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1. INTRODUCTION

1.1 Introduction

- 1.1.1 This report provides an update to and should be read in conjunction with the Strategic Proposal Back Check and Review (BCR) (2020) for the Yorkshire Green Energy Enablement (GREEN) project (hereinafter referred to as the Project). This report should also be read in conjunction with other supporting documents, namely the Yorkshire GREEN Project Strategic Proposal Report (2019) and the Yorkshire GREEN Project Need Case (hereinafter referred to as the Project Need Case).
- 1.1.2 Since the publication of the BCR, two further developments have occurred:
- The latest Network Options Assessment (NOA) (2020/21) was published in January 2021, based on the latest Future Energy Scenarios (FES) 2020; and
 - The UK Government's offshore wind target was increased to 40GW by 2030, from the previous target of 30GW assumed in FES 2020.
- 1.1.3 These developments are significant to the consideration of options for the Project as they both imply more ambitious and optimistic assumptions about the extent of new generation to be connected to the network in coming years, as compared to the 2019 FES and 2019/20 NOA that informed decision-making in the BCR.
- 1.1.4 This report considers whether, in light of the new information available, the assessment and conclusions in the BCR exercise remain robust.

2. SUMMARY OF NEW INFORMATION

2.1 Introduction

2.1.1 This section of the report provides an update of the NOA 6 (2020/21) process including the consideration of different options, as well as a consideration of those options alongside updated boundary constraint costs. It also covers the increase in the UK Government's target for offshore wind generation.

2.2 Network Options Assessment 6

Overview and Summary of Options

2.2.1 The FES show four different scenarios for plausible and credible pathways for the future of energy from today through to 2050. Based on these four scenarios, the Electricity Ten Year Statement (EYTS) identifies future transmission requirements, and areas where the network needs to be strengthened and reinforced. The Transmission Owners (TOs) put forward several options to solve these future network requirements, which are submitted into the annual NOA cycle. The NOA is an economic analysis of each of these options and provides a recommendation on which options would be the most economic to proceed with and develop.

2.2.2 In NOA 4 (2018/19), based on FES 2018, an option called OENO was recommended to meet the system reinforcements required. This option comprised of a 400kV overhead line between Osbaldwick and Eggborough to reinforce the B7, B7a and B8 boundaries. This confirmed the economic case for investigating reinforcements over these boundaries in further detail. A long list of strategic options was subsequently developed as part of the 2019 Strategic Proposal process, in which OENO was considered. This resulted in the selection of OPN2, which consisted of a new 400kV overhead line between Osbaldwick and Poppleton, with relevant 275kV upgrades.

2.2.3 OPN2 was then submitted into the NOA 5 (2019/20) process, based on FES 2019, alongside four other alternative options (including OENO). A proceed signal was given for OPN2 in NOA 5.

2.2.4 As a result of agreements for customer connections which were not included in the FES 2019, further network and system studies were undertaken. These identified a circuit rating requirement of 1500MVA, which meant that the existing 1100MVA rating of OPN2 selected in the NOA 5 assessment would now be inadequate. A BCR was therefore undertaken; this identified a variant of OPN2 which was entered into the NOA 6 (2020/21) process (which is based on FES 2020).

2.2.5 A total of seven options were entered into the NOA 6 (2020/21) process as follows:

- OENO - A new 400kV double circuit overhead line between Osbaldwick and Eggborough, and new 400kV substations at Osbaldwick and Eggborough.
- OPN1 – A new 400kV double circuit overhead line from the 2TW line, to a new 400kV substation in the York area, and uprate the existing 275kV line from Poppleton to Monk Fryston to 400kV, and new Monk Fryston 400kV substation.
- OPN2 - A new 400kV double circuit overhead line from the 2TW line, to a new 275kV substation in the York area, and uprate the existing 275kV line from

Poppleton to Monk Fryston (but keep at 275kV), and new Monk Fryston 400kV substation.

- OPN4 - A new 400kV double circuit underground cable from the 2TW line, to a new 275kV substation in the York area, and uprate the existing 275kV line from Poppleton to Monk Fryston (but keep at 275kV), and new Monk Fryston 400kV substation.
- OPN5 - A new 400kV double circuit overhead line from the 2TW line, to a new 400kV substation at York North, and uprate the existing 275kV line from Poppleton to Monk Fryston (but keep at 275kV), and new Monk Fryston 400kV substation.
- PMU1 - Upgrading to 400kV. Rebuild the 275kV substation at York North as proposed in OPN2/4 and uprate the XC/XCP lines to 400kV.
- PMU2 - Upgrading to 400kV. Take the proposed infrastructure in OPN5 and uprate the XC/XCP lines to 400kV.

