REA Response to BEIS Consultation on Changes to the Planning framework for Energy Storage

Introduction & Context

The REA is the largest trade organisation for the energy storage industry, representing 200 organisations involved in the market in some way, from manufacturers and developers to consultancies and academic institutions.

Planning is an important part of developing any new energy project and this is exacerbated for energy storage projects, given the lack of a clear route to market at present – where any additional cost impacts on the viability or otherwise of a project. Therefore the NSIP process, which could cost millions of pounds, as opposed to hundreds of thousands via the LPA, is a considerable cost barrier for potential projects. In addition, as a developer only faces the full costs of a project if it achieves planning, in the developers eyes the most important consideration is to remove big risks as quickly as possible with finite resources. It is a huge risk to commit DCO funds to a project that might fail and therefore few try. BEIS should consider the percentage costs of DCO planning applications compared to the development spend on a project, not the capital spend, which are typically around 5% of the overall project capex spend.

REA Priorities

- We agree with the need to reform the planning process for co-located generation and energy storage sites.
- We call on government to vigorously and ambitiously plan for the future by entirely exempting energy storage projects from the NSIP or increasing the applicable threshold to at least 350MW (or an equivalent MWh figure), in line with that in Wales.
- There is a need to consider a dedicated Use Case for storage devices in the planning system – this would be enabled further by and closely relates to, the need for a dedicated legislative basis for storage in the electricity system (requiring primary legislation).
- There is also a need to understand issues around EIA thresholds being triggered by revised proposals, requiring consideration.
- Final clarity on the basis for planning decisions for solar PV projects – whether AC or DC is to be used, would be very welcome (although we recognise this is outside of the terms of this particular consultation).
- Industry is also seeking further clarification on Permitted Development rights for storage devices – ideally would be as simple and clear as current rules for solar PV.
- The REA would like to raise awareness within Government and industry of some of the actions being undertaken by the REA with project partners to try

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and bring greater awareness and clarity to planning departments and the market on some planning and related issues, this includes the production of guidance briefings for local planning departments and homebuilders.

Specific consultation questions

1. **The analytical assessment in Annex A that supports this consultation explores the costs and benefits of the preferred policy option. Do you agree with the analytical assessment and the assumptions that underpin it? Please provide evidence and analysis to support your answer where appropriate.**

No. The energy system is changing, and the energy transition needs energy storage. Therefore, it is essential that reforms whose purpose is to support the energy transition – like this reform – holistically considers the energy storage needs of the transition and works to remove barriers to their deployment. The need to do this is acknowledged at various points in the consultation document, however, that thinking does not seem to be reflected in the proposed changes.

The treatment of energy storage under the planning policy framework should be proportionate to the impact that energy storage projects may have on their surrounding areas and only escalated to the NSIP regime where its potential impact on the environment warrants such treatment. As such we welcomed Government's intention, as stated in the recent Update to the Smart Systems and Flexibility Plan, "*to ensure that [electricity storage facilities] are assessed fairly in the planning system without facing inappropriate barriers to deployment*". However, the level of analysis and the options considered in this consultation appear to reflect a desire only to make minor tweaks on the edges rather than to give meaningful consideration to what constitutes a 'fair' treatment for storage within the planning system going forward. We note that matters that fall within the NSIP more generally, aside from generation, include construction of airports, harbours, LNG storage facilities, railways, dams and reservoirs and hazardous waste facilities (see section 14 Planning Act 2008). Our members strongly believe that storage (generally) does not fall into the same category as those other projects.

In terms of the analysis in Annex A specifically, we note the following:

- Cost-benefit analysis only considers the costs and benefits of the preferred option and does not allow any meaningful comparison between the other options considered.
- The reasons for discounting options lack rigour. For example: The analysis relies on extrapolating historic rates of deployment which we believe is entirely inappropriate for forecasting the size of future projects. The size (power (MW) and energy (MWh)) of energy storage projects seen in Capacity Market auctions to date reflects the market signals, regulatory incentives and technology costs of the time. As market signals and incentives shift from short duration to longer duration systems, and with

improvements in technology and system cost, the types of energy storage projects that developers will want to bring forward will invariably change. Put another way, the analysis does not appear to take into account anticipated cost reductions and the rapid technology advancements in energy density and extended duration.

- As a result, the assessment of Option 3 (Amending the unit of the threshold (to MWh instead of MW) and Option 4 (Raising the level of the threshold) makes the entirely false assumption that the current threshold does not distort sizing decisions and avoids any attempt to consider how the planning implications associated with electricity storage compare with the planning implications of other types of 'generation'.

