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Consultation

National Grid Electricity Transmission (NGET) Bengeworth Road Grid Supply Point (GSP) Project

Publication date:	16 April 2021	**Contact:**	Electricity Transmission Operations Team
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Response deadline:	17 May 2021	**Tel:**	020 7901 7414
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We are consulting on NGET's proposed Bengeworth Road Grid Supply Point Project. We would like views from people with an interest in electricity transmission and distribution networks, and from other stakeholders and the public.

This document outlines the scope, purpose and questions of the consultation and how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at **Ofgem.gov.uk/consultations**. If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

Contents

1. Introduction

What are we consulting on?

1.1. We are consulting on the needs case and efficient costs for the Bengeworth Road Grid Supply Point (GSP) proposed by National Grid Electricity Transmission (NGET) under the RIIO-2 re-opener.

1.2. NGET has worked with UK Power Networks' (UKPN) to provide Ofgem with evidence of two issues that need to be addressed. First, a significant proportion of UKPN's underground cables in the Wimbledon - Bengeworth – Deptford region of south London are deteriorating and will not function adequately unless extensive repair or replacement is carried out. In addition, significant forecast demand growth in that same region over the coming decades will require additional network capacity. There are a number of engineering options available to address both of these issues; following discussion between UKPN and NGET, they both consider that the best solution is for NGET to develop a new substation at the Bengeworth Road Grid Supply Point (GSP)[1] ("the proposed project") and allow UKPN to decommission the above mentioned deteriorating cables. This work would link up with the wider London Power Tunnels Phase 2 (LPT2) reinforcement program which is currently under construction; the proposed GSP would be connected to the new transmission cable being installed by the LPT2 program.

1.3. NGET and UKPN both provided information to justify the proposed project as part of our review of NGET's RIIO-2 business plan in 2020. The information provided at that time demonstrated the need to address the issues but fell short on evidencing the justification of the option proposed. Accordingly, we did not approve the funding as part of our Final Determination (FD) for NGET. We instead provided a re-opener in the NGET licence[2] where NGET could provide additional information for us to conduct a considered assessment of the proposed project. NGET and UKPN have submitted additional information under that re-opener.

[1] A Grid Supply Point (GSP) is a Systems Connection Point at which the Transmission System is connected to a Distribution System.
[2] Special Condition 3.35 of NGET plc's Electricity Transmission Licence

1.4. This consultation sets out our minded-to position on the Bengeworth Road GSP project in the following areas:

- the needs case
- the alternative options and the justification for the proposed project
- the efficient costs for the proposed project

Context and related publications

1.5. The scope of this consultation is limited to NGET's Bengeworth Road re-opener. Additional information on this re-opener can be found in our RIIO-2 FD[3] document on NGET and in NGET's Licence Special conditions[4] published on our website.

Consultation stages

1.6. This consultation will open on 16 April 2021 for 28 days and close on 17 May 2021. We will review and publish the responses 10 days after the consultation closes. We will endeavour to publish our decision by 21 June 2021.

How to respond

1.7. We want to hear from anyone interested in this consultation. Please send your response to the person or team named on this document's front page.

1.8. We've asked for your feedback in each of the questions throughout. Please respond to each one as fully as you can.

1.9. We will publish non-confidential responses on our website at www.ofgem.gov.uk/consultations.

[3] https://www.ofgem.gov.uk/system/files/docs/2021/02/final_determination_nget_annex_revised.pdf
[4] https://www.ofgem.gov.uk/publications-and-updates/decision-proposed-modifications-riio-2-transmission-gas-distribution-and-electricity-system-operator-licences

Your response, data and confidentiality

1.10. You can ask us to keep your response, or parts of your response, confidential. We'll respect this, subject to obligations to disclose information, for example, under the Freedom of Information Act 2000, the Environmental Information Regulations 2004, statutory directions, court orders, government regulations or where you give us explicit permission to disclose. If you do want us to keep your response confidential, please clearly mark this on your response and explain why.

1.11. If you wish us to keep part of your response confidential, please clearly mark those parts of your response that you *do* wish to be kept confidential and those that you *do not* wish to be kept confidential. Please put the confidential material in a separate appendix to your response. If necessary, we'll get in touch with you to discuss which parts of the information in your response should be kept confidential, and which can be published. We might ask for reasons why.

1.12. If the information you give in your response contains personal data under the General Data Protection Regulation 2016/379 (GDPR) and domestic legislation on data protection, the Gas and Electricity Markets Authority will be the data controller for the purposes of GDPR. Ofgem uses the information in responses in performing its statutory functions and in accordance with section 105 of the Utilities Act 2000. Please refer to our Privacy Notice on consultations, see Appendix 4.

