



*Qualification of
National Board Team Leaders
and
National Board Representatives*

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NB-290, Revision: 8
Approved by BOT: 1/30/2019
*Denotes Revised Section(s)

1.0 GENERAL

The purpose of this document is to define requirements for the qualification of individuals who function as National Board Team Leaders and National Board Representatives. Where there are differences in the requirements for qualification or training for any of these functions, such differences are noted.

- 1.1 National Board Team Leaders are qualified to perform accreditation reviews, audits, surveys and similar activities for National Board repair programs, "R", "VR" and "NR and National Board inspection agency programs as specified in procedures NB-360, NB-369, NB-371 and NB-390.
- 1.2 National Board Representatives are defined as individuals who are qualified to perform device selections, test witnessing or any combination of these functions.
- 1.3 National Board Team Leaders performing functions for ASME shall meet the qualification and training requirements as specified by ASME.

2.0 QUALIFICATION

In order to qualify as a National Board Team Leader or National Board Representative, the individual shall meet the requirements of paragraphs 2.1 through 2.5 as applicable.

2.1 Education and Experience

The prospective National Board Team Leader shall have a minimum of twelve credits that have been accumulated under the following system to qualify for the conduct of accreditation reviews, audits or surveys. The Prospective National Board Representative shall have a minimum of seven credits to qualify for the conduct of device selections and test witnessing.

2.1.1 Education (4 credits maximum)

Education (1 Credit Minimum, 4 Credits Maximum)	Credit Points
1. Bachelor's Degree in Engineering	4
2. Associate's Degree in Engineering	3
3. Bachelor's Degree in Science or Mathematics	3
4. Associate's Degree in Science or Mathematics	2

<p>5. Technical Curriculum (Examples)</p> <ul style="list-style-type: none"> • Graduation from an accredited technical school in subjects that include, but not limited to Manufacturing, Building Construction, Construction Technology, Heating Ventilating and Air Conditioning, and Industrial Technology • Successful completion of a power engineering certification program • Successful completion of an Accredited Trade certification program in such skills as: boilermaker, boiler mechanic, steamfitter, machinist millwright, or welder • Successful completion of a military or merchant marine training program in the area of marine or stationary boilers, pressure vessels or nuclear reactors • Successful completion of a Certified Welding Inspector (CWI) certification program from the American Welding Society or an equivalent certification. 	2
<p>6. Technical Training in Boiler, Pressure Vessel, or Piping Inspection</p> <ul style="list-style-type: none"> • Technology Courses: Completion of a course in at least one (1) of the following (or related) subjects: <ul style="list-style-type: none"> ▪ Quality Systems ▪ Engineering ▪ Fabrication Methods ▪ Nondestructive Examinations ▪ Inspection • Code Courses: Successful completion of a classroom course or seminar on knowledge, understanding, and general structure of the NBIC or ASME BPV Code. • National Board Conducted Courses: Successful completion of any National Board classroom course. 	1

2.1.2 Qualifying Work Experience (10 credits maximum)

2.1.2.1 Qualifying work experience includes experience associated with boilers, pressure vessels, piping, and/or pressure relief devices in any of the following categories: design, manufacturing, construction, operation, maintenance, repair, alteration, quality control, nondestructive examination, or inspection.

(a) Each full year of experience: **score 1 credit per year.**

(b) If three years of the experience in paragraph 2.1.2.1 (a) have been working with American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME BPV Code): **score 1 additional credit.**

(c) If two years of the experience in paragraph 2.1.2.1 (a) have been as a quality assurance/control auditor: **score 2 additional credits.**

2.1.2.2 The sum of paragraphs 2.1.2.1 (a), 2.1.2.1 (b), and 2.1.2.1 (c) may be used towards the 10 credits maximum for qualifying work experience.

2.1.3 Professional Accomplishments (2 credits maximum)

2.1.3.1 For certification of competency in engineering, science, inspection or quality assurance/control which is issued and approved by a government agency, or by the National Board or other Technical Society. Examples include a National Board Commission or American Petroleum Institute (API) or American Welding Society (AWS) Certification: **score 1 credit.**

2.1.3.2 For registration as a Professional Engineer in one or more states: **score 1 credit.**

* 2.1.4 Management Evaluation (2 credits maximum)

Upon recommendation from the individual's employer, the National Board may award up to two credits for other performance factors applicable to reviews, audits, inspections and other activities which may not be explicitly called out in these criteria. Examples of these factors are leadership, judgment, analytical ability, past performance, and teaching at technical schools, seminars or courses.

