

**Office of Gas and Electricity Markets (Ofgem)**

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Dear Keren

**Consultation on the Eastern HVDC (EHVDC) Projects' Final Needs Cases**

We are pleased to enclose a response from SSEN Transmission<sup>1</sup> (SSENT) to Ofgem's consultation on the EHVDC projects' Final Needs Cases (FNC). This response is focused in particular on the Peterhead to Drax subsea EHVDC link (NOA code E4D3), with references made to the Torness to Hawthorn Pit subsea EHVDC link (NOA code E2DC) where appropriate.

Please note that SSENT and National Grid Electricity Transmission (NGET) now refer to the Peterhead to Drax EHVDC Link as "Eastern Green Link 2 (EGL2)" and all references herein to EGL2 refer to that link.

We welcome Ofgem's decision to provisionally approve the first of two subsea links planned to connect Peterhead in Scotland to demand centres in England. These links are critical to the country's net zero ambitions, delivering UK and Scottish Government renewable targets and reducing our exposure to volatile wholesale gas markets by supporting indigenous low carbon electricity generation. We would like to thank Ofgem for its timely, transparent and constructive engagement on the EHVDC projects so far, including on its assessment of the respective FNCs.

We have enclosed responses to the questions in Ofgem's consultation at Appendix 1 and highlight the following key points:

- We note that Ofgem considers it prudent - before making its decision on the FNC for Eastern HVDC - to check whether any alternative route options or other material changes are recommended to EGL2 (or EGL1) as a result of the Holistic Network Design (HND) work. SSENT are mindful of the interaction of the HND and OTNR with both EHVDC links and remain focused on ensuring a coordinated approach to network development is maintained. However, we do not believe Ofgem needs to wait until HND concludes before issuing its decision on the EHVDC FNC. This approach only adds uncertainty for TOs, and the risk of a delayed decision on the FNC should the reporting timescales of HND slip.
- Ofgem continues to engage closely with the three TOs on the suitability of applying a PDC to the Eastern HVDC projects. In coming to its view on this, we understand Ofgem will aim to arrive at a position which protects the interests of existing and future consumers. However, we challenge Ofgem's assertion that "there is a clear need to set a PDC for the Eastern HVDC project to protect the interests of existing and future consumers." We do not believe that there has been sufficient evidence presented by Ofgem to determine whether a PDC is appropriate for

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<sup>1</sup> References to SSEN Transmission encompass the licenced entity Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461.

application on the EHVDC projects. We have raised concerns in our trilateral engagement so far on both the lack of clarity with the current policy and the urgent need for such clarity to inform the RFP process for each link. Until we have had further discussions on both the shape of the policy and the art of the possible on its application to EHVDC, we believe that the position stated in the consultation is premature.

- We note that Ofgem’s consultation does not make any mention of the TOs’ request for confirmation that Ofgem will fund any efficient early expenditure that TOs may have to incur to maintain programme timelines and de-risk project delivery (e.g. where TOs have to commit on factory slots prior to FNC and/or PA). For the avoidance of doubt, we would like to reaffirm that this remains a concern for the TOs and we restate our request here. The TOs recognise that, in such a scenario, they will have to provide a clear case for why making those commitments early is in the best interests of consumers. This case will have to also clearly articulate the quantum and timing of such commitments; the interaction with any pre-construction funding; and the associated regret.

We trust that our comments and proposals in this document are clear but please do not hesitate to contact us if you have any questions or comments about our feedback.

We look forward to working with Ofgem, Government and wider stakeholders to accelerate the necessary investments in strategic grid reinforcements required to support our future energy needs.

Yours sincerely

David Howie  
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**SSEN Transmission Regulation**

## **Appendix 1 – Responses to Ofgem Questions on EHVDC**

### **FNC ASSESSMENT**

#### **Question 1 - Do you agree that meeting the technical requirement with the two proposed HVDC links is appropriate?**

It is SSENT's position that meeting the technical requirement with the two proposed HVDC links is appropriate. The optioneering, FNC CBA and the annual NOA have demonstrated consistently that the two proposed HVDC links are most effective for addressing the requirement to increase transfer capability across multiple network boundaries over a large geographical area. The TOs are progressing with onshore network reinforcements that have been demonstrated to supplement these links and also continue to assess both HVAC and HVDC options that can support net zero ambitions.

