nationalgrid

35 Homer Road
Solihull
West Midlands
B91 3LT

John Greasley
NGIHL Customer and Regulatory Manager
john.greasley@nationalgrid.com
Mobile: +44 (0) 07836 357137
www.nationalgrid.com

For the attention of: Stuart Borland

Competitive Networks
Ofgem
9 Millbank
London, SW1P 3GE

15th November 2016

Dear Stuart,

NGIHL response to Final Project Assessment of NSL interconnector to Norway consultation (published 18 Oct'16)

Following constructive dialogue with Ofgem and its consultants, National Grid Interconnector Holdings Ltd (NGIHL) on behalf of North Sea Link Limited (NSL (50/50 partnership with Statnett)) welcomes the opportunity to respond to Ofgem's consultation on the NSL Final Project Assessment.

NGIHL is the legal entity within the National Grid group responsible for interconnector development and the management of existing operational interconnector businesses. NGIHL, in conjunction with a number of partners, is developing several interconnector projects that will be subject to cap and floor regulatory arrangements. This response is being made on behalf of these new interconnectors, namely National Grid IFA2 Limited, National Grid NSN Limited and National Grid Viking Limited. Despite the uncertainty caused by the Brexit vote, NGIHL remains committed to its ongoing investments in interconnectors.

In summary, we are pleased with the assessment and conclusions of Ofgem and its consultants, regarding the level of costs to be incurred for constructing the NGIHL share of the interconnector between Great Britain and Norway. National Grid and Statnett have undertaken a significant exercise to ensure the capital costs of the NSL interconnector are the most economic and efficient. Considerable analysis was undertaken to develop, amongst other things, the overall contracting strategy and management of foreign exchange risk. We are pleased that Ofgem has recognised the results of this exercise in its overall findings of this consultation, and it is important that our proposals are seen as an overall package, which deliver maximum value.

We do have concerns with Ofgem's proposed approach to the assessment of 'Risk' at the Post Construction Review (PCR) stage, and changes to allowed returns which we consider to be a deviation from policy. We are suggesting alternative proposals for Availability Incentives and regime start dates which will bring additional benefits to consumers. We explain these concerns and alternatives in more detail in our responses to the individual consultation questions, which are provided in the attachment to this letter.

We are happy to discuss our views contained within this response, should it be helpful and look forward to continuing the collaborative working relationship with Ofgem to develop the full suite of Cap & Floor documentation. For further information please contact Sultana Begum (sultana.begum@nationalgrid.com).

35 Homer Road
Solihull
West Midlands
B91 3LT

This response is not considered confidential; we are therefore happy for it to be placed on Ofgem's website and shared for the purposes of the consultation.

Yours Sincerely

John Greasley

NGIHL Customer and Regulatory Manager

35 Homer Road
Solihull
West Midlands
B91 3LT

Question 1: Do you agree with our benchmarking of the NSL project?

Overall we are happy with the benchmarking activity that has been undertaken and the confirmation by Atkins that our costs have been constructed in an efficient manner through a competitive tendering process. Direct comparisons should be treated with caution given that these projects are not like-for-like to NSL and the benchmarking activity was not based on final outturn costs (i.e. may exclude re-measurable items and risk).

We also note your point that the convertor costs are high in point 2.12, this is not supported by Atkins in their report.

Question 2: Do you agree with our views on NSL's level of project management?

The project team undertook extensive work to validate the project management costs expected to be incurred during the construction phase (through internal and external benchmarking activities). We are therefore pleased Ofgem's views are aligned.

We would like to highlight project management costs were converted to Sterling using the project exchange rates as highlighted in our FPA submission. Project management activities will largely be carried out by the two partners developing the link. The costs will primarily be borne in NOK and GBP and are subject to inflation. These costs are not firm and costs incurred in NOK are subject to currency fluctuations. Should these costs be fixed now then we recommend they should be 'fixed' in the native currencies of the costs and in Real 2015/16 terms. This is then consistent with Ofgem's approach to Risk, as it's outside of our control.

Question 3: Do you agree with our views on and proposed approach to project risks?

We understand the principles of the two criteria (foreseeability and externally derived) approach to risk assessment; however, we do not agree that halving the risk allowance is fully justified.

We do seek clarity at this stage on Ofgem's definition of "unrelated external parties". We understand this definition to mean all entities including contractors. We would like confirmation that our understanding is consistent with Ofgem's.

Though we understand Ofgem's proposal on assessing risks, we are not fully confident Ofgem has taken note of the following challenges in managing a project of this size.

