



# Annex

## A10.05 Consumer Value Proposition

### December 2019

As a part of the NGGT Business Plan Submission

## Annex A10.05 on our consumer value proposition (CVP)

This is the National Grid Gas Transmission (NGGT) 9 December annex on consumer value proposition in our RIIO-2 business plan. Our plan provides significant value to consumers; delivering a safe, reliable and resilient network for homes, businesses and communities both today and into the future, and playing our part in decarbonising Britain's energy system. The CVP focuses on those parts of our plan (these could be commitments, outputs or incentives) that go beyond minimum requirements and beyond the functions typically undertaken by an energy network company as business as usual.

In this annex, we explain what the CVP is, our proposed package of monetised CVPs, and a qualitative assessment of additional CVPs which cannot be monetised robustly. This annex is supplemented by the following documents:

- CVP snapshot table (included in Annex A3.04)
- Frontier Economics report on CVP (Annex A10.06)
- Frontier Economics CVP quantification spreadsheet (Annex A10.07)

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## 1. What is the CVP?

Ofgem provided details of the consumer value proposition (CVP) in its 3 May, 9 September and 31 October 2019 business plan guidance documents.

Ofgem describes the CVP as:

“Under the CVP, Business Plans should set out the ways in which their plan goes beyond the minimum requirements and beyond the functions typically undertaken by an energy network company as business as usual and how this will lead to benefits for consumers.” (paragraph 5.13, page 50) [Ofgem’s 31 October 2019 business plan guidance](#)

We welcome the CVP because it helps show the enhanced value our plan provides for consumers. It fits well with our increased emphasis on engagement and openness in our RIIO-2 business plan. The CVP is only a small part of the consumer benefit of our business plan as we explain in the next section.

## 2. Categorising consumer benefit in our business plan

### **Benefit delivered through NGGT’s core business**

NGGT’s core service delivers large economic and wider societal value as a key input into almost every aspect of daily life. NGGT maintains and operates one of the most critical pieces of national infrastructure in the country. There is no measure available of the significant value delivered by the national gas transmissions system – from heating to cooking to supplying the fuel source of about 40% of electricity generation in GB. Whilst the costs associated with delivering our business plan sit at £553m per year during RIIO-2, the value delivered far outweighs these costs, allowing modern society to function. We are conscious that the cost of our activities isn’t the only thing that has an impact on consumer bills. By facilitating the effective functioning of the gas market, we have a positive impact on the wholesale energy cost in a way that benefits consumers. This impact is supported by a recent study by professional services firm EY which concluded that, even with perfect foresight and without taking account of an unexpected short-term shock, failure to maintain the existing capacity of the NTS could have significant impact on GB consumers, for instance by adding £877m per year to both gas and electricity consumers by 2035. We have not attempted to place a monetary value on NGGT.

### **Benefit delivered due to our ambitious business plan: improving efficiency**

Our plan for RIIO-2 is stretching in terms of efficiency and improvements to our core services. Our business plan will deliver consumer benefit beyond what has been delivered in RIIO-1 through ambitious efficiency commitments and actions to improve outputs e.g. efficiency savings and output improvements. These actions add significant consumer benefits, but will be considered as part of Ofgem’s cost assessment not CVP.

### **Activities that push the boundaries of our usual operations, going beyond the minimum requirements and beyond the functions typically undertaken as business as usual to deliver significant additional consumer benefit**

A CVP is specifically an activity that looks at the value our plan provides above Ofgem’s minimum requirements and beyond the functions typically undertaken by an energy network company as business as usual. Ofgem has asked that we attempt to monetise our CVP. For some areas of our business plan it can be difficult to monetise our CVP even if it is clear they do provide benefits for consumers. Reflecting this, we categorised our CVP into three layers.

**Table 2.1 – the three layers of CVP in our business plan**

Layer		Description
1	Monetised CVP	CVP items for which we have a robust methodology for estimating the monetised benefits for consumers.
2	Magnitude estimate CVP	CVP items for which we can provide an estimate of the magnitude of the benefits for consumers ( <i>we chose to undertake this additional analysis as it was considered helpful by [REDACTED]</i> ).
3	Qualitative CVP	CVP items that provide benefits for consumers, but for which we have not found it possible to robustly quantify or estimate the magnitude of the benefits.

The qualitative CVP layer is an important part of our CVP because the activities often relate to new and innovative parts of plan, which makes them harder to value. Indeed, many of the activities which Ofgem note in the Business Plan Guidance that companies could include in their CVP proposals (including commitments for stakeholder engagement, innovation strategy, sharing of information and data) are hard to monetise. The same can be said for activities that the RIIO-2 Challenge Group noted in their feedback in October 2019 could potentially go beyond business as usual (open data sharing and governance or promoting best practice in the supply chain).

The independent stakeholder user group challenged us to consider the strategic narrative around our CVP submission, noting that the CVP was designed to cover those activities which are stretching/ambitious. They noted that some of the items we proposed as qualitative CVPs (layer 3) may not be considered stretching in the environment in which we are currently operating (for example stakeholder commitments and promoting supply chain best practice). In recognition of this feedback, we have focused our CVP submission to the items in layers 1 and 2 and have not included a narrative on layer 3 (see **Appendix 1** for the list of those items from the October draft CVP annex which we have not included in our final CVP proposals and why).

### 3. Our approach to producing our CVP

Working with Frontier Economics we established a structured approach to producing our CVP, recognising the significant value inherent in the activities we undertake and the focus of the CVP.

Step 1: Determine a complete list of consumer value propositions (which go beyond minimum requirements).

Step 2: Produce a qualitative assessment of the consumer value, and a view on ability to quantify (*step 1 and 2 was included as annex A9.05 to our draft October business plan*).

Step3: Discuss qualitative assessment with key consumer representatives (*please see **Appendix 2** to this annex for a summary of these discussions*).

Step 3: Produce a short list of propositions.

Step 4: Quantify and justify CVPs.

Step 5: Engage on CVPs with key consumer representatives and the independent stakeholder user group.

Step 6: Submit final CVP.

