive a revised submission we will endeavour to consider it as soon as possible and will consult on our updated views on the revised Final Needs Case submission ahead of reaching of a decision.

[1] Herein referred to as 'the Western Isles project'.
[2] These were referred to as the "two Lewis Wind Power projects" in our March consultation; however, the ownership of one of the projects has changed since that consultation.
[3] The full CfD auction results are available here - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/832924/Contracts_for_Difference_CfD_Allocation_Round_3_Results.pdf

Today we have also published an update on the Final Needs Case for the Shetland Isles electricity transmission project. We expect to publish an 'in-principle' decision on Scottish Hydro Electric Power Distribution's (SHEPD) proposals to contribute financially towards the proposed electricity transmission link to Shetland in November. This will also provide an update on how SHEPD proposes the principle can be applied to the proposed links to Orkney and Western Isles.

Context

The Western Isles project is a proposed technical solution for connecting the Western Isles to the transmission network on mainland Great Britain (GB).

In August 2018 SHE-T submitted to us its Final Needs Case for a c.£623.8m[4] 600MW transmission link, to be delivered in 2023, when SHE-T is contracted to connect some local generators on the Western Isles. SHE-T's Final Needs Case submission stated that the need for the project was conditional upon two large onshore windfarm projects (the Stornoway and Uisenis Wind Farms that could be up to 369MW in total) being awarded CfDs in the 2019 auction. SHE-T's submission stated that there is significant renewable generation potential on the Western Isles, particularly onshore wind, and that this potential could only be realised if a new transmission link to the Western Isles was constructed (as without a link no new generation on the Western Isles can connect to the transmission network).

Following assessment of SHE-T's submission and underlying cost-benefit analysis (CBA), we consulted on our minded-to position in March 2019. In that consultation we outlined that we considered there to be a technical and economic need for the Western Isles project, but that we were not satisfied, on the basis of the information that we had seen, that SHE-T's Final Needs Case represented long term value for money for existing and future consumers and that we were not satisfied that GB consumers were appropriately protected from the risks and costs associated with building an underutilised transmission link. We set out the following positions relating to the Final Needs Case submission for the Western Isles project: [5]

"We are minded to reject SHE-T's Final Needs Case submission for a 600MW HVDC transmission link to the Western Isles based on only the two Lewis Wind Power projects[6] being successfully awarded a CfD in the 2019 allocation round.

Subject to no material changes to the information we have reviewed during our assessment, we would approve a resubmitted proposal for a 450MW transmission link to the Western Isles based on the two Lewis Wind Power projects being successfully awarded a CfD in the 2019 allocation round.

We would consider the case for a 600MW transmission link to the Western Isles if consumers were more appropriately protected from the additional costs of funding a potentially significantly oversized link." [6]

Our consultation also outlined that if we were to ultimately approve the Final Needs Case, we would need to determine the most appropriate delivery model for the Western Isles project. As we are not approving the Final Needs Case for the project at this time, the delivery model is not considered further in this letter.

We received 29 responses to the consultation which addressed the Final Needs Case submission. These came from a mixture of stakeholders, including local generators, Western Isles residents, local bodies, politicians and renewable energy associations.

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[4] SHE-T previously estimated the capital costs of the 600MW HVDC link as £662.9m in its Final Needs Case submission. Following further procurement activity, SHE-T updated the estimated capital cost to £623.8m.
[5] As shown in paragraph 2.51 of our consultation - https://www.ofgem.gov.uk/system/files/docs/2019/04/western_isles_consultation_updated_30042019.pdf
[6] The Final Needs Case submission and our March consultation refer to the Uisenis and Stornoway wind farms as the Lewis Wind Power projects. Since our March consultation, Uisenis is no longer owned by Lewis Wind Power and as such the projects will be referred to individually as Uisenis Wind Farm and Stornoway Wind Farm.

An overview of the key aspects of responses received to our consultation can be found in Annex 1 and a brief summary of responses can be found below. If SHE-T brings forward a revised submission for the Western Isles project, where appropriate we will consider responses to our March 2019 consultation in considering any such revised submission.

