From: Ofgem



Electricity Transmission RIIO2 Policy Working Group

Date:11 October 2018

Time:10:00-15:10

Location:
Adams Room
Teachers Building
4 St Enoch Square, Glasgow

G1 4DB

This document sets out the high level minutes and actions from the Electricity Transmission Policy Working Group 4. The aim of the document is to record the main issues and themes raised in discussion.

All minutes and notes were recorded in conjunction with the Terms of Reference for the workshops and were recorded under Chatham House rules, whereby comments are non-attributable. For reference to the presentation material, please refer to the accompanying working group slides.

1. Welcome and introduction

2. Transmission losses

- 1. SSEN presented on transmission losses, including why these arise, their calculation, the impact of increasing renewable generation on losses, and what transmission owners can do to reduce losses. The presentation concluded with SSEN's views about price control options for the relatively small portion of losses within TO control. It was clarified that the suggested site efficiency measure would cover fixed losses as well as energy efficiency in the production of auxiliary services on substation sites.
- 2. A number of points and queries were raised in the discussion. The first was whether it was possible to conduct some modelling of controllable losses or run a pilot to identify the potential saving/contribution. It was explained that although energy metering at entry and exit points is very accurate, operational metering is potentially less robust (because it is not used for settlement). Also it was noted that typically sites are not metered power used on site is included as part of losses on system wide measures. There was support for some form of trial to prove the potential value/benefit before rushing into specific programmes. SPT noted they were conducting a metering trial in this area aimed at improving metering and energy efficiency on a small number of substations.
- 3. Another query was raised about the barriers to technical solutions to reduce losses. It was noted that dealing with fixed losses is considered at decisions on projects but generally this is marginal in terms of costs and benefits. However, dealing with variable losses at on projects is much more complex and depends of a number of future factors including load and prices so it is more complicated to build an economic case. The TOs are required to design cost efficient solutions, and avoid overinvestment.
- 4. Two additional questions were raised in relation to losses: 1), how can we seek an overall reduction given losses make up 90% of TOs' carbon footprint? 2) and do we need to apply whole system thinking to losses to better understand the interactions?



- 5. The discussion highlighted that operational requirements on the transmission network and distribution network can lead to situation where opposite conditions are needed that negatively affect losses on the other network. A stakeholder suggested that there might be a role for the ESO better take account of conditions on different networks, and possibly be incentivised to manage this in respect of losses. However, it was noted that this could sometimes conflict with its day job of managing risk of faults.
- 6. Another challenge is that there is a gap in the information about some of the generation connected to the distribution network. Overall it was considered that there would be some benefit from further exploring losses in whole system terms to better understand interactions, opportunities and potential to target interventions to help reduce losses. A TO noted it is engaging with DNOs to talk about specific GSPs to understand issues as part of its enhanced stakeholder engagement on its business plans.

3. Stakeholder engagement incentive (SEI) and the Stakeholder Satisfaction Output (SSO)

- 7. Ofgem presented on the SEI in RIIO1 and options for RIIO2. This was followed by SSEN's presentation on the Stakeholder Satisfaction Output (SSO). The latter outlined the SSO arrangements in RIIO1, observations on experience to date, and SSEN's proposals for RIIO2.
- 8. One stakeholder asked for clarification on whether vulnerable customers are going to be a relevant output area for the TOs. It was noted that vulnerable customers are relevant for all sectors, but there are differences in how this is incorporated across the various sector price controls. For example, there is a strong expectation that all networks are engaging with vulnerable consumers to help inform business plans, but will likely be differences in whether social outputs/deliverables are included.
- 9. Another question was asked about whether there is an ongoing role for the RIIO enhanced engagement processes (ie networks' user and consumer groups) as part of the stakeholder engagement piece. Is there an enduring role of user groups? It was noted that in water (at least in Scotland), that the user group has an ongoing role to assess delivery on commitments.
- 10. It was noted that the SEI is assessed by Ofgem but without any consultation with stakeholders to verify the claims made by the network companies in their submissions. It was suggested that if the SEI is retained there should be a process of fact checking with stakeholders, similar to the Incentive on Connections Engagement (ICE).
- 11. A general question was raised as to whether the SEI is past its use by date, given that it was introduced in RIIO1 to ensure the companies were proactive in developing meaningful stakeholder engagement throughout the price control period. What is it that the companies wouldn't do if it was removed? In response it was noted that the SEI has helped to genuinely embed stakeholder engagement and raise its profile at board level. Removing the SEI could risk a reduction in focus, increase pressure on resourcing and budgets, and stakeholder engagement could take a retrograde step.