**Table 3.1 Short list of CVP propositions, aligning activities to CVP layers**

BP chapter	CVP reference	CVP item	Monetised	Magnitude estimate
14. Gas on and off	CVP1	Resilience solution at Blackrod	£173m	
15. External threats	CVP2	Security innovation application	£9.2m	
16. Environment and communities	CVP3	Business carbon footprint reduction - construction	£0.3m	
16. Environment and communities	CVP4	Natural environment improvements	£1.75m	
16. Environment and communities	CVP5	Community initiatives	£0.6m	
16. Environment and communities	CVP6	Methane emissions reduction		£2.2m
17. Whole energy system	CVP7	Whole systems strategy		£2.2m
19. Connect	CVP8	Facilitate connection of smaller gas suppliers		£33m
<b>Total</b>			<b>£184.8m</b>	<b>£37.4m</b>

## 4. Layer 1: The monetised CVP in our business plan

Utilising the short list of CVPs identified we worked with Frontier Economics to assess which could be monetised.

The overarching approach to quantification was:

- Evaluate benefits relative to a counterfactual scenario, which is determined on a case-by-case basis. The counterfactual is based on what a reasonable, ambitious business could be expected to do.
- CVP benefits are calculated net of costs to consumers associated with delivering those benefits.
- Net benefits are calculated in present value terms at 2020/21 (when we expect Ofgem will evaluate the CVP). We use the Government Green Book standard discount factors to discount future costs and benefits.
- For consumer benefits resulting from carbon reductions, we use BEIS traded and non-traded carbon prices to quantify the value of reductions.
- CVP values are denominated in 2018/19 prices, using the RPI index published by the ONS to inflate prices where necessary.

**Appendix 3** to this annex includes the Frontier Economics methodology for each of the monetised CVPs.

For each of our monetised CVP items we have provided a form below explaining how they meet Ofgem’s criteria. **Appendix 4** to this annex sets out Ofgem’s non-exhaustive list of assessment criteria for the CVP.

CVP1: Resilience solution at Blackrod	
<i>Business plan reference: Chapter 14, network resilience</i>	
Net CVP value	£173m
Baseline cost associated with delivering activity	
Description	We will invest in a new pipeline at Blackrod to connect the Blackrod network offtake, and a new Above Ground Installation (AGI) multijunction, to increase supply security.
Through what channel does it deliver consumer benefit	Improved reliability of supply, lower bills
<i>Frontier Economics name</i>	GT3
<i>Name in 1 October plan</i>	CVP5
Ofgem assessment criteria	
1. Additional to the minimum requirements/beyond business as usual.	<p>The work that we are planning to carry out during RIIO-2 at Blackrod, to increase network resilience, is an example of where we have gone beyond business as usual to find the optimal whole system solution to a problem.</p> <p>The default option (our counterfactual scenario) would be to consider the issue in isolation, not build the new pipeline, and to leave the risk of a local supply interruption at current levels.</p> <div style="background-color: black; height: 40px; width: 100%; margin-top: 10px;"></div>

2. Incorporates consumers' expectations	For consumers of gas, reliable supplies are essential, whether it's for heating, electricity generation or for operation of industrial processes. Consumers (domestic and non-domestic consumers) have expressed a preference for reliability over affordability concerns. All groups are willing to pay more for a reduction in the risk of supply interruptions.
3. Stakeholder views (including independent stakeholder user group)	<p>Whilst this CVP was in part redacted we were able to talk [REDACTED] through the principles of this activity. In the October discussion on qualitative CVPs [REDACTED] queried if this was beyond business as usual. In our November discussion [REDACTED] noted the clarification of the whole energy system benefits from this CVP, and why, as a result, we consider it above minimum requirements. They noted it was positive we are seeking whole energy system solutions.</p> <p>The independent SUG noted: Whilst recognising the impact of incentives to push forward this work, there is not a clear view yet across the group. Some of group, yes. Some of the group, uncertain. Stronger justification needed. Not clear that scrutiny by ongoing stakeholder group is justified.</p>
4. Reasonable monetisation methodology	<p>Appendix 3 to this annex includes the Frontier Economics' quantification methodology and Annex A10.07 provides the quantification spreadsheet. We consider the approach is appropriate.</p> <p>Note: To understand the sensitivity of this methodology, we asked Frontier Economics to model quantification for this activity based on a 25-year asset life (as opposed to 45) given the ongoing proposal to refine our depreciation profile (noting this proposal does not apply to pipelines). Applying a 25-year asset life to this full activity (both pipeline and AGI) would result in a net consumer value of £127m.</p>
5. Current, future and vulnerable consumers	This benefit will accrue mostly for future consumers, who will benefit from enhanced network resilience on a long-term basis. This will be specifically targeted at consumers in the North West.
6. Arrangements for non-delivery	In light of the feedback from the independent stakeholder user group feedback we have revised our proposals regarding non-delivery. We are no longer proposing that this activity be monitored by the enduring independent stakeholder group. Instead we are proposing that we engage directly with Ofgem to report when this project has been completed. Should it be found we do not deliver against the commitment we would propose paying back any CVP funding received.

### CVP2: Security innovation application

Business plan reference: Chapter 15, our proposals for RIIO-2 and how they will benefit consumers

Net CVP value	£9.2m
Baseline cost associated with delivering activity	£2.1m <i>* Note this cost has been incurred in RIIO-1, however as the action of rolling out the SCADA upgrade could not be performed without the £2.1m spend on developing the upgrade, we net off this cost from the benefit to give a conservative estimate of the consumer benefit.</i>
Description	<p>We are committing to roll out an open-source SCADA innovation initiative (developed through NIA) on compressor sites, which will offset the full replacement of control systems from RIIO-2 to RIIO-3. This will ensure systems are security compliant in RIIO-2 while the replacement strategy is refreshed, helping to ensure greater cyber resilience across the NTS and helping to mitigate the risk of intended third party cyber interference.</p> <p>[REDACTED]</p>

