

Grid Scale Energy Storage System Planning Guidance consultation

Introduction

Grid scale Battery Energy Storage Systems (BESS) are a fundamental part of the UK's move toward a sustainable energy system. This guidance supersedes and seeks to build on the original guidance document that was published in 2023 (Version 1). The guidance is based upon a range of supporting materials including academic research, national and international standards, case studies, and industry guidance. The content of this guidance is the result of analysis of that supporting material with subsequent professional judgement applied.

This document has been produced for the use of Fire and Rescue Services (FRS) and Local Authority Planners to support community and firefighter safety. In referring to this guidance, NFCC seek to support FRS to ensure they are aware of the location of all grid scale BESS in their area. This is to allow for effective operational pre planning to take place ensuring that FRS requirements are proportionate to the hazard and risk whilst not being overly burdensome to the developer of the BESS installation. It is hoped that the guidance will promote consistency of approach across FRS.

We recommend that you thoroughly read the document before completing your review. The document has been submitted as a word document with line numbers, please indicate the appropriate line numbers in your response. Please provide sufficient detail in your comments for us to make appropriate amendments.

If you would like to prepare your response, you can review the questions in advance **[insert PDF of questions]**. There is also a save and continue function that can be used throughout the consultation so that you can return to your response later and pick up where you left off.

This survey will close end of the day **Thursday 22 August 2024**. If you have any questions, please contact the NFCC Policy team.

Thank you for taking the time to respond to this consultation.

Privacy statement

The NFCC uses your data expressly for the purposes outlined in this introduction. Your contact details will only be used to clarify your response or request additional information relating to this survey. The NFCC complies with GDPR policies for the collection, processing, and storage of personal data.

Your details

1. Please select your Fire and Rescue Service:
I am not part of a Fire and Rescue Service
Avon
Bedfordshire
Buckinghamshire
Cambridgeshire
Cheshire
Cleveland
Cornwall
County Durham and Darlington
Cumbria
Derbyshire
Devon and Somerset
Dorset and Wiltshire
East Sussex
Essex
Gloucestershire
Greater Manchester
Guernsey
Hampshire and Isle of Wight
Hereford and Worcester
Hertfordshire
Humberside
Isle of Man
Isles of Scilly
Jersey
Kent
Lancashire
Leicestershire
Lincolnshire
London Fire Brigade

Merseyside	
Mid and West Wales	
Norfolk	
North Wales	
North Yorkshire	
Northamptonshire	
Northern Ireland	
Northumberland	
Nottinghamshire	
Oxfordshire	
Royal Berkshire	
Scottish Fire and Rescue Service	
Shropshire	
South Wales	
South Yorkshire	
Staffordshire	
Suffolk	
Surrey	
Tyne and Wear	
Warwickshire	
West Midlands	
West Sussex	
West Yorkshire	
. If you <u>are not part of an FRS,</u> please provide your contact details:	
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Service/Organisation	
Role/Job title	
mail address	

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Data	(1-1-0)				
Role/	Job title				
Emai	l address				
4. Ar	e you respondi	ng on behalf of your	organ	isation or as an individual?	
	On behalf of my	organisation			
	As an individual	organication			
/	ns all illuividual				
5. Ar	e you the single	e point of contact for	your	service?	
,					
	Yes				
	No				
	Not applicable -	I don't work in service			
6. Ar	e you happy for	r us to contact you re	egardi	ng your response to this consulta	ation?
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	Yes				
	No				
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	Direct email noti	fication		General communications from the	NFCC
	NFCC Committe	e or working group		NFCC Members newsletter	
	NFCC Workplac	e		Notified through your organisation	
	Service single po	oint of contact (SPOC)	Twitter	
	Other (please sp		,		
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3. If you are part of an FRS, please provide your contact details:

service:	
Name:	
Role/Job title:	
Email:	

8. If you are not the single point of contact, please provide details for the SPoC for your

Introduction and Scope

These questions are to gain your feedback on the <u>Introduction</u> and <u>Scope</u> sections of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

9. Do you agree with the content in the <u>Introduction</u> and <u>Scope</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
10. The language in the <u>Introduction</u> and <u>Scope</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

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These questions are to gain your feedback on the <u>Principles</u> section of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

11. Do you agree with the content in the <u>Principles</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
12. The language in the <u>Principles</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

FRS Organisational Requirements

These questions are to gain your feedback on the <u>FRS Organisational</u> <u>Requirements</u> section of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

13. Do you agree with the content in the FRS Organisational Requirements?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
14. The language in the FRS Organisational Requirements is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

Planning Approval Process

These questions are to gain your feedback on the <u>Planning Approval Process</u> and <u>Information requirements</u> sections of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

15. Do you agree with the content in the <u>Planning Approval Process</u> and <u>Information requirements</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
16. The language in the <u>Planning Approval Process</u> and <u>Information requirements</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

System design, construction, testing and decommissioning

These questions are to gain your feedback on the <u>System design</u>, <u>construction</u>, <u>testing</u> <u>and decommissioning</u> section of the <u>Grid Scale Energy Storage System Planning</u> <u>Guidance</u>.