1.13. If you wish to respond confidentially, we'll keep your response itself confidential, but we will publish the number (but not the names) of confidential responses we receive. We won't link responses to respondents if we publish a summary of responses, and we will evaluate each response on its own merits without undermining your right to confidentiality.

General feedback

1.14. We believe that consultation is at the heart of good policy development. We welcome any comments about how we've run this consultation. We'd also like to get your answers to these questions:

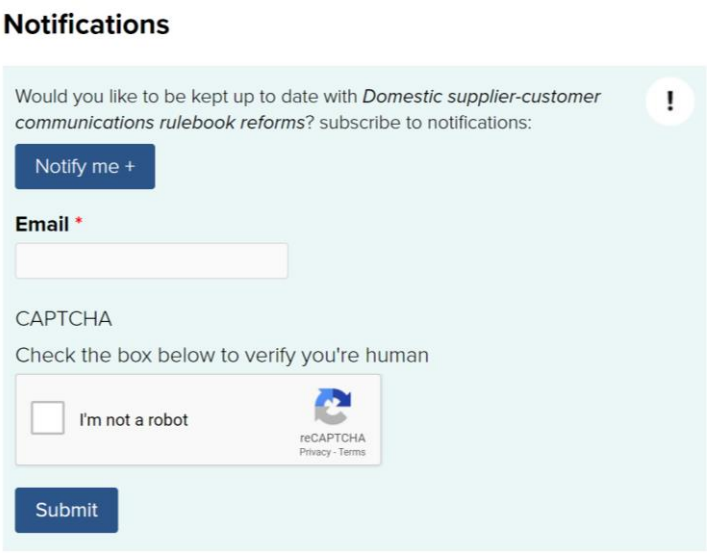
1. Do you have any comments about the overall process of this consultation?
2. Do you have any comments about its tone and content?
3. Was it easy to read and understand? Or could it have been better written?
4. Were its conclusions balanced?

5. Did it make reasoned recommendations for improvement?
6. Any further comments?

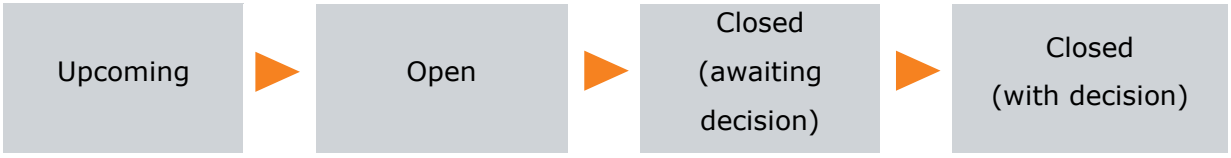
Please send any general feedback comments to stakeholders@ofgem.gov.uk

How to track the progress of the consultation

You can track the progress of a consultation from upcoming to decision status using the 'notify me' function on a consultation page when published on our website. Ofgem.gov.uk/consultations.



Once subscribed to the notifications for a particular consultation, you will receive an email to notify you when it has changed status. Our consultation stages are:



2. Needs case for the proposed project

Section summary

In this section, we detail the two main issues that form the needs case driving the Bengeworth Road GSP project.

Questions

Question 1: Do you agree with our view of the validity of the needs case for the Bengeworth Road GSP Project?

2.1. There are two interrelated issues that the proposed Bengeworth Road GSP project seeks to address:

- the deterioration of UKPN's aging underground cables on the Wimbledon - Bengeworth - Deptford route.
- forecast demand growth in south London.

