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Annex 33: Technical assurance report

December 2021

Electricity Northwest Ltd.

REVIEW OF BUSINESS PLAN DATA TABLES FOR RIIO-ED2 SUBMISSION

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Electricity Northwest Ltd.

REVIEW OF BUSINESS PLAN DATA TABLES FOR RIIO-ED2 SUBMISSION

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Electricity Northwest Ltd.

REVIEW OF BUSINESS PLAN DATA TABLES FOR RIIO-ED2 SUBMISSION

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1 INTRODUCTION

This report has been commissioned by Electricity Northwest Limited (ENWL), in order to review the Business Plan Data Tables (BPDTs) required by the Office of Gas and Electricity Markets (Ofgem) as part of their remit as regulators for the RIIO-ED2 price control period. In accordance with ENWL's established assurance process, it is a required that any component of the submission identified as critical risk is to be subject to external review by an appropriately qualified third party, in addition to associated internal assurance activities. As such, ENWL have commissioned WSP as the third party to perform this external review.

1.1 CONTEXT

ENWL is required to make a submission to Ofgem for the RIIO-ED2 price control period (covering years from 2023 - 2028) in 2021, consisting of a previous draft submission in July and a final submission in December. This final submission is to consist of a range of evidence and data that will allow Ofgem to determine cost allowances for ENWL in the RIIO-ED2 period.

The key elements of the RIIO-ED2 Business Plan submission are the submission of BPDTs and their accompanying commentaries, along with the narrative documents and supporting appendices. Ofgem has previously published guidance documentation for this submission, including a minimum requirements index sheet in which ENWL is required to indicate where in the submitted documentation a range of specific requirements have been satisfied.

1.2 APPROACH TO WORK

This report reviews the data and documents provided by ENWL to WSP as part of their draft submission to Ofgem for the RIIO-ED2 price control review. In particular, WSP have reviewed a range of BPDTs covering both technical and non-technical business aspects, in order to verify their accuracy, consistency, and efficacy. This review was conducted over two rounds; the first prior to the draft submission, covered in a separate document; and the second before the final submission, covered herein.

The review of the various BPDTs was conducted via two key tasks:

- Validation of the selected data, including where appropriate:
  - Tracing a subset of historical data back to a previous published source. Trend analysis to assess reasonableness of historic data in cases where this was relevant.
  - Outlier analysis, using a 3σ approach where data points are classed as outliers if they fall more than three standard deviations (σ) from the mean.
  - Review of current and forecast data in terms of reasonableness, with consideration of stated assumptions.
  - Consistency and correctness checks on selected BPDTs.

- Cross check with relevant Ofgem guidance, as published in their RIIO-ED2 Business Plan Data Template (BPDT) instructions and guidance documentation and provided to WSP.

1.3 REPORT STRUCTURE

This report details the research, analyses and conclusions of the work undertaken to provide a high level review of the BPDTs provided by ENWL. The remainder of the document is divided into sections as follows:

- Section 2 reviews the non-technical BPDTs marked for review, as agreed between WSP and ENWL. Each subsection therein reviews a separate table or table category.
- Section 3 similarly reviews the technical BPDTs marked for review, as agreed between WSP and ENWL. Each subsection again reviews a separate table or table category.
- Section 4 then summarises the findings and conclusions of this assurance report.

2 BPDT REVIEW – NON-TECHNICAL TABLES

This section consists of a high level review of the non-technical draft BPDTs provided by ENWL. This examines an overview of any potential errors and corrections and, where appropriate, may also outline tracing of historical data, trend analysis, or a variety of other verification methods as required.

2.1 C9 – CORE CAI

This worksheet collects cost data on the aggregated total of core CAI costs, and separates these by categories for cost assessment purposes.

DATA VALIDATION

Trend analysis reveals no obvious outliers in gross cost, regardless of categorisation. An example is plotted in Figure 2-1 below, which shows the gross costs from 2011 separated by cost category (e.g. labour, materials, etc.).

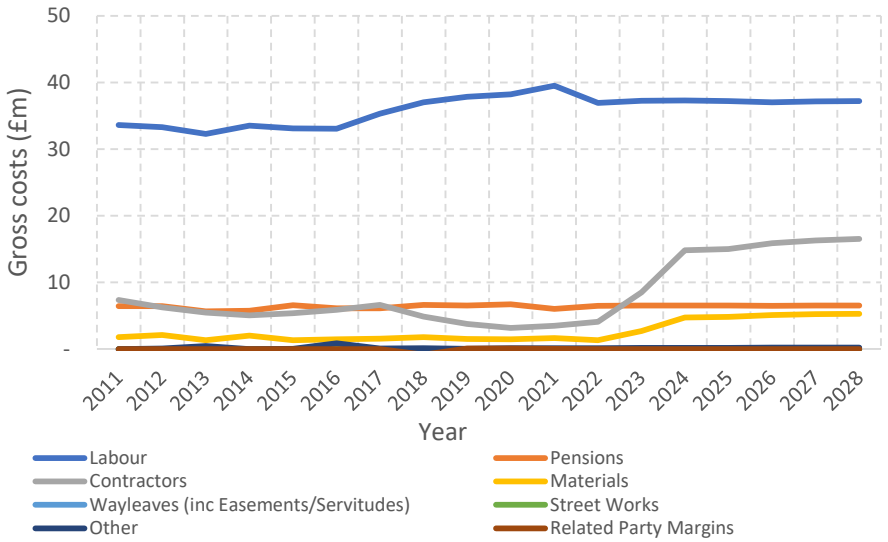

Figure 2-1 - C9: Gross costs, for each year and cost category.