In our experience, offshore options reduce planning consent risk and delivery timescales (when compared to onshore options). Comprehensive and strategic optioneering has concluded that any potential alternative onshore options (or combination of options), cannot deliver comparable constraint relief in the timescales that can be achieved by the links. It has been demonstrated through the NG ESO CBA that the timing of these network reinforcements is critical to delivering consumer benefit.

As Ofgem is aware from both our Initial and Final Needs Case submissions and subsequent bilateral engagement, the TOs have undertaken in depth analysis over a number of years supported by third parties to arrive at our proposals. Successive rounds of design and study led us to the proposals put forward. As recognised in the Ofgem consultation, our analysis has shown that HVDC options become more economic over longer distances and therefore can be more effective than onshore AC options at addressing the requirement for increased capability across a large geographical area.

#### **Question 2 - Do you agree with our conclusions on the appropriateness of the options taken forward?**

We agree with Ofgem's conclusions on the appropriateness of the options taken forward. The links taken forward are appropriate on the basis that: they have been demonstrated to deliver consumer benefit in the CBA; the links have been consistently recommended by NOA; and the regret associated with deferring network investment outweighs the benefit of selecting this reinforcement combination. Furthermore, the southern landing points on the East coast of England that are not utilised by the first two HVDC links from Scotland will continue to be assessed for future network reinforcement and offshore wind.

We note that Ofgem considers it prudent, before making its decision on the FNC for Eastern HVDC, to check whether any alternative route options or other material changes are recommended to EGL2 (or EGL1) as a result of the Holistic Network Design (HND) work. SSENT are mindful of the interaction of the HND and OTNR with both EHVDC links, and the TOs remain focused on ensuring a coordinated approach is maintained. However, we do not believe that Ofgem needs to wait until HND before issuing its decision on the EHVDC FNCs. This approach only adds uncertainty for TOs, and the risk of a delayed decision on the FNC should the reporting timescales of HND slip.

We note the concerns highlighted in Ofgem's consultation regarding the risk that the E2DC Eastern HVDC project may be delivered later than previously estimated. In relation to EGL2, we restate the position set

out on this matter as part of the Supplementary Question process which supported Ofgem's FNC assessment: at this stage our programme assumption remains that delivery will be in 2029. Work will continue throughout project development to refine our programme and assessment of delivery date. As mentioned in previous correspondence with Ofgem, we would again highlight that, by definition, EISDs are not fixed dates for energisation but are better understood as a target outcome. It is on this basis entirely possible that they may move as development progresses and further information is uncovered. However, as noted above, the current programme assumption on the EGL 2 project is that delivery will be in 2029.

**Question 3 - Do you agree with our conclusions on the technical design and the costs of the proposed E2DC and E4D3 projects?**

We agree with Ofgem's conclusions on the technical design and the costs of the proposed EGL2 project. However, we would reiterate the following important general points below which have been made previously to Ofgem (particularly regarding costs).

***Construction ahead of Project Assessment***

We note (from engagement with Ofgem on this and other LOTI projects) that there may be an expectation upon licensees that they start construction ahead of completion of the Project Assessment (PA). We continue to reiterate our opposition to this expectation for licensees to construct at risk (i.e. spending significant values whilst uncertainty remains on the final financial settlement for a LOTI project) without appropriate protections in place. RIIO-T2 is the most stretching price control, with the lowest cost of capital to date, and an ambitious ongoing efficiency challenge. We do not think it is appropriate or financeable for TOs to bear this additional risk.