2.2. Details on each of the issues are set out below.

Deterioration of UKPN's aging underground cables

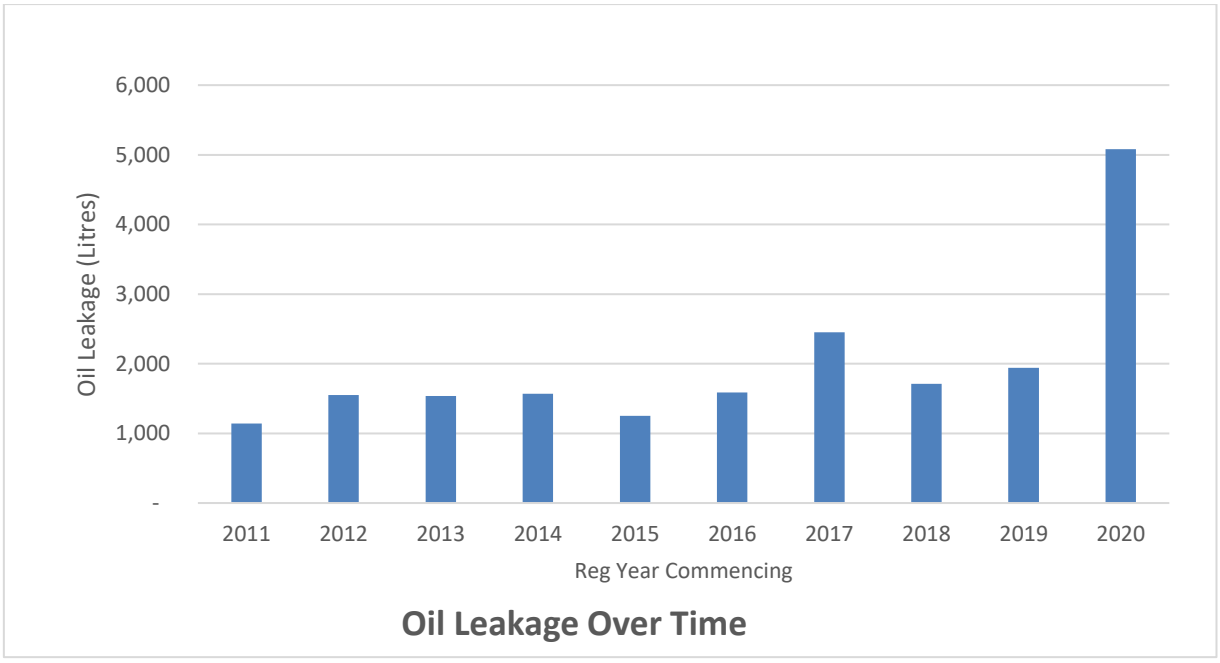
2.3. As part of the needs case for this project, we considered information provided by UKPN on the deterioration of its underground cables in south London.

2.4. UKPN's cables on the Wimbledon – Bengeworth – Deptford routes were installed in the 1960's and are approaching 70 years of operational service. The cables' construction includes pressurised oil with a lead sheath, and they have deteriorated significantly over the years, leading to oil leakage.

2.5. The level of oil leakage observed is consistent with the expected deterioration of this type of cable. However, the oil poses an environmental risk to drinking water supplies and the natural environment and has required UKPN to instigate repairs in the past. These repairs will need to continue, and likely at an increased rate, until a more substantive intervention is

implemented. The chart below sets out the level of historical and current oil leakage on these cable routes.

Figure 1: Annual oil leakage on the Wimbledon – Bengeworth – Deptford routes[5]



2.6. UKPN has provided information on the current and forecast health of these cables (shown in the table below). The health index (HI)[6] scores from the present day through to the end of ED2 indicates a progression towards failure and that these cables require replacement.

[5] Note that the data for 2020 is not for the entirety of the regulatory year, as at the time of compilation, this was not yet complete

[6] The health index (HI) score is on a scale of HI-1 to HI-5 where a HI-1 score represents a cable in an as-new healthy condition, and a HI-5 represents a cable in a condition requiring replacement.

Table 1: current and forecast health of Wimbledon – Bengeworth – Deptford cables

132kV Circuit Name	Circuit Length (km)	Current Circuit HI	Start of ED2 HI	End of ED2 HI	Criticality Index[7]
Wimbledon to Bengeworth Road Circuit 1	10.4	4	4	5	C2
Wimbledon to Bengeworth Road Circuit 2	10.4	4	4	5	C2
Bengeworth Road to Deptford Circuit 1	10.1	5	5	5	C2
Bengeworth Road to Deptford Circuit 2	10.1	5	5	5	C2

2.7. In RIIO-ED1, these cables were listed as being assets in which leakage was a concern and were approved for part replacement. This was on the basis that some sections of the cables were unaffected by oil leakage issues and therefore considered relatively low risk. The oil leakage has become worse and we agree that substantive intervention is required to either replace the cables or provide network capacity to meet system demand through some other means.

Forecast demand growth

2.8. NGET and UKPN have both provided Ofgem with load growth information that forecasts an increase in demand in south London of between 30 – 110% by 2050. The forecast is driven in large part by:

[7] The Criticality Index is a comparative measure of the Consequence of Failure (CoF) and is used for tracking changes in asset CoF over time. There are four Criticality Index bands, ranging from 1 (lowest criticality) to 4 (highest criticality).

- expected growth driven by Net Zero, covering increased electric vehicle charging, solar panels capacity, battery capacity and heat pumps.

