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Dear Anna

RIIO-ED1 Draft Determinations

Scottish and Southern Energy Power Distribution (SSEPD) welcomes the opportunity to respond to the Draft Determinations for the slow-track electricity distribution operators (DNOs) published on 30 July. We are separately responding to the consultation on the treatment of real price effects (RPEs) for RIIO-ED1 slow-track DNOs published on 28 August. Our two responses should be considered together.

SSEPD has long supported the incentive-based RIIO framework for networks' price controls given the clear benefits to customers of increased transparency and greater focus on outputs and innovation. These benefits are evident from the cost reductions and service improvements set out in the Draft Determinations. In particular, SSEPD welcomes Ofgem's recognition of the strong package of customer improvements described in our March 2014 Business Plan.

The Draft Determinations make a traffic-light score of 'green' for Southern Electric Power Distribution (SEPD) in four of the five core assessment criteria: process, outputs, efficient costs, and uncertainty and risk. For Scottish Hydro Electric Power Distribution (SHEPD), a 'green' score was made in three criteria: process, outputs, and uncertainty and risk. We welcome this. However, 'amber' scores were made for efficient costs for SHEPD and for efficient finance for both licensees. This is disappointing and, as we set out in this response, we have concerns about the basis of the conclusions reached in

these areas. Our key observations on these issues around cost allowances and financial parameters are:

- Qualitative evidence to support our cost submissions has not been fully taken into account. Were this done, residual concerns around the efficiency of SHEPD's costs would be addressed. Also on the issue of cost efficiency, we do not support Ofgem's proposal to substantially weaken the financial incentive (through the Information Quality Incentive (IQI) mechanism) for efficient expenditure.
- Ofgem's view of cost savings that can be made through the application of smart grids and meters requires further consideration and justification. In particular, we are concerned about the approach to assessing the innovative proposals in our March 2014 Business Plan which appears to understate, by around £67 million, the savings we have already identified and have been accepted in the Draft Determinations.
- While we have responded separately to the consultation on RPEs, we also highlight material flaws in the methodology for calculating the ex-ante RPE allowances in the Draft Determinations.
- The proposed cost of capital set out in the Draft Determinations is based on cost of equity and cost of debt that are evidently too low. Evidence presented in our March 2014 Business Plan, supported by analysis enclosed with this response, supports a cost of equity of 6.4%. In order to ensure DNOs are sufficiently funding for the average cost of debt, we argue that the cost of debt trombone should start as 15-year trailing average (rather than a ten-year trailing average).

We comment further on these issues below.

Taking these issues together, and the Draft Determinations as a package, we cannot see that it is credible for a best performing DNO to achieve double-digit return on regulatory equity (RoRE), as is Ofgem's policy position. We would strongly encourage Ofgem, in preparing the Final Determinations, to undertake an assessment "in the round" of the outcomes that DNOs might realise for credible performance scenarios.

EFFICIENT COSTS

Attachments: *SSEPD Supplementary Appendix 3: Costs and Outputs*
SSEPD Supplementary Appendix 4: IQI calibration

Overall, SSEPD has been broadly supportive throughout the RIIO-ED1 process of Ofgem's approach to cost assessment and benchmarking of the relative efficiency of the licensees. We strongly believe that comparative analysis is a powerful regulatory tool that, when combined with strong financial incentives, drive ongoing efficiency gains to the benefit of both licensees and customers. Against this background, we have three concerns with the Business Plan expenditure assessment set out in the Draft Determinations:

- **Continual and substantial changes to the cost assessment methodology between the November 2013 fast-track decision and the Draft Determinations**

  There have been substantial changes to both the models and weighting applied over the past eight months. The consequence of this is to materially change the outcome for a number of licensees. Some of these changes are clearly articulated (for example, the change to modelling business support costs); but some are not (for example, the adjustment to SHEPD's regional factors). Overall, while we have some concerns with the approach, we are equally concerned that the constant revisions undermine the credibility of the analysis and, hence, the conclusions.

  We have included comment on material modelling issues in *SSEPD Supplementary Appendix 3: Costs and Outputs* (attached). In particular, we would highlight an over-arching question raised by the result that licensees under common ownership are shown to have very divergent positions in the efficiency rankings. For SHEPD, we believe that the divergence with SEPD arises from specific cost issues (noted below) and small-company / large-geography factors that have not been fully accounted for in the totex modelling.

- **Qualitative evidence has not been fully taken into account**

  We have attached *SSEPD Supplementary Appendix 3: Costs and Outputs* clearly setting out the evidence to support our cost forecasts that appears to have been overlooked in the Draft Determinations. This fully justifies a cost differential of £100 million across a number of cost categories including:

  – Sub sea cables (SHEPD);

  – Tree cutting (SEPD); and

  – Environmental improvements (SHEPD and SEPD).

