James Santos-Mansur
Ofgem
10 South Colonnade
Canary Wharf
London E14 4PU

21 January 2022

Dear James,

Consultation on Isle of Skye project – Initial Needs Case (INC) consultation

We are pleased to enclose a response from SSEN Transmission[1] to Ofgem's consultation on the Isle of Skye project's INC.

We welcome and agree with Ofgem's initial assessment of the need, and that our preferred solutions seem reasonable. In responding to the consultation, we have enclosed responses to the questions within Appendix 1 and would highlight the following key points.

Developing a long-term economic solution

Our approach to the Skye project has been to develop a long-term economic solution which addresses the current asset condition issues, accounts for future growth in renewable generation and the strong view from our stakeholders to develop an enduring solution; to do it once and do it right. We believe that option 4a (132kV steel tower double circuit from Fort Augustus to Edinbane and a 132kV wood pole single circuit from Edinbane to Ardmore) is the most economic and efficient solution to address the need and contribute towards the UK's net zero targets, whilst balancing stakeholders' needs. With this in mind, we have strong concerns that option 1b (two 132kV wood pole single circuits from Fort Augustus to Broadford, a 132kV single circuit on steel structure from Broadford to Edinbane and a 132kV wood pole single circuit from Edinbane to Ardmore) has not been ruled out at this stage as this would not provide enough capacity to connect the contracted renewable generation, nor facilitate future generation looking to connect in the region. We have significant concerns that were option 1b pursued it would quickly result in an oversubscribed asset and effectively block new renewable generation development vital to achieving net zero targets. Past experience has shown us that when reinforcements are progressed, it will act as a signal for additional generation to come forward. Indeed, since the INC submission we have continued to receive interest from generators looking to connect in the Skye area and have recently issued a new connection offer for a 100MW renewable generation scheme.

[1] References to SSEN Transmission encompass the licenced entity Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461.

We will update our generation forecast ahead of Final Needs Case (FNC) and monitor the development of offshore generation, as requested by Ofgem. We believe that this additional information will conclusively demonstrate the option 4a is the most appropriate option to take forward for development.

Final Needs Case (FNC) timing

We welcome the flexibility Ofgem has offered in proposing to receive the FNC six months prior to the decision on planning consents for the project, which we recognise is a departure from the default process specified in Ofgem's Large Onshore Transmission Investment (LOTI) Guidance. Our position is that submitting a FNC **and** receiving a "subject to planning consents" decision by Ofgem ahead of receiving material planning consents is the most efficient way to reduce delays to connect renewable generators, whilst balancing construction risk undertaken by network companies, and risk borne by consumers. A substantial amount of work is undertaken through environmental assessments, site visits, surveys, and stakeholder engagement to understand project contestability and key risks ahead of submitting planning applications. This extensive and lengthy process means that by the time that we submit planning applications, we have high confidence on the consentability of a project. Any material changes to the proposed solution between application and consents being granted are very rare. Given the level of certainty at this stage, we would ask that Ofgem accepts a FNC at the point where we submit our planning application and to provide a decision on its FNC assessment as early as possible (within the 4-6 month window indicated in the LOTI guidance) and prior to receipt of a decision on planning consents.

In addition to the above, an earlier decision would have the following impacts:

