

Minutes

Reliability and Safety Working Group (RSWG) meeting 28 June 2012

Follow up meeting to further discuss Quality of Service areas for RIIO-ED1.	From Date and time of Meeting	johnsT 28 June 2012, 10:00- 17:00	2 July 2012
	Location	Millbank, Ofgem	

1. Present

Bob Parker (BP) David Tighe (DT) Jonathan Booth (JB) Steve Cox (SC) Mark Nicholson (MN) Mark Marshall (MM) Rob Friel (RF) Carl Woodman (CW) Gerard Boyd (GB) Catherine Dowd (CD) Mark Smith (MS) Paul Helmsley (PH) Michael Lord (ML) Duncan Carter (DC) Michael Cousins (MC) James Hope (JH) Karl Hurley (KH) Thomas Johns (TJ)

Western Power Distribution (WPD) Western Power Distribution (WPD) Electricity North West (ENWL) Electricity North West (ENWL) Northern Powergrid (NPG) Northern Powergrid (NPG) UK Power Networks (UKPN) Scottish Power (SP) Scottish Power (SP) Scottish Power (SP) Scottish & Southern Electricity Distribution (SSE)

Scottish & Southern Electricity Distribution (SSE) Environmental Agency (EA)

Consumer Focus (CF)

Department of Energy & Climate Change (DECC)

Ofgem Ofgem Ofgem

2. Introductions

KH introduced the work areas for the day and the group did introductions around the room. JH explained that whilst this was the last RSWG meeting scheduled to cover IIS/ QoS work before the September paper and where possible Ofgem were looking to close issues off ahead of September, any areas that need further discussion ahead of September can be addressed as part of either the upcoming RSWG meetings on LIs or HIs or a separate teleconference. The importance of not cutting off necessary debate was emphasised by JH and to this end, it was explained that full consensus across all parties and DNOs was not a requirement for the September paper. Ofgem will set out its views and explain where DNOs, etc. do not agree.

3. Review of previous actions and objectives for the day

- KH ran through the actions from the last meeting and explained that particular actions would be picked up in the discussions on specific agenda points. JH added that due to a lot of the actions being completed and sent in late by the DNOs, there were some areas where it had not been possible to collate a summary or views/responses and so these points may not get fully covered in the meeting.
- RF explained that the issue of strategic spares, on which he was to report back to 3.2. the group on, was still being debated within the E3C group of the ETC.

4. Recap on overall reliability measures

- 4.1. KH briefly summarised the developments from the last RSWG meeting on the IIS planned and unplanned targets, Guaranteed Standards and Incentive rates/interactions with IQI and posed the question to the group of whether there was anything missing from the overall reliability package and whether there was anything not listed to be discussed that the members felt should be.
- 4.2. RF flagged the interactions between High Impact Low Probability (HILP) events and interactions with reliability as something that warranted some discussion. JH suggested that DNOs should look to develop work on how performance against money given for HILP could be measured.

Action point: DNOs to consider whether a HILP metric is required and what it might look like

Person - All DNOs

- 4.3. MN raised the likely move away from ENA engineering recommendation P2/6 within the ED1 period and its replacement with P2/7, and the expected introduction of EU networks codes (which will affect how DNOs design and operate their networks) as being something that would need to be considered across the reliability and resilience work areas, the introduction of these new codes may place additional requirements on DNOs over and above existing Distribution and Grid Codes and they could also lead to increased costs for new connections and existing infrastructure. JH suggested that the approach to this would be something that could be covered in the September paper. MN confirmed that this would be helpful. MS suggested that a reopener would be the obvious approach to dealing with any such change over in obligations. JH explained that Ofgem would set out the options that there would be in the September paper to ensure that the correct approach is adopted for the circumstances faced ie: If any changeover happens very late in the ED1 period, a logging-up mechanism or reopener would probably not be the optimum approach.
- 4.4. RF suggested that the impact of increased Low Carbon technologies (LCTs) connecting at LV on reliability would need to be considered. JH explained that this had been discussed at the Flexibility and Capacity Working group (FCWG) and stated that, in his opinion, the fact that the IIS is blind to the cause of faults is a good thing and should remain. MN suggested that the key point on this area is the importance of Ofgem and DECC supporting the need for DNOs to be informed where LCTs connect, so that issues around the G83 and G59 boundary can be prevented from developing into reliability issues. BP echoed these sentiments and suggested that there may be a resultant increase in unplanned interruptions but explained that it was up to DNOs to proactively ensure that the correct notification processes are in place.

