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Our Reference NG/LAD

Dear Emmanouela, Phil,

**Response to “Cap and Floor Regime for Regulated Electricity Interconnector
Investment for application to Project NEMO (Consultation 28/13)”**

Please find attached a joint response from National Grid and Elia, the Project Nemo developers, to the above consultation.

Yours sincerely

A handwritten signature in black ink, appearing to read 'LAD', with a stylized flourish at the end.

Lewis Dale

Cc: Terry McCormick
Paul Whittaker

Response to: Cap and Floor Regime for Regulated Electricity Interconnector Investment for application to Project NEMO (28/13)

This response is from the Project NEMO developers Elia and National Grid Business Development:

- Elia is Belgium's Transmission System Operator. The Elia Group owns all of Belgium's 150 to 380 kV grid infrastructure and 94% of the 30 to 70 kV network. Elia's transmission grid infrastructure forms a key connection between France and the markets of Northern Europe. It includes the Belgian end of interconnections between countries and extends to future transmission infrastructure in marine areas under Belgian jurisdiction. The Belgian activity is separately regulated from Elia's interests in the German transmission system.
- National Grid Business Development is responsible for existing electricity interconnectors owned by National Grid plc and the development of new interconnection projects. As well as Project Nemo, National Grid's interconnector interests include the British part of the England France Interconnector (IFA) and a 50% share of the BritNed link jointly owned with Tennet in the Netherlands. National Grid's interconnector activities are ring-fenced from National Grid Electricity Transmission (NGET) and Project Nemo has acquired connection agreements with NGET through the same connection process as other users.

The developers of Project NEMO welcome the opportunity to respond to this consultation on the proposals for regulating this interconnector. This framework is important because it clarifies how this interconnector will be regulated in the absence of an exemption to the EU cross-border regulation (which cannot be obtained in this case due to the structure and role of Elia). We appreciate the time that staff at Ofgem and CREG have invested in understanding the need for a new interconnector regulatory framework and developing it such that it can co-exist alongside existing regulated and exempt links together with any future projects which may also use this framework.

Project Nemo

Project Nemo has been designed (comprising the selection of technologies, cable route and connection arrangements) such that the overall additional welfare benefits brought by this link justify and, we expect, significantly exceed its overall incremental costs. Given our confidence in our design and ability to successfully deliver a valuable service, we are willing to take exposure to the costs we can control and also to the revenues that will result from providing services to link customers under current market arrangements. In this way, consumers in Belgium and GB would be protected from the costs and risks associated with this project but still benefit substantially from the net improvement in social welfare, enhancements to energy market competition and strengthened security and quality of supply.

Although the economic prospects for additional interconnector capacity between Great Britain and the main synchronous European network are robust, various policy and market development issues (which might further consumer's interests in respect of establishing the single internal market for electricity) mean that there are significant uncertainties for developers as to whether revenues from link capacity sales will consistently accrue to the project. (Currently, arrangements in GB mean that only revenues from capacity sales are available to provide returns to interconnectors in the GB market). On this basis, we approached the regulatory authorities in UK and Belgium to identify how greater regulatory certainty about policy related risks could be obtained as participation by the Belgium TSO would mean that we would not qualify for an exemption to the requirements of the cross-border regulation. We are pleased that a regulatory framework which enables this project to progress has been formulated.

Approach to cap and floor parameter setting

The cap and floor approach represents a sharing of the upside and downside outcomes of capacity sales between developers and transmission charge-payers (as representatives of consumers in the linked countries). If the regime is not to become an undue subsidy or tax which biases interconnector development above or below the discoverable economic outcome then the cap and floor revenue levels should be set symmetrically (in value terms) around the required project returns (which reflect efficient costs and a suitable risk adjusted project cost of capital). The approach set out in the consultation document establishes this symmetry by specifying that the project “operational cost of capital” would be mid-way between the set cap and floor returns. However, the focus on separate approaches to determining the cap and floor return levels from other benchmarks risks leaving the resulting overall achievable project return too low.