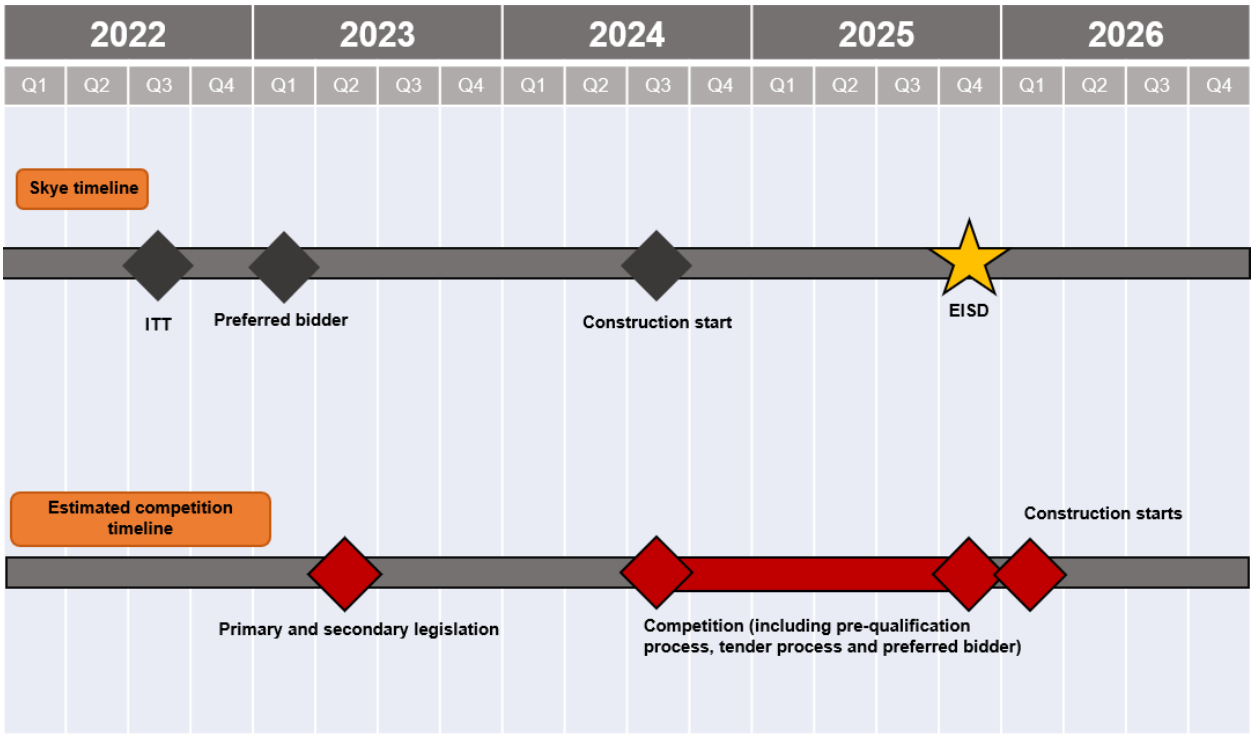
- providing a decision on the FNC as soon as possible after the ITT, currently planned for Q3 2022, would give the market certainty that Ofgem approves the need for the project and,
- ensure that we have had time to take the outcome of the FNC assessment into consideration ahead of the Project Assessment (PA) stage.

We understand that Ofgem has indicated concern that publishing a FNC decision may influence the planning consents process. Our view remains that these are two separate regulatory frameworks and should not impact each other. At this stage we are seeking clarity from Ofgem on any concerns it has with the proposal we have outlined above, and in particular the risks it would be seeking to mitigate with a later FNC submission. We would welcome further engagement with Ofgem to address this and any other concerns on providing a decision for the FNC ahead of receiving full planning consents.

Competition

We note Ofgem's intention to provide a decision on the use of the Competitively Appointed Transmission Owner (CATO) model by September 2022. Our position is that delivery under a Late Competition Model, such as CATO, would not be feasible for this project given that it would cause considerable delay to delivery, as demonstrated in the diagram below[2], through the necessity of developing and completing additional long duration tendering process(es).

[2] The diagram shows a 'best view' of the competition timeline as material questions on the process remain (e.g., transferability of consents)



This would:

- prevent us from meeting our contracted connection dates with customers,
- increase the security of supply risk with existing infrastructure, and
- introduce further delay and uncertainty as to the final cost to developers and UK consumers.

SSEN Transmission, our stakeholders, and developers, need certainty to ensure timely delivery of network investments. We would encourage Ofgem to rule out competition in its INC decision to avoid delay and allow us to undertake meaningful engagement with the supply chain as soon as possible to secure the most economic and efficient price through our existing competitive processes.

