

# **REA Member Forums Meeting**

## **5<sup>th</sup> November 2019**

**A warm welcome to REA members working in the solar, energy storage, electric vehicles, large scale power markets and finance areas.**



# **REA Energy Storage Forum**

## **Presentation for member meeting**

### **5<sup>th</sup> November 2019**

**Kindly chaired by Vijay Shinde, Chief Technical  
Officer, Harmony Energy**



# Agenda

## Policy & Market Update:

- Ancillary Services Market
- Update - VAT on Domestic Energy Saving Materials
- Planning Rules Consultation (re 50MW cap & NSIP)

Energy Storage and its role in the 2019 Power Cut, Anesco

The Role of Data in Decarbonisation, LEBA

Business Plan 2019, REA Energy Storage Member Forum



## Update on Ancillary Services

National Grid ESO have announced 'zero-carbon Ready system by 2025'

Means reform of c.24 balancing 'products' into c4 'products'

One third of balancing services to be procured from new sources by 2025

Progress still awaited, but work ongoing

- Frequency response auction trial
- Power Potential Market DSO trial blazer



# National Grid ESO Frequency Response Trial

NG ESO trial awarding Frequency Response contracts via an auction

Open to a range of technologies

Participants must provide:

- at least 30 minutes' worth of capacity
- respond within at least 1 second
- Activation point at 49.6 Hz

Tender for delivery on week-ahead basis

Auction on Pay as Clear basis

# Frequency Response auction Phase 1 Result

## National Grid ESO Auction

First Phase 1 Weekly Frequency response auction held 13 June 2019

Four parties, all successful in securing contracts.  
Service delivery commenced at 23:00, 14th June.

Auction cleared at:

- £5.25/MW/h during overnight periods (EFA blocks 1-2)
- £3.25/MW/h during daytime periods (EFA blocks 3-6)

# Update - Project TERRE

Project TERRE will open up the European balancing market to new players and create more of a European market

Originally scheduled for December 2019 Implementation

French Grid ESO RTE has experienced delays in implementing necessary IT systems. Means UK delay as well

Implementation now expected in June 2020

Ofgem seeking views on how to implement



# Targeted Charging Review (TCR) Latest

The final TCR decision is expected in the next month (before Christmas)

Slight changes to timelines (positive) and charging options (minor)

Access and Forward looking charges proposals still developing – a range of options

Still unclear if these will outweigh damage from TCR changes. Case studies and more information requested.



# Energy Storage Planning Rules - Final Outcome & Follow-Up



Department for  
Business, Energy  
& Industrial Strategy

## FOLLOW UP CONSULTATION ON PROPOSALS REGARDING THE PLANNING SYSTEM FOR ELECTRICITY STORAGE

Includes Government Response to original  
consultation



# Planning changes for energy storage, initial proposals

The first, January 2019 consultation set out two main proposals for electricity storage:

- To retain the 50 megawatt (MW) Nationally Significant Infrastructure Project (NSIP) capacity threshold that applies to standalone storage facilities; and
  - To amend the Planning Act 2008 to establish a new capacity threshold for composite projects including storage and another form of generation, such that a composite project in England would only fall into the NSIP regime where either its capacity, excluding any electricity storage, is more than 50MW; or, the capacity of any electricity storage is more than 50MW. Therefore, where the capacity of both the storage and non storage elements of the generating station are less than 50MW individually, but over 50MW in combination, the generating station would fall under the local planning regime.



# Co-located storage & generation sites to gain from increased threshold in National Planning assessment - Final Outcome

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# Co-located storage & generation sites to gain from increased threshold in National Planning assessment - Final Outcome

- Following campaigning, with the exception of Pumped Hydro projects, BEIS is minded to carve out all electricity storage projects from the NSIP planning regime in England & Wales (subject to further consultation)
- This would mean that the "primary consenting route in England will be under the Town and Country Planning Act 1990 (TCPA). Section 35 of the Planning Act 2008 will continue to apply in England, allowing the Secretary of State to direct projects into the NSIP regime, where she considers it appropriate. In Wales, planning decisions for electricity storage (except pumped hydro) of any size will generally fall to be consented by the relevant Local Planning Authority under the TCPA regime, whereas currently this is only the case for electricity storage (except pumped hydro) below 350MW."
- Follow up consultation published, closes 10 December



# Permitted Development Rights and Environmental Impact Assessments (EIAs)

- The Consultation document also clarifies the position regarding Permitted Development rights in the planning system, and requirements around Environmental Impact Assessments (EIAs) for energy storage.