Through what channel does it deliver consumer benefit	Lower bills
<i>Frontier Economics name</i>	<i>GT9</i>
<i>Name in 1 October plan</i>	<i>Not included</i>
<b>Ofgem assessment criteria</b>	
1. Additional to the minimum requirements/beyond business as usual.	<p>A key part of our role is to develop and deliver resilience to cyber attacks and other external threats through a risk-based approach, ensuring that critical infrastructure is suitably protected.</p> <p>In a counterfactual scenario, we would increase cyber resilience by employing a third-party solution to upgrade the control systems.</p> <p>We are going beyond this scenario by implementing innovative solutions to ensure that better resilience can be achieved at lower cost. The rollout of the SCADA innovation therefore delivers significant cost savings to consumers. The SCADA upgrade was developed in RIIO-1 and rolling it out in RIIO-2 involves continuing to go beyond the counterfactual business as usual approach of using a third-party solution.</p> <p>Deploying SCADA innovation during RIIO-2 will help to avoid or defer asset replacement, reducing costs beyond what could be achieved purely through operational efficiencies. These cost savings will benefit consumers through lower bills in RIIO-2.</p>
2. Incorporates consumers' expectations	Consumers (domestic and non-domestic) appreciate the importance of high standards of cyber security for our network.
3. Stakeholder views (including independent stakeholder user group)	<p>Whilst this CVP was in part redacted we were able to talk [REDACTED] through the principles of this activity. We shared a query from the independent SUG regarding whether additional funding should be received given NIA funding was used to develop the solution, this was noted by [REDACTED] who agreed with the need to consider this, but also noted it was worth having in our proposals.</p> <p>The independent SUG noted: Not clear on why this is above and beyond. Stronger justification.</p>
4. Reasonable monetisation methodology	Appendix 3 to this annex includes the Frontier Economics' quantification methodology and Annex A10.07 provides the quantification spreadsheet. We consider their approach is appropriate.
5. Current, future and vulnerable consumers	This benefit will be accrued by all consumers.
6. Arrangements for non-delivery	We propose that this activity is monitored by Ofgem and the NIS component authority. Should it be found we do not deliver against the commitment we would propose paying back all or part of any CVP funding received.

<b>CVP3: Business carbon footprint reduction – construction</b>	
<i>Business plan reference: Chapter 16, Climate change: our climate commitment</i>	
Net CVP value	£0.3m
Baseline cost associated with delivering activity	£0
Description	We will achieve carbon neutral construction by 2026.
Through what channel does it deliver consumer benefit	Environmental benefits
<i>Frontier Economics name</i>	<i>GT5A</i>
<i>Name in 1 October plan</i>	<i>CVP14</i>



Ofgem assessment criteria	
1. Additional to the minimum requirements/beyond business as usual.	<p>In a counterfactual business-as-usual scenario, we would likely still take some actions to reduce our business carbon footprint, as consumers are likely to expect this from most businesses.</p> <p>We have gone beyond this by:</p> <ul style="list-style-type: none"> <li>- Engaging extensively with stakeholders on environmental issues, finding that stakeholders want us to set ambitious goals for reducing our carbon footprint, and want us to engage more with our supply chain on environmental matters;</li> <li>- Responding to these messages by committing to reduce carbon from many different sources across our business</li> </ul> <p>We note the feedback from the independent SUG and confirm that this activity does not only relate to solely to carbon offsetting. We are committing to achieve carbon neutral construction for major projects by 2026 – implementing PAS 2080 (which is a specification standard detailing how to demonstrate carbon neutrality, produced and published by the British Standards Institution) and offset any residual carbon.</p>
2. Incorporates consumers' expectations	Improving the environment (air quality, carbon emissions, local community and the environment) is very important for domestic consumers. Non-domestic consumers see action on climate change as particularly important.
3. Stakeholder views (including independent stakeholder user group)	<p>█ noted the activity is the right thing to do. Whilst there could be an argument we do not need to pursue carbon neutrality until later, given this proposal responds to stakeholder and consumer feedback we should be rewarded for going beyond baseline expectations. Undertaking this work with partnerships will be key, working with the right people with the right skills to do it in the most effective way.</p> <p>█: not convinced commitments are ambitious enough, counselled to look at commitments from other companies (e.g planting of trees).</p> <p>The independent SUG noted: Yes. In principle. Need to review use of offsetting – not sure this is above and beyond if limited to offsetting. Need to be clearer on how to compares with Grid's current practice.</p>
4. Reasonable monetisation methodology	<p>Appendix 3 to this annex includes the Frontier Economics' quantification methodology and Annex A10.07 provides the quantification spreadsheet.</p> <p>We consider their approach is appropriate.</p>
5. Current, future and vulnerable consumers	This benefit will be accrued across all consumers.
6. Arrangements for non-delivery	We can measure our progress against this commitment and propose that this activity is monitored by the enduring independent stakeholder group. Should it be found we do not deliver against the commitment we would propose paying back all or part of any CVP funding received.

<b>CVP4: Natural environment improvements</b> <i>Business plan reference: Chapter 16: Responsible asset use and caring for the natural environment</i>	
Net CVP value	£1.75m
Baseline cost associated with delivering activity	£0
Description	We will enhance the value of the natural assets on our non-operational land by 10% over the course of RIIO-2.

Through what channel does it deliver consumer benefit	Environmental and community benefits
<i>Frontier Economics name</i>	<i>GT6</i>
<i>Name in 1 October plan</i>	<i>CVP17</i>
<b>Ofgem assessment criteria</b>	
1. Additional to the minimum requirements/beyond business as usual.	<p>There is no requirement for us to improve the natural environment on our land, and in a counterfactual scenario we could do nothing with our estate, and would not deliver any benefits.</p> <p>However, we have been working towards measuring the natural capital and biodiversity value of our non-operational land, and have set a target to improve this by 10% over RIIO-2. This will bring benefits to both the natural environment and to communities that can use this land. Because these types of natural capital improvements are relatively low-cost, the consumer benefits far outweigh the costs.</p> <p>We note that in order to maintain existing natural capital value requires significant work and, therefore, we consider 10% to be a stretching commitment.</p>
2. Incorporates consumers' expectations	Improving the environment (air quality, carbon emissions, local community and the environment) is very important for domestic consumers. Non-domestic consumers see action on climate change as particularly important.
3. Stakeholder views (including independent stakeholder user group)	<p>█: Note that this activity is not required and so is above baseline so feels appropriate for a CVP. █ queried if 10% was ambitious enough.</p> <p>The independent SUG noted: Yes. Need clearer justification showing that this goes above and beyond current practice. Also, further justification re the cost to value multiplier used.</p>
4. Reasonable monetisation methodology	<p>Appendix 3 to this annex includes the Frontier Economics' quantification methodology and Annex A10.07 provides the quantification spreadsheet.</p> <p>We note the independent SUG feedback that further justification is needed for the cost to value multiplier used. There is no baseline cost associated with this activity. The methodology identified by Frontier Economics takes the baseline natural capital per hectare and applies a 10% increase in natural capital to this. We believe this methodology is robust.</p> <p>Frontier Economics' estimated the natural capital value over a 30-year period. Whilst Ofgem allows benefit to future consumers to be recognised in the CVPs we believe the 30-year period is too long and sought to apply a shorter 10-year period to Frontier Economics' calculation. This resulted in the total CVP proposed being 50% of the value identified by Frontier Economics. We have included the proxy adjustment as a highlighted section in Frontier Economics' quantification methodology (<b>Appendix 3</b> to this annex).</p>
5. Current, future and vulnerable consumers	This benefit will be accrued across all consumers. This will directly benefit current and future consumers living or working close to the land improved and current and future consumers who care about the natural environment more generally.
6. Arrangements for non-delivery	We can measure our progress against this commitment and propose that this activity is monitored by the enduring independent stakeholder group. Should it be found we do not deliver against the commitment we would propose paying back all or part of any CVP funding received.