2.2.6 NOA 6 (2020/21) again recommends a 'proceed' signal with OPN2. All other options in the list above received 'stop' or 'do not start' signals.

Constraint Costs

2.2.7 At the time of the BCR in 2020, the annual boundary constraint costs to deliver the reinforcement were derived from NOA 5 (2019/20), which is in turn based on FES 2019. The constraint costs from a single year delay were estimated by the Electricity System Operator (ESO) and this included the costs of not realising the full benefits of the Eastern Link 1 project ('E2DC' in the NOA process), which could still physically connect to the National Grid electricity transmission system in the event the reinforcement was not completed and energised in 2027.

2.2.8 However, as this analysis was based on the FES 2019, it did not capture the emerging direction of travel on renewables and the decarbonisation agenda. For example, FES 2019 pre-dates the UK Government legislation for Net Zero greenhouse gas emissions by 2050¹, and therefore is based around the previous target of 80% of 1990 levels by 2050. Only two of the 2019 FES scenarios ('Two Degrees' and 'Community Renewables') are assumed to meet the 80% reduction by 2050 target.

2.2.9 The 2020 FES, on which NOA 6 (2020/21) is based, includes three scenarios in which the 2050 net zero target is assumed to be met – 'Leading the Way' (by 2048), 'Consumer Transformation' and 'System Transformation' (both by 2050). Only the Steady Progression scenario assumes the target will not be met.

2.2.10 This means that the constraint costs for not enabling the connection of offshore wind and other green energy generation projects calculated using FES 2019/NOA 5 were likely to be materially understated relative to the more up-to-date FES 2020.

2.2.11 Furthermore, the additional signed customer connection agreements identified in the BCR and summarised below are not accounted for in the background generation assumptions in FES 2019.

¹ <https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law>

- 1.8GW Continental Link connection September 2027;
- 1GW Atlantic SuperConnection connection September 2027; and
- Hornsea P4 2.6GW - 2 phased connection in April 2027 & October 2028.

2.2.12 As these connections would increase the capacity flow requirement of the reinforcement beyond the levels assumed in NOA 5, based on FES 2019, they would result in greater constraint costs than are allowed for in the NOA 5 analysis.

2.2.13 In reviewing ESO constraint costs in the BCR process, it was assumed that the annual constraint costs value, based on FES 2019, was likely to be a significant underestimate of the real consumer detriment of delay to the Project. However, it was not possible at that time to quantify the costs based on the more recent FES 2020. This assumption played a key role in the assessment of the capital costs of options against their benefits, including constraint savings.

2.2.14 The new constraint cost analysis carried out by the ESO, based on FES 2020/NOA 6 and the new 1500MVA specification of OPN2, indicates that the cost of single year delay is significant² and, even in the most conservative scenario ('Slow Progression'), the constraint costs are more than three times greater than the constraint costs based on FES 2019.

FES 2020 treatment of local connections

2.2.15 The FES 2020 make conservative assumptions on the connection dates of the customers subject to the agreements referred to above. This means it is likely that, assuming some or all of these projects progress to their contracted connection dates in 2027, the FES 2020 scenarios may underestimate the extent of constraint costs.

2.3 Target for 40GW offshore wind by 2030

2.3.1 In October 2020, as part of its plans to 'Build Back Greener' and the green industrial revolution ten-point plan, the UK Government's offshore wind target was increased to 40GW by 2030, from the previous target of 30GW³. This policy was announced after the FES 2020 was published in July 2020, and therefore the latest FES does not take account of the significant increase in proposed offshore wind generation.

2.3.2 This further emphasises the shift in the direction of travel in relation to the increase in pace of decarbonisation since the FES 2019, and is likely to mean that even some of the more optimistic FES 2020 scenarios underestimate the likely level of offshore generation and the extent of constraint costs to be met by consumers if associated network investments are delayed. Only the 'Leading the Way' scenario assumes that 40GW of offshore wind will be connected by 2030.

