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Our ref

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Date

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9th May 2014

Dear Anna

RIIO-ED1: Electricity Distribution Networks Operators' resubmitted business plans – publication, views and next steps

I am writing on behalf of Western Power Distribution (South Wales) plc, Western Power Distribution (South West) plc, Western Power Distribution (East Midlands) plc and Western Power Distribution (West Midlands) plc in response to the above consultation of 31st March 2014.

Factual inaccuracies in Northern Powergrid's business plan

There are a number of factual inaccuracies in the slow-track business plan submitted by Northern Powergrid. These factual inaccuracies are outlined below.

1. Interruption Incentive Scheme (IIS) Targets

On page 32 of Section 3 Financing of their Business Plan, NPg's plan includes the sentence:

"Western Power Distribution reduced its targets for this [IIS] incentive scheme relative to those described on the face of its published business plan".

This sentence indicates that WPD amended the proposed IIS targets, during the fast track assessment process, to less challenging IIS targets. NPg's sentence is false.

In the Reliability and Safety Supplementary Annex to Ofgem's Strategy Decision for the RIIO-ED1 Distribution Price Control (March 2013), Ofgem proposed IIS targets for the RIIO-ED1 period for all DNOs. The targets proposed for the WPD DNOs are shown below in Table 1.

Customer Interrupted Targets (March 2013)								
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
West Midlands	88.2	86.8	85.5	84.2	83.0	81.7	80.5	79.3
East Midlands	55.7	54.9	54.1	53.8	53.5	53.2	53.0	52.7
South Wales	54.4	54.2	53.9	53.6	53.4	53.1	52.8	52.6
South West	56.2	55.9	55.6	55.3	55.1	54.8	54.5	54.2
WPD Total	66.0	65.2	64.4	63.8	63.2	62.6	62.1	61.5
Customer Minutes Lost Targets (March 2013)								
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
West Midlands	61.5	60.1	58.8	57.6	56.3	55.1	53.9	52.8
East Midlands	42.3	41.4	40.4	39.5	38.7	37.8	37.0	36.2
South Wales	41.6	41.6	40.7	39.8	38.8	37.9	37.1	36.2
South West	49.5	49.5	48.6	47.6	46.6	45.6	44.6	43.6
WPD Total	49.8	49.0	48.0	47.0	45.9	44.9	43.9	43.0
TABLE 1 – IIS TARGETS PROPOSED BY OFGEM IN STRATEGY DECISION DOCUMENTATION (MARCH 2013)								

In paragraph 9.29 of the RIIO-ED1 WPD Business Plan states:

" ... we will improve network performance for unplanned network performance so that customers are on average interrupted for no more than 38 minutes and experience no more than 6 interruptions in ten years".

Furthermore in Supplementary Annex SA-04 Outputs, the year on year IIS targets proposed by WPD were shown on page 15. These year on year targets for the RIIO-ED1 period are shown in Table 2.

Customer Interrupted Targets (June 2013)								
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
West Midlands	86.7	85.0	83.3	81.7	80.0	78.3	76.7	75.1
East Midlands	55.3	54.9	54.6	54.2	53.8	53.5	53.1	52.7
South Wales	52.3	52.2	52.1	52.0	51.8	51.7	51.6	51.5
South West	56.4	56.0	55.6	55.2	54.9	54.5	54.1	53.7
WPD Total	65.1	64.3	63.6	62.8	62.1	61.3	60.6	59.9

Customer Minutes Lost Targets (June 2013)								
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
West Midlands	51.1	50.3	49.5	48.7	47.9	47.1	46.4	45.6
East Midlands	37.8	37.6	37.4	37.2	37.0	36.8	36.6	36.4
South Wales	27.5	27.5	27.4	27.4	27.3	27.3	27.2	27.1
South West	35.8	35.6	35.4	35.2	35.0	34.8	34.6	34.4
WPD Total	40.1	39.8	39.4	39.0	38.7	38.3	37.9	37.6
TABLE 2 – IIS TARGETS PROPOSED BY WPD IN BUSINESS PLAN (JUNE 2013)								

It is evident that the IIS targets proposed by WPD, as shown in Table 2:

- Are consistent with paragraph 9.29 of the RIIO-ED1 WPD Business Plan; and
- Are more challenging than the targets proposed by Ofgem (as shown in Table 1).