- 12. One stakeholder said that outcomes are the most important. So we need to understand what is genuinely at risk if incentives are removed. And also what will the companies do that is new or original.
- 13. Another stakeholder asked whether the level of stakeholder engagement has now reached a satisfactory level? Is there evidence that stakeholders expect performance to increase any further going forward? If the current level/quality of engagement is satisfactory for stakeholders does this suggest this area should move into reputational only territory?
- 14. It was noted that the SEI has also helped to encourage greater collaboration between the companies, with learning on best practice being shared and adopted by other networks. A general point was highlighted that purpose of network regulation is to mimic competition which seems at odds with the strong focus in the outputs working group on encouraging greater collaboration. It was suggested that a fuller debate is needed on whether collaboration versus competition is going to drive the best outcomes for consumers. If this debate shows the former is more beneficial then it casts doubt on the appropriateness of relative incentives. It was also noted that if the improvement in stakeholder engagement is the result of a collective effort then this should also inform the level of reward.
- 15. Ofgem presented on its thinking on the stakeholder satisfaction arrangements and possible improvements for RIIO2.
- 16. One stakeholder observed that setting the baseline target on the average of past performance isn't very challenging. It is important that incentive rewards are only paid for above average performance. It was also noted that RIIO1 performance won't be a good indicator of future performance if the survey format in RIIO2 is changed.
- 17. Generally, there was agreement that using a survey is the preferred approach to measuring stakeholder satisfaction, however it was noted that it was affected by context.
- 18. There was no strong view on changing the range of the cap and collar used in RIIO1. It was noted that the +/- 1.6 range was decided on basis that a score of 10 was deemed impossible and that a score of 9 represents very high satisfaction levels.
- 19. In relation to survey content, it was generally agreed that there should be flexibility so that the survey can be of value to the wider network business. However, the survey should contain some standard questions so that performance is comparable. It was also agreed that the survey score should be derived from more survey questions probing satisfaction levels, not just one overall 'killer' question.
- 20. It was agreed that those completing the survey should be a representative group. But there was some disagreement between stakeholders on whether connected customers and developers are surveyed rather than broad-interest stakeholders. One TO said it thought the SSO should be more focused on customers rather than wider stakeholders.
- 21. Most stakeholders thought that some form of KPIs should be retained as these are informative of the main outcomes stakeholders care about and can help to highlight



specific pinch points. But there were different opinions about whether KPIs are incentivised, particularly as there could be some overlap with other areas eg ENS.

- 22. All stakeholders agreed that the External Audit component of the SSO (assessment against the ISA3000) is best practice. Accordingly, most stakeholders thought that it shouldn't be incentivised. Instead it could either be an obligation or an eligibility requirement for the SSO
- 23. It was also noted that if there was a move to a relative incentive framework for the SSO that there would need to be clear rules ensuring survey comparability.

3 Energy not supplied

- 24. National Grid presented on ENS, summarising the actions it takes to reduce ENS, the ENS target for RIIO2 and looking at the issue of embedded generation and whether the ENS methodology should be amended to take this into account.
- 25. In discussion it was noted that incentive is very successful in ensuring reliability above NOMS and SQSS level. A stakeholder asked about when the TO takes an action which would support the SO availability, but minimize their Unit rate returns, such as delivering a soluiton through offline build. This occurs in a variety of situations to reduce risk of ENS. A stakeholder further asked if the TO considers approaches which would limit the SO availability in the future but undertaken in minimum required designs, the TO confirmed that it does look at options for minimium design in most projects.
- 26. NGET was asked how likely is an ENS event to occur in London due to the network design? This is more likely in summer when you've got outages. However, this would be a result of a string of multiple events eg planned outage, a fault in protection, a weather event. It was noted that this may be mitigated with alternative network designs.
- 27. The embedded generation issue was explained as arising because ENS is measured at the Grid Supply Point (GSP) and usually there is a difference between the amount of energy lost by consumers compared to what is lost at GSP (the latter is usually reported as smaller) due to embedded generation.
- 28. It was noted that adjusting for embedded generation would require real time information which would require additional data collection in a standard format. This would add costs to generation (new metering) and DNO (managing information). We note that metering on embedded generation would need to be installed by DNOs.
- 29. There was a question about what this adds as the incentive should focus be on impact on customer. However, another stakeholder noted that in the DSO world there will be more data and telemetry and better information to adjust, so surely this will be less of a challenge going forward. These developments were acknowledged; however, it was thought there will be a period of time before we get to the point where we have comprehensive data across all DNOs.