2. Do you agree with our conclusion that it would be disproportionate to amend the threshold for triggering the NSIP regime? If not please provide evidence to support your argument, including to support what an alternative threshold should be in terms of level and/or unit.

No. Our members explicitly tell us that energy storage projects should either be entirely excluded from NSIP or that the planning threshold should be raised for storage projects as the existing 50MW threshold represents an arbitrary boundary which disproportionately affects storage and forces developers to reduce the optimum size of new projects. This is evidenced by the experience with the threshold changing in Wales – prior to the lifting of the threshold above 50MW the size applications was around 49MW, but after this was increased to 350MW we understand that project sized increased to 75-90 MW and above. We would argue that this was a case of projects finding their most efficient, optimum capacity (given the market and regulatory signals at the time) following the lifting of the threshold.

The risks and barriers to the NSIP process are numerous. These include the fact that the NSIP process can add 1-2 years to process, compared to a typical timeline of 8-16 weeks under the TCPA framework. In addition, under the NSIP process, an applicant often does not know how much they will spend until the process has ended. The number of inspectors has huge bearing on this, again not determined until the process has begun. In addition, when a DCO is active the local planning authority/council is still expected to do a considerable amount of work, but receives no payment at all, whereas under the TCPA process they can charge a fee. This does not appear to adequately resource a relevant local representation for the DCO process.

A case study from a member-company indicates that one third of their total development spend to date has been due to progressing through the NSIP process, whereas this would have been under 10% if taken through the LPA route. The question of how many planning inspectors would sit on the case proved critical as these come at a cost of £350k per inspector. The DCO/NSIP process also added two years to the development process, as opposed to a number of months.

The Progress Update to the Smart Systems and Flexibility Plan rightly sets out an intention to consider a 'fair' treatment for storage in the planning framework. In this context, while it may be convenient to nominally consider storage as generation (at least while there is no explicit provision for storage in the planning regime), it is not clear that it actually makes sense to do so in the planning context. We note:

- 50MW of most types of storage arguably does not have the same visual or land use impact as 50MW of solar or wind for example. Members have reported estimates that energy storage occupies much less than 1% of the land space needed for a solar installation of the same output power capacity (MW).
- Energy storage projects can be delivered in much faster timeframes than many other types of generation. The 100MW/129MWh Honsdale battery installation in South Australia was delivered in 100 days.
- We know that there is an urgent need to more generally facilitate more flexible capacity on the system to transition to a low carbon, lower cost network. As such, it is important that thresholds for triggering the much longer and more expensive NSIP process for electricity storage should be proportionate so that the framework does not unnecessarily create barriers to deployment.
- Electricity substations are in many ways similar in size and impact to electricity storage installations but are not subject at all to the NSIP framework. Rather they are assessed under the TCPA regime. Given the similarities, BEIS should consider whether electricity storage should similarly be entirely excluded from the NSIP regime.

In light of this, the REA urges BEIS to consider reviewing the NSIP threshold for electricity storage and consider the following options:

- Complete exclusion of electricity storage from the NSIP regime.
- A separate threshold of 350MW for electricity storage (consistent with the Welsh threshold);

3. Do you agree with our approach to amending the Planning Act 2008 to allow a more appropriate approach to the NSIP threshold for composite projects involving electricity storage and another form of onshore non-wind generation? Please provide evidence and analysis to support your answer where appropriate.

In the absence of exploring a more proportionate approach to determining the NSIP threshold for storage, Yes, we agree with the proposal in principle. We would caveat this however with the need to raise the NSIP threshold for energy storage projects and we would also argue for wind to be included in this proposal. Industry would also appreciate clarity on the procedure for large generation assets installing a small amount of energy storage capacity and exceeding the threshold.

In addition, BEIS should clarify that where storage is added to an existing station, that the addition only falls into the NSIP regime if the capacity of the storage part is (or will be on completion) above the trigger threshold. The proposed rule for composite stations as expressed on page 19 of the consultation document[1] leaves an unintended consequence that would mean that adding storage, regardless of its capacity, to an existing generating station that is more than 50MW will *always* fall into the NSIP regime. By contrast, if the storage element was developed in a way such that the station is not regarded as a 'composite' station, the NSIP regime would only be triggered if the capacity of the storage element exceeded the NSIP threshold. This would have the perverse outcome of discouraging co-location generally or lead developers to seek co-location designs to avoid the NSIP process – which again adds to the burden of undertaking co-location projects.