5. Interruptions Incentive Scheme

5.1. KH explained that one DNO put forward the view (via the actions from the previous meeting) that the unplanned targets should be based on a rolling average, rather than rolling best average. RF clarified that UKPN was the DNO that was being referred to and explained that this was because the rolling best average approach put forward by Ofgem at the previous QoS meeting would mean that a DNO that faces four consecutive years where performances alternates above and below the target by a consistent uniform percentage (2 years above, 2 below) – the DNO, rather than having their reward and penalties netting to zero, would actually incur a penalty as they will be tied to a lower target by the two years where they outperform the target. In terms of the target-setting methodology, years above target will count more than an equivalent year below target. CW agreed with the views of RF and added that, if Ofgem were to review the Severe Weather Exceptional Event thresholds, a target-setting methodology based on best average would further punish DNOs.

- 5.2. JH accepted the points raised, but also explained that consideration needed to be given to how the methodology would develop into ED2 where DNOs outperform targets towards the end of ED1. RF argued that the best average approach would provide a perverse incentive for DNOs to not have a particularly strong year as this would ratchet down their target indefinitely. RF also explained that some of the debate about whether to amend the weighting given to 132kV incidents would not be necessary if we moved to a rolling average target. JH explained that he understands this argument but also stated that the reintroduction of the upside cap, an approach suggested by UKPN as part of a rolling average methodology, would create a similarly perverse incentive.
- 5.3. RF put forward UKPN's view that targets for ED1 should be set up front to enable DNOs to make effective and timely investment decisions. JH agreed that in principle, this approach would be beneficial to DNOs but stated that it would only be considered where the Upper quartile performance was considered unlikely to move. BP explained that as a result of operational changes in WPD East and West Midlands at no cost, WPD would be earning £12m in interruptions incentive payments and that this would inevitably impact on the upper quartile for CML/CI in 2011-12.
- 5.4. JH explained that Ofgem would look at the 2011-12 annual performance figures before making a decision and would probably set out options in September rather than being definitive, but did raise a concern that in the past DNOs have invested in IIS schemes, but only put them into operation in the last 2 years of the price control to ensure the associated improvements do not feed into their targets for the next price control period. With fast tracking, JH explained that if the targets were set for the full ED1 period upfront, they would potentially be set at least 10 years before the end of RIIO-ED1. Within the context of the improvements in WPD East and West Midlands, BP emphasised that the combined effect of the performance improvements already achieved and the use of the upper quartile CML/CI would probably result in WPD not being rewarded for their operational improvements for each year of ED1. MC explained that in general DECC is in favour of ensuring that DNOs are not incentivised to invest or defer investment around the timings of incentive pay offs.

Action point: Ofgem to model CML/CI Upper Quartile including data for 2011-12 and extrapolate this out across ED1 and set out as an alternative approach in September paper

Person – Ofgem By – September

- 5.5. PH moved the discussion on to how the incentive rates and rewards/ penalties would interact with IQI. He suggested that WPD's £12m reward would be halved to £6m through applying the IQI factor to the incentive rate in ED1. JH explained that Ofgem have not stated that the IQI will be applied to the IIS. He explained that within internal discussions, comparisons had been made to RIIO-T1 where the IQI is applied to the transmission reliability incentive. The point was not for RIIO-ED1 to be the same as T1, but to consider the approaches undertaken in both transmission and gas distribution and decide which approaches should be consistent, and which should justifiably differ. JH did emphasise that given the reality that the amount customers were paying in real terms for certain IIS improvements was above their willingness to pay results, this is an issue that requires further discussion.
- 5.6. BP then presented his thoughts on applying DNO IQI rating to the IIS incentive rates. The key points presented were as follows:
- Drive to improve interruptions to customers would be reduced
- CML improvements are possible through operational changes at zero cost would potentially require splitting out of investment-driven improvements and noninvestment-driven improvements
- Potential amending of rates as above could not be applied to penalty greater DNO risk on IIS

