Part B: ET Annex Questions

Delivery of major new projects

Key messages:

- We welcome the major projects regime and the role of the Independent Technical Advisor (ITA), which will improve Ofgem's confidence in the information we share and enable more streamlined and faster decisions.
- We do not think a financial threshold is the most appropriate factor to determine whether a project should fall into or out of the proposed major projects regime and suggest this is determined using wider criteria such as project complexity, technology types, forecast consumer value, interaction with other projects, etc.
- Automatic pre-construction funding (PCF) and early construction funding (ECF) will be a fundamental feature of the major projects regime, as they enable the progress and pace of delivery required. There are improvements that can be made to the proposed scope and operationalisation, based on our learnings from ASTI.
- We are supportive of the proposal to introduce the role of the ITA and the potential benefits it can bring by improving Ofgem's confidence in the information we share with them and enabling faster decisions. This is important at a time when major projects need to be delivered at pace. The design and implementation will be key and we have made suggestions for how this could be done to realise the benefits from the role. We are happy to support Ofgem develop the ITA regime through piloting it on projects in advance of the ET3 period.
- Suitably calibrated delivery incentives in line with the strength of those used for ASTI will be important for projects where timely delivery is key to unlocking the benefits for consumers and this will be true for some non-CSNP projects as well. We have identified some core principles which a delivery incentive needs to meet to be effective.
- There is benefit for TOs, Ofgem and consumers in setting ex-ante allowances later using direct market costs resulting from an appropriate procurement process that reflects current market conditions. The cost assessment approach for the major projects regime should be developed from the methodology used in recent ASTI project assessments.

ETQ1. What are your views on the materiality threshold that should be set to determine which projects fall into or out of our proposed major projects regime?

We do not think a financial threshold is the most appropriate factor to determine whether a project should fall into or out of the proposed major projects regime.

The SSMC (paragraph 2.56 of the SSMC ET Annex) suggests that the framework for CSNP projects below the proposed £100m materiality threshold will be largely similar to the major projects regime, but would not have an ITA. Therefore, we understand the threshold is mainly to determine whether or not an ITA applies.

The ITA is a welcome proposal. It will improve Ofgem's confidence in the information we share with them and has the potential to enable more streamlined and faster decisions. This is important at a time when major network investment needs to be delivered at pace and there is likely to be a large number of projects to assess in-period.

The ITA also has the potential to support trust and transparency between TOs and Ofgem which we consider is a key enabler for preparing, reviewing and approving projects at the pace required for the energy transition. We think the ITA will provide most value on projects or programmes of work that have specific characteristics that would benefit from detailed independent assurance. For example, projects or programmes that are complex, involve new technologies, have a number of critical dependencies and interactions with other projects, will drive significant consumer value (e.g. in terms of forecast constraint cost savings), are particularly sensitive in terms of environmental or community impact, or need to be delivered in an accelerated timeline. It may not always be the case that these types of projects fall above a certain financial threshold.

We have explained our rationale using the list of tCSNP2 projects which have received a proceed or hold signal:

Applying the £100m threshold:

The £100m threshold would put 26 tCSNP2 schemes (out of 58) within the scope of the 'major projects regime'. Of the 26, 14 are reconductoring schemes, which are projects that are relatively low in complexity and therefore it is unlikely to benefit consumers by subjecting them to any detailed assurance from an ITA. It may be more

appropriate to perform some form of initial (or mid-project) 'health-check' to ensure they are on track to deliver defined benefits. This could be light touch in nature and therefore be more cost efficient to deliver.

For example, the 26 would include the following reconductoring projects:
- EDN3: Reconductoring Brinsworth to Thorpe Marsh, Brinsworth to Chester Field and Chesterfield to Ratcliff at forecast cost of £160m; and
- FWRE: Reconductor Feckenham to Walham 400kV circuit at forecast cost of £146m.

The list would also include some new circuits that are not complex in nature in terms of being a point-to-point construction and may not merit an ITA's involvement, such as:
- BSNC: new double circuit within North East England at forecast cost of £113m.

The £100m threshold could exclude projects that might benefit from ITA assurance. For example, in the Welsh programme of works described below, PTC1 has a forecast cost of £80m and would fall outside of the remit if the £100m threshold was applied in isolation.

Applying alternative parameters:

As noted above, the use of an ITA could be determined by other factors. For example, the ITA could review a programme of interdependent projects which are best assessed together as they are cost-optimised as a whole, rather than individually (i.e. project 1 may cost more than would otherwise be expected as it is building extra bays for project 2).

An example of such a programme of works include the following from the Wales region in tCSNP2:
- AC6: an HND1 2GW offshore link from Scotland to England/Wales (£bn but forecast not yet confirmed)
- WCD4: Proposed amendment to AC6 to provide 4GW Scotland to England/Wales capacity connecting into North Wales (forecast £2.1bn)
- PSNC: New double circuit from North Wales to South Wales (forecast £2.7bn)
- PTC1 (forecast £80m) and PTN2 (forecast £160m) are also linked to these projects and may therefore benefit from being included within the scope of the programme for the ITA.

Each of the projects in the programme is interdependent and designed and cost optimised as a whole. tCSNP2 flushed out increased power transfer requirements from what AC6 as initially proposed provided. This increased need can be achieved by building WCD4 as a completely new link, or by modifying the design of AC6 to increase its capacity. What we decide to do on that project would affect where AC6/WCD4 lands in Wales, which in turn affects where we should start building PSNC. While the programme is worth billions and therefore well above the £100m threshold, it does include some smaller projects that would not otherwise have been caught.

We therefore recommend that an appropriate set of criteria is developed and included in an overarching assurance framework to determine whether or not an ITA would apply to a project or programme of works, as we think this is a more appropriate way of targeting the ITA resource in consumers' interests than applying a financial threshold. See further our response to ETQ3.

ETQ2. What are your views on our proposed approach to setting PCF and ECF, the scope of PCF and ECF and continuing the 'operational aspects' introduced under ASTI?

We are broadly comfortable with the suggested scope of PCF and ECF which is aligned to ASTI and will enable the early activities, works and commitments necessary to help progress the relevant projects at pace. There are a few changes we think are required. The third bullet point in the list of areas for PCF is too specific to overhead line work and should be updated so that it is appropriate for other projects. We also think it is important to specifically include easements as they can provide greater land rights security compared with wayleaves. We also note that securing of options is not included under ECF funding areas. We think that securing options for land should be included so that we are not restricted to acquiring the freehold of land. In some circumstances it may be more appropriate to secure an option where this is also in the best interests of consumers. Our suggested edits to the scope of the two definitions are set out below:

PCF:
- *surveys, assessments and studies that inform environmental, consenting and design feasibility decision making;*
- *stakeholder engagement and consultation which will be key to informing project design and progressing through the consenting process;*

- *project design and engineering development that move the project ~~from being 'lines on a map'~~ to a detailed ~~project proposal~~* ***design*** *that can be taken to the market for procurement*
- *tasks associated with wayleaves,* ***easements*** *and planning applications*

ECF:

- *market engagement activities that are key to building market interest in tendering for the project;*
- *ordering equipment;*
- *strategic land purchases****, securing of options****, and early procurement commitments; and*
- *early enabling works*.

From our experience to date on the ASTI projects, PCF and ECF are proving a fundamental part of our ability to progress at pace and make the commitments we need to on supply chain. However, we are already seeing that the percentages for both PCF and ECF are set too low based on what we experience in the market.

On PCF, we know we will need to use the re-opener to seek additional pre-construction funding for ASTI projects. We think it would be more streamlined, with less administrative burden for Ofgem, to adjust the percentage so it is more reflective of the level of PCF spend on a typical project. This would help avoid the need for re-openers and would present a low risk to consumers. The PCF funding under ASTI is provided on an 'use-it-or-lose-it' (UIOLI) basis, meaning any funding that is not used will be returned to consumers, and the funding that is spent is subject to an ex-post review to ensure it was efficient. We are engaging separately with Ofgem on the appropriate percentage for the ASTI projects, and will need to wait until we have the relevant information for projects within the scope of the 'major projects regime' to determine what an appropriate percentage might be for those projects.

On ECF, our experience to date suggests on a number of projects a 20% cap will need to be increased. It is important that we have the appropriate cap and an efficient process that both proportionately protects end consumers and avoids extra uncertainty and risk for the TOs.

We also note the description in paragraph 2.38 of the ET Annex which describes the ASTI approach as providing "*an ECF provision of up to 20% of the forecast total expenditure across the programme*" does not completely reflect the licence, as the ECF for ASTI is currently on a project by project basis rather than a programme.

As we look forward, across our whole portfolio of works we are going to have to adopt a more programmatic approach to securing the supply chain in the timescales we need – Ofgem should ensure the framework provides for an additional ECF route, over and above any project specific provisions, that works at a portfolio level, similar to strategic spares but enabling a strategic order book to deliver a programme of works. We would suggest no cap on this as it would be at a programme level, but be applied for on a case by case basis, and cut across by price control periods. Such an approach appears to align with the objectives of Recommendation 14 of the Network Commissioner's Report, to place a strong responsibility with the TOs to address the acute supply chain constraint.

ETQ3. What are your views on options for how the ITA could be implemented for major new ET3 investments, and what are your views on its role and scope?

We welcome Ofgem's proposal to introduce the role of the ITA. There are clear benefits the role can bring by improving Ofgem's confidence in the information we share with them and enabling more streamlined and faster decisions. This is important at a time when major network investment need to be delivered at pace. It has the potential to support trust and transparency between TOs and Ofgem which we consider is a key enabler for preparing, reviewing, approving and delivering projects at the pace required for the energy transition.

It is important that the role of the ITA is designed and implemented to support achievement of the intended benefits from introducing the role. The design of an overarching ITA framework which establishes how the ITA role would be implemented and in what circumstances will therefore be key. We have set out what this framework might cover and our thoughts against the options presented in the SSMC, below.

There are some critical success factors for the regime:

1. Ensuring the scope of the ITA role, responsibilities and level of assurance is clearly defined and understood by all parties, including existing Ofgem functions and the ITA itself. If not, it could become burdensome, introduce duplication and have the potential to adversely impact delivery at pace.

2. Ensuring the criteria to trigger ITA assurance is clear and the ITA is only used on projects where its involvement is proportionate and will help ensure meaningful value for consumers. This should help focus the scope and ensure resources are used effectively given the scale of investment required.
3. Ensuring the level of assurance required from the ITA can be tailored to the project/portfolio in question and is commensurate to the level of risk or value involved. In practice, we acknowledge that the level of assurance may differ between projects/programmes of work and each project would require a partially tailored assurance plan for each project where some elements could be covered once at a portfolio level with a light touch follow up at project level.
4. Ensuring the ITA (where it is required) looks beyond basic process adherence and considers the decisions made through those processes and the degree to which those processes and decisions will support the TOs to achieve the required outcomes for consumers.

The overarching assurance framework, which we think should be co-developed by the ITA, or consortium of ITAs, Ofgem and the TOs, should set out the parameters of the ITA scope and role which will help manage these challenges. We have discussed some of our initial views with Ofgem in the working group meeting that took place on 8 February 2024 and shared with Ofgem a supplementary document setting out more detail on how we think an overarching assurance framework could work as follow up to that meeting. We do not repeat the detail set out in that document, but we expect it will be considered as part of our overall position on the ITA.

We are happy to support Ofgem with developing the ITA regime by way of pilot projects before the ET3 period, sharing lessons and identifying improvements which could be adopted into the enduring regime.

The overarching framework should cover the following:

ITA eligibility and timing

We note that Ofgem is open to eligibility criteria for the ITA being value and non-value based as appropriate. As set out in our response to question ETQ1, we think factors beyond a purely financial threshold will be more appropriate for determining whether or not an ITA should apply.

Various criteria could be developed against which projects are assessed to determine whether or not an ITA will be applied: for example, consumer value at risk (including, but not limited to, project cost); delivery complexity (for example, reconductoring works, technology type, novelty or complexity (and/or other appropriate eligibility criteria such as strategic value); environmental and consenting complexity; and proximity to expected delivery date.

We acknowledge that there are benefits to introducing the ITA early in the design process and after the need has been established via CSNP. Given that a significant amount of optioneering and development of proposals will take place as an input to the CSNP, and the CSNP will go through a Strategic Environmental Assessment (SEA) and public consultation, there could be benefit in the ITA providing some earlier assurance over that stage, prior to the publication of CSNP. The ITA could provide independent assurance and support over TO input/optioneering and the NESO processes by applying relevant skills and expertise. This would need to be non-duplicative of later ITA involvement and should not cut-across the role of the NESO but could help provide confidence that TOs and the NESO have worked effectively together to build a robust CSNP.

The ITA may also be effective in providing assurance to the further development of options to meet the needs identified by the tCSNP2, which are likely to be at an earlier stage of maturity. This may have two benefits: i) to trial the ITA role over an earlier set of projects in order to refine the process and design; and ii) to ensure that these early projects benefit from an assurance partner. We understand Ofgem are intending to consult on this separately.

ITA level(s) of assurance

We think there is value in developing a risk-based assurance spectrum that identifies the different levels of assurance that should be applied to a project depending on its value (project cost and consumer value), the stage of the project, any changes in its risk profile, or depending on characteristics from design, procurement and into construction.

This would set out key aspects such as assurance assessment criteria for each level (i.e. what can be assured), the assurance process, how it will work in practice and how scope for each further level of assurance will be defined. It will also define the reporting and ongoing monitoring process that will need to be established. This assurance spectrum could range from confirmation on overall project design and self-assessment, through to targeted deep-dive and ad-hoc assurances.

In order to develop the overarching assurance framework, we think there would be merit in engaging with potential ITA providers and obtaining their input into how the role could be made to work efficiently and effectively. We think it

would help to refine the proposal by trialling an ITA on one or more ASTI, tCSNP2 or ET3 projects so that any learnings can be reflected in the final proposal before it is fully implemented.

The below table sets out our views against each of the options presented in the SSMC:

Category	Option	NG View
Organisational Structure	Option A – Private firm or consortium Option B - Individuals Option C – A combination	We support **Option A.** • Different skills and resources will be required across design, procurement, and construction and so a recognised firm would be best placed to provide these assurance(s). It is unlikely that a single organisation will be able to span design, procurement and construction. • Ofgem and TOs should agree on a pool of possible organisations that can take on the role of ITA for each phase of activity or type of project/assurance required. In order to ensure successful delivery and timeliness there is a need to ensure that the organisation(s) have adequate skills and capabilities to make sure we do not need to spend time briefing/getting them up to speed on the project specifics. • There is likely to be benefit from one overall firm coordinating the assurance plan (i.e. a Project Management Office type function).
Contract Structure	Option A – Project by Project Option B – Programme Option C – Framework of organisations	We support **Option B.** • Grouping projects into programmes or logical work packages is likely to be appropriate and could help reduce overall burden. It may also make it easier for the ITA and Ofgem to manage from a commercial perspective. • A programmatic approach could support cost efficiencies as plans can be aligned and ITA can spread its resource profile across multiple projects in parallel. • If a consortium approach was adopted for the ITAs, smaller tenders could be run for groups of projects to create competitive cost pressure on ITA organisations. These tenders would need to be simple and Ofgem would need to retain the ability to direct award if needed. • Once the projects subject to ITA assurance are identified as per the proposed assurance framework it will be easier to identify logical groupings and build them into a proposed plan either with the ITA or prior to the ITA joining each programme of work(s).
Scope	Option A – TO defined and run Option B – Ofgem defined and run Option C – A combination	We support **Option B.** • Our view is that Ofgem should ultimately determine the overarching ITA assurance framework that sets out how assurance is scoped; however, we do see a role of the TO in working with the ITA to agree the detailed scope and timings. • In order to retain independence, we think ITA should be involved in defining the scope of the role. • We think both Ofgem and the TO should have the ability to request ad-hoc assurance from the ITA, within an agreed timeframe/process. This would allow Ofgem to get an independent view on any areas that would not have otherwise been assured, e.g. because it has concerns over the approach. It would also allow TOs to flag a suggestion for ITA support and input in situations where the TOs believe an independent view would be beneficial.
Funding	Option A – through price control Option B – Charged to projects Option C – A Combination (Ofgem, FSO, TO)	• In order to ensure the independence of the ITA (and its perceived independence), we think it is important that Ofgem should fund the ITA. This cost could then be recovered through its licence fee, meaning it will ultimately be funded as a pass-through cost through the price control, but we think this separation between TOs and the ITAs is important.

Duty of Care	Option A – Legal duty of care to Ofgem only Option B – Legal duty of care to Ofgem and the TO (and the FSO). Option C - No formal duty of care is established but the ITA acts independently	• We see merits in a joint duty of care but would like to further explore with Ofgem how this could be suitably established (noting that the SSMC refers to such a duty in Ofwat's DPC framework) to ensure confidence in the regime is maintained. **The most important feature for the success of the regime is a duty of care to Ofgem.** • We would recommend consulting with potential ITAs on this matter and if the issue were material we would recommend the duty of care would be between the ITA and procuring party (Ofgem or TOs). Fundamentally, the role (and associated framework) should be devised by Ofgem as the main purpose is to give Ofgem comfort that decisions are being taken in the right way across design, procurement and construction.

ETQ4. What are your views on introducing a delivery incentive into RIIO-ET3 for major projects that is broadly similar to the ASTI ODI-F? Do you consider that delivery should be more strongly incentivised than under ASTI, and if so how?

Given the scale, pace and criticality of what we need to deliver during RIIO-ET3 and the consumer value associated with many of the investments, we agree that timely delivery is likely to be a key factor across a number of strategic investments. Introducing a suitably calibrated delivery incentive for such investments is in consumers' interests. This must be done in close agreement with licensees to avoid unintended consequences. For example, setting too stretching a target date, with significant penalties for late delivery that are not reflected in the overall risk/reward of the framework, is only likely to drive the supply chain to offer later dates.

A delivery incentive will only be appropriate if timely delivery is one of the key drivers in securing the benefits for consumers. For example, if the project (either in its own right, or because of its interaction with other key projects) is critical to the achievement of a specific government target or to resolving a specific boundary constraint that is driving material constraint costs for consumers, the timely delivery of that project will be important to ensure the resulting benefits for consumers are not delayed. It is important that projects are not assessed in isolation, as their interaction with other projects, including for managing system access, will be critical to ensuring the benefits of strategic investments can be delivered in optimal timescales to unlock their intended benefits.

The ODI-F in the ASTI framework was introduced because of the time-critical nature of these projects which are central to achieving the government's ambition to connect 50GW of offshore wind by 2030. It provides us with a meaningful and effective incentive (including at its current calibration) to strive to accelerate delivery. Seeking to ensure that this 2030 ambition is met will help accelerate the shift away from fossil fuels towards a decarbonised energy system, increased energy security and reduced constraint costs for consumers, among other things. The 2030 ambition and associated benefits of timely delivery provided a clear imperative for the ASTI ODI-F to be incorporated into the framework.

We think an ASTI-style ODI-F should not be limited to major projects identified in the CSNP. There will be non-CSNP projects in our network investment plan of strategic importance (either in their own right, or because of their impact on enabling the benefits from other strategic investments to be realised) that will deliver meaningful consumer value if delivered on time. An ASTI-style ODI-F could be appropriate for these projects. We therefore suggest that the final assessment on the need for an ODI-F on delivery is made on a case-by-case basis once the relevant drivers and circumstances associated with the investment (including its interaction with other projects) is known.

A well-designed incentive will align our interests with those of consumers, be clear and predictable in its application and link to factors that are within our control to drive the desired outcome. It is therefore important that any ODI-F on delivery that is put in place meets the following key principles:

1. the project is sufficiently mature for a target date to be set and an ODI-F to be applied to that date;
2. the target date is fair and reflects a date that is reasonable, based on all available evidence, for the network company(ies) to be incentivised to meet;
3. the incentive provides a symmetrical opportunity for upside / downside performance so that the incentive presents a 'fair bet' for network companies and consumers – we note that for ASTI this was calibrated across the portfolio of a TO's projects rather than on a project-by-project basis;
4. the size of the incentive is proportionate to align the TOs' interests with consumers, but it should not seek to provide 'insurance' to consumers for the consequences of delayed delivery – the latter approach would

essentially change our role as a licensed network business and our risk profile which would have implications for our cost of capital;

5. appropriate delay event penalty exemptions are incorporated into the ODI-F to ensure network companies are not penalised for delays driven by factors outside of their reasonable control;
6. the ODI-F should not be coupled with a licence obligation on the delivery date, as this is disproportionate and inconsistent with Ofgem's stated purpose of the different regulatory outputs. It results in a risk of double jeopardy for network companies which drives additional risk onto the TOs. As noted in the SSMC, Licence Obligations (LO) are used to set minimum standards of performance whereas ODI-Fs are set to incentivise network companies to deliver service quality improvements which go beyond minimum standards, The distinct functions of the LO, the ODI-F and the PCD need to be recognised and preserved in designing the ODI-F for major projects in ET3.

In terms of incentivising delivery more strongly than under ASTI, we think the ASTI ODI-F is already a strong incentive on network companies and it is not clear why Ofgem is suggesting that major projects identified in the CSNP would need to be incentivised more strongly than under ASTI. The ASTI ODI-F is also combined with an LO on the delivery date which imposes further consequences for us if we are delayed beyond a certain point. We think this is disproportionate and should not be adopted for future delivery incentives, for the reasons set out in point 6 above. Increasing the risk profile from a carefully calibrated incentive (as is the case with ASTI) to a regime with significant risk could have unintended consequences and end up driving behaviours that are the opposite of those intended. This would not be in consumers' interests, as it could risk delays in delivery, which could exacerbate constraint costs and delay the connection of cheaper, cleaner renewables onto the system. It could also create perverse incentives for TOs to pursue commercial strategies which transfer more or less risk to the supply chain than is economically justified. This may unintentionally penalise TOs for sound decisions about where and how to allocate risk to maximise consumer benefit. TOs should be incentivised to place the risk where it can be best managed.

It is important that in setting and calibrating the incentive Ofgem takes account of the historic performance of public, regulated and private bodies delivering large infrastructure projects, and combines this with the cumulative risk being placed on investors given the unprecedented volume of work we will need to deliver in ET3.

Ofgem should calibrate the strength of the incentives in the round when the final package of available incentives is determined.

ETQ5. What are your views on our proposed cost assessment approach for major new RIIO-ET3 projects?

NGET welcomes Ofgem's intention of creating a cost assessment framework that avoids introducing any delays into project delivery. In the current volatile supply chain environment, which is affecting our entire workplan and not just those projects covered by the tCSNP2/major projects regime, there is benefit for TOs, Ofgem and consumers in setting ex-ante allowances later in the process. This 'late ex-ante' approach helps reduce asymmetry of information by using direct market costs resulting from an appropriate procurement process that reflects current market conditions. The late ex-ante cost assessment approach should be developed from the methodology used in recent ASTI project assessments and applied where the supply chain dynamics require its use, which will go beyond the major projects regime.

For direct costs, NGET broadly shares the same view as Ofgem outlined in paragraph 2.52 of the SSMC ET Annex, with several additional comments for clarifications.

The definition of "an appropriate tender process" (paragraph 2.52 of the SSMC ET Annex) would vary depending by project type, so Ofgem should be open to a range of appropriate procurement processes rather than expect the same process to be followed for all project and portfolios. The appropriate procurement process in each case would have multiple considerations, including but not limited to:

- the nature of the products being procured;
- the nature of the supply chain (i.e. capacity and structure);
- the nature of the market (e.g. competition levels, standard procurement practice and forms).

While we are promoting competition in the supply chain by regularly sharing our portfolio of schemes to give tenderers advanced notice, we are seeing limited and decreasing competition and appetite for tenderers to particulate in full tender processes. This is pushing us to do more direct forms of contract allocation in response to supplier feedback and preferences, such as 'Best for Task' which allows us to test on our procurement framework who may be interested in the scheme - this is based on criteria such as supplier mobility in the scheme's area, technical expertise and capacity. We consider that Ofgem should be open to these procurement approaches in the

context of the supply chain environment and the flexible procurement approaches we are having to take in response.

Ofgem has also proposed that there would be limited challenge to direct costs where "*unit rates are broadly consistent with our expectations*" (paragraph 2.52 of the SSMC ET Annex). NGET is supportive of this intention but it is important that Ofgem recognises that in the current market environment, market costs have been, and remain, volatile. As set out in our separate Supply Chain Annex, increased competition for supply chain capacity is leading to an increasingly volatile cost environment and creating other challenges, such as longer lead times. It is important that Ofgem's unit rate expectations reflect the realities in the supply chain at the time and the specific circumstances surrounding the project/programme of work. Ofgem should not rely on a single set of static unit rates, as they will likely become outdated and irrelevant very quickly.

Other factors are also influencing the cost base of the assets, supplies and services we are procuring. Recent engagement has highlighted that our stakeholders view protecting the environment as a key priority for us to focus on. This is in line with our desire to be a responsible business, meet our own net zero commitments and minimise our impact on the environment. Some of our costs are therefore increasing as we procure more sustainable supplies, for example SF6 free equipment and low carbon concrete and steel, where the market is less developed and prices are currently more expensive than their historical alternatives. These kinds of initiatives are generating value for consumers and wider society by protecting our natural environment and contributing to the achievement of net zero. Additional costs may also result from the transformative new ways of working we are adopting (e.g. extended-hour contracts), but remain in consumers' interests as they enable overall consumer value to be maximised (e.g. by ensuring projects are delivered on time and constraint costs mitigated). Ofgem needs to reflect these beneficial changes in its cost 'expectations'.

Therefore, we encourage Ofgem to be transparent in how it proposes to set, and keep updated, its unit rate expectations.

