

## Reliability and Safety Working Group (RSWG) meeting 19 December 2012

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Meeting to discuss development of Health and Criticality indices.	From	Martin Hughes
	Date and time of Meeting	19 December 2012 10:00-16:00
	Location	Ofgem, London

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### 1. Present

Jonathan Booth (JB)	Electricity Northwest (ENWL)
Eddie Hamilton (EH)	Electricity Northwest (ENWL)
Gerry Boyd (GB)	Scottish Power Electricity Networks (SPEN)
David Neilson (DN)	Scottish Power Electricity Networks (SPEN)
Iain Divers (ID)	Scottish Power Electricity Networks (SPEN)
Mark Smith (MS)	Scottish and Southern Energy (SSE)
John Smart (JS)	Scottish and Southern Energy (SSE)
Mark Nicholson (MN)	Northern Powergrid (NPg)
Gavin Howarth (GH)	Northern Powergrid (NPg)
Rob Friel (RF)	UK Power Networks (UKPN)
Richard Wakelen (RW)	UK Power Networks (UKPN)
Ian Butler (IB)	UK Power Networks (UKPN)
Bob Parker (BP)	Western Power Distribution (WPD)
David Tighe (DT)	Western Power Distribution (WPD)
Mike Cousins (MC)	Department of Energy and Climate Change (DECC)
Jason Davis (JD)	National Grid
Martin Hughes (MH)	Ofgem
James Hope (JH)	Ofgem
Karl Hurley (KH)	Ofgem
Jack Ambler (JA)	Ofgem

### 2. Discussion of deliverables from the Criticality Working Group

#### Criticality Principles Document

- 2.1. The latest version of the Criticality Principles document was discussed and Ofgem believed this was fit for purpose and was of an appropriate level of detail. JH felt that there was scope for more specific information to be provided in the Consequence of Failure section.
- 2.2. It was confirmed that although the document would have no formal status, the principles would be included in Ofgem's guidance to DNOs for completing their business plans, and in the future would feed into development of the RIIO-ED1 RIGs.

#### HI and Criticality Data Templates and Questionnaire

- 2.3. With regards to Health Index (HI) reporting, Ofgem set out that it wanted to be made aware of any changes that a DNO makes to its methodology. Ofgem confirmed that for the 1<sup>st</sup> of July 2013, DNOs should submit their HI information in the 2012-13 RIGs submission, according to the established DPCR5 conventions. On the 1<sup>st</sup> of July, DNOs should also submit completed business plan templates, and these should be completed according to the conventions established by the RSWG when they have been finalised.