- an estimated 20% population increase in the inner London boroughs of Wandsworth, Lambeth and Southwark (from 950,000 to 1.1m) leading to increased customer connection applications.

- London's long-term strategic growth plan including seven major developments within the south London area that will increase electricity demand for homes, businesses and transport.

2.9. We have not scrutinised the work underpinning these future growth estimates. Instead, when assessing the needs case, we have looked at a range of demand growth scenarios and compared the risks with progressing the Bengeworth Road project now (rather than the other solutions proposed which are further described in the next chapter) against the risks that it either would not be needed, or it would be needed at a later date and incur much greater cost.

Our initial view of needs case

2.10. We consider that the needs case put forward by NGET and UKPN is valid.

2.11. We maintain our view from the RIIO-ED1 settlement that the deterioration of UKPN's aging cables would require a substantive intervention – either by replacing these cables or creating new assets elsewhere – to ensure a robust network for the customers they supply.

2.12. We agree that additional capacity will be required in south London to support expected demand growth, although the optimal solution will depend on the extent of this growth, which is uncertain.

2.13. NGET and UKPN have considered several options to address the needs case. We set out in the following chapter our view on the optioneering carried out by NGET and UKPN.

3. Assessment of options and justification for the proposed project

Section summary

We examine all the alternative solutions considered by NGET in collaboration with UKPN from a technical viewpoint. We analyse the relative costs of these options and discuss our minded-to view of their proposed solution.

Questions

Question 2: Do you agree with our technical assessment of the range of solutions to meet the needs case?

Question 3: Do you agree with our minded-to view of the solution proposed by NGET?

Engineering assessment of the range of solutions

3.1. To address the needs case drivers discussed in the previous chapter (deteriorating cables and forecast increases in demand), NGET and UKPN worked together to consider the following two broad options[8]:

- Replacing the deteriorating UKPN cables on the Wimbledon - Bengeworth - Deptford route to continue to supply the current demand, followed by additional GSP reinforcements as demand increases; or

- Reinforcing existing GSP substations or building a new GSP substation now to provide greater network capacity sufficient for future demand and removing the need for the deteriorating UKPN cables.

[8] The "Do nothing" option was ruled out given the state of the existing UKPN cables and the criticality of the demand in this region

3.2. Each broad option also contained variations of relevant components, such the alternative approaches to replacing the UKPN cables or to building additional network capacity.

3.3. We have undertaken a technical review of the alternative solutions considered by NGET in collaboration with UKPN, through the review of a variety of material including engineering justification papers, networks system studies and reports. The material we reviewed comprised NGET's business plan submission, NGET's initial submission under the re-opener licence condition and responses to supplementary questions from both NGET and UKPN.

UKPN cable replacement solutions

3.4. UKPN had considered work options on its own network to address the deterioration of its aging cables on the Wimbledon – Bengeworth – Deptford route. We have summarised these cable replacement options below, alongside UKPN's views on their viability.

Open cut cable replacement

3.5. This would involve the open-cut asset replacement of the 41km of oil circuits between Wimbledon to Deptford. The replacement cables would be installed in the public highway with the normal trenching requirements of width >1m, depth =1.3m, for a double circuit, non-diversified route with pilot ducts. This would also require the construction of a 132kV switchboard at UKPN's existing substation.

3.6. After discussion with Ofgem, UKPN provided the open cut option with alternative routes to avoid further 132kV downstream works. The scope would have been broadly similar to the specification above.

3.7. Whereas this solution can address the deterioration of the existing cables and could accommodate some of the anticipated capacity increase, UKPN assess the delivery risk as high due to likely resistance to the works by local authorities and the general public.

UKPN sole-use tunnel

3.8. This option involves replacing the south London 132kV fluid filled cables between Wimbledon and Deptford via Bengeworth Road with XPLE cables installed in a new UKPN sole-use deep cable tunnel of 2m diameter. Terminations would be made to the existing connection points and the network configuration would remain unchanged.

3.9. This solution could address both drivers of the needs case, but is assessed as medium-to-high delivery risk by UKPN on account of the difficulties in the design, planning and obtaining consents for the tunnelling work, as well as space constraints at the Wimbledon substation site.

UKPN and NGET tunnel share

3.10. Under this option, asset replacement of the Bengeworth Road to New Cross 132kV cables would be achieved by installing replacement 132kV cables in National Grid's LPT2 tunnel. The cables would be terminated onto the existing connections at each end with no change to the existing network configuration. Due to cable design and ventilation requirements the diameter of National Grid's tunnel would need to be increased from 3m to 4m. In addition, it would be necessary to construct a spur extension from the main tunnel into Bengeworth Road. This option would avoid the need to undertake a planned Wandsworth Town cable diversion.