- Asymmetric incentive rates could change/complicate DNO approach to network investment decisions
- Calibration of Return on Regulatory Equity (RORE) would likely become more difficult.
- May impact on viability of enabling technologies for smart techniques
- 5.7. PH agreed with the points raised by BP although did point out that the IQI could act as a reassuring cap and collar of DNO exposure to the scheme. RF suggested that the rebasing would change the viability of investments, re-focusing company priorities and could cause problems for averages used for unplanned targets.
- 5.8. JH asked for NPG's views on applying IQI to IIS incentive rates. MN explained that although he didn't agree with all of Bob's points they hadn't thought it through in as much depth as WPD as regards any potential asymmetry. Although it did seem reasonable that the rewards for IIS improvements remain commensurate with customers' willingness to pay for them.
- 5.9. JH also asked for ENWL's view. JB explained that they hadn't really considered that whatever the outcome, the incentive would not remain symmetrical. JB suggested that if Ofgem was concerned about whether the incentive rates accurately reflect customers' willingness to pay, the easiest thing to do would be to reduce the rates. Having said that, ENWL were keen to point out that interruptions performance has consistently ranked as the number 1 customer issue and so would be wary of suggesting it should be reduced and suggested any decision should be taken across the full range of incentives within the price control.
- 5.10. CW stated that Scottish Power would reflect on this discussion, but initially feel that the use of the IQI could weaken the IIS.

Action point: DNOs to share areas of priority as identified

through consumer engagement work

Action point: DNOs to check that the areas of customer priority

Person – All

Person – All

Person – All

can be shared with non-DNO members of the group

DNOs By – 13 July

- 5.11. Addressing the points raised by ENWL, JH posed the group the question of whether, within the context of DPCR5, the appropriate amount was on the IIS.
- 5.12. MS said that that an appropriate amount was set against IIS and that it shouldn't be reduced, JB stated that since it was strong enough to change DNO behaviour, it was probably at the right level and could be used as a comparative benchmark for other incentives across the Price Control.
- 5.13. MN suggested that the incentive strength did not need to be stronger, and that there are more appropriate incentive mechanisms to facilitate the roll-out of LCTs. JH explained that the opposite view to this had been put forward in the FCWG, where it was suggested that a strengthening of the reliability output would encourage DNOs to do the requisite reinforcement that would reduce the cost of connecting and therefore boost the uptake levels. RF also felt that as the IIS drives behaviour, it should not be weakened. JB explained that it was strong enough at present to encourage the re-investment of efficiency gains elsewhere and that the weakening of the incentive may just lead to shareholders not reinvesting this money. CW explained that his gut reaction was that applying the IQI to the incentive rate would reduce the incentive to do things and that as the IIS benefits from its simplicity, changing the incentive rate would be the correct approach to aligning it with a post-IQI level of customers' willingness to pay. Regarding the current strength of the

incentive, CW explained that it was strong enough to draw the interest of company directors and therefore, in this regard it is probably pitched at the right level.

- 5.14. MC wondered whether, since the incentive is clearly changing behaviours, it would be possible to get a narrative on how these behaviours are changing across DNOs to inform the industry work on resilience. JH explained that this might be appropriate in the context of an ongoing reflection of performance possibly via the annual report, but would not be appropriate as an upfront approach for the Price Control as this could lead to potential micro-managing and giving uncompetitive advantages to the lagging performers.
- 5.15. CW emphasised that the key requirement on resilience is the development of metrics that are not subjective.
- 5.16. BP suggested that there were some appropriate synergies to be drawn between IIS performance and resilience; tree-cutting, automation etc. MC said that whilst these were resilience issues that were reactively addressed by industry, DECC would be looking to develop some proactive approaches to improving network resilience to things that may not have happened yet.
- 5.17. The discussion moved on to the potential re-weighting of 132kV events within a rolling best average target setting methodology. JH explained that there was always a danger that through good intentions we make the mechanism more complicated without actually improving the targets. JH also explained that there were a range of different approaches put forward by DNOs and suggested that it would be best to review and collate all the options put forward and prepare a spreadsheet explaining how the different approaches would impact on the targets at the start of ED1.

Action point: Development of indicative targets based on different approaches to target-setting/ weightings on 132kV – these will cover transition to ED2 as well Action point: Ofgem to circulate guidance note on methodology once one is finalised