2.2 Training

2.2.1 A prospective National Board Team Leader or National Board Representative shall have training sufficient to develop competency in reviews, audits, surveys or similar activities in accordance with National Board policies and procedures. Prospective National Board Team Leaders shall also attend the National Board Training Program for Team Leaders.

2.2.2 Training shall be based on the criteria described in paragraphs 2.2.2.1 through 2.2.2.8 – as applicable to the certification the prospective National Board Team Leader or National Board Representative is seeking.

2.2.2.1 Knowledge and understanding of the National Board Inspection Code and ASME BPV Code Sections I, II, III, IV, VIII (Divisions 1, 2 & 3) IX, X, and XII;

2.2.2.2 Knowledge and understanding of NB-57, National Board Guide for ASME Joint Reviews.

2.2.2.3 Knowledge and understanding of ASME Conduct of ASME Surveys, Reviews, Audits, Investigations and Interviews.

2.2.2.4 Knowledge and understanding of ASME Standard Qualification for Designees for Accreditations and Product Certification.

- 2.2.2.5 ISO-19011, Guidelines for Quality and/or Environmental Systems Auditing.
- 2.2.2.6 Knowledge and understanding of the general structure and applicable elements of quality assurance/control;
- 2.2.2.7 Procedures and techniques of auditing, questioning, evaluating, reporting methods of identifying and following up on review items, and closing out review findings; and
- 2.2.2.8 Training shall include the fundamentals and conduct of a review, visit for production device selection, or test witnessing as applicable.

2.3 Activity Participation

- 2.3.1 The prospective National Board Team Leader or National Board Representative shall be assigned with a qualified National Board Team Leader or National Board Representative to participate in a minimum of three reviews or visits of the type for which qualification is being sought within a one year period, except as provided below.
 - 2.3.1.1 For qualification to conduct testing laboratory reviews and Authorized Observer acceptance reviews, the individual must be a National Board Test Laboratory Authorized Observer or have been an Authorized Observer at another test lab and a qualified ASME Team Leader. The individual shall participate with a qualified ASME Team Leader during one testing laboratory review.
 - 2.3.1.2 Qualification as an Authorized Observer at the National Board Testing Laboratory shall also qualify the individual as a National Board Representative to perform test witnessing at the National Board Testing Laboratory.
 - 2.3.1.3 National Board Representatives performing test witnessing, device selections or other similar activities at facilities other than the National Board testing laboratory shall meet one of the following criteria:
 - 2.3.1.3.1 Hold an Authorized Observer certification at the National Board Testing Laboratory and participate in at least one site visit with a qualified National Board Representative at another ASME/NB accepted testing laboratory for test witnessing.
 - 2.3.1.3.2 National Board qualified Team Leaders who are not qualified Authorized Observers, shall participate in two site visits with a qualified National Board Representative to another ASME/NB accepted testing laboratory for test witnessing and one visit at the National Board Testing Laboratory, which will include training by qualified Pressure Relief Department Staff.

2.3.1.4 Any National Board or ASME Team Leader qualified to perform shop reviews for National Board VR or ASME V, UV, UD, HV, TV, TD, certificates of authorization is qualified as a National Board Representative to perform device selections provided all assigned qualification reviews included device selections.

2.3.2 The prospective National Board Team Leader or National Board Representative shall complete a Qualification Review Report (QRR), or the report required for the activity being reviewed. This report shall be submitted to the qualified National Board Team Leader or National Board Representative who shall review for content, completeness and accuracy.

2.3.3 The qualified National Board Team Leader or National Board Representative shall appraise the prospective National Board Team Leader's or National Board Representative's performance, including a review of the QRR or report required for the activity being reviewed as described in paragraph 2.3.2. Additionally, the qualified National Board Team Leader or National Board Representative shall submit a written evaluation of the prospective National Board Team Leader's or National Board Representative's performance and communication skills to the Manager of Technical Services.

