



CLEVE HILL SOLAR PARK

**OTHER DEADLINE 3 SUBMISSIONS
THE APPLICANT'S RESPONSE TO GREAT EXPERT REPORT ON THE
STATEMENT OF NEED - REFERENCE 10**

August 2019
Revision A

Document Reference: 11.4.10.10
Submitted: Deadline 3
www.clevehillsolar.com



CLEVE HILL
SOLAR PARK



Department for
Business, Energy
& Industrial Strategy

CONSULTATION ON PROPOSALS REGARDING THE PLANNING SYSTEM FOR ELECTRICITY STORAGE

Closing date: 25 March 2019

January 2019



OGL

© Crown copyright 2019

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.

Any enquiries regarding this publication should be sent to us at: enquiries@beis.gov.uk

Contents

General information	4
Why we are consulting	4
Consultation details	4
How to respond	5
Confidentiality and data protection	5
Quality assurance	5
Executive Summary	6
Chapter 1: Current treatment of electricity storage in the planning system	8
Context	8
Defining electricity storage as a subset of generation	9
Current planning system	9
Chapter 2: Assessment of planning issues for storage	14
An appropriate threshold for electricity storage	14
Regulatory clarity	15
Analysis	15
Chapter 3: Proposed approach	18
Catalogue of consultation questions	22
Annex A: An analytical assessment of the impacts of the preferred policy option considered in this consultation	23
Annex B – Data Protection	31

General information

Why we are consulting

The Department for Business, Energy and Industrial Strategy (BEIS) is consulting to gain views on our proposed changes to the treatment of storage under the planning system.

Consultation details

Issued: 14 January 2019

Respond by: 25 March 2019

Enquiries to:

Smart Energy Team,
Department for Business, Energy & Industrial Strategy,
1 Victoria Street,
London,
SW1H 0ET

Tel: 0300 068 4000

Email: smartenergy@beis.gov.uk

Consultation reference: Consultation on proposals regarding the planning system for electricity storage

Territorial extent:

The proposals outlined in this consultation are intended to apply to England only.

How to respond

Your response will be most useful if it is framed in direct response to the questions posed, though further comments and evidence are also welcome. This consultation is open to everyone. We are keen to hear from a wide range of interested parties involved in the planning process.

Where possible please respond online: <https://beisgovuk.citizenspace.com/energy-strategy-networks-markets/planning-system-electricity-storage>

Responses emailed to smartenergy@beis.gov.uk and hardcopy responses sent to the BEIS postal address will also be accepted.

Smart Energy Team,
Department for Business, Energy & Industrial Strategy,
1 Victoria Street,
London,
SW1H 0ET

Confidentiality and data protection

Information you provide in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018 and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential please tell us, but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable UK and EU data protection laws. See our [privacy policy](#).

We will summarise all responses and publish this summary on [GOV.UK](#). The summary will include a list of names or organisations that responded, but not people's personal names, addresses or other contact details.

Quality assurance

This consultation has been carried out in accordance with the government's [consultation principles](#).

If you have any complaints about the way this consultation has been conducted, please email: beis.bru@beis.gov.uk.

Executive Summary

The Government has a challenging and critical set of objectives in the energy sector: ensuring security of energy supply, keeping bills as low as possible for households and businesses, and decarbonising cost-effectively and in a way that enables us to reap the economic benefits of this transition through our Industrial Strategy. As part of this, the Government's Clean Growth Strategy sets out a suite of policies to decarbonise the economy, of which smart energy is a key element.

Smart, flexible energy can help the transition towards a low carbon energy system, whilst bringing significant benefits for consumers, the energy networks and the wider economy. A study carried out for the Government estimated that the benefits of a smart and flexible energy system to the UK could be £17-40 billion to 2050.¹

In July 2017 the Government and Ofgem published the Smart Systems and Flexibility Plan² ('the Plan'). The Plan set out 29 actions for the Government, Ofgem and Industry to take forward to support the transition to a smarter and more flexible system. The Plan is split into three main areas: removing barriers to smart technologies such as electricity storage; enabling smarter homes and businesses; and making markets work for flexibility. Within the section on removing barriers to smart technologies, one of the commitments was to review how storage is treated in the planning system. We have since engaged with industry, including storage developers, to better understand the issues faced by storage under the current planning system. We published a Progress Update to the Plan in October 2018, which confirmed that we would consult on the planning treatment of storage.

This consultation considers two areas that have emerged from our review of the treatment of electricity storage in the planning system:

- Whether the level and unit of the 50MW capacity threshold for non-wind onshore³ generating stations in the Nationally Significant Infrastructure Projects (NSIP) regime is appropriate for electricity storage; and
- clarification of how composite projects, consisting of storage and another form of generation, should be treated with regards to the NSIP capacity threshold.

Our review to date has explored these areas by examining the pipeline of existing and prospective storage projects in Great Britain (GB), engaging with stakeholders on the factors that could be influencing the sizing of storage projects and estimating the costs to developers of consenting projects under the NSIP regime and the Town and Country Planning Act 1990 (TCPA) system.

Our findings so far indicate that the 50MW capacity threshold, which triggers the need for a proposal to be brought into the NSIP regime, does not in itself distort storage developers' sizing and investment decisions to a significant degree. Other factors (e.g. network connection costs, upfront capital costs and available revenue streams) are far more influential. In addition, some stakeholders felt that amending the unit or level of the threshold may result in disproportionate complexity in the regulatory system for planners and prospective developers.

¹ [An analysis of electricity system flexibility for Great Britain](#), November 2016

² [Smart Systems and Flexibility Plan](#)

³ This consultation does not consider offshore generating stations as our review to date has not identified any problems impacting the deployment of storage within this area.

On this basis, our analysis indicates that reforming the capacity threshold for standalone storage projects would be disproportionate relative to the benefits of such reform.

Instead, our stakeholder engagement suggests that it may be more effective to focus efforts on ensuring that the planning system is fit-for-purpose now and in the future by addressing uncertainties over the treatment of composite projects consisting of storage and another form of generation. We therefore propose reform to reduce these uncertainties.

In particular, the Government is seeking views on the following proposals:

- **retaining the 50MW NSIP capacity threshold that applies to standalone storage projects;** and
- **amending the Planning Act 2008 to establish a new capacity threshold for composite projects including storage and another form of generation,**⁴ such that 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. 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.

Preliminary analysis of the potential costs and benefits of the proposal has been included in this consultation with details of the assumptions and methodology detailed in [Annex A](#).

Although this consultation focuses primarily on proposals affecting NSIP-scale storage, we also understand that stakeholders could benefit from greater clarity over how the planning system deals with the addition of small-scale electricity storage to premises where the primary function is not generation; this is outlined in [Chapter 1](#).

The proposals outlined in this consultation are intended to apply to England only. The consenting regime for generating stations in Wales and Scotland is explained in [Chapter 1](#) under the heading 'current planning system'. For further information please contact either the Welsh Government Planning Directorate⁵ or the Scottish Government's Energy Consents Unit.