3.11. National Grid are entering the delivery phase of the LPT2 project based on a 3m diameter design, which effectively removes this option from practical consideration.

NGET GSP solutions

3.12. NGET considered three options, as described below.

Expansion of Wimbledon GSP

3.13. Expansion at Wimbledon GSP is already planned, and once this is completed the site will comprise six 240MVA Supergrid Transformers (SGTs). NGET expressed concerns as to the viability of including a seventh SGT at Wimbledon to support demand in this area. This would present operational running arrangement difficulties in compliance with SQSS and require significant reinforcements on the distribution system. As a result of those concerns, expansion of the Wimbledon GSP to meet the needs case has been discarded by NGET.

Expansion of New Cross 275/132kV GSP & 275/66kV GSP

3.14. NGET has presented Ofgem with a report that details what work would need to be done at the New Cross site to support the forecast load growth, alongside the consequential works on the UKPN distribution system. The report also details several issues that limit the scope for New Cross expansion. NGET and UKPN have stated they are not able to presently use the available capacity economically at the New Cross 66kV substation adjacent to New Cross

132kV. It considers that in all instances, a GSP at Bengeworth Road would eventually be required to maintain compliance with the SQSS planning standards, albeit that under some of these scenarios this may not be required until 2043. Consequently, expansion of NGET's existing GSP at New Cross has been discarded as a solution to meet all future demand scenarios. NGET are likely to have to replace the New Cross 275kV substation with a 400kV substation before 2050. NGET did not provide outage cost forecasts but we acknowledge the presence of an additional GSP would minimise outage costs for the replacement of the 275kV site.

Construction of a new GSP at Bengeworth Road

3.15. NGET's proposed solution is to build a new 400kV substation adjacent to UKPN's existing Bengeworth Road 132kV substation site. This substation would form a new GSP and divert supply currently along UKPN's Wimbledon – Bengeworth – Deptford cable routes into NGET's LPT2 scheme. This will support the achievement of compliance of the transmission network with SQSS[9] planning standards and P2/7 for UKPN's distribution network and allow for the future addition of a third SGT to the substation to address potential further increases in demand.

3.16. The south London area currently supplied along UKPN's Wimbledon – Bengeworth – Deptford cable routes will shift to be supplied along the various subsequent GSPs on LPT2. NGET considers that the initiation of a new GSP at Bengeworth Road is the most flexible and resilient response from a transmission system viewpoint.

3.17. We note that UKPN will be required to undertake open cut 132kV routes works (estimated 5km total) in the Brixton and Clapham areas to realise the additional capacity that the new Bengeworth Rd GSP would provide. These works will be evaluated as part of the UKPN ED2 submission. We have factored in UKPN's forecast costs and scope into our analysis.

Ofgem's view of the potential solutions

3.18. Having considered the range of solutions presented by UKPN and NGET, we are satisfied that they have considered an appropriate set of options to address the needs case. Of the UKPN cable replacement solutions, we agree that the option of engaging in a sharing

[9] Security & Quality of Supply Standard

arrangement of the LPT2 tunnel with NGET is no longer feasible, as that project is too far advanced to incorporate such a significant change as increasing the tunnel diameter from 3 to 4m.

3.19. We also agree with NGET's analysis of the difficulties involved in the expansion of the Wimbledon or New Cross GSPs to meet the needs case. Therefore, we have taken forward three viable options for economic assessment. The first is the construction of a new GSP at Bengeworth Road and decommissioning the existing UKPN cables on the Wimbledon - Bengeworth - Deptford route. The second option is the open cut replacement of the UKPN cables, followed by adding network capacity later in line with the local demand growth. The additional network capacity would eventually require the construction of the Bengeworth Road substation[10], at a higher cost than it would take now due to the loss of synergy and efficiency of joint work along with NGET's LPT2 project. The third option is the same as the second one except that instead of open cut, it involves the construction of a sole use tunnel for UKPN cables.

Economic assessment of options

3.20. We have not conducted a cost-benefit analysis on the options to meet the needs case. Instead, since all of the proposed options meet the needs case, we have focussed on looking at the relative cost of the solutions that meet those outcomes.

3.21. NGET and UKPN have provided Ofgem with the relative costs of the viable solutions over time. This is summarised below, where the negative values represent costs incurred. It should be noted that the forecast costs have been offset against the lifetime value of reduced electrical losses on the UKPN network (assuming UKPN's demand growth forecast), though this is small relative to the size of the investment. We also note that the cost estimates for options 2 and 3 do not factor in the economic cost of disruption caused by open cut replacement of the UKPN cables in the streets of south London or the risk of delay in completion of this work.

