nationalgrid

Finance Executive Summary

This is an executive summary setting out our key messages on the financial proposals set out in SSMC. We set out the detailed responses to Ofgem's specific questions raised in the finance annex to SSMC in a separate appendix to the overall National Grid response.

The key highlights of our finance response:

- Macroeconomic conditions have changed significantly since the RIIO-ET2 Final Determination.
- There is a marked increase in the scale of investment and levels of risk now expected for electricity transmission owners in RIIO-ET3.
- It is critical that the financial package enables the NGET notional company to attract the significant volumes of new capital that will be required in order to deliver the consumer and societal benefits associated with the energy transition.
- We welcome the inclusion of an investability assessment, and propose in our response a key 'test' of investability that the RIIO-ET3 financial package must pass.
- Cross-checks based on market evidence (including the observed yields on hybrid bonds) demonstrate that a simple roll forward of the RIIO-ET2 cost of equity (CoE) methodologies will not result in an adequate range for the cost of equity or an investable proposition.
- We set out how Ofgem can make methodological choices to support investability using the UK Regulators Network (UKRN) guidance.
- At this early stage of the RIIO-ET3 process, the overall suite of available evidence points towards a range for the allowed cost of equity in the region of 5.8%-6.9% (60% notional gearing).[1] We are keen to engage with Ofgem to update this estimate as the evidence develops over the period to final determinations.
- For cost of debt, we support the use of a RAV weighted indexation approach and can support inflation options 1 and 2 that fully address the leverage effect.
- To alleviate financeability concerns inherent in periods of heightened capital outlay, cash measures will need to be reviewed in addition to ensuring returns are attractive.

As part of its legally binding commitment to achieve net zero by 2050, the UK government has committed to a fully decarbonised electricity system by 2035, subject to security of supply considerations. To deliver this, and unlock the associated value for consumers and wider society, electricity transmission owners need to invest unprecedented levels of capital during the RIIO-ET3 price control period at a pace fundamentally different to what has been seen before. It is essential that we can attract the necessary investment, and an investable sector requires a financial package that delivers appropriate returns and cashflows to investors.

We welcome the open and constructive approach taken in the SSMC Finance Annex, along with the positive engagement we have had with Ofgem to date. We were pleased to see the document reference the overall environment and context for attracting investment, including as Ofgem notes, *"at a time where there is greater competition for investment and capital in the UK water and global regulated infrastructure sectors."*

Investor decision making will be influenced by a macro environment that has changed dramatically as we have transitioned from a 'lower for longer' to a 'higher for longer' interest rate environment, with the UK Bank of England rate at the highest level since February 2008. The financial framework must recognise this transition, including that the returns on debt available to investors are substantially higher than they have been in well over a decade. Risk is also increasing for networks, primarily due to the scale of growth, combined with factors including new licence obligations and supply chain constraints.

Ofgem recognises in the SSMC that there are factors that support reviewing policies and methodologies from RIIO-ET2 (i.e., step change in ET investment and the addition of a net zero statutory duty for Ofgem[2]), and our evidence shows that a roll forward of the RIIO-ET2 approach to returns will not be appropriate in this changed environment. We understand and recognise that Ofgem has committed to following the UK Regulators Network (UKRN) guidance, but we note that this must be considered in light of Ofgem's statutory

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[1] Frontier Economics, Cost of equity for NGET at RIIO-3, March 2024, Table 2. We note that the risk free rate is set using a data cut-off date of 20 December 2023 and is as per the Oxera RIIO-3 Cost of Equity Report (dated 23 February 2024) prepared for the ENA.
[2] RIIO-3 Sector Specific Methodology Consultation (SSMC) Finance Annex, Ofgem, December 2023, paragraph 1.4 and 1.5. Hereafter this document is referred to as 'RIIO-3 SSMC (Finance Annex)' only. The document may be accessed here.

duties, including the net zero and growth duties. Our response sets out how Ofgem can make methodological choices which are in accordance with the UKRN guidance and the regulatory discretion it allows.

