Energy Technology List

Department for Energy Security & Net Zero

## Product application checklist

Please complete in BLOCK CAPITALS

# Battery Energy Storage

Manufacturer/supplier name: .....

Applicant's name: .....

Telephone number: .....

**Product information**

Product name: .....

Model number: .....

Please complete each section of this form based on your product's characteristics. Incomplete or incorrect data could affect the processing of your product application.

Each product application should be made on a separate form unless a product's design characteristics are common to all the products. In this instance a single application can be made for multiple products.

| 1. Product testing and certification | No | Yes |
|---|---|---|

**Where type testing has been applied to demonstrate product performance ensure that the information supplied is sufficient to demonstrate the performance of all the products for which applications are being made.**

**1.1** **Does the product have an appropriate Conformity Assessment mark?** ☐ ☐

**If so, to which directive?** .....

**1.2** **How was the product(s) performance tested?** *(Please select one).*

a) Tested in the manufacturers in-house laboratory, in accordance with a registered Quality Management System (i.e. 'self-tested'). ☐

b) Tested in a laboratory either in house or on-site, witnessed by an independent body (i.e. 'witnessed testing'). ☐

c) Tested by an independent laboratory (i.e. 'independent testing'). ☐

d) Tested as part of on-site acceptance tests or field trials, because laboratory testing was not practical due to product size, or lack of a suitable laboratory. ☐

e) Representative testing. ☐

*Please refer to the ETL Testing Framework for details of the requirements that must be satisfied for each of these product testing options.*

**1.3** **Where product testing has been done in accordance with a registered Quality Management System, what is its registration number?**

.....

**1.4** **Where product testing has been witnessed by an independent body, what was the name of the witness?**
*(Please include contact details).*

**1.5** **Where products have been tested by an independent laboratory:**

a) What is the name of the independent laboratory?

b) What is the laboratory's registration number (where accredited)?

**1.6** **Is the application for:** *(please select one)*

a) A product submitted with individual performance test data *(go to question 2)*. ☐

b) A product with the same constructional design as other products where 'Representative models' have been tested and are listed on the ETPL. ☐

c) A product with the same constructional design as other products that are not yet on the ETPL, and where performance test data is being submitted for 'Representative models' with this application. ☐

**1.7** **What are the 'Representative models':**

| **ETL Product ID number** | **Product model numbers** |
|---|---|
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*Where applications are being made for two or more models that are variants of the same basic design, test data may be submitted for a single 'representative model' provided that all variants:*

- *Use the same power conversion subsystem, control subsystem, auxiliary subsystem, and connection terminal.*
- *Use the same battery technology for energy storage scaled to different capacities by adding/removing cells of the same battery technology.*

*It should be noted that:*

- *If a manufacturer voluntarily removes the representative model from the ETL then other products linked with that representative model may or may not be permitted to remain on the ETL.*
- *If any product submitted under these representative model rules is later found not to meet the performance criteria when independently tested, then all products based on the same representative model will be removed from the ETL.*

| 2. | Product type and features | N/A | No | Yes |
|---|---|---|---|---|
| 2.1 | **Product category** *(please tick one)*: | | | |
| | a) Office building (< 20,000 kWh) | | | ☐ |
| | b) Small Industrial/ Large business (< 90,000 kWh) | | | ☐ |
| | c) Large Industrial (< 250,000 kWh) | | | ☐ |
| 2.17 | **What is the product's capacity in kWh?** | | | |
| | ..... | | | |

