Minutes

Meeting Title: Generator Owner Operator Forum
Meeting held on: 15th January 2018, UKPN, Newington House, 237 Southwark Bridge Road, London, SE1 6NP.

Attendees:

Invited customers:

Graham Pannell (GP) – RES
Julian Elsworth – Foresight Group
Matt Black – Foresight Group
Victoria Ramsden – Wise Energy
Charles looker – Looker Energy
Sara Vidal – Cambourne Energy Storage
David Gilbey – Dunamis Group Ltd
John Collier – AGR Group
Kier Petherick – F.C Palmer & Sons
Clara Perez – Foresight Group
Philipp Erdmann – Palm Paper
Adian Morris – Aggregated Power
David De Uilberri – Wise Energy
Ryan Goddard – Welsh Power

UK Power Networks

- Richard Wilson (RW)– Outage Planning Manager, Network Operations
- Saleem Naeem (SN) – Network Control Manager, Network Operations
- Ali Reza Ahmad (ARA) – Power System Development Engineer, Asset Management
- Alex Jakeman (AJ) – Innovation Project Lead, Safety Strategy & Support Services
- Martin Hawkins – Control Room Network Manager (SPN), Network Ops
- Sam Wagiciengo – EHV Maintenance Manager (SPN) Network Ops
- John Coleman – Head of Information Systems Delivery, Safety, Strategy & Support Services
- Luca Grella – Innovation Engineer, Safety, Strategy & Support Services
- Nuno da Fonseca (NdaF) – Infrastructure Planning Manager (EPN), Asset Management
- Zivanayi Musanhi – Generation & System Coordinator (LPN/SPN), Asset Management
- Tim Manandhar (TM) – Low Carbon Solutions Design Manager, Asset manage
- Steve Halsey – Distributed Energy Resources Manager, Connections
- Nigel Turner – Distributed Energy Resources Analyst, Connections
- Marc Bartlett – Associate Director, Navigant
- Oliver McShane – Managing Consultant, Navigant

Number	Item
1	**RW – Ongoing Work to Benefit Customers** UKPN website provides links to how customers request planned outage information for each region i.e. EPN/LPN/SPN. Also there are further links for request for information on interruptions to DER/generators which is a form customers can complete and emailed back to DG mailbox.

	This mailbox shows 8 weeks planned outages, UKPN aim to minimise outages and planned maintenance. Capacity Trading, an example could be Customer A buys Customer B constraints, GP felt this could work in the right circumstances. RW presented a slide which showed how there was no switching between 2 feeders coming out of 132KV/33KV to 33KV/11KV at Leighton Buzzard and there are often daily outages. An additional switch was installed which means load can be switched from the 2nd feeder.
2	**MB Navigant – Outage Planning and Tracking Tool (OPTT)** Navigant – Technical management activities, working with UKPN talking to stakeholders to help set up a Request for Information (RFI) to develop software/tools, system called (OPTT). GP asked what WPD position is on outage information. RW attending meeting 25th January should learn more. RW explained one issue was knowing who the asset owners are, (especially as asset ownership can and does change) we could develop a self-service portal to help. GP felt it was crucial to know hour by hour or daily outages and could we develop a RAG system. Possibly a user control alarm system where emails are sent if anything appears more than say one to two hours/daily etc. RW UKPN working with National Grid (NG) to identify outages that could affect certain customers i.e. 6-10 week outages and what UKPN can do to reduce these, for example 8-10 weeks reduced to 3-4 weeks.
3	**SN DSO and Smart Network Operations** SN presented slides showing further details on Distribution Systems Operators (DSO) and Smart Network Ops. The DSO Innovation team looking at technical advances, flexible connections and how we as a Distribution Network operator (DNO) move to being a DSO. GP better information would be useful on constraints. SN carrying out review with Control team on how we operate network as DNO by talking to our stakeholders/customers. How we maximise/optimise Distributed Energy Resources assets. RW presented slides detailing Working group on DC0079. Often UKPN aware of over 5MW generation but not so much below 5MW. Grid codes 0037 & 0079 Rate of Change of Frequency (RoCoF) below 5MW, working with national Grid. Ofgem formally approved modifications to DC0079 15/12/2017.
4	**RW Kent Active System Management (KASM)**