<b>CVP5: Community initiatives</b>	
<i>Business plan reference: Chapter 16: Supporting the communities we work in</i>	
Net CVP value	£0.6m
Baseline cost associated with delivering activity	£0
Description	We will commit 0.3% of major project spend to consumer-led community improvements.
Through what channel does it deliver consumer benefit	Community benefits
<i>Frontier Economics name</i>	GT7
<i>Name in 1 October plan</i>	CVP18
<b>Ofgem assessment criteria</b>	
1. Additional to the minimum requirements/beyond business as usual.	<p>We are going beyond minimum requirements by committing to spend on community initiatives. We are not requesting additional funding to cover this spending.</p> <p>By committing this money to local community initiatives, particularly those that are led by consumers, NGGT is ensuring that communities benefit and that money is allocated to areas valued by consumers.</p>
2. Incorporates consumers' expectations	<p>Domestic consumers tend to support supporting the local community. The majority of domestic consumers believe that costs for NGGT's charity and community work should be shared between NGGT and customers. However, a small proportion of domestic consumers also believe that costs should be borne entirely by NGGT.</p>
3. Stakeholder views (including independent stakeholder user group)	<p>█: Note that this is a really good CVP, which is not required so above business as usual. It is acceptable that it benefits only those in the local community impacted by the construction work. As with CVP3 undertaking this work with partnerships will be key, working with the right people with the right skills to do it in the most effective way. It makes sense that the independent stakeholder user group oversees this activity to ensure it is carried out appropriately.</p> <p>█ needs to be clear that this is directed at the communities impacted by our works as this determines which consumers benefit.</p> <p>The independent SUG noted: Yes. But only if a genuine step change and different to cross sector BAU. Not clear that this is comparable to peer benchmarks or a step-up from current practice.</p>
4. Reasonable monetisation methodology	<p>Appendix 3 to this annex includes the Frontier Economics' quantification methodology and Annex A10.08 provide and quantification spreadsheet.</p> <p>We consider their approach is appropriate.</p> <p>We note that a study carried out by Auriga for Severn Trent Water, United Utilities and Thames water found that every £1 invested by the water companies in social schemes delivered £3.06 of benefit. A similar multiplier may be expected for the community spending we carry out. However, we have not used this multiplier for any quantification because the initiatives covered in the study (more around support for vulnerable customers of the water companies) may not be comparable to those we carry out.</p>
5. Current, future and vulnerable consumers	<p>This benefit will be accrued by those consumers in the communities close to the major construction work. Depending on the initiatives taken forward it is likely to benefit both current and future consumers.</p>
6. Arrangements for non-delivery	<p>We can measure our progress against this commitment and propose that this activity is monitored by the enduring independent stakeholder group. Should it be found we do not deliver against the commitment</p>

	we would propose paying back all or part of any CVP funding received.
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## 5. Layer 2: The magnitude estimate in our business plan

In this section, we list those CVPs where we have been unable to robustly quantify, but are able to provide an order of magnitude for the benefit. Please note these have not been included in the snapshot table, which is intended for monetised CVP only. Please note these figures are highly indicative because many of the input assumptions are very uncertain. They should only be interpreted as a rough indication of the possible order of magnitude of these benefits, given the assumptions made.

<b>CVP6: Methane emissions reduction</b>	
<i>Business plan reference: Chapter 16: Our proposals for RIIO-2 and how they will benefit consumers</i>	
Order of magnitude estimate	£2.2m
Description	We will increase our focus on reducing all methane emissions because methane is a major contributor to climate change. In particular, we will monitor leaks on the network and work on ways to reduce them.
Through what channel does it deliver consumer benefit	Environmental benefits
<i>Frontier Economics name</i>	GT4
<i>Name in 1 October plan</i>	CVP12
<b>Ofgem assessment criteria</b>	
1. Additional to the minimum requirements/beyond business as usual.	<p>This action is a key part of our climate commitment, helping to deliver a more sustainable network for current and future consumers. One of the most significant environmental impacts of operating our network comes from methane emissions. Methane is 25 times more potent a greenhouse gas than carbon dioxide, and is leaked from the network, particularly at sites such as compressor stations.</p> <p>We have heard from our stakeholder engagement that stakeholders would like to see better monitoring of fugitive emissions. Better monitoring would help us make more informed decisions. We are therefore committing to establishing a baseline for emissions leaks on the network by installing real-time methane monitoring equipment at high-risk points on the network.</p> <p>In a counterfactual, we would continue to attempt to reduce methane emissions but without investing in innovative monitoring equipment. Installing this equipment will help optimise our maintenance and asset health programmes to reduce emissions more effectively. We will also use innovative recompression equipment when carrying out maintenance works that require pressure reduction, further reducing the amount of methane that escapes into the atmosphere.</p>
2. Incorporates consumers' expectations	Improving the environment (air quality, carbon emissions, local community and the environment) is very important for domestic consumers. Non-domestic consumers see action on climate change as particularly important and major energy users noted that there was a societal obligation for action on methane.
3. Challenge of monetising	In RIIO-2, we will invest in equipment to monitor methane leaks, and work on ways to reduce them. Because monitoring equipment has not yet been installed, we do not know how much methane is currently lost from fugitive emissions. However, for the purpose of providing an

	order of magnitude we have extrapolated information gathered from analysis at specific compressor sites to give a rough indication of the potential value of reducing methane emissions.
4. Current, future and vulnerable consumers	This benefit will be accrued by all consumers.
5. Stakeholder views (including independent stakeholder user group)	<p>■-Reducing methane leaks is a value, but simply establishing the baseline is not enough, we need to reduce as well. Note why we have not been able to fully quantify this activity.</p> <p>■ -For methane measurement the key is how we will measure and set a target, value from this includes improved safety.</p>