Given the shape of GB to Europe electricity spread durations, we understand why CEPA chose peaking generation as a relevant comparator for required interconnector returns. However, they do not quantitatively describe the relationship between the average returns observable for such generators and the returns that could then result if such a value was used as a cap. As average return will always be below the cap (by an amount that depends on the position of the cap with respect to the average revenue and the volatility of those revenues), the absence of a suitable adjustment to compensate for this effect will risk an undue lowering of average returns. This will not be compensated by floor revenues which, for the range proposed by regulators, are likely only to trigger in very prolonged low market revenue conditions.

Ofgem’s proposed use of the average observable beta of Drax to set the cap would suffer from the same issue. Moreover, the choice of a period in which Drax has been the subject of transformational investments makes it impossible for us to assess whether this provides a sensible benchmark for an interconnector cap.

Concerning other parameters, while we recognise and agree with the performance data collated from international experience by SKM concerning link availability, we cannot reconcile that data with the proposed availability target (we suspect there is an issue with the planned maintenance assumptions). The resulting unfeasibly high availability target would further lower achievable project returns.

The comparison of returns on regulated equity in the consultation confirms the potential impacts of the above issues. Using realistically achievable gearings for a project with significant construction and market exposure risks, the analysis in the consultation shows average equity returns are very likely to be lower than those for RIIO-T1 whereas the nature of the risks would suggest interconnector returns would need to be higher.

The annex to this response provides our responses to the specific questions asked. The two issues on which we would request further consideration by Ofgem and CREG prior to final decisions on parameters are:

- 1) The proposed availability target (affecting cap revenues) appears to diverge from that which would be derived from observed data relating to existing hvdc interconnector operating experience (specifically that relating to planned maintenance requirements).
- 2) The proposed cap returns (given the proposed floor return) may not reflect all the risk aspects of these projects and may give average prospects that are inferior to other investment alternatives.

The consultation is silent on the particular benchmarks and parameters that would be chosen in Belgium (although it is proposed that a 50:50 weighting is given to them). Given how observable

Belgian equity risk premiums have been unusually low in the recent past, there is specific need to consider appropriate forward looking parameters.

Whilst the consultation sets out a proposed regulatory framework for Nemo that is logical and has many merits, certain parameters should be revisited to ensure that the proposals will form an overall workable package.

CHAPTER: Two

Question 1: *Do you agree with our proposed regime design outlined in this chapter and Appendices 1 and 2? Is the design consistent with the high level principles established for the cap and floor regime in December 2011?*

We agree with the regime design and we think it is consistent with the principles established in the earlier consultation. In particular, it addresses the regulatory barrier to development which existed without this framework.

Question 2: *Do you consider that provision for a financeability test within period outlined in this chapter and in Appendix 2 is needed with five year assessment periods? If so, how should the trigger point for financeability constraints be set?*

The developers appreciate the thought that has been given to ensuring the framework does not prescribe the form of finance for the project and thereby allows developers to adopt efficient financing structures given the project risks and the degree of underwriting provided by customers via the floor.

We agree that developers should not be encouraged to adopt highly aggressive financing structures and then rely on financeability safeguards because this could impose higher underwriting requirements on customers than were agreed when the project was granted such underwriting. On this basis, we agree that the trigger for any additional financeability revenues should be below the cumulative level of the floor and restricted to conditions that are beyond those that could have reasonably been foreseen by the developer.

Question 3: *Do you consider the proposed arrangements (for market related costs and the availability incentive) incentivise high link availability?*

As we will be exposed to the actual proceeds of capacity sales net any firmness and related market costs under normal operating conditions when the net revenues lie between the cap and floor levels as aggregated over a 5 year period, and the level of capped revenues will depend on good availability and the underwriting by floor revenues will depend on maintaining sufficient serviceability, we consider consumers are suitably protected by the proposed arrangements. On this basis, we do not see a strong need for a further availability incentive but, if one is implemented, it should be set at a suitable level.

With specific reference to the SKM determined availability target determined for the cap revenues, we agree with the majority of the model inputs used and can see how these have been derived from performance data from international experience. However, our assessment of the need for planned maintenance outages (and our interpretation of the international experience data) differs significantly from that used by SKM. We suspect that this difference causes SKM to suggest a higher availability target than we think is achievable. We would welcome an opportunity to understand the thinking and data used for the setting of the proposed availability target.