² Boundary constraint costs are considered to be significant where this may affect National Grid's ability to perform their statutory duties to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

³ <https://www.gov.uk/government/news/new-plans-to-make-uk-world-leader-in-green-energy>

3. REVIEW OF 2020 BCR PROCESS AND KEY DECISIONS

3.1 Introduction

3.1.1 This section of the report updates the BCR key criteria (ability to meet the earliest in-service date of 2027, ability to minimise the length of the new 400kV connection, and ability to minimise the cost) following the release of NOA 6 (2020/21). It also considers the extent to which the decision to select Option 1B Overhead Line (OHL) - New Substation at 'York North' (400kV Offline Substation at Monk Fryston) (the current Strategic Proposal as described in the BCR and subsequently OPN2 in NOA 6 (2020/21)) would change.

3.2 Review of 2019 Strategic Proposal

3.2.1 During the 2020 BCR process, the 2019 Strategic Proposal (OPN2 from NOA 5 (2019/20)) was reviewed and revised into six variant strategic options (consisting of both OHL and underground cable (UGC) technology sub-options) to enable OPN2 to potentially be delivered.

3.2.2 A summary of the six variant strategic options considered in the BCR and the key criteria is provided in **Table 3.1** below. This is an update to Table 5.2 of the BCR and provides the revised 2020 total (capital and lifetime) costs whilst considering the updated boundary constraint costs (post NOA 6).

Table 3.1: Six Variant Strategic Options and Consideration of Key Criteria

| Variant Strategic Option | Tech. | 2020 EISD | Approx. Length (km) | 2020 Total (Capital and Lifetime) Cost (£m) | Are boundary constraint costs applicable (in addition to 2020 Total Costs (post NOA 5)? ⁴ | Are boundary constraint costs applicable (in addition to 2020 Total Cost) (post NOA 6)? ⁴ |
|--|-------|-----------|---------------------|---|--|---|
| Variant strategic option 1A – new 275kV substation at Monk Fryston, new 275kV or 400kV substation at 'York North', new 7.5km | OHL | 2028 | 7.5 | 401.06 – 430.19 | Yes – significant boundary constraint costs to be added | Yes – significant boundary constraint costs to be added (at least three times greater than the FES 2019 constraint costs) |

⁴ Boundary constraint costs are considered to be significant where this may affect National Grid's ability to perform their statutory duties to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

| Variant Strategic Option | Tech. | 2020 EISD | Approx. Length (km) | 2020 Total (Capital and Lifetime) Cost (£m) | Are boundary constraint costs applicable (in addition to 2020 Total Costs (post NOA 5)?⁴ | Are boundary constraint costs applicable (in addition to 2020 Total Cost) (post NOA 6)?⁴ |
|---|--------------|------------------|----------------------------|--|--|---|
| 400kV connection | UGC | 2027 | 7.5 | 524.16 – 624.84 | No boundary constraint costs | No boundary constraint costs |
| Variant strategic option 1B - new offline 400kV substation at Monk Fryston, new 275kV or 400kV substation at 'York North', new 7.5km 400kV connection | OHL | 2027 | 7.5 | 401.49 – 430.72 | No boundary constraint costs | No boundary constraint costs |
| | UGC | 2026 | 7.5 | 524.64 – 627.93 | No boundary constraint costs | No boundary constraint costs |
| Variant strategic option 2A - new 275kV substation at Monk Fryston, new 275kV or 400kV substation at 'Poppleton South', new 7.5km 400kV connection | OHL | 2028 | 7.5 | 427.60 | Yes – significant boundary constraint costs to be added | Yes – significant boundary constraint costs to be added (at least three times greater than the FES 2019 constraint costs) |
| | UGC | 2027 | 7.5 | 562.66 | No boundary constraint costs | No boundary constraint costs |
| Variant strategic option 2B- | OHL | 2027 | 7.5 | 407.71 | No boundary | No boundary constraint costs |

| Variant Strategic Option | Tech. | 2020 EISD | Approx. Length (km) | 2020 Total (Capital and Lifetime) Cost (£m) | Are boundary constraint costs applicable (in addition to 2020 Total Costs (post NOA 5)?⁴ | Are boundary constraint costs applicable (in addition to 2020 Total Cost) (post NOA 6)?⁴ |
|--|--------------|------------------|----------------------------|--|--|---|
| new offline 400kV substation at Monk Fryston, new 275kV or 400kV substation at 'Poppleton South', new 7.5km 400kV connection | | | | | constraint costs | |
| | UGC | 2026 | 7.5 | 562.54 | No boundary constraint costs | No boundary constraint costs |
| Variant strategic option 3A - new 275kV substation at Monk Fryston, new 275kV or 400kV substation at 'Poppleton South', new 7.5km 400kV connection and partial realignment of the existing 275kV XC/XCP overhead line between Moor Monkton Grange and the existing Poppleton 275kV substation. | OHL | 2028 | 7.5 | 431.81 | Yes – significant boundary constraint costs to be added | Yes – significant boundary constraint costs to be added (at least three times greater than the FES 2019 constraint costs) |
| | UGC | 2027 | 7.5 | 551.78 | No boundary constraint costs | No boundary constraint costs |

