

Power Potential Regional Market Advisory Panel

Update, December 2018

Introduction

Please find below details of the progress made in response to the actions raised at September's fourth Regional Market Advisory Panel.

The build phase of the project's technical solution ('DERMS' the Distributed Energy Resources Management System) is progressing towards technical testing early in 2019 and detailed planning for the operation of each wave of the trials is well underway.

We are delighted by the level of interest in the project as demonstrated by the scale of stakeholder interaction at the project's showcase event on 30 October at The Crystal Building in London.

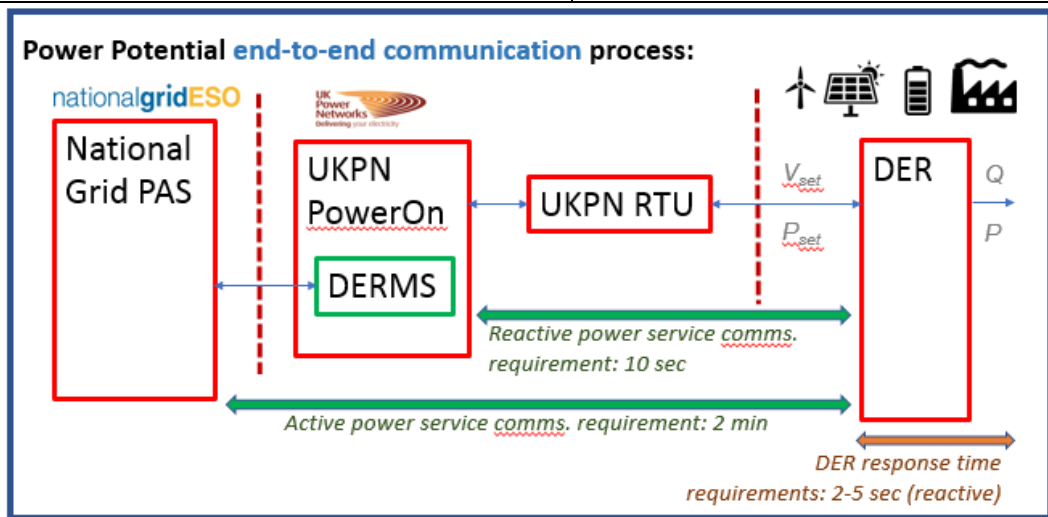
The personalised PQ ranges for each DER site expressing interest in participating in the trials were issued on Monday, ready for Framework Agreements' signing.

We're looking forward to sharing progress with you at our fifth Regional Market Advisory Panel meeting at the end of February 2019.

	Actions from 12 September	December Update
3.1	Has the timetable shifted?	<p>The market calendar has been revised to the following dates, and these dates are shown in the latest update to the Market Procedures:</p> <p>2019</p> <p>Wave 1 Mandatory trials 13 May – 22 May Wave 1 Optional trials 23 May – 21 Aug Wave 2 trials 23 Sept – 01 Nov Wave 1 November 04 Nov – 15 Nov Wave 2 continued 18 Nov – 10 Jan</p> <p>2020</p> <p>Wave 3 trials (tbc) 13 Jan – 28 Feb</p>
3.2	Action: Project team to improve clarity of the diagram at section 2.5.1 of Technical Requirements (Communications via UKPN RTU at DER site)	The DER Technical Requirements document has been updated and published (the diagram referred to is Figure 1).
3.3	Is there a timeline for commissioning?	Once Framework Agreements are signed it is expected that each DER will agree the plans for site commissioning with UK Power Networks, with the site commissioning taking place in a window February-April 2019. We will work with DER who join the project later to commission and take them through mandatory trials, but DER joining later may not be able to access the full Wave 1 optional trial hours.