On 1st November 2013, as part of the Supplementary Question process, WPD were asked two questions by Ofgem related to IIS targets. These two Supplementary Questions are shown below.

Supplementary Question 146

A DNO has raised a question regarding the inclusion of QoS expenditure in the calculation of allowed revenues for RIIO-ED1, stating that they had included the expenditure as a memo item and not part of their totex bid. Given that you have forecast QoS expenditure in RIIO-ED1 please can confirm that you intended this to be part of your allowed totex for RIIO-ED1.

Supplementary Question 147

Please can you clarify whether the CI and CML values included in your BPDT represent your view of your targets for RIIO-ED1. If these are tighter than the Ofgem targets please confirm that it is your understanding that the tighter of the two targets will form your agreed targets for RIIO-ED1.

WPD's responses to these two questions are shown below.

WPD Response to Supplementary Question 146

WPD's business plan submission includes quality of supply expenditure. The amounts included are shown in the table below.

	Gross Forecast Quality of Supply Expenditure ⁽¹⁾ (£m)	Quality of Supply Expenditure As Percentage of Total Gross Expenditure	Total Gross Costs within Price Control ⁽²⁾ (£m)
West Midlands	15.6	0.74%	2107.5
East Midlands	8.7	0.41%	2108.9
South Wales	2.9	0.26%	1119.0
South West	2.9	0.17%	1716.8
WPD Total	30.1	0.43%	7052.2

(1) BPDT Table T2 Cell N24

(2) BPDT Table T2 Cell BJ24

Therefore, we can confirm that we intended our forecast quality of supply expenditure to form part of the allowed totex for RIIO-ED1.

WPD Response to Supplementary Question 147

The targets included in the WJBP submission are based on stakeholder feedback for RIIO –ED1. If the result is that our targets are tighter than the Ofgem targets then we confirm that the tighter of the two targets will form our agreed targets for RIIO-ED1.

In their letter, dated 22nd November 2013, relating to the Assessment of RIIO-ED1 business plan and fast tracking, Ofgem acknowledged that WPD:

" sets out more challenging and binding reliability targets than those specified by Ofgem".

In the draft determination for the WPD DNOs, Ofgem indicated that the final RIIO-ED1 IIS targets, in any year, would be would be the lower of those proposed by WPD and those derived by Ofgem. The final targets could be derived only after the actual 2012/13 performance had been finalised for all DNOS. In the Final Determination, the final IIS targets were provided by Ofgem. These are shown in Table 3 below.

Customer Interrupted Targets (June 2013)								
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
West Midlands	86.7	85.0	83.3	81.7	80.0	78.3	76.7	75.1
East Midlands	51.9	51.1	50.4	50.1	49.9	49.6	49.4	49.1
South Wales	50.1	49.9	49.6	49.4	49.1	48.9	48.6	48.4
South West	55.7	55.4	55.1	54.9	54.6	54.3	54.0	53.7
WPD Total	63.6	62.7	61.8	61.1	60.3	59.6	58.9	58.2
Customer Minutes Lost Targets (June 2013)								
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23

West Midlands	51.1	50.3	49.5	48.7	47.9	47.1	46.4	45.6
East Midlands	37.8	37.6	37.3	36.5	35.7	34.9	34.2	33.5
South Wales	27.5	27.5	27.4	27.4	27.3	27.3	27.2	27.1
South West	35.8	35.6	35.4	35.2	35.0	34.8	34.6	34.4
WPD Total	40.2	39.8	39.4	38.9	38.3	37.7	37.2	36.6
TABLE 3 – FINAL IIS TARGETS SHOWN IN FINAL DETERMINATION								

From Table 3 it can be seen that the IIS targets are either equal to those proposed by WPD in the June 2013 Business Plan or are more challenging

It is evident that at no stage during the fast track assessment process were WPD’s IIS targets made less challenging, in fact the targets were made more challenging.

Overall, it is clearly event that NPG’s statement that WPD “*reduced its targets for this incentive scheme relative to those described on the face of its published business plan*” is factually incorrect.