Provisional sums:
Policy intent is to provide certainty i.e. fix cost items that are known and reassess those that will potentially vary at the PCR stage. One of these items is provisional sums; we are pleased Ofgem recognise these costs are uncertain as volumes are unknown due to contractors unwilling to take a full allocation of total risk on a link of this length and complexity. We undertook a competitive tender activity and negotiated fixed unit costs but relevant quantities for some cost elements will not be known until the cable installation activity is carried out. We are concerned by the statement in para. 2.18, that most variations in provisional sums will not be eligible for review at the PCR stage. This statement is not consistent with sections 3.12 & 3.18 that recognise unforeseen ground conditions and extreme weather (which are the two main causes of variations in these costs) as acceptable reasons for review at the PCR stage. We therefore recommend any additional costs or reductions over the fixed provisional sums relating to quantity are allowed providing surveys have been done in line with standard industry practice.

We agree that the actual cost impact of risks associated with provisional sums can only be objectively and transparently reviewed at the PCR stage allowing both positive and negative cost exposure for consumers and developers.

Risk assessment (uncertain costs) and consumer benefits:
We agree with the approach to review uncertain costs at PCR. However, we are concerned with Ofgem's comment on '*We think the majority of these (risks) should not be included in the Cap & Floor*'. It was our understanding that as eligibility principles have been established, actual expenditure over and above

nationalgrid

35 Homer Road
Solihull
West Midlands
B91 3LT

baseline/fixed amounts would be tested and assessed if they meet the criteria. It is premature to completely exclude an unspecified list of risks. Therefore, no decisions should be made on the inclusion and exclusion of certain risks into the C&F levels at this stage of the process until they are known. Ofgem should refrain from provisionally disallowing unknown risks at this point given there may be potential upside for consumers from currently unforeseen opportunities to realise new net benefits from risks materialising which we believe the project team is best placed to manage.

We would also like to clarify a mis-understanding around Options. Ofgem state Options, '..... are costs that are not part of the base contract'. Project Options have been competitively procured, priced and included in the main contracts. Depending upon the needs of the project, these Options may or may not be called upon.

Interfaces:
Ofgem indicates disallowance of risks driven by interfaces between contractors. However, our assessment was that the most efficient strategy on contracting was not to source a full turnkey contract. A full turnkey solution would likely to have resulted in higher overall costs to consumers. Therefore, our more efficient solution should have costs of interface as allowable risks and should be reviewed at PCR when it is certain (as per point above).

Foreign Exchange and Inflationary Risks
In our FPA submission (Assumption Book, section 2.3.3 'Exchange rate and currency choice'), we informed Ofgem of the following:

'For the purposes of the assumptions, where currency exposure has not been hedged, currency rates derived from the signed Ownership Agreement have been applied to support conversions to GBP.
We expect that any subsequently placed hedges and/or any actual unhedged currency rates incurred will be reconciled at the post construction review (PCR) stage.'

The National Grid strategy for costs in foreign currencies is to minimise risk and maximise cost certainty through hedging exposure. We applied this approach to the baseline costs and will continue to apply for the variable amounts as they become certain. We understand from bilateral conversations that Ofgem has accepted our approach and that additional hedged and unhedged currency exposures will be reviewed at the PCR stage.

As mentioned in our response to question 2 (project management), the project operates in an environment where construction costs will be incurred in multiple currencies. Certain costs will be fixed in Nominal terms whilst others will be subject to an inflationary uplift. This creates risk when setting the cap and floor levels in Real 2015/16 Sterling terms on an ex-ante basis. Through our hedging approach we seek to minimise risk for ourselves and consumers.
For example, the fall in Sterling since our EPC contracts were hedged has resulted in benefits to consumers through the certainty of the Sterling values for these contracts. However, as we still have significant currency exposure for costs that are not firm and/or certain these will need to be reviewed at the PCR stage. If any cost allowances are to be fixed now then we recommend that these cost allowances be fixed in either Real or Nominal terms depending on NSL's underlying exposure to inflation and in the native currency which those costs were incurred in. This will reduce risk regarding the level of payments to or from consumers

If these factors are ignored this could undermine the incentives given to developers and therefore reduce the benefits to consumers.

Question 4: Do you agree with our proposed approach to the post construction review?

We agree with Ofgem's proposal to review all uncertain costs at the PCR stage and therefore the points we have made in question 3 are all applicable for this question too.

Non-contract disallowance of £0.63m:
Commissioning power costs are uncertain and should be reviewed as part of the PCR. This is in line with the decision given on Nemo Link's commissioning power. Therefore, disallowing a cost at this stage, which is needed for the purposes of testing prior to operations, seems inconsistent with decisions already made and we request a

nationalgrid

35 Homer Road
Solihull
West Midlands
B91 3LT

review at PCR, when the costs are more certain.