Should the CATO model not be applied and Ofgem decides to consult on the Competition Proxy Model (CPM) at FNC stage, we would reiterate our view that CPM continues to be an underdeveloped financing approach with unresolved issues. In the absence of further development work, we strongly believe there is no sound basis for considering its application to Skye.

Holistic decision-making

We welcome Ofgem's recognition that given the UK's legally binding net zero legislation, a significant increase in electricity demand will cause an increase in the required transmission boundary capability, triggering associated network investments. This transition represents a fundamental change in the UK's energy system and with that, we should expect the corresponding impacts and value creation of the network to also change. In order to make a holistic decision which respects and acknowledges the significant benefits that this investment will create, we would urge Ofgem to review and include factors such as carbon displacement and socio-economic benefits in their consideration of the Skye needs case.

Yours sincerely,

Cara Dalziel
Senior Regulation Analyst
SSEN Transmission

Appendix 1 – Responses to Ofgem Questions on Skye INC

Question 1: Do you agree with the technical need for investment on the transmission network?

Yes, we agree with the technical need for investment. The existing Fort-Augustus to Skye overhead line is fast approaching the end of its operational life and is in urgent need of intervention. Its planned replacement is essential to maintain network reliability and security of supply to homes and businesses along its route, as well as to the Western Isles. At the same time, existing generation exceeds the capacity of the line which operates under a derogation that limits renewable generation output and relies on standby diesel generation for demand security. Alongside the need to support the UK and Scottish Governments transition to net zero, these factors necessitate growth in the transmission capability.

Question 2: Do you agree with our initial conclusions on the three drivers for the Skye project?

We mostly agree with Ofgem's initial conclusions on the three drivers for the Skye project, however we would highlight some areas of disagreement.

On the second driver (load related), we would note Ofgem's comment around the uncertainty over the level of generation that will end up connecting to the transmission network. While we acknowledge that there is some short-term uncertainty over the exact levels of generation to connect at this stage, our approach with the Skye reinforcement project has been to reach a long-term economic solution; short-term thinking will not be sufficient to achieve our strategic legally binding net zero targets. This means looking beyond currently connected and contracted generation and considering scoping generation and recognising the cost and environmental impact of any significant network augmentation in the short to mid-term. One of the key themes from stakeholder feedback is to develop an enduring solution which would avoid the need for additional infrastructure within the decade to avoid returning and disturbing the local environment and communities. This stakeholder feedback has been a major driver behind our approach to "do it once, do it right'.

We would also disagree with Ofgem's initial view on the third driver (security of supply). With only one overhead line (OHL) supplying Skye and the Western Isles, any outages on this line – whether planned or unplanned – result in loss of supply. Given the light construction of the transmission line over the most challenging terrain and its age-related condition, its reliability is poorer compared to other lines. We believe that any reinforcement works must deliver improved security of supply by improving the reliability of the Skye transmission network. While the diesel generator sets will not be removed, there is an opportunity to improve the performance of the line and therefore reduce the likelihood that diesel generation will be required (ultimately reducing the negative environmental impacts, in line with net zero ambitions).

Question 3: Do you agree with our initial conclusions on the technical options considered?

We welcome Ofgem's conclusion that option 4a is reasonable and likely to provide the optimal solution. However, we disagree with the decision not to rule out option 1b at this stage as this option would not provide enough capacity to connect the generation capacity required by developers currently requesting connections, nor facilitate future generation looking to connect in the region.