2. Support for Top Down Total Expenditure Model Developed by Frontier Economics

On page 6 of Annex 1.2: Benchmarking to NPG’s Business Plan, includes the following paragraph:

“The totex benchmarking model being used for RIIO-ED1 was developed by Frontier Economics. Frontier was commissioned by UKPN to develop the model, and it was subsequently assessed and supported by all the DNOs, and adopted by Ofgem to inform the price control review process. As such, this model has been developed by an independent third party and subsequently assessed, modified and verified by the sector as a whole”.

The first sentence of the paragraph is false. It is correct that WPD worked jointly with Frontier Economics to develop, assess and modify the top down total expenditure benchmarking model. However, it is incorrect to say that that the top down total expenditure benchmarking model was:

- *“supported by all the DNOs”.* WPD’s long held view, which is well known across the sector, is that top down total expenditure benchmarking does not produce reliable results. In fact, as part of the Business Plan submission in June 2013, WPD submitted papers, prepared by Gibbens and Zachary, which were highly critical of total expenditure benchmarking. Further commentary in respect of total expenditure benchmarking is provided later in this response;
- *“verified by the sector as a whole”.* WPD could not verify a benchmarking approach that produced unreliable results, and explicitly pointed to the unreliability of top down total expenditure in Supplementary Annex SA-08 Business Efficiency of our business plan.

OFGEM'S overall approach to cost assessment

Reliability of cost assessment methods

For the fast tracking cost assessment Ofgem used three total expenditure assessment approaches as part of their broad toolkit. The weightings that Ofgem applied to the results of each of these three total expenditure assessment approaches are shown in the table below.

ASSESSMENT APPROACH	WEIGHTING APPLIED TO RESULTS
Disaggregated Total Expenditure Analysis	75.0%
Top Down Total Expenditure – High Level Drivers	12.5%
Top Down Total Expenditure – Activity Level Drivers	12.5%

The disaggregated total expenditure, i.e. activity level, analysis produces more reliable cost assessment results. This is primarily due to the inherent capability of the analysis to align specific activity drivers that have a causal relationship with each specific activity.

In contrast, there are significant and material limitations to both of the top down total expenditure analyses. The top down total expenditure model uses activity/cost drivers that do not have a causal relationship with the activities. WPD have submitted previously papers by Dr Richard Gibbens and Prof Stan Zachary that have identified the deficiencies of top down total expenditure analysis.

We expand on the advantages and disadvantages of the disaggregated and top down approaches later in this response.

For the slow tracking cost assessment, the disaggregated total expenditure analysis will produce cost assessment results that will be more appropriate for setting allowances. The results from the top down total expenditure analyses are not suitable for setting allowances. Therefore, in the fast tracking cost assessment a greater weighting than 75% should be applied to the activity level analysis.

Data used

WPD acquired the West and East Midlands DNOs in April 2011. By the end of 2011, the West and East Midlands DNOs had been restructured and integrated into the WPD Group. The first full year that the West and East Midlands DNOs operated in line with the WPD business model was 2012/13. Consequently, when undertaking any benchmarking, it is important to recognise that the costs in both 2010/11 and 2011/12 in the West and East Midlands DNOs are not representative of the enduring cost base. Therefore, when undertaking comparative cost analysis, costs for 2010/11 and 2011/12 for both West and East Midlands should be excluded.

In addition, comparative cost analysis should focus predominantly on DNOs' forecast business plans. Comparative cost analysis of actual costs should be undertaken with the objective of revealing the current relative efficiencies so that the scale of proposed efficiency improvements can be put into context.

Normalisation and other adjustments

Regional Labour Cost Adjustments

WPD accepts that the labour costs associated with operating in London are inherently higher than the remainder of the UK,; e.g. many companies add a "London Weighting" to salaries for staff working in London. Consequently, it is appropriate for a labour cost adjustment to be applied to those activities that must be undertaken within London. However, it should be recognised that many activities, particular Closely Associated and Business Support indirect activities need not be undertaken within London.

However, it should be recognised that there is a national labour market for a large number of the skill labour employed by DNOs, which has the consequential impact that the salary level of DNO skilled labour is not materially different across DNOs. WPD operates in four licensed areas and within each licensed area there is a significant diversity in respect of population density. WPD has common salary scales across all four of its licensed areas. This has enabled WPD to use common unit costs across all four DNOs.