It is also for consideration whether unavailability due to external events beyond the control of the link operator should be included. For example, decisions by other system operators to limit usable capacity for wider system reasons or external events that cannot be addressed through prudent design and operation. In particular, the reliability following initial commissioning (the bed-in phase of the reliability bath tub) cannot be avoided and targets for the initial operating period should recognise this aspect.

Question 4: *Do you believe that there are opportunities for gaming by developers with our proposed regime design?*

At the heart of the proposed framework is a sharing of risks between developers and wider customers and hence end-consumers. This sharing will be most in the interest of consumers if risks are allocated to the parties most able to manage them, i.e. operating and commercial risks to the developer and their commercial customers and the risks resulting from policy changes falling to consumers and stakeholders on whose behalf policy decisions are being made. On this basis, the floor should be sufficiently high to protect developers from policy changes but not so high that the developer is no longer exposed to the consequences of their design and operating decisions.

At the present time there are many relevant policy change risks due to the implementation of the 3rd package, new market coupling arrangements, changes that are consequences of the UK's electricity market reforms (EMR) and potential outcomes of Ofgem's Integrated Transmission Planning and Regulation (ITPR) project. We recognise that there is a danger that in seeking a floor sufficiently high to safeguard against these risks might also transfer to consumers other risks which are best managed by developers. The package suggested by Ofgem and CREG addresses this risk by setting floor revenues on the basis of verifiable costs and observable minimal returns. The proposal to base floor returns on observable yields for corporate bonds sets floor revenues very conservatively making it very unlikely that developers would progress this project unless there is a good prospect that good sales revenues will occur.

Question 5: *Are there aspects of the proposed regime design for NEMO that should be reviewed for future projects, eg changes in capex treatment as more of these projects are built?*

This question is against the background of the decision on Project Nemo to use voltage source converter technology. This will be one of the first applications of this technology at this unit size and has been chosen to address certain network integration issues. As this technology becomes more widespread, there will be opportunities for regulators to use benchmark data from other schemes in informing their cost assessments.

CHAPTER: Three

Question 1: *Do you agree with our proposed approach on the key methodology considerations? Is our approach consistent with the high level principles established for the cap and floor regime in December 2011?*

We understand and accept the approaches to key methodology considerations proposed by Ofgem and CREG. Whereas we have approached the financial appraisal of this project by considering the project cost of capital that is consistent with similar projects as adjusted to reflect the expected degree of customer underwriting, we recognise that the mechanistic approach taken by Ofgem and CREG has advantages in terms of transparency and simplicity.

In terms of achievable project returns, we note that with an appropriate value chosen for the cap return then the approach taken by regulators (which uses an independently chosen floor return and an operational cost of capital that is determined by a 50:50 weighting of the cap and floor returns) will give equivalent outcomes to an approach which seeks to set symmetrical caps and floors around a suitable risk adjusted project cost of capital. As noted below, however, we do not consider that the proposed value used for the cap in the consultation document is a suitable value.

Question 2: *Do you agree with our approach of using the cost of debt and equity to set returns at the floor and cap respectively, while acknowledging that the appropriate level of the cap and floor returns are interrelated?*

Given the interrelated nature of the cap and floor on project returns, the impacts on expected project returns should be assessed. There is a risk that the approach of separately setting the floor and cap returns result in an unduly low prospective average project return.

We note the reasons given by CEPA for setting the cap return similar to a peaking generator and by regulators for a much lower value based on achieved returns of a particular (non-peaking) generator. We suggest there are a couple of additional considerations:

- 1) The impact of a cap will mean that developer retained revenues can only be less than or equal to those seen by a generator (whose average returns will include contributions from returns above as well as below their average value). The position of the cap with respect to average revenues and the volatility of the revenues determine the size of this effect.
- 2) The actual returns of a business will depart from the prospective returns in an investment appraisal for a number of reasons. We suspect there are a number of factors which are relevant to Drax's observable beta which are not relevant to interconnector investment appraisals.