Furthermore, to deliver projects in a cost-efficient way for consumers, in certain circumstances, NGET may be able to negotiate contracts earlier but with an agreement that the costs in the supplier contract are indexed to a later date as agreed with the supplier. This would mean the final costs paid to the supplier are updated to reflect any changes to the agreed indices. The cost assessment process, across ET3, not just for the major projects regime, needs to be able to accommodate these types of contractual arrangements and resulting changes in costs.

For indirect costs, there are several layers, and the cost assessment process should allow for appropriate assessment of each:

- Capex CAI, as defined in our ETQ35 response: These will vary on a project-by-project basis and so should be evaluated within the direct Capex assessment, as was done with LOTI projects and ASTI projects.
- Opex CAI and Business Support Costs: These costs are relatively stable and have a known relationship with the size of the investment or network being operated by the TO, hence their suitability for regression modelling as discussed in our response to ETQ35. As such, as additional workload and funding is agreed through the major projects regime, an incremental allowance for these support costs should be considered for which we propose cost assessment through a single % applied across the portfolio of major new projects.

A more comprehensive response on all indirect cost methodology is included within our response to ETQ35.

Context for questions ETQ6-9: the delivery of network investment, including load and non-load-related expenditure and the interactions with 'shared drivers' and major projects

Questions ETQ 6-9 (inclusive) consider the approach that should be taken in the RIIO-ET3 framework for delivering load related and non-load related expenditure and also interact with our responses to ETQs 1-5 on the major projects regime. Our responses to these questions include a number of common components. These are:

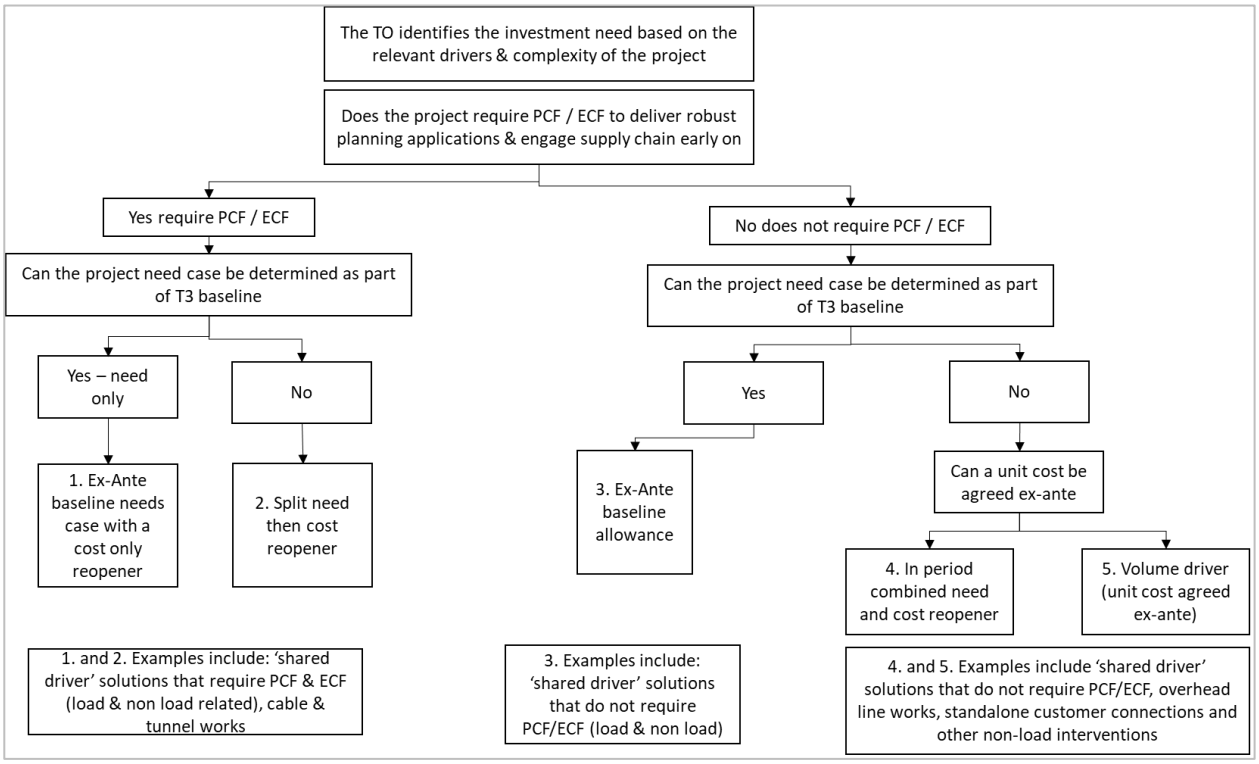
- We recognise Ofgem's position that the major projects regime would only apply to certain investments which are approved by the NESO through the CSNP.
- For investments which are covered by the core ET3 framework (which includes TO-proposed projects and NESO-identified projects which do not form part of the major projects regime) we propose three re-openers ('cost only', 'combined need and cost' and 'split need then cost'). There will be projects in this category which are of a similar strategic importance for the energy transition as those that fall into the major projects regime, for example to accelerate customer connections which need appropriate regulatory treatment so they can proceed at pace.
- The selection of which of the three re-openers is used should be informed by when the need for the investment can be confirmed compared to:
    - when we will be able to confirm full project costs;
    - the complexity of the project;
    - the supply chain requirements; and
    - the pace at which the project needs to be progressed to ensure the desired outcomes are achieved in line with consumers' interests.

  These factors influence how and when costs can be accurately confirmed and when we need to make supply chain commitments.
- The split need and cost reopener would be used where, like the case with ASTI and investments under the major projects regime, there is a need to have early engagement with the supply chain and make financial commitments to secure contractors for delivery or equipment, and delaying need to a future point when costs can be locked down would lead to delayed delivery, and/or where preliminary works and spend is required in order to develop the final solution, for example land acquisition, consenting, designs and engagement with stakeholders. The cost only reopener would operate the same as the second half of the split need and cost reopener, and would be applied to projects where need was already confirmed in the ET3 baseline plan or through the CSNP.
- To facilitate this, as part of the confirmation of need for the split need and cost opener, access to pre-construction funding (PCF) and early construction funding (ECF) should be enabled. This would allow TOs to progress projects at pace and realise the associated benefits for consumers, such as accelerating connections to the transmission system, improving energy security, or reducing constraint costs.
- The selection of re-opener mechanism should <u>not</u> be based on the drivers of the project e.g. customer connections, shared-driver schemes or asset health or how the need is confirmed or the total cost of the project. We think these delineations would create arbitrary distinctions between investments which would add unnecessary complexity and could mean the same 'type' of investment would need to use different mechanisms just because, for example, it fell above/below a financial threshold. Equally, those factors do not influence our ability to accurately set costs or engage with the supply chain, therefore to restrict available mechanisms would risk our ability to deliver projects at pace which add value for consumers.
- For the same reason, while we are supportive of the major projects regime, we do not think a £100m project value threshold should be applied. Instead, we think Ofgem should establish a set of agreed criteria that considers the complexity and impact of delivering the scheme is applied to each project to determine if it falls within the scope of the major projects regime.
- The RIIO-ET3 funding mechanisms should reduce barriers to TOs making anticipatory investments that will deliver a 'connections-ready' and future-proofed network. Given the challenges associated with managing scarce resources, such as system access and supply chain capacity, it is important that we build our investment plan off the principle of '*do it once, do it right*'.

- Volume drivers represent one of the most effective ways of enabling TOs to deliver at pace during RIIO-ET3. The RIIO-ET2 mechanisms should be reviewed and updated to represent a suite of measurable and repeatable activities.
- The interactions between proposed and existing assets on the transmission network will impact our non-load interventions on the network. This means that there needs to be flexibility in the framework to allow an increase or decrease in the number of interventions that are required (or their timing) and any subsequent impact on network operating costs. Working with the NESO, we will need to manage system access (a finite resource that is subject to change in response to different events) and shape how and when our network investments are executed. Taking a holistic approach enables us to optimise the use of the outages we have whilst maintaining reliability as we expand and upgrade the network. This way, we can design the optimum solution and deliver the work that will maximise overall value for consumers and make the best use of the outage and resources we have.
- In some instances, the availability of the system may mean prioritisation decisions need to be made over the work we choose to deliver in the available outage, in particular in response to events which cannot be foreseen before the start of the price control period. This may require trade off decisions, for example, to manage the risk of ageing equipment on the network in order to connect customers and increase transmission capacity.

Flowchart ETQ8.1 below (also included in our response to ETQ8) shows the different funding routes proposed for network investments outside of the major projects regime:

Flowchart ETQ8.2. NGET's Proposed Funding Mechanism by Intervention Type and PCF/ECF requirement



ETQ6. What are your views on our proposed treatment of sub-£100m schemes identified by the CSNP?

Key messages:

- A financial threshold could result in arbitrary decisions on whether a projects falls within the scope of the major projects regime. We propose that a set of agreed criteria that considers the complexity and impact of delivering the scheme is applied to each project to determine if it falls within the scope of the major projects regime
- For smaller projects, we see two mechanisms as appropriate:
  (i) Volume driver, where work is repeatable and measurable and an appropriate unit cost can be agreed ex-ante (note these types of investment would not need separate pre-construction funding (PCF) or early construction funding (ECF))
  (ii) Cost-only re-opener, where a volume driver is not suitable because the project is more complex or supply chain dynamics mean PCF and ECF should be triggered by the CSNP confirming need

As per our response to ETQ1, we do not think that a financial threshold is the most appropriate factor in determining whether a project should fall into or out of the proposed major projects regime. Our understanding is the proposed threshold primarily determines whether or not an ITA applies. We consider this would be better determined through a set of agreed criteria that recognise the complexity and impact of delivering the scheme. We therefore recommend that an appropriate set of criteria is developed and reflected in an overarching assurance framework to determine whether or not an ITA would apply to a project or programme of works. This would be a more appropriate way of targeting the ITA resource in consumers' interests than applying a financial threshold.

The following types of network interventions identified in the CSNP could be below a £100m threshold, although this is not an exhaustive list:

- Overhead line (OHL) works: reconductoring, hotwiring, OHL turn-ins and circuit upgrades; and
- Installation of technology to manage power flows (e.g. power flow control devices and quadrature boosters) and provide voltage control (e.g. reactive and series compensation).

These interventions will also be present in other areas of our network investment plan, that are not identified through the CSNP. We agree with Ofgem's overarching desire to design a more streamlined and proportionate framework, where possible, and therefore think the starting point should be for parity in the design of funding routes for similar types of interventions.

As set out in our responses to ETQ 7 and ETQ 8, we think there are five key funding mechanisms that should be utilised for network investments:

- **Baseline ex-ante funding** – where needs and cost are sufficiently certain to be included in our ET3 business plan submission. This will not be the case for CSNP projects, given the first CSNP will not be published until 2026, but might apply to some tCSNP2 projects (or certain aspects of them). It is also likely to be appropriate for a significant portion of our non-load expenditure.
- **Volume drivers** – where an appropriate unit cost can be agreed as part of the baseline for work that is of a measurable and repeatable nature. This is likely to be appropriate for certain investments such as OHL fittings and reconductoring work and customer connection work at existing substations.
- **Cost-only re-opener** – where the 'need' has been confirmed through our ET3 business plan submission, or where the 'need' is confirmed through the tCSNP2/CSNP. This is also likely to be appropriate for more complex or strategic investments where there is a need to engage with the supply chain and make financial commitments to secure contractors for delivery or equipment and delaying need to a future point when costs can be locked down would delay delivery. This is also referred to in the shared driver response to ETQ8 where the need is known at the time of the business plan submission.
- **Combined need and cost re-opener** – where the investment scope and costs are sufficiently certain to seek approval of both elements together. This is likely to be appropriate for some of the less complex projects which don't require PCF/ECF and there are more limited supply chain constraints and certain connections work which is not funded by the volume driver. This would also be the proposed route for atypical projects which fall above or below an allowance threshold, similar to how MSIP currently operates
- **Split need then cost re-opener** – where the investment need is known and it will help the progress of the project at the necessary pace to confirm 'need' early, to trigger automatic PCF and ECF, and allow for the network company to come back for the final project assessment once the detailed scope of the solution and the costs are sufficiently certain.

There are four main points raised in the SSMC in relation to the treatment of 'smaller CSNP-driven works', as set out in paragraphs 2.56 and 2.57 of the SSMC ET Annex, that we have covered below:

a) Project need being determined by the CSNP;
b) Need providing automatic PCF and ECF;
c) A streamlined ex-ante cost assessment process; and
d) How the TOs should be held to account for timely delivery of smaller works.

a) Project need being determined by the CSNP

We agree that for investments identified in tCSNP2/CSNP (whether above or below any financial threshold), the tCSNP2 / CSNP should provide the need case confirmation and there should be no requirement for TOs to provide any further justification or evidence of the need to Ofgem. This is a key principle that would reduce the regulatory burden for both Ofgem and the TOs and allow the TOs to progress the project more quickly.

We note that the tCSNP2 projects are at a less mature stage than is expected for projects identified in future CSNPs, which will have been through a strategic environmental assessment and public consultation. Therefore, further optioneering of tCSNP2 projects will be required. An appropriate process will be required to confirm the final scope of the projects that are designed to meet the investment need confirmed through the tCSNP2. We note that Ofgem will consult separately on the framework for tCSNP2 projects and this point should be addressed as part of that consultation.

b) Need providing automatic PCF and ECF

The following paragraphs should be read in conjunction with our response to ETQ2 on PCF and ECF provision.

We agree that the provision of automatic PCF and ECF will be important for schemes identified in the CSNP and which will be progressed through a cost-only re-opener (see below), as it allows progression of critical activities such as ordering of equipment and early enabling works which are important to securing supply chain capacity and delivering at pace before the final project assessment.

In terms of the mechanics for the provision of PCF and ECF our recommendation is that this is provided on a project or portfolio basis at the point the CSNP is issued.

During the production of the CSNP we expect the NESO to rely on support from TOs to do work that would have previously come after the NOA and tCSNP2 processes (and so have been funded by PCF) but which will now need to happen before the CSNP is complete. We need to identify a proportionate funding route for TOs' work here that both allows proper control of spend and enables TOs to rapidly respond to NESO needs. TOs will not have a good understanding of the quantum of this work before the start of ET3, so an ex-ante allowance is unlikely to be appropriate and we consider an appropriate re-opener will be required.

c) A streamlined ex-ante cost assessment process

In section 2.56 and 2.59 of the SSMC ET Annex, Ofgem refers to a streamlined cost assessment, where the cost assessment could be carried out via a batched assessment based on location, value or optimal timing or through individual project assessment. We consider that the pragmatic route to cost assessment for all of the CSNP projects, without an ITA, would be through the following two mechanisms: volume driver and cost-only reopener. These two mechanisms form part of the five mechanisms for network investment listed earlier in our response.

1. Volume driver: We consider that the use of volume driver mechanisms should be adopted for works that are broadly repeatable and measurable, and we can provide sufficient evidence to support the setting of a unit cost. This would reduce regulatory burden between Ofgem and TOs by providing a mechanistic approach, enabling works to be progressed without delay in the best interests of consumers. We recommend this approach for overhead line works across drivers, e.g. asset health, load (outside of CSNP) and CSNP driven works, and for certain customer connection works. Our position is put forward on the basis we can benchmark appropriate financial values for these projects and the mechanisms remain cost reflective of indices throughout the price control.

2. Cost-only re-opener: For NOA, CSNP and tCSNP2 projects outside of the major projects regime (or those where 'need' has been confirmed as part of our baseline submission) that are not appropriate for a cost reflective volume driver, we propose that a cost only reopener mechanism should be used. This is because need will have already been determined, either through the CSNP/tCSNP2 or through Final Determination. This could include operability work required at sites, such as reactors, pathfinders where the scope could be significantly different and in these cases there is not a significant amount of historical information to support setting benchmarks. The key principles for this re-opener are:

- **We propose that TOs should be able to make submissions at any time, provided we have given a minimum notice to Ofgem**. The current single and fixed window is inconsistent with the way in which projects need to be developed to maintain momentum and pace of delivery. Delays to progress could exacerbate constraints on the system and ultimately lead to higher costs for consumers. Restricting submissions to specific windows could lead to artificial peaks and troughs of work for the TOs and Ofgem that will naturally lead to a slower pace of decisions than is needed. We appreciate the demands this would place on Ofgem's available resource and, therefore, we consider that TOs would need to take a transparent approach to sharing their pipeline of reopeners and updating Ofgem on a more regular basis than is currently done through annual RRP. We are committed to exploring the appropriate frequency of such updates with Ofgem and putting such an approach in place for NGET.
- **It is important that there is regular engagement with Ofgem as our projects approach submission**. We have a responsibility to keep Ofgem informed about our portfolio of reopeners, to help Ofgem resource plan and also to provide high quality submissions that can be processed quickly. This engagement would be designed to familiarise Ofgem with our optioneering and the cost of the project. This would provide an opportunity for Ofgem to challenge TOs and for TOs to address this feedback ahead of their submission. Consequently, we propose that Ofgem's assessment of our final submission would include a check for consistency with previous engagement and a targeted assessment on any areas of concern. If an ITA is applied to the project, we would expect Ofgem's assessment to be more streamlined and straightforward due to the additional assurance.
- **Each re-opener should use common documentation, but the level of detail required should be tailored and proportionate to the ask being made of Ofgem.** For example, we would expect a cost only submission to refer to where the need has been agreed but not repeat the original justification for the need, given that has already been approved.
- **The level of evidence required should be proportionate to the materiality of the investment.** For example, in the 2024 MSIP window we made an MSIP submission for a £200k investment in a new bay. To allow for evidence demonstrating detailed options assessment and consideration of deliverability risk, document totalled 39 pages. We consider that this required a disproportionate level of evidence and spent resource for us to produce the submission and for Ofgem to assess it.
- **All prior (ET1, ET2) efficiently incurred development spend** should be recoverable as part of the cost assessment in ET3 or through the ET2 true-up assessment. We raise this aspect as the recovery of non-load development and early procurement was removed from ET2 final determinations, and on the North Wessex Down reopener the spend incurred during RIIO-ET1 has been dis-allowed**.**
- The cost reopener should allow for **atypical projects to be submitted** where the project costs are above or below an updated volume drive cap/collar, consistent with the MSIP mechanism in RIIO-ET2.
- The **cost assessment can be submitted on a late ex-ante or ex-post basis** to allow for certainty in project costs and this decision can be taken at National Grid's discretion. The assessment of efficient costs should be in line with Ofgem's proposed approach to the ASTI assessment, where Ofgem can only re-open or challenge costs that it can show are 'demonstrably inefficient and wasteful expenditure' (DIWE).

d) <u>How the TOs should be held accountable:</u>

We consider that delivery incentives should only be used for the projects where timely delivery is the main driver in determining whether the benefits of that project is delivered for consumers. As we are seeing from both the ASTI projects and the tCSNP2 projects, some of the smaller-scale investments are a critical enabler of larger projects and therefore in order to unlock the consumer benefits it is as critical to deliver the smaller investment as it is to deliver the larger. Therefore, if one of the CSNP projects outside of the major projects regime is identified as a key enabler to a major new project then it would be appropriate for a delivery incentive to be applied to both projects. The points made in our response to ETQ4 are equally applicable here.

Load related expenditure outside of the CSNP

ETQ7. What are your views on our proposal for load-related expenditure outside of the CSNP, how these mechanisms can be improved and streamlined, and the appropriate thresholds for the mechanisms?

Key messages:

- We agree that Ofgem should continue to use a combination of ex-ante allowances, volume drivers and re-openers to fund load-related expenditure in ET3. However, modifications are required to the considerations Ofgem proposes to use in determining which funding mechanism should be used:
  - Ofgem should recognise the outputs from each TO's assessment of customer confidence to connect in support of the assessment of 'need'.
  - There should be three re-openers that allow the assessment of needs and costs to be split or combined, as appropriate, to allow progress to be made at pace in the interests of consumers.
  - Where need and cost assessment is split, pre-construction funding (PCF) and early-construction funding (ECF) should be triggered automatically once the need is agreed but before full costs are assessed.
- The RIIO-ET3 funding mechanisms should enable TOs to make anticipatory investments that will deliver a 'connections-ready' and future-proofed network. Given the challenges associated with managing scarce resources, such as system access and supply chain capacity, it is important that we build our investment plan off the principle of '*do it once, do it right*'.
- Volume drivers represent one of the most effective ways of enabling TOs to deliver at pace during the RIIO-ET3 price control. The RIIO-ET2 mechanisms should be reviewed and updated to represent a suite of measurable and repeatable activities

We agree with the SSMC proposal that Ofgem should continue to use a combination of ex-ante allowances, volume drivers and re-openers to fund load related expenditure during ET3 (as set out in Table 5 in the SSMC ET annex). We think this combination of mechanisms has worked well in ET2 and can be suitably updated to achieve the desired outcomes in ET3. However, the SSMD should acknowledge that the outcomes of the ongoing connections reforms before and during the ET3 period might necessitate reconsideration of the suite of mechanisms and their operation.

Although the need for certain major network investments will now be confirmed through the tCSNP2 and CSNP, many of the same types of work identified through those plans will also arise in the work identified by the TOs to address local and regional needs. They may also be of the same strategic importance for the energy transition, for example developing major new substations to accelerate customer connections to the electricity transmission system. Many of the characteristics of the major projects regime and the mechanisms used for smaller CSNP projects are therefore likely to be relevant to the design of the mechanisms that apply to network investment outside of the CSNP.

The RIIO-ET3 funding mechanisms should enable TOs to deliver the step-change in pace and volume required to enable the energy transition and to avoid delays in connecting customers and exacerbating system constraints that ultimately lead to higher costs for consumers. We are developing an ambitious plan for RIIO-ET3 which will allow us to deliver a capacity-rich, 'connection ready' network in anticipation of customer needs. We intend to proactively invest in the network to create cost-effective connections capacity where we have assessed it may be needed. We are planning a mix of connections plus anticipatory investments that will provide connection options that are ready (or more ready) to meet customer needs rapidly as they emerge (e.g. to flexibly accommodate connections in different locations and / or accelerate connections during RIIO-ET3 and beyond).

We anticipate that expenditure to connect customers will form a material proportion of our load-related expenditure during ET3. In some cases, these investments might also address needs identified in CSNP (e.g. our 'shared driver' investments). In other instances, we will need to deliver separate investments to address CSNP needs or enable the full benefit of the CSNP investments.

On the SSMC proposals to determine which funding mechanism should apply to load-related expenditure during ET3, we broadly agree with figure 2 in the SSMC ET annex but consider that there is a need for:

- **Ofgem to recognise the outputs from each TO's assessment of customer confidence to connect** (see further below) to support assessment of the 'need' for the resulting investment. We recognise this could be supported by a review/endorsement of the underlying processes for assessing and proposing

projects by either Ofgem or NESO to provide confidence in TO decisions and overall legitimacy for the approach.

- **PCF and ECF are required for complex projects** (e.g. when we need to refine the design, carry out more detailed stakeholder engagement, make commitments to the supply chain, obtain land for a new site or to rebuild a site – typically where the costs may be higher and the lead times are greater) where the need for the investment is known, but further work is required before a full project assessment can be presented to Ofgem for approval. The PCF and ECF **should be triggered automatically once the need is agreed** so that the further work and commitments can be actioned without requiring the network companies to take on undue levels of funding risk. If need for the investment is confirmed by Ofgem through the Final Determinations on the basis of our business plan submission, PCF and ECF should be triggered at this time. Otherwise, they would be triggered during the price control by Ofgem's confirmation of the 'need' for investment through the split need then cost re-opener.
- **Re-openers that allow the assessment of needs and costs to be separated or combined**, as appropriate, to allow progress to be made at pace in the interests of consumers.
- **A use it or lose it allowance (UIOLI) for low materiality investments that cannot be managed through the volume driver** and for which it would not be in consumers' interests to apply the resource or time associated with a re-opener, such as customer intertrips. We propose that Ofgem scrutinises TOs' efficient expenditure ex-post against a 'demonstrably inefficient and wasteful expenditure' (DIWE) threshold and that, as for other UIOLI mechanisms, any unused funds are returned automatically to consumers. As above, initial scrutiny of the processes used by TOs to identify such projects could further build confidence in such a mechanism.

Table ETQ7 below sets out the circumstances in which we would expect to use the funding mechanisms we consider should be used in ET3. Following the table, we set out:

- an overview of our methodology for determining the likelihood of a customer connection; and
- the key characteristics of each of the funding mechanisms we propose.

Our substantive comments on volume drivers are provided in response to ETQ9.