Figure 2-1 does show an increase for contractor costs in RIIO-ED2, starting from 2023 onwards, but the values fall within 3σ of the average for contractor costs from 2011. Detailed outlier analysis does show that the 'Other' and 'Related Party Margins' categories do contain outliers (£0.9m in 2016 and -£0.8m in 2018 respectively). However, these are small variations, only flagged as outliers due to the low magnitudes of their respective cost categories. Furthermore, they are consistent with previous reporting, and as such do not require repeat validation.

It is worth noting that the associated commentary for C9 notes the "plan to spend an additional £5.1m each year on projects associated with delivering a better service to vulnerable customers, which we have classified as Call Centre costs." However, the year on year difference between RIIO-ED1 and RIIO-ED2 call centre costs varies from £4.9m to £5.5m, so additional clarity on how the difference is calculated may be useful.

GUIDANCE CROSS CHECK

Ofgem guidance has been followed. In particular:

- Gross costs have been reported by cost type and the correct cost categories.
- Total gross costs have been split by cost type at in Rows 15 to 22, and total income is entered in Rows 24 and 25 as required.
- The check cell in Row 28, which ensures the total gross costs match the total gross costs by category type, shows no errors.
- At the bottom of this worksheet, the memo table included in rows 45 to 52 captures costs in relation to DSO by the correct cost categories, and these are linked correctly in table M19.

2.2 C12 – CORE BS

This worksheet collects cost data on the aggregated total of core business support activities, and separates these by categories for cost assessment purposes.

DATA VALIDATION

Trend analysis visually reveals no obvious outliers in costs, regardless of categorisation. An example is plotted in Figure 2-2, which shows the gross costs from 2011 separated by cost category.

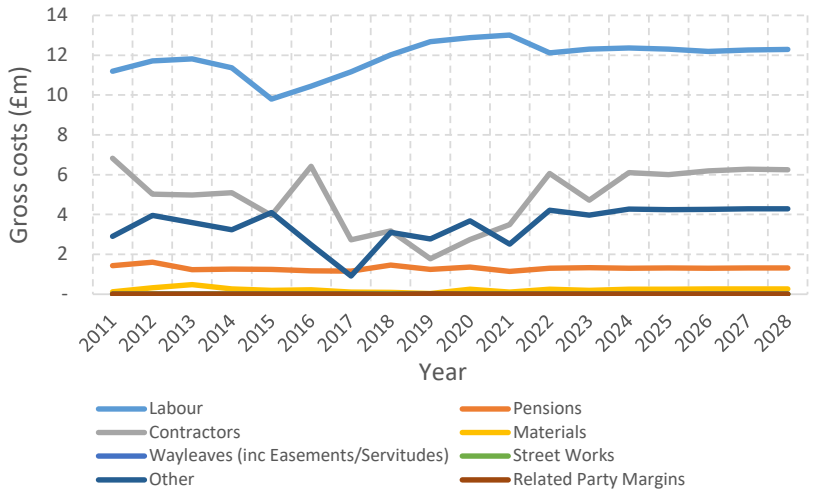

Figure 2-2 - C12: Gross costs, for each year and cost category.

Analysis of outliers beyond the 3σ range shows a potential outlier in 'Related Party Margins' for 2019. However, given the values in this series show zero costs in 9 of 18 years, this is likely due to the very low average.

Average costs for RIIO-ED1 and RIIO-ED2 were calculated, and match the values reported in the associated commentary. It is noted that the commentary on new activities calculates £2.3m and £8.4m to be spent on 'Non-operational training' and 'Finance and Regulation' respectively during RIIO-ED2.

These values are not clearly reflected in the C12 table; for example, the difference in finance and regulation spending between RIIO-ED1 and RIIO-ED2 is -£17.9m.

GUIDANCE CROSS CHECKS

Ofgem guidance has been followed. In particular:

- Gross costs are reported by cost type and the appropriate cost categories.
- The total gross costs are split by cost type in Rows 15 to 22. Income is entered as a negative in Rows 24 and 25.
- The total gross costs in Row 23 reconcile with the total gross costs by category type in Row 39, as confirmed by check cells.
- Income is reported by year, broken down by insurance claims paid to ENWL and other income in rows 40 and 41.
- The total net costs in Row 26 reconcile with the total net costs by category type in Row 42, as confirmed by check cells.
- At the bottom of this worksheet, there is a memo table included to capture any costs in relation to DSO, and these costs are included in the M19 table.

2.3 OERPE1 – RPE AND ONGOING EFFICIENCY

This worksheet serves to provide an analysis of Real Price Effects (RPEs) and Ongoing Efficiency (OE) forecasts and assumptions. Ongoing efficiencies are productivity improvements expected by all DNOs. According to the guidance document, rates and weightings are required by Ofgem for all years of RIIO-ED1 and RIIO-ED2, in order to provide a comparison between price control periods.