Interest During Construction (IDC):
Interest during construction is expressed as a percentage annual allowance receivable during the development and construction phase. Within the policy documents published in May 2014 (Window 1 projects) and December 2014 (Nemo Link) the following statements were made relating to IDC:

> **May 2014** ***(3.41)****: We continue to see the need for IDC to ensure that a difference in timing between costs being incurred and the regime taking effect is reflected in the cap and floor.*
>
> ***May 2014 (Appendix 2):*** *Interest During Construction (IDC) is treated as a cost incurred in the construction phase and applied to the pre-operational cost.*
>
> ***December 2014(4.12):*** *The pre-operational RAV, which is the base on which IDC is earned, will be calculated using the approved RAV additions following the capex review. This will be re-assessed following the final capex adjustments.*

To enact the policy as stated, IDC should therefore be based upon the final phased costs and allowances of development and construction. Fixing this allowance (as referenced in Section 3.2) increases the level of regulatory uncertainty in setting the C&F levels i.e. cap and floor returns on allowed capex would not equal the cap and floor rate of return parameters.

Question 5: Do you have any other views on the post construction review for NSL?

NGIHL appreciates and welcomes the additional information provided on how the PCR will be undertaken.

We request however, further guidance on the eligibility criteria for Risk, Options and Variation Orders. At this stage the PCR process has not been fully defined and will be used for the first time on Nemo Link and with a strong possibility the assessment process can take longer than anticipated. As such, do not agree with Ofgem's proposal to reserve the right to disallow any within-period assessment until the PCR is complete. We would welcome working with Ofgem to clearly define and jointly align approaches to bring greater efficiency to the PCR process and thereby benefits consumers.

There is a clear interaction between the annual RIGs submissions and the PCR that will be done at the end of the construction stage. We believe it is important, following each RIGs submission, that Ofgem should review and challenge it so that issues can be dealt with as close as possible to the time at which they arose. This will facilitate a more effective and efficient PCR.

Question 6: Do you agree with our proposal to set an availability target of 93.0% for the NSL interconnector based on the updated report by GHD consultants?

Availability Incentive (AI): We acknowledge that Ofgem policy has been stated to apply a +/-2% cap adjustment. However, we think the broader policy objective is to incentivise developers to maximise availability to ensure that consumer benefit is maximised, principally in the case of NSL through lower wholesale prices. Whilst a +/-2% incentive is appropriate for short links that have a higher level of reliability. For far longer interconnectors the cap adjustment should be proportionally bigger and aligned with the Availability Target.

During the design of the regime, Ofgem was concerned that when revenue is above the cap the developer faces limited incentive to keep the link available as any additional revenue earned would flow back to consumers. With this in mind, there is little incentive to maximise availability over c.95% of the time given the proposed target of 93% with an incentivised range of +/- 2%.

The Dec'14 Ofgem commissioned Poyry (Near Term Interconnector Projects Cost Benefit Analysis) report shows in Net Present Value (NPV) terms, the benefits to GB consumers from the NSL link as c. €3.9bn in the Base Case

35 Homer Road
Solihull
West Midlands
B91 3LT

analysis. The more the link is available the more this benefit will flow to consumers.

NGIHL recommends and requests a regime variation so consumers can benefit from the link being available over 95% throughout the life of the link. Increasing the cap adjustment and availability range to +/-7% would realign the interest of consumers and developers as the incentive was originally designed to do.

Availability target change:
NSL's Availability Target has been recommended at 92.86% following a review by Ofgem's consultants GHD. We agree with this assessment, which considers the complexities associated with managing and operating a link of this length and therefore a link specific target is appropriate.

We do not understand Ofgem's rationale for proposing an Availability Target of 93% when its technical experts recommended a target of 92.86%.

Question 7: Do you have any views on the updated regime design, financial parameters or cap and floor financial model (CFFM)?

Though the proposals largely align to our understanding of the C&F regime, we have a few comments which we would request Ofgem consider prior to making the final decision on NSL's provisional C&F levels.

Returns at the Cap:
We do not agree with Ofgem's suggested allowed return at the cap. As per policy, parameters are either fixed by policy or fixed at the time of FID (which Ofgem has also confirmed). We were informed our cap return was 8.1% post-FID and therefore should remain at this level.

Regime duration and start date:
NSL's current scheduled operational start date is a year later than the regime start date. The 1st January 2022 operational date is due to supply chain constraints and is outside the control of the project. We have been transparent with Ofgem on this point, who in turn has recognised the challenge for NSL. We are concerned the cap and floor start dates are not symmetrical and this means the regime is only for 24 years instead of 25 years.