⁴ Not including onshore wind.

⁵ Further information: [Welsh Government: Developments of National Significance](#)

Chapter 1: Current treatment of electricity storage in the planning system

Context

Electricity storage comes in many forms and is a source of flexibility for the energy system. It can support the integration of low carbon technologies, reduce the overall costs of operating the system and help avoid or defer costly reinforcements to the networks.

Electricity storage is already being deployed across Great Britain (GB) and there is currently around 3GW of storage on the system, the vast majority of which is pumped hydro.⁶ National Grid's Future Energy Scenarios (FES) predicts that between 12-29GW of electricity storage could be deployed by 2050.⁷ Whilst there has been a focus in recent years on the development and deployment of battery storage, there are other technologies that could be deployed at scale in the future. To make the regulatory framework as future proof as possible, the Government wants to ensure that there is a level playing field for all storage technologies.

Not all aspects of the regulatory framework were designed with technologies such as storage in mind and we have found that storage faces certain barriers to deployment as a result. The Smart Systems and Flexibility Plan ('the Plan') therefore outlined nine actions that the Government and Ofgem will take to improve the regulatory framework for storage.

The treatment of electricity storage within the planning system was identified in the Plan as an area where there is uncertainty. The Plan confirmed that storage facilities should be classified as a form of electricity generating station. We therefore committed to review the treatment of storage within the planning system for generating stations.⁸

This consultation outlines the proposals resulting from our review to date, which has encompassed different elements of the planning system for storage. We have assessed both the unit, currently megawatts (MW), and level, currently 50MW, of the capacity threshold for bringing non-wind onshore generation projects within the NSIP regime and whether this is appropriate for storage. This assessment has considered views from a range of stakeholders. In addition, we have considered whether there are areas where further clarity is needed, such as the treatment of co-located storage as part of a composite project.

As planning is largely a devolved matter, the remit of this consultation is England only. In this chapter we outline how approaches to planning differ across Great Britain, however, this is for context only and the proposals outlined in this consultation are limited to England.

⁶ Pumped hydro pumps water from a lower to higher reservoir using excess electricity, this is then stored and when electricity is required, the water is released back to the lower reservoir through a hydro power turbine to generate electricity.

⁷ [National Grid: Future energy scenarios](#)

⁸ This consultation does not consider offshore generating stations as our review to date has not identified any problems impacting the deployment of storage within this area.

Defining electricity storage as a subset of generation

The Call for Evidence⁹ on moving to a smarter and more flexible electricity system, published in October 2016, outlined that we consider electricity storage to be a distinct subset of generation and therefore electricity storage facilities should be treated as a form of electricity generating station for planning purposes. This position was agreed with the UK, Scottish and Welsh Government. In the Plan we re-confirmed this position and following this, to further publicise this classification of storage in the planning system and ensure a consistent approach, it was also confirmed in the Chief Planners note in England in December 2017.¹⁰

In the Plan we outlined that when parliamentary time allows we will use primary legislation to define electricity as a form of generation. Defining electricity storage in this way in primary legislation will provide long-term clarity over the treatment of storage under the existing legislative framework including for licensing and planning purposes.

For the purposes of the proposals in this consultation when we refer to electricity storage, we mean a generating station, or any part of a generating station that generates electricity from stored energy. Stored energy is energy that is converted from electricity, and then stored for the purpose of its future reconversion into electricity. This definition of storage is intended to cover a wide range of electricity storage technologies.

It is on this basis that the proposals in this consultation have been developed.

Current planning system

The planning system in GB features both national and local elements and is largely devolved in Scotland and Wales, with roles and responsibilities shared between Local Planning Authorities (LPAs), the Secretary of State (SoS) and the devolved administrations. This consultation focuses on and proposes changes to the planning system in England only, however, the systems in the devolved nations are outlined below for context.

Planning permission under Town and Country Planning legislation is typically required to undertake building work, alter an existing building, or change the use of land or a building. In most cases parties should apply for planning permission from their LPA,¹¹ however, depending on the nature and size of the development, it may be captured by the NSIP regime which requires a grant of development consent from the SoS under the Planning Act 2008.

Currently in England and Wales, the development of non-wind powered onshore generating stations with a capacity of up to and including 50 Megawatts (MW) can be consented via a grant of planning permission under the Town and Country Planning Act 1990 (TCPA).¹² However, where the generating capacity is more than 50MW the project will fall under the NSIP regime, requiring a Development Consent Order (DCO) from the SoS.¹³ The NSIP

⁹ This was a [joint Ofgem and BEIS Call for Evidence](#)

¹⁰ [Planning guidance: letters to chief planning officers](#)

¹¹ Some specific types of development may not require a full application for planning permission if they benefit from 'permitted development rights'. In England, these rights are set out in the Town and Country Planning (General Permitted Development) (England) Order 2015.

¹² In Wales, where the generating capacity is up to 10MW permission is sought from the relevant LPA, where it is between 10MW and 50MW permission is sought from Welsh Ministers.

¹³ Section 15(2) of the Planning Act 2008 covers the construction or extension of a generating station which is or (when constructed or extended) is expected to be an onshore generating station in England which does not generate electricity

regime was created by the Planning Act 2008 in England and Wales as a bespoke planning regime designed to consider applications for a range of types of nationally significant infrastructure project. The provisions of the Act relating to generating stations largely replaced the operation of the pre-existing national consenting regime contained in section 36 of the Electricity Act 1989.¹⁴ Applications for development consent are administered by the Planning Inspectorate and examined by an independent examining authority which makes recommendations to the relevant Secretary of State. In the case of energy infrastructure projects, the decision maker is the SoS for BEIS. Compared to planning applications made to the LPA, an application for a DCO does not need to demonstrate the need for a project where a national policy statement has effect. There are also statutory timeframes to deliver a decision within one year of examination commencing. In addition to granting planning permission for a development, a DCO granted under the NSIP regime can include many of the consents needed to operate a project and can include compulsory acquisition of land where appropriate.

In Scotland the NSIP regime does not apply. Instead, generating stations with a capacity more than 50MW continue to require consent under section 36 of the Electricity Act 1989 from Scottish Ministers. Where the capacity is up to and including 50MW, the project is consented by the relevant LPA under the Town and Country Planning (Scotland) Act 1997 (TCPASA).

As explained above, the UK, Scottish and Welsh Government agree that a storage facility is a form of electricity generating station. This means that a storage facility with a capacity of more than 50MW will need development consent as required by the Planning Act 2008 in England and Wales or Scottish Ministers' consent under section 36 of the Electricity Act 1989 in Scotland (s. 36 consent).