[10] Assuming the demand growth arises in line with UKPN's forecast

Table 2: relative costs incurred for progressing the viable solutions

Option No.	Options Description	Net Present Value of cost incurred over 45 years (£m, 18/19 prices)
1	Install Bengeworth Road Grid Supply Point as part of LPT2 and decommissioning the Wimbledon – Bengeworth – Deptford 132kV cables	-123
2	Construction of open cut route for replacing the Wimbledon – Bengeworth – Deptford cables providing additional capacity at New Cross by 2030 and establishing Bengeworth Road by 2043	-175
3	Construction of UKPN Tunnel for replacing the Wimbledon – Bengeworth – Deptford cables, providing additional capacity at New Cross by 2030 and establishing Bengeworth Road by 2043	-186

3.22. The analysis indicates that the lowest cost option across most investment timescales is the construction of a new GSP at Bengeworth Road as part of LPT2 , with the largest cost difference occurring over the 45 year timespan.

Our assessment of viable solutions

3.23. We have reviewed the detail underpinning the assessment of the options presented above. Option 3 is estimated to cost more than establishing Bengeworth Road GSP as part of LPT2, without providing any compensatory benefits to offset this additional cost. Whereas we don't consider the difficulties in getting consents for option 2 to be an insurmountable problem, we agree that this factor adds significant risks in respect of timing and cost overruns when compared to the preferred solution. Therefore, we consider that under the demand growth scenario UKPN has presented, Bengeworth Road GSP (option 1) is the best solution to satisfy the needs case.

3.24. We have also sense-checked this analysis by looking at the incurred costs for the various options under a range of demand growth scenarios, from minimal growth up to the levels presented by UKPN.

3.25. In particular, we have considered the scenario where demand does not grow to the extent that a new GSP is required at Bengeworth Road to support this demand. This would still require the reinforcement of New Cross and the open cut replacement of the 132kV cables on the Wimbledon - Bengeworth - Deptford route.

3.26. Whilst this would incur marginally lower cost (c£10m less over 45 years) than the Bengeworth Road GSP solution, it neither factors in the economic cost of disruption caused by open cut replacement of the UKPN cables in the streets of south London nor the risk of delay in completion of this work (in line with the cost estimate for options 2 and 3 in the previous section). This option limits the potential to accommodate future demand growth and lacks resilience by leaving a significant proportion of south London demand on two heavily loaded GSPs. In contrast , the proposed Bengeworth GSP option will avoid the disruption of replacing the Wimbledon – Bengeworth – Deptford 132kV cables, creates headroom to accommodate forecast demand growth, provides diversity to security of supply in south London, and will facilitate the asset replacement of New Cross GSP when this is needed.

3.27. Overall we are satisfied that the option of undertaking the Bengeworth Road GSP development and then decommissioning the cables as part of the LPT2 project represents the most cost-efficient solution (on a risk-adjusted basis) against the majority of demand growth/timescale combinations.

Our minded-to view of the proposed project

3.28. Our review concluded that both NGET's proposed new GSP at Bengeworth Road and the first two of UKPN's solutions are all technically feasible. However, our minded-to view is that NGET's proposed new GSP at Bengeworth Road (which once complete will allow UKPN to decommission the Wimbledon – Bengeworth – Deptford cables) represents the most optimal strategic option. It is a whole system solution that would address both the issues of UKPN's deteriorating cables and the potential future capacity requirements of the south London area.

3.29. There are a range of other benefits that the Bengeworth Road GSP option brings: it provides increased resilience for an economically significant area of the country; it provides strategic cover for potential demand growth; it allows for the further development of the New Cross site without such substantial risk of disruption to consumers; and it avoids much of the transmission-related disruption from works in the alternative options.

3.30. We recognise that the preference for the proposed project over the other alternative solutions is in part driven by the future growth assumptions presented by UKPN and NGET. If

no growth was to transpire, progressing with the Bengeworth Road project would prove to have been an inefficient investment decision relative to some of the other options available. However, we consider that the direction of travel on decarbonisation of the energy system means that there is sufficient credibility in demand growth scenarios that would justify the proposed project.

3.31. We have considered the delivery cost of the proposed project and the alternative options against a variety of demand growth assumptions. As previously noted, in most demand growth scenarios, the Bengeworth Road GSP becomes a necessity; the variable for these is the timing of the need. The delivery cost of this project will increase noticeably if it is delayed beyond the completion of LPT2 works. In our view, the risk of providing the additional capacity early through the Bengeworth Road project outweighs the risk that it would prove to be an inefficient investment. Accordingly, we are minded to accept the justification for the proposed project. The following chapter considers the costs for this project that have been submitted for consideration by Ofgem.