17. Do you agree with the content in the <u>System design, construction, testing and decommissioning</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
18. The language in the <u>System design, construction, testing and decommissioning</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

Battery Chemistry

These questions are to gain your feedback on the <u>Battery Chemistry</u> section of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

19. Do you agree with the content in the <u>Battery Chemistry</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
20. The language in the <u>Battery Chemistry</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

Detection and monitoring

These questions are to gain your feedback on the <u>Detection and monitoring</u> section of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

21. Do you agree with the content in the <u>Detection and monitoring</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
22. The language in the <u>Detection and monitoring</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

Suppression and Suppression Systems

These questions are to gain your feedback on the <u>Suppression</u> and <u>Suppression Systems</u> sections of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

This covers sections:

- Suppression
- Suppression systems
- Inert Gaseous Suppression System
- Water based suppression system

23. Do you agree with the content in the <u>Suppression</u> and <u>Suppression Systems</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?

Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?
Explosion Control (Deflagration Protection)
These questions are to gain your feedback on the Explosion Control (Deflagration Protection) section of the Grid Scale Energy Storage System Planning Guidance .
To what extent do you agree or disagree, if at all, with the following statements relating to this section:
25. Do you agree with the content in the Explosion Control (Deflagration Protection)?
Agree
Agree Neither agree nor disagree
Neither agree nor disagree
Neither agree nor disagree Disagree
 Neither agree nor disagree Disagree Don't know If you disagree, do you have any feedback regarding anything that is missing or erroneous in this
 Neither agree nor disagree Disagree Don't know If you disagree, do you have any feedback regarding anything that is missing or erroneous in this
 Neither agree nor disagree Disagree Don't know If you disagree, do you have any feedback regarding anything that is missing or erroneous in this
 Neither agree nor disagree Disagree Don't know If you disagree, do you have any feedback regarding anything that is missing or erroneous in this

Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

26. The language in the Explosion Control (Deflagration Protection) is easy to understand.

Site Location and Access

These questions are to gain your feedback on the <u>Site Location</u> and <u>Access</u> sections of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

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- Site Location
- Site Access

27. Do you agree with the content in the <u>Site Location</u> and <u>Access</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
28. The language in the <u>Site Location</u> and <u>Access</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

Spacing between BESS and Spacing to other buildings beyond perimeter of site

These questions are to gain your feedback on the <u>Spacing between BESS</u> and <u>Spacing to other buildings beyond perimeter of site</u> sections of the <u>Grid Scale Energy Storage</u> <u>System Planning Guidance</u>.

29. Do you agree with the content in the <u>Spacing between BESS</u> and <u>Spacing to other buildings beyond perimeter of site</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
30. The language in the Spacing between BESS and Spacing to other buildings beyond
30. The language in the <u>Spacing between BESS</u> and <u>Spacing to other buildings beyond</u> <u>perimeter of site</u> is easy to understand.
30. The language in the Spacing between BESS and Spacing to other buildings beyond perimeter of site is easy to understand. Agree
perimeter of site is easy to understand.
perimeter of site is easy to understand. Agree
perimeter of site is easy to understand. Agree Neither agree nor disagree
perimeter of site is easy to understand. Agree Neither agree nor disagree Disagree
perimeter of site is easy to understand. Agree Neither agree nor disagree Disagree Don't know
perimeter of site is easy to understand. Agree Neither agree nor disagree Disagree Don't know
perimeter of site is easy to understand. Agree Neither agree nor disagree Disagree Don't know

Site Conditions

These questions are to gain your feedback on the <u>Site Conditions</u> section of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

31. Do you agree with the content in the <u>Site Conditions</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
32. The language in the <u>Site Conditions</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

Water Supplies

These questions are to gain your feedback on the <u>Water Supplies</u> section of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

33. Do you agree with the content in the Water Supplies?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
34. The language in the <u>Water Supplies</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

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These questions are to gain your feedback on the <u>Signage</u> section of the <u>Grid Scale</u> <u>Energy Storage System Planning Guidance</u>.

35. Do you agree with the content in the <u>Signage</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
36. The language in the <u>Signage</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

Emergency Response Plan

These questions are to gain your feedback on the <u>Emergency Response Plan</u> section of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

To what extent do you agree or disagree, if at all, with the following statements relating to this section: 37. Do you agree with the content in the Emergency Response Plan? Agree Neither agree nor disagree Disagree Don't know If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section? 38. The language in the **Emergency Response Plan** is easy to understand. Agree Neither agree nor disagree Disagree Don't know If you disagree, do you have any feedback for how we could improve the language in this section?

Site Plans and Maps

These questions are to gain your feedback on the <u>Site Plans and Maps</u> section of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

39. Do you agree with the content in the <u>Site Plans and Maps</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
40. The language in the <u>Site Plans and Maps</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

Environmental impacts

These questions are to gain your feedback on the <u>Environmental impacts</u> and <u>Recovery</u> sections of the <u>Grid Scale Energy Storage System Planning Guidance</u>.

41. Do you agree with the content in the <u>Environmental impacts</u> and <u>Recovery</u> ?
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback regarding anything that is missing or erroneous in this section?
42. The language in the <u>Environmental impacts</u> and <u>Recovery</u> is easy to understand.
Agree
Neither agree nor disagree
Disagree
Don't know
If you disagree, do you have any feedback for how we could improve the language in this section?

Final question

Thank you f	or taking	the time to	respond	to this	consultation.	Your	feedback is	greatly
appreciated								

B. Please use this space to provide any other feedback you have on the <u>Grid Scale Ener</u> corage System Planning Guidance.										