Person –
Ofgem By – 13
July
Person –
Ofgem By –
When required

- 5.18. RF suggested that reducing the weighting on the higher voltages may have a negative impact on DNOs approach to resilience. JH countered that it was generally P2/6 that acted as the driver for investment on the primary network, with resilience more of an investment driver at the lower voltages. RF explained that some work had been done on EHV circuit breakers where IIS was the driver for investment. CW suggested that the change in the one-off exceptional event criteria, to allow the inclusion of some events where third-party interference was not the underlying cause of the event was probably enough to mean that there is no need to re-weight the primary network failures. JH suggested that the Dartford event raised the issue for Ofgem if it hadn't had passed the one-off criteria, the DNO would have avoided the full exposure through the cap and then enjoyed an easier target for the next four years. RF accepted that if this had have been the case, the full extent of the incident probably shouldn't have gone into future targets.
- 5.19. The next area for discussion was whether cut-outs should be included in the interruptions incentive for ED1. BP felt that these would be covered sufficiently by the Guaranteed Standards of Performance (GSOP). JH explained that a number of areas are covered by both the IIS and GSOP. RF questioned whether the issue was material enough to make a big difference either way. SC suggested that cut out related faults should be separated into cut out fuse failures (should not be included in IIS) and cut out faults/ changes (could be included). CW suggested that incidents impacting on single premises should not be included in IIS reporting as these works are normally separately arranged with customers for a convenient time for both parties; to implement reporting on this would be bureaucratic and unnecessary. JH agreed with this point but emphasised the importance

of not setting a bad precedent for DNO operatives by ingraining a view that 1 customer means no reporting, particularly within the context of restoring supplies at the end of a storm event.

Action point: Check reporting requirements for single-premise LV service replacements

Action point: Give views on how cut outs/fuses should be treated within the wider IIS/GSOP regime in ED1

Person – All DNOs/ Ofgem By – 13 July Person – All DNOs/ Ofgem By – 13 July

- 5.20. DC queried whether DNOs are able to identify where these individual customers are on the Priority Customer Register (PCR). JH explained that generally, DNOs would prioritise by voltage to ensure the maximum number of customers are restored as quickly as possible, but they will send out assistance to vulnerable customers to ensure that their needs are being met during the interruption. CW added that it was generally not feasible to reconnect individual customers but that generators were often given to customers with specific requirements, i.e. requiring electricity for medical equipment. RF added that where possible, DNOs would prioritise these particular customers.
- 5.21. DC explained that work was underway to attempt to provide a nationwide PCR. RF welcomed the idea as a means to ensure that all vulnerable customers receive the appropriate treatment as well as explaining that it would provide clarity for DNOs but explained that data protection issues had previously held this work back. JH explained that, whilst the IIS is blind to who is experiencing interruptions, the DNO should not be and welcomed the development of the nationwide list.
- 5.22. The group moved on to discuss Ofgem's proposal for Prearranged Target setting which TJ had set out in the previous meeting on QoS (meeting 3 of RSWG). KH and JH summarised the views that had been received by DNOs and explained that Ofgem would look to give clarity in the September paper on whether DNOs would be able to propose their own pre-arranged targets as part of a "well-justified business plan".
- 5.23. CW explained that SP had concerns over the 4 year lag in average prearranged performance as with investment levels ramping up in ED1, there would likely be a period of penalty for DNOs and subsequently a likely period towards the end of ED1 where targets will be rising, as the volumes fall. CW also presented an alternative approach whereby the allowances are formulated as in DPCR5 but these only trigger penalty if breached, with no reward for under-performance.
- 5.24. MS explained that out-performance against allowances in DPCR5 was being driven by the use of generators and hot-gloving, rather than being the result of high DNO forecasts. TJ explained that the issue with the DPCR5 approach was a lack of incentive for DNOs not to exaggerate the impact of their investment plans on prearranged interruptions and that some companies felt that they had lost out by being honest with their forecast. The move to basing allowances on average performance was a means of taking this decision out of the hands of the DNO. TJ also added that the 4 year lag outlined was purely a reflection of the equivalent time period used in the unplanned target setting and not something that Ofgem were dogmatically advocating.

Action point: Develop options for period of lag on average that builds into prearranged targets

Person - TJ/ Ofgem By - 13 July

5.25. MS further explained that it was important that the targets are driven by customer willingness to pay. JH explained that the use of rolling average targets was intended to simplify the decisions that DNOs have to make regarding the cost of a generator versus the value to customers of lost load (VoLL). Within the context of the smart meter roll out

interacting with planned outages, there were a variety of views and JH emphasised the importance of all DNO views on smart metering issues being put across in all of the various forums in which smart metering will impact.