- 2.4. DNOs raised the point that it may be useful to have a standard template in place for them to follow in assessing health and criticality. Ofgem noted that we may look to put some structure into the accompanying narrative for this.
- 2.5. RF asked whether the narrative will be part of the Business Plans. JH confirmed it would be part of this submission, but perhaps as an appendix. Ofgem invited views from the DNOs on this, particularly on how the business plans are published on the website
- 2.6. The subject of how consequences should be measured was discussed and JB felt that it should be set out that an "aggregated consequence" approach had been agreed. MS pointed out that, whilst it was not necessarily an issue for DNOs, there was a current license obligation placed on TOs to maintain consistency with DNOs, and that would be an issue if DNOs proposed a new or different approach. GB and others felt that the approach going forward should not be determined by previous price controls. JH suggested that there could be scope for aligning the approach between larger distribution assets and transmission, and agreed to take this away for further consideration. RW felt that it was preferable to maintain a consistent approach for all distribution assets however.
- 2.7. GB felt it was important to note that assessment of criticality would differ from HIs as it is more subject to influence from external factors. RW added that it is important to establish how movements from a Criticality Index (C) rating of 3 to 4, for example, would be mapped and noted that movements can be driven by different interventions. JH asked hypothetically what figure would be used to account for a growth in customer numbers of 1% per annum. MN replied that today's customer numbers would be used. The group also generally agreed that without intervention, the criticality profile would be the same at the beginning as the end of the period. BP noted that the only factor likely to change was the consequence measure should RPEs move. MN felt that it would be possible to forecast changes in criticality for reinforcement by using DSR. JH asked how this was possible and asked MN to consider how the guidance could be tailored to ensure that certain approaches are not artificially favoured over others.
- 2.8. BP asked what approach Ofgem expected DNOs to use to report changes in criticality year on year. JH confirmed that this would be through the Health/Criticality Tracking sheet and Ofgem have been developing this as an Excel workbook. The intention is to use one tab for each reporting year however Ofgem welcomed any suggested revisions to the tracking sheet from DNOs. JH also confirmed that commentaries from DNOs would be required for both their well justified business plans and FBPQ submissions.
- 2.9. BP asked whether expenditure reported in data tables would be for all assets or just those where HI interventions had been made. Furthermore, instructions for the data table would need to be explicit and provided to DNOs in good time. MN added that there was a need to understand the difference between solutions and enabling technologies as the templates did not extract this. JH stated that Ofgem would be looking at the data sets and the scenario information would provide clarity on some of these issues. Ofgem would also be visiting EA Technologies in the New Year to look at the Workstream 3 model more closely.
- 2.10. Regarding the HI and Criticality questionnaire, Ofgem asked for these to be completed and submitted in the second week of January and all DNOs agreed that they would be happy for theirs to be circulated to the rest of the group.

<b>Actions:</b>	<b>Person –</b>
<b>Arrange further discussions with transmission colleagues on comparative approaches for treatment of assets between Transmission and Distribution.</b>	<b>Ofgem by 11<sup>th</sup> Jan</b>
<b>Consider how the criticality mechanism can be tailored in order to avoid prejudicing certain approaches to managing networks</b>	<b>MN / Any other DNOs by 11<sup>th</sup> Jan</b>
<b>Clarify how movements with or without intervention will be assessed</b>	<b>Ofgem by 11<sup>th</sup> Jan</b>
<b>Re-circulate HI tracking sheet/return with refinements and suggestions</b>	<b>Ofgem/DNOs by 11<sup>th</sup> Jan/24<sup>th</sup> Jan</b>
<b>Complete HI and Criticality questionnaire</b>	<b>DNOs by 11<sup>th</sup> Jan</b>

### 3. HI Traffic Lights

- 3.1. In pulling the slides together for this meeting, Ofgem noted some issues with transpositions between licensees of one DNO group and a lack of associated expenditure. As a result, these were not included. It was agreed that it is reasonable to produce the overall summary on an aggregate basis.
- 3.2. The tables used for the traffic lights are based on the July submissions – as such, there are some parts that may have changed. Tables in the annual report are likely to be similar to the bar charts presented. RF asked how easy some of the tables/charts may be for third parties to understand. Ofgem noted that there is the option to produce stacked charts to improve clarity, and welcomed DNOs' views on this. JH felt that the voltage level breakdowns highlighted interesting differences between DNOs. No concerns were raised by DNOs regarding adding this breakdown into the annual report. JH also noted that there is the possibility of presenting the original DPCR5 view as well.
- 3.3. JH asked whether DNOs would have any issues with the inclusion of some forecasts/projections out to the end of DPCR5, given that DNOs have submitted these to Ofgem already. MH will run any of these past the DNOs before publication. Ofgem will make it clear in the annual report that this is a five year plan and that DNOs may take up new positions during this time.
- 3.4. Ofgem asked whether DNOs would have an issue with the year 1 and year 2 tracking sheets being put on the website. DNOs asked for time to consider this and will get back to Ofgem with their views.