DATA VALIDATION

At the time of this review, the commentary provided by ENWL states:

“We are continuing to develop our forecasts for Ongoing Efficiency and RPEs but have included provisional figures for the Draft Business Plan… Ongoing efficiency values have been set to 1% per annum in all categories.”

Table 1 – RPEs

- The totals by expenditure categories and input categories are equal, as required.
- The calculations reference the correct cells in sheet ‘I3 – BPFM Inputs’ for each category.
- All percentages for categories in each year sum to 100% as required.

Table 2 – OEs

As stated in the commentary referenced above, OE values have been set to 1% p.a. in all categories from the onset of RIIO-ED2 in 2024. No errors appear in the calculations in rows 161 to 168.

GUIDANCE CROSS CHECK

Ofgem guidance has been followed for this table. In particular:

Table 1 – RPEs

- Fractions appear to be correctly weighted to the base year of 2020/21, e.g. 1.01 represents a 1% increase over 2020/21.
- The weights of each input are filled in for the expenditure building blocks.
- The guidance states, “You should provide evidence within the commentary/business plan of how the final indices were deduced and why you expect the weight of each input category to vary over time (if applicable).” The current draft of the commentary clarifies that these details will be added in the future.

Table 2 - OEs

- Ongoing efficiency assumption of 1% of totex costs is correctly filled in in row 147.
- The guidance requests, “in the table disaggregating the ongoing efficiency assumption by expenditure areas, input how the totex assumption maps out across these areas. This table aims to provide transparency for us to better understand how the overall assumption is built up across expenditure categories.” This is done consistently, in that all categories are 1% in this provisional version. However, this may require a more detailed explanation in the commentary.

2.4 M19 – DSO

This worksheet is used to provide a summary of information on DSO expenditure that is reported in relevant tables within the BPDT pack. DNOs input the costs of ED1 Innovation into the draft table provided by Ofgem, whereupon other net costs are automatically populated.

DATA VALIDATION

Initial data validation for M19 has consisted of checking that the links to other tables are correctly populated and the data is consistent between sheets.

- C9, C12 link correctly to M19, as verified during the cross checks of those tables.
- The additional tables CV1, CV11, C4, and C13 link correctly to M19.
- It is noted that the reference to CV2 in M19 row 14 links to CV2 row 168, which gives values for capacity restraints rather than a secondary reinforcement total.

Considering the associated commentary, the costs for additional energy planning engineers has been included in the reconciling items, while conflict mitigation costs have been referenced but not entered to avoid double counting, consistent with the commentary.

Other memo items from the commentary are populated below the reconciling items table. It should be noted that, for LV monitoring costs, the commentary quotes £11.7m for RIIO-ED1, while the value in

the table in £10.8m (cell Q85). It is also noted that FTE cost for 2023 (cell K82) is £33.85m, which should be rounded to £33.9m, rather than £33.8m as recorded in the commentary.

GUIDANCE CROSS CHECK

The Ofgem guidance states that, "the only input from DNOs is to input the costs of ED1 Innovation in cells H45:K45. All other net costs are automatically populated linking to other worksheets in the BPDT pack."

It is noted that cells H45:K45 are currently empty. Although this may be an omission, this is consistent with the associated commentary, which does not mention ED1 innovation.

2.5 M21 – BESPOKE AND UNCERTAIN ACT (SMART STREET)

This worksheet details the costs, volumes, and Consumer Value Proposition (CVP) related to any bespoke activities. DNOs have the opportunity to propose bespoke activities to be assessed as part of the overall business plan. In the case of ENWL's submission, this covers work on the Smart Street initiative and on LineSight, as noted in the commentary.

DATA VALIDATION

- The total cost for the Smart Street program over all years (2023-28) totals £78.0m, consistent with the commentary document.
- The total cost for the LineSight program over all years (2023-28) totals £34.5m, in contrast to the £24.0m reported in the commentary. This difference will need to be corrected.

GUIDANCE CROSS CHECK

Ofgem guidance has in general been followed for this table. In particular:

- Both bespoke programs have costs, volumes and references recording in M21 as required.
- The table is missing two columns noted in the Ofgem guidance document in paragraphs 9.118 and 9.119 – 'Bespoke Output Costs Excluded from BPDT Baseline Figures? (Y/N)' and Bespoke Output Volumes Excluded from BPDT Baseline Figures? (Y/N)' respectively. This may be a problem associated with the template.

2.6 M23 – ENVIRONMENTAL ACTION PLAN

The purpose of this table is to collect information related to ENWL's environmental performance. This data will be used to inform Ofgem's view on ENWL's performance in RIIO-ED1 and their potential in RIIO-ED2, with and without the initiatives set out in the Environmental Action Plan.

DATA VALIDATION

- It is noted that the percentage breakdown by source for cables is unchanged with and without implementation of initiatives (cells J97 and K97).
- There is a minor typo in cell S20.