As set out in response to Q2, our approach has been to develop a long-term economic solution which addresses the current asset condition issues, accounts for future growth in renewable generation in line with legislated net zero targets and the strong view from our stakeholders to develop an enduring solution. The Isle of Skye is an environmentally sensitive area with the proposed OHL route running through some of Scotland's most valued wild landscapes. Understandably, many stakeholders have concerns about the potential disruption and lasting visual impact from the infrastructure and construction methods. We have worked closely with our stakeholders to develop an economic, co-ordinated solution that satisfies current and future consumers' needs and so avoiding the damaging cost of multiple incremental interventions. As outlined within the INC, we have undertaken an extensive assessment of the potential future generation in the Skye area, with the aim of ensuring that our proposed solution not only meets the immediate needs for generators looking to connect in this area but also makes proportionate provision for future potential generation in the area. At the time of INC submission, 418MW of new generation capacity was contracted, however since then we have continued to hold early discussions with generators looking to connect in the Skye area and have recently issued a new connection offer for a 100MW scheme. If option 1b was pursued, it would result in a significantly oversubscribed asset based on the current contracted background and would effectively block new renewable generation development.

In light of this, we believe that option 4a is the most economic and efficient solution to address the need drivers, meet our stakeholders needs and to contribute towards the UK's net zero targets by 2050 and 2045 for Scotland.

Question 4: Do you agree with our initial conclusions on the cost benefit analysis and the appropriateness of the option taken forward?

We welcome and agree with the initial conclusion from the Cost Benefit Analysis (CBA) that option 4a is the option of least worst regret. This option satisfies all the drivers for the project and provides capacity to support national net zero ambitions. Furthermore, we welcome Ofgem's support of our approach to working with the ESO to prepare the CBA (section 2.45) and the constructive engagement that we held with Ofgem during this process.

As explained in Table 4 in Ofgem's INC consultation document, a range of sensitivities were applied to the CBA to test the robustness of the conclusion. Following this application, the preferred result did not deviate from option 4a (or option 4a01, a close variant of option 4a). We note however, that in one specific instance of a low generation test, the preferred option changed to option 1b. While we understand this from a computational perspective we remained concerned that this lower stress test of generation is highly unlikely to represent a credible representation of future generation. As explained in

our INC, section 4.3.6, testing a lower level of generation set at 205MW would represent a scenario where only 77MW of new large scale wind farms could be approved in the next 30 years. Since submitting our INC In July 2021, we have received an application for a 100MW scheme and made a connection offer. This connection alone would already take us over the threshold presented under the low generation sensitivity test.

We agree with Ofgem that the low generation sensitivity may not represent the renewable generation capacity in the coming years (section 2.50). We also confirm that we will update our generation forecast ahead of FNC (section 2.51) and monitor the development of the offshore network development (2.52). With this additional information we believe that we will conclusively demonstrate the low generation scenario is not representative of the forthcoming reality and clarify that option 4a is the most appropriate option to take forward for development.

Question 5: Are there any additional factors that we should consider as part of our Initial Needs Case assessment?

As noted by Ofgem in section 1.8 of the consultation, the UK is currently governed by legally binding net zero legislation. As Ofgem rightly points out, with this imperative a significant increase in electricity demand will cause an increase in the required transmission boundary capability, triggering associated network investments. This transition represents a fundamental change in the UK's energy system and therefore with the composition of the system changing, we should expect the corresponding impacts and value creation of the network to also change.

One such area is in carbon displacement, the enabling of renewable generation to displace carbon-based energy generation sources. Through the development of carbon pricing from the Department for the Business Energy and Industrial Strategy (BEIS) the value of carbon has become a quantifiable metric which can be used in analysis. Combining this with the data on the electricity grid mix factor, calculations can be made to outline the level of carbon-based generation which is displaced through the connection of renewable energy and from decreased use of backup diesel generation during outages, hence arriving at the monetary value to society of displaced carbon from a given project. Given the reality of the net zero legislation, we believe this is a material cost which can act as a proxy value for the transition to the low carbon economy and will include calculations of this nature in the FNC.

