

Minutes

15 July 2012

Reliability and Safety Working Group (RSWG) meeting 12 July 2012

From
Date and time of
Meeting
Location

johnsT 12 July 2012, 10:00

Ofgem, Millbank,

London

1. Present

Bob Parker (BP)
Jonathan Booth (JB)
Ian Povey (IP)
Mark Nicholson (MN)
Rob Friel (RF)
Allan Boardman (AB)
Jane Wilkie (JW)
Graeme Vincent (GV)
Mark Smith (MS)
Will Clements (WC)
Ian Mulvaney (IS)
James Hope (JH)
Thomas Johns (TJ)
Martin Hughes (MH)

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

Scottish & Southern Electricity Distribution (SSE) Scottish & Southern Electricity Distribution (SSE) DECC

DECC Ofgem Ofgem Ofgem

2. Introductions and Working Arrangements

2.1. TJ introduced the meeting and the group did introductions around the room. TJ then ran through the arrangements for minute taking and Ofgem's preference for attributing points made to specific individuals within the published minute on Ofgem's website.

3. Action Log Update

- 3.1. Some discussion on UKPN's previously circulated Load Priority Index (LPI) took place. RF explained briefly that load growth alone does not always signify which substations are most critical. BP felt that while this was the case, some DNOs already have an element of criticality built into their LIs. BP also drew attention to the fact that there is currently no standardised approach to asset rating across the DNOs. JB said that further to this there is no common definition of the terms that go into creating the metrics.
- 3.2. IP felt that demand side management/response (DSR) should be used to change reported firm capacity. In capturing DSR, non-firm demand should be separately identified from maximum demand and firm capacity.

Impact of Generation and Demand Side Response to LI Framework

- 3.3. BP stated that this issue had been covered in the consolidated responses from DNOs. He felt that when considering DSR, distributed generation can be seen to contribute to both the numerator and denominator on an asset's LI. MN pointed out that P2/6 would also apply here.
- 3.4. RF raised the point that although a standard LI 3 rating might not be significant enough to warrant intervention, net loading of this asset including DG may push it up to an

- LI 4 or 5. MS's view was that if a site was rated an LI 4 or 5 and was generation dominant, this would make it a site that DNOs would want to monitor closely. Furthermore, he felt that LIs at present are primarily used to measure "creeping demand growth", while the way in which DG comes onto the network tends to be in quite large 'chunks', and was unpredictable in its location on the network. As such LIs for DG could not be used in the same way as LIs for demand are used, to link to forecast expenditure over the period of a Price Control. MS asked if it would therefore be more helpful, for short term needs, if DNOs could indicate an aggregate capacity of generation above a certain level. It would however not be suitable for long term investment forecasting needs such as a Price Control. TJ responded that ultimately Ofgem are trying to track how much DNOs invest and that is not essential for them to formulate a business plan based on investing ahead of need. He also asked that if a DNO wanted to develop this type of strategy, how progress against the plan would be measured?
- 3.5. JH stressed that existing LIs were designed for demand dominated sites and agreed that there was a need to make sure demand LIs are dealt with on a consistent manner. A consistent approach could also be applied to the remaining years of DPCR5 if this would prove helpful to DNOs. TJ reiterated that although inclusion of DG in the LIs was not currently required, we would need to look ahead to see when this could be applied in the future, perhaps during the mid-period review. MN felt that his would fit with the implementation of P2/7, which should help to harmonise DNOs' treatment of DG.
- 3.6. MS asked what the position of the DG incentive is going forward. JH responded that this was still undecided. The incentive could be retained and refined or could be encompassed within a broader low carbon incentive however the Flexibility and Capacity Working Group (FCWG) was a more appropriate forum for discussing this. JH also informed the group that the September document would not definitively state that LIs would be in place for DG. The document will describe a range of options which may be impacted by other factors.
- 3.7. BP noted that it was important to be aware of the possibility of changes elsewhere in the regulatory regime which could see the penetration of DG increase. RF pointed out that the LPI is useable in all scenarios where the DG incentive is effective.
- 3.8. MN felt that it needs to be made clear whether automatic transfer capacity is to be considered in or out of a substation's firm capacity. RF spelt out the need to get some definitions to a reasonable level of transparency in order to make them comparable. BP pointed out that it would be appropriate for DNOs to include certain proposed changes in their business plans, for example where they expected to install new transformers. JB also felt that some form of tracking DNOs' work in improving LIs against forecasts would be sensible.
- 3.9. JH set out that he was keen for LIs to be tracked in a similar way to that being proposed for Health Indices in order that Ofgem could compare what allowances DNOs had requested with their overall investment. BP pointed out that forecasting for ED-1 was likely to involve accounting for more uncertainty than for any previous price control period. He suggested that there would therefore need to be a lot of dialogue between DNOs and Ofgem.
- 3.10. MS asked how Ofgem intended to incentivise DNOs to seek lower cost/more efficient solutions. TJ replied that speed of connections would be incentivised through DSR and that the FCWG was looking to encourage flexibility by not mandating investment in reinforcement. JH added that the IQI should also incentivise efficient solutions. JH also raised the possibility of including walkthroughs of certain aspects of LIs as part of this year's annual visits. For example: how individual DNOs treat DG, determine maximum demand and firm capacity, and approach ratings of transformers and other assets.