From 1 April 2019, section 39 of the Wales Act 2017 will amend the Planning Act 2008 to remove Welsh onshore non-wind powered generating stations and generating stations in Welsh waters with a capacity of up to and including 350MW from the NSIP regime. The Welsh Government recently consulted on proposals for consenting such projects under the devolved regime for Developments of National Significance (DNS). The Welsh Government's response to their consultation is that storage technologies, excluding pumped hydro, will be carved out of this regime. This means that storage facilities (except pumped hydro) with a capacity of up to and including 350MW will need to seek consent from the relevant LPA, and all storage projects with a capacity of more than 350MW will continue to be consented by the SoS as a NSIP.

The Planning Act 2008 was amended in 2016 to remove onshore wind powered generating stations of all sizes from the NSIP regime and therefore the 50MW capacity threshold does not apply to onshore wind farms in England or Wales.¹⁵

from wind and which has a capacity of more than 50 megawatts. The development consent for the project will also include consent to operate the generating station

¹⁴ Consents under section 36 of the Electricity Act 1989 apply to the construction (or extension) and operation of certain generating stations and are accompanied by a direction that planning permission is deemed to be granted under the relevant national town and country planning legislation. Development Consent Orders granted under the Planning Act 2008 typically authorise the construction (or extension) and operation of the relevant generating station and remove the need to obtain planning permission or s.36 consent.

¹⁵ See the Infrastructure Planning (Onshore Wind Generating Stations) Order 2016/306. Section 78 of the Energy Act 2016 made similar amendments to the Electricity Act 1989 to align the treatment of onshore wind generating stations under both regimes.

Table 1 demonstrates how standalone storage is treated under the different systems across GB.

Table 1: Current planning system for electricity storage across GB.

Territory	Type of planning consent for standalone electricity storage projects		
	Planning Permission under Town and Country Planning legislation	Consent from Welsh Ministers (DNS) or Scottish Ministers (s.36 consent)	Development Consent under the Planning Act 2008
England	Where the generating capacity is up to and including 50MW permission is sought from the relevant LPA under the TCPA.	N/A	Where the generating capacity is more than 50MW permission is sought from the BEIS SoS under the Planning Act 2008.
Wales	Where the generating capacity is up to and including 10MW permission is sought from the relevant LPA under the TCPA. ¹⁶	Where the generating capacity is between 10MW and 50MW permission is sought from Welsh Ministers under the TCPA. ¹⁷	Where the generating capacity is more than 50MW permission is sought from the BEIS SoS under the Planning Act 2008. ¹⁸
Scotland	Where the generating capacity is up to and including 50MW, permission is sought from the relevant LPA under the TCPA.	Where the generating capacity is more than 50MW permission is sought from the Scottish Ministers under the Electricity Act 1989.	N/A

Composite projects

Many storage technologies can be deployed either as standalone facilities or co-located with other types of generation, for example to maximise the usable output of intermittent low carbon generation. The current legislation covering generating stations in the planning system does not distinguish between standalone projects involving one type of generating technology and scenarios involving two or more types of generation. However, in order to apply the relevant threshold criteria, it will normally be necessary to determine the proper extent of the generating station in question. In some cases, it may be appropriate in planning terms to treat particular

¹⁶ From 1 April 2019, the Welsh Government will amend this situation so that where the generating capacity is up to and including 350MW for storage technologies apart from pumped hydro, permission is sought from the relevant LPA under the TCPA 1990.

¹⁷ From 1 April 2019, the Welsh Government will amend this situation so that where the generating capacity is up to and including 350MW for storage technologies apart from pumped hydro, permission is sought from the relevant LPA under the TCPA 1990.

¹⁸ From 1 April 2019, section 39 of the Wales Act 2017 will amend this situation so that where the generating capacity is more than 350MW permission is sought from the BEIS SoS under the Planning Act 2008.

co-location scenarios as comprising a single composite generating station, whilst in others it may be appropriate to treat the different elements as comprising two or more distinct generating stations in their own right.

Planning judgements of this kind are a matter of fact and degree and therefore it is difficult to set out any absolute guidance as to when co-located storage should or should not be treated as forming part of a single composite generating station. However, there are a number of factors that planners and developers will likely need to take into account when deciding the correct consenting route for the project. These include (but are not limited to): proximity between assets, presence of shared infrastructure, whether there is a single operator for the assets, the landscaping of the project and whether the assets are technically interoperable. Technical interoperability is likely to be an important factor as where the storage asset can store electricity produced directly from other co-located generation assets this may suggest that the development will constitute a single integrated generating station.

For the purpose of this consultation we use the term 'composite project' to refer to the scenario where the nature of the project is such that a co-located storage asset and another type of generation asset should be treated as forming part of a single generating station. Developers may wish to discuss with the Planning Inspectorate at the pre-application stage whether their project is a composite project if they think that it may, if it is a composite project, be a NSIP.

We recognise that that the current legislation does not expressly define how the capacity of generating stations should be assessed and, as result, it is unclear how the NSIP capacity thresholds should be applied in the case of composite projects involving storage. This was noted in our Call for Evidence which identified that a lack of regulatory clarity may cause uncertainty among industry and planners over the application of the NSIP capacity threshold for composite projects.

As electricity storage is considered to be a form of generation for the purposes of planning for new composite projects involving storage, or storage extensions to existing generating stations, the generating station as a whole could currently be considered a NSIP where the capacities of each element added together exceed the 50MW threshold.¹⁹ Through this consultation we therefore seek views on proposals to clarify how composite projects should be treated in the future.

Adding subsidiary storage to premises where the primary function is not generation

Although this consultation focuses primarily on the treatment of NSIP-scale projects involving storage, we are aware that some stakeholders are unclear about whether planning permission is required to add small-scale electricity storage to premises where the primary function is not generation.

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. However, whether the installation of storage within an existing premises requires planning permission will depend on the specific circumstances of the individual case and it is for the LPA to determine.

¹⁹ The Planning Act 2008 refers to a NSIP project being the construction or extension of a generating station. The 50MW threshold applies to both the construction and the extension.

Permitted development rights grant permission for certain development without the requirement to make a planning application. These rights are set out under the Town and Country Planning (General Permitted Development) (England) Order 2015, as amended. Developers in England should be aware that permitted development rights in Schedule 2 Part 7 of the Order²⁰ may allow the extension of certain existing business premises. The extension may be used to provide additional space to accommodate electricity storage where this is subsidiary 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) as outlined in Schedule 2 Part 7 of the Order. Whether the extension of existing premises to accommodate storage is permitted development will depend on the specific circumstances of the individual case and it is for the LPA to determine.

²⁰ This outlines the type of premises that may be able to make use of these rights and the limits by which permitted development rights can be used.