For our north of Scotland worst served customers, our Business Plan included four bespoke, well justified schemes to improve the service to around 3,400 customers. This was proposed as a substitute to Ofgem's mechanism (noting the option in the March 2013 Strategy Decision to propose an alternative where it could be justified). We have concerns about Ofgem's assessment of our proposal, and the Supplementary Appendix provides more information on why we believe that the proposed schemes are efficient and consistent with other cost allowances.

Finally, we would highlight the inconsistency between DNOs in proposed cost allowances for severe weather events which appears to take no account of the geographic likelihood of such events occurring or historic expenditure.

- **The Information Quality Incentive (IQI) has been calibrated to significantly weaken the efficiency incentive**

  Across the RIIO-ED1 Draft Determinations, Ofgem has sought to 'sharpen' the suite of regulatory incentives in order to promote DNOs' behaviours that improve customers' outcomes. SSEPD has supported this. The exception to this approach has been in the calibration of the IQI mechanism which, in effect, materially weakens the incentive for future efficiency and the rewards/penalties for historic efficiency. In our view, this is perverse and inconsistent with the RIIO principles as adopted out in the March 2013 Strategy Decision.

  This issue is considered further in *SSEPD Supplementary Appendix 4: IQI calibration*. In summary, we strongly believe that the principle of the frontier licensee be maintained and that other licensees' efficiency incentives be calibrated with respect to the Upper Quartile from the frontier licensee. To do otherwise, and establish a 'Frankenstein' network at the frontier as per the Draft Determinations, is unjustified. We contend that the IQI matrix should be applied against the relative efficiency of licensees' controllable cost bases. The effect of this would be to enhance the strength of the efficiency incentive in line with Ofgem policy.

Looking to the Final Determinations, we would strongly urge Ofgem to refrain from further revisions to the cost assessment methodology. We believe that all qualitative evidence that has been presented, including that set out in our Supplementary Appendix 3, should be considered. Finally, Ofgem should give serious consideration to the strength of the efficiency incentive through the IQI mechanism to ensure that it appropriately drives licensees to continue to make efficiency gains.

SMART GRIDS SAVINGS

Attachments: *DNO RIIO-ED1 Business Plan smart grid related expenditure assessment (report by EA Technology)*
SSEPD Supplementary Appendix 5: Business Plan smart grid savings

The role of smart meters, technologies and operating techniques in responding to future customers' requirements and driving ongoing efficiency gains has been a central element of the current price control and the planning for RIIO-ED1. SSEPD has been a strong supporter and contributor to the development of these smart grids savings, evidenced by our participation in Innovation Funding Incentive (IFI) and Low Carbon Networks Fund (LCNF) regulatory mechanisms (as well as other schemes outwith the regulatory arena). Consistent with this, the customer benefits arising from the use of smart solutions was a central theme of our March 2014 Business Plan – not just the Innovation Strategy. In summary, our Plan proposed £100 million of cost savings from the use of smart solutions (over-and-above our forecast of future productivity gains).

The Draft Determinations employs a somewhat opaque mechanism to conclude that all DNOs (with the exception of the fast-track licensees) should be able to achieve 4% totex reductions during the RIIO-ED1 period from the use of smart grids. For SSEPD, this resulted in a smart grids downwards cost adjustment (post interpolation) of £76 million. We have serious concerns about this adjustment for three reasons:

- **The approach to determining the potential smart grids savings is flawed**

  On behalf of the Electricity Networks Association (ENA), EA Technology has appraised the methodology set out in the Draft Determinations to assess the potential savings. This report is attached. The key conclusions are:

  – The Transform model should only be used to estimate smart savings on low carbon technology (LCT)-related reinforcement. This makes up a minor proportion (industry average 23%) of total reinforcement expenditure (the remainder is general load related or fault level related). The solution sets recommended by Transform to minimise LCT-related reinforcement and the estimated savings would not be applicable to other types of reinforcement.

  – The solutions and savings predicted by Transform are dependent on assumptions about scenarios and a range of other factors; it is not clear what assumptions underpin Ofgem's figure of savings worth 25% of reinforcement and, hence, the credibility of these assumptions.

  – The approach to defining 'smart' as opposed to business as usual (BAU) solutions should take into account the fact that existing equipment / techniques may be used in novel ways to deliver greater benefits and savings than current BAU practice.

– There are a number of discrepancies between the smart meter benefits estimated in DECC's impact analysis and the ENA study of network benefits from smart metering. The smart meter benefits DNOs realise will depend on the level and distribution of smart meter penetration; this is in the control of suppliers not DNOs. The most recent information from DECC indicates 33% penetration is expected by 2017, not 2014 as assumed in the impact assessment. Overall, it appears likely that it will be later in RIIO-ED1 than estimated before network benefits are realised.