| 3. | Product performance | No | Yes |
|---|---|---|---|
| 3.1 | **Does the product have an energy density of no less than 150 kWh/ton?** | ☐ | ☐ |
| | **Please provide the product's energy density in kWh/ton:** *(ton to refer to total battery energy storage mass)* | | |
| | ..... | | |
| 3.2 | **Does the product have a lifespan no less than 10,000 cycles before reaching 60% of rated capacity?** | ☐ | ☐ |
| | **Please provide the product's lifespan in *number of cycles:*** | | |
| | ..... | | |
| 3.3 | **Does the product have a round-trip energy efficiency of no less than 95%?** | ☐ | ☐ |
| | **Please provide the product's round-trip efficiency:** | | |
| | ..... | | |
| 3.4 | **Is the product's performance tested using the following standard:** | | |
| | a) BS EN IEC 62933-2-1:2018 | ☐ | ☐ |
| | b) Other standard | ☐ | ☐ |
| 3.5 | **Please confirm that during testing the conditions that the test was conducted under were as followed:** *(this is in line with the conditions defined in BS EN IEC 62933-2-1:2018)* | | |
| | a) Ambient air temperature 25°C | ☐ | ☐ |
| | b) Altitude ≤ 1000m | ☐ | ☐ |
| | c) Humidity ≤ 95% with no condensation | ☐ | ☐ |
| 3.6 | **Is the capacity of the battery energy storage system calculated following 'the actual energy capacity test' found in the standard BS EN IEC 62933-2-1:2018 at 6.2.1?** | ☐ | ☐ |
| 3.7 | **Is the energy density of the battery energy storage system calculated following the 'Input and output power rating test' found in the standard BS EN IEC 62933-2-1:2018 at 6.2.2?** | ☐ | ☐ |
| 3.8 | **Is the lifespan of the battery energy storage system provided by the supplier as described in the standard BS EN IEC 62933-2-1:2018 at 5.2.4?** | ☐ | ☐ |
| 3.9 | **Is the round-trip efficiency of the battery energy storage system calculated following the 'round-trip efficiency test' found in the standard BS EN IEC 62933-2-1:2018 at 6.2.3?** | ☐ | ☐ |

## 4. Summary of documents to be included

| No | Yes |
|---|---|

**Please send ONE copy of each of the following documents:**

**If the relevant information in support of the questions above is contained within a larger document, please indicate the location of the relevant information. Note that all documentation submitted must directly refer to the model numbers for which you are making this application. Documentation should be added to your online application.**

a) A technical sales brochure or leaflet for the product clearly summarising:

i) The key features of the product (ideally including photographs of the product's exterior). ☐

ii) The product's operation (i.e. in-built functionality) and intended applications (i.e. usage). ☐

iii) Any product selection options (including optional extras, alternative configurations etc.). ☐

*This documentation should contain sufficient detail to enable the assessor to confirm that the proposed entry on the ETPL is correct, and that the supplied documentation can evidence the conformity of the products against the requirements the ETL eligibility criteria. If the model names contain any "wildcards" in respect of cosmetic variations please check with the ETL Team (info@etl.energysecurity.gov.uk) that this is permitted before submitting your application.*

b) A technical specification for the product, including:

i) Details of the model numbers covered (including individual features of each model). ☐

ii) The product's design ratings (electrical, mechanical, thermal, flow rates, energy use etc.). ☐

iii) A description of how to install the product including connection/wiring diagrams. Where the product must be assembled, configured and/or commissioned on site before use, please include instructions. ☐

*This documentation should contain sufficient detail to enable the assessor to confirm that each product entry on the ETPL has the design features specified in the eligibility criteria for that category of product. Please indicate on the checklist where information on specific design features is located in the documentation.*

c) Evidence that the product meets the performance criteria, including:

i) Test reports showing product performance at the standard rating/test conditions. ☐

ii) Details of the test procedures/standards used to determine product performance. ☐

iii) A declaration certifying the accuracy of the test reports and confirming that:

- The test facilities complied with the minimum specifications outlined in the test standard, and the required test conditions where applied during testing. ☐
- All measurement equipment used in testing was calibrated by an accredited laboratory, or its calibration is otherwise traceable back to national standards. ☐
- Appropriate quality assurance procedures have been used to verify or cross-check the accuracy and repeatability of the test procedures and test results. ☐

iv) Where type testing procedures were used to select representative models for testing, please provide a written explanation of the reasons why these models were chosen, and evidence that the products covered by the representative model(s) are variants of the same constructional design. ☐

*Please note that summary test reports will only be accepted where the accuracy of the test reports has been certified by a recognised independent body or where two detailed test reports (or in the case of representative testing one detailed test report) have been submitted per product range.*

*Detailed test reports must always be submitted for acceptance tests or field trials.*

*Please refer to the ETL Testing Framework for further guidance on the submission of test results, and minimum information requirements.*

d) A Declaration of Conformity with UK/EU Directives on product safety, including one of the following:

i) An appropriate Conformity Assessment mark. ☐

e) Evidence that a quality assurance system/procedures is/are in place to control the specification, design, manufacturing and testing of the products. ☐

f) Signed application checklist ☐

*Please note that all product documentation provided must be written in, or translated into, English.*

## 5. Declaration

I confirm that the information given above is correct to the best of my knowledge and that I have read and agree to the terms and conditions governing the management of the Energy Technology List.
A copy of the terms and conditions can be found **here**.

Signature: ..... Date: .....

### For more information:

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**ETL813 v4**