We suggest these two factors are significant counters to the derisking effects of the floor identified in paragraph 3.34. We also note that the three items listed in paragraph 3.34 actually reduce to just the presence of a floor revenue stream, which at the proposed level, is unlikely to give a present value symmetrical to that removed by the proposed cap.

The consultation is silent on the particular benchmarks and parameters that would be chosen in Belgium (although it is proposed that a 50:50 weighting is given to them). Given how observable Belgian equity risk premiums have been unusually low in the recent past, there is specific need to consider appropriate forward looking parameters.

Question 3: *Do you agree with our proposed approach to setting interest during construction (IDC) outlined in this chapter and Appendix 4? Are there any other relevant risks/factors that we should be aware of when developing an IDC methodology?*

Although the regulatory framework will make adjustments to the cap and floor on the basis of efficient outturn capex, the overall prospects for the project will nevertheless depend very strongly on a successful and economic construction phase. For this reason we would not expect significant differences between the operational cost of capital and the cost of financing during construction (and, on this basis, our financial appraisals do not use different costs of capital in these phases). We understand this is consistent with the approach taken to the treatment of financing costs during the construction phase in onshore transmission price controls. We agree with the aspects set out in Appendix 4, particularly the reasons set out in paragraph 4.17 which identify why specific aspects of the offshore transmission regime requires particular regulatory scrutiny and treatment of interest during construction submissions. As identified in Appendix 4, we agree that interconnectors subject to the proposed framework would not share this characteristic.

CHAPTER: Four

Question 1: *Is our analysis on Return on Regulated Equity (RoRE) considerations consistent with the high level regime principles?*

The calculation of return on regulated equity is a helpful way of summarising the return prospects for developers given market and other risks. For the proposed parameters and gearings consistent with the project risks, the analysis shows prospective average returns less than those for RIIO-T1 – a counterintuitive outcome given the predominance of construction risks and the significant exposure to market prices.

Question 2: *Do you think that our proposed RoRE range is sufficiently wide enough to retain market incentives within a regulatory framework?*

The analysis in the consultation document identifies how the range of potential returns on regulated equity is wider than that achievable under RIIO-T1 suggesting there are higher returns available for developers that target and deliver efficient interconnectors. However, the return on regulated equity that is consistent with the proposed operational cost of capital (calculated from 50:50 weighting of cap and floor returns) is below the RIIO-T1 average even with gearing as high as 50%. This suggests that the proposed cap return may be somewhat low because returns on alternative investments which are likely to have lower risk would be more attractive.

CHAPTER: Five

Question 1: *Do you agree with the proposed high level principles for considering the connection process in the regulatory decisions on electricity interconnector investment? Are there any other areas that need to be considered in the principles?*

We do not have any comments on the proposed high level principles for the interactions between interconnection connection applications to the GB network and the regulatory process for granting exemptions or cap and floor regulated frameworks. We agree that the agreement of a connection arrangement is a sensible prerequisite for detailed consideration of these projects by regulators. While we note that this agreement will not lead to the establishment of a locational signal from TNUoS in GB, the connection agreement does create a financial commitment that will over time reflect to some extent location specific costs. This will offer some direct financial incentive on developers to choose acceptable connection locations. The connection process will also generate information on wider costs which will be relevant for considering the overall welfare benefits of each project.

Question 2: *Do you have any views on the regulatory decision making process for project NEMO and on any other areas of consideration for the cap and floor regime beyond NEMO?*

The NEMO project developers welcome the proposed timing of the final decisions by Ofgem on parameters and request early notification if factors arise which mean that this might not be achievable.

Besides, as one of the Nemo project promoters, Elia underlines the need for similar decisions and clarifications by the Belgian regulator. The current regulatory regime in Belgium is indeed not fully capable of accommodating the proposed cap and floor regime for the Nemo project. Though Elia is confident that required changes specific for this project may be incorporated in a timely manner, it is needed to get a complete view on the revised Belgian framework and the arrangements suggested by the Belgian regulator which will impact the return allowed to Elia and the setting of transmission tariffs in Belgium. In any case, full clarity on this is needed before the investment decision, which is required in early spring 2014, is taken.

NG/LAD + Elia/PF 29 April 2013.