Chapter 2: Assessment of planning issues for storage

An appropriate threshold for electricity storage

Planning plays a vital role in ensuring that development proposals are located in the right place and at the right time, with its potential impacts tested and mitigated as necessary. Scrutiny of storage within the planning system is important. Planning applications need to be determined at the appropriate level to ensure efficient processing of applications and to avoid distortionary effects on storage deployment. For example, if the capacity threshold for NSIP consent were too low, developers could face greater costs relative to the planning impacts of the particular project, by having to seek a DCO from the SoS rather than planning permission from an LPA. This might result in developers sizing projects sub-optimally to avoid triggering the threshold. In contrast, if the NSIP consent threshold were too high, this could result in inefficiencies in the planning process. For example, developers incurring extra cost and time by going through the TCPA system rather than the NSIP system, as the latter is generally designed to handle larger and more complex infrastructure projects. These inefficiencies could arise due to potential delays, risk of appeals and a costlier process of obtaining all the relevant permits and consents. In addition, too high a threshold would limit the SoS's oversight of projects which have national significance²¹ and there could be disproportionate strains on LPAs. It is therefore essential that any intervention in this area considers a balance between these factors and different parties' responsibilities.

Innovation in the storage sector has progressed considerably over the past couple of decades, with new technologies and battery chemistries emerging and pre-existing technologies becoming more commercially viable. It is likely that new storage technologies will become commercially viable in the future. It is therefore important that any policy reform with respect to planning, does not confer preferential treatment on a specific technology such that it may create comparative disadvantages for other or newly-emerging technologies.

As part of our review we have considered whether the NSIP threshold, which is currently measured in megawatts, is appropriate for storage. For example, we recognise that there is a technical argument that the NSIP threshold for storage could be in megawatt hours (MWh). This metric may better reflect the planning impacts of storage, particularly with regards to the size of the project, and also the duration for which it can store, import and export electricity and therefore contribute towards meeting the demand of the system.

To determine if reform of the threshold is necessary, we have investigated some of the concerns that were raised in response to the 2016 Call for Evidence that preceded publication of the Smart Systems & Flexibility Plan. This involved analysing existing and prospective storage projects and engaging with stakeholders to ascertain whether the existing planning system could be distorting sizing and investment decisions for storage developers significantly more than other types of generation. A summary of this analysis can be found under the heading 'Analysis' from page 15.

²¹ However, in some cases it may be possible for the Secretary of State for Housing, Communities and Local Government (SSHCLG) to call projects in from the TCPA regime under s.77 of the TCPA 1990, for example where the application raises issues of more than local significance.

Regulatory clarity

Government wants to ensure that the regulatory framework is as clear as possible for electricity storage in order to promote confidence in the sector and, in turn, encourage investment and deployment. A firm position on the classification of storage as a generating station was set out in the Plan, but we recognise that further certainty is needed in legislation on the treatment of composite projects involving both storage and another form of generation. This is especially important given the benefits storage can bring in supporting the integration of intermittent low carbon generation.

Clarifying the legislation in this area will reduce the risk of projects being treated inconsistently. This in turn should reduce the risk of disagreements between developers, planners and local communities over the treatment of individual projects, promoting greater certainty for investment decisions on composite projects including storage. We therefore see providing regulatory clarity for composite projects as a priority.

In addition, in line with our Clean Growth Strategy²² we expect to see increasing deployment of intermittent low carbon generation and electricity storage is a key technology for supporting its integration into the energy system. The co-location of storage with other forms of generation (e.g. gas-powered turbines) can also improve operational efficiency and potentially increase the range of valuable services they can provide to the system. Composite projects involving storage and another form of generation can bring these benefits whilst also sharing grid connections and site costs. As such, we recognise that a different consenting process for these projects in the planning system may be appropriate.

As outlined in chapter one we acknowledge that for composite projects, current legislation could require that the generating capacities of any two or more generating assets are added together to determine whether the 50MW NSIP capacity threshold has been exceeded. However, this may incentivise developers to separate projects for planning purposes to avoid triggering the NSIP threshold, particularly where storage with a capacity of up to and including 50MW is being constructed alongside another form of generation. For example, in the case of a composite project consisting of a 49MW solar farm and 5MW of storage, the project could currently be viewed as falling within the NSIP regime. Seeking consent under the NSIP regime in this situation may act as a disincentive to the deployment of a project.

Analysis

Through the Call for Evidence and our ongoing stakeholder engagement we have identified two main issues requiring further consideration in order to improve regulatory clarity and ensure a level playing field for storage in the planning system:

1. the suitability of the unit and level of the 50MW NSIP threshold;
2. the way in which composite projects comprising both storage and another form of generation should be treated with regard to the 50MW NSIP threshold.

Evidence was gathered through stakeholder engagement, from various publications and by collating information on existing and prospective storage projects in Great Britain to help explore these two areas further. This work has informed the analytical assessment which can

²² [Clean Growth Strategy - October 2017](#)

be found in [Annex A](#). The key findings from the evidence gathering exercise are summarised below:

- only around 15%²³ of prospective storage projects that bid into the latest Capacity Market T-4 auction cluster around the 50MW threshold, and most are sized well below this level;
- overall, planning costs were not perceived as a material barrier to deployment, as they constituted a small proportion of total upfront costs (around 1-2%), regardless of whether the project requires a DCO from the SoS or planning permission from the LPA;
- the costs of obtaining planning consent vary significantly on a project-by-project basis (regardless of the consenting regime), however, all else being equal, a similar sized project with low planning impacts could be expected to incur some additional costs by going through the NSIP regime rather than under the TCPA system due to the additional resource needed to produce the applications and the additional time (1-2 years) it takes to obtain consent;
- there is limited evidence to suggest that the existing planning threshold distorts the sizing and investment decisions of storage developers – revenue streams seem to be the biggest driver of these decisions, and connection costs are also an important consideration; and
- developers' main concerns with planning were linked to issues unrelated to the threshold itself, such as Environmental Impact Assessment requirements, a lack of understanding of storage technologies among planners and local communities, and a lack of clarity around how composite projects should be treated.

Some stakeholders highlighted that any such change (in particular reforming the threshold unit) may introduce unnecessary complexities to the planning system. Planners assess a vast range of infrastructure and building proposals, determining each in accordance with regulations, policy and guidance. While it is important to ensure that energy infrastructure is consented at the appropriate level in line with its planning and energy system impacts, this must be balanced with the need to maintain a clear and transparent system for planners to apply, without unnecessary burdens. Changing the threshold for storage would not only add complexity by establishing a bespoke treatment for a relatively small class of such infrastructure, but also in determining how this new threshold should interact with the threshold for other forms of generation when both make up a composite project (i.e. adding MW to MWh, which could require use of formulae to determine whether the NSIP threshold had been exceeded). Our analysis does not indicate that adding further complexity of this kind would be proportionate given that the current threshold does not appear to constrain storage deployment.

In summary, the findings did not indicate that the 50MW NSIP threshold is significantly distorting storage developers' sizing and investment decisions relative to other forms of generation, suggesting that there is not a strong economic rationale to reform the level or unit of the NSIP threshold for standalone storage projects. As discussed above, while we recognise that an alternative threshold unit (such as MWh) may better reflect the technical characteristics

²³ National Grid, Electricity Market Reform Delivery Body. 2018. [Capacity Market Registers. 2017 T-4 registers](#)
Around 300 prospective storage projects bid into this auction of which around 50 were sized between 48-50MW.

of storage, our analysis highlights that it would be disproportionate to change the policy approach relative to the benefits such a change would bring.

