

# Point of Connection Working Group

#### 1. Present

Roger Reynolds (RR)	Korus	
Bob Weaver (BW)	PowerCon	
Geoff Fisher (GF)	SSE	
Mark Johnston (MJ)	CE Electric	
Bill D'Albertanson (BDA)	UKPN	
Ian Oliver (IO)	WPD	
Stuart Duggan (SD)	RDNetwork Design	
David Ball (DB)	ENWL	
Phil Norrish (PN)	UPL	
Gary Barnes (GB)	SP	
David Overman (DO)	GTC	
James Veaney (JV)	Ofgem	
Stacy Feldmann (SF)	Ofgem	

## 2. Apologies

2.1. James Duncan (GTC);

## 3. Actions outstanding

3.1 An update on willingness to take forward trials and the scope of the trials was provided by the DNOs present.

- WPD indicated that they would consider trials for LV only in principle. They signalled that on the LV network they would also consider embedded projects. It was indicated that this willingness was only for WPD, rather than the new CN areas. WPD confirmed that they had not as yet engaged with anyone on trials. It was indicated that Tim Hughes would be the point of contact if any ICPs wanted to approach WPD for trials. WPD indicated that there were no timescales associated as yet and there was still some work to be done in understanding scope and purpose.
- WPD indicated that their modelling tools were Wind debut for LV, Dynnis for HV and PSSE for EHV. DO commented that if Tim Hughes is the point of contact for PoC trials, perhaps he should be in attendance at future PoC meetings. IO indicated that he would be moving to another role in December. IO clarified that at present, as the CN areas are still being incorporated into WPD, at present, they would not be suitable for trials and thereafter, there should be scope to include them in trials.
- SP signalled their interest and indicated that they would be willing to consider trials on the LV network. They felt at this stage that they did not feel they would be able to consider trials in generation as it is much more complex a project in such cases. SP indicated that they would be willing to develop process for projects up to 75kVA, 2 phase. Thereafter they would review and see what other level they could extend the trial to.

- In terms of modelling tools, SP indicated that they needed to confirm these details as they have different tools for their different regions North and South. SP explained that for instance, South, IPSA is used for LV voltage drops but that this is not shared. With North, Winddeb is used. SP commented that they had met with DB of ENWL and understood the issues and where to develop the process. They intended to draft out the process, taking account of ENWL's approach but providing more detail on voltages and parts of the network. SP reported that they had not specific discussions with ICPs to date.
- SSE indicated that a single ICP had approached them for a trial. They indicated their willingness to establish trials and that there was no limitation on the type of connection as they wished to gain as much learning as possible. However it was commented that due to current data constraints it was likely that LV and small HV projects could be considered at this stage. The trial in progress is intended to use existing arrangements and consider the accuracy of point of connections determined by SSE and by the ICP.
- In relation to modelling tools, SSE uses the following: LV-windbut; HV-Sincal; EHV-PSSE.
- UKPN reported that they were willing to look at projects for trials on the LV and HV network. They indicated that they had no limitations on the type of connections or projects that could be nominated for a trial. It was clarified that there could some constraints on the types of projects associated with UKPN's internal load through process. GTC have approached UKPN and it was reported that at present, there was no formal process developed for the trials. DO provided greater detail in clarifying that a large amount of work had been done with UKPN where points of connection were drafted separately by the ICP and DNO for a few projects and then compared for accuracy. DO indicated that at this stage, GTC and UKPN had already met to discuss the issues arising from a few of these exercises. He outlined that the next steps were to meet with planning teams and decide how to move forward. The biggest challenge with the trials was data availability.
- UKPN's modelling tools are windbut; dixelin and for the HV network, a separate modelling tool was not used.
- ENWL reported that at the initial stages of trial they would limit it to LV. It was indicated that they would assess applications up to 60 kVA and that two ICPs have to date approached them for trials: EoN and RDNetworkDesign. Some of the projects brought by EoN have been trialled whereas with RDNetworkDesign further discussions were necessary. Later in the agenda, ENWL provided an outline of their trials, scope, purpose and the challenges that have already been be noted from trials. ENWL's modelling tools are a bespoke for both LV and HV.
- CE reported that they had discussions with two ICPs. They reported that they would be having a meeting shortly with GTC to discuss and compare the outcome of one of the trials where DNO and ICP drafted separate points of connection. At this stage, there is no formal process in place, but it has been agreed on the projects they currently have on trial to provide mains records to the ICPs and give the ICPs the same timeframe as their in-house design teams, to complete the point of connection. It was noted that coming out of the trials, one key challenge was the interactions with planning. Another was understanding the often differing design and engineering assumptions that may underline the different approaches to drafting points of connection. This is true for both ICPs and for in-house design teams. It was further commented that there needed to be a separation and understanding of assumption-based and technical-based design.
- It was clarified that CE were willing to hold trials for HV and generation projects. They are reviewing the level of information that may need to be provided to ICPs in drafting their own points of connection. It is intended to take learning from the trials on the exact information that needs to be provided, outside of the extensive access to data that is provided on their website already.