- 30. It was noted that NOMs is leading indicator for reliability, and that ENS is a lagging indicator. Future reliability is influenced greatly by the NOM target set in price control.
- 31. Some stakeholders probed whether ENS should be treated as BAU now. In response it was noted that a lot of the work to reduce ENS is evolving all the time, and it's not a fit and forget activity but instead subject to continual improvement.
- 32. Another question was posed about whether it would be easier to get better reliability at transmission with more reinforcements across the distribution boundaries? It was noted that the TOs are actively working with DNOs to manage demand energy at risk.
- 33. One stakeholder noted that the incentive had a big role to play to ensure networks are proactive in managing new risks to reliability such as cyber attack.
- 34. Ofgem presented its views on some of the issues covered at the working groups on ENS, and the possible options it is considering for the methodology consultation in December.
- 35. A stakeholder noted that the incentive is currently asymmetric at moment, with a greater downside than upside available.
- 36. It was also noted that dead bands would reduce incentive to reduce ENS risks if those were equal to the dead band– ie wouldn't care about every last 1MW. At its extreme, might not include demand at risk events of demand if these are equal or smaller than the dead band.
- 37. One stakeholder thought that it was important to include improvements in the ENS target over the RIIO2 period ie a rolling average target. However, another stakeholder thought that the target should be informed by stakeholders ie it shouldn't be dictated by Ofgem. It was also noted that in the past stakeholders are generally satisfied with the existing level of reliability and haven't indicated a strong preference to improve it.
- 38. One stakeholder noted that removing the collar on the reliability incentive would result in a downside risk so large that TOs would need to put a vast amount of resource into prevention and mitigation. This level of investment may not be economic nor reflect consumer priorities.

4 Environmental impacts

- 39. Ofgem presented on the framework options it is considering for setting network environmental outputs and price control deliverables in RIIO2.
- 40. One stakeholder said it was important that the sulphur hexafluoride gas (SF₆) output delivery incentive (ODI) is structured appropriately so that it rewards the utilization of the alternative g3 gas during the RIIO2 period.



- 41. One stakeholder questioned the additionality of the ODI for exceptional contribution to the low carbon (LC) transition. They thought that this would be better served by focusing the innovation package in RIIO2 on the LC transition.
- 42. It was clarified that it is not intended that the exceptional contribution ODI drive research and development into network technologies or overcoming technical challenges arising from increasing LC technologies connecting to the network. The latter being more the scope of the existing RIIO innovation package. Instead the objective of the ODI is to provide some flexibility within the price control to reward network companies who go beyond business as usual to facilitate the LC transition. Potentially this could include addressing hurdles in existing industry codes or practices and/or collaborating with relevant parties to define roles and new processes, if appropriate, for new LC technologies. A general request was made for the TOs (as well as other stakeholders) to come forward with examples of such potential initiative. A general question was asked what could TOs do (within the remit of their licence) but currently have no incentive to undertake?
- 43. A stakeholder asked for further clarification on the difference between option1 and option2. It was noted that Option1 is more backwards looking, whereas Option2 is more forwards looking and embedding environmental commitments upfront.
- 44. One stakeholder was supportive of the regulator's ambition to extend the role of networks in the LC transition and noted that either option will be an improvement on RIIO1.

5 Next steps

- 45. It was agreed that the final working group will be go ahead in London on Thursday 8 November. Details of the agenda to be confirmed but general intention is to circle back on specific policy issues covered to date in the WG and to test the next stage of our policy thinking with stakeholders.
- 46. A general invitation was made for working group members to get in touch if they had additional thoughts or views on the content of Ofgem's presentations covered at the fourth working group.
- 47. It was requested that we look again at some of the whole system issues identified in relevant policy areas and Ofgem's further thinking in relation to whole system policy in RIIO2.
- 48. It was noted that NGET also want to present at the working group 5 on the issue of SO/TO incentivisation for network availability.



Appendix 1 - Summary of Actions

Action	Allocated to	Due date
Bilateral discussions on	Open to all WG members.	2 November 2018
Ofgem's policy thinking		
presented at WG4.		



Appendix 2 – Working Group List

Attendee	Organisation
Jon Ashley	National Grid
John Wilson	National Grid
Alan Kelly	SP Transmission
Jillian Price	SP Transmission
Shirley Robertson	SHE Transmission
Neil Sandison	SHE Transmission
David Manson (by phone)	SHE Transmission
Alec Morrison	SHE Transmission
Leigh Rafferty	Scottish Government
James Kerr	Citizens Advice
Jamie Stewart	Citizens Advice Scotland
Andy Manning	Centrica
David Bowman	System Operator
Maheshi Da Silva (by phone)	Energy Networks Association
Tom Watson (by phone)	Energy Networks Association
Judith Ward (by phone)	Sustainability First
David Manson (by phone)	SHE Transmission
Barnaby Wharton (by phone)	Renewable UK
Niall McDonald	Ofgem
Ben Pirie	Ofgem
Grant McEachran	Ofgem
Victoria Low	Ofgem
Anna Kulhavy	Ofgem
James Tyrrell	Ofgem
Eilidh Alexander	Ofgem
Keren Maschler	Ofgem
Jo McHutchison	Ofgem
Cissie Liu	Ofgem
Dale Winch	Ofgem
Clothilde Cantegreil	Ofgem