They clarify Permitted Development rights where the building is not used primarily for energy generation as such:

- Where storage is installed within an existing premises to support its primary use, there are no external changes proposed to the premises, and the majority of electricity is used on the premises, it would be unlikely that a material change of use had occurred and therefore it would not be considered 'development' requiring planning permission.
- Permitted development rights allow the extension of certain existing premises to provide additional space to accommodate electricity storage where this is ancillary to the primary use of a premises and the majority of electricity stored is used on the premises. Those wishing to make use of these rights should ensure extensions are within the limits (footprint, height etc) outlined in Part 7 of Schedule 2 to the Permitted Development Order.
- Note that they also clarify that the majority of the electricity stored does not need to be used on site, but that, the storage must be ancillary to the primary use of the premises.



# Planning Consultation - Final Outcome

- REA Believe the proposals are very welcome. Problem has been highlighted and requirement for change evidences by the Welsh (350MW) threshold difference
- Believe the planning situation would be further improved by a standalone definition for energy storage in the Electricity Act 1989
- Related note: clarification of whether 50MW size threshold for generation is on a DC or AC basis received late 2018 – if generation capacity goes above 50MW in either DC or AC then becomes notifiable NSIP project



# Energy storage standards update

## MCS Smaller-Scale Storage Certification Scheme

National certification scheme MCS (Microgeneration Certification Scheme) developing certification for battery energy storage systems

REA and REAL sit on the development group

Aims to better equip the industry to roll out smaller energy storage installations while ensuring consumer protection

‘Pilot’ launched



# Energy storage standards update

## **BEIS Health & Safety Standards Committee**

- Formed autumn 2018
- Undertaking gap analysis at present
- Long standing REA 'ask' – very welcome
  - Next meeting 2020

## **Guidance notes: Energy Institute Energy Storage Working Group**

- REA Vice-Chair of group
- Funding secured for best practice guides: planning, fire & construction/maintenance
  - Planning Guidance Note published
  - Fire Guidance Note draft final review
- Construction/Maintenance Guidance Note consultant work begun



# Energy storage standards update

## El Energy Storage Working Group with REA – Possible future projects:

- Short guidance on 2<sup>nd</sup> life batteries
- Workshop on sharing learning from incidents/issues/near misses - Chatham House rules, to aid forward planning, to also explore possible confidential reporting system/protocol to enable better sharing of incidents, near misses etc. in industry
- Tentative contribution towards a BSI 'mini-standard' on battery storage H&S. Will depend on whether the standard actually goes ahead - won't know until a little later this year

# Energy storage: IET Standard Update

**Installation Guidance: *Under Review 2019***. First comprehensive behind the meter battery storage installations for installers – update planned for 2020.

New MCS Standard will link to this (same lead author)

REA initiated process, published by IET

Download current version (payment required):

<http://www.theiet.org/resources/standards/eess-cop.cfm>

## Electrical Energy Storage

Improve safety and increase performance of your electrical energy storage systems with good-practice guidance from the IET.

[Find out more >](#)



# Best Practice Guidance

## El Technical Note, REA initiated & review

Provides overview guidance for planning departments with multiple storage planning applications

Aims to provide information and allay planners fears

Published September 2019

<https://publishing.energyinst.org/topics/power-generation/battery-storage/battery-storage-guidance-note-1-battery-storage-planning>

## Battery Fire Safety guidance

Developing Best practice guide on battery fires through El

*Consultants started work – questionnaire on details circulated to interested parties*