We do acknowledge that the policy states the regime starts in January 2021; however, all NSL specific consumer benefit analyses was based upon a 25 year regime (with €3.9bn consumer benefit). Removal of a year from the regime date ultimately means consumers do not receive the maximum benefits from the link they are sharing the risk on, especially from a link that is connected to a country with lower prices. We would recommend Ofgem re-visit its decision to start the cap from the 1st January 2021 and base it on the operational start date. This will reduce the level of regulatory uncertainty that currently exists regarding the calculation and application period of the cap and floor values and payments to or from consumers.

Minimum floor availability 80%:
Interconnector minimum floor availability was built up from OFTO's minimum floor availability. They are very different assets and we do not think it is appropriate to apply the same methodology to interconnectors. We would reasonably expect the minimum floor availability to flex for each interconnector depending upon its characteristics. Given the Target Availability reduction for NSL relative to Nemo Link (by c.4%) we would recommend a minimum floor availability of 76% for NSL (taking note of the complex characteristics of the link as recognised in the GHD report).

Within Period Adjustments:
The ability to make Within Period Adjustment (WPA) is currently only permitted for years 1 to 4 of any 5 year assessment. We believe that the ability to make a WPA should be extended to allow for year 5 also. This additional flexibility will provide the following benefits for consumers and developers alike:

- If revenues are below Floor levels (on a cumulative NPV basis) a WPA for year 5 will reduce the interest cost ultimately borne by consumers and enable developers to reduce the chances of financial distress caused by further delay in receiving below Floor payments.

nationalgrid

35 Homer Road
Solihull
West Midlands
B91 3LT

- If revenues are above Cap levels (on a cumulative NPV basis) a WPA for year 5 would enable consumers to receive benefit from these sums a year earlier and for developers not to incur additional interest costs.

CFFM - Length of regime and associated financial years:
The CFFM currently uses a regime start date of 1st January 2022. This is not consistent with Appendix 2, Table 1 - Key regime features. We recommend that Table 1 is amended to accommodate the planned start date of 1st January 2022 or later depending on actual operational start date. This will reduce the level of regulatory uncertainty that currently exists regarding the calculation of the cap and floor values.

If a start date of 1st January 2021 is adopted it is not clear how the current CFFM would calculate:

- Cap and floor values; and
- Payments to consumers.

Whilst ensuring NPV principles and full recovery of cost allowances are maintained. In particular the calculation of the level of Interest During Construction in the opening RAV needs to adhere to these principles.

The CFFM is currently modelled with Financial Years ending 31st December i.e. calendar years. The NSL financial years will run from 1st April to 31st March and so it will be sensible to align reporting years to the same basis. Moving to a financial year basis would align time periods to:

- Cost inputs which have been prepared and shared with Ofgem during the FPA process on a financial year basis
- RPI and Exchange Rate data used in the RPI sheet

CFFM - Transaction costs:
We have reviewed both the NSL CFFM and Window 2 Model for Interconnector projects seeking a cap and floor regime. In both versions of the CFFM the calculation of transaction costs has been conducted via a one-step calculation at the end of the construction period. The debt and equity transaction costs are modelled to be incurred during the first year of operations.

In reality the raising of debt and equity for a standalone entity would be carried out on a piecemeal basis during the development and construction period. This transparent approach as part of the pre-operational RAV calculation ensures developers receive the full value of transaction costs as they are incurred. Currently the costs are deemed to have been incurred half way through the first year of operations, which results in a proportion of the transaction costs incurred not being recovered. Whilst the Window 2 CFFM has been externally audited it is not clear against what criteria this audit has taken place and it is apparent from our analysis the approach adopted is not consistent with NPV principles and thus not enacting stated policy relating to full recovery of transaction costs. We recommend the CFFM is amended so the modelling and recovery of transaction cost allowances is done in a clear way ensuring NPV principles of full cost recovery is adopted.

Interconnector RIGs:
We appreciate Ofgem's proposal to publish RIGs information around the time of NSL's licence consultation. We would welcome RIGs information be shared earlier than the licence consultation so we can start preparing for a timely submission.

Licence consultation:
As this is an evolving regime and we are continually learning new things about the regime, we recommend during licence drafting, it is important each project is treated as a standalone interconnector and its arrangements should not be prejudiced by licence conditions negotiated for previous interconnectors. In terms of its corporate structure and operating environments the arrangements for NSL are unique and therefore the licence should be drafted and consulted on that basis.