#### **CVP7: Whole systems strategy – GDN collaboration**

*Business plan reference: Chapter 17: Our proposals for RIIO-2*

Order of magnitude estimate	£2.2m
Description	Taking a leading role in the decarbonisation of heat for gas transmission. We will collaborate across industry on a hydrogen workplan and on innovative solutions.
Through what channel does it deliver consumer benefit	Lower bills, lower wholesale energy prices, environmental benefits
<i>Frontier Economics name</i>	GT11
<i>Name in 1 October plan</i>	CVP20 and CVP22
<b>Ofgem assessment criteria</b>	
1. Additional to the minimum requirements/beyond business as usual.	<p>We do not have any specific minimum requirements around whole systems, so we would expect that a feasible counterfactual scenario would be a continuation of a more traditional approach to running a network, making decisions and developing solutions in isolation, and taking a fairly static view of the energy system when planning for the future.</p> <p>We are committing to continue progress made in RIIO-1 towards considering whole system approaches when assessing investment options. This involves close collaboration with other networks and wider stakeholders.</p> <p>We are engaging and collaborating with numerous other players in the energy sector, including gas distribution networks, BEIS, ENA, shippers, and the European Network of Transmission System Operators for Gas (ENTSOG), to ensure that different players are aligned and working together to deliver industry changes around decarbonisation and the future of gas.</p> <p>We note that over time, as the focus on whole systems increases and evolves into business as usual, we expect that these types of activities will be seen as minimum requirements rather than stretching commitments.</p>
2. Incorporates consumers' expectations	Domestic consumers support NGGT's role in working with other organisations to make the overall gas system cleaner and the majority are willing to pay more on their bills for this. Domestic consumers also support "Innovation projects to trial greener alternatives to natural gas" and are willing to pay more for this.
3. Challenge of monetising	This cannot be quantified robustly, as the actual benefits that will be realised through this strategy during RIIO-2 are uncertain and rely on third parties in many cases. The impact of third party actions on wholesale energy prices is also complex to model and the benefits therefore cannot be robustly quantified. However, we provide a rough

	estimation of possible savings to consumers if collaboration enables gas distribution networks to achieve cost efficiency gains of 0.1%.
4. Current, future and vulnerable consumers	This benefit will be accrued by all consumers.
5. Stakeholder views (including independent stakeholder user group)	█: Note the assumption for this CVP that our activities would have a positive impact on the efficiency of GDNs. It is good we are thinking about whole energy system activities and helpful to see an order of magnitude.

### CVP8: Facilitate connection of smaller gas suppliers

*Business plan reference: Chapter 19: Our proposals for RIIO-2 and how they will benefit consumers*

Order of magnitude estimate	£33m
Description	We are committing to implement improvements from our Customer Low Cost Connections (CLoCC) project into business as usual, enabling small and medium connections for less than £1m and in less than 12 months from initial enquiry to 'gas on'. This will facilitate the connection of smaller gas suppliers to the network (e.g. biogas plants).
Through what channel does it deliver consumer benefit	Lower bills, lower wholesale energy prices, environmental benefits
<i>Frontier Economics name</i>	GT10
<i>Name in 1 October plan</i>	CVP20 and CVP26
<b>Ofgem assessment criteria</b>	
1. Additional to the minimum requirements/beyond business as usual.	<p>We have issued all customer connections on time in RIIO-1, despite an increasingly challenging environment, including changes such as increased interest from new entrants with smaller flow rates, such as biogas and compressed natural gas connections, and increased disconnection and decommissioning activity.</p> <p>As well as continuing to meet requirements despite these challenges, we have also innovated through project CLoCC in RIIO-1, which was driven by engagement with customers who said that connection costs and timescales could create barriers to connecting to the network, particularly for smaller, non-traditional producers and consumers. Improvements including a new online gas connection application, pre-approved and pre-appraised standard design connections, and improved commercial terms.</p> <p>We are committing to implement these improvements into business as usual, going beyond the minimum standards required for connections. By helping small and non-traditional suppliers connect to the network, this should deliver benefits to consumers through lower wholesale energy prices, as well as environmental benefits if it enables the connection of more biogas suppliers to the network.</p>
2. Challenge of monetising	<p>Consumer benefits cannot be robustly quantified due to uncertainty around the impact that implementing CLoCC will have on the connection of small and medium gas suppliers, and the resultant impact on wholesale energy prices and the environment. However, in order to provide an order of magnitude estimate of the benefits, we considered:</p> <ul style="list-style-type: none"> <li>- FES green gas supply numbers (ambitious "Two Degrees" Vs "Steady Progression")</li> <li>- Assumed CLoCC would enable 1% of the difference (enabling ~25 million m<sup>3</sup> of extra green gas in RIIO-2)</li> <li>- Calculated the consumer benefit as the CO<sub>2</sub> saving associated with this (~£33m)</li> </ul>

3. Current, future and vulnerable consumers	This benefit will accrue to all consumers.
4. Stakeholder views (including independent stakeholder user group)	<p>■: Queried why we would not articulate this as fully quantified CVP, understanding it may be due to the uncertainty associated with how much green gas will connect. We confirmed this was the case, and in addition we noted the uncertainty regarding the 1% CLoCC enablement assumption.</p> <p>■ also queried why we did not use the green gas volume included within the common scenario. We noted that this was another option that could be considered to determine and order of magnitude. Using the common scenario would result in a proposed value of £68m (as opposed to £33m). Given we are seeking a conservative estimate of the order of magnitude we have continued to use the lower estimation for this CVP.</p>

## Appendix 1: Draft CVPs not taken forward and why

Below we summarise activities which have not been taken forward to our final CVP proposals and why.