Of additional note in respect of the methodology deployed in the Draft Determinations is the summation of the benefits case value of registered LCNF projects. This approach is flawed for a number of reasons:

– Double counting. Different smart solutions and methods can be used to derive the same benefits. For example, a dynamic transformer rating project may avoid the upgrade of a transformer but, similarly, a demand side management project can achieve the benefit for the same transformer.

– Customer benefits. A significant number of LCNF projects facilitate the connection of Distributed Generation; many of these benefits as a result flow to the customer rather than DNO.

– Applicability. Many projects in DNOs' portfolios are based on uncertain future demand scenarios, for example mass utilisation of electric vehicles. If these scenarios do not arise then there will be limited benefit realisation.

Finally, we would note that the allocation of the derived smart grids benefits across the DNOs has a number of flaws, including use of submitted rather than efficient reinforcement, ignoring different DNOs' work mixes and formula errors.

Taken together, and accounting for the adjustments made by Ofgem, our conclusion is that the Draft Determinations overstate the potential smart grids savings achievable during RIIO-ED1.

- **Recent evidence shows that smart meter benefits are over stated**

Since the Draft Determinations were published, DNOs have received new information from the Data Communications Company (DCC) on wide area network (WAN) provision during RIIO-ED1. This shows that communications to smart meters in a considerable proportion of the SHEPD licence area (including all Scottish islands) may not be available until 2020 or at all during RIIO-ED1. This would prevent smart meter benefits being realised for those customers and on the relevant parts of the network.

Of further relevance is that many of the affected areas are already "load managed zones" using teleswitch capabilities. Teleswitch is in the process of being phased out by the telecoms providers,

as we have anticipated the roll-out of smart meters. The absence of smart meter communications during RIIO-ED1 would require SHEPD to either :

– fund long wave transmission to maintain the capability of teleswitch to manage demand; and/or

– reinforce the network to accommodate the increased demand peaks that the loss using teleswitch to managed load would create; and/or

– undertake local, site specific manual interventions (where possible) utilising with other non-communications based smart solutions.

These options were not part of our March 2014 Business Plan, and no costs have been presented to date. Of additional concern is that current proposals to install smart meters with no functionality would not result in a reduction in the charge levied on the DNO by the DCC for smart meters. We will continue to update Ofgem on this issue as we urgently seek more information from the DCC.

- **Evidence of smart grids savings presented in our March 2014 Business Plan has not been fully taken into account**

  SSEPD presented evidence of £100 million savings from smart grids solutions in our Business Plan. Only £32.5 million of this is recognised in the Draft Determinations. The attached *SSEPD Supplementary Appendix 5: Business Plan smart grid savings* addresses our concerns in detail; in summary:

  – All our smart solutions are forecast to deliver demonstrable savings to customers during RIIO-ED1 and result from innovative equipment and practices proven or under trial by SSEPD;

  – Some technologies, for example dynamic line ratings and meshing, have been recognised as smart for other DNOs and, hence, should be recognised as smart for SSEPD;

  – For future developments, for example additional automatic demand side response (ADR) and fault current limiters, these appear to have discounted as smart (although the cost savings in our activities have not been kept in) as specific scheme details aren't known at this time. This is inconsistent and flawed.

  – Some technologies have been discounted as other DNOs use the same language to refer to legacy applications of similar solutions and as such have stated those solutions are already BAU, for example energy efficiency and LV voltage regulators. The definitions need to be examined for consistency.

  – Ofgem specifically highlighted the benefits that one DNO is creating from the application of advanced LV automation, and applied these benefits plus a multiplication factor to all other

DNOs. The identical technology was included in our March 2014 Business Plan, as were the associated benefits.

– A number of innovations were excluded from the assessment (but benefits not removed) on the basis that they were not listed in Transform. The use of this single list, and the process followed, penalises DNOs that have sought to seek benefits from innovation outwith this narrow list.

In the Final Determinations, we expect Ofgem to fully and credibly justify its forecast for smart grids savings taking into account the evidence presented by ENA and DCC. We also strongly believe that all of the £100 million of smart grids savings presented in our March 2014 Business Plan need to be acknowledged.