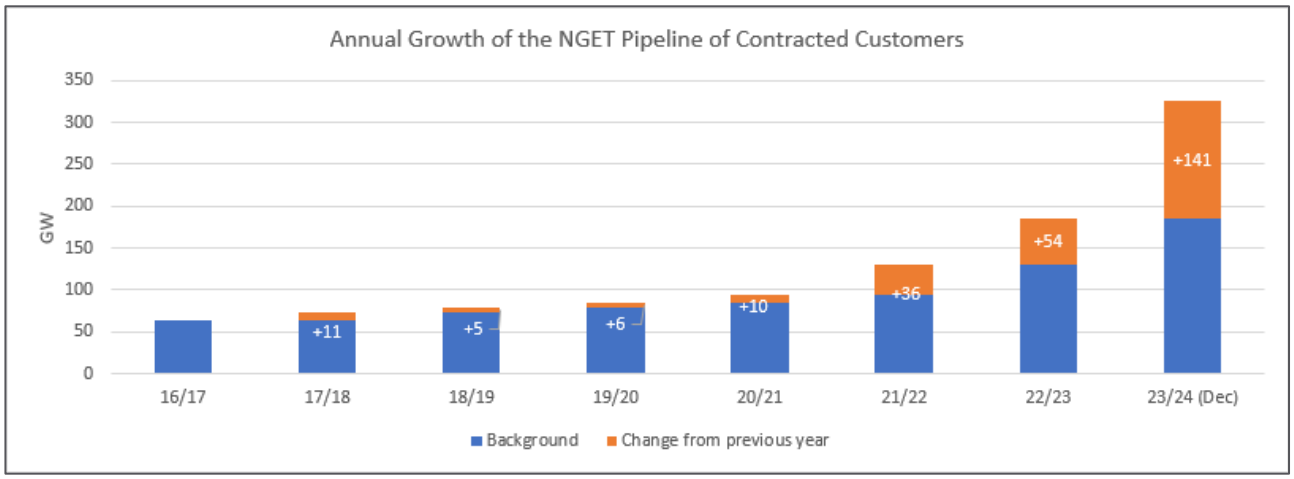
Table ETQ7: NGET's proposed ET3 funding mechanisms and their criteria for use

		Funding mechanism						
		Ex-ante (in the ET3 baseline)			Re-openers			
		Need and full project costs	Need and ECF and PCF	Use it or lose it allowance	Adjusted volume drivers	Cost only	Combined need & cost	Split need then cost
Circumstances for use	Need	When the need can be confirmed through the business plan	When the need can be confirmed through the business plan	The size of the allowance would be determined ex-ante and included in the baseline	When the need emerges in-period	When the need has been agreed in the baseline (or through CSNP)	When the need emerges in-period	When the need emerges in-period
	Complexity	When the complexity or supply chain circumstances of the project does not require PCF & ECF	When the complexity of the project requires PCF & ECF. These allowances are triggered when the baseline plan is approved	When the complexity or supply chain circumstances of the project does not require PCF & ECF	When the complexity or supply chain circumstances of the project does not require PCF & ECF	PCF & ECF are required and are triggered when the business plan is approved	When the complexity or supply chain circumstances of the project does not require PCF & ECF	When the complexity or supply chain circumstances of the project does require PCF & ECF
	Costs	When sufficiently mature full project costs are included in the business plan and included in the ET3 baseline	When sufficiently mature full costs are not available for the business plan. They will be assessed in-period using the cost only re-opener	When sufficiently mature full project costs are: of low materiality **and** project costs cannot be represented using a volume driver	When the ET3 volume drivers represent the sufficiently mature project costs within a cap and collar	When sufficiently mature project costs are: Above/ below an updated volume driver cap/collar **and/ or** There is no relevant volume driver to determine costs	When sufficiently mature project costs are: Above/ below an updated volume driver cap/collar **and/ or** There is no relevant volume driver to determine costs	When sufficiently mature project costs are: Above/ below an updated volume driver cap/collar **and/ or** There is no relevant volume driver to determine costs

Summary of NGET's methodology for assessing the likelihood of customer connections

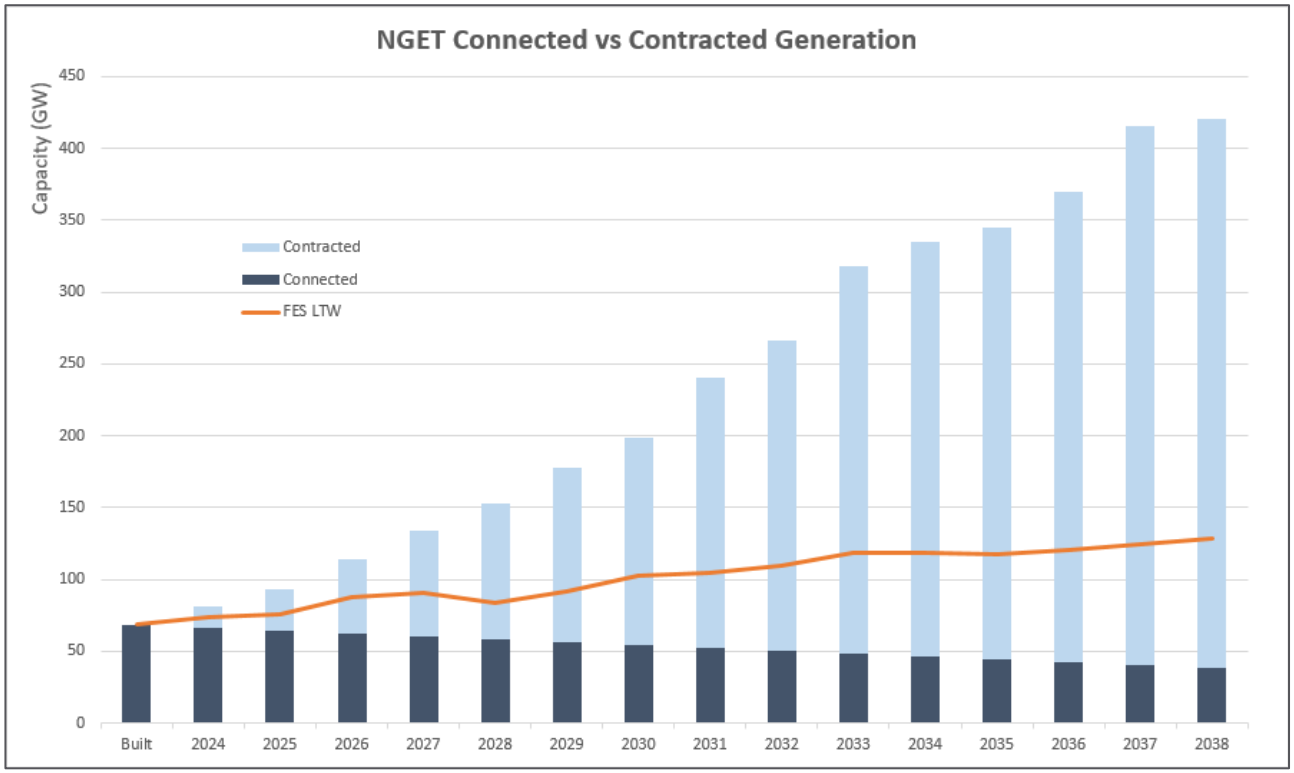
While we are not seeking formal approval of the approach at this stage, we felt it would be helpful to share this information with Ofgem to "bring to life" some of the approaches noted above.

Our current contracted connections pipeline is growing at an unprecedented rate, e.g. between April and December 2023 our contracted background grew by 141GW:



Source: Transmission Entry Capacity register

Additionally, our contracted pipeline of c. 382 GW of customer connections far exceeds the capacity required to deliver net zero under the FES 2023 Leading the Way scenario (which indicates that 45GW of customer connections will be required during ET3):



Sources: Transmission Entry Capacity register and FES 2023

During ET3 we intend to commence delivery of a connections ready network, that provides connections and an inventory of more anticipatory connection options. This will allow either contracted or future customers to be connected more quickly and so transmission work will not be on customers' critical path. This will support delivery

of net zero and – in combination with other initiatives - reduce the connections queue. However, it does not mean building the network now to connect the entire connections background, which would be uneconomic and hugely costly for consumers given the background far exceeds any scenario for net zero generation.

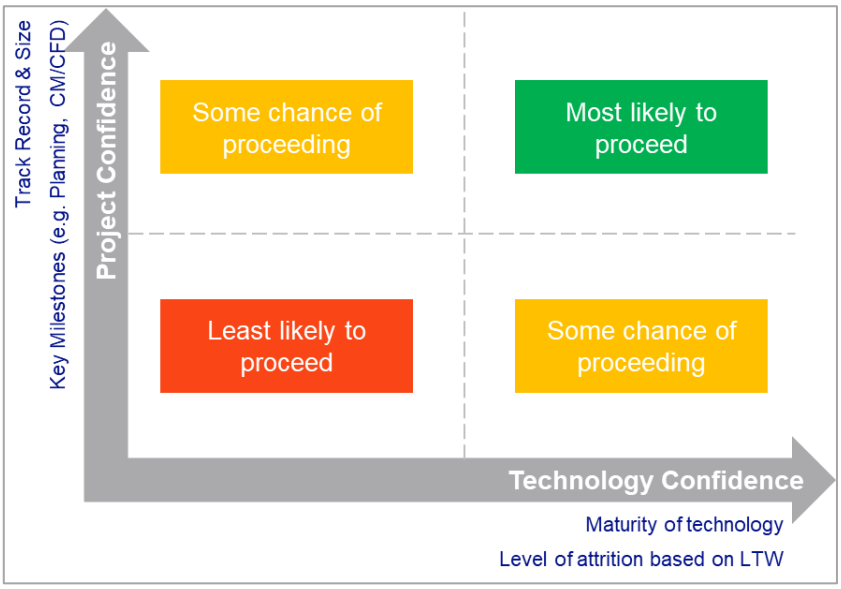
This challenge of identifying the connections projects which can be justified and accelerated, including through cost effective anticipatory investment, is most acute in England and Wales. For example, 40% (156 GW, which is greater than the Scottish TOs' contracted queues combined) of NGET's contracted queue is comprised of hybrid battery-solar storage projects compared to 7.5% (8.6 GW) across the Scottish TOs. Across all battery projects, NEGT's contracted capacity is over 20 times greater than the needs indicated by Leading the Way, whereas in Scotland the TOs are c.11 times oversubscribed.

To develop the network in a way which delivers value for consumers, we have developed a consistent and repeatable methodology for assessing our confidence of each contracted customer connections project proceeding. We are applying this methodology systematically to generation, demand, and embedded generation to guide where we should invest in substations and what we should build at those sites. The purpose of this is to avoid exposing consumers to excessive costs by building for the entire background and instead progressing investments to move towards delivering a "capacity-rich" network that speeds up connection times.

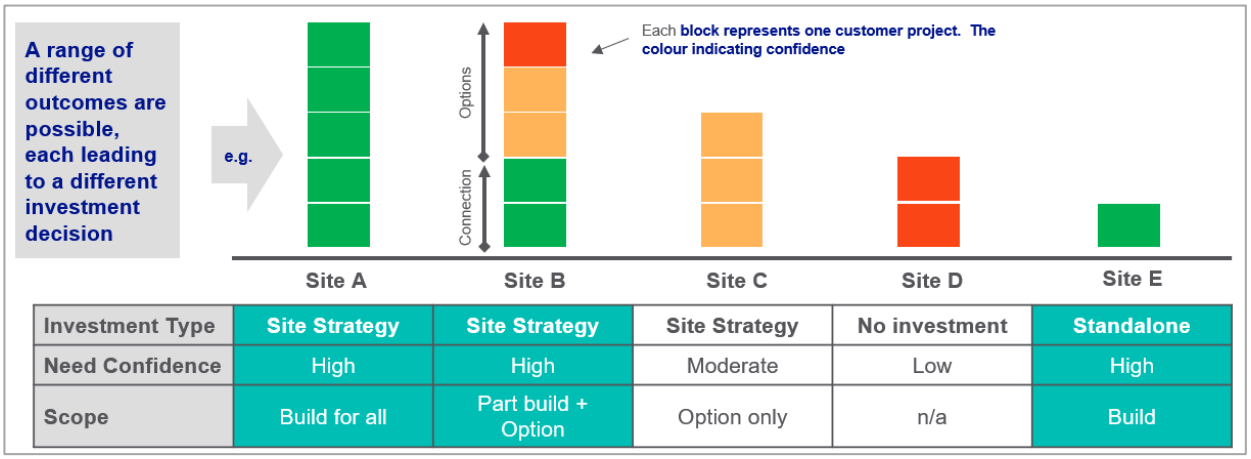
There are four steps in this methodology:

1. Score each contracted project on technology and project confidence. Technology scores account for the maturity of each technology type connecting to our network and the amount by which contracts to connect indicate oversubscription against the expected level of connections (under Leading the Way). The project confidence score reflects the developer's level of experience of developing the proposed technology and whether certain key project milestones have been achieved (e.g. planning consents, success in the capacity market, etc.).
2. Combine the technology and project score for each project to indicate the relative likelihood of a project proceeding based on the information currently available (see the figure illustrating the outputs below).
3. Use the technology mix presented in FES23 Leading the Way to inform the volume of capacity likely to be needed by each technology type and the customer confidence analysis to select the most likely connections that meet the energy scenario and reflect these in our plan.
4. Design a set of connections and connection options for each site that balance customer uncertainty, the need to deliver connections at pace, site opportunities and cost to customers. Whilst the connections options chosen may vary from site to site due to costs, system access, and physical constraints, the figure below illustrates how we can use the customer likelihood assessment to inform investments at our sites.

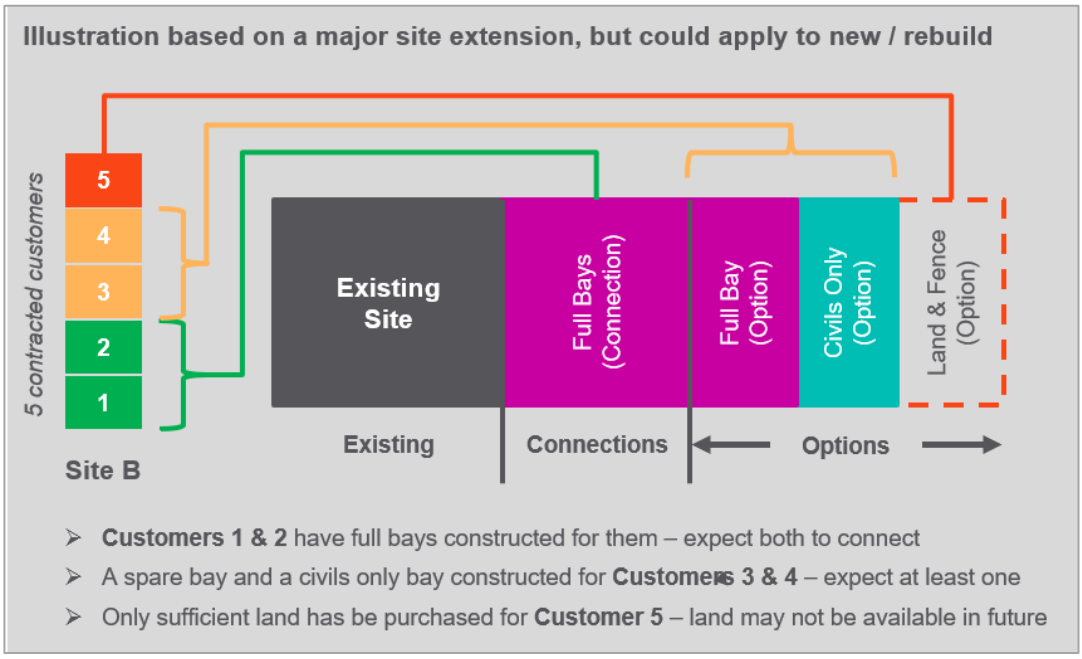
Output from NGET's likelihood of customer connections assessment process:



Illustrative example of how NGET can use the outputs to determine investments required at our sites:



Investment Type	Site Strategy	Site Strategy	Site Strategy	No investment	Standalone
Need Confidence	High	High	Moderate	Low	High
Scope	Build for all	Part build + Option	Option only	n/a	Build



We have worked with the other TOs to confirm that our approach applies common principles in both our assessment of customer confidence and for determining interventions. The TOs have subsequently demonstrated to Ofgem their methodologies for assessing their contracted background. NGET has now shared its examples of the application of its methodology with Ofgem and we hope Ofgem to use this opportunity to provide any feedback on our approach.

Given the scale of investment projects that the TOs will put forward for approval during the RIIO-ET3 period, as uncertainty over project requirements reduces, Ofgem should consider a streamlined approach to approving the need for such load related projects which reflects the approach taken in the major projects regime to identify efficient and quick ways in which Ofgem can confirm investment need.

We believe our methodology to assess customer confidence could play an important role in this, and we would like to explore ways that Ofgem (potentially involving NESO) could use the outcome of this type of assessment throughout ET3 so that it can support the confirmation of need. We suggest that the TOs engage jointly with Ofgem to identify the controls that should be in place to allow this, for example RRP reporting and assurance.

The following sections provide more context on the mechanisms set out in ‘Table ETQ7’ above and the circumstances for their use:

Ex-ante baseline allowances or confirmation of need

We propose that there should be two approaches to setting the majority of our ex-ante allowances through the RIIO-ET3 baseline, which depends on the complexity of the investment and/or the supply chain environment:

- **As proposed in the SSMC, ex-ante baseline allowances for full project delivery should be made where we can evidence a clear needs case and sufficiently mature investment costs through our business plan submission**. The SSMD should acknowledge that these baseline allowances will also include anticipatory connection options where we can demonstrate that they are appropriate to be funded by consumers. For example, we consider it in consumers' interests to build assets that enable connections at a site with several contracted customers so that there are cost-effective options that recognise cost, system access and the supply chain. This will support our ability to connect many customers at pace when the time is right e.g. once they have secured planning consent (see our methodology for assessing likelihood of customer connections). We propose an incentive (see our response to ETQ23) on use of the connections options that we deliver during ET3 to ensure that consumers are protected from unnecessary costs.
- **For complex projects (e.g. when we need to refine the design, make early commitments to the supply chain, obtain land for a new site or to rebuild a site – typically where the costs may be higher and the lead times are greater), the ET3 framework needs to enable and maintain pace of delivery during ET3.** In this instance, the 'need' for the investment would be confirmed ex-ante by Ofgem through the Final Determinations on the basis of our business plan submission. This would then trigger PCF and ECF so that the further work and commitments can be actioned without requiring the network companies to take on undue levels of funding risk. Our response to ETQ2 suggests changes to the description of some PCF activities so that they are not overly specific to overhead line work and can be applied to other activities which are in consumers' interests. When we have sufficiently mature projects costs they would subsequently be assessed using the 'cost assessment only' component of our proposed re-opener mechanism.

For both approaches, we will use our customer confidence methodology to support the need for investment.

We also consider that the RIIO-ET3 framework should have an UIOLI fund confirmed as part of the ex-ante baseline which TOs can use for load-related expenditure on projects where:

1. the specific need cannot confidently be identified as part of the business plan but the overall requirement can; or
2. the costs are of relatively low materiality and cannot be suitably represented by a volume driver.

We propose that the size of the fund should be informed by the number and forecast cost of low value work TOs anticipate they will need to deliver during the RIIO-ET3 period.

The UIOLI would avoid using re-opener processes where the time and resources required to prepare and scrutinise the submissions provides very limited value to consumers. We would expect to report on use of the allowance annually. We propose that Ofgem scrutinises TOs' efficient expenditure ex-post against a 'demonstrably inefficient and wasteful expenditure' (DIWE) threshold and that, as for other UIOLI mechanisms, any unused funds are returned automatically to consumers.

For example, in the 2024 MSIP window we made an MSIP submission for a £200k investment in a new bay. To allow for evidence demonstrating detailed options assessment and consideration of deliverability risk, the document totalled 39 pages. We consider that this required a disproportionate level of evidence and spent resource for us to produce the submission and for Ofgem to assess it. Future submission of this nature could be avoided if the ET3 framework allows a UIOLI fund for such investments.

Uncertainty mechanisms: volume drivers and re-openers

Given the uncertainty in the external environment, we agree with the SSMC proposal that the price control will need to be adjusted in-period using appropriate uncertainty mechanisms. We will use our customer confidence methodology set out above to determine our RIIO-ET3 investment plan and manage this uncertainty in a way which will help accelerate customer connections and allows us to manage complex 'shared driver' site developments with multiple or different investment drivers.

Uncertainty mechanisms (i.e. volume drivers and re-openers) will be needed to address:

- New needs that will emerge during ET3 (i.e., new or changing customer contracts, including as a result of connections reform);

- New information about existing customer contracts that may emerge (e.g. whether they have obtained planning permission) which may increase our confidence in some customers compared to our initial assessment and that will then need to be progressed;
- New or updated information that indicates that an individual (standalone) connection in the baseline may now be better progressed through a shared-driver investment or a multiple-customer investment; and
- Costs we will incur to deliver projects where we do not have sufficiently mature costs to include in our business plan for inclusion in the baseline that then need funding provided.

We provide our substantive comments on generation and demand connections volume drivers in ET3 in response to ETQ9. We consider that volume drivers are needed in ET3 but they must be suitably adapted to fund TOs to build ahead of need to maintain the pace of delivery required to enable the energy transition by avoiding delays in connecting customers and exacerbating system constraints that ultimately lead to higher costs for consumers.

During the RIIO-ET3 price control we will always seek to use volume drivers where they suitably reflect the costs of the activities we will deliver. This is because we consider that volume drivers represent the most effective way of enabling TOs to deliver at pace due to their automatic nature. However, we will need to use re-openers for projects where one or more of the following criteria are met:

- The activities we will deliver are represented by a relevant volume driver but the forecast costs of the project lie above or below an agreed cap or collar (respectively) to prevent network companies and consumers being exposed to windfall gains or losses;
- There is no volume driver to represent some or all of the activities we will deliver. If a component of the project can be accurately represented by a relevant volume driver, then we would seek to use the volume driver to determine this component of the total project cost.

We propose that the RIIO-ET3 framework should include three re-openers for network investment:

1. Cost only re-opener
2. Combined need and cost re-opener
3. Split need then cost re-opener

Below we set out the circumstances in which we propose each of the re-openers is used. This is followed by the common features we consider should be applied to each re-opener process. All reopeners should be designed to be as efficient and predictable as possible, to replicate as many of the benefits of the automaticity of volume drivers. Our proposal above for Ofgem (potentially working with NESO) to consider the controls that would allow TOs' customer confidence methodologies to be used to support a more automatic confirmation of need when re-openers are triggered is an example of such a mindset.

1 - Cost only re-opener

We agree with the SSMC proposal that there should be a cost only re-opener for projects where the 'need' was approved in the ET3 baseline (as described above) but suitably mature full project costs were unknown at that time. Once we have sufficiently mature full project costs the proposed cost only re-opener would be used to agree the cost allowance for the full project. This could be a standalone re-opener, or it could just utilise the second stage of the "split need then cost re-opener".

2 and 3 - Need and cost re-openers

We agree with the SSMC proposal that there is a requirement for a re-opener that covers need and costs where:

- the need and cost are not sufficiently certain to be confirmed through the business plan submission; and
- the costs of the project are not accurately represented by the volume drivers;

As for RIIO-ET2, where the MSIP re-opener addresses need and costs together and the LOTI re-opener (and ASTI framework) splits the need and cost assessment, the ET3 framework should similarly include two types of need and cost re-openers:

1. A combined need and cost re-opener for projects that do not require PCF and ECF
2. A split need then cost re-opener for projects that do require PCF and ECF

We would use the combined need and cost re-opener for less complex projects with shorter lead times. These projects would not require specific PCF and ECF and so combining the need and cost assessment would not slow the pace of delivery or prevent us from making relevant commitments to the supply chain, providing between the TO and Ofgem we are able to progress the reopener decision efficiently.

The split need then cost re-opener would be used for more complex projects with long lead times and where supply chain commitments are needed to progress the project at pace. Confirmation of need should automatically trigger PCF and ECF as is proposed for the major projects regime. This would allow TOs to maintain the pace of delivery on these projects and make relevant commitments to the supply chain without being exposed to undue risk. As set out in the 'additional considerations for the ET3 re-openers' section below, we anticipate regular engagement with Ofgem on our optioneering and the developing costs in the period between the split need and cost assessment

Additional considerations for the ET3 re-openers

To further maintain pace of delivery during the RIIO-ET3 period, it is essential that all re-opener assessments are conducted as frequently and quickly as possible, regardless of whether they are separated or combined. For example:

- **There should be no financial threshold for the re-openers** (other than if the costs are not accurately represented by the volume drivers). This would be a change from ET2 when the cost of the project determines whether the MSIP or LOTI re-opener processes should be used.
- **We propose that TOs should be able to make submissions at any time, provided we have given a minimum notice to Ofgem**. The current single and fixed window is inconsistent with the way in which projects need to be developed to maintain momentum and pace of delivery. Delays to progress could exacerbate constraints on the system and ultimately lead to higher costs for consumers. Restricting submissions to specific windows could lead to artificial peaks and troughs of work for the TOs and Ofgem that will naturally lead to a slower pace of decisions than is needed. We appreciate the demands this would place on Ofgem's available resource and, therefore, we consider that TOs would need to take a transparent approach to sharing their pipeline of reopeners and updating Ofgem on a more regular basis than is currently done through annual RRP. We are committed to exploring the appropriate frequency of such updates with Ofgem and putting such an approach in place for NGET.
- **Any needs assessment could be completed quickly if we can agree controls that give Ofgem confidence in our methodology for assessing our confidence in customer connections**. The scope of the needs assessment in the re-opener would therefore be limited to confirming that we have applied that methodology robustly and consistently based on the latest information available.
- **It is important that there is regular engagement with Ofgem as our projects approach submission**. We have a responsibility to keep Ofgem informed about our portfolio of reopeners, to help Ofgem resource plan and also to provide high quality submissions that can be processed quickly. This engagement would be designed to familiarise Ofgem with our optioneering and the cost of the project. This would provide an opportunity for Ofgem to challenge TOs and for TOs to address this feedback ahead of their submission. Consequently, we propose that Ofgem's assessment of our final submission would include a check for consistency with previous engagement and a targeted assessment on any areas of concern. If an ITA is applied to the project, we would expect Ofgem's assessment to be more streamlined and straightforward due to the additional assurance.
- **Each re-opener should use common documentation but the level of detail required should be tailored and proportionate to the investment in question.** For example, we would expect a cost only submission to refer to where the need has been agreed but not repeat the original justification for the need.
- **The level of evidence required should be proportionate to the materiality of the investment.** We describe above the disproportionate level of evidence and spent resource the RIIO-ET2 framework requires for low materiality investments (e.g. 39 pages to justify a £200k investment). Our proposed UIOLI fund would reduce this burden for low materiality investments and consider that more can be done to develop a proportionate approach to evidencing the needs, options considered and costs for the range of investments that would require the use of re-openers under our proposals for the ET3 framework.
- **All prior (ET1, ET2) efficiently incurred development spend** should be recoverable as part of the cost assessment in ET3 or through the ET2 true-up assessment. The same would be true for any projects extending into the next regulatory period after ET3. We raise this aspect as the recovery of non-load development and early procurement was removed from ET2 final determinations, and on the North Wessex Down reopener the spend incurred during RIIO-ET1 has been dis-allowed.
- The **cost assessment can be submitted on a late ex-ante or ex-post basis** to allow for certainty in project costs and this decision can be taken at National Grid's discretion. The assessment of efficient costs

should be in line with Ofgem's proposed approach to the ASTI assessment, where Ofgem can only re-open or challenge costs that it can show are 'demonstrably inefficient and wasteful expenditure' (DIWE).