GUIDANCE CROSS CHECK

Ofgem guidance has in general been followed for this table. According to the guidance, ENWL is required to submit data where it is available, and where it is not an explanation should be provided in the 'Notes' column. This review has found that:

- Table 1 has in general been filled in according to Ofgem guidance.
- According to guidance, ENWL is to identify embodied carbon within their networks and adopt a methodology to calculate the carbon of new projects, with the chosen methodology identified in the 'Notes' column. The commentary states that, "we are… unable to calculate our embodied carbon, waste and biodiversity at network sites." However, the notes from ENWL in M23 instead state, "do not have any baseline data for this; ED2 activity." These two explanations should be clarified so that they more clearly present the same reasoning. It is noted that the explanation in the commentary for this gap is further on in the document, stating, "for embodied carbon this baselining exercise won't be concluded until [the] 2024." This should be clarified in relation to Table 1.
- In Table 2, ENWL is required to give an estimate of each measure with and without implementing the initiatives in its Environmental Action Plan identified in Table 3. The currently available data has been filled out according to Ofgem guidance.
- Table 3 is to provide details for Environmental Action Plan initiatives. These are provided, but only two initiatives are costed (rows 14 and 19). While the majority may be infeasible to cost, the initiatives relating to the purchase of electric vehicles (rows 15 and 16) may have costings available, which should be included if possible. The commentary does not clarify the omissions, but does refer to Annex 13 for further information.
- Table 3 provides no links to relevant CBAs, or dependence on other business areas.

3 BPDT REVIEW – TECHNICAL TABLES

3.1 CV7A – ASSET REPLACEMENT NARM

This worksheet consists of addition and disposal costs and volumes data for condition-based replacement of those assets from categories included in the measure of delivery of the NARM.

DATA VALIDATION

A number of individual points are noted here:

- There are multiple errors flagged in both Unit Costs and, as a consequence, Multi-year Average Unit Costs (e.g. CI121, CV127:CY127). These errors reflect years in which one of either cost or volume is zero while the other is non-zero, and so the unit cost calculation produces an error.
    - The majority of these errors are historical and consistent with older versions of the BPDTs, but there are four errors in in the unit cost projections for 2022 onwards: CI121, and CF127:CH127, as well as the associated four errors in the multi-year average. Neither of these rows relate to asset categories covered by the additional documentation referred to in the CV7a commentary.
- Outlier analysis shows that there are no outliers detected, as all the cost values fall within three standard deviations of the mean.

Trend analysis was then performed on the dataset. Figure 3-1 shows the gross costs from table CV7a from 2021 to 2028, separated by cost category.

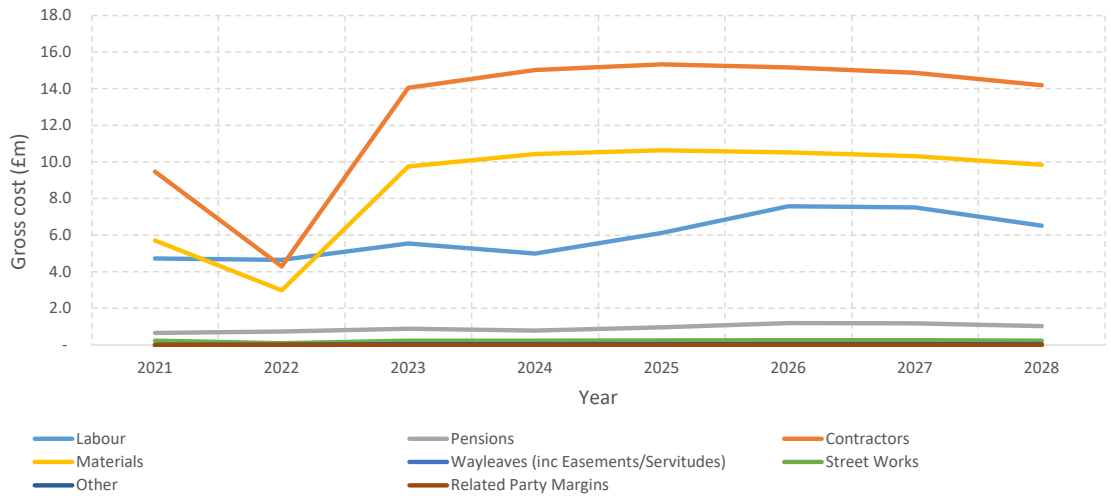

Figure 3-1 - CV7a: Gross costs, for each year and cost category.

Equivalent data is presented in Figure 3-2, separated instead by asset category and extending back to 2011. Given the large number of asset categories plotted, it is not feasible to include a legend in this plot.