| Variant Strategic Option | Tech. | 2020 EISD | Approx. Length (km) | 2020 Total (Capital and Lifetime) Cost (£m) | Are boundary constraint costs applicable (in addition to 2020 Total Costs (post NOA 5)? ⁴ | Are boundary constraint costs applicable (in addition to 2020 Total Cost) (post NOA 6)? ⁴ |
|--|-------|-----------|---------------------|---|--|--|
| Variant strategic option 3B - new offline 400kV substation at Monk Fryston, new 275kV or 400kV substation at 'Poppleton South', new 7.5km 400kV connection and partial realignment of the existing 275kV XC/XCP overhead line between Moor Monkton Grange and the existing Poppleton 275kV substation. | OHL | 2027 | 7.5 | 432.15 | No boundary constraint costs | No boundary constraint costs |
| | UGC | 2026 | 7.5 | 551.97 | No boundary constraint costs | No boundary constraint costs |

3.2.3 During the 2020 BCR process, all of the variant strategic options detailed in the table above were considered suitable to be taken forward for BCR options appraisal.

3.2.4 Following the update to the boundary constraint costs (post NOA 6), it can be seen that OHL options 1A, 2A and 3A have an earliest in-service date (EISD) of 2028 (highlighted in red in **Table 3.1**). Therefore, the cost of these options has increased significantly with the post-NOA 6 boundary constraint costs (with an increase of at least three times greater than the FES 2019 / NOA 5 constraint costs). Given that there are alternative OHL options that would meet the need case for reinforcement with substantially lower costs, OHL options 1A, 2A and 3A have not been considered further.

3.3 Review of remaining 2019 Strategic Options

Strategic Options Not Applicable for Further Consideration

3.3.1 During the 2020 BCR process, an exercise was undertaken to determine which of the 2019 shortlisted strategic options (totalling 105 options) should be taken forward for further consideration. That process identified 49 strategic options which did not require further consideration for the following reasons:

- Superseded by previous review and amendment resulting in the six variant strategic options identified at **Section 3.2** of this report.
- Gas insulated line (GIL) no longer being considered as a technology option.
- No requirement for 400kV uprating works (to the existing 275kV XC and XCP overhead lines) – the FES scenarios and NOA outputs demonstrate that reconductoring at 275kV would be sufficient to meet the boundary transfer requirements.

3.3.2 As these strategic options were discounted for reasons other than cost, an update to boundary constraint costs has no bearing on the conclusion not to consider these options further, and the reasons for discounting them therefore remain valid.

Strategic Options More Expensive than the Six Variant Strategic Options

3.3.3 During the BCR process, and following the exercise described above, a further 28 strategic options were considered against the key criteria and were not considered suitable to be taken forward for BCR options appraisal for the following reasons:

- Their 2019 costs were already more expensive than the most expensive of the six variant strategic options (with 2020/2021 costs). Their costs would increase further should the additional works now known to be required at other substations be used to re-scope and re-cost these options to 2020/2021 prices.
- They all had an updated 2020 EISD of 2028 and therefore would not meet the desired 2027 EISD. This would incur additional NOA 5 boundary constraint costs which would be added to the costs set out in the bullet point above.
- They would each require a new 400kV connection length of between 19.47km and 39.51km, significantly longer (between 2.5 and 5 times longer) than the six variant strategic options.

3.3.4 In light of NOA 6 and the update to the boundary constraint cost analysis, which indicates that boundary constraint costs have increased significantly and are at least three times greater than NOA 5 constraint costs, these 28 strategic options remain unsuitable for further consideration for the reasons stated above. This provides further justification that these strategic options remain unsuitable for further consideration.

Re-scoping and re-costing of Remaining Strategic Options

Overview

3.3.5 During the BCR process, and following the exercise described above, the remaining 28 strategic options were then re-scoped and re-costed (similar to the manner in

which the 2019 Strategic Proposal was re-scoped to form the six variant strategic options). The re-costing exercise was undertaken using 2020/2021 prices (to match the costing exercise undertaken for the six variant strategic options). The re-scoping and re-costing exercise was undertaken to enable the 28 remaining strategic options to be considered against the key criteria.