Instead, our stakeholder engagement suggests that it would be more effective to focus efforts on simplifying the planning system by addressing any uncertainties over which consenting route would be most appropriate for composite projects involving storage.

Consultation question

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.

Chapter 3: Proposed approach

The analysis we have carried out to date indicates that the most pressing issue relating to the NSIP threshold is the lack of clarity around how this should be applied to composite projects including storage. Providing greater certainty and establishing an appropriate approach to the treatment of these types of projects is therefore our immediate priority. As outlined above, the evidence we have gathered does not indicate that Government intervention to reform the 50MW NSIP capacity threshold for standalone projects is proportionate, given that this threshold is unlikely to significantly impact on sizing and investment decisions.

50MW NSIP capacity threshold for standalone projects

The evidence gathered so far does not indicate that the 50MW planning threshold is significantly distorting storage developers' sizing and investment decisions or inhibiting deployment compared to other forms of generation. We found that the key drivers of sizing and investment decisions are likely to be revenues, upfront capital costs for storage assets as well as other costs such as grid connections (which are likely to be much higher for larger projects needing to connect to networks with higher voltages). Given that we found that planning makes up a minimal proportion of costs (1-2% of upfront costs) we reason that it would be disproportionate to introduce a reform that would add complexity to the system where it doesn't have a significant impact on sizing and investment decisions. On this basis **we propose no changes to the unit or level of the 50MW NSIP capacity threshold in England.**

We are however seeking views on this position and welcome any alternative views and evidence to support these.

Consultation question

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.

Storage co-located as part of a composite project

To reduce legislative uncertainty and the potential for inconsistent treatment of planning applications, the Government believes that it is necessary to establish a clear and appropriate approach to applying the NSIP threshold to composite projects where storage is deployed alongside other forms of non-wind generation as part of a single onshore generating station. The treatment of composite projects involving storage and onshore wind generation is considered separately below.

The Government considers that these types of composite projects can bring benefits to the energy system in terms of maximising the output and operational efficiency of projects (particularly in the case of intermittent low carbon generation) and potentially enabling them to provide a wider range of services (e.g. frequency response services). In addition, developing composite projects may enable developers to make fuller use of existing sites and grid

connections. In these ways, they can contribute to a smarter, cleaner and more efficient system. We want to ensure that the planning system supports these aims by ensuring that the capacity threshold is applied appropriately for composite projects.

Under the Planning Act 2008, the construction or extension of a non-wind onshore generating station constitutes a NSIP if its capacity, when constructed or extended, is more than 50MW. As discussed earlier, we acknowledge that the current legislation does not expressly define how capacity should be assessed and, as a result, it is unclear how this threshold should be applied in the case of composite projects involving storage. Currently, this could mean that for new composite projects involving storage, or extensions of storage to an existing generating station where the capacities of each element added together exceed the 50MW threshold, the generating station as whole will be considered a NSIP. This would be the case even if the storage were being used to maximise the output of intermittent low carbon generation such as solar (e.g. storing excess output from a solar farm and then exporting this at a time when demand is high which is likely to be later in the day when there is minimal generation from solar) or where the storage is providing frequency response services to the Electricity System Operator (which typically involves exporting or importing electricity for just seconds or minutes). In these situations, the way that the storage is being used may not significantly impact the total generating capacity of the project.

The Government believes that the capacity threshold should recognise the distinctive characteristics of storage as a form of generation, noting the benefits that composite projects including storage can have for the energy system. The lack of clarity around the existing NSIP threshold could disincentivise developers from deploying or adding storage where this may cause the project to move from the TCPA to the NSIP regime. It could also lead developers to ensure that co-located projects are treated as separate generating stations falling underneath the NSIP threshold, where they might otherwise be considered a composite nationally significant project. This could be achieved through project design or by submitting separate planning applications for different elements of the project, and developers may opt for this approach even if it were not technically optimal or appropriate in planning terms.

We believe that these situations could be avoided by reforming the threshold for composite projects to disaggregate the capacity of the storage from the capacity of the rest of the generating station. In doing so we also acknowledge the need to ensure consistency of treatment with standalone storage projects which will continue to be subject to the NSIP regime when their capacity is more than 50MW.

We propose that this type of 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.

In order to make these changes we envisage that, when parliamentary time allows, we would make an order using powers contained in s.14 of the Planning Act 2008 to:

1. amend the criteria set out in s.15 of that Act to explicitly recognise composite generating stations in England which will, when constructed or extended, include electricity storage deployed together with other forms of non-wind generation as part of a single generating station; and
2. stipulate a bespoke threshold for this type of generating station so that it is treated as a NSIP where its capacity, excluding any electricity storage, is more than 50MW or the capacity of any electricity storage is more than 50MW.

We would also make an order under s.36 of the Electricity Act 1989 to ensure that the operation of that section is aligned with the new thresholds contained in the Planning Act 2008 in England only.

Onshore wind powered generating stations

As outlined earlier, decision making for English and Welsh onshore wind generating stations was put into the TCPA regime. This was achieved by amending the Planning Act 2008 in 2016 to provide that the construction or extension of a generating station which generates electricity from wind is not classified as a NSIP.²⁴ Similar amendments were made to section 36 of the Electricity Act 1989 to ensure that the treatment of English and Welsh onshore wind generating stations was aligned under both regimes.²⁵ As a result, the current position in England is that an application for the construction or extension of an onshore wind generating station of any capacity must be processed under the TCPA regime.

The policy outlined above seeks to apply the planning threshold more appropriately for composite projects and to avoid disincentivising developers from deploying or adding storage where this may cause the project to move from the TCPA to the NSIP regime. However, this is not applicable for wind. In scenarios where co-located storage is deployed to support the operation of a new or existing onshore wind farm as part of a single generating station we consider that, in line with wider Government policy, it remains appropriate for this type of project to continue to be consented under the TCPA regime. As such we are not proposing that composite generating stations involving both storage and wind generation would be subject to the new threshold outlined above.

The Government believes that the existing exemptions in section 15 (as amended) of the Planning Act 2008 and section 36(1D) of the Electricity Act 1989 apply to any onshore generating station which, when viewed as a whole, generates electricity from wind. We consider that the existing legislation is sufficient to exempt from the NSIP regime the construction or extension of onshore wind farms which include an element of storage. However, as part of this consultation we are seeking views on whether the existing exemptions are sufficiently clear for this purpose and whether they are effective to cover the types of composite project involving wind and storage which are likely to come forward in future.

Consultation questions

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.

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.