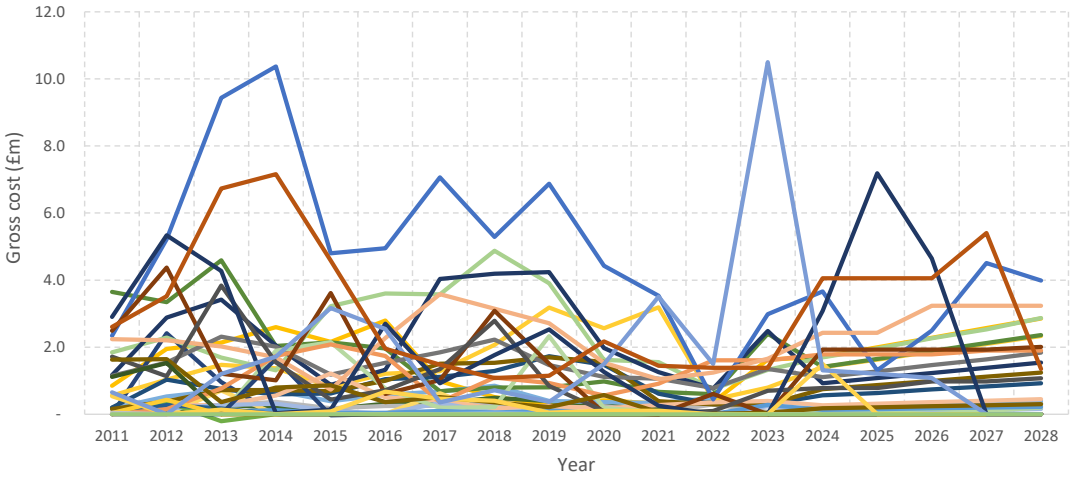

Figure 3-2 - CV7a: Gross costs, for each year and asset category.

Figure 3-3 shows asset addition numbers over the same period, separated again by asset category. Again, given the large number of asset categories plotted, it is not feasible to include a legend in this plot.

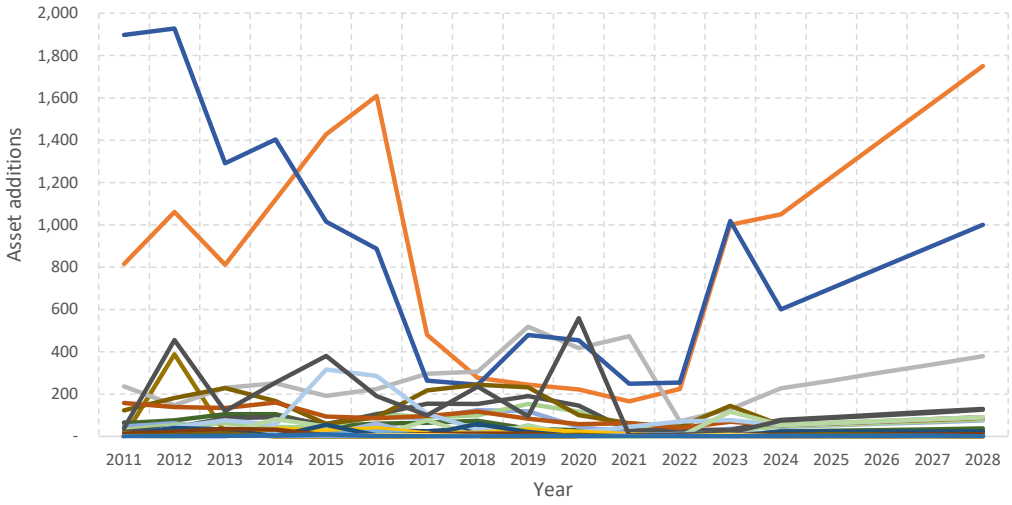

Figure 3-3 - CV7a: Asset additions, for each year and asset category.

Figure 3-2 shows noticeable peaks in future costs, particularly in 2023 for '132kV CB (gas insulated busbars) (ID) (GM)' assets (i.e. the light blue spike in Figure 3-2). This is however consistent with a peak in asset installations at the same time. However, given the relatively low volume of 132kV installations compared to LV installations, this is not apparent in Figure 3-3. However, the overall trend of installations tracks relatively well with the trend in gross costs. Figure 3-3 also shows a significant rise in asset installations in two categories (LV poles and 6.6/11kV poles) during RIIO-ED2, but this is consistent with historic addition volumes for these assets in earlier years.

GUIDANCE CROSS CHECK

Ofgem guidance has been followed for this table. In particular:

- Costs and volumes are correctly reported by asset type and voltage based upon the asset installed.
- Following Ofgem's guidance, no civil works costs or volumes are entered in the asset replacement tables.
- The total gross costs for years 2020/21 onwards are split by cost type in Rows 15 to 22, for which the check cells are consistent with the total gross costs in Row 152.

3.2 CV9 – REFURBISHMENT NARM

This worksheet consists of cost and volume data related to Type 1 refurbishment works, where these costs and volumes relate to activities that can be considered in the measure of NARM delivery. Refurbishment volumes separated by activity are also reported. The volume data reported is to represent the number of assets where disaggregated refurbishment - NARM activities have been undertaken.

DATA VALIDATION

Figure 3-4 shows the gross costs from table CV9 from 2011 to 2028, separated by cost category.

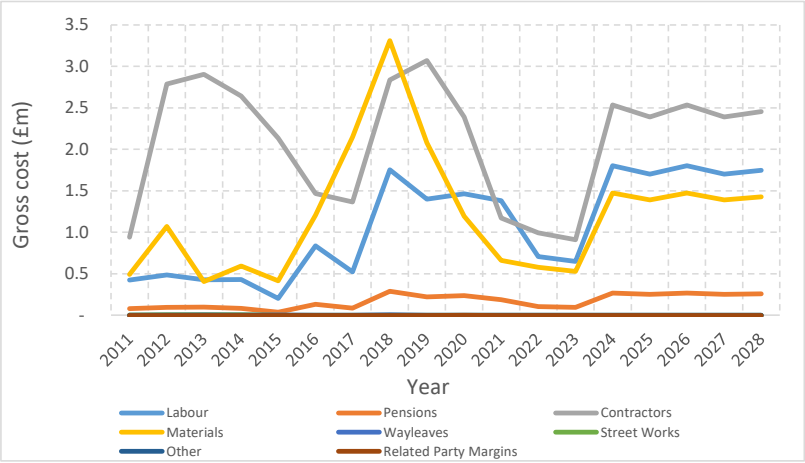

Figure 3-4 - CV9: Asset additions, for each year and cost category.