ETQ8. What are your views on our proposal for 'shared drivers' projects, how TOs need to evidence investment requirements and how they can be held to account for delivery?

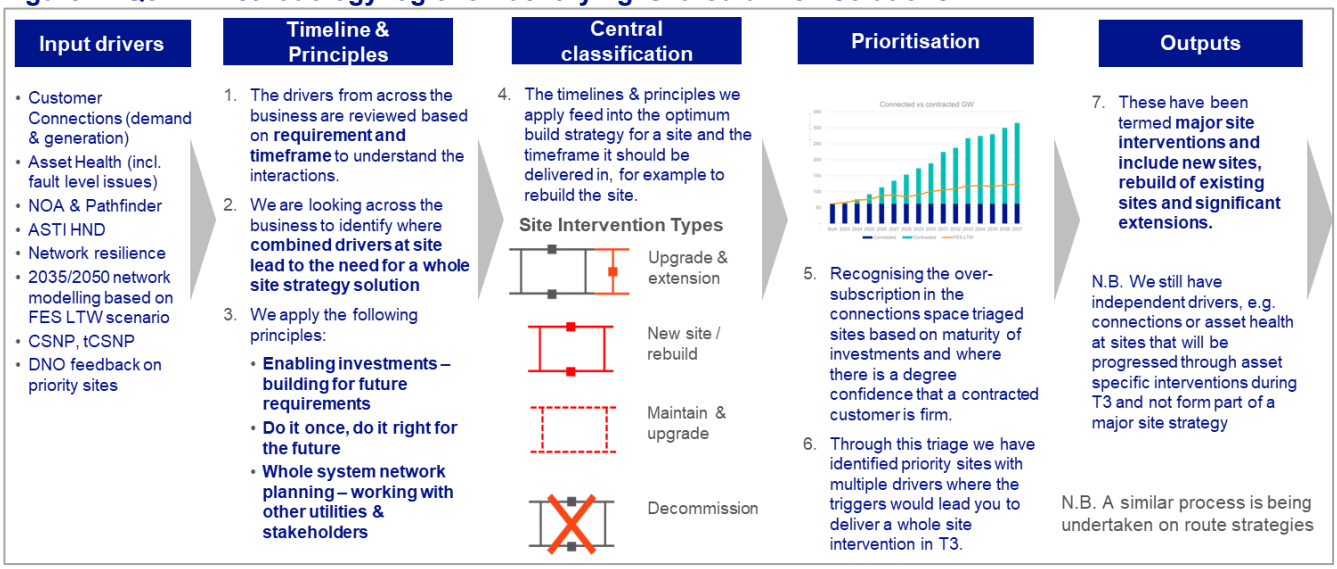
Key messages:

- It is important to agree the right definition of 'shared driver' projects so that it is clear which types of investment should be treated as a single project, instead of a collection of coordinated interventions. This will help provide clarity over the appropriate funding mechanism to use for these 'shared driver' schemes.
- We propose the shared driver definition means a single coordinated holistic solution proposed at a substation that has: (i) been developed to respond to a number of known or anticipated drivers; and (ii) changes the intervention(s) that would otherwise have been done at that time at that substation if each of the drivers was considered individually.
- Depending on the point at which the need, scope and cost of the 'shared driver' solution is known, and how complex the solution is, funding could be agreed through one of the following routes:
    - **Baseline funding** – where need and cost of the 'shared driver' solution(s) is fully scoped and included in the business plan submission.
    - **Cost-only re-opener** - where the 'need' for the 'shared driver' solution is approved through the baseline and the final scope and costs will be assessed through a re-opener. Approval of the 'need' in the baseline would provide automatic pre-construction funding (PCF) and early-construction funding (ECF).
    - **Combined need and cost re-opener** – where the need and cost of the 'shared driver' solution is scoped and can be assessed together during the price control.
    - **Split need and cost re-opener** – for more complex 'shared driver' solutions, where early confirmation of need is required to trigger PCF and ECF and allow for progress to be made before the final project assessment of scope and cost.
- We are keen to work with Ofgem to agree the level of evidence that would be required to support a 'needs case' assessment in order to trigger automatic PCF and ECF. We think this should be linked to us demonstrating our application of an agreed methodology or logic and we are working on developing more specific proposals to engage with you for how this should work across different types of network investment to help inform SSMD.
- For more complex and strategically important 'shared driver' solutions we think these could benefit from ITA assurance, in line with our proposals for the scope and role of the ITA set out in our response to ETQ 3.
- Where timely delivery of a 'shared driver' solution is important to achieving the intended consumer benefits, we think a delivery incentive will be appropriate, in line with the principles for a well-designed delivery incentive set out in our response to ETQ 4

<u>Process for identifying shared driver projects</u>

We welcome Ofgem's recognition in section 2.71 of the SSMC ET Annex that we are proposing a holistic approach for investments at specific sites. This is in line with the approach we have shared at recent ET Policy Load Working Groups, where we set out the process we are using to identify the need for coordinated whole site (and circuit/route) strategy solutions:

Figure ETQ8.1 – methodology/logic for identifying 'shared driver' solutions:



These investments will include cost-effective anticipatory investment, where appropriate. The use of anticipatory investment is in consumers interest as it should ensure that options look beyond the current needs of today and therefore remove the focus on just in time investments and shift the principle to '*do it once, do it right'*. The maturity of the understanding of the need and timing of requirements will inform the level of anticipatory investment, whether that is bundling load and non-load drivers at a site to identify a holistic solution or ensuring that that there is an option on adjacent land to limit constraints on future development.

It will be important to agree the right definition for these 'shared driver' works, as there is nuance to the types of projects that *should* fall into this categorisation. In the SSMC, Ofgem proposes to refer to these works as 'shared driver' projects which would include projects that relate to two or more drivers of investment, for example, an asset health driver and forecast generation requirement. However, we consider this misses a key feature of the projects that *should* fall into the definition, which is that a holistic solution is being developed which goes beyond simply coordinating a number of separate interventions and delivering them at the same time. Coordination of works within an aligned outage window is good system practice, but should not result in those works being treated as a 'shared driver' scheme. In that example, using the individual mechanisms (e.g. baseline asset health funding and a generation volume driver) is likely to be the right approach.

We have therefore proposed an alternative definition to reflect the projects that should be captured:

'Shared driver' solution Definition

Our alternative definition expands on the definition set out in 2.71 of the ET Annex:

"'Shared driver' solution" means a single coordinated solution proposed at a substation that has:

(i) been developed to respond to a number of known or anticipated drivers; and

(ii) changes the intervention(s) that would otherwise have been done at that time at that substation if each of the drivers was considered individually.

We do not consider that this should cover where you choose to combine works at a site at the same time to make use of outages or resource (internal or external). That is because the intervention delivered for each driver does not change on this basis and it would not meet limb (ii) of the proposed definition. There may be a reason to accelerate or delay the asset replacement work in time to optimise the use of outages or resource at the site. This is not a shared driver but good system access practice to use campaign outages and bundle works.

Working with the NESO, we will need to manage system access (a finite resource that is subject to change in response to different events) and shape how and when our network investments are executed. Taking a holistic approach enables us to optimise the use of the outages we have whilst maintaining reliability as we expand and upgrade the network. This way, we can design the optimum solution and deliver the work that will maximise overall value for consumers and make the best use of the outage and resources we have.

In some instances, the availability of the system may mean prioritisation decisions need to be made over the work we choose to deliver in the available outage, in particular in response to events which cannot be foreseen before

the start of the price control period.. This may require trade off decisions, for example, to manage the risk of ageing equipment on the network in order to connect customers and increase transmission capacity.

Application of the definition to our planned ET3 substation investments

We forecast having approximately 15 – 25 substation investments over the RIIO-3 period that meet our proposed definition of a shared driver project ('shared driver' solution). Given this scale of investment, it is important to create a framework that gives us the ability to engage early with the supply chain to secure the necessary capacity and is proportionate to the level of investment.

The scope of these projects will include the delivery of the holistic solution for that substation, and in some cases will also need to factor in the decommissioning and potential repurpose of the existing site, assets and materials. The cost of decommissioning a site can be challenging to estimate with sufficient confidence ahead of detailed assessment as it may need to cover both above ground and underground assets, where there could be a contamination risk. Therefore, in these cases we would like to agree with Ofgem how this can be managed as part of the cost assessment framework.

These investments form an important part of our RIIO-ET3 investment plan and demonstrate how we are approaching our network plan to upgrade and uprate our network, so it is fit for the future. These investments will also be an important route to managing the connections queue by creating connection ready opportunities for customers. In developing the solutions, we are considering the whole life cost of the investment and the benefits to consumers by delivering a holistic solution that will meet longer term needs rather than carrying out multiple individual interventions that are unlikely to together deliver a fit for purpose network.

Across our substation portfolio there is likely to be a significant interaction between asset health (including SF6), load and ASTI/tCSNP2/CSNP driven works, which may result in a 'shared driver' solution. For asset health interventions, it is therefore important for the baseline mechanism to provide flexibility and allow an increase or decrease in the number of interventions based on outcomes from site level optioneering. Additionally, we may need to delay or carry out an intervention sooner than originally planned. Decisions to do this would be based on the overall benefits to consumers. These decisions will allow us to optimise the delivery of our plan to support the decarbonisation of the system, provide additional capacity whilst ensuring continued reliability. This will enable us to deliver works at the best point in time to optimise the use of resources, outages and / or combine with other interventions at the site. This will enable us to maximise the value we create. This could also impact Network Operating Costs (NOC), for example, when we need to increase the number of inspection or maintenance activities for delayed interventions. Therefore, flexibility with the funding and reporting mechanisms for NOC are also important. A requirement to deliver specific interventions for any assets would be counterintuitive to enabling the flexibility required for asset health activities.

Interaction with ASTI works

As Ofgem notes in the SSMC, one of the relevant drivers to the 'shared driver' solutions could be upgrades or works directly triggered by CSNP or tCSNP2 projects. We are already seeing a few of the existing ASTI projects becoming a driver to some of our 'shared driver' solutions, as other load (demand and generation) connections are taken into account. In these cases, we will need to work with Ofgem to identify an appropriate route to adjust the proposed scope for the relevant ASTI projects, and understand the risk profile, to support the 'shared driver' solution without delaying the required progress for the delivery of the relevant ASTI projects and the significant associated consumer benefit.

In scoping future tCSNP2 and CSNP projects, the relevant analysis for whether those projects will trigger/impact shared driver Site Strategies can be done at an earlier stage and the appropriate funding routes agreed from the outset. Nonetheless, we think it is important to ensure that the major projects regime, the mechanisms for tCSNP2/CSNP projects <£100m and the mechanism for shared drivers share common features, as we suggest in our response, so that the selected funding mechanism works in a similar way.

Application of the definition to transmission routes (overhead lines and cables)

Our network investment plan will also include investments on transmission circuits comprised of overhead lines and / or cables that are triggered by more than one driver. In the case for overhead lines, where the combination of drivers such as asset health, customer or NESO driven requirements does not change the intervention needed e.g. reconductoring, this would not meet the definition of a holistic solution.

For cables, again we consider that the intervention would not change, e.g. this would remain as a cable investment, but the length / location ends may be different based on the combination of requirements. However, we consider that the delivery of cable investments whether direct buried or in a tunnel and decommissioning existing routes is a

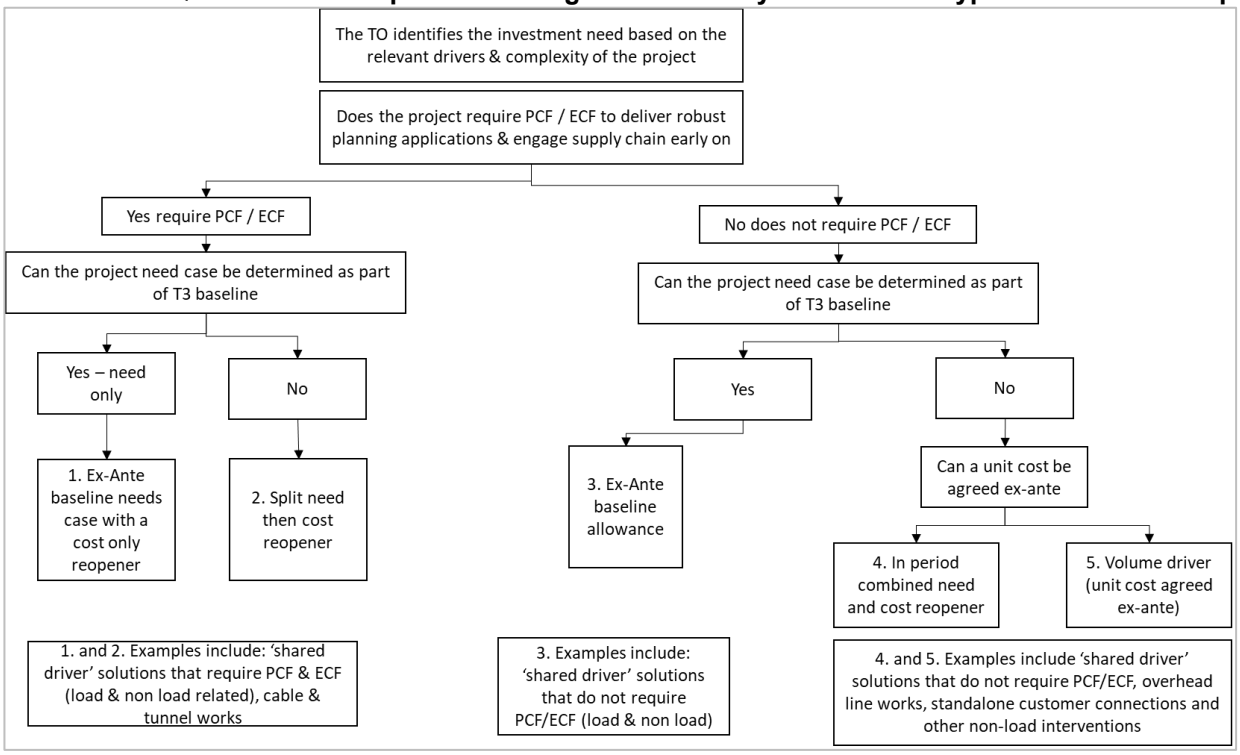
complex activity and will always need to be addressed through the baseline plan or reopener rather than a volume driver. While we do not consider that these investments meet the 'shared driver' solution definition, we have included them in Flowchart ETQ8.2 below to demonstrate how they would be assessed against the funding mechanisms.

Appropriate funding mechanisms

We do not think a single funding mechanism is appropriate for 'shared driver' solutions. In determining the appropriate funding mechanism, the two key factors will be (i) the complexity of the investment, which will influence whether PCF and ECF is required to enable the pace of delivery required; and (ii) the point at which need and cost certainty will arise.

In Flowchart ETQ8.2 below we have set out the different investment types and the associated funding mechanism that we consider is appropriate. We think it is for the TO to identify the investment need and solution based on the relevant drivers, but we acknowledge that for some sites and circuits there will be an interaction with the tCSNP2 and CSNP. We have therefore been having early engagement with the NESO to discuss how we can ensure that the approach we are taking to identifying and developing the possible solution(s) is consistent with the outputs from the tCSNP2 and future CSNP.

Flowchart ETQ8.2. NGET's Proposed Funding Mechanism by Intervention Type and PCF/ECF requirement



We note that the funding mechanisms identified in Flowchart ETQ8.2 would not be limited to 'shared driver' solutions and OHL/cable work. In some places there may be some ambiguity between which route could be used and the TO should determine the appropriate route for the project. This same set of mechanisms would also be appropriate for load related investment (as set out in our response to ETQ7).

Ex-ante needs and cost allowances

We agree with the SSMC proposal that baseline allowances for full investment delivery should be made where we can evidence a clear needs case and include sufficiently mature investment costs in our business plan submission.

The need for PCF and ECF

Several of the shared driver solutions will be strategically important investments that enable us to deliver a future proofed, connection ready network. Some will also be key enablers for ASTI, tCSNP2 and CSNP investments, meaning our ability to deliver them at pace and on time will also be key. For new build and re-build solutions, designing the optimum solution is likely to be complex and involve an appropriate level of optioneering, engagement with the supply chain and local stakeholders and appropriate preparatory work, including surveys, supply chain commitments, planning applications, before the final solution can be determined. In these instances, it

is critical that the regulatory mechanism enables the 'need' and cost assessment to be split, with the 'need' approval triggering PCF and (where required) ECF.

The development and delivery of both overhead line and cable projects have a long runway to delivery and they are often on the critical path to achieving net zero. For cable projects the development phase can take between one and three years, dependent on whether a tunnel is required. In these cases, access to early development funding is essential given the significant costs and resource that are required to determine a potential solution. The CSNP/tCSNP2 will confirm need (via NESO) and automatically trigger PCF and ECF for projects included in those plans. We have suggested that the application of our customer confidence methodology set out in our response to ETQ7 should help streamline Ofgem's assessment of the 'need' for connections works which will trigger PCF and ECF. We are keen to work with Ofgem to agree the level of evidence that would be required to support a 'needs case' assessment in order to trigger automatic PCF and ECF. We think this should be linked to us demonstrating our application of an agreed methodology or logic and we are working on developing more specific proposals with you for how this should work across different types of network investment to help inform SSMD.

We propose that the RIIO-ET3 framework should include three re-openers for network investment:

1. Cost only re-opener
2. Combined need and cost re-opener
3. Split need then cost re-opener

Below we set out the circumstances in which we propose each of the re-openers is used. This is followed by the common features we consider should be applied to each re-opener process. All reopeners should be designed to be as efficient and predictable as possible, to replicate as many of the benefits of the automaticity of volume drivers. Our proposal above for Ofgem (potentially working with NESO) to approve an investment methodology as part of the ET3 Final Determinations which can support a more automatic assessment of 'need' as an example of such a mindset.

1 - Cost only re-opener

We agree with the SSMC proposal that there should be a cost only re-opener for projects where the 'need' was approved in the ET3 baseline (as described above) but suitably mature full project costs were unknown at that time. Once we had sufficiently mature full project costs the proposed cost only re-opener would be used to agree the cost allowance for the full project. This could be a standalone re-opener, or it could just utilise the second stage of the "split need then cost re-opener".

2 and 3 - Need and cost re-openers

We agree with the SSMC proposal that there is a requirement for a re-opener that covers need and costs where:

- the need and cost are not sufficiently certain to be confirmed through the business plan submission; and
- the costs of the project are not accurately represented by the volume drivers;

As for RIIO-ET2, where the MSIP re-opener addresses need and costs together and the LOTI re-opener (and ASTI framework) splits the need and cost assessment, the ET3 framework should similarly include two types of need and cost re-openers:

3. A combined need and cost re-opener for projects that do not require PCF and ECF
4. A split need then cost re-opener for projects that do require PCF and ECF

We would use the combined need and cost re-opener for less complex projects with shorter lead times. These projects would not require specific PCF and ECF and so combining the need and cost assessment would not slow the pace of delivery or prevent us from making relevant commitments to the supply chain, providing Ofgem's assessment is prompt.

The split need then cost re-opener would be used for more complex projects with long lead times. Confirmation of need should automatically trigger PCF and ECF as is proposed for the major projects regime. This would allow TOs to maintain the pace of delivery on these projects and make relevant commitments to the supply chain without being exposed to undue risk. As set out in the 'additional considerations for the ET3 re-openers' section below, we anticipate regular engagement with Ofgem on our optioneering and the developing costs in the period between the split need and cost assessment.

Additional considerations for the ET3 re-openers

To further maintain pace of delivery in ET3, it is essential that all re-opener assessments are conducted as frequently and quickly as possible, regardless of whether they are separated or combined. For example:

- **There should be no financial threshold for the re-openers** (other than if the costs are not accurately represented by the volume drivers). This would be a change from the RIIO-ET2 framework when the cost of the project determines whether the MSIP or LOTI re-opener processes should be used.
- **We propose that TOs should be able to make submissions at any time, provided we have given a minimum notice to Ofgem**. The current single and fixed window is inconsistent with the way in which projects need to be developed to maintain momentum and pace of delivery. Delays to progress could exacerbate constraints on the system and ultimately lead to higher costs for consumers. Restricting submissions to specific windows could lead to artificial peaks and troughs of work for the TOs and Ofgem that will naturally lead to a slower pace of decisions than is needed. We appreciate the demands this would place on Ofgem's available resource and, therefore, we consider that TOs would need to take a transparent approach to sharing their pipeline of reopeners and updating Ofgem on a more regular basis than is currently done through annual RRP. We are committed to exploring the appropriate frequency of such updates with Ofgem and putting such an approach in place for NGET
- **Any needs assessment could be completed quickly if we can agree controls that give Ofgem confidence in our methodology for assessing our confidence in customer connections**. The scope of the needs assessment in the re-opener would therefore be limited to confirming that we have applied that methodology robustly and consistently based on the latest information available.
- **It is important that there is regular engagement with Ofgem as our projects approach submission**. We have a responsibility to keep Ofgem informed about our portfolio of reopeners, to help Ofgem resource plan and also to provide high quality submissions that can be processed quickly. This engagement would be designed to familiarise Ofgem with our optioneering and the cost of the project. This would provide an opportunity for Ofgem to challenge TOs and for TOs to address this feedback ahead of their submission. Consequently, we propose that Ofgem's assessment of our final submission would include a check for consistency with previous engagement and a targeted assessment on any areas of concern. If an ITA is applied to the project, we would expect Ofgem's assessment to be more streamlined and straightforward due to the additional assurance.
- **Each re-opener should use common documentation but the level of detail required should be tailored and proportionate to the investment in question.** For example, we would expect a cost only submission to refer to where the need has been agreed but not repeat the original justification for the need.
- **The level of evidence required should be proportionate to the materiality of the investment.** For example, in the 2024 MSIP window we made an MSIP submission for a £200k investment in a new bay. To allow for evidence demonstrating detailed options assessment and consideration of deliverability risk, document totalled 39 pages. We consider that this required a disproportionate level of evidence and spent resource for us to produce the submission and for Ofgem to assess it.
- **All prior (ET1, ET2) efficiently incurred development spend** should be recoverable as part of the cost assessment in ET3 or through the ET2 true-up assessment. We raise this aspect as the recovery of non-load development and early procurement was removed from ET2 final determinations, and on the North Wessex Down reopener the spend incurred during RIIO-ET1 has been dis-allowed.
- The cost reopener should allow for **atypical projects to be submitted** where the project costs are above or below an updated volume drive cap/collar, consistent with the MSIP mechanism in RIIO-ET2
- The **cost assessment can be submitted on a late ex-ante or ex-post basis** to allow for certainty in project costs and this decision can be taken at National Grid's discretion. The assessment of efficient costs should be in line with Ofgem's proposed approach to the ASTI assessment, where Ofgem can only re-open or challenge costs that it can show are 'demonstrably inefficient and wasteful expenditure' (DIWE).

How TOs can evidence investment requirements

To identify shared driver solutions, we are using our driver assessment methodology, as set out in Figure ETQ8.1 above. We have had some initial engagement with the NESO to take them through this approach and would like to get to a position where both NESO and Ofgem are comfortable with this methodology. This would mean that needs case approval should be more efficient and streamlined provided we demonstrate that we have applied the

methodology robustly and consistently. This is in line with the approach suggestion for connections works being progressed through a re-opener rather than a volume driver.

We think the process could also be streamlined by enabling a needs case assessment to be made across a portfolio of works together. For example, this could be a sub-set of works in a specific region or that respond to a specific set of drivers, and could support the approach being taken with our supply chain (i.e. providing commitments across a programme of works). This is also likely to support the need to progress at pace. We are exploring a similar approach on the LOTI-lite/early needs case projects currently being discussed with Ofgem.

We anticipate regular engagement with Ofgem on our optioneering and our developing costs in the period between the split need and cost assessment. We recognise that the purpose of the cost assessment is to determine the efficient cost allowance for the delivery of the project. We consider that the key components of this will include:

- Confirmation that the needs case is still applicable.
- Confirmation of the final scope.
- Demonstration that we have confidence in the cost estimate, which could be via final procurement offer.
- Identification of risks and opportunities associated with the project build.
- Demonstration that we are ready to proceed with delivery.

The cost assessment process should not reopen the needs case and this should be a high-level confirmation no fundamental changes have taken place since the approval which changes the overall benefits for consumers of the project. We expect that we will share our optioneering and cost benefit analysis with Ofgem between need confirmation and final project assessment. In our proposed approach, we envisage these not being reopened when costs allowances are set, as this would create significant delays to the process.

