



\* **ACCREDITATION OF TEST ONLY (“T/O”) ORGANIZATIONS**

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## ACCREDITATION OF TEST ONLY (“T/O”) ORGANIZATIONS

### \* 1.0 Scope

This procedure establishes the requirements for organizations seeking a National Board “T/O” *Certificate of Authorization*. This certificate authorizes the organization to use the “T/O” Certification Mark (*Certificate of Authorization*) to confirm seat tightness and to confirm or restore nameplate set pressure and/or performance (e.g., blowdown, lack of chatter) of pressure relief valves (all of which will be referred to as “testing” in this procedure). This authorization does not permit any activity that requires disassembly or repair of pressure relief valves. Such activities shall be performed by a National Board Valve Repair (“VR”) Certificate Holder, or the valve shall be replaced.

- 1.1 Organizations seeking a *Certificate of Authorization* shall have a written Quality Management System (QMS), in the English language, that complies with the National Board Inspection Code (NBIC) and this procedure. It shall also include the expected scope of activities. An organization’s scope of activities includes the type of activity that will be performed (e.g., testing) and the location of such activity (e.g., shop, field site(s), or both).
- 1.2 *Certificates of Authorization* may be issued to organizations whose business is to test or repair pressure relief valves, to manufacturers or assemblers of pressure relief valves, to owners and users of pressure relief valves, and to other organizations that qualify in accordance with these requirements.
- 1.3 Organizations actively holding a “VR” *Certificate of Authorization* will be considered qualified to use the “T/O” Certification Mark, provided the process is described in their QMS. They may be issued a “T/O” *Certificate of Authorization* upon request.
  - 1.3.1 The test media listed on the “T/O” *Certificate of Authorization* shall match that listed on the “VR” *Certificate of Authorization*.

### \* 2.0 General Requirements

The National Board “T/O” Certification Program applies to the testing of valves only in accordance with NBIC Part 4, 3.2.5 or NBIC Part 2, 2.5.7. These valves shall be capacity certified by the National Board and are identified as follows:

- 2.1 American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (ASME BPVC) Section I valves identified with the ASME Single Certification Mark with V Designator or the ASME BPVC V Symbol Stamp;
- 2.2 American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (ASME BPVC) Section III valves identified with the ASME Single Certification Mark with NV Designator or the ASME BPVC NV Symbol Stamp; (When authorized under a NR/VR Program)
- 2.3 ASME BPVC Section IV or Section XIII valves with the ASME Single Certification Mark with HV Designator or the ASME BPVC HV Symbol Stamp; or
- 2.4 ASME BPVC Section VIII or Section XIII valves with the ASME Single Certification Mark with UV Designator or the ASME BPVC UV Symbol Stamp.

Testing of pressure relief valves shall be required for valves whose condition and performance may not be equivalent to the standards for new valves. This may include valves that have been

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in service for an extended period or were exposed to environmental or other conditions that may adversely impact their performance.

Testing shall not be performed if any of the valve’s external adjustment seals have been broken, opened, or otherwise disturbed or if the nameplate(s) is missing or illegible. Instead, the valve shall be replaced or sent to a National Board “VR” Certificate Holder for disassembly, inspection, and repair.

### 3.0 Testing of Nuclear Valves

This procedure does not address testing of ASME BPVC Section III valves.

### \* 4.0 Application

- 4.1 Organizations seeking to obtain a *Certificate of Authorization* shall apply to the National Board using the NB-550, *Application for the National Board “VR” and/or “T/O” Certificate of Authorization*, obtained from the National Board website ([www.nbbi.org](http://www.nbbi.org)) under the “Accreditation” tab.
- 4.2 Organizations seeking to renew their *Certificate of Authorization* shall apply for renewal at least eight months prior to the expiration date of the *Certificate of Authorization*. Renewal applications shall be accessed and submitted online through the Certificate Administrator account on the National Board Business Center ([buscenter.nationalboard.org](http://buscenter.nationalboard.org)).
- 4.3 When an organization has plants or shops in more than one location, they shall submit a separate application for each plant or shop.
- 4.4 For field-only scopes, the address of record shown on the *Certificate of Authorization* is the location from which the administrative, technical, and quality aspects of the business are controlled.