The indices calculated using the Office of National Statistics (ONS) Annual Survey of Hourly Earnings (ASHE) data do not explicitly use DNO skill sets. This is a material weakness that fails to recognise the national labour market associated with DNO skilled labour.

Overall, it is not appropriate to apply a labour costs adjustment to those activities undertaken outside London.

Company Specific Factors

WPD operates within both densely populated and very sparsely populated areas. We have not identified any valid reasons for cost differentials between densely populated areas and very sparsely populated areas that should be factored into cost assessment. Specifically, there is no justification for company specific costs associated with:

- Parking fines;
- Servicing of vehicles in London as this amount to double counting due to the previous application of a regional labour adjustment;
- Higher excavation costs in congestion under road and footpaths. All DNOs undertake excavations in such environments and undertake excavations in other challenging locations, e.g. Sites of Special Scientific Interest (SSSI);
- Maintaining keys for access to buildings, ventilation of substations, working in confined spaces, pumping out contaminated water and maintaining pipes and ducts. All DNOs undertake these activities;
- Preparing for major events as it would not be appropriate for electricity consumers to be paying for these major events;
- Rescheduling of planned work due to external factors such as major events. All DNOs reschedule work due to external factors. Major events are known well in advance and can be considering when work scheduling is originally undertaken. Many of the other external factors experienced by all DNOs are not known well in advance; and

- Operating and maintaining the interconnected network in its SP Manweb (SPMW) licence area. The asset types specifically associated with this interconnected network have been identified in the BPDTs. Therefore the costs and activity driver data is readily available for this interconnected network so that cost assessment can be incorporated into Ofgem's cost assessment models.

The following cost areas should separately assessed for efficiency and then the efficient costs should be excluded before cost assessment is undertaken:

- London Congestion Charging;
- Lane rental schemes; and
- Permit schemes;

Exclusion of Costs from Main Benchmarking

It is appropriate that certain costs should be excluded from cost assessment either because they are incurred by a small number of DNOs or are subject to different treatment. It is appropriate to exclude the following costs from the cost assessment:

- Operational Training indirect activity. The costs and associated drivers of the Operational Training indirect activity are complex as they are influenced materially by a DNO's manpower strategy. For example, a DNO that operates using an own labour resource strategy will inherently have higher Operational Training costs that a DNO that operates an "outsourcing to contractors" resource strategy;
- Quality of supply expenditure (both IIS & Worst Served Customers);
- Wayleave payments;
- London Congestion Charging;
- Lane rental schemes; and
- Permit schemes;
- Remote Location Generation Operating Costs as only three DNOs incur such expenditure;
- Remote Location Generation Capital Costs as only one DNO is likely to forecast costs for the RIIO-ED1 period;
- Insurance costs within Business Support – which should be subject to separate evaluation;
- ETR 132 resilience tree cutting activity as there appears to be a material inconsistency in DNO reporting. Qualitative assessment should be undertaken for this activity.

In the fast track cost assessment Ofgem separately assessed WPD's forecast expenditure associated with the diversions necessary as a consequence of Network Rail's electrification programme. This approach is appropriate for the slow track cost assessment.

Adjustments proposed by WPD

There are three adjustments that need to be undertaken in order to normalise costs. These adjustments are associated with:

- Vehicles and Transport Indirect Activity;
- Non Operational Capital Expenditure – Vehicles
- Non Operational Capital Expenditure – Small Tools and Equipment.

Vehicles and Transport Indirect Activity and Non Operational Capital Expenditure – Vehicles

The adjustment to normalise costs associated with the Vehicles and Transport indirect activity and Non Operational Capital expenditure – Vehicles arises because of the different strategies implemented by DNOs.

If a DNO purchases their own vehicles then the expenditure associated with the purchase of the vehicles is treated as Non Operational Capital Expenditure – Vehicles. The vehicle running costs are treated as Vehicles and Transport indirect activity.

If a DNO leases vehicles, then both the leasing charge and the vehicle running costs are treated as Vehicles and Transport indirect activity.

If a DNO outsources work to a contractor, then the contractor's costs of both of purchasing (or leasing) vehicles and running the vehicles are embedded in the contractor's charges which are treated as direct costs.