Where a project has an ITA, the assurance provided through this route should ensure that there is not a backwards focus. For all projects that fall outside of CSNP and / or don't have an ITA we would welcome further engagement with Ofgem to agree how we can provide sufficient comfort to Ofgem on the processes we have taken, to ensure need and optioneering are not re-opened at the final project assessment.

As part of the current project assessment framework there is a requirement to *'provide clear evidence of negotiations with external suppliers*'. We are committed to demonstrating value for money in the cost of delivering projects. We are already seeing that the geo-political environment and increasing scale of network build out, both in the UK and globally, are creating pressures on our supply chain. We are already experiencing a decrease in appetite from the supply chain to engage in tenders for projects (see separate Supply Chain Annex for evidence). The evidence we are likely to submit as part of project assessments will centre on how we have applied an appropriate supply chain strategy. This is likely to evidence use of the frameworks available to us and, where we have directly allocated projects, how we have challenged the final procurement offer. Through the SSMD process we would welcome agreement from Ofgem on the type of evidence that will be expected in demonstrating negotiations with external supplier(s).

How TOs can be held to account for delivery of shared driver projects

In reference to the part of question ETQ8, '*how TOs can be held to account for delivery of shared driver projects*', we consider that a number of 'shared driver' solutions are going to be of strategic importance and will be important to progressing net zero and unlocking consumer benefits. We therefore think that some of these would benefit from an ITA and some might be suitable for an ODI-F on timely delivery and the points made in responses ETQ3 and ETQ4 would also apply here.

ETQ9. What are your views on our proposal that there is a need for generation and demand connections volume drivers in RIIO-ET3, and how, if at all, they should change relative to those used in RIIO-ET2?

We agree with the SSMC proposal that there is a need for generation and demand volume drivers in RIIO-ET3. As described in response to EQ7, this should be as part of a suite of funding mechanisms for load related expenditure.

The ET3 framework should recognise the need for the generation and demand volume drivers to represent the range of load-related expenditure activities that are repeatable, quantifiable and for which the costs of delivery can be determined ex-ante. This should include activities such as overhead line reconductoring and embedded generation.

The specification of the ET3 volume drivers must be adjusted to enable TOs to deliver connections in a more strategic way, so that the network is available when the need crystallises. This will avoid delays in connecting customers and mitigate system constraints, in turn reducing overall costs for consumers. We set out our key requirements for the ET3 volume drivers below.

1. **ET3 volume drivers need to allow TOs to invest in delivering a connection ready network which delivers high value optionality**

The generation and demand volume drivers in the RIIO-ET2 framework currently fund the TOs when the customer physically connects to the network. This means that a volume driver pushes TOs to invest only when it is certain the output will be used within the price control period. It also encourages TOs to develop the network 'just in time' to avoid a funding gap between delivering the investment and the customer making the physical connection.

To deliver the scale and pace of connections required in the coming years and ensure the network is ready to connect the customers (both generation and demand) and meet the increasing demands on the network in consumers' interests, TOs need to be able to deliver a 'connection ready' network, which allows customers to connect when they are ready rather than wait for connections. This will require us to proactively invest in the network to create connections where they are needed so they are available when needed. Therefore, the volume drivers will need to provide funding for connections and the inventory of options created for future connections. They should provide funding when work is completed and not at the point each connection is used.

In response to question ETQ24 we set out possible options for how we should be incentivised to ensure that connections options we make available are sufficiently utilised. We also propose that we should report annually on the projects we forecast to deliver, those we have delivered and those that are utilised. We would provide narrative to transparently explain this information.

2. **The specification of volume drivers should be reviewed ahead of ET3**

The ET2 volume drivers provide an allowance for each MW or MVA delivered. This has worked well for the RIIO-ET2 price control when we have delivered connections to meet specific needs but for ET3 we will need to consider different drivers to ensure that the costs of delivering connections options (e.g. civils and land) for a 'connections-ready' network are captured.

We propose that Ofgem should agree to further load working group sessions that will allow Ofgem and the TOs to work jointly on how these mechanisms are revised for ET3. Through the working group we expect to agree with Ofgem the principles that TOs should consider when developing their recommendations for volume drivers to avoid abortive work.

3. **Ofgem should enhance certainty of funding for investments that span price controls**

The RIIO-ET2 price control includes a provision in the volume drivers that allow costs to be incurred in ET2 to enable delivery in year one or two of RIIO-ET3. This was introduced to allow TOs to continue invest with funding confidence at the end of a price control.

In section 1 above, we set out that the ET3 framework must include volume drivers that fund TOs to proactively invest in the network. Lead times for delivering investments are typically more than three years and so an investment begun in the final year of ET3 would not have its funding guaranteed in ET4. We recommend that the duration for which the costs determined by a volume driver can be carried over between control period should be extended beyond two years. This will allow TOs to maintain pace when enabling delivery of government's net zero targets.

Minimising networks' impact on the environment

Key messages:

- We agree with retaining the Insulation and Interruption Gases (IIG) ODI-F and including SF6 commentary in the Annual Environmental Report (AER). This will maintain the incentive on us to manage SF6 assets and reduce leakage.
- We agree with retaining funding to support mitigation projects that reduce the visual impacts of existing infrastructure in designated areas where this is led by external stakeholders and aligned with ongoing consumer willingness-to-pay. We support the Stakeholder Advisory Group bringing forward projects in a way that aligns load-related uprating requirements or asset replacement with visual mitigation projects to make efficient use of resources.
- We agree with Ofgem's proposal to retain the SF6 Asset intervention PCD and re-opener and Net Zero Carbon Construction UIOLI. We don't agree with Ofgem's view to remove the reducing carbon emissions from operational transport PCD.

ETQ10. What are your views on our minded-to proposal of retaining the IIG ODI-F during RIIO-ET3, and our additional commentary around the incentive and its associated reporting requirements?

We agree with Ofgem's proposal to retain the IIG ODI-F. This mechanism has incentivised National Grid to drive improvement in managing SF6 assets and reduce SF6 leakage. We also agree to Ofgem's proposal for including SF6 commentary to the AER. This will ensure network companies remain focussed on reducing SF6 leak and further reinforce what network companies are doing to manage their SF6 assets. The ODI-F and the AER commentary complement each other, and we are supportive of this proposal.

As part of RIIO-2, National Grid also has a SF6 Asset intervention PCD, and reopener. The PCD supports the long-term strategic intervention based upon the forecast emissions and helps to manage the large volume of SF6 assets on our network. The re-opener allows National Grid to respond to changing circumstances in either behaviour of assets or the availability of emission reduction. We would like to retain these as set out in our response to ETQ13.

It is important that the SF6 management, and associated funding mechanism are considered holistically to ensure that the necessary year on year SF6 improvements can be implemented. We propose keeping existing funding mechanism as per Ofgem's proposal.

With regards to Ofgem's proposal to include a dead-band, further clarity will be required from Ofgem to understand how the dead-band will interact with emission reduction science-based targets and the proposed funding mechanism, without this clarity it is difficult for us to comment on a need to introduce a dead-band. We are open to discuss the dead-band mechanism with Ofgem and network companies

ETQ11. What are your views on retaining funding to support mitigation projects that reduce the visual impacts of existing infrastructure in designated areas?

The need for projects to mitigate the visual impact of existing infrastructure in designated landscapes is led by external stakeholders and dependent upon ongoing consumer willingness-to-pay. In England & Wales, there are potential high-priority visual impact mitigation projects that would involve major interventions (e.g. undergrounding of overhead line) that have not yet been addressed.

Therefore, at the request of the independent Visual Impact Provision Stakeholder Advisory Group[1], NGET will repeat the consumer willingness-to-pay exercise for RIIO-ET3 for potential further interventions. This will need to be undertaken on a non-route-specific basis (as was the case for RIIO-ET2) because we have not begun local stakeholder engagement for specific ET3 candidates. This is because it would be wrong to do so (raising the expectations of local stakeholders) until (and if) an ET3 provision has been agreed. It will therefore not be possible to take "the views and priorities of local communities into account" when making our RIIO-ET3 business plan submission (as suggested in the Consultation) because we cannot engage at a route-specific level and create a local expectation until we know there is sufficient ongoing support for this type of investment from Ofgem. The analysis will be submitted alongside our Business Plan in late 2024.

Once we have an allowed ET3 provision and before we start development of any new major projects, we will consult widely with local communities to assess their appetite for the project. As a result, we do take local

[1] The national VIP Stakeholder Advisory Group is made up of senior representatives from organisations dedicated to conserving and enhancing the landscape throughout England and Wales. For more details, please visit our website: Stakeholder Advisory Group | National Grid ET

considerations into account in a timely fashion. For example, we have redesigned project elements such as the headhouses in Eryri (Snowdonia), the cable routes in Dorset and North Wessex Downs, and the sealing-end compound location and approach to ecology in Peak East. Local communities are also extensively engaged and consulted right through development and into delivery, often bringing an unexpected dividend, e.g. engagement with the extensive archaeology in Dorset and the likely contribution to industrial history at the World Heritage Site in Eryri.

In terms of the supply chain challenge, this has been recognised throughout the existence of the Visual Impact Provision (VIP); for example, it was considered in NGET's RIIO-ET2 submission. It is the reason why NGET has endeavoured to have no more than two major undergrounding VIP projects in active delivery in any one year; where practicable, each new project is broadly phased to start on site as an existing one concludes. The demand for underground cabling will increase in RIIO-ET3 due to the works required to deliver 'net zero', affecting both available cable manufacturing capacity and installation contractor resources. However, major transmission cable projects are relatively few in number and require specialist skills and equipment. Having a small number of VIP projects throughout RIIO-ET1 and RIIO-ET2 has assisted in developing and sustaining UK cable installation expertise. This may continue to be the case in the RIIO-ET3 period and beyond, so it could be helpful to have the ability to bring forward these more flexible (in terms of timing) projects to in-fill between projects for other network drivers where and when strong local stakeholder support coincides with the ability to maintain critical 'net zero' supply chain capacity.

Deliverability constraints more widely (including system access) are the reason why NGET supports the Stakeholder Advisory Group in bringing forward projects in a way that aligns load-related uprating requirements or asset replacement with visual mitigation projects to make efficient use of resources. Examples of this are the Eryri and North Wessex Downs VIP projects, both of which will ultimately deliver uprated cable circuits that match what would otherwise be uprated overhead line circuits and support wider network reinforcement to facilitate the connection of new generation - including the renewable generation required to achieve 'net zero'. Looking longer term, on all major projects including the VIP projects, NGET works with local education establishments to inspire interest in STEM subjects (Science, Technology, Engineering & Mathematics) in the next generation. The three VIP projects delivered to date and in delivery have undertaken education projects which, although they will not produce cable engineers in time for RIIO-ET3, should help to grow interest in both STEM and environmental sciences in the future.

Working in designated landscapes with very specific environmental constraints has also driven NGET and its contractors to innovate and develop techniques for working in a sensitive and sustainable way. For example, the Peak East VIP project was NGET's first project to achieve a Biodiversity Net Gain of 18%, significantly exceeding our commitment to deliver at least 10% Biodiversity Net Gain. Both Dorset and Peak East were shortlisted for national awards, the former winning its category and Peak East being 'highly commended'. Learning from VIP projects is being applied to future new build projects, for the benefit of all.

In addition to the major undergrounding projects, NGET's external stakeholders (as represented by the independent VIP Stakeholder Advisory Group) strongly support the continuation of funding for Non-Technical Mitigation Projects that utilise landscaping and environmental enhancement to mitigate the visual impacts of existing infrastructure; for England & Wales, these are known as Landscape Enhancement Initiative (LEI) projects. Their aim is to make a positive contribution to natural beauty, wildlife and biodiversity, cultural heritage and public enjoyment by carrying out local improvements that shift emphasis away from the visual impact of existing transmission infrastructure. These improvements may include landscaping measures such as management of hedgerows, tree planting, changes to public accesses (trails, cycleways, footpaths, etc) and enhancing historic features. The projects delivered to date have been extremely well-received, including a new accessible boardwalk at RSPB Minsmere in the Suffolk Coast & Heaths Natural Landscape which won an Accessible & Inclusive Tourism Award and numerous farmer-led partnership initiatives in the Clwydian Range & Dee Valley AONB and Eryri National Park to mention a small few. (A report summarising LEI achievements is available from our dedicated website[2].) We therefore believe that LEI projects are valuable and should continue.

As a minimum, RIIO-ET3 funding will be required to complete the works on the Eryri, North Wessex Downs and Cotswolds VIP projects and any active LEI projects. The first has been approved by Ofgem and is in delivery, funding for the second is being considered by Ofgem and a funding application for the third will be made later in 2024. LEI projects can span two or more years, and so it is probable that staged payments will be required after 31 March 2026 to complete some projects.

[2] https://www.nationalgrid.com/electricity-transmission/document/149611/download

As a point of detail, the RIIO-ET2 expenditure cap for Non-Technical Mitigation Projects that utilise landscaping and environmental enhancement to mitigate the visual impacts of existing infrastructure is £11.6m in 2018/19 prices over the RIIO-ET2 period for NGET, not the £7.5m stated in the Consultation (paragraph 2.110).

We also refer Ofgem to the submission on behalf of the Visual Impact Provision (VIP) Stakeholder Advisory Group dated 6 March 2024 in response to ETQ11, a copy of which we have enclosed with our response.

ETQ12. Do you agree with our assessment of the bespoke outputs described in Table 7?

Three outputs were assigned to National Grid in Table 7. We have set out our feedback against each one below:

- **SF6 Asset intervention PCD and re-opener.**

We agree with Ofgem view for RIIO- ET3 and the need to retain the SF6 Asset intervention PCD and re-opener. Meeting the UK and National Grid's 2050 Net-Zero goals will require a shift towards condition based, pre-emptive interventions, to ensure leakage rates are managed and aligned to IEC 62271-203.

Our proposal for RIIO-3 is to utilise the PCD to address sites currently exhibiting leak-rates, alongside opportunities to further develop retro-fill solutions and condition assess a selection of non-leaking assets. The re-opener will provide an opportunity to undertake further interventions should they be required following the condition assessment of those initial small selection on non-leaking assets.

- **Net Zero Carbon Construction UIOLI**

We agree with Ofgem's view to retaining the Net Zero Carbon Construction UIOLI funding mechanism. We are currently defining our approach to offsetting, and the use of the Net Zero Carbon Construction UIOLI fund in ET2.

To date, we have carried out a technical consultation, with support from Sustainability First. We consulted on our eight principles on what type of projects we would invest in, to ensure we only support high quality projects that will deliver effective outcomes. We also proposed a hierarchy-based approach, prioritising UK based projects that deliver benefits such as social value or nature restoration.

Twenty technical experts in carbon/sustainability from across industry, private and public sector and industry groups took part in the consultation and provided strong support for our proposed approach. We will now focus on developing strong governance to manage this and will be establishing our first offsetting framework to enable us to spend the fund over the remainder of ET2. We propose to carry these principles and governance through into RIIO-ET3.

We are happy to share further information with Ofgem.

- **Reducing carbon emissions from operational transport PCD**.

We do not agree with Ofgem's view to remove the reducing carbon emissions from operational transport PCD in RIIO-ET3. We have experienced challenges during RIIO-ET2 in replacing all our fleet with zero emissions vehicles due to recognised supply chain delays, lack of availability and changes to government policy.

For RIIO-ET3, we propose retaining the PCD for reducing carbon emissions from operational transport because:

- The forecast increases in the amount of work to be delivered will result in an increase in resource, which will have a subsequent requirement for an increased number of low carbon emission vehicles in our fleet.
- At present, there are also no suitable EV alternatives on the market for large panel vans, 4x4s and HGVs.
- National Grid has a responsible business commitment to deliver an environmental action plan that drives us towards a reduction in greenhouse gas emissions and consider that this PCD is an important driver in ensuring we deliver against this target.

Compliance with safety legislation

ETQ13. Do you agree that we should retain the RIIO-ET2 approach to safety, or do you consider there is anything more we could do?

We agree with Ofgem's position to retain the RIIO-ET2 approach to safety and agree it is not appropriate for Ofgem to attach additional outputs to safety given existing HSE legislation requiring the TOs to design and operate their networks to ensure the safety of the public and their employees. As a business, safety is a fundamental part of our core values and we are committed to carry out our operations, and construction works, across our contractors and wider workforce in a safe way, driving towards the highest level of safety maturity.

Network Access Policy (NAP) LO

ETQ14. Do you agree with our proposal to retain the NAP for RIIO-ET3, and do you have any views on if and how it should be updated?

We agree with the proposal to retain the NAP for RIIO-ET3. The NAP document explains the working relationship between the TOs and the NESO and sets out the TOs' commitments in facilitating the delivery of their business plans while ensuring that the NESO continues to operate the transmission system in a safe, secure, and efficient manner. We think it is important for this relationship to continue to be defined explicitly particularly as we move into a time of change with the formation of the NESO and evolution of the electricity network.

Coordination between TOs and NESO to maximise system access will be more important than ever in the ET3 period – it will be one of the biggest constraints to the delivery of the plan. Given this, TOs need clarity on the appropriate level of risk to embed in network operations to ensure work can be delivered while also maintaining reliability and resilience. Our view is that this can be achieved through modifications to the NAP to include NESO commitments that complement those set by the TOs. Service level agreements between the parties will act as an incentive, over and above the licence requirement, to ensure both parties deliver to their commitments.

We propose that updates to the NAP should include the following commitments on the NESO:

- to provide a timely view of system constraints associated with the system access requirements submitted by the TOs. This will ensure TOs can develop the most efficient and whole system economic project solutions and ways of delivering projects, in consumers' interests. Where outages result in high constraint costs, the TOs can explore agile ways of delivering the project or ways of reducing outage delivery times, for example through shift working, securing the necessary funding and incentivisation through the SO:TO incentive. While we understand that system dynamics can result in short term need for changes, we believe that this long-term view will significantly reduce the number of outages delayed or cancelled due to system constraint cost. Improving information about system constraints will also support TO efforts in early identification of enhanced solutions that deliver consumer value under STCP 11.4 and the SO-TO Optimisation ODI; and
- to timely signing in of outages into the delivery plan and agreeing to plan freeze at a year ahead such that any outage changes requested within year are subject to cost recovery as defined in STCP11.3 Short term outage agreements make planning incredibly difficult and inefficient with a high risk of short-term cancellations which are costly and disruptive to the whole outage plan often with significant knock-on consequences. With the ET3 plan, there will be little slack in the plan to accommodate delays therefore it will be of paramount importance for the TOs and the NESO to agree on a deliverable plan a year ahead of delivery to enable efficient delivery of the planned work, which is the consumers' interest. We acknowledge that we operate a dynamic system where faults and system issues arise requiring in-year changes to the plan. A hybrid generation background coupled with less predictable weather patterns also adds to the challenges in operating the system. We therefore understand the need for flexibility in outage planning and the need for changes or delays in outage date agreements. Where these changes are justified, we require a clear timely signal of the approval or not of the outage up to a week in advance of outage date so as to enable efficient outage planning and delivery of our commitments.

We are happy to discuss and agree further commitments with the NESO through the regular NAP working groups that are already established.
Additional updates to the NAP could include a review of the NAP KPI reporting to include a qualitative analysis of the performance metrics. Quantitative reporting can result in incorrect conclusions for example, in some instances, changes to outage plan within year is beneficial to end consumers such as where an outage has been moved to save constraint costs. This can be missed when viewing numerical metrics without an accompanying narrative.

Energy Not Supplied (ENS) ODI-F

Key messages:

- Maintain ENS as an ODI- F with no increase in incentive strength. We do not agree with a transition into a minimum obligation standard.
- Agree to updating the value of VoLL as consumer patterns have changed in the last 10 years and likely to continue to change. VoLL is used in the NARM System Consequences model used by NGET to make asset investment recommendations. It is hard to assess the extent of the impact of a change in VoLL on investment decisions as several other factor feed into investment decisions made.
- The definition for exceptional events is sufficiently broad, covering all events beyond a TO's control.

- We do not agree with setting a materiality threshold for exceptional events as multiple small events can add up to material consequences and therefore this would expose TOs to undue risk/penalty outside of their control. Therefore, to make such a change would undermine the purpose of the arrangements around exceptional events.
- There is no need to add any modifications on the ENS to increase circuit availability as it is reported in C17 reports.

Context

We plan to deliver an ambitious plan in ET3 which will require unprecedented levels of system access, which is a finite resource. Internal modelling of future work volumes shows that by 2026 the requirement for system access every year will exceed the recent historic maximum. This carries the risk of reduced system resilience and increased constraint costs, which will have to be managed between NESO and TOs. Additionally, climate change impact is set to increase system vulnerability with more frequent severe weather patterns.

We recognise that delivering a low-cost transition whilst maintaining network reliability is of paramount priority to energy consumers and stakeholders. Therefore, it remains NGET's priority to continue to economically maintain high network reliability despite the challenges of system vulnerability due to unpredictable weather events and the requirement for more system access to deliver the plan.

ETQ15. Should we retain the ENS incentive as an ODI-F and strengthen performance targets, or transition to a minimum obligation standard?

The ENS should be retained as an ODI-F. No changes are needed to the incentive – as evidenced by the high levels of performance achieved. It continues to be NGET's priority to deliver a secure network, the biggest incentive being doing the right thing for our customers and all energy consumers, as a reliable network is valuable to all of us. We therefore do not think a stronger incentive is necessary and would not provide any additional benefit to consumers. The tighter targets set in ET2 had the desired effect, resulting in substantial improvements in ENS performance compared to RIIO ET1.

For NGET, the improved performance has been as a result of a cultural shift towards prioritising demand security, with more mitigation actions taken to reduce the likelihood of demand loss during outages particularly where the outages place demand at single circuit loss risk. We are proud of our performance in the first two years of RIIO ET2 where we have achieved a network reliability of 99.99997%. However, we consider that further tightening of the incentive targets would risk the delivery of the ET3 investment plan, by incentivising restrictions to system access – which is a key constraint to the pace of the delivery of the plan. Moreover, it is not desirable for a network to be operated with an unbalanced focus on availability as it eventually becomes unreliable due to lack of maintenance, or the cost of maintenance increases as expensive actions are taken to secure demand during outages. It is therefore necessary that the correct balance between network availability and system access is maintained. Strengthening the incentive skews that balance further away from taking more network outages to deliver the required outputs, which is not in consumer's interest.

We also consider that the context of the ET3 regulatory period will require additional efforts from TOs to maintain the historic high levels of performance. With climate change making weather pattens increasingly unpredictable and extreme weather events such as storms and heat waves occurring more often, the likelihood of system faults will increase significantly. Additionally, as set out above due to the scale of the build needed, system outages will become increasingly necessary, resulting in reduced network resilience. This will make it significantly more challenging to achieve historical levels of ENS performance resulting in natural strengthening of the incentive – hence why the incentive should remain in its current form.

We are not in favour of the ENS transitioning to a minimum obligation standard as we believe having an incentive maintains a sharp focus on the issue and therefore encourages the actions to maintain or improve on the standard of performance. We strongly believe that maintaining network reliability should continue to be a top priority for networks and therefore an incentive to ensure this priority is upheld is important to have in a regulatory framework. Reducing it to a minimum obligation standard could imply reducing the priority which is not in the interest of consumers.

ETQ16. Are either a rolling baseline target or the addition of an improvement factor appropriate changes to the incentive target calculation methodology given the increases in target.

A rolling target is likely to result in tighter targets on the incentive which as explained in our response to ETQ15 could incentivise a more cautious approach to providing system access which is not conducive to the drive to net zero and therefore not in the consumers' interests. In the overview document, Ofgem acknowledges that dynamic targets risks disincentivising good performance. We think introducing such a risk would undermine the current effectiveness of the ENS incentive and with potential unintended consequences.

ETQ17. Would a change in the estimate of the VoLL impact TOs investment decisions, and should the incentive value methodology be updated if the VoLL is changed?

Updating the value of lost load (VoLL) is a welcome proposal, as the way consumers use electricity has changed significantly in the last 10 years. With the growth of society's dependence on electricity as an integral part of daily life, we believe it will be in consumers interest for the value of VoLL to be updated to reflects society's increased value of and reliance on reliable electricity supplies.

A change to VoLL would impact TO investment decisions. For example, the value of VoLL is used as one of the inputs into the NARM System Consequences model used by NGET to make asset investment recommendations. An increase in VoLL would result in system consequences scaling up more rapidly on one asset than another thereby altering the relative ranking of the asset for investment recommendation. It is however difficult to assess the extent of the impact of a change in VoLL on investment decisions as, in addition to the outputs of the system consequences model, various other factors feed into the investment decisions made.

A change in VoLL would change the scaling of the ENS incentive. If a change to VoLL is made, a review of the ENS methodology should be carried out to avoid unintended consequences on the incentive for both TOs and consumers.

ETQ18. Are the current definitions for excluded and exceptional events sufficient, or should they be changed for RIIO-ET3?

The definition for exceptional events i.e., "an event or circumstance that is beyond the reasonable control of the licensee", is already sufficiently broad to cover all likely events that fall outside the control of a TO's control. However, a change is needed to increase the threshold for exceptional events in the light of changing environmental circumstances.

The number of transmission faults during a severe weather event needed to qualify as an Exceptional Event is particularly high (more than 50 in any 24-hour period). For example, during Storm Arwen there was a total of 33 transmission circuit trips in one night (Storm Arwen 26/27 November 2021), which we felt was an exceptional number of trips in that period. However, had we suffered an ENS event, it would not have qualified for an exceptional event claim. As storms are likely to become more frequent, coupled with a requirement for more system access than before, which will have an impact on network resilience, we consider there might be a risk of us incurring penalties due to exceptional events that we cannot claim. We therefore think that a revision of this number downwards is required and consider that 30 trips would be an appropriate threshold value.