#### **Action:**

**Confirm whether Year 1 and 2 tracking sheets can be published on Ofgem's website – DNOs by 11<sup>th</sup> Jan**

### 4. Development of HIs for Civil Assets

- 4.1. The group discussed the feasibility and potential benefits of extending HI classifications to civil assets. BP raised the point that for certain civil assets such as

outdoor support structures, costs were embedded elsewhere in the RIGs, CV3 Asset Replacement in this case.

- 4.2. MS asked whether the assessment of civils would be backward or forward looking. It was felt that this would be forward looking as Ofgem will be looking at how the asset base will degrade over time. GB also felt that it was important to distinguish between what was classified as a civil asset defect and what was a genuine degradation. MN suggested that it may be possible to separate these two classifications effectively. MN also emphasised the importance of taking a proportionate approach.
- 4.3. JB reiterated that the main purpose for considering applying HIs to civils was because it was an area where there was a large amount of expenditure yet had relatively underdeveloped monitoring processes in place compared with electrical assets. RF's view was that although there was scope to develop the monitoring of civils, it shouldn't be an incentivised area of the RIIO-ED1 mechanism. RW suggested that it would therefore not be considered an output measure. Following on from this, BP raised the question of whether HIs for civil assets would therefore be declared or not.
- 4.4. The possibility of working with other sectors, e.g. transmission and water, to produce a common HI system of classification for civils was raised. JD felt that National Grid would not be keen on doing this as their civil asset condition ratings were included alongside electrical assets.
- 4.5. JH felt that not treating civil HIs as an output area for RIIO-ED1 and leaving it as an area for development in time for ED2 would prove a missed opportunity for DNOs. He suggested to DNOs that it would be down to them to take the opportunity to develop civil HIs if they wish.

**Action:**

**DNOs to attempt to define appropriate list of assets for civil HI application – by (date TBC)**

## **5. Interactions between CV15 (Troublecall) and CV3 (Asset Replacement)**

- 5.1. The need to know how fault replacement work feeds into HIs was discussed. KH joined the group and noted that from previous meetings on quality of service, the option of having an additional reporting tab was less favoured by DNOs. KH felt the main question/issue still outstanding is whether reactive fault work is feeding into HI work. For example, for a fault where a licensee says that they are doing betterment and moving expenditure into CV3, the HI tracking sheet records this as asset replacement and the licensee gains credit. Depending on how two licensees report the same fault, one could get different points from the other. KH therefore asked what the impact of some DNOs doing more betterment than others would be.
- 5.2. KH used the example that if a DNO completed 200 transformer replacements when they have stated they will do 100, and 100 of those were classified as HI5, would it be considered they had completed all those they stated they would. Another issue was that for the work completed to address faults, what credit would be given in terms of HI and Criticality points. If an asset fails due to a fault, would a DNO take the last recorded HI, or assume the asset to be an HI5. If the latter, the DNO would be credited with HI points but not necessarily criticality points.
- 5.3. BP noted that a plan will be submitted that states, for asset type X, the DNO will replace 100 units. During the maintenance work if it is discovered that an asset is in worse condition, this asset is substituted into the list for one in better condition. BP questioned whether this was any different from an asset requiring work due to faults.

- 5.4. Ofgem indicated that this would be different from a DNO that only completed reactive fault work. In DPCR5 Ofgem were not prescriptive enough in ensuring those assets DNOs set out to complete work on, saw that work completed. It was agreed that if an asset was in this profile of expected work and failed earlier than expected it would be included in CV3. Ofgem reiterated that the most important thing was to ensure consistency across all 14 DNOs however.
- 5.5. DNOs agreed that they had all considered the boundary between asset repair and replacement costs (i.e. CV3 and CV15). Ofgem suggested that all work to do with faults could be reported in CV15 and the volumes still picked up in V4, which would still allow for an average to be taken over time.
- 5.6. Ofgem suggested that for RIIO-ED1, the tracking sheets can be delineated so that it can be stipulated what goes where for HI delta recording. Those assets that originate from a fault will be picked up on tracking sheets. Faults will be recorded in CV15, the volume of work (plus costs) in CV3b/V4, and the HI tracking sheet will also pick up both of these. Ofgem could expect a certain volume of asset replacement work in the profile will be reactive. Ofgem remain open to any further thoughts on how this may work however, prior to finalisation.