It can be seen that costs vary within a consistent range up to £3.5m. While there are no obvious outliers, more detailed analysis was subsequently performed.

- Outlier analysis shows that there are no outliers detected, as all the cost values fall within three standard deviations of the mean.
- While there are errors present in the check cells in row 28 for total gross costs in years 2011, 2013, and 2016, the associated commentary for CV9 from ENWL explains that certain material data have been moved from CV9 to CV8, and as such these are not flagged for review.

GUIDANCE CROSS CHECK

Ofgem guidance has been followed for this table. In particular:

- Cost and volume data are reported against the asset type upon which the refurbishment activity was undertaken. The volume data represent the number of assets on which refurbishment activities have been performed, irrespective of whether multiple refurbishments were performed on the same asset. The unit reported is consistent with the unit used to record the asset population in table V1.
- Total gross costs are split by cost type in Rows 15 to 22, with the check cell verifying consistency with the total gross costs in Row 138. These check cells reveal errors in years 2011, 2013, and 2016, but these are appropriately explained as previously discussed.

3.3 V1 – TOTAL ASSET MOVEMENTS

DNOs are required to input the closing balance of the asset base in 2009-10 in this worksheet, and the total asset movements worksheet is then auto populated by addition and disposal volumes from the activity areas. As such, review of this worksheet primarily requires consistency checks between the data sources, rather than trend or outlier analysis.

DATA VALIDATION

As would be expected with asset renewal and replacement, asset additions follow asset disposals very closely. In some years and asset categories, asset additions are notably larger than disposals, and the total asset register increases in tandem.

GUIDANCE CROSS CHECK

Ofgem guidance has in general been followed for this table. In particular:

- The closing balance of assets for 2010 is reported in column BS, after which the worksheet is automatically populated.
- The total count for a subset of assets within the other assets section of V2 must be populated according to the guidance. This data appears to have been entered in the columns for asset volumes/additions (AA to AR) and again in the columns for asset disposals (AW to BN). It is also noted that the number of the ‘UG cable (oil and gas)’ asset types in rows 131 and 133 do not appear to reflect the additions noted in table V2.
- The guidance states that, “this worksheet also includes a table for Shared Infrastructure for Telecoms, with the number of shared poles or towers to be input.” However, this table does not appear in the current version, nor in Ofgem’s draft table.
- Certain data from table V1 is linked to the NARM2 table. These links will be verified in Section 3.4 below.

3.4 NARM2 – ED1 NARM PROFILES

The purpose of this worksheet is to provide Ofgem with licensees' views of the health and criticality of their assets for the remaining years of RIIO-ED1, as represented using Health Index and Criticality Index information as calculated using the Common Network Asset Indices Methodology (CNAIM).

DATA VALIDATION

As the CNAIM methodology used to populate both the NARM2 and NARM3 tables is a well-established statistical method, it is not useful to perform subsequent outlier analysis on these tables. To validate the asset data contained here, it is first necessary to verify that the total volumes of assets shown in each category match the total asset volumes shown in Table V1, evaluated above. A cross section of the data was checked to confirm this, showing that the asset totals at end of current year (column K) match the 2021 totals in table V1 (column CD).

The NARM2 worksheet presents the health and criticality indices for the asset base across different assumptions. A sample of these was plotted, and is shown in Figure 3-5 and Figure 3-6 below.

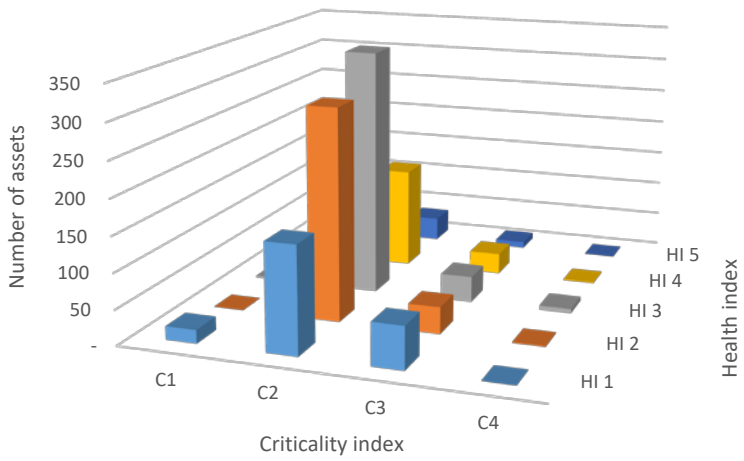

Figure 3-5 - Asset profile (start of current year): 33kV CB (Air Insulated Busbars) (ID) (GM) health and criticality indices.

The data in Figure 3-5 are well clustered, with this asset category primarily measuring in the C2 criticality index and the lower range of health indices.

