

Quality Management System Manual

Table of Contents

1.0 INTRODUCTION.....	3
2.0 QUALITY POLICY STATEMENT	3
3.0 DESCRIPTION OF LEGAL STATUS	4
4.0 PTI ORGANIZATION	4
5.0 CERTIFICATION PROGRAMS.....	5
5.1 TERMS OF REFERENCE.....	5
5.2 MANAGEMENT STRUCTURE AND ORGANIZATION.....	5
5.2.1 Certification Program Personnel	5
5.2.2 Plant and System Certification Committees	6
5.2.3 PTI CRT-140 Certification Advisory Board (CAB).....	8
5.2.4 PTI Board of Directors.....	8
5.2.5 PTI Certification Staff	8
5.2.6 INDEPENDENT INSPECTION AGENCY	13
5.3 PROCEDURES FOR ASSESSING, RECORDING AND MONITORING OF PERFORMANCE	15
5.3.1 Review of evaluation reports.....	16
5.3.2 Audit Review of Independent Inspection Agency.....	16
5.3.3 Year-end Performance Evaluation.....	16
5.4 QUALITY MANAGEMENT PROCEDURES	16
5.4.1 Management of Impartiality.....	16
5.4.2 Mechanism for Safeguarding Impartiality	17
5.4.3 Administrative Procedures including Document Control	17
5.4.4 Due Notice of Changes	18
5.4.5 Procedure for Evaluating a Plant's or System Quality Control Process	18
5.4.6 Conditions for Issue, Retention & Withdrawal of Certification Documents.....	18
5.4.7 Procedure for Reviewing Changed Conditions	19
5.4.8 Controls over the Use and Application of Documents used in the Certification Program	19
5.4.9 Procedure for Dealing with Appeals, Complaints and Disputes	20
5.4.10 Appeals and Disputes	20
5.4.11 Complaints.....	21
5.4.12 Policies and Procedures for Conducting Management Reviews	22
5.5 Procedures for Financial Management and Budgeting.....	28
5.5.1 Program Budgeting	29
5.5.2 Member Dues Credit	29
Appendix A – PTI Organizational Charts	30
Appendix B – Managing PTI Staff Competencies.....	39

Appendix C – PTI Certification Staff Assignments and Key Responsibilities.....	40
Appendix D – Minimum qualifications for PTI Unbonded Tendon Plant Inspectors	40
Appendix E – Current updc independent inspection agency personnel	40
Appendix F - Step by Step Administrative Procedures for the PTI Unbonded Tendon Plant Certification Program	40
Appendix G - PTI Unbonded Tendon Plant Certification Program Recordkeeping Organization & Structure	40
Appendix H – PTI Certification Document Retention and Destruction Policy	41

Document Color Key

Items Specific to the PTI CRT-20 Unbonded Tendon Plant Certification Program

Items Specific to the PTI CRT-70 PTS Certification Program

1.0 INTRODUCTION

The Post-Tensioning Institute (PTI) program develops and maintains programs for Certifications for post-tensioning facilities (manufacturing plants), personnel and post-tensioning systems. This document addresses the Quality Management System for those certifications. It has currently been tailored to focus on the plant and system certifications. Examples of two certifications are presented below, the PTI CRT-20 Certification of Plants Producing Unbonded Single Strand Tendons and the PTI CRT-70 Post-tensioning System Certification for Multistrand Tendons. The Personnel Certification Programs are currently exempt from all of the requirements of this quality plan, until such time that it is adopted and/or adjusted for the specific requirements of those programs. As a historical note, this document was originally created solely for and dedicated to the CRT-20 UTPC program and as it was then extended to include other programs, some references have remained in the document that are specific to the UTPC program or remained to emphasize the requirement of the UTPC program.

Other systems relating to plant and system certification are also subject to the requirements of this Quality Management System.

The Post-Tensioning Institute (PTI) CRT-20 program for Certification of Plants Producing Unbonded Single Strand Tendons has been developed to provide independent certification of a plant's extrusion and/or fabrication capability to produce standard and/or encapsulated unbonded single strand tendons. This certification program also includes evaluation of calibration practices for jacks and gauges used for stressing single strand tendons. The program is applicable to all facilities whether fixed or mobile.