We are supportive of the plan to develop the notion of investability alongside the more established financeability assessment. This key 'test' should assess whether the allowed return on equity and cashflows are sufficient to retain and attract the "fresh" equity capital in the notional company that Ofgem expects to be required.[3] Investability is one of the most important topics for RIIO-ET3 given the imperative for ET companies to get on and deliver the energy transition. We set out what a robust assessment should include in our response to FQ14 and later in this summary. It is critical that the outputs inform decisions that Ofgem make when concluding on cost of equity parameters. This includes whether specific parameters should be reviewed again or if "aiming up" is strongly supported.

The overall suite of market evidence available at this early stage of the process, from a range of sources including the observed yields on hybrid bonds, points towards a range for the allowed cost of equity in the region of 5.8%-6.9% (60% notional gearing).[4] We are keen to engage and work further with Ofgem on the evidence referred to in this response and, as new evidence and analysis is developed, move towards agreement of an appropriate range.

In the sections below we set out our views and evidence on key areas of focus and, areas where change is required in order to attract investment to the sector at this critical point of the energy transition.

"Investability" must be tested in RIIO-ET3

The concept of "investability" broadly refers to the willingness of investors to place capital into ET owners. If the return and financial package is not competitive, then investors will be unwilling to commit the new capital required. This test is generally not considered in conventional estimates of the cost of capital or financeability, but is an important additional test in setting the financial framework. Failing to consider investability could place the energy transition at risk given the criticality of the investments which must be funded.

In order to fund the enlarged investment programme required in RIIO-ET3, Ofgem recognises in the SSMC that it expects networks will need to seek "fresh" equity in the operating company during RIIO-ET3.[5] To ensure the price control can attract this equity requires additional considerations over and above the traditional Capital Asset Pricing Model (CAPM) assessment, which does not fully capture the full range of investor considerations.

These additional considerations include pressures on investability, which include the increased scale and complexity of investment but also the significant competition for capital. Investors, which for National Grid are predominantly global investors, have a large range of potential investment options and will need to be comfortable that the opportunity to invest in RIIO-ET3 is the most attractive and rewarding place for their capital.

We propose an assessment of investability which provides comfort that the price control is sufficiently attractive to investors and, is in addition to market evidence on cross checks that we detail in the below section. We propose that this test of investability is a fundamental component of assessing the overall financial package, including the allowed cost of equity. If the assessment of investability does not indicate that the price control will be sufficiently attractive to a wide variety of global investors, then Ofgem must ensure that the price control is adjusted appropriately through revisiting CAPM parameters or "aiming up" to ensure undue risk is not placed on the transition to net zero.

Our proposed test considers both quantitative and qualitative assessments. The proposed approach considers key metrics such as dividend yield and RAV/EBITDA, as well as credit ratings headroom under several scenarios, noting that equity investors also utilise rating agency analysis. We present the detail of our proposed test of investability in our response to FQ14.

The willingness of investors to provide capital is critical. If the allowed cost of capital is uncompetitive with other investment opportunities, there is a risk that a shortfall in available capital follows and this in turn risks undermining the investability of the sector and the credibility of the regulator to investors in the long-run.

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[3] RIIO-3 SSMC (Finance Annex), paragraph 1.6
[4] Frontier Economics, Cost of equity for NGET at RIIO-3, March 2024, Table 2. We note that the risk free rate is set using a data cut-off date of 20 December 2023 and is as per the Oxera RIIO-3 Cost of Equity Report (dated 23 February 2024) prepared for the ENA.
[5] RIIO-3 SSMC (Finance Annex), paragraph 1.6

Consumers will ultimately pay the costs whether financial or societal, of delayed or cancelled infrastructure and it is in consumers interests that the sector is able to attract the scale of capital it needs to deliver the long-term consumer benefit.