Secondary Network LI Outputs

- 3.11. IP of ENWL presented their views on how LIs could be applied to the secondary network. IP's view was that at present there is no concrete means of determining where load will materialise on the secondary network and that some assumptions would have to be made to do so. For example, the possible clustering of new technologies, such as PV, would need to be considered. IP added that for the Work Stream 3, data capture for traditional solutions would probably form the basis of the model.
- 3.12. JH asked whether given that licensees have different networks and volume types, how uniformly a benchmark solution for costs could be applied. IP suggested this would be possible across most DNOs with a predominantly radio type network and JB added that an efficient benchmark cost should be widely applicable. BP felt that the difference in costs across solutions was likely to be quite wide however and that looking ahead to the end of ED-1, the nature of possible interventions and solutions was likely to vary significantly. JH observed that disparities in unit costs had been seen over the years and suggested that some of this was down to differences in networks and some to the network operators. If the cause of disparities was predominantly the former, this could create problems for a benchmark solution. TJ suggested that based on a forecast mix of what problems will be fixed in a certain way; a composite unit cost could be created.
- 3.13. IP reiterated that DNOs' objective is to try and invest ahead or just in time of need. ENWL are not currently monitoring their entire network and therefore need means of identifying where problems are. JB outlined the importance of covering off volume risk and unit cost risk and that these were separate considerations. He also suggested that as technology evolves and matures, it may not be beneficial to try and make predictions eight years ahead of time. IP proposed that modelling work being done at the current time should be to forecast levels of expenditure.

Action point: Circulate ENWL's updated model specifications to group

Person – Ofgem

Potential Role for LI at LV

- 3.14. TJ began by discussing the role of the LI tracking sheet. He suggested that a unit solution cost (cost per solution) could be set following agreement of an initial baseline for LV reinforcement. This would allow continued monitoring even if volumes varied significantly from forecasts. JH suggested that this was one option that could be included in the September document and that a conventional unit cost (i.e. traditional solutions) or blended (i.e. traditional/smart) unit cost could both be considered. TJ added that the secondary network would be differentiated into "HV network" and "LV feeders". BP questioned whether the WS3 model catered for all causes however. JH also proposed that an automatic volume driver might also be included in the September document which could be allowed to run and run provided potential issues surrounding its use were mitigated.
- 3.15. JH confirmed that Ofgem would not require leading indicators from DNOs and that progress would be measured against the forecasts provided. BP asked whether, if funding was to be upfront, it would be more appropriate if this was based on "least" rather than "smart" cost. TJ confirmed that if there is an upfront allowance for smart enabling solutions, the allowance would be based on least cost and Ofgem would expect the per problem cost to be significantly reduced. BP suggested that establishing smart grid infrastructure might be all that is needed for ED-1 as solutions proposed are a mix between smart and traditional. MS added there is a need to consider what metrics are used to measure actuals against forecasts.

