Legal Inspection Requirements for Stationary Lithium Battery Storage Appliances

By the Bureau of Standards, Metrology and Inspection (BSMI), Ministry of Economic Affairs

Introduction:

To achieve net-zero carbon emissions by 2050, it is expected that renewable energy power generation equipment and energy storage systems will gradually enter households. Due to the risks associated with thermal runaway in lithium-ion batteries used in energy storage systems, the BSMI add stationary lithium battery storage appliances into the mandatory inspection scope. Two alternative conformity assessment procedures are made available for the choice of applicants, i.e. Registration of Product Certification (RPC) or Type-Approved Batch Inspection (TABI).

Date of implementation: 1 July 2026

Scope of covered products:

Description of Goods	Inspection Standards (Note)	C.C.C. Code (the first 6 digits are the same as HS Code)(For reference)	Conformity Assessment Procedures
Stationary Lithium Battery Storage Appliances (inspection scope: battery capacity not exceeding 20kWh, with bidirectional power transfer function between the device and the utility grid or other equipment, or equipped with solar photovoltaic module input capability.	1、CNS 62619: 2020 or 2023 & CNS 63056: 2021 2、For those equipped with solar photovoltaic module input: CNS 15426-1: 2011 CNS 15426-2: 2013 For others: CNS 62477-1: 2023 3、For those used only in industrial environments: CNS 14674-2: 2023 & CNS 14674-4: 2023 For others: CNS 14674-1: 2023 & CNS 14674-3: 2022 4、For those with the function of transmitting power to the grid of Taiwan Power Company (hereinafter referred to as grid-connected function): CNS 15382: 2018 or Technical Specification for Grid-Connected Power Conversion System (PCS): 2024 5、CNS 15663: 2013: Section 5 “Marking of presence”	8504.40.92.00.6B 8504.40.93.00.5B 8507.60.00.90.0E 8507.80.90.19.5E	RPC Scheme (Modules II+IV or II+V or II+VII) or TABI Scheme

Note:

1. The products shall conduct the "Propagation Test" in accordance with Section 7.3.3 of CNS 62619: 2020 or 2023.
2. The functional safety of the battery system as specified in Section 8.1 of CNS 62619: 2020 or 2023 shall comply with one of the following standards and corresponding requirements, and provide test reports issued by testing laboratories accredited by signatories to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA), or the International Accreditation Forum (IAF) Multilateral Recognition Arrangement (MLA), or testing laboratories participating in the IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components(IECEE).
   (1) IEC/UL 60730-1:2013 Annex H (Safety integrity level Class B or C)
   (2) IEC 61508 (Safety integrity level (SIL) at least 2）
   (3) ISO 13849-1 and ISO 13849-2（performance level “C”）
   (4) UL 991 and UL 1998
3. For cells or battery systems that complies with CNS 62619 or CNS 63056 and are certified under the Voluntary Product Certification (VPC), the VPC certificates issued by the BSMI may be used as conformity documents. The cells that complies with IEC 62619: 2017 or relevant international standards of newer version, the certification documents issued by product certification bodies accredited against ISO/IEC 17065 may be used as conformity documents.
4. The products tested based on the standard CNS 62477-1 may be exempted from conducting the tests specified in Section 4.9 (Mechanical Active Substances - Dust and Sand) and Section 5.2.6.6 (Dust and Sand Test).
5. For products tested based on the standards CNS 14674-2 and CNS 14674-4, precautions "This product is intended for use in industrial environments only." shall be labelled on the products in Chinese on its body, packaging, or instructions.
6. For products that do not have grid-connecting functions, technical documents proving that the product does not have grid connecting functions shall be submitted.

Description of the two kinds of conformity assessment procedures

1. Registration of Product Certification (RPC) Scheme:

For product subject to Modules II+IV, II+V, or II+VII procedures, not only the products shall be type-tested in advance (Module II) by the BSMI or BSMI-recognized testing laboratories, but the quality management systems of the production premises must be in conformity with Module IV (Full Quality Management System), Module V (Production Quality Management System) or Module VII (Factory Inspection).

For Module IV and Module V, a registration certificate in accordance with the CNS 12681 (ISO 9001) series of standards is required to be obtained from the BSMI, or certification bodies recognized by the BSMI. As for Module VII, a factory inspection report issued by the BSMI or BSMI-recognized factory inspection bodies is needed in the same way.