To attract the investment required, Ofgem should review all the cost of equity parameters in light of the new market conditions, and not be constrained by the RIIO-2 methodologies where there is a clear case for change

The recent UKRN guidance reaffirms that the CAPM is the most established estimation method for the cost of equity. In the SSMC, Ofgem recognises that the RIIO-ET3 cost of equity which may result from applying Ofgem proposed CAPM-based approach should be considered in light of the need for the sector to be investable and attract the levels of capital required (as detailed in the section above), and we agree with this statement.

However, Ofgem also states in the SSMC that the CoE should be considered on a 'through the cycle' basis, which could result in a lower allowed return than the evidence suggests is necessary for RIIO-ET3. We consider that this position conflicts with the need to attract and retain capital under the concept of 'investability'. The concept of a 'through the cycle' assessment of CAPM parameters is further fundamentally flawed, given Ofgem cannot fetter its future discretion, and so can give no assurance as to the basis on which allowed returns in future price controls will be set.

The financial market environment is very different from that in the decade leading up to the RIIO-ET2 price control, which was characterised by a prolonged period of very low and declining interest rates. As a result, certain decisions taken by Ofgem during the earlier "lower for longer" period, both in terms of CAPM parameter values and the methodologies used when estimating these parameters, are no longer appropriate and need to be revisited. Even with appropriate changes to the parameter calibration, the CAPM alone may not result in a sufficient level of allowed equity return given the levels of capital which need to be attracted to electricity transmission and the change in risk profile going forward.

It is critical that appropriate weight is given to meaningful and objective cross-checks to ensure that investors are properly remunerated. Cross-checks provide a critical layer of analysis to confirm whether the cost of equity is appropriately set. Investors must see equity returns as having sufficient premia to debt returns to account for the increased risk borne by equity. If equity returns are insufficiently priced, then the notional company will struggle to attract the "fresh" equity capital Ofgem expects networks to require.

Capital Asset Pricing Model (CAPM)

We understand and recognise that Ofgem has committed to following the UKRN guidance for setting cost of capital. This guidance allows for flexibility regarding exact implementation and envisages regulators taking different approaches in some areas, as well as recognising that a regulator's decisions must be taken in line with its statutory duties. The guidance also acknowledges that updates may be required 'to capture any additional insights that may stem from evolving circumstances.'[6] So it is clear that what was deemed appropriate in the context of one price control, may not automatically transpose to another price control, including where an approach may have been found by the CMA to be 'not wrong' in the past.

We believe that Ofgem should implement important methodological changes to its approach for estimating all three parameters of the CAPM. These changes are generally consistent with the intent of the UKRN guidance, and are needed to deliver an appropriate CoE that reflects the current market environment, the increased risks in RIIO-ET3, and to pass the investability test.

- **Risk Free Rate (RFR):** We do not agree that sole reliance on index-linked gilts is appropriate and instead support the addition of an adjustment to reflect the "specialness" of government bonds, commonly referred to as a "convenience yield or premium". The UKRN guidance "does not propose alignment to a particular stance"[7] on the convenience premium, allowing Ofgem to take this into account. This would be consistent with the approaches recently adopted by other regulators including the Competition and Markets Authority (CMA) and the Civil Aviation Authority (CAA). We disagree with Ofgem's assertion that CPI and CPIH are sufficiently close such that and adjustment is not justified.
- **Total Market Return (TMR):** We agree that the TMR is more stable than the equity risk premium (ERP), but this is fundamentally different to the TMR being fixed over time. TMR should vary directionally with

[6] UKRN guidance for regulators on the methodology for setting the cost of capital, UK Regulators Network, March 2023 p2, p7. Hereafter this document is referred to as 'UKRN Guidance' only. The document may be accessed here
[7] RIIO-3 SSMC (Finance Annex), paragraph 3.30

interest rates and given the recent rise in benchmark rates, a portion of the decline in estimated TMR in past regulatory decisions should now be reversed. This movement would be compliant with the UKRN guidance, which recognises that the TMR is not fixed. Evidence from market data and previous regulatory decisions indicates that the movement in TMR is approximately 40-50bps per 100bps of movement in prevailing gilt interest rates. We believe this evidence should be applied as a cross-check when setting the TMR, to ensure that the parameter is appropriately attuned to the market environment in which the price control is set and is an important component of ensuring an investable financial framework. In addition, we believe that the primary method of estimation should be the historical ex-post method, with very limited weight applied to historical ex-ante.