6. Resilience

- 6.1. MC gave a brief overview on how the work of the RSWG on resilience interacts with the wider issues being addressed through the DECC- driven Energy Emergency Executive Committee (E3C). MC explained that ultimately, the aim of the E3C was to be able to give the relevant assurance to the energy minister that the UK networks are sufficiently resilient. It was explained that the key issues for the RSWG to cover were:
- How do we measure resilience?
 - o What is already in place?
 - o How is it measured?
 - o What further work can be done?
- How do we move towards a more proactive rather than reactive approach to resilience?
- 6.2. The examples of substation resilience to flooding and black-start capabilities were given as examples of where work was already underway. In relation to black start resilience, MN questioned whether a grid code obligation would be put in place, as otherwise, it would be difficult to mobilise across industry. MC explained that there would be a meeting the following week that would address some of these issues.
- 6.3. MC explained that the issue of strategic spares, as previously mentioned by RF, had moved back into the work of the E3C and cited the strategic storage of transformers in the US post-9/11 as an example of what could be done, although he did accept that this might be difficult in the UK context of only 6 DNO groups.
- 6.4. ML informed the group on the EA perspective of resilience within the context of adapting to climate change. He explained that industry would be missing a trick if it did not consider the impact of climate change within the wider debate on the development of smart grids and raised the question of how we put in place a framework that allows DNOs to take this sort of issue into consideration within their investment decisions. JH suggested that it would be useful to get some input on adapting to climate change for the September paper from ML to set the wider context to some for the decisions that will be made across the wider Price Control. JH suggested that understanding what DNOs are doing and encouraging them to consider the impacts in their business plans would be a useful approach. ML agreed that this was a proportionate approach and preferable to setting specific spending requirements on DNOs.

Action point: ML to provide text to incorporate in September Person –ML Paper on how EA expect DNOs to incorporate adaptation to By – 13 July climate change work into business plans

- 6.5. JH ran through Ofgem's proposal for the capturing of performance against flood mitigation performance. In a similar manner to DPCR5, the sites put forward in DNO business plans would be set as an overall level of improvement that would need to be met by the DNO across the period, with ongoing performance against this "delta" measured each year. JH explained that to some degree the IIS would act as a driver for flood mitigation expenditure, highlighting that NPG had done some upfront flood defence expenditure that mitigated the impact of the 2007 floods in YEDL. MN explained that this expenditure was the result of the learning that came from the 2000 floods, which had impacted on a similar area.
- 6.6. MN and RF were supportive of Ofgem's approach, although MN did explain that within the context of DPCR5, the assessment of a number of sites was amended between the FBPQ submission and the start of the DPCR5 period as a result of improved data from

the EA. JH accepted that this was a potential issue that might need to be addressed if a similar situation occurred in ED1.

Action point: JH to circulate working with updated view once 2012 numbers have been included in July

Person -JH By - Late August

6.7. ML questioned whether the survey work that set the levels of substation risk included surface flooding. MN, CW & RF clarified that the level of risk did not cover surface flooding as the relevant ETR was devised at a point when the full study of drainage had not been completed.

Action point: DNOs to work through what information there is to Person –ALL allow the development of surface flooding mitigation within the DNOs – 13 July well justified business plan (WJBP) for RIIO ED1

- 6.8. MN explained that work is underway on this work via the ENA, but cautioned that this work would be unlikely to be completed in time for the business plan development. MN also confirmed MS's understanding that for ED1 there would likely be three strands of flood mitigation that would need addressing in business plans;
- Mitigation work that was originally forecast for DPCR5
- Mitigation work scheduled for ED1
- Mitigation work from the potential developments into covering surface flooding
- 6.9. MS explained that, due to the potential for different DNOs to have differing views on flood risk, and Ofgem comparing these different approaches, he would actually prefer a mandated standard to allow clarity on exactly what should or shouldn't be mitigated and what specific schemes are viable.
- 6.10. The group then concluded the discussion of resilience by reflecting on the key issues covered. BP suggested that in terms of the discussion on climate change adaptability, there was an overlap with some discussions that had taken place in the Cost Assessment Working Group (CAWG) around how to capture the incremental costs of such activities as using taller poles when replacing overhead lines in order to account for potential line sagging as global temperatures rise. MS reflected that whilst the mechanics of the strategic spares debate would be difficult to bottom out, it was definitely a worthy endeavour. JH explained that the LCNF was an example of where DNO funding can be pooled to achieve a common objective in the interest of all customers.
- 6.11. JH suggested to MC that some of the work that DECC is leading on would benefit from having wider development within the ED1 process in order to focus minds on what was achievable for inclusion within ED1 Business plans. MC agreed that the process provided a good opportunity for development but stated that the key point was to ensure that the arrangements put in place were the right ones, rather than being constrained by price control timescales. MC suggested that it would be useful to scope out the requirements of what specific strategic spares might be required. MN reiterated that a grid code obligation and ENA (Energy Networks Association) engineering standard would need to be in place before this could be developed with regards to black start. RF added that the implementation of such a governance obligation would be difficult whilst there was an existing lack of consensus from DNOs.