- CE raised concerns that there needed to be more clarity around the use of the information, the formal agreements in place with ICPs in terms of what benefits and what ICPs would provide to the DNOs.
- SP reported that they are willing to consider any projects suggested for trials, however some jobs may be more complex than others and would therefore provide more thinking in advance. Commented that there are constraints on the information that DNOs hold, e.g. overhead lines system.
- SP's modelling tools are Dynnis at 11kV. For HV an internal system is used and for LV there are spreadsheets rather than a specific modelling tool.

Action	Responsibility
Keep group updated on the progress of trials and lessons learnt	DNOs
DNOs to provide details of modelling tools in writing. DNOs to also consider the parameters of their modelling tools that we would want information to be sent to them by ICPs	DNOs

#### 4. Scope of ENWL trials (David Ball)

DB presented the scope, rationale, success factors and identified requirements of each of the key players in a PoC trial.

Highlighted areas of challenge including making information available, application of local knowledge and internalised 'rules of thumb' and assumptions used so that ICPs can plan, and approach the process in an informed manner.

DB indicated that some of the challenges and successes identified were unique to ENWL and that some reflect principles that cut across the whole DNO community.

GB agreed that there were instances of local knowledge and some exclusions for instance that needed to be known about so that ICPs did not spend time and effort planning connections at points that would not be viable. The challenge is to document this local knowledge.

DB also outlined the need for a dispute resolution process to address any disputes and issues associated with the future roll-out of self-determination of PoC. It was noted that in gas there were arrangements in place for dispute resolution and there could be merit in considering whether this process was fit for use in electricity.

It was commented that one of the customer requirements which could be a challenge was the guarantee that the DNO would adopt and accept the network where a self PoC had been carried out.

There was some discussion around the difference between simply having the information to self PoC and enlisting design expertise to formally design a self-PoC. It was disagreed by some in the group that there was a differentiation between these two activities such that only the more technically intensive required NERS accreditation. It was agreed that this needed to be clarified and that there needed to be agreement that there needed to be a specific standard level of PoC.

It is commented that NERS accreditation and the split of activities may need to be a separate agenda item for a future meeting. This was confirmed as an action for a future meeting.

It was commented that where accreditation was required and whilst at present there was a small amount of ICPs involved with trials, this could create a monopoly effect of first movers

and those accredited to complete self-PoC as opposed to ICPs who joined in this activity once it had been rolled out.

Action	Responsibility
Discuss and consider NERS accreditation and if there is a split between ICP self PoC and design determined PoC	PoC group. Ofgem to include in next agenda

## 5. Terms of Reference (Dave Overman)

5.1. It was commented that the Terms of Reference needed some refining in order to provide clarity on the following:

5.1.1. What success looks like

- 5.1.2. How trials should be documented
- 5.1.3. What business as usual should look like
- 5.1.4. How to capture learning and what the success factors are

An action was taken to consider shortening the ToR and drafting an accompanying project plan targeting the deliverables, objectives, requirements and trying to get some visibility on what constitutes success and business as usual. It was commented that DO would liaise with DB of ENWL as a lot of the slides presented on their trials sought to capture some of that.

Action	Responsibility
Consider shortening the ToR and adding the rest in an accompanying project plan	DO to lead

#### 6. Next Steps and Actions

6.1. The date of the next meeting was discussed but a final date was not agreed.

Action	Responsibility
Schedule next meeting	Ofgem

#### **7. AOB**

There is a possible risk associated with providing individual loads to customers, i.e. release of customer details. DB commented that he would take an action to provide a separate email to Ofgem detailing his concerns on this.

Action	Responsibility
Provide details to Ofgem of concerns of release of customer details	DB
Review details provided by DB and have a position by the next meeting	Ofgem