

台灣電力股份有限公司電力設備器材定型試驗施行及審查作業要點 Keynotes of Execution and Verification of Electrical Equipment (or Material) Type Test for Taiwan Power Company (TPC)

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- 一、 本公司為規範電力設備器材定型試驗施行及定型試驗報告審查之原則，特訂定本要點。
 - I. The Keynotes stated herein are enacted by TPC as the guiding principle to regulate execution of electrical equipment (or material) type test and review of the report.
- 二、 有關器材特性及試驗要求、設計技術資料內容及審查規定等，均依器材規範書之規定及用料單位要求辦理。
 - II. The properties of equipment (or material), test requirements, the content of technical design data and review regulations shall all be handled according to the requirements of TPC' s equipment (or material) specifications and that raised by the material requesting units.
- 三、 產品定型試驗施行方式依下列規定辦理：
 - (一)器材承製能力審查採現場查證方式者，其產品定型試驗須在本公司派員會同下辦理試驗。
 - (二)器材承製能力審查採書面審查方式者，其產品定型試驗須由符合「台灣電力股份有限公司受理試驗機構辦理電力設備器材定型試驗須知」規定之試驗機構辦理試驗，但器材規範書另有指定試驗機構者除外。
 - (三)器材承製能力審查採行方式及本公司辦理器材承製能力審查之作業程序、受理窗口及參與會審單位等按器材規範書、相關作業程序及有關文件規定辦理。
- III. The vendor' s product (equipment or material) type test shall be executed according to the following requirements:
 - (I) If site-certifying-method, required for protected category equipment (or material), is adopted for verifying vendor' s manufacturing ability, then the product type test should be conducted in the presence of TPC' s personnel.
 - (II) If written-report-reviewing-method, required for non-protected category equipment (or material), is adopted for verifying vendor' s manufacturing ability, then the product type test should be conducted by the laboratory that meets the requirements of “ Instructions for Testing Institutes When Accepting Type Test

Entrustment of Electrical Equipment (or material) for Taiwan Power Company,” except for the laboratory otherwise designated in TPC’ s equipment (or material) specifications.

(III) The method adopted to verify vendor’ s manufacturing ability, its operational procedure, the accepting window and the joint review units are regulated in the TPC’ s equipment (or material) specifications, applicable operational procedure and the requirements of relevant documents.

四、 前條試驗機構應依據廠商委託試驗器材之器材規範書及相關標準，以及「台灣電力股份有限公司受理試驗機構辦理電力設備器材定型試驗須知」之規定負責辦理產品定型試驗後提出完整之定型試驗報告。

前項試驗機構辦理產品定型試驗得採下列方式之一：

(一)完全自行試驗。

(二)部分項目自行試驗，無法試驗之項目採見證試驗。

(三)完全採見證試驗。

IV. The aforementioned laboratory shall conduct product type test according to TPC’ s equipment (or material) specifications supplied by the entrusting vendor and relevant standards as well as the requirements specified in “ Instructions for Testing Institutes When Accepting Type Test Entrustment of Electrical Equipment (or material) for Taiwan Power Company,” then submit a complete set of the type test report after the test.

The laboratory may adopt any of the following methods to conduct the type test:

(I) Conducting in-house test totally by itself.

(II) Conducting in-house test partially and adopt witness test for the items that cannot be tested by itself.

(III) Conducting witness test totally with help from other institutes.

五、 定型試驗報告內容應記載下列各項：試驗機構名稱、試驗機構被認可證明、試驗日期、試驗地點、試驗設備清單、試驗所需之大氣條件、試驗樣品資料、引用規範或標準、試驗方法說明、試驗值、試驗結果、試驗(或見證)人員資料、負責主管人員核准簽章。

前項試驗設備清單應詳列試驗設備之名稱、規格、誤差、校驗日期。

第一項試驗樣品資料應詳載試驗樣品之型號、序號、照片、製造地點、製造廠商及相關監製/抽樣紀錄。

第一項試驗方法說明需含必要之試驗迴路圖。

第一項試驗值需含必要之波形圖及紀錄圖。

第三項之樣品相關監製/抽樣紀錄可由試驗機構或立案之公證機構(單位)辦理之。

- V. The type test report should include the following items: names of the laboratories, recognized certificates of the laboratories, test dates, test locations, test facility list, atmospheric conditions required for the tests, test samples' description, specifications or standards exercised, description of test method, test values, test results, test (witness) personnel' s information and the approval signature (stamp) by the responsible supervisor.

The aforementioned test facility list should contain the name, specification, precision degree and the latest calibration date.

The aforementioned test samples' description should include model number, serial number, photo, manufacturing location and the manufacturer of the test samples together with relevant manufacture-supervising and sampling record.

The aforementioned description of test method should include circuit diagram of the required test.