Ofgem should formally acknowledge that building at risk may be unfinanceable and requires network companies to bear significant risk (e.g. through the requirement to award contracts without full knowledge of available project funding). We therefore request that Ofgem make all PA decisions ahead of the elapse of contract price guarantee period, and ahead of contract award to preferred bidders.

In chapter 9 of the EGL2 FNC submission, the TOs mention that we expect the market to offer a price hold period of only 2-3 months after best and final offers. This expectation is the result of market intelligence. The emergent high European and Global demand for HVDC converter and HVDC cable manufacturing capacity means that suppliers can be selective about the projects in which they participate. Furthermore, current trends in inflation and real price effects mean suppliers will seek to de-risk. In these circumstances, suppliers are less likely to hold prices for long periods of time (or may hold prices for longer but at a significant premium to the TOs and consequently consumers). We would stress that it is not yet clear how long contractors will be willing to hold prices, and this will not be known until we tender this project. This is an issue which will be faced by any participant and is not a matter specific to the TOs.

Under the current process, Ofgem expects the PA to be made once prices are firm (which we anticipate will generally be after the 'best and final offer' stage). Under normal circumstances, it would be possible for a Project Assessment to be made and determined without delaying the award of Main Works contracts - i.e. if bidders were willing to hold their prices for the 6-month minimum period specified in the Ofgem guidance, the PA can run parallel to the final stages of procurement.

Given that the TOs are unable to sign Main Works Contracts of high materiality without PA sign off (and subsequent TO FIDs), the shorter hold period presents a challenge in ensuring the regulatory process does not delay the EISDs of this link. As discussed in the FNC submissions, all three TOs are prepared to work closely with Ofgem to jointly develop a PA mechanism that is efficient in terms of resource, effective in its intent and carried out as early as possible to secure the most reliable, safe, economic, and efficient project schedule.

Without prejudice to whether such proposals would be acceptable to all TOs, there are several (potentially overlapping) potential options to mitigate this issue:

- A staggered PA could be completed, whereby some issues can be agreed and determined earlier, with final pricing agreed once available, in the short price hold period.
- Ofgem could agree (at an earlier stage) re: each of the following aspects, with a firm commitment from Ofgem that the outcome of the procurement events will be respected in setting allowances:
  - The overall procurement strategies adopted for each link (e.g. EPC with separate lots for cable and converter for each link; form of contract; pricing mechanism);
  - The approach to risk apportionment, especially in relation to technology risk; and,
  - The scope to be tendered.
- PA submissions could be made earlier in the procurement process, based on less firm prices, and determined in time for Main Works Contract awards – this is acknowledged to present a risk to both the TOs and consumers, given that prices may move following the submissions.
- Some form of letters of comfort could be issued by Ofgem to reduce the perceived risk of reductions in allowances relative to market-tested costs.

The TOs have had some initial discussions on what engagement may be required with Ofgem between now and PA submission, particularly in the later stages of the tender process, and the above bullet points/topics will likely form part of these ongoing discussions. We expect we will engage further on this in due course.

#### ***“Early construction activities”***

We note that Ofgem’s consultation does not make any mention of the TOs’ request for confirmation that Ofgem will fund any efficient early expenditure that TOs may have to incur to maintain programme timelines and de-risk project delivery (e.g. where TOs have to commit to factory slots prior to FNC and/or PA). For the avoidance of doubt, we would like to confirm that this remains a concern for the TOs and we restate our request here. The TOs recognise that, in such a scenario, they will have to provide a clear case for why making those commitments early is in the best interests of consumers. This case will have to also clearly articulate the quantum and timing of such commitments; the interaction with any pre-construction funding; and the associated regret.

As noted during the Supplementary Question process and the FNC submission itself, the TOs envisage undertaking a variety of “early construction activities”. These include e.g. third party works (including DNO onshore asset diversion works); securing cable manufacturing slots (i.e. booking these slots and reservation of the dates of commencement of manufacturing); and, early design activities that would typically be in the Main Works Contractor(s) scope. Early Converter design works can help move the

planning process forward thereby expediting overall timelines, for example the completion of reserve matters associated with outline planning consents. In addition, expediting third party activities such as public road improvements/alterations, that are outside of the TOs' control, can help to de-risk the construction programme. There may also be some potential low regret site enabling works required, with examples including platform establishment, ground improvement works and site access development. Any critical works that can be completed early will help to mitigate programme risk, increasing the likelihood of meeting the EISDs. Other such activities may arise as development work and procurement continues.