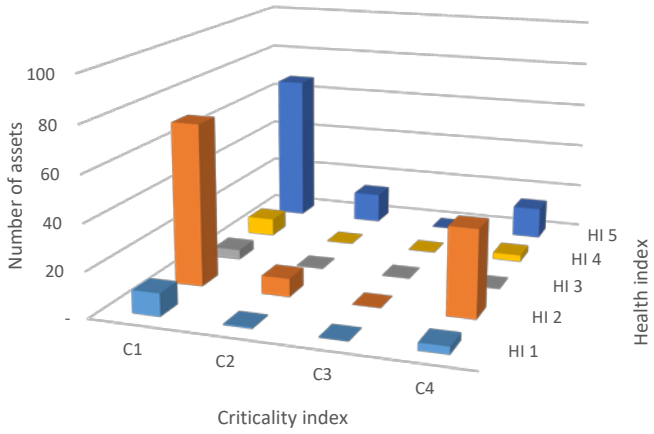

Figure 3-6 - Forecast asset profile at end of ED1 (with no further ED1 intervention): 33kV UG Cable (oil) health and criticality indices.

The data for 33kV underground oil cables in Figure 3-6 are noticeably more spread out, though given the low total number of assets this is unlikely to be significant. There are a number of assets appearing in the highest risk bracket (C4/HI5), which would be expected from data excluding further ED1 intervention. Health and criticality indices with ED1 interventions included are shown in Figure 3-7 below.

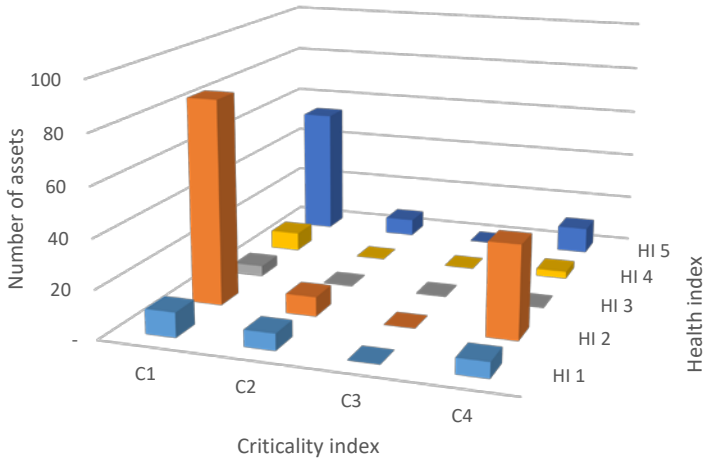

Figure 3-7 - Forecast asset profile at end of ED1 (with ED1 interventions): 33kV UG Cable (oil) health and criticality indices.

Figure 3-7 shows a reduced number of assets in HI5 compared to Figure 3-6, as would be expected. However, there are still a noticeable number of cables in the highest risk bracket (C4/I5).

GUIDANCE CROSS CHECK

Ofgem guidance has in general been followed for this table. According to Ofgem guidance:

- "The total volumes of assets shown in each Asset Register category [in column K] should reconcile to the Total Asset Register volumes shown on table V1 … for the closing balance of the reporting year ending 31st March 2021." This was verified during data validation.

- "The total volumes of assets shown in each Asset Register category [for column R] should reconcile to the total volumes for the Asset Register Category shown in the Current Year asset population (in Columns F to K)." This is consistent with ENWL's data.

- "The total volumes of assets shown in each Asset Register category [in column Y] should reconcile to the forecast Total Asset Register volumes shown on table V1… for the closing balance of the reporting year ending 31st March 2023." This does not appear consistent with all of ENWL's data (e.g. Y30 from NARM2 compared with CF28 from V1).

- The totals presented for 'Forecast Asset Profile - End of ED1 (31/03/2023) With ED1 Interventions' in column Y for certain asset categories are equal to the totals presented in both columns K and R, i.e. the same as the totals for the reporting year ending 31st March 2021. Comparing this to Table V1, for example for LV poles, it can be seen that the total asset number changes from 53,623 to 53,427, while for LV poles in the NARM2 table the number is unchanged. The number is changed for some asset classes, but not reflective of table V1. For example, LV pillar (ID) assets increase from 4,717 to 4,817 in the NARM2 table between 2021 and 2023, but from 4,717 to 4,870 in table V1.

Given the final two points noted above, a detailed review of columns T to Y in the NARM2 table is suggested.

3.5 NARM3 – ED2 NARM PROFILES

This worksheet details the forecast asset health and criticality data for the RIIO-ED2 period, for all categories where the NARM deliverable is applicable, including the forecast change in asset health and forecast impact of planned interventions.

DATA VALIDATION

As the CNAIM methodology used to populate both the NARM2 and NARM3 tables is a well-established statistical method, it is not useful to perform subsequent outlier analysis on these tables. To validate the asset data contained here, it is first necessary to verify that the total volumes of assets shown in each category match the total asset volumes shown in table CV7a, evaluated in Section 3.1 above. A cross section of the data was checked to confirm this, and is discussed in more detail in the subsequent guidance cross check section.

Figure 3-8 shows the projected health and criticality indices for 6.6/11kV transformers (GM) at the beginning of the ED2 period, taken from the NARM3 table.