The aforementioned test values should describe the required waveform chart and log chart.

The aforementioned manufacture-supervising and sampling record can be handled by the laboratory or the accredited survey institute (unit).

- 六、 產品定型試驗(全部或單項試驗)採見證試驗或在本公司派員會同下辦理試驗時，可於製造廠商、其協力廠商或其他具試驗能力之單位(處所)辦理試驗，如試驗能力不足或經本公司同意，亦可委託其他符合「台灣電力股份有限公司受理試驗機構辦理電力設備器材定型試驗須知」規定之試驗機構負責辦理試驗後提出試驗報告。

- VI. In the case that the product type test (total or single item test) is conducted by witness method or in the presence of TPC' s personnel, the test may be conducted at the premises of the manufacturer, its collaborators or other units having such test capability. In the event of test capability insufficiency or having obtained consent from TPC, the test can also be entrusted to other laboratory that meets the requirements of “ Instructions for Testing Institutes When Accepting Type Test Entrustment of Electrical Equipment (or material) for Taiwan Power Company” and this laboratory shall submit the test report after the test.

- 七、 定型試驗樣品須為委託試驗廠商自行製造且有證明者。

- VII. The product samples to be type tested should be manufactured by the

manufacturer who entrusts the test to the laboratory and is issued a certificate to identify the manufacturer.

八、 定型試驗報告具有下列情況之一且經本公司審查符合要求者，該個案器材得免依據本要點再辦理產品定型試驗，但必要時本公司得要求重做或補做部分試驗項目。

(一)屬採現場查證方式之器材：

- 1、 產品定型試驗曾由本公司採現場查證辦理完成者。
- 2、 該器材規範書曾訂有「定型試驗可委託公證機構或試驗機構辦理或見證」之規定，且產品定型試驗已於本要點施行日前依據該項規定辦理或委託完成者。

(二)屬採書面審查方式之器材：

- 1、 產品定型試驗曾由本公司採現場查證辦理完成者。
- 2、 於本要點施行日前已完成產品定型試驗且經本公司審查符合者。
- 3、 於本要點施行日前已完成產品定型試驗且能提供該項器材使用於本國或外國電力系統之相當運轉記錄證明者。

VIII. If a type test report meets any of the following situations and has been reviewed by TPC as conforming to the requirements, then further type test of that particular product is not required according to the Keynotes herein. However, when necessary, TPC may ask for all test redo or partial test makeup.

(I) Products certified by site-certifying-method:

1. In the case that vendor' s same product has been type-test-passed by TPC using site-certifying-method.
2. In the case that the requirements of “ the type test can be entrusted to the survey institute or laboratory for conducting or witnessing” have been specified in the TPC' s equipment (or material) specification and the type test of vendor' s product of the specification had been conducted and passed or entrusted to conduct and passed according to the said requirements before the Keynotes implementation date.

(II) Products certified by written-report-reviewing-method:

1. In the case that vendor' s same product has been type-test-passed by TPC using site-certifying-method.
2. In the case that vendor' s same product had been type-tested passed and the report reviewed as “ compliant” by TPC before the Keynotes implementation date.
3. In the case that vendor' s same product had been

type-test-passed before the Keynotes implementation date and the vendor can provide relevant operation record proving the good use of such equipment (or material) in foreign or domestic power system.

- 九、 定型試驗報告經審查不符規範要求者，須重新辦理產品定型試驗。
- IX. When the type test report fails to meet the TPC' s specification requirements, the manufacturer shall redo the type test.
- 十、 產品型號(型式)、製造地區或設計變更時，除本公司同意外，須重新辦理產品定型試驗。
- X. When there is any change in the product model number (model), manufacturing location or design, unless prior consent from TPC is obtained, the manufacturer shall redo the type test.
- 十一、 廠商提出之定型試驗報告經發現其內容係偽造、變造或試驗樣品非委託試驗廠商製造之情況者，本公司將依政府採購法有關規定將該廠商刊登於政府採購公報。
- XI. In the case that forgery or falsification is found in the manufacturer' s type test report or the tested samples are not manufactured by the entrusting vendor, then TPC shall publish the name of such vendor for punishment on Taiwan' s Government Procurement Gazette according to the regulations of Taiwan' s Government Procurement Act.
- 十二、 本公司各單位辦理電力設備器材採購時，其器材規格審查準用本要點規定辦理。
- XII. In handling the electrical equipment (or material) purchase, the units of TPC involved may employ the requirements specified in the Keynotes herein for reviewing specifications of the purchased equipment (or material).
- 十三、 本要點自發布日施行。
- XIII. This document is implemented from its announcement date.

Remarks for the English version only: This document is enacted in Chinese, which shall prevail in case of any difference and conflicts between the English translation and the Chinese original.