To address this unintended outcome, BEIS should consider the drafting of the criteria to make clear how the rule applies: in the case of a new 'composite' project; and in the case where an existing station is extended to become a 'composite' station.

In our view, this added layer of complexity further highlights the disproportionality of retaining and applying the 50MW NSIP threshold to energy storage and we would urge BEIS to reconsider the appropriateness of the threshold in view of our response to question 2. above.

4. Do you agree that the current carve out from the NSIP regime for onshore wind generating stations is sufficiently clear to cover composite projects involving storage and onshore wind? Please provide reasons to support your answer including, where relevant, details of any particular projects which are expected to come forward in future.

We note the concern from the devolved administrations regarding the wording in terms of possible loss of decision making powers, but otherwise believe that, from the developers perspective, the wording should be clear as proposed. We believe there may be significant amounts of 'subsidy-free' onshore wind progressed in the medium term in Scotland and Wales, dependant on grid network upgrades.

We note also that this proposal suggests that adding energy storage is not the feature of an onshore wind project that transforms it into a Nationally Significant Infrastructure Project. If it is not, that principle should arguably apply no matter what the generation technology is. Therefore, further to our response to question 2, BEIS should consider whether it is more appropriate to

[1] "*[A] composite project in England would 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.*"

entirely exclude energy storage from the NSIP regime and leave them to be assessed under the TCPA.

5. **Are there any other areas of the planning system that you consider treat storage inappropriately relative to other forms of generation and therefore impact on its deployment? Please provide evidence to support your answer where appropriate.**

We note several areas of concern:

- Confusion regarding Use Classes as they apply to energy storage assets. Storage does not have its own use class in the planning system, and this causes some confusion (for example storage space (ie for boxes etc) is Use Class 'D', whereas Energy generation is a separate use class and this causes confusion. It also creates problems for planners when considering 'change of class' and the impact on employment they need to consider.
- Environmental Impact Assessments (EIAs). We understand that there is a possible issue around the triggering of an EIA requirement (an expensive, time consuming process) as a result of combining storage and generation applications. Industry would appreciate if this was confirmed and if necessary guidance issued which made clear the exact threshold and avoids unintended consequences from the changes ot the NSIP threshold.
- Permitted Development rights. Although there is a reference to clarifying this in the consultation document, REA member views are that this is still an area with much ambiguity in the market and industry is not entirely clear exactly which projects qualify for this and which do not.
  What is needed here is guidance clearly stating in clear language the PD rights associated with energy storage, similar to solar PV on commercial buildings where the size threshold is very clear and well understood.
- Closely related to the installation of energy storage is the installation of renewables, and solar PV among these. There has for some time been some uncertainty regarding whether planning permissions granted to solar PV farms are on the basis of a Total Installed Capacity (TIC) in AC or in DC terms. Informal rulings have been made and messages given, but the REA is not aware of any overarching guidance on the topic.
  A simple guidance note on this topic would be very simple to issue and very welcome from the sector.

The REA would also like to underline some of the work it is undertaking in this area which is of wider relevance and interest, and worth BEIS support and promotion if possible:

Dedicated guidance to planning departments on energy storage devices- the REA has been working as Vice-Chair of the Energy Institute's Energy Storage group, on a dedicated guidance note for Local Authority planning departments on the kind of issues they need to be aware of when receiving and evaluating new energy storage applications, written by a specialist consultancy.

Guidance to new homebuilders on energy storage devices- again, the aim of this guidance (developed with the NHBC) is to educate builders on the storage market and potential of the technologies, while also flagging some common technical and safety, planning considerations. This is now available to download from the NHBC website[2].

Conclusion

While we welcome the proposal regarding co-located storage and generation projects, we believe that there is a strong case for raising the threshold for storage projects to enter the NSIP regime or exempting storage entirely, based on the large proportion of development costs (a case study shows this to be a third of total development costs), relatively uncontroversial nature of most technologies, additional time required that this results in for such projects and enhanced system benefits that they provide.

We also want to raise a number of related uncertainties regarding storage in the planning system, including the appropriate Use Classes, EIA threshold, local planning authority uncertainties and need for clear rules and guidance on Permitted Development rights for smaller energy storage projects. The REA is engaged in a number of activities to improve planning department and industry awareness.

Please do not hesitate to contact us (Frank Gordon) to discuss any of the content in this response further.

REA, March 2019

[2] https://www.nhbcfoundation.org/publication/watts-in-store-introduction-to-energy-storage-batteries-for-homes/