In order to address this inconsistency:

- The costs of the overall vehicles and transport activity should be allocated to all direct activities, both within and outside the price control, on the basis of direct labour; and
- Non Operational Capital Expenditure – Vehicles should be allocated to all direct activities, both within and outside the price control, on the basis of direct labour. Due to the "lumpiness" of Non Operational Capital Expenditure – Vehicles, an eight year average value should be used. Eight years is an appropriate timescale as this is consistent with the cyclical replacement of vehicles.

Non Operational Capital Expenditure – Small Tools and Equipment

The cost of small tools and equipment should not be the subject of separate cost assessment. This is due to the historic reporting inconsistencies across DNOs, which are evident in DNOs' forecasts. The costs of small tools and equipment should be allocated to all direct activities, both within and outside the price control, on the basis of direct labour.

Disaggregated total expenditure cost assessment

The use of the disaggregated total expenditure cost assessment model provides Ofgem with the most reliable and robust results. The disaggregated total expenditure cost assessment model has many advantages, when compared with the top down total expenditure cost assessment model. These advantages include:

- It is proven – WPD have used a top down total expenditure cost assessment model in the process of acquiring the West and East Midlands DNOs;
- Activity/cost drivers that have a causal relationship with each disaggregated can be identified;
- Disaggregated analysis can take into account a greater number of factors that explain costs, including the efficiency of both volumes and unit costs, enabling a richer model specification;
- It is possible to undertake appropriate cost normalisations and adjustments to specific activities;
- With the equalisation of cost saving incentives across the total cost base, the use of bottom up disaggregated total expenditure benchmarking accommodates the trade-offs between activities, such as the range of asset interventions possible to achieve an improvement in the performance of an asset. Therefore the approach avoids the risk of inadvertently favouring different solutions through the cost assessment process;
- Both quantitative and qualitative volume adjustments can be accommodated;
- Provides a greater depth of understanding of where companies' costs are better or worse than benchmarks
- All DNOs essentially "do the same thing" which is to install, maintain and repair assets. This means that a comparison at a detailed level provides a meaningful result. The networks were built to similar standards and differences in costs will therefore be driven by how a DNO chooses to organise and manage their operations;
- There is no requirement for regional adjustments, such as customer density and sparsity. Volumes of work drive costs - labour costs, contractor and asset costs do not vary nationally (other than inside the M25);

Top down total expenditure cost assessment

Top down total expenditure cost assessment models produce unreliable results. The opposite of virtually every advantage identified for the disaggregated total expenditure model can be identified as a disadvantage of the top down total expenditure model.

However, there are some additional material disadvantages associated with the top down total expenditure cost assessment model developed by Frontier Economic and advocated by a number of DNOs. These additional material disadvantages are:

- Prof Stan Zachary and Dr. Richard Gibbens have advised that the top-down model developed for RIIO-ED1 is not fit for purpose because there are insufficient data points to enable statistical methods to be of any use. A copy of their report is attached. Their conclusion states in relation to the total expenditure approach proposed by Frontier Economics that:

"We are of the opinion that, for all the reasons outlined above, an econometric approach to DNO benchmarking is so unreliable as to produce efficiency scores which might almost as well have been randomly generated. We therefore believe that the nature of the problem, and of the available data, is such that the proposed approach is simply not feasible for this purpose."

Essentially, the margins of error are so wide that effectively the model cannot differentiate between DNOs;

- The top-down approach cannot distinguish between a company that spends less because it is efficient and a company that spends less because it has just not done the work that the cost allowances were supposed to cover. Further, given the data available, the statistical techniques used cannot distinguish between costs that vary between companies because of the scale of task driven by the network and costs that vary between companies because of differences in efficiency
- Deloitte LLP also reviewed the Frontier Economics model and have also concluded that the model does not produce reliable results. A copy of their report is attached;
- The developers of the model, Frontier Economics, have confirmed that the top down approach is not appropriate for setting allowance;
- Activity/cost drivers proposed by Frontier Economics are not the activity/cost drivers associated with DNOs' activities but are only be generally reflective of the operating environment and do not change over time; and
- Does not deal adequately with differences in asset replacement cycle;

Should you wish to discuss any aspects of our response please contact Bob Parker (rparker@westernpower.co.uk).

Yours sincerely



ALISON SLEIGHTHOLM
Regulatory & Government Affairs Manager