The certification of a plant under this program indicates that the plant and the personnel are capable of producing unbonded single strand tendons in conformance with the Post-Tensioning Institute Specification for Unbonded Single Strand Tendons, latest edition, or as specified in contract document(s) for specific project(s).

The PTI CRT-70 Post-tensioning Acceptance Testing and Approval Program was developed to standardize the approval process for post-tensioning systems. The Program is open to all suppliers of post-tensioning systems. The program is intended to provide uniform objective acceptance criteria and a mechanism to test and approve post-tensioning systems that meet these acceptance criteria. Program adoption on a national basis by appropriate Federal, State, and local Agencies, State Departments of Transportation, and other building authorities shall provide uniform approval criteria for PTSSs.

2.0 QUALITY POLICY STATEMENT

The Post-Tensioning Institute is recognized as the world-wide authority on post-tensioning. PTI is dedicated to expanding post-tensioning applications through marketing, education, research, teamwork,

and code development while advancing the quality, safety, efficiency, profitability, and use of post-tensioning systems. Members of the Institute include major post-tensioning materials fabricators, manufacturers of prestressing materials, and companies supplying materials, services and equipment used in post-tensioned construction. In addition, PTI has more than 500 professional members which include engineers, architects, inspectors, building code officials and educators.

One of the goals of the Institute is to ensure that specifiers and purchasers of post-tensioning materials receive products and services which meet a recognized standard of quality. Working toward this goal, PTI has established a certification programs ~~both~~ for manufacturing plants, post-tensioning systems/components (PTS), and for field personnel. One such program is for the Certification of Plants Producing Unbonded Single Strand Tendons (hereafter referred to as the Unbonded Tendon Plant Certification Program.) Another is the PTS Certification for MultiStrand Systems.

PTI has established a Quality Management System (QMS) as set forth in this manual to ensure the quality of the ~~Unbonded Tendon Plant~~ Certification Program. Specific objectives of the QMS are as follows:

- Ensure that program is fair, impartial and non-discriminatory to all stakeholders
- Ensure that program conforms with ANSI, ISO and other relevant certification standards (Some programs are directly under ANSI, others follow similar format but may not be certified under ANSI)
- Ensure that program conforms to the PTI By-Laws and established Certification Committee procedures.
- Facilitate continuous improvement of the program New – in response to 2021 ANSI Citation
 - Ensure the program is available to all applicants whose activities fall within the scope of the program's operations, regardless of size, membership status, association or group, or conditional upon the number of certifications already issued. There shall not be undue financial or other considerations.

3.0 DESCRIPTION OF LEGAL STATUS

PTI was established and incorporated as a 501 c(6) non-profit trade association in the state of Illinois, April 1976. PTI's office is currently located at:

38800 Country Club Drive
Farmington Hills, MI 48331
Phone: (248) 848-3180
Fax: (248) 848-3181

4.0 PTI ORGANIZATION

The bulk of PTI's work is done through its various committees comprised of volunteer members. The PTI Board of Directors has contracted with Advancing Organizational Excellence (AOE) to provide

administrative support including member/customer services, production, accounting, human resources, informational systems, and physical resources.

Currently, PTI committees and organizational charts, and lines of authority for PTI and AOE staff are listed ~~at. In Appendix A.1 through A.4- and shown on the organizational charts (Figures 1—4) on the following pages.~~

The Board-Level committees report directly to the PTI Board of Directors and are generally responsible for setting the direction and policy of PTI's financial, technical, membership, marketing and certification activities as shown in Appendix A.5 through A.7. ~~The lines of authority for staff are shown in Figures 5-7.~~

PTI technical committees report to the Technical Advisory Board (TAB) and are responsible for developing technical guidance, recommended practices and standards for the design, construction, maintenance and repair/rehabilitation of post-tensioned concrete structures.

PTI's certification committees report to the Certification Advisory Board (CAB) and are responsible for the development, implementation and oversight of PTI's various plant, system, and personnel certification programs.