Summary of responses

All of the respondents agreed with the need to reinforce the network on the Western Isles to allow generation projects to progress. The majority of respondents noted that in their view, the number of prospective generation projects on the Western Isles means that a 450MW link would be largely filled by the transmission contracted projects[7] and would leave little scope for the development of community projects due to the limited headroom (additional capacity) that would remain on the 450MW link.

Most of the respondents argued that if a 600MW link was approved it would avoid the need for an additional link in the near future if only a 450MW link were approved. Almost half of all respondents argued that in their view, the CBA only points to a 450MW link as optimal due to the inclusion of the Steady State generation scenario in the CBA.[8] Those respondents commented that the Steady State generation scenario should not be included in the CBA, should be rated at 0MW or given a lower probability of occurring due to the conditionality suggested by SHE-T. The respondents stated that this view was supported by the ESO.

A small number of respondents commented that they consider the level of generation needed for approval of the link (which equates to approximately 369MW of generation, as proposed by SHE-T) is appropriate for the larger 600MW transmission link. Those respondents stated that there is additional protection for GB consumers afforded by grid liabilities associated with connection offers, and that this further safeguards consumers from any risks associated with an underutilised link or stranded assets.

CfD auction

On 20th September 2019, the department for Business Energy and Industrial Strategy (BEIS) published the results of the Autumn 2019 CfD auction. These set out which projects were successful in the 2019 CfD auction. On the Western Isles, the Uisenis Wind Farm (189MW in capacity) and the Drium Leathann Wind Farm (49.5MW in capacity) have been successful in the 2019 CfD Auction, however the Stornoway Wind Farm project (180MW in capacity) has not.

Our updated position on the Final Needs Case submission

In accordance with the Strategic Wider Works (SWW) condition in SHE-T's licence, we have been considering whether the current Final Needs Case submission, technical scope and timing of delivery of the proposed Western Isles project are sufficiently well justified and represent long term value for money for existing and future consumers.

The Uisenis Wind Farm has been successful in the 2019 CfD Auction, however the Stornoway Wind Farm project has not. Nor has an equivalent level of generation brought forward by other generators on the Western Isles been awarded a CfD. We consider in these circumstances that, before reaching a decision on the Final Needs Case, it would be in the interests of consumers for Ofgem to consider any revised Final Needs Case that SHE-T may wish to submit.

[7] The transmission projects contracted on the Western Isles is currently 419MW in total.
[8] The Steady State generation scenarios is one of the four Future Energy Scenarios (FES) developed annually by National Grid in its role as Electricity System Operator. The four Future Energy Scenarios presented by the ESO in 2017 and used in the CBA, were Steady State (SS), Consumer Power (CP), Slow Progression (SP) and Two Degrees (TD).

Further detail

Under SWW, we assess large transmission projects intended to extend and strengthen the transmission network, which are proposed by SHE-T and the other transmission owners (TOs). It is for each TO, working with the electricity system operator (ESO) as appropriate, to identify what system reinforcements may be needed to meet the needs of existing and future consumers.

We would expect SHE-T to continue working alongside the ESO to consider the appropriate next steps for ensuring an economic and efficient transmission network in its area. This may be expected to include engaging with generators in light of the CfD auction results and with other local stakeholders, as appropriate.

If the outcome of that process is a revised Final Needs Case submission by SHE-T, in accordance with the SWW condition in SHE-T's licence, we will consider whether the Final Needs Case is sufficiently well justified and represents long term value for money for existing and future consumers. We will endeavour to consider any such revised submission as soon as possible and we will consult on our updated views on any revised Final Needs Case submission ahead of reaching a decision.

It is for the TO to decide what information is necessary to support a Final Needs Case and to submit the same in support of their proposal. SHE-T may wish to consider in any revised submission whether its current plans for the transmission link remain appropriate or if an alternative size of link or alternative conditions for approval should be proposed. Ofgem will consider whether any revised submission from SHE-T is sufficiently well justified and represents long term value for money for existing and future consumers.