In addition, a declaration of conformity-to-type is also required to ensure that the mass-produced commodities are in conformity with that shown in the type-test report for all the above three IV, V, VII modules.

After being certified and registered by the BSMI, products will be allowed to use the Commodity Inspection Mark with the letter ‘R’ and the identification number given by the BSMI. Additionally, these products can clear customs directly without any further inspection if not being sampled by RPC border check procedures. The application fee and annual fee for RPC are both NT$5,000 (about US$170) for each certification, and the RPC certification is valid for 3 years. If there are any serial products, an extra NT$3,000 (about US$102) of application fee will be charged for every application in each certification. The fees for type testing vary by products and depend on the fee policies of the testing laboratories.

2. Type-Approved Batch Inspection (TABI) Scheme

Under this procedure, manufacturers or importers shall have their products type-tested by the BSMI or BSMI-designated testing laboratories, and file an application for Type Approval to the BSMI or its branches.

After manufacturers or importers obtain a Type Approval certificate, they are required to file an application for batch inspection to the BSMI each time before their products are released from the production premises or arrive at the port of entry. The BSMI will then review the application and the related documents while additional samples may be required for further testing if it is deemed necessary.

After the products have passed the inspection, they will be allowed to use the Commodity Inspection Mark with the letter 'T' and the identification number given by the BSMI. The application fee for the Type Approval is NT$3,500, and a Type Approval certificate is valid for three years. The fees for type testing vary by products and depend on the fee policies of the testing laboratories.

*Further information on the two schemes can also be found on the BSMI website:
https://www.bsmi.gov.tw/wSite/lp?ctNode=9768&CtUnit=4132&BaseDSD=7&mp=2

Locations to apply for Type Testing:
The BSMI designated testing laboratories.

Locations to apply for Registration of Product Certification:
The BSMI or its branches.

Locations to apply for Batch Inspection:
1. Domestic manufacturers or consigned manufacturers: submit inspection applications to the BSMI or the branches of the BSMI according to the place of production. If necessary, the manufacturers can apply for cross-jurisdictional inspections.
2. Importers or entrusted importers: report to the BSMI or the branches of the BSMI for inspection according to the jurisdiction of the port where the imported goods arrive. If necessary, the manufacturers can apply for cross-jurisdictional inspections.

Time required for Registration of Product Certification:
14 working days. (This period does not include the time for corrective actions by the applicant due to deficiencies in the documents or samples. Extra 7 working days may be required if additional tests are required.)

Related requirements:
1. The inspection for the above listed commodity, no matter imported and domestically produced, will begin from 1 July 2026. The import regulation code is C02. From the announcement date, the BSMI can accept applications for Type Approval Batch Inspection and Registration of Product Certification for the above listed commodity.

2. Those who apply for a certificate to the BSMI from the date of announcement shall provide the type test report that meets the inspection standards. The certificate shall be issued after the examination by the BSMI. The validity period of the certificate shall be three years from the date of issuance. (If the issuance date is before 30 June 2026, the effective date will begin from 1 July 2026 and the expire date will be 30 June 2029)

3. The technical documents required for type testing shall comply with the requirements specified in the "Directions Governing Type Approval of Electrical and Electronic Commodities."

4. Fees for product type-testing: Charged in accordance with the fee regulations of the BSMI's designated testing laboratory.

5. Fees for product registration of product certification and type approval batch-by-batch inspection: Charged in accordance with the relevant provisions of the "Regulations Governing Fees for Commodity Inspection."

6. The inspection standards of the products listed in the table shall be the version published in this announcement. If any updated version is available, the BSMI shall publish the implementation date of the updated version in further announcement.

7. The above listed products should indicate the presence of restricted substances in accordance with Section 5 "Labeling" of CNS 15663 (2013) (the example format shown in Table 1 and Table 2) on the body, packaging, label, or instructions. However, for those who provide (disclose) the presence of restricted substances via webpage, the URL link should be clearly stated on the body, packaging, label, or instructions. The location of the indication is not subject to the provisions of Section 5.3 of CNS 15663.

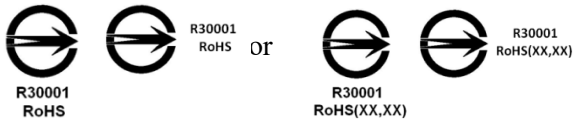
8. After the above listed products are approved by the BSMI for the issuance of certificate, the labeling requirements are as follows:

   (1) Based on "Regulations Governing the Use of Commodity Inspection Mark", the Commodity Inspection Mark shall be printed by the certificate holders. The identification number of the Commodity Inspection Mark consists of "A Letter (R or T)," "Designated Code (5 digits)" and "the presence conditions of the restricted substance" (e.g., RoHS or RoHS (XX,XX)).

