# Rising & Lateral Mains

## ED2 Engineering Justification Paper Addendum

### ED2-NLR(A)-SPEN-005-RES-EJP-ADD

| Issue | Date | Comments |
|---|---|---|
| Issue 0.1 | Aug 2022 | Internal Draft for Review |
| Issue 0.2 | Aug 2022 | Internal Draft with Comments Addressed |
| Issue 1.0 | Aug 2022 | First Issue - Draft Determination Response |

| | |
|---|---|
| **Scheme Name** | Rising & Lateral Mains ED2 Strategy |
| **PCFM Cost Type** | Non-Load Related - Asset Replacement |
| **Activity** | Switchgear Condition Modernisation |
| **Primary Investment Driver** | Network and public risk reduction |
| **Reference** | ED2-NLR(A)-SPEN-005-RES-ADD |
| **Output Type** | Rising & Lateral Mains |
| **Cost** | SPD: £34.056m SPM: £27.072m |
| **Delivery Year** | 2023-2028 |
| **Reporting Table** | CV17 |
| **Outputs included in ED1** | Yes/No |
| **Business Plan Section** | Ensure a Safe and Reliable Electricity Supply |
| **Primary Annex** | Annex 4A.19: Rising and Lateral Mains Strategy |

| **Spend Apportionment** | **ED1** | **ED2** | **ED3** |
|---|---|---|---|
| | **£m** | **£61.128m** | **£m** |

| | **Proposed by** | **Endorsed by** | **Approved by** |
|---|---|---|---|
| **Name** | Alex Campbell | Ralph Eyre-Walker | David Cupples |
| **Signature** |  |  |  |
| **Date** | 23.08 2022 | 23 08.2022 | 23.08.2022 |

# 1 Purpose

This addendum has been prepared to provide additional information and justification to ED2-NLR(A)-SPEN 005-RES EJP Rising & Lateral Mains EJP following receipt of RIIO-ED2 Draft Determination The content of this addendum is in response to comments and feedback provided by Ofgem as to the "Partial Justification" status of the EJP. The purpose of this document is to support Ofgem's assessment for Final Determination including supporting any associated impact on engineering adjustments within Ofgem's financial modelling.

# 2 Ofgem Comments & Feedback

## 2.1 RIIO-ED2 Draft Determinations SPEN Annex

The following comments are taken from Table 26 of *"RIIO-ED2 Draft Determination SPEN Annex"*.

**Ofgem Comment -** Partially Justified. We agree with the needs case and optioneering presented by SPEN However, we are concerned that SPEN's proposal is based on survey data from a small sample size extrapolated over the asset base. We consider the volume of interventions proposed by SPEN to be uncertain.

**Ofgem Identified Risks -** There is a risk that the out-turn volumes will differ from the volumes that SPEN have proposed in their submission.

## 2.2 Draft Determination SQs

Following the receipt of Draft Determination, SPEN submitted SQs including *'SPEN_DD_016 – EJP Clarification'* which contain detail relevant to this EJP The relevant content of the SQ has been included below for reference.

**SPEN Submitted SQ SPEN_DD_016 (25/07/2022)**

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*"We agree with the needs case and optioneering presented by SPEN. However, we are concerned that SPEN's proposal is based on survey data from a small sample size extrapolated over the asset base. We consider the volume of interventions proposed by SPEN to be uncertain. There is a risk that the out-turn volumes will differ from the volumes that SPEN have proposed in their submission."*

**Is uncertainty over the volume of interventions related to survey size or to delivery in DPCR5 and RIIO ED1, and would justification over the validity of SPEN's RLM survey data alongside a breakdown of risks to delivery with mitigation actions meet Ofgem's expectations for this paper?**

SPEN will elaborate on the use of survey data for forecast RIIO-ED2 interventions, commenting on the validity of this and any assumptions made, including why we consider the sample size to be adequate. We will also outline any risks in using this method for forecasting volumes, plus the actions

we will take to ensure these risks are mitigated in the run-up to and during RIIO-ED2. We will outline our process to continuously update our data log of RLMs assets throughout RIIO ED2 and the benefit of this to deliverability and targeting of the programme.

**Is this proposal in-line with Ofgem's expectations for additional evidence to further justify our RLMs programme of works?**

**Ofgem response to SQ SPEN_DD_016 (08/08/2022)**

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We were not satisfied that SPEN has provided sufficient evidence to address the uncertainty over the volume of interventions related to survey size and therefore confidence We welcome further justification in regard to the validity of this approach, associated risks and risk mitigation measures.

# 3 Additional Justification

## 3.1 Summary of Ofgem SQs

SPEN responded to multiple SQs issued by Ofgem and these responses have been appended in Section 4 for reference. SPEN's responses to SQs were:

- SPEN042 on RLM delivery risks and mitigations received 09/02/2022
- SPEN043 on RLM unit costs received 09/02/2022
- SPEN044 on CV17 BPDTs and volume calculations received 09/02/2022
- SPEN105 on inspections received 11/04/2022

## 3.2 Additional Supporting Information

### 3.2.1 Survey Data

Our RIIO ED2 strategy is based on sample data from surveys undertaken in DPCR5 and RIIO-ED1, extrapolated to forecast the current health and deterioration rate of these assets. Whilst we recognise that the volumes of assets surveyed are a small proportion of our total asset population, we believe that this data can be used as a valid initial forecast for condition across the remaining assets. This is because RLMs assets tend to be of similar age, construction, loading and environment across all properties. This is discussed in our response to SQ SPEN105.

This survey data was used to forecast deterioration of assets and provide an estimate of their health. A proportion of the volume of the worst condition of these (HI4/5) have been included for intervention in our ED2 plan. We do not currently have a full list of sites that we will intervene on through this programme, but will use our inspection programme (discussed in section 3 2 2) to identify locations.

As the table below shows, we have not included the full volume of forecast HI4/5 assets in the ED2 plan, due to ED1 run rates and deliverability constraints

| Licence | Forecast HI4/HI5 (27/28) | ED2 Volume |
|---|---|---|
| SPD | 177,863 | 36,114 |
| SPM | 64,963 | 35,335 |

The inclusion of fewer volumes in ED2 mitigates the risk of survey data forecasting an inaccurate volume of HI4/5 assets (i.e. if fewer are HI4/5 than anticipated), as the poorest condition can be prioritised to be the reduced volume of replacements in ED2. Other poor condition assets can be deferred to later price controls as necessary, with no interventions required for assets in better condition than expected.

If the survey data forecast too few HI4/5 assets, this will not have any effect on ED2 volumes as these are limited by deliverability  This would have an effect on the strategy and volumes for future price controls.

### 3.2.2 Inspections Programme

Our RIIO-ED2 strategy is to inspect every RLM asset before it is replaced (though not every asset inspected will need replacing). The inspection data we collect will therefore directly inform our asset replacement plan over the next few price controls, ensuring that future replacement volumes are consistent with total asset population condition  As the ED2 inspection programme is front-ended, we will start building up this database quickly which will also aid with prioritisation of replacements within ED2. The front-ending of inspections has led to back-ending of interventions, both to allow locations to be identified from data and to ensure deliverability.

The inspection programme is discussed further in our response to SQ SPEN105. Our strategy to ensure deliverability of volumes in RIIO-ED2 is discussed in our response to SQ SPEN042.

# 4 Appendix

The content of this appendix has been redacted.