In any revised Final Needs Case submission, we consider it important that the analysis underpinning SHE-T's previous submission is appropriately updated. This is not limited to, but may include:

- Robust evidence to demonstrate that the generation underpinning any Final Needs Case submission is likely to go ahead;
- Updated cost benefit analysis if appropriate, for example considering whether, in light of the CfD auction results, changes are required to inputs to the CBA; and
- Consideration, as appropriate, of views of stakeholders, including where relevant, responses to our March 2019 consultation (summarised in this letter and published on our website[9]).

While we will endeavour to consider any potential revised Final Needs Case submission as soon as possible, the length of the review and decision-making process will be affected by the quality of the information and analysis we receive and the robustness of any case put forward.

We would be happy to discuss the content of this letter. Please contact us at NTIMailbox@ofgem.gov.uk.

Yours sincerely,

Cathryn Scott
Director, Wholesale Markets & Commercial

[9] We received 2 confidential responses to our consultation which are not summarised here or published on our website, non-confidential responses are published on our website and available here - https://www.ofgem.gov.uk/publications-and-updates/western-isles-transmission-project-consultation-final-needs-case-and-delivery-model

Annex 1 - Overview of consultation responses on the Final Needs Case

We provide below a brief overview of the responses received to our March 2019 consultation. This overview is limited to responses regarding the Final Needs Case. We received 30 consultation responses in total, 29 of which responded to our questions regarding the Final Needs Case. These came from a mixture of stakeholders, including local generators, residents on the Western Isles, local bodies, politicians and renewable energy associations. All of the non-confidential responses to our consultation have been published on our website.[10]

Need for reinforcement

All of the respondents agreed with the need to reinforce the network on the Western Isles, stating that the current network is not able to accommodate any new potential generation projects on the Western Isles, and flagged that the process of securing a transmission link for the Western Isles has been ongoing for a number of years.

The majority of respondents expressed their support for the wider generation project pipeline which they consider underpins the need for a transmission link. Most of those respondents stated that in their view, the number of generation projects already in development on the Western Isles means that a 450MW link would be largely filled immediately. Those respondents also noted that the progression of transmission contracted projects[11] on the basis of a 450MW link would leave little scope for the development of community projects due to the limited headroom (remaining capacity) that would remain on the 450MW link.

The majority of respondents raised concerns that they consider proceeding with a 450MW link, would mean that a second, smaller link, would be required to meet the demand from generators on the Western Isles for grid connections. A small number of those respondents also flagged that they consider progressing two links would ultimately cost consumers more in the long run than proceeding with a 600MW transmission link in the first place.

There were no responses received expressing opposition to the proposed reinforcement project as a whole, and none of the responses raised concerns about wind farm development on the Western Isles. Four respondents questioned whether the possibility of upgrading the existing 33kV AC link between Harris and Skye had been fully explored.

Generation background and scenarios

In relation to the generation scenarios presented by SHE-T in its Final Needs Case submission, a small number of respondents agreed that they represent a reasonable range of potential generation outcomes on the Western Isles. However, the majority of the respondents argued that the generation scenarios underestimate the amount of wind generation likely to be developed on the Western Isles and in particular highlighted their support for the higher scenarios. Most of those respondents highlighted that they consider there is in excess of 180MW of further projects in development in addition to the transmission projects referred to above and several respondents flagged additional onshore projects at earlier stages of development as well as potential floating offshore wind projects.

One of the respondents commented on the Future Energy Scenarios (FES)[12] developed by the Electricity System Operator (ESO), National Grid, stating that the scenarios do not capture the high and low generation outcomes that may arise on the Western Isles.

[10] https://www.ofgem.gov.uk/publications-and-updates/western-isles-transmission-project-consultation-final-needs-case-and-delivery-model

[11] The transmission projects contracted on the Western Isles is currently 419MW in total.

[12] The Future Energy Scenarios (FES) are developed annually by National Grid in its role as Electricity System Operator. The four Future Energy Scenarios presented by the ESO in 2017 were Steady State (SS), Consumer Power (CP), Slow Progression (SP) and Two Degrees (TD).

One respondent acknowledged that the development of projects on the Western Isles, beyond the currently contracted generation is less definite and that the development of subsidy-free projects (ie projects without a CfD) is relatively uncertain. A further respondent noted that the ongoing network charging reforms[13] may add further uncertainty to the business case for subsidy free projects.