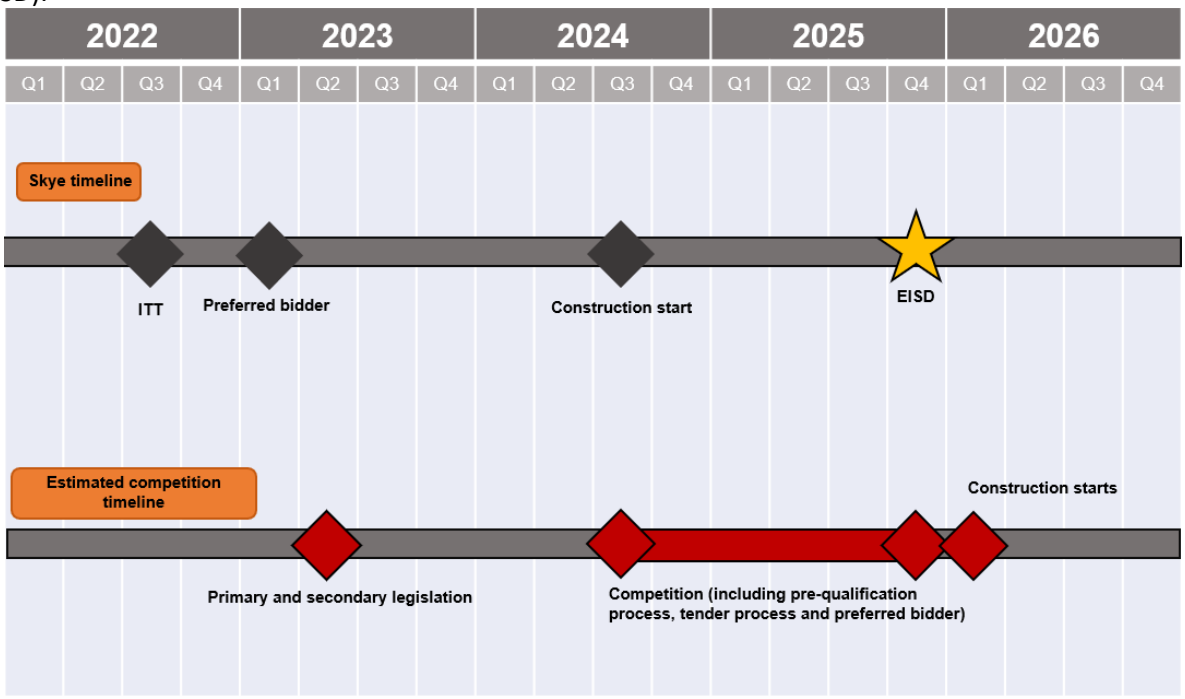
Impacts in the carbon economy are not the only additional consideration, socio-economic factors are also important to include. This project represents around £400m of investment into a local region which has the potential to create a range of different multiplier effects on both the immediate economy and wider supply chains. We believe this is a significant investment into the Skye region and we will prepare a socio-economic impact report to demonstrate these benefits to the Scottish and UK economy for the FNC.

In order to make a holistic decision which respects and acknowledges the significant benefits that this investment will create in addition to the network capacity improvements, we would urge Ofgem to review and include these factors in their consideration of the Skye needs case.

Question 6: Do you agree with our proposal to make a decision on use of the CATO model before the invitation to tender stage of SHET's proposed procurement of the supply chain for delivery of the Skye project? If not, do you have views on an alternative appropriate timing for that decision?

Our position is that delivery under a Late Competition Model, such as CATO, would not be feasible for this project as it would cause considerable delay to delivery through the necessity of developing and completing additional long duration tendering process(es), preventing us from meeting our contractual connection dates with customers, increasing the security of supply risk with existing infrastructure, and introducing further delay and uncertainty as to the final cost to developers and UK consumers.