The list of excluded events as defined in Special Condition 1.1 of the transmission licence is sufficient.

ETQ19. Should Ofgem add a materiality threshold for exceptional events?

No. Multiple 'small' events can add up to material consequences. A materiality threshold would expose TOs to undue risk/penalty outside of their control which would not be in consumers' interests. Our view is that the option to evaluate the cost against the benefit of submitting an exceptional event claim should remain with the network companies who are best placed to evaluate the technical details of the event. To reduce regulatory burden, we suggest that a materiality threshold is set for the level of scrutiny applied such that the level of scrutiny is proportionate to the value of the claim.

ETQ20. What are your views on our proposed change to the ENS reporting requirements?

Circuit unavailability (planned or unplanned) does not always relate to, nor does it always increase the likelihood of ENS events. Due to the meshed nature of the transmission network, it is possible for a transmission circuit to experience periods of prolonged unavailability with no impact on demand security. We therefore do not agree with

the proposed changes. We think this extra reporting will increase regulatory reporting burden with no benefit to Ofgem or end consumers.

ETQ21. Are there alternative modifications to the ENS incentive that will more effectively improve visibility of circuit availability across the grid?

No. TOs report network availability, disaggregated into User Connection, System Construction, Maintenance and Unplanned Unavailability, for the Network Performance Report published by the NESO (also known as the C17 report) We think this reporting should be sufficient to give visibility of the network availability.

We urge caution in further increases in the metrics around network availability. This carries the risk introducing a perverse incentive where maintenance and connection outages are deferred to uphold a prescribed level of availability. This incentivisation would be in contrast to be behaviour required to deliver the extensive work planned for the next price control period. It is our expectation that average circuit availability will be reduced in ET3 so as to facilitate network connections and system upgrades required to achieve the Net Zero targets. We think that any incentivisation to the contrary will not be in consumer's interest.

Connections incentives

Key messages:

- We agree reform to the current ET connections incentives is required. The design of new incentives should take account of the ongoing reforms to the process by which customers apply to connect to or use the electricity transmission system in Great Britain.
- Connection incentives should be designed to encourage TOs to deliver infrastructure fit for a low-cost transition to net zero and to develop a connections-ready network.
- Reforms should also be made to the Timely Connections and Quality of Connections survey to improve the way they operate and better align TOs interests with those of customers and ultimately consumers.

ETQ22. What are your views on the extent to which fundamental reform of the ET connections incentives is required, and how would you approach that reform?

We agree that reform of the customer connections incentives is required so that they better reflect the objective to deliver infrastructure fit for a low-cost transition to net zero and our ET3 plan to produce a 'connections ready' network. The process by which customers apply to connect to or use the electricity transmission system in Great Britain is subject to ongoing reform and the UK government's 'Connections Action Plan' commits Ofgem to review the connections incentives used across the electricity sectors. We consider that any fundamental reform to the existing connections incentives should be considered as part of this review which may not be complete ahead of SSMD.

The SSMD should therefore commit to working with TOs on how best to design appropriate connections incentives.

Below we set out how we consider Ofgem should approach reform of the connections incentives:.

Encouraging TOs to deliver infrastructure fit for a low-cost transition to net zero and a connections-ready network

Our ET3 plan is being developed to progress delivery of a connections ready network, that provides a range of connections and options which are ready to meet connection needs rapidly. This requires cost effective anticipatory investment to build a "capacity rich" future network.

Our response to SSMC question ETQ7 and ETQ9 set out the suite of funding mechanisms that are necessary to enable TOs to move away from developing the network 'just in time' so as to avoid a funding gap between delivering the investment and the customer making the physical connection. Instead, it is in consumers' interests for us to invest before need has fully crystallised in order to deliver the step-change in pace and volume required to enable the energy transition. This is critical to avoid delays in connecting customers and exacerbating system constraints that ultimately lead to higher costs for consumers.

To encourage TOs to explore every possible step and focus on this goal, there is a role for an incentive to drive us to work in a way which benefits network customers and is efficient for consumers. We would welcome dialogue with Ofgem on how best to do this. We see several potential options. For example we could be incentivised on the:

- proportion of connections options (i.e. investments in anticipation of a connection) that are utilised within a specified timeframe; or
- average difference between customers' requested connections date and the date we deliver.

The chosen incentive should encourage TOs to build at pace to address their customer connections queue, to build in the right place, at the right time and to play their part in the efficient coordination of offers. We propose that any incentive in this space should be symmetrical, so that TOs are rewarded when they meet or exceed expectations and are penalised when they fall short. Any incentive must be focussed on activities that are within the TOs' management control and suitably calibrated so that TOs are not exposed to unreasonable financial risk.

Ensuring that incentives are robust to the impacts of connections reform and wider review of connections incentives

The SSMC acknowledges that industry, government and Ofgem are working together to progress short-term solutions and longer-term reforms to the connections process. To date, the ESO has introduced several smaller scale interventions before it intends to implement its full set of recommendations in January 2025. Separately, as the SSMC also acknowledges, the government's Connections Action Plan commits Ofgem to review the connections incentives used across the electricity sectors.

We propose that any more fundamental reform of the existing connections incentives is considered as part of the review of connections incentives that Ofgem has said it will lead. We suggest that Ofgem consults with the TOs and finalises the ET3 connections incentives through this review. We are happy to work with the other TOs and Ofgem to support in developing the proposals.

ETQ23. Do you have views on how the Timely Connections incentive can be reformed, or replaced, to better capture the efficient coordination of network offers?

We support the suggestion in the SSMC that TOs should be incentivised to share information in a timely manner and support reform of the Timely Connections incentive to encourage this. This should be part of a suite of funding mechanisms and incentives that together address the size of the connections queue and the time customers spend in it. We consider that the current Timely Connections incentive does little to support these aims because the incentive encourages TOs to make offers in a timely manner but not how long customers must then wait for a physical connection.

We consider that the SSMD should commit to working with TOs on how best to reform this incentive. The timeline for developing the incentive should allow the reforms to the connections process to be accounted for and should align with Ofgem's review of connections incentives identified in the Connections Action Plan. This means that we do not expect the SSMD to include a final position on the Timely Connections incentive.

ETQ24. Do you have views on how the QoCS incentive can be reformed, or replaced, to better capture the service that connections customers receive?

We recognise the need for TOs to deliver a high quality of service to their connections customers. We consider that the ET2 Quality of Connections Survey (QoCS) incentive methodology could be made more representative of customer satisfaction. For example, we suggest that:

- only customers with a milestone within the year should be surveyed for inclusion in the score;
- the score should be calculated from a balanced sample of customers across our contracted connections;
- the questions should be reviewed so that they are directly relevant to the role of TOs in providing customer connections, e.g., how informed customers feel.

In addition, we consider that ongoing reform of the connections process may have unintended consequences for the survey scores. For example, we anticipate that the survey score could be negatively skewed by customers who consider that reform will result in less favourable outcomes for them. The timeline for reviewing and confirming the incentive should allow the likely impacts of reforms to the connections process to be understood and for and should align with Ofgem's review of connections incentives identified in the Connections Action Plan. This means that we do not expect the SSMD to include a final position on the QoCS incentive.

SO:TO ODI-F

Key messages:

- We agree with the minded-to position to retain the ODI in ET3 as constraint costs continue be a significant driver of cost for consumers and managing system access in a way that seeks to minimise constraint cost will be increasingly important in light of the volume of work in ET3.
- Given the work expected in ET3, it will be important that system access and constraint costs are managed proactively both in project delivery and project development time scales to maximise overall value for consumers.
- We agree with the formula for calculating incentive rewards and the windfall gain protection in place.
- In order to make this incentive most effective and to drive maximum value for consumers, TOs will need timely visibility of forecast constraint costs in the long term to enable CBA for enhanced solutions in the long term, therefore the NESO needs to have adequate resource and obligation to support this.
- Long term solutions may trigger Joint Works Projects, the financial trigger point should be reviewed upwards and we understand the NESO is in discussion with Ofgem to agree a more appropriate value.
- We do not see any conflict between the SO:TO ODI-F and the introduction of the CSNP. The ODI-F might actually help identify areas where network investments are required to support a long-term solution to constraint costs.

ETQ25. What activities should be considered business as usual under the SO:TO incentive?

Business as usual activities are activities the TOs would carry out as part of normal business activity to develop and maintain an economic, efficient, and coordinated transmission network, compliant with relevant applicable standards and industry code documents such as the System Operator – Transmission Owner Code (STC).

Any actions taken by the TOs that deviate from the normal operation of the system or network assets for the purpose of lowering the overall costs associated with the procurement and use of balancing services by the ESO are defined as a Commercial Operational Service (CoS) in STCP11.4 (also referred to as enhanced services). Where actions would not be taken by the TO as part of normal business operation, they will often require the TO to take additional risk on their assets and/or incur additional cost to deliver. The SO-TO Optimisation ODI was designed to energise STCP11.4 process by rewarding the TOs for the delivery of these non BAU Commercial Operational Services thereby encouraging the TOs to seek out and deliver these types of solutions for the benefit of the consumers.

System conditions may allow for, or necessitate that, some Commercial Operational Services provided by the TO are repeated either within year or over consecutive years if they are effective in reducing system operating costs and unlocking benefits for consumers. The actions to provide these services would not normally be taken by the TO in the absence of the need to reduce constraint costs. These services, therefore, despite being required more than once, are still enhanced services as they are delivered for the purpose of reducing constraints cost. The delivery of these non BAU services would still result in the TO taking additional risk on the system and/or incurring an additional cost. We believe such services should continue to be incentivised under SO:TO incentive to encourage TOs to take the extra risk and cost in the provision of the services. During the working groups sessions, there was a proposal made to consider a run down to BAU for specific repeated services. We are happy to work with Ofgem and other TOs to explore this proposal further.

ETQ26. What are your views on our proposal to retain the blended constraint cost savings, the 90:10 sharing factor, and the current windfall gain protection mechanism?

We agree with the proposal to retain the blended approach. The blended approach to incentive calculation was designed to maintain the balance between (i) the TOs' need for sufficient certainty on the minimum reward available, so as to decide on the level of effort and risk to take on the system in delivering the enhanced service, and (ii) the need to protect the consumer from unjustified incentive payments to the TO which result from the mismatch between forecast and outturn constraint savings. The justification for this approach remains valid.

Given the difficulty in accurately forecasting constraint costs and the tendency of the forecast to be higher than the ex-post saving achieved, it is reasonable and in consumers' interest for Ofgem to maintain the windfall gain protection mechanism to ensure the TOs are rewarded for constraint costs savings delivered. We therefore agree

with the retention of the windfall gain mechanism. We welcomed Ofgem's decision in 2023 to remove the cap and think this is an important feature of the incentive, as it ensures TOs continue to be incentivised to find further opportunities under STCP11.4.

Another consideration that will assist in reducing the regulatory burden of the incentive and facilitating ambitious solutions in the long time is an upward review of the limit at which joint works project is triggered. Currently in STCP11.4, the trigger value is set at £1,146,800 (in 2009/10 prices). In ET3, in addition to short term operational solutions, we plan to seek enhanced solutions at project development. Given the complexity of solutions we might consider, it is likely that changes proposed will often trigger joint works project creating regulatory burden for the TO and the ESO (the NESO) in making an application and for Ofgem in reviewing the application for funding. We foresee this process resulting in delays in project development and could deter TOs from submitting solutions costing above that value which will result in missed opportunities for consumer value delivery. We understand the NESO and Ofgem are already in discussions as to what might be an appropriate level to set this threshold at. We are happy to support this process and provide further information if that would be useful for Ofgem.

ETQ27. We welcome your feedback on the SO:TO incentive scheme, and how we can ensure that it aligns with the long-term CSNP network planning and investments.

The SO:TO incentive has worked well in encouraging TOs to seek out solutions to assist in reducing constraint costs. We believe that through cooperation and information sharing between the TO and the ESO (NESO) the repeated services delivered by the SO:TO ODI will highlight the areas of concern on the network where more permanent solutions are required. Therefore, the SO:TO ODI may help identify longer-term network solutions that could be incorporated into the CSNP.

As part of the CSNP it will be important for the NESO to provide timely long term constraint cost forecasts that can feed into CBAs at project optioneering stage. The ready availability of long-term view of constraint costs will support TOs to seek out long term solutions that deliver consumer value.

New Infrastructure Stakeholder Engagement Survey ODI-R

ETQ28. What are your views on whether and how TO customer service performance should be incentivised or enforced during RIIO-ET3, over and above the incentives and obligations described elsewhere in this chapter?

The purpose of engagement undertaken on New Infrastructure projects is twofold: (i) we gather feedback from a variety of stakeholders, including public, government and private organisations to input to the direction of our projects; and (ii) we engage to educate and inform.

We consider that while customer and stakeholder surveys play a role in demonstrating customer service performance, in the New Infrastructure arena our experience is that these can be subjective. The New Infrastructure projects that we deliver are not always bought into by the communities impacted by the infrastructure and therefore survey responses focus on the ‘what’ rather than ‘how’ we are providing the engagement.

Based on the subjectivity and external factors which cannot be overcome despite the best actions of a TO, we do not think a financial regime with incentives and penalties would be appropriate for the New Infrastructure Stakeholder Engagement Survey.

CSNP Coordination

Key messages:

- We think that the CSNP has the potential to deliver a step change in how we collectively create a holistic long-term plan that delivers the best value to consumers, but getting it right will require effective collaboration across industry.
- We support the introduction of a licence obligation on the TOs to engage and collaborate with the NESO to ensure delivery of the CSNP, provided that equivalent licence obligation(s) are included in the NESO licence to engage and collaborate with relevant stakeholders (including TOs) to develop the CSNP.
- An appropriate re-opener is required to support the development of new tooling, processes and capabilities required for the TOs to support the NESO in its whole-system planning role, as those requirements become clearer.
- Given the value for consumers in NESO:TO collaboration on the optimisation of designs of major new projects such as those in the tCSNP2/CSNP we are exploring a potential incentive for stronger collaboration and development of lowest cost/greatest value network options for consumers. We would like to engage Ofgem on this over the coming months.

ETQ29. What is the most effective way of ensuring collaboration between the FSO and the TOs, to ensure the delivery of high-level design of CSNP options?

The 'Future System Operator' (FSO), soon to be the National Energy System Operator (NESO), will have a leading role in shaping the UK's energy system to meet net zero and energy security. This will include its role in developing the Strategic Spatial Energy Plan (SSEP) and Centralised Strategic Network Plan (CSNP). The NESO will also take on the role of Regional Energy Strategic Planner (RESP).

As Ofgem notes in the SSMC, the second transitional CSNP (tCSNP2), due to be published in early 2024 and the first full CSNP, due to be published in 2026, will inform a significant proportion of the TOs' load related business plans for the next price control period. Alongside this, NGET will also need to deliver substantial load and non-load related investment during ET3 relating to projects outside the scope of the tCSNP2/CSNP, driven in particular by the volume of new demand and generation connections needed to enable the government's 2035 and 2050 decarbonisation goals. It will be important to ensure these non-tCSNP2/CSNP investments are aligned with the SSEP and CSNP, where relevant, and do not contradict or undermine the development of those outputs.

Therefore, it will be crucial to establish appropriate ways of working and co-ordination across TOs and the NESO to ensure relevant and timely inputs are being provided and captured to ensure the relevant plans are identifying and proposing the right investments for consumers.

The CSNP has the potential to deliver a step change in how we collectively create a holistic long-term plan that delivers the best value to consumers. Getting this right requires collaboration across industry to deliver value for consumers and stakeholders in the most effective way. As part of this, it is important we take a long-term view, with a more 'right to left' approach, to ensure network planning does not overly focus on today's network and incremental build (which is likely to become harder and more expensive to stretch existing capabilities and build in the gaps). The NESO's 'maturity' assessment should be leveraged whilst also balancing alternative solutions which could address the network needs.

We have already seen successful collaboration and engagement between the TOs and ESO on HND/NOA and tCSNP2. This provides a platform to build on as the ESO transitions into its broader role as the NESO. The SSEP and CSNP will be very different to HND/tCSNP2 and there will need to be a step change in how the CSNP (and SSEP) process is run. It is important that we leverage the positive ways of working (including sequencing for sharing information) established at the later stages of developing tCSNP2 to continue to support the development of CSNP and remain linked to the investment review process of the NOA committee (i.e., which is the only current route to formalise investment signals to TOs).

Today, the ESO makes decisions on how processes will run and the TO input required. They do so with limited consultation and based on high level terms of reference. Based on our HND and tCSNP2 experience, we have identified a number of improvements for TO:NESO working which would help the CSNP processes work well for consumers:

- Ensuring sufficient time is provided for TOs to complete a robust analysis, especially in relation to complex queries;

- Ensuring questions are considered at the right level of detail (for example, if a problem or question is overly simplified, this could lead to the wrong investment question being answered and lead to sub-optimal consumer outcomes); and
- Ensuring related issues are examined in parallel and through connected processes. If questions are examined separately, this could lead to TOs producing conflicting material for the NESO (e.g. if we are asked to develop technical solutions to multiple problems through separate queries, they may not always all be viable when combined together).

As the design of the tCSNP2 process has not involved TOs, these improvements could not be raised. Where possible within their overall approach, the ESO has worked with the TOs to attempt to make improvements. Increasing collaboration and optimising process design from the outset can reduce the risk of issues arising.

It is important that when designing future NESO processes for CSNP, SSEP and RESP, NESO and Ofgem ensure that these are developed through an open and collaborative proves, with stakeholders invited to comment on proposed processes at all stages. Inputs should be sought from all parties with an expert interest, including but not limited to TOs and DNOs.

We also recognise that there are existing mechanisms in place to support and complement collaboration between the TO and the NESO. For example, the SO:TO output delivery incentive incentivises collaboration to mitigate constraint costs for consumers. Under the System Operator – Transmission Owner Code (STC) the ESO and TOs must also collectively agree a programme of activities to be undertaken by the TOs in order to support the ESO in the development of the NOA and in the assessment of options. However, there needs to be greater collaboration for CSNP given the complexity compared with previous network planning activities.

Significant value could be delivered for consumers by the regulatory framework supporting collaboration at the right points in the CSNP development process.

For example, our collaborative work with NESO and offshore windfarm developers to design the East Coast offshore cluster identified in the HND (project codes AC2, AC4 and AC6) has reduced the investment consumers need to fund by several billion pounds. Whilst we were funded for this, we went above and beyond the direct asks of us in order to deliver an economic, efficient and coordinated system. Incentivising this through the framework could encourage this behaviour from TOs on an ongoing basis.

As the CSNP process is developed, we would welcome further engagement with Ofgem to explore a financial incentive that could maximise the consumer value of TOs being involved at the right points in the process to maximise the value for consumers in project design. This would allow for replication in a consistent way the benefits we have delivered through a currently ad-hoc processes.

In addition to ensuring a collaborative regime that can deliver workable processes, it is important that the following areas are considered: (i) roles, accountabilities, responsibilities and timings, (ii) interaction with non-CSNP investments, and (iii) information sharing and resourcing, as below:

(i) Roles, accountabilities responsibilities and timings

Clear accountabilities between parties including clarity on the input requirements from TOs and other stakeholders (including government) is necessary in order to avoid the risk of sub-optimal network plans that do not consider a whole-system approach or produce insufficiently robust plans which cannot be endorsed in planning policy.

To achieve this, both the TOs and the NESO need to work through their respective obligations in network codes (i.e., in network codes and industry standards) and licence conditions to understand what accountabilities need to change as the NESO takes on a greater planning responsibility, with plans being endorsed in planning policy. This will need to be done through an appropriate consultation process. Whilst the NESO will be overall accountable and responsible for producing the CSNP, it should also have a licence obligation to coordinate with the TOs and other stakeholders from early in and throughout the process, i.e. when defining the process and methodology.

Improvements from tCSNP2 should be made to ensure that there are robust processes and appropriate timeframes for input into the development of the CSNP. It is expected that there will need to be an increase in the level of optioneering, appraisal, scrutiny and evidential reporting required for CSNP. This will be accompanied by a requirement to consider cumulative impacts and feedback from public consultation, required to enable the CSNP to have sufficient robustness to be endorsed in planning policy.

In order to do this robustly, the process will require sufficient time for (i) the TO(s) to develop and appraise options to the level of scope and maturity required, and (ii) the NESO to undertake the necessary assessments when bringing that input together, on which public consultation would be undertaken.

This is necessary for the NESO to then select preferred options that have been subject to robust strategic environmental assessment (SEA) / Habits Regulation Assessment (HRA) and that can be taken to public consultation by NESO. If this process is not done with the necessary robustness or degree of confidence (for example, on route identification) early on in the process and with sufficient time, it means the CSNP cannot be endorsed in planning policy. This increases the risk of successful judicial review of the CSNP itself or decisions taken based on the CSNP as well as potential adverse disruption to local communities and the environment and habitats.

This would undermine the outputs from the CSNP and could lead to delays in the projects being delivered in the timescales required, which would not be in consumers' interests or those of wider society.

(ii) Greater clarity on the interaction with non-CSNP investments.

In creating the CSNP it is important that the NESO does not focus too narrowly on transfer capacity/thermal constraints but also considers other drivers and interactions such as the connections-driven investment outside the scope of the CSNP, as well as wider system operability considerations (such as health/criticality factors, monitoring fault levels and outages).

The timing of the development of different strategic network plans like the CSNP also presents a sequencing challenge that will need to be addressed to enable the effective cooperation between the NESO and TOs (for example, SSEP, CSNP and RESP interaction(s)). In particular, the SSEP will be finalised shortly after the submission of TOs' RIIO-ET3 business plans, while the CSNP will be published after the ET3 period has commenced and TO business plans have already been assessed by Ofgem. Similarly, outputs of the regional energy plans and the relative sequencing of their role in the development of the broader CSNP will need to be clearly outlined.

It is important to ensure that the NESO and TOs are operating on a substantively similar base of shared assumptions of future network needs and that NESO addresses all investment/intervention signals from the current system as well as the future network demands, before landing on a CSNP. The ET3 framework needs to reflect this uncertain environment and provide the ability for TOs to evolve their network plans as external events change, in order to maximise value for consumers though our investment plans.

In the short term, we are already proactively engaging with NESO to explore how to minimise any material misalignment in planning assumptions for ET3 investments. Effective strategic planning in the long-term will require clarity on the enduring CSNP development process to minimise similar sequencing complexity in the future, as noted above. We have had some initial engagement with the NESO (and further engagement planned) to explore how we can ensure the plan we are developing for RIIO-ET3 does not include investments that are incompatible with the SSEP and CSNP and are based on aligned planning assumptions.

Furthermore, it will not be possible for the NESO and TOs to collaborate and deliver effective project options if the impact of new customer connections is not considered during the development of the CSNP. The impact of a single large connection to the transmission (and distribution) network can significantly impact the wider strategic plans for the network in the area. As the connections process can change on a regular basis, this information needs to be incorporated into the CSNP on an equally regular basis. Planned connections will be influenced by the current connections process and queue, and any subsequent reform. The process for determining CSNP outputs will need to be able to adapt rapidly to changes in these areas.

Without consideration of the impact of customers it will not be possible for TOs to design the right technical solutions, and for the NESO to deliver the SEA as they will not be able to consider cumulative environmental and community impacts from customer connections.

(iii) Information sharing and resourcing

To ensure that the CSNP is sufficiently robust, an increased level of optioneering will be required in its development (alongside necessary engineering, planning and environment assessments).

TOs will need to develop project options to sufficient level of scope maturity to allow environmental appraisal of these options (including SEA and HRA) and to enable the NESO to undertake environmental assessments of all the submitted options and their cumulative effects. This is necessary in order for the NESO to then select preferred options that have been subject to SEA/HRA and that can be taken to public consultation.

This will require early and ongoing collaboration and information sharing to incorporate TO input and knowledge sharing on both sides; requiring a step change from the current tCSNP2/NOA processes. This collaborative and iterative process is needed as well for combined offshore and onshore design assessment, as opposed to the current process where these designs are assessed independently. An appropriate re-opener will be required to ensure TOs can develop the required capabilities, processes, systems and tooling to efficiently collaborate and support the NESO in its whole-system planning role, as those requirements become clearer. This will need to include appropriate

governance, resources and systems to ensure data readiness, resilience and sharing is robust on an enduring basis (including how information/updates are requested and shared).

It will also be necessary to address how the TOs' work in this area is funded, given that many of the activities carried out as part of the CSNP are driven by the (NESO controlled) volume of requests made and in ET2 would have been carried out through pre-construction funding under LOTI or ASTI.

ETQ30. Do you agree that there should be a licence obligation on the TOs to engage and collaborate effectively with the FSO to ensure the delivery of the CSNP?

We support the proposal that there should be a licence obligation on the TOs to engage and collaborate effectively with the FSO (soon to be NESO) to ensure the delivery of the CSNP. As above, we acknowledge that there are already licence obligations on the TOs to support network planning.

It may be necessary or sensible to develop more detailed licence conditions around collaboration with future NESO processes, but to understand the requirement or opportunity it is first necessary for those processes to be developed in detail. As explained above, we are also considering the role of incentives to align interests of all parties around best value consumer decision making and welcome the opportunity to explore this topic in the coming months.

Equivalent licence obligation(s) should be implemented across network companies (including the NESO) to encourage whole-system collaboration between all parties (for example, sharing of relevant information and inputs). Clear deliverables and clarity on the outputs must be reviewed and agreed by all parties so the effectiveness of this licence obligation can be measured and all parties are committed to relevant licence obligations (including relevant governance arrangements, communication and information sharing requirements).