	The aim of this project is to trial new contingency analysis (CA) software and forecasting tools that can be used to run distribution network closer to its limits, by moving away from conservative, 'worst case' assumptions. AJ when do you need to be informed? Depends on size and duration of outage more notice the better. Solar prefer evenings, not during the summer. RW explained UKPN can be more accurate when nearer the time of the outage, how close to real time? 5 days is less accurate GP How frequent are outages? RW how fast can you react? Solar can react quickly, what is UKPN flexibility? RW it's a balance – situation can change minute by minute, hourly so we could be providing too much information. GP RES have modelling team wind forecast – happy to share with UKPN?
5	**N da F Long Term Planned Works** Further development of heat maps, substations GEO tool using pins so customer selects area bringing up planned outages information i.e. any UKPN major projects. GP can heatmap show future planned customer connections i.e. different stages (offer or offer accepted etc.) Can we provide substation name? Current you can click on to find substation details SH looking to further develop DG mapping tool. POST MEETING NOTE – REQUESTED SUBMITTED FOR NEXT ROUND OF IMPROVEMENTS
6	**ARA – Power Potential** OFGEM £6m funding, part of Network Innovation Competition (NIC). Looking at congested area, part of network with no or little capacity for new connections, area of focus SE Kent. 3 options – Work packages 1) Technical Solution 2) Commercial Solution 3) Business Change Heatmap for each grid point – MW & MVAR the Ninfield GSP was shown on diagram. Developing software will allows DER customer to generate/distribute more onto network. Shows blockages so we know which areas generation will benefit and enable better response between NG/UKPN & DER Customer. NG send instruction and UKPN need to be "armed" in 10 seconds. Key aim to unlock capacity so more DER can be connected & better management of the network. Further details - https://www.nationalgrid.com/uk/investment-and-innovation/innovation/system-operator-innovation/power-potential

	GP compliance process so asset can achieve maximum utilisation RES has DER control voltage. ARA response is if DER Customer doesn't respond the DNO can move to another DER Customer. Possible penalties for non-delivery from DER Customers i.e. they don't provide response to request. ARA 12 customer's signed up across all generation including CHP, Gas, PV, Wind etc.
7	**TM Update on Live Flexible DG (FDG) performance** Active Network management (ANM) will provide a more flexible network, utilising customer network assets. Two trial area 1) March & Peterborough & 2) Norwich. ANM takes over control (usually with an engineer behind a desk) and will become a more automated system. ANM will also allow greater management for DER/Generation customers as well as DNO's who will be becoming more Distribution System Operators (DSO) i.e. EV/Solar Transiiton to DSO means customer no longer only demand but will also generate/export on to system. UKPN support whole system optimisation which will enables markets to develop. UKPN DSO strategy in 2018 will have 5 key areas. GP will there be any constraints on primary system due to increase connections of Electric Vehicle charging points? TM we haven't seen evidence so far but this could change over time as more EVCP are connected to our system. RW 11KW PT close to limits and could cause issues as the diversity on the system changes i.e. the more export from solar PV during summer months. TM showed slide with FDG site communications availability during 2017, GP why isn't it 100%, i.e. mainly 99.7% etc. TM explained that satellites used to monitor and it could be cloudy conditions i.e. restricting view etc.
8	**Q&A** GP RES wind farms – received communication of outages for a 2 week period and RES notified well in advance. The issue is the works were completed within 2 days not 2 weeks but RES not notified for some time. RW asked GP to provide further details. RW – anything missed? GP more detailed information & discussions around outages, could we organise workshops? RW agreed looking at round table discussions once RFI have been returned.