Undertaking critical path or potential critical path activities earlier will reduce the risk of not meeting the EISD and delivering the associated benefits to consumers. Where activities are on the critical path (as is the case for the DNO works at the southern end of E2DC), the EISD would be delayed if the critical path works are delayed. These works are highly likely to always be required regardless of final design. It therefore makes sense to de-risk these activities as much as possible. In other cases, early activities would increase the certainty of meeting the EISD, noting the magnitude of potential impact on consumers of any potential delay. As detailed within Table 9 of the EGL2 FNC submission, any delay to the delivery of these projects leads to additional constraint costs of up to £409m in the first year of delay.

#### **FNC ASSESSMENT – COST BENEFIT ANALYSIS**

##### **Question 4 – Do you agree with our conclusions on the cost benefit assessment and the appropriateness of taking forward the E2DC and E4D3 options?**

We agree with Ofgem's conclusions on the cost benefit assessment and the appropriateness of taking forward the EGL1 and EGL2 options.

##### **Question 5 – Do you agree that considering the proposed investment reinforcements in the context of wider network reinforcements (reinforcement pathways) is an appropriate approach?**

We agree that considering the proposed investment reinforcements in the context of wider network reinforcements (reinforcement pathways) is an appropriate approach. However, we reiterate our point from above in relation to HND and risk of delay if Ofgem are to defer its decision on EHVDC until review of the HND outcome.

##### **Question 6 – Are there any additional factors that we should consider as part of our Final Needs Case assessment?**

In our response to this question during the INC assessment process, we highlighted the key areas of uncertainty which remained over the regulatory process as it pertains to EHVDC. We are grateful that Ofgem appear to have considered the TOs' overtures and requests for as much certainty as possible on each of the various factors under consideration (delivery model, decision in advance of planning etc). This will help protect project delivery timelines, consumers from detriment and, progress towards net zero. We continue to work diligently to protect project timelines, and the removal of key aspects of uncertainty will help mitigate risks to that programme.

We appreciate Ofgem's position that approval of an FNC may be provided (albeit on a conditional basis) subject to the licensee(s) securing all relevant material planning consents. Ofgem is aware that it is not uncommon for approval of planning consents to take a significant period of time, potentially even



several years. This approach should help protect project delivery timescales and guard against the risks to consumers associated with any delays. On that basis, it is our working assumption that Ofgem will continue to engage with the TOs on the Project Assessment in advance of the *final* decision on FNC. As referred to on page 6 of this response, there are various early construction activities which may need to be financed in advance of finalisation of the Project Assessment or receipt of all material planning consents. We would appreciate confirmation from Ofgem that it is willing to commit consumer funding to the construction of the Eastern HVDC projects to support these activities.

On a general point in relation to Ofgem's policy regarding planning consent and LOTI projects, we note that it is useful to see the specific concerns Ofgem is trying to address through the introduction of this policy. However, we would welcome further engagement with Ofgem on the issues identified in order to explore the actual risks associated with Ofgem granting FNC approval ahead of planning consents. We are not aware of any SWW projects under T1 where Ofgem's decision to approve the need affected the decision for planning consent. If no specific risk exists then delaying FNC approval until planning consents are in place seems unreasonable and, as identified by Ofgem, also risks delaying the project. Given that allowances for a LOTI are not awarded until the Project Assessment stage, approval of the FNC does not in itself mean that Ofgem is committing material consumer funding, it just allows the project to progress to the next stage and, importantly, maintain its programme for delivery. Equally, TOs would not be in a position to progress with construction of a project, and therefore commit funding, in the absence of the required planning consents.