Evolving the RIIO-ET2 approach to cost assessment for RIIO-ET3

Key messages:

- The ET2 cost assessment process for load and non-load capex cost assessment (the 'Project Assessment Model') was not, and is not now, fit for purpose. We have serious concerns should Ofgem retain the ET2 assessment process. Substantial improvements and simplifications are necessary and can be achieved through alternative approaches.
- Changes to the cost assessment approach are needed to address both market volatility seen to date and future volatility. This can be achieved through adjustments to baseline capex assessments, how re-opener project assessments are undertaken, and through amending the existing package of Real Price Effects (RPEs)
- The cost assessment approach used for indirect costs needs to evolve significantly to reflect the changing cost drivers, cost assessment splits, suitability of regression modelling and exclusions.
- Capex indirects that are very closely associated to project costs should be assessed as part of the gross capex costs of that project, as:
    - Projects can be incentivised to deliver a total efficient cost, with benchmarking at the capex level being in the interest of the consumer, rather than its constituent parts.
    - There is no simple correlation between annual capex and headcount or a single 'efficient' percentage of indirect spend that can be applied to projects
    - A split for 'contractor indirect' costs is not available today, meaning setting allowances based off assumptions/allocations of historical and forecast data could lead to underfunding.

ETQ31. Do you have any views on how the cost assessment methods used in RIIO-ET2 for load and non-load capex could be improved and/or simplified for RIIO-ET3? Do you think we should consider alternative and/or supplementary approaches to the assessment? If so, which?

National Grid agrees that Ofgem should continue to use a toolkit approach with a range of assessment tools to cost assessment; however, the toolkit must change to address the deficiencies of the ET2 cost assessment process and the recent volatility in market prices which are recognised by Ofgem in the SSMC (paragraph 5.13 of the SSMC ET Annex). Substantial improvements and simplifications are necessary and can be achieved through alternative approaches, as explained below.

Repeating the cost assessment methods used during RIIO-ET2 for load and non-load capex will not achieve the principles for cost assessment that Ofgem sets out within the SSMC (paragraph 5.1 of the SSMC ET Annex). In order to meet these principles, Ofgem should ensure qualitative, technical and bespoke assessment is used where appropriate to complement more quantitative approaches. Ofgem should be transparent about the potential cost assessment methods under consideration, and about how the selected approach achieves the principles referred to above.

The ET2 cost assessment process was not, and is not now, fit for purpose

Concerns about the cost assessment methodology applied to load and non-load capex were raised with Ofgem during ET2, and again during ET3 Cost Assessment Working Groups. Our major concerns were, and remain:

- There were serious statistical shortcomings to the ET2 approach, for example insufficient data points to constitute a statistically valid sample for the majority of asset categories[3];
- There were data consistency issues with the ET2 approach, for example outliers were not removed from asset categories resulting in asset types not being assessed on a robust "like-for-like" basis; and
- Ofgem's intended allowance setting approach was mathematically flawed to such an extent that even an efficient company could not recover efficient costs. This was due to the methodology choosing the lower of ET1 actual costs or ET2 submitted costs, and the mechanistic downward adjustment of allowances in any project where submitted costs were higher than the benchmark, yet allowing only submitted costs where such costs were below the benchmark.

We have serious concerns should Ofgem intend on using the toolkit "*as-is*" (paragraph 5.9 of the SSMC ET Annex).

The principles of good cost drivers from RIIO-ET2 remain appropriate, although the requirement that a driver should have a *"relatively stable relationship with costs over time"* (SSMC ET Annex, paragraph 5.6) has become harder to achieve in practice given the current supply chain volatility. In addition, the requirement that a driver should be "*accurately and consistently measurable and quantifiable*" (SSMC ET Annex, paragraph 5.6) should be expanded to include *"…against a robust and definitive scope"*.

The macro cost assessment categories remain appropriate.

NGET's proposed alternative to the RIIO-ET2 Project Assessment Model: the stratified random sampling approach

As explained above, there are fundamental flaws in the ET2 Project Assessment Model. In particular, the ET2 Project Assessment Model is inherently reliant on a population of stable, consistent and highly granular costs data that does not exist for the majority of the costs that Ofgem will assess through the load and non-load cost assessment at ET3. Any requirement on TOs to reconstruct existing data on a different basis would introduce a range of unrecorded approximations and assumptions which may be inconsistent between TOs, rendering the data unsuitable for benchmarking.

Since making incremental improvements to the Project Assessment Model would only address some and not all of the problems with its application, Ofgem should explore alternative cost assessment methodologies with the affected TOs, noting that there may be underlying differences between TOs' investment programmes which mean that individual company approaches may be necessary in certain areas. RIIO-ET3 presents an opportunity to utilise qualitative, technical and bespoke assessment tools to complement more quantitative approaches, making full use of the tools within the toolkit approach and building on the cost assessment approaches that have been developed for ASTI and will continue to develop for re-openers in ET3.

At this stage, NGET's preferred approach for replacing the Project Assessment Model would be to instead apply a stratified random sampling approach, which is an evolution of the approach that Ofgem applied for the ET1 period.

A stratified random sampling approach would involve splitting the load and non-load projects into categories (the "stratification") based on the main asset category driver for each project, for example overhead line projects, cables projects, transformer replacements. Cost categories from the existing Regulatory Reporting Pack should be used to ensure maximum consistency with existing data structures and reporting mechanisms.

Within each category, Ofgem could then undertake a sampling exercise with the number of samples from each category reflecting the proportion of that category to the total cost. This approach would ensure that Ofgem reviews a representative sample of projects. In line with good practice, sampling would need to be random and the approach

[3] This led to Ofgem being unable to apply the proposed ET2 'Project Assessment Model' approach to NGET's ET2 business plan submission. Consequently, NGET's costs were assessed by an opaque method, unique to NGET, and introduced after Draft Determinations.

and compliance with this should be published externally (including to TOs) – in the interests of transparency and building confidence in the approach.

Ofgem should then undertake, utilising sufficiently experienced consultants if necessary, an engineering assessment of the projects sampled to understand the scope of the project and determine whether the costs submitted by the TO are appropriate, and if not, to determine what an efficient allowance to deliver the scope of works being assessed would be. There should be a clear delineation between the review undertaken by the Ofgem engineering team to determine an efficient scope, and the review undertaken by the cost team to understand efficient costs to avoid any potential for overlap**.**

The efficient allowance can then be compared with the submitted costs from the TO. An average percentage allowance can then be calculated from all the sampled projects in that asset category, and the average deduction or premium then applied to all remaining non-sampled projects within the asset category.

We believe this method would deliver several important advantages; most significant of which is that it will deliver best value for consumers through focusing on the efficient cost for each project scope, rather than an overly complex method that attempts to apply a theoretical efficient benchmark for the constituent parts within the project scope. The consumer interest is best served by limiting project gross costs to the efficient level, rather than modelling individual cost categories, which might distort incentives for companies to structure project delivery in a way that leads to higher project costs – the focus should be on overall efficiency on the gross cost as best value for the consumer.

In addition, our proposal would offer benefits to Ofgem in terms of managing the resource burdens of the ET3 price control. It would be in line with the commitment in the SSMC for a proportionate price control regime.

The stratified random sampling approach is robust to volatile historical prices and any inconsistencies in granular cost allocations across the TOs, which has caused issues under the RIIO-ET2 Project Assessment Model. This method would also reduce the data and resource burdens on both the TOs and on Ofgem.

Though this method is robust to historical prices that are volatile, for allowances to remain appropriate, an effective Real Price Effect (RPE) mechanism is needed also, as addressed in OVQ44.

Improvements to the RIIO-ET2 Project Assessment Model

If, notwithstanding the points made above, Ofgem proposes to retain a version of the ET2 Project Assessment Model, there are four key improvements which Ofgem should make, at a minimum:

- The model should only be used where statistically valid data populations are available, i.e. where multiple data points exist, it is a repeatable activity, there is low technical variation in scope, and there has been stable cost data / low volatility historically;
- The model should make accurate calculations of benchmarks that are valid in the market environment that exists today, i.e. calculating a benchmark that does not simply take the lower of historical values and ET3 submitted costs;
- The model should calculate allowances based on a portfolio assessment of costs, rather than on an asset-by-asset, project-by-project basis, i.e. setting allowances that reflect the natural variation in project costs that will occur across a portfolio of works, rather than setting allowances based on the lower of an assessed benchmark and submitted project costs;
- Ofgem should not require TOs to restate historic data in the form of granular category breakdowns which are not already available, and/or which it would be disproportionately onerous for TOs to carry out (for example requiring ET1 historic data to be restated on an ET3 basis). Such data would not be sufficiently reliable for use in the Project Assessment Model as would be based on different assumptions between TOs, and would therefore not be directly comparable.

Regardless of the method chosen, Ofgem should share the methodology that it attends to apply, justify the reasons for its selection against the cost assessment principles per paragraph 5.1 of the SSMC ET Annex, and share in advance the models that it intends to utilise. This will help TOs to understand Ofgem's rationale and identify practical and data issues that are likely to arise so that they can be managed proactively.

ETQ32. Linked to ETQ30, do you have any views on how the cost assessment process could be adapted to capture multiple drivers and address the needs of evolving cost categories for 'shared drivers' schemes?

Please see our response to ETQ8 which sets out our proposals on shared driver projects. Our answer sets out four scenarios for funding 'shared driver' solutions:

- Baseline funding – a bespoke project assessment is required to ensure that the specifics of each project are assessed appropriately. For the avoidance of doubt, we do not consider that the ET2 cost assessment process via the Project Assessment Model would be suitable for this purpose (see ETQ31);
- Needs case approved in baseline – it is proposed this would trigger pre-construction funding (PCF) and early construction funding (ECF). We envisage that these mechanisms would work similarly to such funding mechanisms in ASTI, and therefore that detailed cost assessment is not proportionate at this stage due to the uncertainty over the final project costs;
- Combined need and cost re-opener – a bespoke project assessment is required to ensure that the specifics of each project are assessed appropriately; and
- Split need and cost re-opener – where the needs case and project cost assessment are separated, the cost assessment element should consist of a bespoke project assessment to ensure that the specifics of each project are assessed appropriately.

For each of the project specific assessments above, we consider that these would be undertaken in a similar way as applies to MSIPs, LOTIs, and ASTI projects during RIIO-2. There is benefit in aligning the approaches taken during baseline assessments and those assessed via re-openers to bring consistency, and to ensure that TO and Ofgem attention is focussed on the gross project capex costs that matter to consumers.

In some cases where we will be submitting multiple projects of a similar nature, it could be more efficient for Ofgem to undertake an assessment along similar lines to the stratified random sampling approach proposed in our response to ETQ31 (i.e. assessing samples of projects and applying the percentage of allowances awarded compared with costs submitted to the other projects that are not assessed on an equally in-depth basis).

ETQ33. Do you have any views on how the cost assessment methods used in RIIO-ET2 for non-operational capex could be improved and/or simplified for RIIO-ET3? Do you think we should consider alternative and/or supplementary approaches to the assessment? If so, which?

The primary route for assessing non-operational capex costs for ET2 was a bespoke assessment by external consultants with requisite expertise. We believe that this remains the most appropriate cost assessment method for ET3 because this category includes specialist, bespoke costs (such as for IT projects).

However, we think that easements in particular (within Land and Property) should be treated as pass-through costs as this will enable the reporting process to be simpler and more efficient if conducted on an annual basis and reduce administrative burden on regulatory reporting.

ETQ34. Do you have any views on how the cost assessment methods used in RIIO-ET2 for network operating costs (NOC) could be improved and/or simplified for RIIO-ET3? Do you think we should consider alternative and/or supplementary approaches to the assessment? If so, which?

We consider that RIIO-ET2 network operating costs (NOC) cost assessments have worked for Inspections, Repairs and Maintenance, and Vegetation Management. There were challenges with the outlined approach initially so overcoming these was testament to the high levels of collaboration between Ofgem and National Grid throughout that period. For RIIO-ET3, the proposal is to apply the learnings from RIIO-ET2 into the cost assessment methodology from the outset, and make improvements for the remaining NOC tables.

We propose several supplementary approaches to the assessment:

- Firstly, a collaborative effort between Ofgem and TOs could simplify and group the existing cost categories into fewer, high-level categories that are consistently applied across all the NOC tables. This may help remove categories with statistically insignificant volumes and better facilitate benchmarking between TOs for future price controls. At present, benchmarking between the TOs is unreliable due to changes in asset category definitions and cost allocation differences (e.g., the dividing line between a maintenance activity and a repair is unclear / inconsistent between TOs). It should also be noted that due to the maintenance regime and original equipment manufacturer recommendations, most of the equipment typically has a 3, 6 or 12 year maintenance cycle. Therefore, over a five-year price control period, there may appear to be a peak or drop in total costs simply due to where the equipment is on its maintenance cycle.

- Secondly, an action which was utilised for the ET2 price control process after challenges were encountered, was to perform a more focussed qualitative cost assessment in some cases. This may be required in instances where we have a statistically insignificant volume of repeatable activities, and under these circumstances the outliers should be removed, and a separate qualitative cost assessment performed. Examples for RIIO-ET3 would include own-use electricity and individual project assessments for Visual Amenity projects. NOC cannot be a simple, mechanistic assessment; therefore, assessment of quantities and category overviews is required.
- Thirdly, further improvements are also achievable in Ofgem's calculation of an efficient benchmark, with the previous method of taking the lower of the ET1 average and the ET2 average not being viable as an approach due to recent cost volatility. Triaging the cost categories based on total expenditure would bring proportionate scrutiny to the categories of highest value. Comparing outturn ET2 price control period costs to ET3 cost forecasts per TO and reviewing the supporting evidence submitted should provide a high confidence benchmark for Ofgem.

ETQ35. Do you have any views on how the cost assessment methods used in RIIO-ET2 for indirect costs could be improved and/or simplified for RIIO-ET3? Do you think we should consider alternative and/or supplementary approaches to the assessment? If so, which?

Building on the positive engagement that the Transmission Owners (TOs) have had with Ofgem through the Indirect cost working groups over the past two years, we welcome the opportunity to suggest constructive changes to the ET cost assessment tool kit for indirect costs.

As a starting point we believe there are many merits to the regression modelling approach for Closely Associated Indirects (CAI) and Business Support Costs (BSC) costs that was used in ET2, for example the principles for exclusions (that should be retained in our opinion) and the opportunity to have a mix of drivers that reflect scaling of indirect cost for the ET2 period.

We are however moving into an ET3 period where the scale of capex and growth of the business is unprecedented and therefore have made a number of suggestions below on changes to mix of drivers, cost assessment splits, regression modelling and exclusions.

1. Splitting of the "Closely Associated Indirects" (CAI) cost category

As discussed in the TO Indirect Costs working groups, we agree that it would be more appropriate to separate the Closely Associated Indirect (CAI) cost category into those costs that are "very closely" associated with projects (including both National Grid and Contractor Indirect spend) and those that are "not so closely" associated to support a more robust cost assessment approach, recognising the different cost drivers of these types of spend.

We propose that the split of this category is achieved by using the existing Capex / Opex reported split in RRP table D4.3 CAI for two reasons. Firstly, where costs have been capitalised, these can be directly attributed to the delivery of a project, whilst the Opex spend is by definition further removed from that direct relationship. As such, this is the most accurate split of the data to align the cost categories to the drivers of the spend. Secondly, it is a split of the data which is already reported and therefore can be reliably used for future cost assessment without the need for a restatement of historical data, which may not previously have been captured in a way that would support this.

2. Assessing "very closely associated" CAI within the gross Capex assessment

We think that it is most appropriate to assess the "very closely associated"/ "Capex" CAI, including both National Grid and Contractor indirect costs, alongside the direct costs of a project as part of a gross Capex assessment.

This enables benchmarking of capex projects as a whole and delivers the most efficient price for the consumer, allowing TOs to contract, sub-contract and deliver projects with different direct/indirect structures that are best suited to each project.

The rationale for taking this approach is:

- The total efficient cost of a project can be assessed without being influenced by how the constituent parts have been carved out.
- It ensures companies remain incentivised to deliver projects at the lowest cost to consumer rather than be influenced by the allowance setting process to have larger / smaller indirect structures. The alternative

would create the potential for unintended consequences, as behaviours could get distorted by artificial cost allowance setting processes which may not reflect reality.

- There is no simple correlation between annual capex and headcount or a single 'efficient' percentage of indirect spend that can be applied to projects, as set out further below. The mix and development stage of the projects and the operating models of different organisations will influence the split.
- Benchmarking at a disaggregated level will not deliver best value for consumers. The appropriate level to benchmark is the overall delivered unit cost – being agnostic to definitional interpretation differences and approach to supply chain.
- A split for 'contractor indirect' costs is not available today (the definitions are still being developed by Ofgem), which means it is not possible for TOs to start to collect the data that would be needed to conduct a robust assessment of these costs on either an historic or forecast basis.

Capex CAI spend as a percentage of total spend varies year-on-year depending upon the stage of the project. For example, when projects are in optioneering and development, they are generally 100% CAI because there are no assets in construction (unless there is an early purchase cost for long lead time items). Once projects move into delivery, the costs swing to being almost entirely direct capex (depending on the definitions of direct/indirect). This variation over time means that, while regression of ED indirects might be a valid approach to setting allowances for high volume/short duration works, the timing of low volume/long duration transmission projects (which typically span three-to-seven years) and whether they start/end in different price controls will make regression analysis inaccurate and unstable for TO indirects.

Further, we are seeing from the supply chain that:

- The most efficient overall delivery price did not always correlate with the lowest proportion of contractor and TO indirects, suggesting that choosing the contract with the lowest indirect percentage may not always be in the best interest of consumers.
- For recent projects, the total CAI (TO and contractor) to Direct cost split varied from a CAI percentage of 12% to 62%. (More detail has been shared with Ofgem but is not repeated in this public response for commercial confidentiality reasons.) The CAI to Direct cost split is dependent on the project scope, the type of asset group/project type, and contracting strategy. Due to this variability, numerous coefficients for contractor indirects would potentially be required for regression analysis.

We are also concerned by Ofgem's recent assertion at the 7th February 2024 Indirect CAWG that ET1 data should be restated for contractor indirects, and if such data is unavailable then a justified "allocation methodology" should be used to provide a percentage for these contractor indirects. We consider this is not a robust approach for cost assessment of Direct and Indirect allowances, and that data gaps such as unavailable splits for projects from a decade ago could lead Ofgem to make inaccurate conclusions.

3. *Retaining regression modelling as a means of econometric benchmarking for the remaining TO "not so closely" CAI and Business Support Cost categories*

Consumers will need certainty that our support functions are resourced adequately and also competent and trained to deliver the growth of the network at a reasonable cost. Historically regression modelling has provided a suitable way of benchmarking the transmission companies, and we believe that should continue with acceptable exclusions that follow ET2 exclusion principles, with flexibility in cost assessment of excluded items.

For much of BSC and "not-so-closely associated indirects" (Opex CAI), we believe the ET2 approach of using regression modelling remains the most efficient method of assessing this portion of indirect costs for TOs. This method facilitates a benchmarking comparison across the TOs and reflects the nature of these costs as being relatively stable across ET1 and ET2. However, alongside this, we suggest that consideration is also given to evidence gathered by the TOs through benchmarking and where market tendered contracts inform the forecast spend to reflect the cost volatility that is currently being seen across the market.

Furthermore, as we move into a period of significant growth, with the scale up in spend, project delivery and workforce, the lagging nature of the combination of drivers used in ET2 will become a larger issue. Therefore, we want to work with Ofgem to identify drivers that accurately reflect our Opex CAI and BSC costs from regression modelling. We have done some qualitative analysis of drivers, as set out below in support of this.

To consider each of the metrics used in the ET2 assessment in turn:

- **Size of network** – this is an important metric to appropriately size the three different onshore TO networks in order to support comparative benchmarking, however, we have specific comments on the approach to the calculation. Please see response to ETQ37 for further comments. For its use in regression modelling, the fact it

is lagging in nature remains the largest concern, noting that the scale of growth in the ET3 period would not be recognised until much later in the period following the completion of much of our capital work, whilst the costs to scale the workforce and deliver this support will be required throughout. To counter this, we propose that this metric remains in use, but with a lower weighing in favour of the other two, more forward-looking metrics. Alternatively, "offsetting" this metric by an appropriate number of years is being considered by NGET and discussed at the working group.

- **Full-Time Equivalent (FTE) headcount** – this driver reflects that an increase in organisation size is a driver of some of our indirect costs, for example in our HR Function to support the required recruitment and support the larger workforce that we will see in the coming years. This remains a suitable driver that is a driver of a greater proportion of our costs than was reflected in the ET2 period, and therefore we suggest a higher weighting should be used.
- **Totex / Capex** – this metric reflects that a number of our indirect activities are still driven by the nature and scale of the capital work that is being undertaken. As another, more forward looking metric, this is useful to consider as an appropriately weighted driver.

In conclusion, we believe the drivers used in the ET2 cost assessment approach are drivers of our spend, however we would like to engage with Ofgem to evaluate what the appropriate weighting of these drivers should be, to ultimately address the issue of the lagging nature of the regression modelling calculation as we move into a period of significant growth.

Whilst we have done this high-level assessment of Opex CAI/BSC drivers, we would welcome clarity from Ofgem on the use of data sets for modelling, so that our drivers of spend are fully reflective of our forecasts, and that these drivers provide a fair benchmarking tool between TOs.

Continuing with existing principles of exclusions and treating new exclusions

We agree with the principles of exclusions that were used to carve out categories of indirect activity from Business Support and CAI that would be assessed outside of the indirect regression model in ET2. This builds on collaborative discussions with Ofgem and the TOs through the cost assessment working groups. We believe these principles should continue as they are, with methods of assessments being proportionate and suitable to the activity. For example, there will be many areas where TOs will incur additional costs associated with a rapid growth in the workforce, changes in the ways of working and of operational control, which might not have historical precedent, so should therefore be assessed separately from the regression model. The method of assessing exclusions should be related the nature of the activity. For example, in RIIO-ET2, insurance was assessed outside the regression due to widely available market benchmarks. The same was true for operational training where there was clear benchmarkable evidence of cost per FTE hired between TOs. This merited these two areas being assessed as exclusions and not mixed with overall regression cost drivers.

4. Use of data sets

Before considering data sets, it is important to note that National Grid (along with other network companies) is operating in a constrained supply chain market, which has a low level of competition. This means there is significant price uncertainty, and network companies will in many cases become price-takers from the supply chain which is needed to deliver projects at scale and pace. That is why, restating data sets for ET1 and ET2 for contractor direct/indirect breakdowns, and using that information to set allowances will set an inadequate precedent and exposes TOs to significant underfunding risk. This is further elaborated in the Capex CAI (including contractors) section of the table below. We also have concerns over the validity of restating data in these data sets due to the changing reporting processes between ET1, ET2 start and ET2 now.

We are advocating for the use of as many data points as possible to ensure robustness of the cost assessment approach and in particular where statistical models are to be used, as these cannot be reliable with only three years of ET2 actual data.

Aligned with the precedent set in the ED2 cost assessment methodology, we believe that the forecast data sets (for ET2 and ET3 periods) should be used as part of the modelling data set. This would support the resolution of the lagging nature of the statistical modelling (as discussed above) and ensure consideration of some of the cost volatility that is being seen in a constrained market. These forecasts would be supported by evidence from TOs to ensure appropriateness and efficiency.

Therefore, reliance should be on a mix of actuals, historic data and forecasts appropriately selected from ET1, ET2 and ET3 data sets to set allowances and test drivers for regression modelling.

Table 1: NG proposals on data sets for use in assessment of indirect costs

Cost Category	NG Proposed Data series to use
Opex CAI & BSC	ET1 – ET3 data The data sets have remained relatively consistent across the reporting periods and provide a useful baseline for statistical modelling. The use of the forecast data set aligns with the ED2 precedent, will strengthen the robustness of the statistical models and enable consideration of cost volatility and changes associated with companies going through a period of significant growth.
Capex CAI (TO only)	ET2 – ET3 data Data is captured in this way through current ET2 reporting, however, there have been significant changes to reporting requirements between the ET1 and ET2 periods. The required data was not captured or reported in the current format during ET1 and so it would not be possible to provide a consistent data set without applying a series of assumptions, which would undermine the validity of the cost assessment processes. We are of the view that these costs should be assessed via gross capex assessments (as stated above).
Capex CAI (incl. Contractor indirects)	None – data is not available for historical projects, and therefore we have no basis on which to estimate forecast costs. Our approach to managing contractors comprises of a range of delivery models depending on the project type, where there will be some models with tier 1 and 2 contractors, subcontractors and other providers, with different contract delivery structures. For the same reasons as explained above, we believe it is not of value to consumers to target efficiencies on contractor indirect spend, but rather on the project cost as a whole, which aligns with capex benchmarking. Given the ongoing discussions with Ofgem on a working definition of contractor indirects (Project Management and Detailed Design), we have only started to disaggregate tendered costs for recent re-opener projects, and do not have this disaggregation available for thousands of historical ET1 and ET2 contracts. This therefore means that there would not be any historical data available that would support indirect regression modelling. If this data were to be used for regression modelling, then we would only be able to use recent contract data. We therefore think that there is a risk that allowances are set incorrectly, meaning we would be unable to fund projects which are needed, which affects consumer outcomes as the energy transition is delayed or does not happen in some areas.

ETQ36. Do you have any views on how the cost assessment methods used in RIIO-ET2 for other costs could be improved and/or simplified for RIIO-ET3? Do you think we should consider alternative and/or supplementary approaches to the assessment? If so, which?