Draft CVP	Reason for not taking forward
Bespoke incentives on stakeholder engagement	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Stakeholder engagement strategy	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Maintenance change and use incentive	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Constraint management	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Residual balancing	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Carbon reduction from own energy use	Feedback from the independent stakeholder user group that this is not considered to be above minimum requirements.
Management of greenhouse gas emissions incentive	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Additional climate change commitments	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Promoting supply chain best practice	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Innovation strategy	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Information provision for increased transparency	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Demand forecasting	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Information provision to enable whole system solutions	Focus of CVP submission on those that can be monetised to allow focused feedback from the independent stakeholder user group.
Delivering the network capability that meets the needs of our stakeholder	Did not make short list, stakeholder feedback that delivering the right level of network capability is business as usual.
Maintain our first-class level of safety	Did not make short list, stakeholder feedback that going above minimum is what we should do anyway; and it is hard to differentiate what is minimum and what goes beyond.
Invest £881m in our asset health programme	Did not make short list, stakeholder feedback that it is difficult to unpick the additional value.
Focused asset health interventions	Did not make short list, stakeholder feedback that it is difficult to unpick the additional value.
Build new gas system operation capabilities	Did not make short list, difficult to unpick what goes beyond minimum requirements.
Activities to ensure compliance with MCP legislation	Did not make short list, stakeholder feedback that this does not go beyond minimum requirements.
Management of shrinkage	Did not make short list, we manage shrinkage to minimise consumer cost exposure by procuring shrinkage energy at below average market price. The RIIO-1 incentive already drives us to stretch our performance and maximise benefit to consumers by providing strong commercial drivers to balance against operational decision making.



	As a result, for the purpose of proposing CVPs, we have considered this to be business as usual through the existing incentive.
October draft CVP28: Using native competition to extract value from the supply chain	Did not make short list, picked up as part of cost assessment in the RIIO-2 framework.
October draft CVP29: making ambitious efficiency commitments	Did not make short list, picked up as part of cost assessment in the RIIO-2 framework.

## Appendix 2: Note of discussions with key consumer stakeholders

**Stakeholder Organisation:** [REDACTED] **Qualitative assessment (October draft business plan Annex A9.09)**  
**Date 15<sup>th</sup> October 2019**

[REDACTED] noted that in it was good to see that in the "initial assessment" NGGT mark the proposals against three criteria which makes it very transparent and that a good range of CVPs had been identified from activities (uncertainty mechanisms, competition and new incentives). However, [REDACTED] felt the CVPs needed more justification as to how they go above the minimum and how they reflect what consumers value. It is particularly important for transmission companies to explain how their CVP examples benefit consumers and the associated calculations, because they do not usually interact with final consumers. [REDACTED] made two further specific observations:

1. [REDACTED] would expect monetisation to be based on a) WTP values their research identified, and b) Social Return on Investment calculations. For these you can use values recognised by Government (look at the Green Book), or recognised values in the industry. [REDACTED] expect all assumptions to be spelt out and provided as part of the submission. As part of the discussion it was discussed whether NGGT could estimate an order of magnitude for the qualitative CVP value even if it could not be robustly quantified.
2. [REDACTED] note that ongoing activities (i.e. those already underway in RIIO-1) could be treated differently, and it would therefore be helpful to be clear where we are already undertaking activities described in the CVP, and if so, will we a) do even more of that activity or the same level, and b) will we do so at the same or a reduced cost to consumers.

Specific comments on the individual CVPs are captured in sections 4, 5 and 6 of this annex.

For those CVPs which did not make the short list (included in sections 4, 5 and 6), [REDACTED] made the following comments:

- Network capability (October CVP2a): just providing the right network capability is what is expected of NGGT
- Safety (October CVP2b): would argue going beyond minimum is what we should do anyway
- Asset health (October CVP3): hard to unpick what the additional value is in the activity proposed
- Emissions compliance (October CVP10): doesn't strike as going above minimum.

**Stakeholder Organisation:** [REDACTED] **Draft quantified CVP Date 13<sup>th</sup> November 2019**

[REDACTED] positively welcomed the reflection of their earlier feedback on our CVP. They particularly welcomed the inclusion of layer 2 of our CVPs (providing a view on the order of magnitude). They also welcomed that we focused on those activities we can robustly quantify.

[REDACTED] noted that two of the CVPs had been redacted, which restricted the ability to fully comment, but were able to comment in principle.

Finally, for some of the activities [REDACTED] noted that it is vital we explore appropriate partnerships, working with the right people with the right skills to do it in the most effective way.

Specific feedback on the individual CVPs is captured in sections 4, 5 and 6 of this annex.

**Stakeholder Organisation:** [REDACTED] **Date: 8<sup>th</sup> October 2019**

It was noted that the CVP was difficult for transmission companies because typically, there is no direct interaction with end consumers. Although it was recognised there were several areas where we do add value for end consumers beyond Ofgem's minimum requirements. [REDACTED] concluded that by taking a broad approach we have captured a good range of proposals for consideration.

[REDACTED] noted that there are some areas not suitable for CVP - the benefit was reputational and NGGT should not try to claim the value back e.g. providing free energy resilience advice to key services or using carbon offsetting. Similarly, with safety, the value derived by safety is too high to put a financial value on.

There were opportunities for CVP, in particular, on carbon reduction, [REDACTED] thought we should be able to monetise these savings. Similarly, for transparency, it was thought NGGT would need adopt approaches such as online support on websites to be going beyond minimum requirements, and open data sharing has the potential to be significantly value adding. NGGT can adopt innovative approaches, and should look to other sectors for best practice. Simplification of how parties can access the data could also add real value. It was commented that this proposition has the potential to be a real differentiator and innovator.

There were a number of other areas where [REDACTED] commented that quantification and/or identification of the business as usual benchmark would be difficult, in particular:

- network capability (October CVP2a): could add value by considering commercial products to manage network capability
- safety (October CVP2b): questioned if we could determine the minimum requirements or value of increased safety. The value derived from safety is too high to put a £ on
- asset health (October CVP3): identifying where we are going beyond what we've been funded for is key
- emissions compliance (October CVP10): this is not going beyond minimum.

[REDACTED]

# CVP QUANTIFICATION METHODOLOGY

## NGGT

This note sets out the methodology that we have used to estimate the consumer benefits delivered by each CVP item that we have quantified.