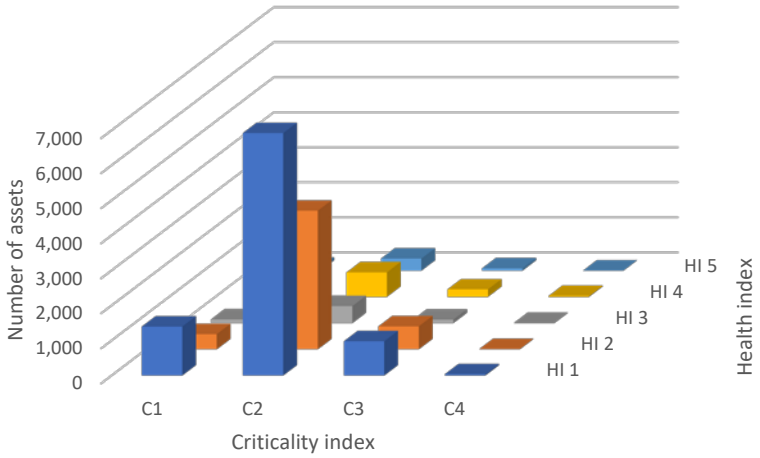

Figure 3-8 - Asset profile (start of ED2): 6.6/11kV Transformer (GM), health and criticality indices

Figure 3-9 shows the projected health and criticality indices for 6.6/11kV transformers (GM), this time at the end of the ED2 period, taken from the NARM3 table.

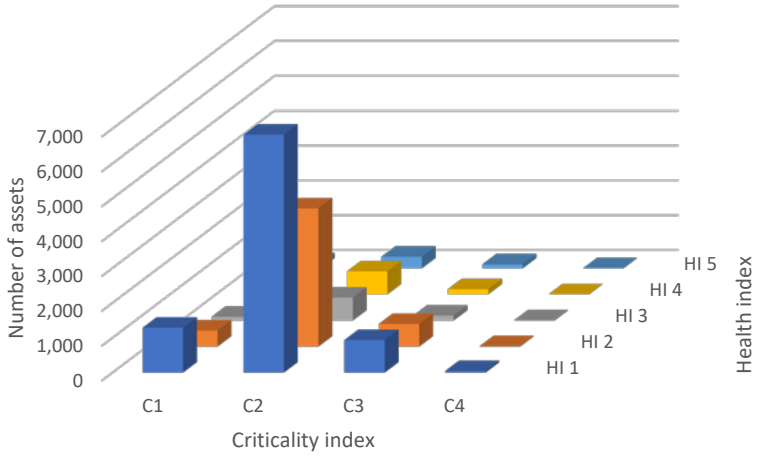

Figure 3-9 - Asset profile (end of ED2, with interventions): 6.6/11kV Transformer (GM), health and criticality indices

Considering Figure 3-8 and Figure 3-9, the data projection appears consistent within the studied asset category. Assets do move between the different health indices over the course of RIIO-ED2, but the overall trends remain the same.

In order to check the consistency of asset volumes through interventions, the asset total at the end of RIIO-ED2, including interventions (i.e. column CY), was compared to the sum of the asset total at the end of ED2 without interventions, the asset disposals, and the asset additions (i.e. columns Y, AF, and AM). These were equal for all asset categories.

GUIDANCE CROSS CHECK

Ofgem guidance has in general been followed for this table. According to the specific NARM3 guidance:

- "The columns are auto-populated with the forecast health and criticality rankings from the 'Forecast Asset Profile - End of ED1 (31/03/2023) With ED1 Interventions' in table NARM2." This is consistent with ENWL data.
- "In these columns the forecast deterioration, for each Asset Register category, is calculated from the change in Health Index profiles between the 'Forecast Asset Profile - Start of ED2 Period (01/04/2023)' (Columns F to K) and the 'Forecast Asset Profile - End of ED2 Period (31/03/2028) With No ED2 Intervention' (Columns T to Y).'' The calculations of ENWL are consistent with the guidance and are calculated based on the subtraction of Columns F to K from Columns T to Y.
- "The total volumes of assets shown in each Asset Register category should reconcile to the total volumes for the Asset Register Category shown in the Start of ED2 period asset population (in Columns F to K).'' This is consistent with ENWL data.
- "The total volumes of asset disposals shown in each Asset Register category should reconcile to the total disposal volumes for the Asset Register Category in the RIIO-ED2 period shown in table CV7 of the BPDT.'' These match consistently for ENWL's data, after accounting for the fact that disposals are entered as negative values in the NARM3 table.
- "The total volumes of asset additions (Columns AH to AM) shown in each Asset Register category should reconcile to the total additions volumes for the Asset Register Category in the RIIO-ED2 period shown in table CV7 of the BPDT.'' This again appears to be consistent for ENWL's data.

4 CONCLUSIONS

This report has described the analysis undertaken by WSP to quality assure ENWL's BDPT submission to Ofgem for the RIIO-ED2 price control review, focusing on a subset of both technical and non-technical tables. This has included trend analysis, outlier analysis, data consistency checks, and reasonableness checks on forecast data. In general, this report finds the data to be valid and consistent. Where errors or omissions have been found, or tables have deviated slightly from the Ofgem guidance document, these instances have been noted in this report for review.

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