7. Guaranteed Standards of Performance (GSoP 698 of 2010)

7.1. DC ran through some presentation slides relating to DNO guaranteed standard performance and comparing the reported levels to some anecdotal information from Consumer Direct data. DC accepted that there were limitations to the data presented as he was aware that DNOs paid out a substantial number of ex-gratia payments which had not

previously been captured in DNO reporting. BP suggested that some non-GSoP data, such as the IIS number of customers off for over 18hours might be of interest to Consumer Focus. DC agreed that this would be useful information.

- 7.2. On the topic of the voltage complaint standard, DC compared the number of failures against the voltage complaint standard with the number of surveyed customers to have experienced voltage dips and power surges. DC acknowledged that as there hadn't been many, perhaps there was less need to understand what was going on behind the numbers. GB suggested that the likely roll out of smart meters and LCTs would be likely to increase the number of voltage complaints over the ED1 period. CW added that the low numbers of claims reflected the fact that failures against the guaranteed standards were originally seen as fundamental failures of duty of a level comparable to licence failure, as time has developed their meaning has changed, with the voltage standard a reflection of the original viewpoint. BP added that since the voltage standard referred to the DNO timeliness in response to complaints, the number of occurrences of voltage fluctuation was not really valid as a comparable statistic. SC added that its important to distinguish between voltage fluctuations and dips and permanent low volts, which can be a legitimate energy saving endeavour.
- 7.3. The group agreed that for particular standards, the reasoning and other detail behind exemptions invoked would be of most value to Consumer Focus. JH questioned some of the detail behind the slide on the prearranged notification standard as within the broad measure, prearranged outage performance seemed to consistently achieve higher scores.

Action point: Inform Ofgem's connections team regarding CF Person -Ofgem findings on customer complaints - 13 July

7.4. KH presented some slides on the potential conversion of the 18hr standard to a 12hr standard and explained that for DPCR5, if the funding for the 18hr standard had been based on previous average payments, the DNOs would have been over-funded. From this standpoint, Ofgem are wary of providing up front funding for the shift to 12hrs based on current volumes of customers off for over 12hrs. JH added that the Ofgem view was that at least some of the cost should be funded by DNO shareholders. CW suggested that it could run like the IIS where money is retained on a lagging basis. RF explained that UKPN were happy to accept that shareholders would fund the movement.

8. Short Interruptions

8.1. JH explained that Ofgem had not been convinced that an incentive on short interruptions (<3 minutes) would be viable for ED1. RF explained that UKPN (who developed the proposal for discussion at the last meeting on QoS (meeting 3 of RSWG), had moved away from looking to develop an incentive and more towards developing the appropriate reporting to allow for the future development of a sensible incentive. MM explained that Smart meters may be able to produce the required reporting on short interruptions. JH explained that if this was a concern for some customers, there would need to be developments in the reporting before the smart meter roll out is completed in 2019.

9. Worst served customers (WSC)

9.1. JH explained that KH/JH had presented the recent developments in WSC work to Ofgem's senior partner for electricity distribution and explained that Ofgem would be looking to signal a more flexible approach to the scheme in the September paper. JH confirmed that DNOs would be able to propose different WSC rates and periods over which the improvements would be experienced. BP questioned whether there might be scope for amending the definition of WSCs. JH explained that the scheme would benefit from stability in this element and so was minded to keep it the same. CW suggested that the extra

requirement of a WSC requiring 3 interruptions per year would limit the number of viable schemes.

10. Any other business

10.1. JH questioned whether, overall, there were any areas that members had expected to be covered in the 2 RSWG meetings on QoS that hadn't been. SC suggested that some discussion of the balance between the incentive rates for CIs versus CMLs was a key change in the IIS for DPCR5 and suggested it should be discussed further. JH agreed that this would be discussed at the previously suggested teleconference likely to happen in late July.

11. Date of next meeting

- 11.1. The next meeting of the RSWG is scheduled for 12 July and will cover the development of the Load Index for RIIO-ED1.
- 11.2. A follow-up teleconference will be scheduled for July to cover off QoS and reliability issues ahead of the September paper publication.