Cost Benefit Analysis (CBA)

One of the respondents asserted that the use of a constraints-based CBA[14] methodology to justify the 'need' for the Western Isles link is an established industry approach and that the outcome is consistent with National Grid ESO's Network Options Assessment.

However, a small number of respondents flagged that they consider the scope of the CBA is too narrow and commented that the local socio-economic benefits associated with the proposed transmission links should be considered in this process.

Several of the respondents commented on the inputs used in the CBA submitted as part of the Needs Case. Firstly, one respondent flagged that they consider the CBA should be re-run with the most up to date FES available as FES 2017 may now be considered redundant and no longer contain the detail required on the current projects.[15] Secondly, one respondent highlighted that they consider the load factor used in the CBA is too low, and is likely to be far higher than this.

On the results of the CBA, almost half of all respondents commented that in their view the CBA only points to a 450MW link as optimal due to the inclusion of the Steady State FES. Those respondents commented that the Steady State scenario should not be included in the CBA, due to the conditionality associated with the Final Needs Case. Many of those respondents stated that the Steady State scenario should be removed from the CBA, be rated at 0MW or given a lower probability of occurring due to the conditionality suggested by SHE-T and stated that this view is supported by the ESO.

One respondent commented that in their view we have been selective in our use of the CBA findings and that this is not an effective method of planning the UK's future electricity network. The respondent also stated that the removal of the S4 generation scenario, which they view as eminently achievable, would represent gaming with scenarios to arrive at a preferred output and that we should take a consistent approach with the Orkney and Shetland Isles projects.

Four respondents stated they consider the CBA overestimates the risks associated with the 600MW option and that other means of protection, such as grid cancellation liabilities should be taken into account as protection to consumers.

Ofgem's minded-to position

In response to Ofgem's minded-to position, most of those who responded did not agree with the position set out. The majority of the respondents flagged that they consider the current position ignores the wider development background on the Western Isles and is short sighted.

[13] As outlined in Ofgem's December 2018 decision on the scope of the Electricity Network Access and Forward-looking Charges Significant Code Review (SCR), we are reviewing whether distribution-connected generation should face the same transmission forward-looking charging arrangements as transmission-connected generation. https://www.ofgem.gov.uk/publications-and-updates/electricity-network-access-and-forward-looking-charging-review-significant-code-review-launch-and-wider-decision

[14] Constraint costs are payments made to generators by the ESO to stop generators producing electricity. It will make these payments when the electricity transmission network in a particular area does not have the capacity to safely transport all of the electricity that is being produced in that area.

[15] The CBA submitted by SHE-T as part of the current Final Needs Case included Future Energy Scenarios (FES) 2017. In July 2019 the ESO presented FES 2019, the four Future Energy Scenarios presented by the ESO in 2019 were Steady State (SS), Consumer Evolution (CE), Steady Progression (SP) and Community Renewables (CR).

Almost a third of respondents highlighted that they consider the cost difference between the 450MW option and the 600MW option is relatively marginal. Several respondents went on to comment that Ofgem is prioritising existing consumers over future consumers, and that the costs associated with a smaller link, and ultimately a follow up link that would be required to meet the demand of generators on the Western Isles will cost consumers more in the long run.

More generally, most of the respondents highlighted that they consider the minded-to position would mean the largest transmission projects (Stornoway and Uisenis Wind Farms) would become uncompetitive in the 2019 CfD auction. A small number of those respondents stated that this would be due to the impact of a 450MW link on their network charges and ultimately on their CfD bid.

A small number of respondents commented that they continue to consider the level of generation needed for approval of the link (which equates to approximately 369MW of generation) is appropriate for the larger 600MW transmission link, with one respondent commenting that they consider a lower level of generation should be proposed for approval of a 450MW transmission link.

A small number of respondents also made reference to the additional protection for GB consumers that they consider is afforded by grid liabilities associated with connection offers, they commented that they consider this further safeguards consumers from any risks associated with an underutilised link or stranded assets.

Four of the respondents also commented that they understand SHE-T is prepared to fund the cost differential between the 450MW and 600MW link should insufficient levels of generation come forward.