REAL PRICE EFFECTS (RPEs)

Attachments: *SSEPD Supplementary Appendix 1: Real Price Effects*
Frontier Economics - CMA RPEs methodology in the NIE inquiry
RIIO-ED1 RPEs First Economics
NERA Review of Ofgem's Draft Determination of Real Price Effects for RIIO-ED1

The question of where sector specific costs will move relative to general price inflation is one that is debated at every price control. We have long supported the approach of making an ex-ante adjustment to costs for RPEs as it provides certainty to DNOs over the cost allowance and maintains a 'sharp' incentive to keep costs down. The challenge is to establish a credible forecast of future movements in costs that takes account of macro economic drivers, sector specific issues and individual DNOs' cost structures.

The approach adopted to assess RPEs in the Draft Determinations is materially different from previous RIIO settlements and, by concluding that sub-inflationary growth should be expected, appears to be at odds with all credible views of likely sector cost pressures. We have attached *SSEPD Supplementary Appendix 1: Real Price Effects* and two independent consultants' reports which examine the RPE methodology. In summary:

- Ofgem's view of long term average, 'steady state' RPEs across the suite of measures has been revised downwards (by up to 1% pa. for individual measures) in the Draft Determinations compared with the fast track decision and previous RIIO price controls settled in 2012. The primary driver for this appears to be methodological changes, which have not been justified.
- In deriving long term average RPEs for the Draft Determinations, one period of growth and two periods of recession have been used. This has the perverse consequence that, as we move into a

period of economic growth, RPE forecasts are more representative of recessionary periods. This is statistically flawed.

- The choice of indices appears arbitrary. For example, taking the labour indices as an example:
  - 20113/14 is based on economy-wide forecasts when actual DNO data are available.
  - Although specialist labour is recognised, the known and evidenced premium for specialist labour has not been applied in 2014/15 and 2015/16.
  - There are material differences in the proportions of general to specialist labour across DNOs that suggest a definitional error that should be adjusted for.
- Application of the RPI formula effect does not take account of changes during RIIO-ED1 that will mitigate the effect.

Once these issues are addressed, the forecast RPEs for SSEPD is in the range £90-125 million.

COST OF CAPITAL

Attachments: *SSEPD Supplementary Appendix 2: Cost of Capital*
A Response to Ofgem's Proposals on the Cost of Equity and Debt for RIIO ED1 (report by NERA)
A response to Ofgem's cost of equity estimates in the RIIO-ED1 Draft Determinations (report by NERA)
Analysis of Ofgem's cost of debt Draft Determinations for RIIO-ED1 (report by NERA)
Review of Ofgem's estimate of the RPI formula effect (report by NERA)

There has been significant debate around the key parameters of the cost of capital during the recent RIIO price controls, including the December 2013 consultation on the equity market return and the revisions to the cost of debt indexation mechanism set out in the Draft Determinations. SSEPD has consistently expressed its concern that regulatory finance policy appears to be overly responsive to short term issues and prevailing economic conditions. Moreso, the analysis presented by Ofgem fails to fully account for all market evidence, the long term nature of mature regulated networks (including the eight-year duration of the price control) and the systematic risks faced now and in the future.

Our concerns extend to the proposals set out in the Draft Determinations. There is compelling evidence that the cost of equity has been set too low at 6.0% and, as Ofgem recognises in the document, the cost of debt does not allow for industry average debt financing costs. The evidence on these points is set out in *SSEPD Supplementary Appendix 2: Cost of Capital* and four reports by the independent consultants, NERA. In summary:

On cost of equity

– Ofgem's assertion of 'headroom' in cost of equity of 6.0% is based on flawed interpretation of the market evidence, incorrect translation of the Competition Commission's conclusions for Northern Ireland Electricity and over statement of the RPI formula effect. When adjusting for these factors, the cost of equity range is 6.2% to 6.5%. Accordingly, it remains our strong view that the evidence supporting cost of equity at 6.4% (as set out in our March 2014 Business Plan) remains credible and robust.

On cost of debt

– Ofgem's proposal to underfund the cost of debt is predicated on overfunding (through the asserted 'headroom') of the cost of equity. Aside from this being flawed regulatory practice, this approach is invalidated by the evidence that such 'headroom' does not exist. In addition, the proposed underfunding of the cost of debt is compounded once errors in the "halo effect" are corrected for and the cost of carry is taken into account. Our analysis demonstrates that a trombone index that starts at 15 year trailing average is more closely aligned with average DNO financing costs and debt maturity profiles.

For the Final Determinations, Ofgem must address the shortcomings in its assessment of the cost of equity, in particular its assertion of 'headroom'. It is our strong view that there remains compelling evidence for the cost of equity at 6.4%. In addition, we contend that the form of the trombone index (starting at 15 years) that most closely matches average financing costs is the appropriate form of the index.

We hope this response is helpful as Ofgem undertakes the necessary further analysis for the Final Determinations. Please let me know if any additional information is required from SSEPD to support that work.

Yours sincerely,

Aileen McLeod
Regulation, Networks