### \* 5.0 Review of Applicant’s Facility

- 5.1 Prior to being issued a *Certificate of Authorization*, the organization’s QMS and facilities are subject to a review and verification of implementation by a National Board Team Leader. At the time of the review, the organization shall demonstrate to the latest mandatory edition of the NBIC or the latest permissive edition. The demonstration shall include, as a minimum, setting and testing of valves within the scope of the applicant’s QMS.
- 5.2 The review shall be performed by , a Team Leader from the National Board, or a Qualified Team Leader from the Member Jurisdiction where the organization is located.. If a jurisdiction elects not to perform the review or there is no jurisdiction, the National Board will represent the jurisdiction.
- 5.3 The applicant shall test and submit a minimum of two valves for verification testing to a National Board Accepted Testing Laboratory. The valve submission shall include at least one valve for each ASME BPVC section and test medium in the scope of the *Certificate of Authorization*.

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5.3.1 Applicants testing ASME BPVC UV-designated steam service valves with air using the manufacturer’s correction factor, shall submit one additional ASME BPVC Section VIII steam valve tested on air for verification testing on steam.

5.3.1.1 Applicants holding a “VR” *Certificate of Authorization* with steam in the scope who intend to test UV-designated steam service valves with air under the “T/O” Program, are not required to submit the valve noted in 5.3.1, provided the following conditions are met:

- The applicant performs a benchmark verification test on at least one UV-designated steam valve tested on air using their qualified steam test equipment.
- Records of this benchmark testing are maintained as long as testing of UV-designated steam service valves with air is included in the scope of the *Certificate of Authorization*.

5.3.1.2 This provision will be listed on the *Certificate of Authorization* as “UV-Designated Steam Valves Tested on Air.”

5.3.2 Verification testing of an ASME BPVC V-designated valve for liquid-only service is not required if verification testing of a UV-designated liquid service valve has been successfully completed.

5.4 For field-only scopes, the review shall encompass both the applicant’s address of record and a field test demonstration site. The demonstration site shall be representative of that typically encountered by the applicant.

5.5 The applicant shall have access to the National Board document/database NB-18, *Pressure Relief Device Certification* (available on the National Board website: [www.nbbi.org](http://www.nbbi.org)), all parts of the latest mandatory edition of the NBIC, and the latest mandatory edition of ASME BPVC sections included in the *Certificate of Authorization’s* scope.

5.6 Upon receiving the National Board’s notification of review dates, the organization shall make arrangements for the review. National Board reviews of Test Only organizations may be coordinated with other reviews when practical.

5.7 A recommendation to issue, renew, or withhold the *Certificate of Authorization* shall be included in a Qualification Review Report (QRR) prepared by the National Board Team Leader. The completed QRR shall be forwarded to the National Board.

5.8 A *Certificate of Authorization* will be issued when all requirements have been met. The *Certificate of Authorization* shall expire three years following the date of issuance or renewal.

### \* 6.0 **ASME BPVC Certificates of Authorization and Single Certification Mark**

A pressure relief valve manufacturer holding an active ASME *Certificate of Authorization* for use of the ASME Single Certification Mark may obtain the “T/O” *Certificate of Authorization* for the testing of pressure relief valves certified under the ASME *Certificate of Authorization*. This can be accomplished without a review of the manufacturer’s facilities, provided their QMS includes

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provisions that cover the scope of testing to be performed. The QMS is subject to review by the National Board. The testing shall be performed at the same location listed on the ASME *Certificate of Authorization*. Unless the valves are tested in the same facilities and to the same procedures as new valves, the number of valves required in Paragraph 5.3 shall be selected for verification tests by a National Board Team Leader.

### 7.0 **Jurisdictional Participation**

The National Board Member Jurisdiction in which the organization is located may participate in the organization’s review and demonstration of QMS implementation. They may also participate in the acceptance of the organization’s QMS Manual.

### \* 8.0 **Use of the “T/O” Certificate of Authorization**

#### 8.1 “T/O” Certification Mark Use

Each “T/O” Certification Mark graphic shall be obtained electronically from the National Board for reproduction on the “T/O” nameplate and shall be used only within the scope and limitations under which it was issued. The organization’s QMS shall provide for constant control of the “T/O” Certification Mark. The organization shall not permit others to use its assigned “T/O” Certification Mark.

#### 8.2 Discontinued Use of the “T/O” Certification Mark

Each applicant shall agree that the “T/O” Certification Mark is controlled by the National Board, and that as such, its use will be promptly discontinued upon demand. Use of the “T/O” Certification Mark shall be discontinued if the organization no longer uses the “T/O” *Certificate of Authorization* or if the *Certificate of Authorization* has expired and a renewal application is not pending. Furthermore, any pre-printed nameplates bearing the “T/O” Certification Mark shall be sent to the National Board for disposal.

A Certificate Holder’s failure to comply with the requirements of this procedure or the NBIC may result in the suspension of their *Certificate of Authorization*. Upon suspension of their *Certificate of Authorization*, the organization shall discontinue use of the “T/O” Certification Mark.