#### **DELIVERY MODEL CONSIDERATIONS**

##### **Question 7 – Do you agree with our minded-to decision to retain the two Eastern HVDC projects within the LOTI arrangements under RIIO?**

We agree with Ofgem's minded-to decision to retain the two Eastern HVDC projects within the LOTI arrangements under RIIO. We are grateful for the confirmation that Ofgem does not envisage implementing either the Competitively Appointed Transmission Owner (CATO) model or Special Purpose Vehicle (SPV) model for the Eastern HVDC projects. We are also pleased that Ofgem is not minded to apply the Competition Proxy model (CPM) to the EGL2 (nor EGL1) link. With Ofgem providing much needed certainty on delivery, we can now engage with confidence with the supply chain to secure the specialist HVDC infrastructure and project delivery partners through an open and competitive procurement process.

#### **LARGE PROJECT DELIVERY**

##### **Question 8 – Do you agree with our approach to LPD?**

We agree that TOs should not benefit financially from any delay in delivery of either the Eastern HVDC projects or other LOTIs.

We agree that the milestone-based approach is not appropriate for the Eastern HVDC projects and we have set out our position on the use of the reprofiling mechanism for the Eastern HDVC project in our response to Question 9.

In relation to the Project Delivery Charge (PDC), we do not agree with Ofgem's assertion that "there is a clear need to set a PDC for the Eastern HVDC project to protect the interests of existing and future

consumers.” We do not believe that there has been sufficient evidence presented by Ofgem to determine whether a PDC is appropriate for application on the EHVDC projects.

We welcome the ongoing engagement with Ofgem on the PDC mechanism and its recognition of the concerns raised by TOs so far. We also welcome Ofgem’s recognition that further detailed engagement is required on this matter, including, for example, on the level and basis of any PDC and how precisely the policy would operate in practice (particularly given the various relevant legal and commercial considerations.)

Whilst we continue to engage with Ofgem on the exact detail of the policy, we have summarised some of our key concerns below:

- We note that Ofgem has stated that the main purpose of a PDC is to ensure consumers are protected from delay in delivery. However, it remains unclear as to the basis for the delay charge that Ofgem proposes to place on the TOs and how these will reflect and reduce perceived consumer harm due to project delay. We ask that Ofgem provides clarity on how it expects daily rates to be set and for it to be recognised that these cannot be benchmarked as they are project specific.
- Another key issue that has yet to be considered is whether the supply chain will be willing to take on this additional risk. Current market conditions with high sector demand put supply chain contractors in a strong position to negotiate these terms, and high-profile world events materially affecting lead times and pricing mean they are seeking to minimise risk exposure in contracts. If it is not possible to pass through the additional costs of the PDC to the supply chain and Ofgem proceeds with the policy, this will result in additional significant risk being placed onto the TOs, which has not been accounted for in the current RIIO settlement and WACC.
- It should also be recognised by Ofgem that it is standard practice that liability for certain delays cannot be passed on, irrespective of the delay, if the delay is due to events outwith TOs’ and contractors’ control such as force majeure or extreme weather. Industry-wide standard contracts typically carve out liability for delay due to unforeseeable events from contractors’ responsibility. Ofgem would therefore need to take cognisance of this.

Taking account of these issues and all others which have been raised with Ofgem on this matter to date, we remain concerned that the PDC will mean potentially significant additional costs for consumers, who will ultimately pay for this insurance policy against late delivery. Ofgem must undertake an Impact Assessment to determine (amongst other things) if these costs justify the assumed associated benefit.

**Question 9 – Do you agree that reprofiling (rather than a milestone-based approach) is an appropriate mechanism for the Eastern HVDC project?**

We note that if a project is delivered late, Ofgem may re-profile allowances to reflect actual expenditure to avoid SSENT benefitting from the time value of money. We do not believe that network companies should benefit financially from any delay in delivery of any LOTI project. Accordingly, we agree that re-profiling allowances to reflect actual expenditure in the event of delay would be appropriate in this instance.