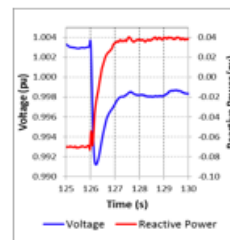
	Actions from 12 September	December Update
3.4	How will this work for aggregated units?	Discussion is ongoing with an interested stakeholder within the trial area to understand the standards available and the option the prospective trial participant would like the project team to consider.
3.5	Is there a step before signing the Framework Agreement whereby an eligibility letter is issued?	The eligible DER that have expressed interest in participating have received details of their site-specific capability (for inclusion within Schedule 3 of the Framework Agreement) and details of amendments to their connection agreement that would be required to participate in the trials. Once these details have been agreed the Framework Agreement can be signed.
3.6	Project team to clarify who in UK Power Networks and National Grid is the appropriate contact for key issues. Share with RMAP and DERs	Resolved in 12 September meeting outcomes document Kellie Dillon (UK Power Networks) and Kameesh Phillips (National Grid ESO) are the project's account managers overseeing engagement with DERs and facilitating access to the right sources of expertise.
3.7	Project team to clarify the process for query management (i.e. are Kellie and Kameesh directing queries to the relevant people or should DER contact the relevant people?)	
3.8	Project team to confirm the requirement on response times and where it is located within the published documents.	Resolved in the 12 September meeting outcomes document.
3.9	Project team to review the timing of site commissioning and project readiness for trials and how to mitigate the risk to participants during commissioning.	Clause 9.7 of the framework agreement confirms <i>If a decision is made not to proceed with the Trial, then in accordance with clause 4.1 and following receipt of evidence satisfactory to UKPN by no later than 30th April 2019 the Provider shall be paid the sums set out in clause 4.1.</i> Clause 4.1 sets the maximum of £45k. The recent update to the framework agreement removes a contradictory date in clause 4.1. Given that we expect DER to be commissioned Feb-April 2019, we would expect DER to have incurred set-up costs by 30 th April 2019. Therefore, this clause mitigates DER risks associated with proceeding to commissioning.
3.10	Project team to clarify the references to Lead and Lag Mvar within documentation and in project visuals/diagrams. Lead and Lag to whom?	Lead is absorbing and lag is (producing) injecting Mvar. This is explicitly mentioned in the Market Procedures document and is being added to the project's FAQ document.

	Actions from 12 September	December Update
3.11	When is the Go / No-go point?	In line with the revised trial calendar the go/ no go point for the trials is at the end of April 2019.
4.1	Will the DER web interface have an API? - Project team to clarify and check security considerations	DER aggregator will be connected through web-based API interface. The standard specification and security consideration are under investigation.
4.2	Will DER get visibility of RTU monitoring data – it would be helpful to see how the site performs	This is something we are investigating including within the DERMS web interface (included in early mock-up but inclusion subject to further testing before confirmation that we would include this requested but non-essential item). We will feed back progress on this to DER participants and RMAP next year.
4.3	Can RTU control the DER without a DER gatekeeper? UKPN to follow up how the approach via an aggregator will work.	Discussion is ongoing with an interested stakeholder within the trial area to understand the standards available and the option the prospective trial participant would like the project team to consider.
4.4	Project team to consider how the aggregator route impacts on the 2-5 seconds' response time.	The 2-5 second response time requirement (reactive power service) applies to the DER independently if this is connected to DERMS via an aggregator. The aggregator route should not add significant delay to the end-to-end communication process. Clarification provided in the diagram below:



DER response requirements: upon set-point being received (V_{set} , P_{set})!

- Reactive power service DER response requirement: 90% response in 2 seconds, 100% in 5 seconds
- Active power service DER response requirement: automatic response when set-point is received.



Example: DER typical response to step change in line with reactive power service requirement

	Actions from 12 September	December Update
5.1	<p>Is the end of 2019 completion date fixed? If schedules slip, will the project gather enough insight?</p> <p>Action: Project team to provide updated plan to RMAP at the end of September</p>	<p>See response to action 3.1 for trial dates which now extend beyond the end of 2019. The project is confident that the revised trial dates will allow the project to gather evidence to meet its objectives.</p>
5.2	<p>Project team to share table showing stackable services with Fernando</p>	<p>Emailed to Fernando 19 September.</p>
7.1	<p>Action: Share updated RMAP slides and Cambridge University's slides</p>	<p>Circulated by emailed 12 September.</p>