**Action:**

**Ofgem and DNOs to give further thought on appropriate treatment of asset categories in ED1 profiles. Also to think about how to treat failed assets, both currently in DPCR5 and going forward to RIIO-ED1 – by 24<sup>th</sup> Jan**

## **6. Interactions with CBA (UKPN presentation)**

- 6.1. RF presented UKPN's thoughts on this area. This included discussing its application in gas, where CBA was used for additional mains replacement on top of statutory mains replacement and for issues of safety compliance, where CBA is mandatory. RF underlined that there is a need to demonstrate the benefit of using CBA to the customers. CBA can also be used to support the volumes that go into the process of reinforcement and to determine the right time to replace assets.
- 6.2. MN questioned how benefits were determined and RF noted that UKPN have attempted to keep away from increasingly intangible aspects (e.g. Volume of Lost Load). Ofgem accepted that in pushing for the CBA to be part of the toolkit there was a need to be clearer on how it will be used. DNOs will also need to let Ofgem know if there are any areas they may use differently from others.
- 6.3. RF felt that it was important DNOs were not drawn in to analysing nebulous values and JB stressed the importance of agreeing as much of the CBA process as possible up front. BP's view was that DNOs should aim always to use the "efficient" unit cost, although RF pointed out that this was only applicable where it could be determined. BP added that results of the work on consequences and the CBA will be quite sensitive to the IIS.
- 6.4. JH stated that CBA would definitely be included in the Strategy Decision Document. He also flagged that some Ofgem colleagues would be concerned that losses had not been included.

**Action:**

**Ofgem to circulate Electricity Distribution CBA – by Jan 18<sup>th</sup>**

## **7. Use of secondary deliverables in benchmarking**

- 7.1. JB gave details of the discussions surrounding forms of benchmarking for RIIO-ED1. Benchmarking will take a three tier form: mid, totex and aggregated models. JB felt that the question of what form of assessment would be done at the mid level remains. For Gas, the mid model was not significantly different. JB had taken some results to the Cost assessment working group where the ability to set appropriate targets was discussed.
- 7.2. JB's view was that the current DPCR5 approach measures progress against a target, with no real assessment of the appropriateness of that target. Unless a comparable framework is in place, there cannot be a comparative efficiency. Relative measures can however be looked at. Movement from a starting risk position to a desired risk position for £x can be normalised, in terms of both the impact and financial cost.
- 7.3. JB felt there is also the question of how to use today's products alongside money in the model to assess the efficiency of outputs. One method could be to use running costs from networks and outputs, and the impact on outputs for expenditure.
- 7.4. JH confirmed that the September Strategy Consultation Document had pointed towards using a mid-model with an outputs element. He also stated that the February document would not stipulate what percentage the CBA should make up. Ofgem will set out the tool kit available to DNOs and will evaluate all the information submitted from them.

### **Actions:**

**DNOs to bring thoughts on inclusion of losses (CO<sub>2</sub>) to next CAWG meeting**

**Ofgem to circulate JB's presentation on mid model - by 11<sup>th</sup> Jan**

## **8. One Day Workshop on Asset Management**

- 8.1. The format of the workshop on the 24<sup>th</sup> January was briefly discussed. Ofgem confirmed that they would set out what topics would be covered and by which DNOs and would decide the running order.

### **Actions:**

**Ofgem to allocate slots and running order for the workshop on 24 January 2013, as well as setting some bullet points of what is to be covered, and the objective of the meeting – by 11<sup>th</sup> Jan**

**DNOs to inform Ofgem of names of attendees for one day workshop – 18<sup>th</sup> Jan**