Remaining Strategic Options More Expensive than Six Variant Strategic Options

3.3.6 21 of these 28 remaining strategic options were not considered suitable to be taken forward for BCR options appraisal for the following reasons:

- They all had an updated 2020 EISD of 2029. Including the NOA 5 annual boundary constraint costs, their 2020 costs were more expensive than the most expensive of the six variant strategic options (OHL only).
- They would each require a new 400kV connection length of between 19.47km and 39.51km, significantly longer (between 2.5 and 5 times longer) than the six variant strategic options.

3.3.7 These 21 strategic options remain unsuitable for further consideration for the reasons stated above. In addition, in view of the two years of delay to the EISD, the annual boundary constraint costs would significantly increase from the figure derived from NOA 5 and FES 2019 to a NOA 6 derived constraint cost which is at least three times greater. This provides further justification that these strategic options remain unsuitable for further consideration.

Remaining Strategic Options Cheaper or of Comparable Cost to Six Variant Strategic Options

3.3.8 The consideration detailed above resulted in a total of 98 of the 105 strategic options being discounted from the BCR process, leaving seven strategic options remaining for further consideration.

3.3.9 A summary of the remaining seven strategic options considered in the BCR and the key criteria is provided in **Table 3.2** below. This is an update to part of Table 5.3 of the BCR and provides the revised 2020 total (capital and lifetime) costs plus updated boundary constraint costs (post NOA 6).

Table 3.2: Remaining Seven Strategic Options and Consideration of key Criteria

| Ref. | Option Name | 2020 EISD | Approx. length (km) | 2020 Total (Capital and Lifetime) Cost (£m) | Boundary Constraint Costs (post NOA 5) ⁵ | Updated Boundary Constraint Costs (post NOA 6) ⁶ |
|------|-----------------------------|-----------|---------------------|---|---|---|
| 13 | 4ZR-OSB_THO-4VJ-DRA_EGG-CYR | 2029 | 25.49 | 283.92 | Significant boundary constraint costs to be added | Significant boundary constraint costs to be added (at |

⁵ Boundary constraint costs are considered to be significant where this may affect National Grid's ability to perform their statutory duties to develop and maintain an efficient, co-ordinated and economical system of electricity transmission.

| Ref. | Option Name | 2020 EISD | Approx. length (km) | 2020 Total (Capital and Lifetime) Cost (£m) | Boundary Constraint Costs (post NOA 5) ⁵ | Updated Boundary Constraint Costs (post NOA 6) ⁶ |
|------|-----------------------------|-----------|---------------------|---|---|---|
| | | | | | | least three times greater than the NOA 5 / FES 2019 constraint costs) |
| 16 | 4ZR-OSB_THO-4YS-MON_EGG-CYR | 2029 | 28.98 | 296.60 | Significant boundary constraint costs to be added | Significant boundary constraint costs to be added (at least three times greater than the NOA 5 / FES 2019 constraint costs) |
| 52 | OSB-4VJ-DRA_EGG-CYR | 2029 | 24.88 | 318.55 | Significant boundary constraint costs to be added | Significant boundary constraint costs to be added (at least three times greater than the NOA 5 / FES 2019 constraint costs) |
| 55 | OSB-4YS-MON_EGG-CYR | 2029 | 26.33 | 322.17 | Significant boundary constraint costs to be added | Significant boundary constraint costs to be added (at least three times greater than the NOA 5 / FES 2019 constraint costs) |

| Ref. | Option Name | 2020 EISD | Approx. length (km) | 2020 Total (Capital and Lifetime) Cost (£m) | Boundary Constraint Costs (post NOA 5) ⁵ | Updated Boundary Constraint Costs (post NOA 6) ⁶ |
|------|---------------------|-----------|---------------------|---|---|---|
| 28 | 4ZR-OSB_THO-MON-CYR | 2029 | 31.1 | 324.22 | Significant boundary constraint costs to be added | Significant boundary constraint costs to be added (at least three times greater than the NOA 5 / FES 2019 constraint costs) |
| 19 | 4ZR-OSB_THO-DRA-CYR | 2029 | 24.03 | 338.89 | Significant boundary constraint costs to be added | Significant boundary constraint costs to be added (at least three times greater than the NOA 5 / FES 2019 constraint costs) |
| 79 | THO-4YS-MON_EGG-CYR | 2029 | 30.11 | 360.63 | Significant boundary constraint costs to be added | Significant boundary constraint costs to be added (at least three times greater than the NOA 5 / FES 2019 constraint costs) |