²⁴ See the Infrastructure Planning (Onshore Wind Generating Stations) Order 2016 (S.I. 2016/306)

²⁵ See section 78 of the Energy Act 2016

In summary our proposals for amending the legislation underpinning the planning system in England are to:

- **retain the 50MW NSIP threshold that applies to standalone storage projects;** and
- **establish a new capacity threshold for composite projects including storage and another form of generation,**²⁶ such that composite projects 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.

Other considerations

This consultation has put forward our proposals to address uncertainties and provide greater regulatory clarity for the treatment of storage in the planning system based on the analysis and stakeholder engagement that we have carried out to date. We will continue to engage with stakeholders to ensure that there is regulatory clarity and that storage can operate on a level playing field with other flexible technologies and conventional forms of generation.

We also welcome work that industry is doing to consider the planning treatment of storage. For example, the Royal Town Planning Institute (South West) has commissioned Regen, The Landmark Practice, Pell Frischmann and the University of the West of England to undertake a research project on planning for a smart energy future. The research aims to understand the potential for the planning system to take a proactive, forward-looking and positive approach to supporting the UK's transition to a smart energy future.

Consultation question

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.

²⁶ Not including onshore wind.

Catalogue of 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.

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.

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.

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.

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.

Annex A: An analytical assessment of the impacts of the preferred policy option considered in this consultation

This section outlines our preliminary assessment of the potential costs and benefits of the preferred option to reform the treatment of composite projects involving electricity storage and other forms of generation.

1. Policy Overview and Rationale for Intervention

In England, electricity storage facilities with a generating capacity of up to and including 50MW currently require planning permission from local planning authorities, while those of more than 50MW constitute 'nationally significant' developments requiring consent from the Secretary of State. Recent evidence indicates a lack of clarity over how composite storage projects should be treated where the combined capacities of the storage and other onsite generating technologies are more than 50MW.

This policy aims to remedy the current ambiguity, reduce any potential additional costs on developers seeking to co-locate storage projects and ensure consistent treatment of storage in the planning system without introducing disproportionate complexity to its application. The preferred option is to retain the 50MW threshold for standalone projects but introduce a new capacity threshold for composite projects (i.e. the threshold for a composite project would be triggered where either the storage or other generation element is more than 50MW individually). Other policy options that were considered, including taking no action, were discounted on the basis that they did not meet the policy aims. The intended outcomes of the policy are set out in Chapters 2 and 3. These are: to increase investor confidence in the sector, to reduce potential additional costs on some storage developers seeking to co-locate, and to help ensure consistent treatment of storage by providing clarity without introducing disproportionate complexities into the planning system. This approach has received support from several stakeholders with whom we have already engaged and this consultation will help ensure wider stakeholder views are obtained and more robust evidence is gathered.

Reviewing the planning system for electricity storage is one of a series of commitments that the Government and Ofgem made in the 2017 Smart Systems and Flexibility Plan and the subsequent Progress Update on that plan.²⁷ The set of actions in the Plan will help remove regulatory and policy barriers for smart technologies such as storage and demand-side response and thereby support their deployment.

The key policy options that have been considered are as follows:

Option 1 – Do nothing (counterfactual scenario)

This option has been discounted on the basis that it does not support the policy objectives and intended outcomes outlined in the previous sections to: increase investor confidence, provide

²⁷ HM Government & Ofgem. 2017 and 2018. [Upgrading our Energy System – Smart Systems and Flexibility Plan](#) and [Upgrading our Energy System – Smart Systems and Flexibility Plan: Progress Update](#)

the sector with legal clarity, reduce the risk of disagreements between developers, LPAs and local communities, reduce the potential additional costs to some developers seeking to co-locate storage with other forms of generation, and to ensure consistent consideration of storage in the planning system. Under this option there would still be a lack of clarity over how applications for composite projects should be treated.

Option 2 – Non-legislative option to provide guidance on application of NSIP threshold for composite scenarios

Guidance could help to clarify to some extent how the existing legislative thresholds should be applied to composite projects involving storage. However, this option would not be sufficient to bring about any substantive amendments to those thresholds to address this type of project more generally (i.e. in a way which recognises the distinctive characteristics of storage as a form of generation and the benefits that composite projects including storage can bring to the energy system).

Option 3 – Amend the unit of the threshold (to MWh instead of MW)

This option was discounted on the basis that the evidence gathered to date indicates that the threshold is not significantly distorting sizing and investment decisions relative to other forms of generation. In addition, changing the threshold for storage would not only add complexity by establishing a bespoke treatment for a relatively small class of such infrastructure, but also in determining how this new threshold should interact with the threshold for other forms of generation when both make up a composite project (i.e. adding MW to MWh, which could require use of formulae to determine whether the NSIP threshold had been exceeded).

Option 4 – Raise the level of the threshold

The threshold could be raised to a different level for electricity storage. However, the evidence gathered to date indicates that the threshold is not significantly distorting sizing and investment decisions relative to other forms of generation. This option was discounted on the basis that it would be disproportionate to reform the level of the threshold relative to the benefits of doing so. This option is considered unlikely to achieve the policy objectives and intended outcomes without conferring a more significant advantage to storage developers relative to other forms of generation.

Option 5 – Preferred option: new capacity threshold for composite projects including storage

This option is to retain the 50MW threshold for standalone projects, but introduce a new threshold for composite projects including storage. It is the preferred option, as it meets the policy objectives and intended outcomes set out in the previous paragraphs without intervening disproportionately in the planning system. It also does not confer a potentially unfair advantage on storage relative to other forms of generation, yet recognises that the technology can be used to maximise the outputs of other forms of generation by applying the 50MW threshold more appropriately for developers looking to construct storage as part of a composite project.

2. Direct Costs to Business

This section only presents the direct costs and benefits of the preferred option (option 5 – new capacity threshold for composite projects) relative to the counterfactual as the previous section outlined why the alternative policy options have been discounted thus far.

Familiarisation costs (one-off costs to businesses interested in storage)

There may be one-off familiarisation costs for market participants to read and understand the proposed legislation. These are estimated to be approximately £70,000,²⁸ using a central estimate of the number of businesses who are likely to read the proposed legislation (150)²⁹ and assuming each would require a full day (8 hours) of additional legal and managerial resource at £65 per hour.³⁰

Direct costs to business (one-off cost savings to businesses investing in storage)

Based on the evidence gathered to date, planning costs make up a small proportion of the upfront costs of a storage project (around 1-2%) regardless of whether it requires consent from the Secretary of State or the Local Planning Authority. The existing NSIP threshold does not seem to be a significant factor in developers' investment and sizing decisions (instead revenue streams are likely to be the biggest influencers). However, it is expected that the existing system may have an influence on whether or how project developers choose to co-locate with other types of generation.

Based on the above, this analysis assumes the following regarding the possible behavioural impacts of the preferred policy option:

- decisions to invest in storage (rather than not) will not be directly affected by the proposed measure; and
- decisions on whether to co-locate with other forms of generation may be affected by this policy.

