<u>Customer Connections Steering Group 21/02/2017 – Gloucester - Minutes</u>

Robert Symons, CEO

WPD is working hard to get the interface between the transmission and distribution system right.

<u>Distribution System Operator (DSO)</u>

Smart systems call for evidence: We need to make use of time of day information, smart meters need to be in place to help provide distributors with relevant information. We also need to consider further growth in the electrification of transport and use of heat pumps. ENA conducted a study of EV and the investment required to support the scale of EV appears to be high.

Why is WPD best placed to be DSO? We have a proven track record not only of efficiency but in connecting distributed generation.

<u>National Grid/System Operator separation</u>

Q: Stakeholder asked if there is an on cost to the customers in the separation of NG/SO.
A: This has not been fully identified but the balance of positives in having a separate body outweighs the potential cost impact.
More progress needs to be made with National Grid but so far we are reasonably pleased with the progress made to date in our engagement.

Nigel Turvey is chairing an ENA working group to improve the customer journey across the TSO/DSO boundary.

Investment ahead of need is becoming more necessary but needs targeting to the right locations to ensure spending provides benefit.

Q: Stakeholder asked what is WPD's prevailing view on battery storage?
A: Robert Symons - It will happen. We currently have 11GW of enquiries, 7GW of offers issued but currently no take up. Customer feedback is that this is due to exclusivity issues with NG which leads to a lack of flexibility. Concerns raised about WPD individuals opinions of battery storage – they may not have seen the benefit of battery storage yet, however WPD individuals should not be promoting negative PR of battery storage and should not be dismissive of engineering solutions for connection. This message will be shared with the business.

Q: Stakeholder asked 'Where next for solar and wind – is it going away?'
A: Robert Symons - As with battery storage, if it's economical to do, it will happen. Forecasting where/when solar will be required is difficult. Stakeholder feels WPD should engage more with the solar industry on what their model is. WPD invites stakeholder presentations at events such as the CCSG to help WPD to understand what customer plans are and what we can do to help facilitate them.
Stakeholder highlighted distributors are the facilitators but BEIS/Ofgem decide on key areas – WPD do deliver investment to facilitate connections.

Q: How will WPD's relations and responsibilities change with TSO?
A: Nigel Turvey – We will hopefully have more responsibility for managing capacity at the Transmission/Distribution Interface.

Robert Symons – We need to avoid the risk on risk issues and have a top to bottom view which avoids this.

Q: Stakeholder raised the huge increase in DSO/SO interaction for Statement of Works and advised Scottish Power are delivering a better service. Can WPD do more?
A: Nigel Turvey - Hopefully yes. Technical arrangements are different in Scotland but WPD have been asking NG for more control on what we can deliver and to be made aware of upstream requirements earlier in a method conceptually similar to heat maps. More telemetry on the network will also improve our understanding of what is physically happening on the network to enable more sensible risk based decisions to be made.

Graham Halladay - We experience difficulties in getting NG to identify what their key issues are and the works required, which we could then share with our own customers. NG need to be more open – plus there are interactivity issues with connections direct onto NG network. Openness would allow individual NG risk and WPD risk to become a more holistic risk view.

Nigel Turvey, Network Strategy and Innovation Manager

Network Strategy

Whilst we have seen a reduction in technology growth, we anticipate further future growth as the cost of technology falls.

What are the possibilities – how much or how little growth might we see and how might demand requirements change?

Demand – in South West & South Wales there is an increase in new technology, e.g. EV but with industry, if anything, we have seen a reduction in demand due to improved efficiencies but East Midlands is a very different picture.

At present, network modelling is focussed on the higher voltage networks. For LV/HV whilst the costs may be significant, reinforcement can be carried out relatively quickly. The higher voltages are more problematic due to the longer timescales associated with reinforcement.

The summer day showed DG domination.

The winter day showed demand domination.

To deliver real solutions, including providing connections for storage, network modelling gives us the understanding of what information goes into these scenarios. Regen SW are helping us to model storage, including likely times of charging/discharging.

Development is underway in some areas to upgrade circuits and release more capacity, network modelling also feeds in to identify those areas. It can aid decision making, for example do we build more assets or use services provided by others to avoid building those assets?

Q: Re anticipatory reinforcement – can we invest more in monitoring of the wider network?
A: Nigel Turvey – we've been looking at monitoring we currently have available – is it accurate? What's missing? Can we roll out more monitoring?