2.4 Communication Skills

2.4.1 The prospective National Board Team Leader or National Board Representative shall have the capability to communicate effectively, both orally and in writing.

2.5 Examination

* 2.5.1 The prospective National Board Team Leader, who will conduct reviews, shall pass a written examination, with a grade of at least 80% for each area they are seeking certification. Examinations shall evaluate the prospective National Board Team Leaders comprehension and ability to apply the training fundamentals identified in paragraph 2.2. The application for a Team Leader or National Board Representative shall be submitted no later than two (2) years after passing the National Board examination. If the certification has not been applied for within the two (2) year period, the applicant shall be required to retake the examination.

2.5.2 The development and administration of the examination shall be carried out in accordance with National Board guidelines.

* 2.5.3 Prospective National Board Representatives shall be evaluated and qualified by a National Board Staff individual qualified as a Team Leader by written examination. This evaluation shall be documented on a Qualification Report.

2.6 National Board Team Leader or National Board Representative Qualifications Application

2.6.1 The application for National Board Team Leader or National Board Representative shall be submitted on form, NB-294, provided by the National Board.

2.7 National Board Team Leader or National Board Representative Qualification Certification

2.7.1 Certification of a National Board Team Leader or National Board Representative will be valid for a period of five years from time of issuance provided the Maintenance of Qualification is maintained as required in section 3.0 of this procedure.

3.0 MAINTENANCE OF QUALIFICATION

3.1 National Board Team Leaders and National Board Representatives shall maintain their proficiency by participating in at least one review, device selection process, test witnessing or similar activity as appropriate with the qualifications, every twelve months.

3.2 National Board Team Leaders shall attend the National Board Team Leader Training Program at least once every two calendar years.

3.3 Each National Board Team Leader and National Board Representative shall be audited by a qualified National Board Team Leader or National Board Representative at least once every 36 months after their initial qualification date. This audit shall be by direct observation during a review or survey and shall be documented on the National Board Team Leader Evaluation Form, NB-165. The completed Form NB-165 shall be signed by the auditor and auditee. The auditor shall then submit the Form NB-165 to the Manager of Technical Services within 30 days of completing the audit.

3.4 For National Board Team Leaders employed by National Board Member Jurisdictions, the audit specified in 3.3 above may be performed by a qualified National Board Team Leader employed by the jurisdiction. Alternatively, National Board Member Jurisdictions may request that the National Board provide a qualified National Board Team Leader to perform the required audit. For Scheduling, such requests shall be made in writing and submitted to the Manager of Technical Services at least 120 days prior to the end of the 36 month audit period.

4.0 RENEWAL

4.1 National Board Team Leaders and National Board Representatives shall complete a renewal application which shall be submitted to the National Board at least 60 days prior to the expiration of the certification.

4.2 The renewal application for the National Board Team Leader or National Board Representative shall be submitted on forms provided by the National Board.

4.3 The employer of the National Board Team Leader or National Board Representative shall sign the application to certify the applicant has maintained their qualification as required in section 3.0 of this procedure.

5.0 REQUALIFICATION

5.1 National Board Team Leaders or National Board Representatives who fail to maintain their proficiency in accordance with paragraph 3.1 of this procedure shall require an audit by a qualified National Board Team Leader or National Board Representative, as appropriate. This audit shall be accomplished within six months from expiration of the twelve month proficiency maintenance period.

- 5.2 National Board Team Leaders who fail to attend the National Board Team Leader training as described in paragraph 3.2 shall be required to attend the National Board Review Team Leader training within six months from the expiration of the two year period specified in paragraph 3.2.
- 5.3 National Board Team Leaders or National Board Representatives who fail to maintain proficiency by complying with the requirements specified in paragraphs 5.1 and 5.2 above or whose certification has lapsed shall require re-qualification. Re-qualification includes retraining in accordance with paragraphs 2.2 thru 2.6.

6.0 WAIVERS AND EXCEPTIONS

When the requirements of this document are impractical to implement, the Executive Director, with the concurrence of the Chairman of the Board of Trustees, may allow exceptions on a case by case basis.