- **Beta:** The assessment of beta should consist of a business-as-usual (BAU) estimate and an adjustment to reflect an increase in risk that the evidence shows electricity transmission networks will face in RIIO-ET3. The BAU estimate should use a sample length of 10 years to account for recent volatility. Our work has evidenced that risk is increasing for ET licence holders even after regulatory mitigations in the ASTI framework due to the significant increase in RIIO-ET3 spend, more complex projects, supply chain constraints, intense competition for labour and materials, at the same time as new licence conditions and potential penalties for late delivery. The beta comparator group should place some weight on sectors with similar risks (e.g. construction) to account for forward looking risks. The evidence we submit also shows that our risks in RIIO-ET3 will be asymmetric, with a downward skew, and Ofgem should consider the regulatory framework in the round to ensure it will be a 'fair bet'.

Cross-Checks

In RIIO-ET3, appropriate cross-checks will play a pivotal role given the step-change in investments required and the move to a 'higher for longer' interest rate environment.

Several market-based cross-checks now show that a CAPM-based estimate of the required cost of equity is likely to be too low and suggest a step change from RIIO-ET2. These include:

- A new cross-check based on hybrid bond yields[8]
- A new "inference model" cross check that builds on evidenced relationships between the RFR, debt pricing and equity pricing[9]
- A new development of the "Asset Risk Premium – Debt Risk Premium"[10] cross-check previously proposed by Oxera

For example, we have worked with Frontier Economics to develop a CoE cross-check which is based on securities that exhibit some equity like characteristics, but for which yield information is available.[11] These securities should therefore have a return lower than cost of equity due to the differential in risk. Hybrid bonds are securities that have a blend of equity and debt like characteristics, and credit rating agencies typically consider them to be 50% equity-like (and hence 50% debt-like). Evidence from the hybrid bond cross-check indicates that the cost of equity should fall in the range 5.8% to 8.5%, with a central estimate of 6.7%.[12]

A range of other cross-checks were considered by Ofgem in RIIO-ET2. A number of these have drawbacks (as previously recognised by the CMA[13]), however it is also worth noting that some of these are now exhibiting very different outputs compared to when Ofgem considered them at the time of the RIIO-ET2 price control. Infrastructure fund implied equity internal rate of returns (IRR), for example, have been c.3% higher over the period between 2020 and 2023 than previously, which would be consistent with the view that a significant increase in the cost of equity is needed between RIIO-ET2 and RIIO-ET3 to reflect investors actual expectations.

Overall Cost of Equity

In conclusion, a robust allowed CoE which properly and appropriately reflects market conditions is needed for electricity transmission to enable the sector to be able to retain and attract the equity that is needed to

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[8] Frontier Economics, Equity Investability In RIIO-3, March 2024, section 5
[9] KPMG, Inference analysis as a cross-check on allowed returns at ET March 2024
[10] Oxera, RIIO-3 Cost of Equity, Section 3
[11] Frontier Economics, Equity Investability In RIIO-3, March 2024, section 5
[12] *Ibid,* Paragraph 113
[13] Cadent Gas Limited, National Grid Electricity Transmission plc, National Grid Gas plc, Northern Gas Networks Limited, Scottish Hydro Electric Transmission plc, Southern Gas Networks plc and Scotland Gas Networks plc, SP Transmission plc, Wales & West Utilities Limited vs the Gas and Electricity Markets Authority; Final determination Volume 2A: Joined Grounds: Cost of equity, The Competition and Markets Authority (CMA), October 2021, para. 5.718 (b)

support the required level of investment in RIIO-ET3. This would protect the interests of existing and future consumers (in line with Ofgem's duties under the Electricity Act 1989, including its principle objective under section 3A(1) and net zero duty under section 3A(1A(a)), ensuring both consumers and wider stakeholders will benefit at a time when investors have an unprecedented degree of choice over where they invest their capital.