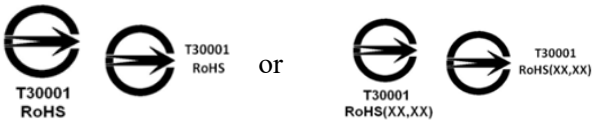
   (2) The identification number shall be placed below or right next to the graphic symbol and "the presence conditions of the restricted substance" shall be indicated in the second row.

   (3) The product inspection mark is not designated with a fixed size, but it should be marked prominently on the product body in an appropriate proportional size. It should be made of durable materials, with clear and legible content that is not easily worn out, and it should be affixed permanently. For those who obtained the Registration of Product Certification before 30 June 2025, they may print the product inspection mark themselves in accordance with the above regulations from the date of obtaining the certificate.

   (4) For RPC scheme, the examples of the Commodity Inspection Mark are listed below:



   (5) For TABI scheme, the examples of the Commodity Inspection Mark are listed below:



   (6) "RoHS" indicates "the content of restricted substance(s), other than exemptions stated in CNS 15663, does not exceed the reference percentage value of presence condition.

   "RoHS(XX,XX)" indicates the content of restricted substance(s) (element XX, element XX, …), other than exemptions stated in CNS 15663, exceeds the reference percentage value of presence condition.

   Restricted substances: Pb, Cd, Hg, Cr^{+6}, PBB, and PBDE.

   Examples:

   RoHS (Pb) indicates that the percentage content of Pb in certain parts of the commodity exceeds the reference percentage value specified in Annex A to CNS 15663.

   RoHS (Cd, Cr^{+6}, PBB) indicates that the percentage content of Cd, Cr^{+6}, and PBB in certain parts of the commodity exceeds the respective reference percentage value specified in Annex A to CNS 15663.
   The inspection standards of the commodities listed in the table shall be the version published in this announcement. When there is an updated version available, the BSMI will publish the implementation date of the updated version in further announcements.

9. The C.C.C. Codes listed in the table are used for reference only. The commodity shall still comply with the requirements before entering into the market, even though its C.C.C. Code is identified differently by the Customs Administration, Ministry of Finance or International Trade Administration, Ministry of Economic Affairs.

10. Commodities with combined features or multifunctional products shall comply with the respective inspection standards and conformity assessment procedures of RPC scheme.

Table 1. Example of markings for the presence conditions of the restricted substances exceeds the reference percentage value of presence conditions

Equipment name: Stationary Lithium Battery Storage Appliances：XXX (Note)						
Unit	Restricted substances and its chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr^{+6})	Polybrominated Biphenyls (PBB)	Polybrominated Diphenyl Ethers (PBDE)
Circuit board	Exceeding 0.1 wt %	○	○	○	○	○
Shell	○	○	Exceeding 0.1 wt %	○	○	Exceeding 0.1 wt %
Power cord	—	○	○	○	○	○
Accessory	—	○	○	○	○	○
Note 1: "Exceeding 0.1 wt %" and "exceeding 0.01 wt %" indicate that the percentage content of the restricted substance exceeds the reference percentage value of presence condition. **Note 2:** "○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence. **Note 3:** The "–" indicates that the restricted substance corresponds to the exemption.						

Table 2. Example of markings for the content of the restricted substances other than exemption do not exceed the reference percentage value of presence condition

Equipment name: Stationary Lithium Battery Storage Appliances：XXX (Note)						
Unit	Restricted substances and its chemical symbols					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent chromium (Cr^{+6})	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Circuit board	○	○	○	○	○	○
Shell	○	○	○	○	○	○
Power cord	—	○	○	○	○	○
Accessory	—	○	○	○	○	○
Note 1: "○" indicates that the percentage content of the restricted substance does not exceed the percentage of reference value of presence. **Note 2:** The "–" indicates that the restricted substance corresponds to the exemption.						

Note: If the position of the label clearly indicates the relationship with the product, the column for device name and model number may be omitted above the label. Additionally, if the label applies to multiple models, their numbers can be listed in the same column.