

The below are speaking notes provided by Paul Thompson for his presentation on capacity trading/sharing provided at the REA Solar and Storage Members meeting, 22nd July 2021

Talking points for capacity trading/sharing

Intro

I'm heading up renewable transport fuels and landfill gas. Particular angle here is from landfill.

Project going ahead now is attempting to bring DNOs into 21st century. Part of a much wider package of measures ENA's Open Networks project. WS1A project 6:

- We have a network that was built for very different patterns of generation and consumption than we have now
- We have serious capacity constraints in many areas where the cost of connections/reinforcement generally falls on the new generator
- We also have other areas where there is under-used capacity – either just not used at all or at certain times of day/year

Broad aim of project

This project is trying to assist DNOs in becoming service providers. What services could they offer to assist greater flexibility in use of under-used existing capacity? Options:

- streamlined procedures for the sale of capacity in full or in part to a third party. Co-located, or elsewhere but on a related part of the distribution network
- 'renting' out that capacity so that only happens for a set period
- More flexible arrangements tied to varied patterns of generation or consumption day/year. And obvious relevance here for both solar and storage
- This could also include trading risk of curtailment. So two users in the same non-firm risk of curtailment could trade their positions.
- Maybe some kind of process for auctioning capacity. Process? Rules? Transparency? Counter-party risk?

In theory, landfill gas generators should have capacity to trade. Landfill gas production is declining as government policy reduces % of biodegradable waste going to landfill and bio waste already in the ground slows down/stops. Many of these sites paid for their connections a long time ago, when firm

meant firm. Faced with long term legacy costs to maintain the site long after the last material was put in and declining income they are looking to make use of the (now under-used) capacity. Either by partnering directly with developers at their sites or some more flexible arrangement. As gas production has declined but not stopped, the ability to sell a part of their secured capacity rather than all or nothing would work well all round.

Problem is that these operators have had several years of DNOs trying to claw back capacity unilaterally. Had died down but has started up again recently. And the most recent attempts have been a little sneaky – ie a routine G59/99 witnessing on a replacement engine has been accompanied by a requirement to sign amendments to existing connection agreement (and the DNO failed to mention their significance when passing on so could easily have been signed by relatively junior on-site engineer who was just trying to get his engines back up and running rather than thinking about the bigger picture).

So there is a history of lack of trust on this issue.

Some initial work done over 2020. We had presentation in our landfill meeting Sept 2020 and it looked like they were trying to be a bit too clever. Almost starting with very sophisticated half-hourly trading rather than the basics. Including who would take part, what is the value of all this and do we actually want DNOs to do this at all, or do we just not want them to get in the way when two third parties arrange a deal between themselves?

Then all went quiet.

Ran a series of workshops in March. Bit more focussed on scenario building rather than the clever stuff. The output doc attached to today's agenda.

One of the key things highlighted from the workshops was that they're still not entirely sure what the level of interest would be in doing this.

Possible live trials in Q2 or Q3 (not happened yet)

All went quiet again, but last month (23 June) contacted by the new project lead (Matthew Hamilton, SSE).

We have had a chat with the Transition project team about collaborating and they're interested in understanding the following:

- *How many landfill gas sites are interested/available*
- *Where they're based (particularly ones in SSEN's areas)*
- *Their size and the amount of capacity they're looking to trade (roughly)*
- *What voltage level of network are they connected to (i.e. LV, HV, EHV)*

The Transition team ideally want to trial any that are already in the Oxfordshire area, but we are going to investigate whether they can accommodate any in the wider SSEN area. They're telling me it's unlikely they can accommodate any that are within another DNO. However, if you give us the various sites details we can see if there's anything else we can do to involve them.

We've been in touch to see if can find a way round the trust issues. How can operator be confident if they say 'I've got this much capacity I can't see myself using' that they don't get a clawback letter as a result? Some kind of assurances for specific sites taking part would make sense. PT replied 13 July, following a members meeting, no response yet.

So other than info and will make sure this group is kept up to date, two things:

1. Any other views from the workshops and thoughts on potential value of this approach?
2. More broadly, is there interest in assisting networking between our landfill members and members of this group on making best use of existing capacity, regardless of the ENA initiative?

For further information please contact Paul Thompson (pthompson@r-e-a.net)