At this early stage of the RIIO-ET3 process, the overall suite of evidence available today points towards a range for the allowed cost of equity in the region of 5.8%-6.9% (60% notional gearing).[14] We are keen to engage with Ofgem as the sector moves forward towards RIIO-ET3 to help Ofgem establish the appropriate range, particularly as new evidence and analysis is developed.

We recognise the importance of a financially resilient sector and agree that appropriate regulatory measures are important to protect consumers

We believe the resilience measures proposed by Ofgem in the SSMC – which represent an 'evolution' rather than 'revolution' in approach – are proportionate, balanced and represent sensible developments of current licence conditions. We support many of the principles around the measures proposed(i.e. the expectations of maintaining more than one investment grade credit rating, amending the dividend lock-up trigger to be the earlier of reaching BBB- with negative watch/outlook and a specified regulatory gearing threshold, and extending the timeline for board certification of adequacy of resources to the entire price control or a minimum of three years ahead), dependent on how they are implemented and operate in practice.

Calibration will be required to ensure the measures (i) are appropriately implemented and consistent with the rest of the price control (and Ofgem's wider duties) and (ii) add sufficient value to consumers. For example, ensuring that the measures bring value to consumers is particularly important where measures may be heavily reliant on assumptions. We also note that adherence to some measures could be outside managements control (for example, the "requirement" versus "reasonable endeavours" to hold two credit ratings), and Ofgem should consider this when coming to a decision.

National Grid has proven to be responsible and resilient in terms of capital structure decisions and we do not support any further measures beyond the three proposals from Ofgem in the SSMC. We do not consider it appropriate or necessary for further regulatory interventions which fetter shareholders' rights to make capital structure decisions. In the SSMC, Ofgem asks questions regarding holding company debt or dividends in the context of excessive leverage. In our view, the that evidence does not point to a resilience 'problem' in the sector stemming from excessive leverage or the presence of structurally subordinated holding company debt which necessitates regulatory intervention. Consequently, we do not consider that any new measures are necessary over and above the specific measures proposed by Ofgem.

If Ofgem was to identify additional specific financial resilience issues, we believe that these are better remedied at the specific company level. Applying further blanket approach measures to the entire sector risks punitively impacting responsible and already resilient companies, and reducing the attractiveness of the sector at a time when the availability of capital is a key consideration. We note that any measure which impacts the investment proposition, including those related to financial resilience, should be considered in the context of investability. Additional measures could weaken resilience by limiting available capital and increasing the cost of capital, this is not in the interests of consumers.

We support the use of a RAV weighted indexation approach and can support inflation options 1 and 2 that fully address the leverage effect

We are supportive of updating the indexation methodology in RIIO-ET3 to being RAV addition weighted and believe it will more accurately track networks' cost of debt, particularly those in a higher growth phase. The length of the trailing average should also take into account whether the response rate to changing market interest rates aligns to that of networks cost of debt, as well as the aim to minimise any calibration adjustment.

Evidence provided in this response and by the ENA demonstrates that additional borrowing costs exceed the current allowance of 25 bps. In particular we draw out CPI/CPIH risk within the CPIH issuance/basis mitigation element of the allowance, which is not taken into account in RIIO-ET2. In addition, we are supportive of a new issue premium, which we pay on our new debt but is not reflected in the allowance as it is based on an index which consists of secondary market bond yields. We also present evidence for a large

[14] Frontier Economics, Cost of equity for NGET at RIIO-3, March 2024, Table 2. We note that the risk free rate is set using a data cut-off date of 20 December 2023 and is as per the Oxera RIIO-3 Cost of Equity Report (dated 23 February 2024) prepared for the ENA.

issuer allowance, as NGET's significant financing requirements will weigh on the bond markets and lead to higher financing costs than those of peers with more modest requirements.