#### 8.3 *Certificate of Authorization* Contents

The following information is specified on the organization’s *Certificate of Authorization*:

- The company name and physical address of the organization;
- The certificate number, issue date, and expiration date; and
- The scope of the certificate:
  - Location: shop, field site(s), or both;
  - ASME BPVC Designator (herein, “designator”): V, HV, and/or UV valves;
  - Test media; and when applicable,
  - Special NBIC provision(s).

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### **8.4 Changes in Scope, Ownership, Company Name, Location, or Address**

The *Certificate of Authorization* is valid only while the organization operates under the company name, address, and scope as shown on the *Certificate of Authorization*. Between renewal periods, any changes to the company name, address, or scope listed on the *Certificate of Authorization* shall be requested online through the Certificate Administrator account on the National Board Business Center ([buscenter.nationalboard.org](http://buscenter.nationalboard.org)). The National Board may require a re-review of the organization’s QMS and/or its implementation based on the changes requested. If a re-review is not required, the National Board will issue a revised *Certificate of Authorization*.

When a “T/O” Certificate Holder changes their primary contact information (company’s primary contact name, phone, or email), ownership, or mailing address, they shall notify the National Board Pressure Relief Laboratory.

### **\* 9.0 Quality Management System**

A “T/O” Certificate Holder shall have and maintain a QMS meeting the requirements of NBIC Part 4. It shall be treated confidentially by the National Board and Team Leader.

### **\* 10.0 Verification Testing of Demonstration Valves**

- 10.1 Operational verification tests of the demonstration valves shall be successfully completed at a National Board Accepted Testing Laboratory. Alternative verification testing described in Section 11.0 may also be applied. The valves shall be typical of those tested by the organization and within the capabilities of the testing laboratory.
- 10.2 Tests conducted shall be witnessed by a National Board Team Leader. The purpose of the tests is to ensure the function and operation of the valves meet the requirements of the designator to which they were manufactured.
- 10.3 Valves not meeting the functional or operational requirements of the designator to which they were manufactured shall be considered to have failed. Replacement valves shall be selected for testing, as stated above, at a rate of two valves for each one that failed.
  - 10.3.1 If any of these replacement valves fail to meet the above criteria, the applicant shall document the cause of the noted deficiencies and actions taken to guard against future occurrence. Upon the National Board’s acceptance of this information, the organization shall test one additional valve for each replacement valve that failed. The valve(s) shall be of the same designator and test medium as the valve(s) previously failing to meet the test requirement.
  - 10.3.2 Revocation of the *Certificate of Authorization* or acceptance of alternative corrective action will be considered if the valve(s) fails to meet the ASME BPVC to which it was manufactured.

### **\* 11.0 Alternative Verification Testing of Demonstration Valves**

- 11.1 In such cases where all valves tested by the applicant for a specified designator or test medium exceed the capabilities of the testing laboratory, valves for that designator or test medium shall be selected as specified in Section 5.0, and a demonstration test shall be successfully performed in lieu of the verification testing specified in Section 10.0. The

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demonstration tests shall be conducted at a facility mutually agreeable to the National Board Team Leader, facility owner, and applicant. The purpose of these tests is to demonstrate, in the presence of a National Board Team Leader, that the tested valves have adequate seat tightness at the maximum expected operating pressure prior to lifting, open within the required set pressure tolerance, operate consistently without chatter, and reclose within the required blowdown.

11.2 If a valve lift assist device is used to confirm set pressure, this device shall also be used to set the demonstration valves.

11.3 If any of these valves fail to meet the above criteria, then replacement valves shall be tested at a rate of two valves for each one that failed.

11.3.1 If any of these replacement valves fail to meet the criteria in Section 11.0, the applicant shall document the cause of the noted deficiencies and actions taken to guard against future occurrence. Upon the National Board’s acceptance of this information, the organization shall test one additional valve for each replacement valve that failed. The valve(s) shall be of the same designator and test medium as the valve(s) previously failing to meet the test requirement.

11.3.2 Revocation of the *Certificate of Authorization* or acceptance of alternative corrective action will be considered if the valve(s) fails to meet the requirements of the designator to which it was manufactured.

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### **12.0 Due Process**

12.1 The National Board provides procedural due process in connection with accreditation activities. There are several levels to which an aggrieved party may appeal. The process may be initiated by contacting the National Board’s Pressure Relief Laboratory.

12.2 All information necessary to determine that the QMS complies with the appropriate codes and/or standards (e.g., drawings, procedures, reports, etc.) shall be held in strict confidence by those participating in the review; such information shall not be discussed with anyone other than National Board staff.

The National Board will maintain information confidential to the extent permitted by the applicable jurisdiction.