### General methodology and assumptions

In general, unless indicated otherwise in the sections below, we have based our calculations on the following approach and assumptions.

We note that in many cases, we have used inputs from NGGT or findings from research carried out by third parties. We have not assured the modelling or processes behind these inputs.

- We evaluate benefits relative to a counterfactual scenario, which is determined on a case-by-case basis. The counterfactual is based on what we would expect a reasonable, ambitious business to do. It could involve not carrying out the CVP action, only carrying out part of the CVP action, or delaying the CVP action. The counterfactual used to evaluate each CVP item is explained in the sections below.
- All CVP benefits are calculated net of costs to consumers (i.e. costs included in baseline funding in T2 and beyond) associated with delivering those benefits. If benefits can be delivered without any incremental increase in funding, consumers incur no costs, so there is no need to net any costs off.
- Ofgem's business plan guidance states that companies' CVPs should demonstrate the additional value that their plans will generate for existing and future consumers. In line with this, we quantify value for consumers in T2, and in some cases beyond T2, depending on the expected duration of the CVP benefit (above and beyond what would be expected of a reasonable, ambitious company).
- Net benefits are calculated in present value terms at 2020/21 (when we expect Ofgem will evaluate the CVP). We use the Government Green Book standard discount factors to discount future costs and benefits.<sup>1</sup>
- For consumer benefits resulting from carbon reductions, we use BEIS traded and non-traded carbon prices to quantify the value of emissions reductions.<sup>2</sup> The decision of whether to use traded or non-traded prices is made on a case-by-case basis, and depends on whether the emissions in question are included in the EU Emissions Trading Scheme (ETS) or not. In order to estimate the value of saved CO2 emissions.
- All final CVP values are denominated in 2018/19 prices. We use the RPI index published by the ONS to inflate historical prices.

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<sup>1</sup> See [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/685912/Discount\\_Factors.xlsx](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/685912/Discount_Factors.xlsx)

<sup>2</sup> See central estimates provided in Table 3 in [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/696677/Data\\_tables\\_1-19\\_supporting\\_the\\_toolkit\\_and\\_the\\_guidance\\_2017\\_180403\\_.xlsx](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/696677/Data_tables_1-19_supporting_the_toolkit_and_the_guidance_2017_180403_.xlsx), Table

The sections below detail the methodology used for each quantified CVP area.

### GT3: Resilience solution at Blackrod

The new pipeline proposed at Blackrod will connect the Blackrod gas distribution network offtake and a new Above Ground Installation (AGI) to increase supply security

[Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

- [Redacted]

[Redacted]

### GT5A: Construction

NGGT is committing to reduce carbon emissions from construction activities and to offset residual carbon emissions. An important tool to reduce NGGT's impact on the environment is to offset carbon

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<sup>3</sup> There is currently some uncertainty around whether the standard asset lifetime for depreciation of certain assets will change from 45 years to 25 years from T2. Therefore, as a sensitivity we have tested the impact on the CVP for Balckrod of using an asset lifetime of 25 years. The NPV of consumer benefits in this case is lower, at £127m.

emissions that can't be avoided, through dedicated schemes that compensate for the emissions by funding actions that reduce global carbon in other ways. The business will not request additional funds for this, so in the counterfactual scenario considered, baseline costs would be the same.

- We estimate the net consumer benefit to be approximately **£0.3m** in T2, which is equal to the present value of consumer benefits as consumers incur no costs.
- Our benefit calculations consider the value of the carbon offset as a proxy for consumer benefit. We use the following approach to quantify these benefits.
  - In T2, NGGT plans to offset carbon emissions from major construction works. Those major projects cover Wormington and Bacton.
  - Each project has a different carbon intensity. For Wormington, NGGT estimates 58t of carbon emitted per £1m investment and for Bacton this value is 149t per £1m spend. The total amount of carbon emitted across the two projects is estimated to be approximately 26 thousand tonnes.
  - The price to offset a tonne of carbon differs depending on the offsetting scheme used. NGGT has provided a price estimate of 12 £/tCO<sub>2</sub>, which reflects the costs of recently employed schemes for NGGT.
  - We assume that the carbon emissions are spread evenly across T2. Discounting this spend gives a net present value of spend on carbon offsetting of **£0.3m**. We consider this to be a proxy for the value of the environmental benefit to consumers since offsetting means that this carbon will be reduced elsewhere.

#### GT6: Natural capital enhancement

NGGT is committing to improve the natural capital value of its non-operational land by 10% over the course of T2. The Natural Capital Committee defines natural capital as “those elements of the natural environment which provide valuable goods and services to people”. The concept of natural capital has been developed to help incorporate the value of natural capital into decision making processes, and therefore it represents the societal benefits of natural capital.<sup>4</sup> This is therefore a helpful tool for valuing the consumer benefits of NGGT's commitments around environmental improvements on its land holdings.

NGGT has 4 “sustainability sites”, where it has done work to calculate an indicative baseline level of natural capital on its sites. It should be noted that this work is ongoing so these figures may change. This work has found that the baseline value of NGGT's land is approximately £32,313 per hectare in present value terms. This is an estimate of the natural capital value that these sites will deliver over 30 years.

Applying this baseline value per hectare to NGGT's total land portfolio of 1,093 hectares (this is equivalent to 'non-operational' land), gives a total baseline value estimate of about £35m. An increase of 10% in this baseline value gives a total increase in natural capital value of about **£3.5m**.

#### National Grid refinement to this methodology:

*Frontier Economics estimated the natural capital value over a 30-year period. Whilst Ofgem allows benefit to future consumers to be recognised in the CVPs we believe the 30-year period is too long and sought to apply a shorter 10-year period to Frontier's calculation. This resulted in the total CVP proposed being 50% of the value identified by Frontier. The proxy adjustment is based on the following assumptions:*

1. *Utilisation of HM Treasury social discount rate of 3.5%*
2. *A £1 investment over 30 years at an interest rate of 3.5% would be worth  $1 \times 1.035^{30} = 2.806793705$*

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<sup>4</sup> See [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/608850/ncc-natural-capital-valuation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/608850/ncc-natural-capital-valuation.pdf)

3. *A £1 investment over 10 years at an interest rate of 3.5% would be worth  $1 \times 1.035^{10} = 1.410598761$*
4. *Moving from a 30 year to a 10 year NPV would involve dividing (3) by (2) = 50.3%*
5. *This would make a proxy 10-year NPV baseline value of £1.75m as opposed to £3.5m*

#### GT7: Investing in community initiatives

NGGT is committing to support community initiatives with 0.3% of major project spend in T2. NGGT is not requesting additional funding for this, so in the counterfactual scenario considered, baseline costs would be the same.