4. Cost assessment of the proposed project

Section summary

This section sets out our assessment of the submitted costs of the Bengeworth Road GSP project. The results represent our current view of an economic and efficient solution.

Questions

Question 4: Do you agree with our cost assessment of NGET's proposed new GSP at Bengeworth Road?

4.1. NGET's submitted costs for this project were broken down into a combination of six work packages, risk and contingency, project management costs and land costs. Our treatment of each area is as set out below and is based on our treatment of cost submissions for the RIIO-ET2 price control. More generic information on our cost assessment approach can be found in the ET2 final determination documents[11].

Work packages

4.2. The proposed project work packages comprised a mixture of different types of contract, and our cost assessment approach has varied in line with their differing characteristics and the nature of the work covered by these contracts. As a first stage, we have considered whether these works have been well specified and competitively tendered in the wider market; if so, we have accepted these costs as representative of the economic and efficient level obtainable. Where contracts have not been competitively tendered, we have reviewed the constituent parts to benchmark against both the asset and other cost data we used in setting the ET2 price control. The specifics of how this approach has been implemented are detailed in the sections below.

[11] Chapter 3 of RIIO-2 Final Determinations Electricity Transmission System Annex (REVISED) (ofgem.gov.uk)

Contracts with risk sharing

4.3. Some of the tendered work contract prices included contingency allowances for dealing with risks that may occur in the delivery of these contracts. The contractors are incentivised to beat these contract prices, and are in part protected from cost overruns, through an equal (50/50) pain/gain share mechanism between NGET and the contractors for cost variations from the contract price.

4.4. This arrangement applies for both the Tunnel and Shafts contract and the Head House, Mechanical and Electrical Works contract. These contracts were originally included in the LPT2 contract, and the outturn values formed part of the LPT2 contract evaluation. Since then the works scope has changed considerably, and the contract price has increased accordingly.

4.5. Although it has been possible to compare some elements of these contract costs with the LPT2 equivalents, due to the specialised nature of other elements, we have not been able to benchmark all costs.

4.6. One element which we will adjust is risk and contingency. Our ET2 determinations capped average risk across projects at approximately 7.5% of contract value, following a review of outturn risk on a number of ET1 projects. We are proposing to do the same across these risk-sharing projects, which results in some variation between the proposed contract prices and our proposed allowance. Where the current embedded risk is above 7.5% of the contract value, we are minded to reduce the allowance so that the risk element does not exceed 7.5% of the contract cost. Where the current embedded risk is below 7.5% of the contract value, we are minded to add an allowance for 50% of the differential between the current rate and the 7.5% level, in line with NGET's risk exposure for those contracts. Other than these risk adjustments, we will accept the proposed contract prices. We consider that the risk sharing nature of the contract will incentivise NGET to manage these contracts efficiently.

Fixed price contracts

4.7. NGET has entered into a fixed price contract for the cable purchase. NGET has been able to benchmark this activity and we have accepted their evidence on this. The delivery risk is with the contractor and we have not allowed NGET any risk premium on this contract.

Contracts out to tender

4.8. NGET has a few contracts out to tender, which are yet to be finalised. These cover areas such as the cable installation and substation infrastructure and connection. NGET has submitted internal benchmarking prices for these activities; it has since indicated that the initial tender submissions cover a range of values around their submitted costs. Although the tender costs are not yet firm, we propose to allow the tender costs in full as our consideration of the benchmarkable elements suggest that the proposed costs are reasonable. However, since the comparator benchmark data is based on outturn costs, we take the view that this includes any outturn risk that has crystallised; therefore, we propose that there should not be an additional risk allowance for these contracts.

Risk and contingency

4.9. NGET requested £7.5m for risk and contingency, in addition to the risk elements embedded in the individual work package contracts. Our view is that the proportion of contract value we are proposing to set through embedded risk allowances deal with the relevant risks for which NGET should be remunerated through the proposed project allowance. Accordingly, we are proposing a zero allowance for this element of the submission.

Project management

4.10. NGET submitted £9.2m for project management (PM) costs. We have removed this from the assessment, as under the RIIO-2 arrangements, PM comes under the scope of the costs included in the opex escalator which will automatically increase the opex allowance if the capex allowance is increased through specified reopeners. NGET will be remunerated through the opex escalator for PM and all other such costs incurred in the development of this project.