We are supportive of both inflation options 1 (nominal allowance for fixed rate debt) and 2 (inflating the RAV with the long run assumption for fixed rate debt). Both options fully address the inflation leverage effect. We do not support option 3 (an unchanged methodology based on review of the long run assumption) as this fails to address the leverage effect and still leaves consumers and investors exposed to differences between assumed and actual rates of inflation for the funding of fixed rate debt. We also note that an approach that utilises the measure of break-even inflation is flawed, and there are also reasons to believe that currently the break-even inflation curve may not be pricing in inflation expectations accurately.

We understand Ofgem only intends to review the index linked debt assumption if either of options 1 or 2 are adopted but not with option 3. We agree with this and support reducing the index linked debt assumption. NGET will not be able to maintain 30% of its debt with natural index linked debt and expect this to fall to c.20%, as the market for CPI linked debt is limited and CPIH even more so.

The financeability assessment should target strong investment grade equivalent to Baa1

There are clear benefits of investment grade equivalent to Baa1 to keep the cost of debt lower for consumers and allow for stronger bond market access and capacity, keeping facilities and short-term borrowing costs low, and ensuring an appropriate buffer to credit rating. Given the scale of investment in RIIO-ET3, and the associated level of required issuance, NGET will need to access a wide range of markets including internationally to support the programme Any move below this level is likely to cause a loss of confidence for both investors and credit ratings agencies and ultimately increase the cost of borrowing for consumers.

Achieving appropriate equity and debt returns that support the energy transition and enable the sector to attract capital at the pace required is critically important. Returns must be set at the correct level first to ensure financeability is not resolved artificially. The financial package will then need to consider cash measures given the increase in investment in the network, as this will add pressure to financeability assessments and sustaining current investment grades.

We are supportive of longer-term analysis of financeability and investability, and we view keeping an eye ahead on a horizon outside of the 5-year period will help foster long-term financial sustainability. This will have benefits for consumers including ensuring intergenerational fairness is considered. A longer-term view of financeability supports our position that cash levers should be deployed that provide more sustainable support for the long-term.

We propose a reduction in assets lives for NGET which will help alleviate financeability concerns that are inherent in periods of heightened capital outlay

Asset lives policy is a key factor of determining revenue streams within the transmission networks, as revenues from this key regulatory lever provide sustainable and stable revenues to fund investments. A reduction in asset lives would offer a partial remedy to the cash challenges faced by networks due to the heightened capital outlay.

We take a clear position that the financial package on offer at RIIO-ET3 must support both Financeability and investability as we move into a sustained period of high capital investment. Separately, there is also a technical narrative that supports a reduction in asset lives for NGET. Based on NGET's evaluation of its own assets, it has been observed that under existing investment plans in RIIO-ET2, the assets being built into the transmission network are exhibiting a reduction in economic useful lives on average from the current 45-year policy. We also note, whilst longer asset lives may yield short-term reductions in consumer bills, they impose upward pressure on future consumers and the intergenerational fairness of this should be considered.

To further address financeability challenges during RIIO-ET3, we propose a revision to the RAV differential that was introduced over a decade ago, with revenues for old assets not due to be recovered fully until 2062[15]. We advocate changing the existing 50-year smoothing period that was applied, and an accelerated transition to at least a 10-year straight-line approach commencing from the start of RIIO-ET3. This proposed adjustment would result in accelerated cashflows and bring NGET in line with most networks that have either already received this balance or have small RAV differentials remaining.

[15] The RAV differential is a regulatory mechanism devised to rectify the revenue cliff-drop in 2011 stemming from pre-privatisation assets assigned a 20-year life in 1991. For more detail please see our response to FQ25

In conclusion, National Grid is pleased to have the opportunity to engage with Ofgem on the open and constructive basis that the SSMC document provides

We are at the heart of the energy transition and are excited to be at the forefront of delivering the investment required to unlock benefits for consumers and wider society.

We look forward to engaging with Ofgem further during the RIIO-ET3 price control process to develop a financial package that delivers the appropriate returns to investors that are fundamental for attracting the capital required for RIIO-ET3.