This analysis has not factored in the possibility that the existing system may be incentivising project developers to submit separate rather than joint planning applications to avoid triggering the NSIP threshold. This is assessed as a possible down side risk to the illustrative estimates that have been presented, however we welcome any alternative or supportive views on this.

Relative to the assumed counterfactual it is estimated that the proposed measure could result in cost savings to two types of businesses looking to deploy in front of the meter storage:

Business Type A:

In the counterfactual, this type would have invested in storage co-located with another form of generation, where the joint capacity of this composite project was more than the threshold of 50MW, regardless of having to obtain a DCO from the Secretary of State. Under the proposed option this type would go through the TCPA system rather than the NSIP regime.

²⁸ Discounted, 2017 prices and base year. Familiarisation costs assumed to be incurred in 2019.

²⁹ The number of interested parties in 2019 (who would likely read the new legislation) is based on the number of responses to the [Government and Regulator's Call for Evidence in 2016](#).

³⁰ Undiscounted, including non-wage-costs of around 20%. Wage costs based on [ONS – ASHE: Table 14.5a](#) (legal profession and corporate managers and directors at the 90th percentile).

This analysis assumes that all else equal this composite project could benefit from some cost savings given that in the counterfactual; it is assumed that the full planning inspectorate process under the NSIP regime would be required and this could require additional resource to produce the applications and additional time (1-2 years) to obtain full consent.

The cost of obtaining planning consent is expected to vary significantly on a project-by-project basis (regardless of the consenting regime), however for illustrative purposes, the potential one-off planning cost savings to each of these types of businesses has been estimated to be in the order of £800,000 (with a range of £400,000 to £1,600,000 to reflect the uncertainty regarding the variation of planning costs on a project-by-project basis).³¹ We are however seeking views on this and welcome any alternative views on the potential additional costs (if any) of obtaining consent under the NSIP regime rather than the TCPA system for co-located projects that are likely to be deployed going forward.

Business Type B:

In the counterfactual, this type would have invested in standalone storage assets. The proposed measure incentivises this type to co-locate and make more efficient use of existing sites and spare grid connection capacity without having to go through the NSIP regime. Similar to planning costs, infrastructure costs are expected to vary significantly on a project-by-project basis, however for illustrative purposes, the potential one-off cost savings to each of these types of business is estimated to be around £200,000 (with a range of £100,000 to £400,000 to reflect the uncertainty regarding the variation of infrastructure costs on a project-by-project basis).³² We are however seeking views on this and welcome any alternative views on the potential infrastructure savings for co-located projects that are likely to be deployed going forward.

The expected number of storage projects deployed in any given year over the appraisal is uncertain and is expected to vary over time as this will depend on future revenue streams and business models. National Grid's 2018 FES scenarios predict up to 5GW of new storage could be deployed by 2030³³ (or 500MW per annum on average); if the existing average size of new storage of 20MW³⁴ remains broadly constant over the appraisal period, this could mean that on average around 25 projects could be commissioned per annum over this period.

Given the uncertainty around how many storage projects are likely to be either Business Type A or Type B going forward, the analysis conservatively assumes that around 10 projects could be either Type A or B (split evenly between types), with a range of around 5-20 projects per annum that are either Type A or B assumed for the low and high scenarios.

To illustrate the potential cost savings over a 10 year appraisal period (in addition to the year of familiarisation), the total discounted net benefit to businesses over the appraisal is estimated to be in the order of £40m with a range of £10m-160m to reflect the uncertainties around the number and type of businesses that this policy is likely to affect as well as the uncertainties

³¹ Undiscounted, 2017 prices. This is not a bottom-up estimate, this is a simplifying assumption based on an average estimate of planning costs for <50MW storage project and average planning cost estimates for >50MW storage projects which were used as a proxy for the possible additional planning costs for co-located projects consented under the NSIP regime rather than the TCPA system.

³² Undiscounted, 2017 prices. This is not a bottom-up estimate, it is a simplifying assumption based on half the estimated range of the possible infrastructure costs for a 50MW/50MWh storage project to illustrate the potential cost savings for a co-located project relative to a standalone project.

³³ National Grid, 2018 [Future Energy Scenarios \(FES\), Data Workbook](#), Two degrees and community renewables scenarios.

³⁴ National Grid, Electricity Market Reform Delivery Body.2018. [Capacity Market Registers. 2017 T-4 registers](#)

around the potential cost savings to these businesses.³⁵ The annual discounted savings are estimated to be around £4m.

It should be noted that the estimated range for the number of businesses that are likely to be affected by this policy may be considered optimistic. By the end of 2017 we estimate that only around 10 storage projects³⁶ (excluding pumped hydro) were commercially deployed in England, however for this analysis we assume that just over double this amount (or 25 storage projects) are likely to deploy annually going forward and that almost half of these could be affected by this policy, which again could be considered optimistic. In addition, the assumed counterfactual does not factor in the possible scenario of developers treating co-located projects as separate generating stations falling underneath the NSIP threshold where they might otherwise be considered a composite nationally significant project or storage developers choosing to co-locate with NSIP scale generating stations. These downside risks would reduce the number of businesses that are likely to be affected and consequently reduce the expected cost-savings from the preferred policy option. As a result, it is currently considered that the likelihood of the high and low scenarios are not equal and that it is more likely that actual benefit could be at the lower end of the range. However, the level of analysis is considered proportionate and fit-for-purpose for this preliminary assessment and will be updated with any additional evidence that is gathered through the consultation.

3. Wider Impacts and Transfers

This proposed measure has the potential to result in an indirect benefit in the form of increased investor confidence for the storage sector. This is through sending a positive signal to stakeholders looking to co-locate storage that Government is committed to supporting the deployment of storage by providing legal clarity to the sector and applying the 50MW threshold more appropriately for composite projects, which could reduce any potential additional costs to developers looking to co-locate. The proposed measure will reduce the potential disincentive for some developers looking to co-locate storage with another form of generation (both conventional and intermittent), which could offer additional benefits to the system and consumers through the increased range of services that the composite project could offer as well as the improved operational efficiency.

The proposed measure will also demonstrate that the Government is committed to developing a supportive regulatory framework for storage by providing clarity over how composite projects should be consented in the planning system and helping to ensure consistency in approaches across England. It has not been possible to quantify this potential indirect benefit of increased investor confidence, though it is considered reasonable to assume that this would have a net beneficial impact.

It is expected that the cost of delivering the legislation will be absorbed within existing resources and consequently, the additional costs to broader government are expected to be zero or negligible.

³⁵ Appraisal period 10 years (2020 – 2029) and one year of familiarisation in 2019, discount rate of 3.5% was used and figures are in 2017 prices and base year. The equivalent annualised cost to business is around negative £4m with a range of negative £1m-15mm (2015 base year and 2014 prices).

³⁶ Excluding smaller scale storage (i.e. less than 5MW)

4. Impacts on Small Businesses

The proposed measure will apply to all electricity storage developers regardless of the size of the business. This measure is not expected to result in a disproportionate impact on small businesses.