Due to the bespoke nature of costs within the Physical and Cyber Security cost categories specifically, they will not be necessarily comparable between the TOs and will continue to need individual cost assessments. A third party consultancy to independently assess the cost assessment could be utilised if required, depending on a value threshold indicated by Ofgem.

We do not consider that alternative or supplementary approaches should be used.

ETQ37. Do you have any views on how to evolve MEAV as a scale driver for RIIO-ET3? What other scale drivers could we consider?

As discussed with Ofgem through the Indirect Costs working groups, there are three issues with utilising MEAV as a scale driver for regressing indirect costs that we should be aiming to resolve in order to support ET3 cost assessments:

1. A lack of a standardised methodology for calculating MEAV across the TOs, potentially resulting in material differences that are not related to network 'size' or 'scale'.
2. The weighting of the assets is based on a capital construction value, however a new build cost for a network is largely unrelated to the indirect costs incurred by the companies. This is a material factor given the significant increase in developing new grid infrastructure in the ET3 period.
3. MEAV increases when assets are constructed and added to the network, and hence lags behind the need for indirect resources to support such projects. Due to the long duration of transmission projects (typically 3-10 years), this means that efficient funding for indirect resources may not be signalled via regression modelling until many years after it was needed. Again this is a material factor given the significant increase in developing new grid infrastructure in the ET3 period.

To address the first of these points, we suggest that the TOs and Ofgem continue to work together through the ongoing working groups to agree a simplified and consistent methodology for the calculation of a network scale metric. However, depending on what is to be regressed against network scale, MEAV might not be the right choice of metric.

Through these meetings, National Grid have proposed a simplified Network Scaler Measure to replace MEAV to be used in the cost assessment of the "not so closely" Closely Associated Indirects and Business Support Costs. As discussed in our response to ETQ35, we believe it more appropriate to assess "very closely associated" CAI, including contractor indirects, as part of a gross capex assessment and therefore we have tailored our methodology proposal accordingly. Whilst these are based on the same principles, there are some key differences that we believe will resolve the issues with the current MEAV calculation:

Table 2: NG proposals for amending MEAV

Proposal	Rationale
An agreed list of asset categories: We suggest this is a smaller list of asset categories than have been previously used	We have suggested an asset category list of between 8-10 assets, which are linked to categories that are already reported within the RRP tables to ensure no additional reporting burden or requirement to restate prior periods. The current asset list specified in RIGs includes the separation of assets into different voltages and sizes, which are generally unrelated to the indirect costs associated with maintaining a transmission network. For example, the fact that an overhead line operates at 275kV as opposed to 400kV does not drive a change in our business support costs. Therefore, we propose that the asset categories are condensed to just the core assets. This change would be in line with Ofgem's commitment to streamline and make the RIIO process more efficient as well as making the cost assessment process more reflective of networks costs. By condensing the list in this way, it will also be easier to identify a suitable and agreed ratio to support the scaling of the metric. It also enables a more proportionate approach to data collection (meaning that ET1 data could be included) and calculation given the limited usage of this metric for the assessment of the core indirect costs.
An agreed ratio to more closely reflect the indirect costs incurred by the business as a result of the scale of its asset base	For usage as a driver of indirect cost, we believe that weightings based on the ongoing costs associated with maintaining and supporting assets are more appropriate to use as a regression input than the capex construction costs and therefore propose that this ratio is based on NOC spend. In order to achieve a consistent methodology across the TOs to support accurate benchmarking, we also believe it is important to agree a standardised ratio through which to weight these assets. In other words,

Proposal	Rationale
	to avoid distortion of network scale by company choices (e.g. in-house vs outsourced maintenance), we believe it would be preferable for weighting factors to be the same across all TOs and fixed for the ET3 period rather than calculated from companies' annual data. As it may not be appropriate for TOs to share full data sets with each other to support this agreement, we ask for Ofgem's support in identifying a suitable weighting for each of the agreed asset categories which is based on an aggregation of the information currently supplied in RRP reporting.

Whilst the proposals above are only a starting point to frame how a network scaler measure may be calculated, we welcome further discussions with Ofgem and the other TOs through the cost assessment working groups in order to refine and agree a consistent approach.

Whilst our proposals address the first two issues noted above, they do not fully resolve risk that this scaling mechanism is a lagging metric. In our response to ETQ35 we have suggested that this could be resolved either through a change to the weightings of the metrics used in the regression modelling calculation to favour the more forward looking metrics or through an "offset" of the calculation. We welcome further discussions on this point.

In a scenario where gross capex assessment for Capex CAI isn't the chosen cost assessment route, then further work will be needed between TOs and Ofgem to explore alternative internal drivers to be applied to a regression of the Capex CAI cost category. For example:

- it may be the case that a 100% Capex driver for most of the Capex CAI costs in a regression will reflect the scale up of indirects that are project based, however this would need to come with exclusions for those Capex CAI items that have high indirect proportions and where a percentage assumption is not fit for purpose.
- Alternatively, a Capex-driven NSM with more asset categories than proposed for Opex CAI, could also be a reflective driver for the scale up of network growth for project driven indirects.
- In both of these cases however, the scale up of indirects early on in projects would need to be added through an appropriate "offset" number of years to reflect the lagging nature of the drivers.

ETQ38. Do you have any views on how the cost assessment process could address the market volatility and supply chain challenges that the sector is facing?

We agree that there are market volatility and supply chain challenges that the sector is facing, and that there are adjustments to the cost assessment process that would help (alongside actions we are taking) to mitigate such challenges.

<u>Supply chain challenges</u>

As set out in our separate Supply Chain Annex, increased competition for supply chain capacity is leading to an increasingly volatile cost environment and creating other challenges, such as longer lead times.

To help address this challenge and for National Grid to manage supply chain volatility better, we are changing our approach to procurement and building an overall supply chain strategy. This takes into account that we need to take on additional risk and take actions now that will grow supply chain capacity for the years to come.

Our procurement team have developed a National Grid Enterprise concept in addition, which is being rolled out for ASTI projects. This strategy has been demonstrated to Ofgem and is intended to commit volumes and firm up costs before they are likely to inflate further, whilst keeping a competitive landscape among suppliers. Across other investments, our approach to procuring and contracting will be based on long term strategies across asset categories which embed portfolio allocation to drive projects on a regional basis to provide long term commitments to the supply chain. While we finalise these strategies and evolve our approach, we are deploying a range of actions to maximise our current procurement frameworks. These actions drive greater competition where possible by providing greater visibility of projects and building competitive tension even in single-bidder situations. We are maintaining robust supplier relationships at multiple levels through strategic engagement to drive innovation, performance management, and optimisation across the project portfolio.

Both during the RIIO-ET3 price control process, and during RIIO-ET3 itself, it is important that Ofgem maintains an open-minded and receptive attitude towards innovative proposals on costs which network companies put forward to address market volatility and supply chain challenges.

Market volatility

As referenced in working groups, all TOs have highlighted the price changes being experienced throughout the industry. There are three ways through which the cost assessment process should be adapted to respond to this volatility:

- changes to the baseline (load and non-load) capex cost assessment process;
- changes to the cost assessment process for re-openers; and
- evolution of the Real Price Effects (RPE) approach.

The actions we are taking to better manage supply market volatility, including the Enterprise concept, and our overall long term supply chain strategy, support a programmatic and portfolio procurement approach and aims to achieve efficient project costs.

Changes to the baseline (load and non-load capex cost assessment process

As detailed in our responses to ETQ31, there are improvements to the cost assessment process for baseline (load and non-load) capex that would help address recent market volatility. Where historical costs remain a valid reflection of current market conditions, such data can and should be used within the cost assessment process. For areas that are more volatile, or where costs are not easily assessed via a 'unit cost approach' (e.g., civil works) Ofgem should ensure qualitative, technical and bespoke assessment are used where appropriate to complement more quantitative approaches.

Changes to the cost assessment process for re-openers

As detailed in our response to ETQ5, we agree with Ofgem's proposal that the cost assessment for the direct costs of major new projects will be carried out closer to the point of project execution. As detailed in our response to ETQ32, the cost assessment process for shared drivers should follow a similar principle.

Through such negotiations and as also explained in our response to ETQ5, to deliver projects in a cost-efficient way for consumers, in certain circumstances, NGET may be able to negotiate contracts earlier but with an agreement that the costs in the supplier contract are indexed to a later date as agreed with the supplier. This may limit the price volatility in the interests of consumers. Through this approach it would mean the final costs paid to the supplier are updated to reflect any changes to the agreed indices. The cost assessment process needs to be able to accommodate these types of contractual arrangements and resulting changes in costs. Our position on the need for price inflation to be accounted for in the reopener process and how this could be done effectively is explained in our response to OVQ45.

Our response to ETQ7 sets out the circumstances in which we consider volume drivers and re-openers should be used during ET3.

RPEs

RPE and other related mechanisms remain an essential part of the framework to ensure that original baseline cost assessments are adjusted for external price changes. This is explained in our response to OVQ44.

In summary, RPE effectiveness, use of re-openers, and being open to supply chain innovations such as the enterprise model we are using for some of our ASTI projects, will help address some of the market volatility and supply chain challenges.

ETQ39. Do you have any views on our initial thinking around the role and potential evolution in RIIO-ET3 of the UMs listed in Table 9?

Our views on Ofgem's initial thinking around the role and potential evolution of the UMs applicable to NGET listed in Table 9 of the SSMC ET Annex is set out below. We note that the below table is not a complete list of all the UMs within NGET's RIIO-ET2 framework. Our responses to other questions, for example, our suggestions on appropriate UMs for load-related work and shared driver work set out in our responses to ETQs 7, 8 and 9, are relevant for how the below UMs are considered or replaced.

Our response to OVQ42 should also be taken into consideration, as the table does not reference the opex escalator, which requires change for RIIO-ET3, as detailed in our response to that question.

UM Type (TO)	Description	Ofgem Initial proposals for RIIO-ET3	NGET view
Re-opener (All TOs)	**Access and Charging Reform reopener** - enables us to reduce totex allowances if changes to industry codes arising from our access and forward looking charges Significant Code Review (SCR) lead to a reduction in network costs.	We propose that this re-opener will not be required in RIIO-ET3 because the access SCR was finalised in 2022. However, we will keep options for a similar re-opener under consideration in the event of future changes to the charging regime.	If similar re-opener is retained/introduced, it should be symmetrical. We note as the connections reform progresses there may be consequential implications. Amending or replacing this UM could help manage the implications of reform in the future and would avoid delays from the need to establish a new mechanism
Re-opener (All TOs)	**Medium Sized Investment Projects (MSIP)** - to ensure that TOs are able to undertake necessary investments in the transmission network, funding for which has not been provided in RIIO baseline allowances.	We propose to review the need for this re-opener beyond RIIO-ET2, as it is likely to overlap significantly with proposals in Chapter 2 of this document.	As set out in our responses to ETQ 6, 7, 8 and 9, we think network investment can be covered by three streamlined re-openers, which would replace MSIP, Wider Works and Incremental Wider Works: (i) **Cost-only re-opener** – where the 'need' has been confirmed through our ET3 business plan submission, or where the 'need' is confirmed through the (t)CSNP. (ii) **Combined need and cost re-opener** – where the investment scope and costs are sufficiently certain to seek approval of both elements together. (iii) **Split need and cost re-opener** – where the investment need is known and it will help the progress of the project at the necessary pace to confirm 'need' early, provide pre-construction funding (PCF) and early-construction funding (ECF), and allow for the network company to come back for the final project assessment once the detailed scope of the solution and the costs are more certain
Evaluative PCD (All TOs)	**Wider Works** - to manage the uncertainty associated with large load related reinforcement schemes derived from the ESO Network Options Assessment process.	We propose to review the need for this PCD beyond RIIO-ET2, as it is likely to overlap significantly with proposals in Chapter 2 of this document.	
Volume Driver (NGET)	**Incremental Wider Works** - to ensure NGET is funded through an automatic mechanism to undertake required incremental wider works investments.	We propose to review the need for this PCD beyond RIIO-ET2, as it is likely to overlap significantly with proposals in Chapter 2 of this document.	
PCD (NGET)	**Overhead Line Conductor Replacement** - to ensure allowances are adjusted down if NGET does not deliver in full the replacement of Aluminium Steel Core Reinforced Core Greased Conductors and Aluminium Composite Core Conductor.	We expect this type of investment to be needed in RIIO-ET3, which would justify retaining this PCD unless the information received through Business Plan submissions will be of sufficient quality. Nonetheless, we intend to review the PCD approach for RIIO-ET3 compared to alternative options such as consolidation with	We agree this needs to be reviewed. It is currently downside-only and does not allow sufficient flexibility to react over a 5-year price control period as the energy transition develops. The current mechanism was split out of conductor, which is a symmetrical mechanism, i.e. one that allows justified under- or over-delivery. The treatment of Scottish TOs is therefore different. There is not sufficient clarity regarding how to treat conductor replacement with an uprating element, resulting in inconsistencies. We will have overhead line conductor replacement works featured in the load plan and driven by NOA/tCSNP2/CSNP that will need to interact with asset

UM Type (TO)	Description	Ofgem Initial proposals for RIIO-ET3	NGET view
		other PCDs or reopeners to reduce regulatory burden	health drivers to ensure we are considering all investment drivers. We also propose that as part of the 'do it once, do it right' principle that we are using for our ET3 investment plan, where we need to reconductor the network for asset health reasons that we should consistently assess whether there are any longer term load related drivers that mean a higher rated conductor, that the towers can support, should be installed to deliver increased capacity rather than a like-for-like replacement. The benefits for this approach can be demonstrated through a whole life cost benefit analysis. Therefore, the mechanism for overhead lines needs to be able to flex the outputs delivered via a symmetrical mechanism, i.e. one that allows justified under or over-delivery and recognise the change in the asset categorisation. As part of our response to ETQ8, we propose that overhead line reconductoring works should have a consistent funding approach through a volume driver as these works are broadly repeatable, the work is measurable and we can provide sufficient evidence to support the setting of a unit cost. See also our response to OVQ12 where we set out our views on outputs and PCDs in more detail, including the need for more flexible PCDs (which flex funding up as well as down), which do not link to specific lists of assets.
PCD (NGET)	**Protection and Control** - to ensure allowances are adjusted down if NGET does not deliver in full certain Protection and Control works.	We expect this type of investment to be needed in RIIO-ET3, which would justify retaining this PCD unless the information received through Business Plan submissions will be of sufficient quality. Nonetheless, we intend to review the PCD approach for RIIO-ET3 compared to alternative options such as consolidation with other PCDs or reopeners to reduce regulatory burden.	We agree Protection and Control and Switchgear Other (Bays) both need to be reviewed. They are currently downside-only and do not allow sufficient flexibility to react over a 5-year price control period as the energy transition develops. There is not sufficient clarity regarding how to treat replacement which coincides with a load-related driver, resulting in inconsistencies. See our response to OVQ12 where we set out our views on outputs and PCDs in more detail, including the need for more flexible PCDs (which flex funding up as well as down), which do not link to specific lists of assets.
PCD (NGET)	**Switchgear Other (Bays)** - to ensure allowances are adjusted down if NGET does not deliver in full the intervention of switchgear other (bay) assets.	We expect this type of investment to be needed in RIIO-ET3, which would justify retaining this PCD unless the information received through Business Plan submissions	

UM Type (TO)	Description	Ofgem Initial proposals for RIIO-ET3	NGET view
		will be of sufficient quality. Nonetheless, we intend to review the PCD approach for RIIO-ET3 compared to alternative options such as consolidation with other PCDs or reopeners to reduce regulatory burden.	
PCD (NGET)	**Instrument Transformers** - to ensure allowances are adjusted down if NGET does not deliver in full the replacement of instrument transformers based on the following drivers: PCB-filles, Dissolved Gas Analysis condition, SF6 leakage and asset family issues.	We expect this type of investment to be needed in RIIO-ET3, which would justify retaining this PCD unless the information received through Business Plan submissions will be of sufficient quality. Nonetheless, we intend to review the PCD approach for RIIO-ET3 compared to alternative options such as consolidation with other PCDs or reopeners to reduce regulatory burden.	We agree this needs to be reviewed. It is currently downside-only and does not allow sufficient flexibility to react over a 5-year price control period as the energy transition develops. In addition, in the case of Instrument Transformers, there are more than 100 named individual assets in the Licence. It is disproportionate to effectively make such sub-components individual price control 'outputs' when each has a value of less than £0.1m. It also removes our ability to flexibly respond to changing constraints because, if we substitute one named unit with an unnamed one, we become unfunded. There is not sufficient clarity regarding how to treat replacement which coincides with a load-related driver, resulting in inconsistencies. See our response to OVQ12 where we set out our views on outputs and PCDs in more detail, including the need for more flexible PCDs (which flex funding up as well as down), which do not link to specific lists of assets.
PCD (NGET)	**Bengeworth Road GSP Project** - to provide funding for works at Bengeworth Road following confirmation of need.	We intend to remove this PCD, as the specified work is expected to be completed in RIIO-ET2.	We agree this is specific to RIIO-ET2 and can therefore be removed for RIIO-ET3
UIOLI (NGET)	**Substation Auxiliary Interventions** - to ensure any unused funding for replacing NGET's Standby Diesel Generators and LVAC Boards is returned to consumers.	We intend to review the need for this uncertainty mechanism for RIIO-ET3.	We agree this is specific to RIIO-ET2 and can therefore be removed for RIIO-ET3
Re-opener (NGET)	**Optel Fibre Wrap** - for NGET to present and seek funding for carrying out the replacement of Optel fibre wrap based on a well-developed new solution and condition assessment information.	We intend to remove this uncertainty mechanism for RIIOET3, as we expect NGET will carry out initial work in RIIO-ET2 and that costs submitted for RIIO-ET3 will be well justified so to remove the need for a re-opener.	We agree this is specific to RIIO-ET2 and can therefore be removed for RIIO-ET3

UM Type (TO)	Description	Ofgem Initial proposals for RIIO-ET3	NGET view
Re-opener (NGET)	**Substation Civil Works** - to allow NGET to seek funding for a range of civil works in their substations.	We are minded to remove this UM for RIIO-ET3, as we expect NGET to submit well-justified costs that will remove the need for a re-opener.	We agree this is specific to RIIO-ET2 and can therefore be removed for RIIO-ET3
Re-opener (NGET)	**Towers and Foundations** - to allow NGET to seek funding for a range of steel and foundation works on Overhead Lines routes.	We are minded to remove this uncertainty mechanism for RIIOET3, as we expect NGET to submit well-justified costs that will remove the need for a re-opener.	We agree this is specific to RIIO-ET2 and can therefore be removed for RIIO-ET3
Re-opener (NGET)	**Tyne Crossing** - to provide funding for works to removed the Tyne Crossing and replace it with a suitable alternative.	We intend to remove this uncertainty mechanism for RIIOET3, as work is expected to be completed in RIIO-ET2.	The issue of funding for a Tyne Crossing has not yet been satisfactorily dealt with for all stakeholders. Throughout the ET2 period, NGET has been working constructively with local stakeholders, Government and Ofgem to explore the case for funding to replace the Tyne crossing. This includes commissioning studies to examine the costs and benefits of a new crossing. If Ofgem were to approve funding for such a project, work is unlikely to be completed before the end of the ET2 period, although provided an approval was received in ET2 then this could be included in the ET3 baseline. If there were no approval, this reopener should be retained given the unique circumstances surrounding the history of the assets, specific consideration might be needed from Ofgem which merits a bespoke reopener.
Pass-through (All TOs)	**Temporarily Physical Disconnection Costs**	We intend to continue to treat these costs as pass-through.	We agree with Ofgem's proposal.
PCD (NGET)	**Generation Related Infrastructure** - to provide funding for connection of a power station	We propose to review the need for this PCD beyond RIIO-ET2, as it is likely to overlap significantly with proposals in Chapter 2 of this document.	We agree this should be reviewed. Note, Ofgem's table in the SSMC does not reflect the demand equivalent.

ET Business Plan Data Templates

ETQ40. We invite views on current reporting requirements and structure at the cost category level and how this may be adapted to better suit RIIO-ET3 and related development of BPDTs.

Regular and transparent reporting on delivery and performance of network companies is a fundamental part of the regulatory framework and to which National Grid is fully committed. We recognise this includes the submission of data in relation to investments and forecasted investments. However, we consider that the current approach to RRP has become overly-detailed and administratively burdensome, difficult for anyone to interrogate, and that the cost to consumers (in terms of time it takes TOs to produce and Ofgem to digest) now outweighs the benefits. While we have deployed digital technologies to reduce some of the burdens and are considering further ways in

which digitalisation can help, we are keen to work with Ofgem to develop a more value-adding and proportionate approach to performance reporting and data submission.

Going forward, a more holistic approach to monitoring TOs performance and implementation of regulatory settlements is needed. The external environment is increasingly uncertain; TOs will have to manage around key constraints such as system access to adapt their plans and balance load and non-load work in response to changing events which cannot be predicted at the start of the price control period. The value networks deliver to consumers will be across a range of outcomes and we consider it important that regulatory reporting similarly looks across all outcomes together. We are undertaking further work to develop such an approach and welcome the opportunity to work with Ofgem on this further.

We understand that the BPDT and RRP templates vary quite materially between sectors and that the ET tables are the most complex. For NGET, we consider the level of administrative burden to complete the cost and volume tables within RRP outweigh the consumer value benefits. We propose changes are made to reduce the burden and ensure TOs' and Ofgem's time, resource and effort can be spent on matters that are more critical to unlocking overall consumer value:

- ***Frequency*** – RRP is an annual activity which is required under our licence obligations, the fundamental purpose of which is to provide the data needed to enable Ofgem to administer the special conditions of the licence such that the correct revenues can be recovered. However, the data needed to complete this process is a subset of that currently required annually by Ofgem. NGET observes that the RRP cost and volume tables specifically could have their frequency reviewed. It is not clear to us what the value is to Ofgem and the consumer of updating the RRP cost and volume tables annually. This annual activity currently requires many administrative and operational resources to produce it, which would otherwise be prioritised on project deliverables in the consumer interests. It is therefore proposed that the frequency of the RRP cost and volume table reporting requirements is tailored to when the analysis is required and utilised by Ofgem to add value for the consumer. That could be at the end or start of a price control period only. As indicated above, alternative, in-year reporting on performance and progress could be introduced as an alternative which is more efficient to produce and focussed on giving a holistic view of delivery and value created for consumers. We support transparency and would welcome the opportunity to explore alternative options for this with Ofgem.
- ***Providing phased costs at asset level within capex cost and volume tables*** – the requirements at present are excessive for the value this generates for the consumer. Consumers are exposed to the total cost of a project, and yet many resources are spent producing data which appears unusable in scrutinising or verifying performance. For example, splitting a project by asset type on scale is done on a pro-rata basis and is not comparable to how allowances were set for the ET2 period (and are likely to be set in future). Tracking costs at project level which can then be scrutinised outside of the RRP data tables if required using clearer information would be a more proportionate approach.
- ***Direct and Indirect cost split*** – There has been ongoing discussions on the need for this between NGET and Ofgem, with NGET advising that separating indirect costs out makes it impossible to view the gross cost of a project, which is one of the main outputs in consumer interests. Due to the way the separation can be applied, this introduces inconsistencies where the delivery model of a project will impact how a project appears, making the data less reliable when comparisons are made. The instruction to split out indirect costs should be revoked and replaced with a standardised clear total cost per asset type / cost area definition to improve the RRP output for future price controls.
- ***Stability*** – the lack of stability overall in the RRP process, categories and definitions make it hard to maintain consistent and relevant outputs for Ofgem. Therefore, added focus is required to address this to improve the reporting output.
- ***Date range*** - For the BPDT, TOs are being asked to restate RIIO-ET1 data, the first Reporting Year of which was 2014 but could include projects starting approximately five years before. Given the lack of stability in definitions between and within price control periods, this is not practical to achieve on anything other than a broad-brush estimation basis. If such an estimation approach were used – this data would not be suitable as an input to cost benchmarking analysis so there would be no value in TOs having provided it. (We believe that the situation was different for ED where data is collected at a higher level, e.g. there is no requirement to phase costs at asset level within projects, and definitions have been stable - meaning that there are some categories where data from prior to ED1 could be used for ED2 allowance setting etc.)

Given the level of integration now embedded within IT systems, should Ofgem intend to modify the RRP reporting requirements further then we will need to undertake an impact assessment. Depending on the nature of the change, time, resource and cost may be incurred due to the high levels of integration into our systems and the type

of work now required to modify it. It should also be noted that after each such modification there will be a lag in subsequently populating the new set-up with real-time data against the new categories or redrawn definitions.

RFPR and RRPR are viewed positively where the information provides a consolidated performance view which may contribute to consumer value while only requiring a moderate level of effort to deliver the output.

Another new reporting requirement for RIIO-ET2 is related to evaluative PCDs. We recognise this is important and are committed to providing the necessary reports, but are keen to explore ways to simplify the process due to the growing burden or at a minimum ensure no additional requirements are placed on these. Exploring this would be line with the Ofgem commitment for streamlining and efficiency in the price control arrangements, to focus both Ofgem and TO resources on activities which generate value for consumers.

For NGED, the reporting process is different and presents far less of a burden. NGED therefore continues to support the annual production of the RRPs and does not have the same concerns as NGET that would necessitate providing this less frequently. We note that there will still be opportunities to improve the process for ED3, for example, to avoid need for unnecessary data tables and streamline the approach as far as possible (including with PCDs), and to resolve potential inconsistencies between BPDT and RRPs, and we can share more on this when Ofgem consults on ED3.