- 3.3.10 Taking the original NOA 5 / FES 19 annual boundary constraint costs into consideration, five of the remaining seven strategic options were all less costly than the lowest cost OHL variant strategic options, whilst the remaining two strategic options were of comparable cost to the other OHL variant strategic options.
- 3.3.11 The seven remaining strategic options all had an EISD of 2029 (two years beyond the desired date), and all had a connection length between 24.03km and 31.10km, significantly longer (between 3.2 and 4.1 times longer) than the six variant strategic options taken forward (as identified in **Table 3.1** above).
- 3.3.12 There would be significant disbenefits associated with these options:
- 1) Substantially later (2029) EISDs would prevent delivering the enabling works required in contractual agreements to connect several customers. With the exception of the first phase of Hornsea P4, each of the generators listed in Section 2 of this report would not be able to physically connect to the transmission system without the reinforcement being completed and commissioned.
 - 2) Each of the seven options would have much longer connection lengths and would therefore likely have significantly greater environmental and socio-economic effects.
- 3.3.13 As discussed above, this analysis was undertaken in the context of two underlying factors.
- 3.3.14 Firstly, it was assumed that significant annual boundary constraint costs would be incurred, based on the 2019 FES, with only two scenarios meeting the superseded 80% 2050 carbon emissions target. Secondly, the assessment was based on the previous 1100MVA rating of OPN2, which would not be able to accommodate all of the customer connections that the current 1500MVA NOA 6 version can. It was therefore highly likely that the costs, including constraints, of the seven remaining strategic options were significantly higher than those of the six variant strategic options.
- 3.3.15 Therefore, all seven remaining strategic options were considered unsuitable to be taken forward for BCR options appraisal.
- 3.3.16 The new constraint cost analysis carried out by the ESO, based on NOA 6/FES 2020 and the new 1500MVA specification of OPN2, indicates that the cost of a single year delay is at least three times greater than the 2019 FES constraint cost. This means that the remaining seven options with 2029 EISDs would result in constraint costs significantly greater than the cost differential between these options and OPN2.
- 3.3.17 Furthermore, the new target to deliver 40GW of offshore wind by 2030, which is not factored into the FES 2020 / NOA 6 analysis, means that if anything, even the new constraint costs may be an understatement. On this basis, it can be confidently concluded that the new constraint costs are a best case assessment of the costs to consumers of delay to reinforcement – i.e. the costs of delay may be even higher.
- 3.3.18 The seven strategic options referred to above therefore remain unsuitable. In fact, these options are now significantly less preferable relative to the OPN2 options, to the extent that they would have been excluded without further consideration had the new constraint costs been available at the time of the BCR (2020).

3.4 Current Strategic Proposal

- 3.4.1 As a result of the review of the BCR key criteria following NOA 6 and the associated updated constraint costs, it has been concluded that the 2019 strategic options considered unsuitable to be taken forward for BCR options appraisal, remain unsuitable to be taken forward. In particular, a key finding is that seven strategic options that were previously less costly or of comparable cost (taking into account constraint costs based on FES 2019) to Option 1B/OPN2, are now subject to significantly greater annual constraint costs, meaning that these strategic options are now substantially less preferable.
- 3.4.2 It is also considered appropriate to discount three sub-options of the six variant strategic options that were previously taken forward for BCR options appraisal as explained above. This is the only change to the options selection which has been identified from the original options selection for the BCR process.
- 3.4.3 As the remaining variant strategic options all had an EISD of 2027, their consideration via the BCR options appraisal process and the subsequent analysis and conclusions remain unaffected by the increase in the annual boundary constraint costs following NOA 6. In particular, the conclusion to take forward Option 1B (OHL) - New Substation at 'York North' (400kV Offline Substation at Monk Fryston) for options appraisal and the assessment of it during the BCR options appraisal process remains valid.
- 3.4.4 Therefore, it remains appropriate that Option 1B (OHL) is taken forward as the Strategic Proposal. The economic case for doing so has been enhanced, relative to options with later EISDs, because of the significant growth in estimated constraint costs. It is therefore necessary to proceed without delay to maximise the chances of delivering the Strategic Proposal by the 2027 EISD.

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