3.16. JH identified that one question still to be resolved was whether DNOs would be allowed to ask for (and include in their plans) an allowance (in £m) for communications work. MN suggested that DPCR5 costs could be used for conventional projects and that LCNF projects and the WS3 model will help identify what potential enabling solutions and costs will be. Enabling costs would also need defining i.e. do they include marginal costs such as replacing old, broken parts of assets with new. JH pointed out that WS3 does capture some inherent costs of enabling technologies however some costs would be classified as replacement and therefore not be included.

SP/SSE work on time to connect vs. LIs at LV interactions

3.17. JH felt that the incentive on time to connect could encourage DNOs to rush work to meet deadlines. The task was to show how high an incentive would have to be to influence performance and it was shown that it had to be quite high. BP suggested that another effect would be to create a lot of redundant assets. MS asked what means were available to encourage DNOs to spend an ex ante allowance, should they be provided with this. JH proposed that by using the WS3 model, problems caused by low carbon connections could be mitigated.

4. Load related questionnaire

4.1. JH described the purpose of the questionnaire: to ask all relevant load related questions in one document and gain a coherent response from each DNO. MN pointed out that this should provide an opportunity to address all four scenarios in WS3 and that these scenarios should be outlined in the questionnaire. BP felt that it was important to recognise that the scope and size of scenarios was normally harder to determine than the scenario itself. RF added that some of the questions were very open and that as a result these could be time consuming to answer and might lead to crossover with the business plan. Ofgem agreed to clarify certain aspects of the questionnaire and include additional banding categories alongside it.

Action point: Circulate updated version of questionnaire

Person – Ofgem by 13th July

5. September Paper

Primary Network

- 5.1. TJ indicated to the group that Ofgem will be flagging areas to be included in the document that require further work and some areas where Ofgem will set out a series of potential options. MN asked how Ofgem would be accounting for DSR and what type of DSR was envisaged, and that this had to be made clear to DNOs. TJ replied that DSR would refer to unfirm capacity, reduction in demand or firm capacity. JH added that where feasible Ofgem would clarify aspects of the text prior to publication of the document. He also stated that there was a need to be mindful of due diligence and that this would be discussed with DECC. JH also expressed a desire to have conversations about ongoing assessment sooner rather than later.
- 5.2. JB asked if there were any additional issues relating to the primary network that needed to be included, for example enabling infrastructure and fault levels. JH agreed that Ofgem would look into this and examine if any changes needed to be made.

Secondary Network

5.3. TJ set out that this would be along the lines of what was presented earlier in the meeting. JH said that the expert review of large schemes undertaken for DPCR5 may not be feasible for ED-1, however it may be possible to look at some issues surrounding these in more detail this year. JH also suggested that where confidence in schemes existed, a less detailed assessment might be sufficient. JB felt that if assurance could be gained that processes worked, individual assessments might not be necessary. BP added that the given the length of the price control period, many schemes would not contain much detail. JH encouraged DNOs to let Ofgem know if they felt this proposed approach was inappropriate. RF felt that in order to approach uncertainty, output vs. volume drivers should also be looked at.

DNO Cost Visits

5.4. TJ requested that ahead of the cost visits later this year, on overview of what DNOs intend to do would be useful to Ofgem. This would save further clarification of certain themes being necessary. JH added that the N-2 schemes will be covered in a future conference call. JH also felt that it would be necessary to discuss how everything is reported in the forecast pack at a later stage and reminded the group of Ofgem's intention to send out their analysis 2 weeks in advance of the first cost visit.

6. Date of next meeting

- 6.1. The next Reliability and Safety Working group will take place on 24th July 2012 and will cover Health Indices.
- 6.2. There are no further working groups planned for discussion of Load Indices, however it was agreed that conference calls would be arranged to finalise discussions of some key issues.