Land costs

4.11. We have assessed the reasonableness of NGET's proposed land costs and consider them to be at an efficient level. Consequently, we are minded to allow these in full.

Summary

4.12. The table below details NGET's requested funding, our proposed reductions, and our proposed allowances against each of the components. Specifics of the work packages have been redacted for commercial sensitivity.

Table 3: Submitted and proposed allowances for Bengeworth Road project (£m, 18/19 prices)

Contract Package	NGET Request (£m)	Ofgem Proposed Adjustments (£m)	Ofgem Proposed Allowances (£m)
Work packages and land costs	80.78	-0.02	80.76
Risk & contingency	7.50	-7.50	0.00
PM[12]	9.24	-9.24	0.00
Grand total	**97.52**	**-16.76**	**80.76**

4.13. In the RIIO-2 price control framework, PM costs will be funded under the opex escalator mechanism.

[12] Zero allowance has been given as this remunerated through the opex escalator mechanism - https://www.ofgem.gov.uk/publications-and-updates/decision-proposed-modifications-riio-2-transmission-gas-distribution-and-electricity-system-operator-licences

5. Next Steps

5.1. We welcome your responses to this consultation, both generally, and in particular on the specific questions in Chapters 2, 3 and 4. Please send your response to: RIIO2@ofgem.gov.uk. The deadline for response is 17 May 2021.

5.2. We will conclude our assessment of NGET's Bengeworth Road re-opener with a decision in June 2021. If our initial view does not change through the consultation and re-opener assessment processes, our decision will confirm our provisional view that NGET should be funded for the efficient delivery of Bengeworth Road GSP Project.

5.3. We are minded to categorise this project as an evaluative Price Control Deliverable (PCD) as we believe there is some flexibility in the manner by which this project can be delivered. Given the potential level of difference in materiality between the delivery modes, we consider it appropriate to protect consumer interests by reviewing the delivery. As such, if we confirm our decision that NGET should be funded for the project, we expect to initiate a statutory consultation to make the relevant changes to the licence required to set explicit deliverables, timescale(s) for delivery and the profile of the project allowances for the PCD.

Appendices

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Appendix 1 – Consultation questions

Needs case for the proposed project

Q1. Do you agree with our view of the needs case for the Bengeworth road GSP Project?

Options for addressing the needs case and justification for the proposed project

Question 2: Do you agree with our technical assessment of the range of solutions to meet the needs case?

Question 3: Do you agree with our minded-to view of the solution proposed by NGET?

Cost assessment of the proposed project

Q4. Do you agree with our cost assessment of NGET's proposed new GSP at Bengeworth Road?

Appendix 2 – Privacy notice on consultations

Personal data

The following explains your rights and gives you the information you are entitled to under the General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the controller and contact details of our Data Protection Officer

The Gas and Electricity Markets Authority is the controller, (for ease of reference, "Ofgem"). The Data Protection Officer can be contacted at dpo@ofgem.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

As a public authority, the GDPR makes provision for Ofgem to process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

3. With whom we will be sharing your personal data

(Include here all organisations outside Ofgem who will be given all or some of the data. There is no need to include organisations that will only receive anonymised data. If different organisations see different set of data then make this clear. Be a specific as possible.)

4. For how long we will keep your personal data, or criteria used to determine the retention period.

Your personal data will be held for (be as clear as possible but allow room for changes to programmes or policy. It is acceptable to give a relative time e.g. 'six months after the project is closed')

5. Your rights

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- know how we use your personal data
- access your personal data
- have personal data corrected if it is inaccurate or incomplete
- ask us to delete personal data when we no longer need it
- ask us to restrict how we process your data
- get your data from us and re-use it across other services
- object to certain ways we use your data
- be safeguarded against risks where decisions based on your data are taken entirely automatically
- tell us if we can share your information with 3rd parties
- tell us your preferred frequency, content and format of our communications with you
- to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law. You can contact the ICO at https://ico.org.uk/, or telephone 0303 123 1113.

6. Your personal data will not be sent overseas (Note that this cannot be claimed if using Survey Monkey for the consultation as their servers are in the US. In that case use "the Data you provide directly will be stored by Survey Monkey on their servers in the United States. We have taken all necessary precautions to ensure that your rights in term of data protection will not be compromised by this".

7. Your personal data will not be used for any automated decision making.

8. Your personal data will be stored in a secure government IT system. (If using a third party system such as Survey Monkey to gather the data, you will need to state clearly at which point the data will be moved from there to our internal systems.)

9. More information For more information on how Ofgem processes your data, click on the link to our "Ofgem privacy promise".