Higher voltages are easier – LV/HV more difficult due to the volume. Ofgem encourage the use of smart metering data but the level of detail we will receive is still to be decided. Issues at the lower voltages are more about not overloading the network rather than managing load levels.

Graham Halladay- Current monitoring gives current and power flow – which was fine for a one-directional network but we would now need to know the direction of that flow and the impacts of switching activities. We have a list of circuits where we believe 2 directional flow is occurring to look at additional monitoring provisions, this is something we are starting work on now.

Stakeholder – IDNO agreements would be required for data exchange for IDNO networks where no metering is in place.

Stakeholder – we need to think now about existing DG agreements with constraints and how to feed in to investment decisions to remove constraints.

Q: Is battery storage a consideration for ANM?
A: yes – we may need restrictions on when a battery can charge/discharge – currently we consider the full capability of the storage and that it could charge/discharge at any time.

Stakeholder – there's a dilemma for domestics – restrictions on planning consents for PV may clash with network constraints, similarly for PV.

We did some work for government on network improvement costs based on EV take up. Also project for controlling timing of EV charging to spread the loads where clusters occur. Currently we are looking at network reinforcement to accommodate these technologies.

Q: Do local government know the problems with networks for connecting technology and how this impacts the limitations of planning consents?
A: Maybe in some areas but not everywhere.

Stakeholder suggests WPD engages with Local Government on the network issues.

Mark Shaw, Network Services Manager

Senior Manager Point of Contact

This process is up and running and feedback is that it has been used to raise specific issues and works very well and issues have been promptly resolved.

If CCSG members don't currently have a SPC but would like one, please contact Mark Shaw at mshaw@westernpower.co.uk

Q: Is there more WPD can do to build on this initiative and improve the customer interface?

Stakeholder: Provide more of a self-serve model to reduce interface required until an appropriate time for ICP/IDNO's.

Stakeholder: Harmonics studies appear to be remote. The interface between customers and designers could be improved so enable discussion directly with the WPD designer undertaking the assessment.

Stakeholder: UKPN have wider consistency and their application process is better, especially the documentation.

Stakeholder: Prefers WPD model to UKPN of being able to talk directly to planners who are locally designing the schemes – it may be that UKPN have separate S.16 and S.15 teams.

Stakeholder: WPD are good for getting to the right people quickly when needed.

Mark Shaw: WPD are willing to learn, if other DNO's have areas of best practice, let us know.

Tim Hughes, Connection Policy Manager

Connections Offers & Milestones

New milestones are being added to our connection offers. Our solicitors have been included in the process to ensure our offers are contractually robust in addition to being relevant.

Our solicitors have also visited teams across all four WPD regions to train out the new offer letters and provide a better understanding of our contract arrangements – who is our customer and who can we talk to?

Initial roll out will be to DG customers with a view to widening to other connection types, e.g. demand schemes.

Summary of the changes:

- Mostly providing clarification on the new terms.
- WPD to countersign which forms the contractual date – a copy of countersigned acceptance will be sent to the customer.
- Constraints/de-energisation – we are not imposing additional rights but bring out conditions which normally appear only at the Connection Agreement stage

There are concerns over milestones but these have been developed by the industry in liaison with customer feedback. This work combines with Ofgem's 'unlocking capacity' publication which says DNO's should not terminate schemes which are progressing.

Q: Stakeholder stated that the timescale for obtaining planning consents is short.
A: Tim Hughes – milestones were developed in consultation but we will review how this works in practice.

Alison Sleightholm, Regulatory and Government Affairs Manager

Key Areas for 0217/18 ICE Workplan

- Availability of Information - typically pre-connection to make information more available regarding network/capacity availability and Statement of Works.
- Consistency – customers like the local team based model but this becomes difficult to retain consistency in approach, application of policy or where policy is silent. We can specify actions in our plan if you, the customers, provide examples of inconsistency.
- Transition to DSO
- Legals & Consents – we currently have external targets but we are looking to implement internal targets.
- DG Owner/Operator forum – we've made a good start. There's more to do and this forum provides a good platform for discussions on DSO transition and provision of services.
- Design Approvals – priority area for some customers.

Stakeholder requested recognition of modifications of existing connections – terminology and processes are geared towards 'new' connections. Going forward, WPD may want to do something on allowable changes following on from ENA consultation and the 'minded to' position due out approximately late spring.

Future CCSG meetings

20.06.2017 - Gloucester

24.10.2017 - Gloucester