As Ofgem has recognised within the consultation, the CATO model will require legislative changes to allow for new parties to be able to be awarded a transmission licence following a competitive tender, and while Government has set out its intention to introduce the required legislation, it is currently uncertain as to when that will be in place. In addition to that timing uncertainty, there would also be a time-cost associated with then having to develop and undertake a Skye-specific competition (the 'CATO tender') to appoint the CATO, which in itself will require potential bidders to undertake their own procurement/supply chain exercises to inform their bid prices for the CATO tender. The diagram[3] below demonstrates that based on the current estimate of when the necessary primary and secondary legislation will be introduced, and taking the shortest timeline for the competition process to run suggested by BEIS[4], construction of the Skye project would commence **after** the Earliest In Service Date (EISD).



[3] The diagram shows a 'best view' of the competition timeline as material questions on the process remain (e.g., transferability of consents)
[4] Competition in Onshore Electricity Networks

In addition to this, the introduction of late competition would prevent meaningful early supply chain engagement during the development phase, which is delayed until the outcome of the competitive tender is known – the supply chain will require certainty as to who will be procuring its services in order to undertake its own financial due diligence of the procuring entity (where it is not SSEN Transmission) and provide a price reflecting any associated risk it foresees with the procuring entity. In addition, given that the UK is operating in an increasingly globally constrained supply chain, there is a clear need to provide supply chain certainty at the earliest possible opportunity to secure manufacturing slots and achieve the most economic and efficient price. If Ofgem was to provide certainty in its INC decision, that it is not minded to direct and wait for a CATO process, SSEN Transmission can start meaningful procurement negotiations early to maximise economies of scale, adequately hedge commodity costs and ensure assets are procured in time to meet key delivery dates. This early engagement is key to secure manufacturing slots and allow contractors and supply chain to collaborate on the best solutions and deliver value for UK consumers.

Late competition would also introduce complexity of accountability to communities and wider stakeholders when the network solution - developed and consented by SSEN Transmission in consultation with stakeholders, including communities and their elected members - is then delivered by a separate entity. On Skye, we have built productive working relationships and trust with communities and wider stakeholders (as demonstrated by the extensive stakeholder engagement activities outlined within the INC), to ensure we can effectively and efficiently deliver the project, whilst also meeting the needs of the local community and ensuring that environmental standards are upheld. Applying the CATO model to the Skye project would raise questions about commitments and liabilities agreed upon during the development phase and introduces fragmentation of responsibility and accountability. Additionally, without having input in preliminary works and design, there is a significant gap in whole project considerations and knowledge when delivering and operating an asset. This is particularly pertinent for Skye given it is such an environmentally sensitive area and works will be carried out over the most challenging terrain.

Ultimately, we, along with our stakeholders (including communities and the supply chain), and developers seeking to connect in the Skye area, need certainty to ensure timely delivery of network investments. We would encourage Ofgem to rule out the use of CATO model on the Skye project in its INC decision to avoid delay and allow us to undertake meaningful engagement with the supply chain as soon as possible to secure the most economic and efficient price through our existing competitive processes.

We would also note Ofgem's comment that should the CATO model not be applied, a decision on whether to apply the Competition Proxy Model (CPM) will be consulted on at the FNC stage. We will comment on this in more detail at the time, however, we continue to reiterate the point (made previously to Ofgem in response to RIIO Final Determinations) that CPM continues to be an underdeveloped financing approach with many unresolved issues. Indeed, it was for this reason that Ofgem removed CPM from the final RIIO-T2 licence. In the absence of further development work on CPM, we strongly believe that there is no sound basis for considering its application to Skye.

Question 7: Do you have a view on the consumer impact of delay to delivery of the Skye project and how any detriment could be quantified?

It is our view that it would be premature at this stage to quantify the consumer detriment should delivery be delayed.

While we understand the question is in relation to any delay caused by the application of a late competition model on Skye, the question of consumer detriment will be relevant should a Project Delay Charge (PDC) be implemented on the project. The PDC mechanism is still to be subject to proper policy debate and we would welcome further discussion with Ofgem on this, including more detailed information on how and when PDCs will apply.