5. Key assumptions and uncertainties for initial assessment

The analysis that has been carried out for the preliminary assessment of the costs and benefits of the preferred option is proportionate and fit-for-purpose as it illustrates the possible scale of impacts of the proposed measure. Evidence gathered through the consultation will be used to improve this analysis where appropriate.

Table 1: Key inputs, assumptions and uncertainties

Assumptions / inputs	Detail	Source
Appraisal period	1 year of familiarisation (2019) and 10 years (2020–2029) for policy appraisal	Standard assumption
Discount rate	3.5%	Standard assumption
Price Base and Price Year	2017 unless stated otherwise	Standard assumption
Familiarisation costs	<ul style="list-style-type: none"> - Estimated number of parties who would likely read the legislation: 150 - Additional resource required to read and understand the legislation: 1 full day (8 hours) of additional legal and managerial resource - Wage rate £65 per hour 	<ul style="list-style-type: none"> - BEIS estimates on number of parties likely to incur familiarisation costs is based on the number of responses to the Government and Regulator's Call for Evidence in 2016. - Wage costs based on ONS – ASHE: Table 14.5a (legal profession and corporate managers and directors at the 90th percentile). - Non-wage cost uplift factor of 20% applied.
Additional cost of obtaining consent under the NSIP regime	<ul style="list-style-type: none"> - Illustrative potential additional cost of going through NSIP regime rather than the TCPA system per co-located project: £800,000 (Range £400,000-£1,600,000). - This is not a bottom up estimate, it is a simplifying assumption based on an average estimate of planning costs for <50MW storage project (£200,000) and an average planning cost estimate for >50MW storage projects (£1,000,000). These estimates were used as a proxy for the possible additional planning costs (due to possible additional resource required to produce applications and additional time to obtain full consent) for composite storage projects that breach the NSIP threshold. - In reality, these will depend on a number of factors that are project specific: including but not limited to the number of permits/consents, consultations, environmental assessments and planning inspectors required. A range (+100%/-50% on the central estimate) has been used to reflect this uncertainty. - We are however seeking views on this and welcome any alternative views on the potential additional costs (if any) of obtaining consent under the NSIP regime rather than 	BEIS estimates based on internal figures.

Proposals regarding the planning systems for electricity storage: consultation

the TCPA system for co-located projects that are likely to be deployed going forward.

Infrastructure cost savings from co-location

- Illustrative potential infrastructure cost savings per co-located project: £200,000 (range £100,000-400,000).

- This is not a bottom up estimate, it is a simplifying assumption based on half the estimated range of the possible infrastructure costs for a 50MW/50MWh storage project to illustrate the potential cost savings for a co-located project relative to a standalone project.

- These costs are expected to vary between different types of storage projects, a range (+100%/-50% on the central estimate) has been used to reflect some of this uncertainty. We are however seeking views on this and welcome any alternative views on the potential infrastructure cost savings for co-located projects.

BEIS estimates based on internal figures.

Number of storage projects affected by the proposed policy

- Illustrative potential number of storage projects affected by the preferred option: 10 (range around 5-20) per annum.

- The number of projects affected by this policy in each year of the appraisal period is uncertain. There may be more projects or fewer projects than is currently assumed in the central scenario. A range has been used to capture some of this uncertainty.

- The central estimate may be considered optimistic given that the projected total number of storage projects that could be affected by this policy currently matches the total number of estimated storage projects deployed by the end of 2017 (excluding pumped hydro and greater than 5MW).

- In addition, the analysis does not consider the fact that some developers would have submitted separate planning applications for each constituent part of a composite project in the counterfactual which would reduce the estimated savings of the proposed measure.

Sources underlying the estimate

Predicted storage deployment by 2030: ~5GW

- National Grid, [2018 Future Energy Scenarios \(FES\), Data Workbook](#), Two degrees and community renewables scenarios.

- [2017 Energy and Emissions Projections, Annex H](#)

Average size of prospective storage projects: 20MW

- National Grid, Electricity Market Reform Delivery Body, 2018. [Capacity Market Registers. 2017 T-4 registers](#)

Around 25 storage projects are assumed to be commissioned per annum on average. This was based on the estimate of around 500MW of storage that could be deployed per annum on average out to 2030 (given the expected cumulative capacity of 5GW and average size assumption of 20MW)

Annex B – Data Protection

Personal data

The following is to explain your rights and give you the information you are be entitled to under the Data Protection Act 2018 and General Data Protection Regulation (GDPR).

Note that this section only refers to your personal data (your name address and anything that could be used to identify you personally) not the content of your response to the consultation.

1. The identity of the data controller and contact details of our Data Protection Officer

The data controller for your personal data is the Department for Business, Energy & Industrial Strategy (BEIS). You can contact the BEIS Data Protection Officer at:

BEIS Data Protection Officer
Department for Business, Energy and Industrial Strategy
1 Victoria Street
London
SW1H 0ET

Email: dataprotection@beis.gov.uk

2. Why we are collecting your personal data

Your personal data is being collected as an essential part of the consultation process, so that we can contact you regarding your response and for statistical purposes. We may also use it to contact you about related matters.

3. Our legal basis for processing your personal data

The Data Protection Act 2018 states that, as a government department, BEIS may process personal data as necessary for the effective performance of a task carried out in the public interest. i.e. a consultation.

4. With whom we will be sharing your personal data

We will not be sharing any of your personal data with organisations outside of BEIS.

5. For how long we will keep your personal data, or criteria used to determine the retention period.

We will retain consultation response information until our work on the subject matter of the consultation is complete.

6. Your rights, e.g. access, rectification, erasure

The data we are collecting is your personal data, and you have considerable say over what happens to it. You have the right to:

- You have the right to request information about how your personal data are processed, and to request a copy of that personal data.

- You have the right to request that any inaccuracies in your personal data are rectified without delay.
- You have the right to request that any incomplete personal data are completed, including by means of a supplementary statement.
- You have the right to request that your personal data are erased if there is no longer a justification for them to be processed.
- You have the right in certain circumstances (for example, where accuracy is contested) to request that the processing of your personal data is restricted.
- You have the right to object to the processing of your personal data where it is processed for direct marketing purposes.
- You have the right to object to the processing of your personal data
- You have a right to lodge a complaint with the independent Information Commissioner (ICO) if you think we are not handling your data fairly or in accordance with the law.

You can contact the ICO at <https://ico.org.uk/>, or telephone 0303 123 1113.

Information Commissioner's Office, Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF

Any complaint to the Information Commissioner is without prejudice to your right to seek redress through the courts.

- 6. Your personal data will not be sent overseas**
- 7. Your personal data will not be used for any automated decision making.**
- 8. Your personal data will be stored in a secure government IT system.**

This consultation is available from: www.gov.uk/government/consultations/the-treatment-of-electricity-storage-within-the-planning-system

If you need a version of this document in a more accessible format, please email enquiries@beis.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.