NGGT expects its contributions to community initiatives to be as follows:

- In T2, NGGT will spend £222m on ‘major projects’, i.e. projects with total costs exceeding £50m. These include the compressor build project in Wormington (£78.5m) and Bacton site redevelopment (£143m). This excludes the network reinforcement investments in Milford Haven whose delivery has not yet been confirmed.
- NGGT’s commitment to spend 0.3% of major project spend on community initiatives implies funding for community initiatives of £0.66m.
- Assuming that this funding is paid out evenly across T2, and discounting the benefits to 2020/21 results in an NPV of £600,000.

We estimate that the resulting net consumer benefit is at least equal to the NPV of community initiative funding of **£0.6m**.

We consider this to be a highly conservative estimate, and that community initiatives are likely to bring benefits to consumers beyond the value of the funding they receive. To demonstrate why this figure is a conservative estimate of consumer benefits, we have used two alternative methods of calculating approximate consumer benefits. Both of these result in a magnitude of consumer benefit much higher than our estimate, as explained below.

- **Social benefit to cost ratio.** Social benefit cost ratios for many projects can be high. For example, a study carried out by Auriga for Severn Trent Water, United Utilities and Thames Water found that every £1 invested by water companies in social schemes delivered £3.06 of benefit.

If the same ratio of cost to benefit was assumed for NGGT’s community initiatives, a spend of £0.66m by NGGT will deliver approximately £1.84m of consumer benefit. We recognise that the cost to benefit ratio may not be directly translatable from the water sector to the energy sector, and the social projects it was based on may not be directly comparable to the community projects that NGGT plans to contribute to. This is why we haven’t used this ratio to calculate consumer benefits for the CVP, but it does demonstrate that benefits have the potential to be significantly higher than the consumer value proposed.

- **Consumer willingness to pay.** For illustration, we have also calculated an estimate of the amount consumers are willing to pay for NGGT to support local communities. This is based on a Willingness to Pay (WTP) study conducted by NERA and Explain for National Grid’s electricity and gas consumers. The study found that domestic gas consumers were willing to pay up to £4.79 per consumer per year for NGGT’s “current level of community activities”, while non-domestic gas consumers were willing to pay £46.65 per consumer per year to support local communities.

Multiplying these WTP estimates with the number of households and businesses, respectively in England and Wales over 5 years results in a total willingness to pay of £1.8bn across both domestic and non-domestic consumers. Given that this is the value that consumers claim to attribute to NGGT’s community initiatives, this provides further evidence that the consumer value could be significantly greater than NGGT’s spend on community initiatives. However, due to the limitations of WTP research, we do not use these figures to provide a quantification of benefits for the CVP. WTP studies should be treated with caution as even well-designed analysis can be limited by a number of biases. For instance, when faced with complex choices, respondents may choose the

default option by opting for the status quo or using a rule of thumb. Respondents' answers may also be limited by the experiences they have had.

#### GT9: Cyber Security innovation – Open SCADA upgrade

NGGT is committing to upgrade the existing SCADA systems on compressor sites, which will postpone the need for full replacement of control systems from T2 to T3. This will ensure systems are security compliant in T2 while the replacement strategy is refreshed, helping to ensure greater cyber resilience across the NTS and helping to mitigate the risk of intended third party cyber interference.

In a counterfactual scenario, NGGT's default approach would have been to rely on a third party to develop and integrate the SCADA upgrade, which is needed to postpone the full replacement of compressor site control systems. However, NGGT proposes to roll out its own solution, which has been developed as a result of recent innovation activities. In doing so, NGGT will realise cost savings relative to the more expensive third party solution.

- By developing a bespoke opensource-based solution internally, the roll-out of this project provides NGGT with a cheaper alternative to third party solutions for security systems, which would otherwise have been employed. We estimate the value of net consumer savings to be £9.2m. This number is based on an NPV of savings of £11.3m and project development costs of £2.1m, which were incurred in T1, and which we net off in order to provide a conservative estimate.
- The project generates annual capex and opex savings compared to an external solution. These savings are the basis for our quantification of benefits and are calculated as follows:

[REDACTED]

□ [REDACTED]

□ [REDACTED]

□ [REDACTED]

□ [REDACTED]

To develop the opensource SCADA upgrade, NGGT received NIA funding of £2.1m in T1. Most CVP items we have identified involve incurring costs only in T2 and beyond. However, because this particular action of rolling out the SCADA upgrade could not be performed without the £2.1m of spend on developing the upgrade, we net off these costs from the benefits to give a conservative estimate of the net benefits from the rollout. This gives a net consumer benefit of more than £9m.

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<sup>5</sup> NGGT plans to upgrade eight sites in 2020/21, six in 2021/22, seven in 2022/23, and one in 2023/24.



#### Appendix 4: Ofgem’s non-exhaustive list of assessment criteria for the CVP from 31 October 2019 business plan guidance

No.	Ofgem assessment criteria for the CVP
1	Whether the proposal consists of something additional to the minimum requirements.
2	The extent to which the proposal represents additional value to consumers, taking into account the functions typically undertaken by an energy network company as business as usual.
3	The extent to which the proposal includes evidence that shows how it incorporates consumer expectations / priorities and value (which may include willingness to pay).
4	The extent to which the proposal has been reviewed by and received the support of the Ofgem RIIO-2 Challenge Group, companies’ CEGs and UGs or, otherwise, the extent to which reasons for the lack of such support are clearly and satisfactorily explained.
5	Whether the proposal includes a monetised consumer benefit and an associated monetisation methodology and the extent to which such a methodology is reasonable.
6	The extent to which the monetised benefits associated with the proposal accrue to current consumers, future consumers and/or consumers in vulnerable situations.
7	Where the proposal relates to a commitment to deliver something within RIIO-2, whether arrangements to address the possibility of non-delivery are set out and the extent to which such arrangements for non-delivery are appropriate and implementable.