

## Product application checklist

Please complete in BLOCK CAPITALS

# **Thermal 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.

No

Yes

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

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 Section 2 of ETL Guidance Note 5 "ETL Testing Programme: Energy Technology List (ETL) Product Testing Framework" for details of the requirements that must be satisfied for each of these product testing options.* 

Energy Technology List (ETL) product testing framework - GOV.UK (www.gov.uk)

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

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1.	Product testing and certification (continued)	No	Yes
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)?		
2.	Product type and features N/A	No	Yes
2.1	Product category: (please tick one)		
	<ul><li>a) Small Industrial/ Large commercial</li><li>b) Large Industrial</li></ul>		
2.2	Does the product have a capacity of no less than 5 MWh?		
	Please provide the product's capacity in MWh:		
3.	Product performance	No	Yes
3.1	Does the product have an energy density of no less than 50 kWh/m <sup>3</sup> ?		
	Please provide the product's energy density in kWh/m <sup>3</sup> :		
3.2	Does the product have an expected lifespan no less than 15 years?		
	Please provide the product's expected lifespan in years:		
3.3	Does the product have a round-trip energy efficiency of no less than 85%?		
	Please provide the product's round-trip efficiency (%):		
3.4	Is the TES performance test for capacity and energy density of the product determined by the manufacturer depending on the application of the system and fully evidenced and verified at the point of application?		
3.5	Is the lifespan of the product provided by the supplier and fully evidenced and verified at the point of application?		
3.6	When the round-trip efficiency is calculated and verified to determine the energy output that the product can deliver, relative to the amount of energy input into the product during charging and discharging, the following procedures shall be followed:		
	a) The product shall be discharged to its minimum available energy level.		
	b) The product shall be charged to its full available energy at rated input power.		
	c) The product shall be discharged at the rated power of the system in accordance with system specifications and operating instructions.		

No

Yes

### 4. Summary of documents to be included

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 at <a href="https://etl.beis.gov.uk/engetl/fox/live/ETL\_LOGIN/login">https://etl.beis.gov.uk/engetl/fox/live/ETL\_LOGIN/login</a>.

- 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 ETL Questions 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.

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 ETL Guidance Note 5 "ETL Testing Programme: Energy Technology List (ETL) Product 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 at <u>www.gov.uk/guidance/energy-technology-list</u>.

Signature:

Date:

#### For more information:

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