5.0 CERTIFICATION ~~OF PLANTS PRODUCING UNBONDED SINGLE STRAND~~ ~~TENDONS~~PROGRAMS

The organization and management structure for ~~the Unbonded Tendon Plant~~ Certification Programs is are comprised of several parts: the Unbonded Tendon Plant Certification Committee /PTS Systems Qualification Testing and Certification Committee / Unbonded Systems Certification Committee / Personnel Certification Committees, the Certification Advisory Board, the PTI Board of Directors, staff and third party contractors (Independent Inspection Agency.) as shown ~~in Figure 8~~ in Figure A.8.

5.1 TERMS OF REFERENCE

The Unbonded Tendon Plant Certification program was first authorized by the PTI Board of Directors in 1989. The Board re-affirmed this authorization in accordance with the requirements outlined in this manual in the PTI By-Laws originally approved October 7, 2011. Visit <https://www.post-tensioning.org/membership/memberresources/by-laws.aspx> for the current version of the PTI By-Laws. The aforementioned management structure and organization was also established by the PTI By-Laws.

The PTS Multistrand Certification was authorized by the PTI Board of Directors in April 2015. It was established by the Board after recommendation of the PTI/ASBI M-50 Bonded Tendons Specification Committee.

5.2 MANAGEMENT STRUCTURE AND ORGANIZATION

5.2.1 Certification Program Personnel

5.2.1.1 General

5.2.1.1.1 PTI shall employ, or have access to, a sufficient number of personnel to cover its operations related to the ~~UTPC~~ Certification Programs s and to the applicable standards and other normative documents. The personnel include employees and committee members, as well as persons working

under an individual contract or a formal agreement that places them within the management control and systems/procedures of the ~~UTPC~~Certification Programs.

5.2.1.1.2 The personnel shall be competent for the functions they perform, including making required technical judgments, defining policies and implementing them. Personnel, including any committee members, personnel of external bodies, or personnel acting on the certification body's behalf, shall keep confidential all information obtained or created during the performance of the certification activities, except as required by law or by the certification scheme.

5.2.1.1.3 The personnel shall not be used to review or make a certification decision for a product for which they have provided consultancy for a period of two years after they have provided such consultancy.

5.2.1.2 Management of competence for personnel involved in the certification process

5.2.1.2.1 The ~~UTPC~~Committee shall implement and maintain the procedure for management of competencies of personnel involved in the certification process as set forth in Appendix~~4B~~. The procedure shall require the ~~UTPC~~Certification Committee to annually:

- a) Review and update as needed the criteria for the competence of personnel for each function in the certification process, taking into account the requirements of the ~~UTPC~~program;
- b) Identify training needs and provide, as necessary, training programs on certification processes, requirements, methodologies, activities and other relevant certification requirements;
- c) Demonstrate that the personnel have the required competencies for the duties and responsibilities they undertake;
- d) Formally authorize personnel for functions in the certification process;
- e) Monitor the performance of the personnel.

5.2.1.2.2 PTI shall maintain the following records on the personnel involved in the certification process:

- a) Name and address;
- b) Employer(s) and position held (entire work resume of the individual);
- c) Educational qualification and professional status;
- d) Experience and training;
- e) The assessment of competence;
- f) Performance monitoring;
- g) Authorizations for functions held within the certification program;
- h) Date of most recent updating of each record.

5.2.2 ~~PTI-CRT-20 Unbonded Tendon Plant~~ and System Certification Committees ~~(UTPC Committee)~~

The ~~Unbonded Tendon Plant~~Certification Committee (such as CRT-20 UTPC Committee or CRT-70 PTS Committee) is the management group that is responsible for decisions relating to the granting,

maintaining, extending, suspending and withdrawing of certification for ~~facilities that fabricate unbonded, single strand post-tensioning tendons~~ the given scope. The UTPC-Certification Committee has overall responsibility for the following:

- Performance of the testing, inspection and evaluation as defined in the ~~Unbonded Single Strand Tendon Plant~~ Administration Certification Manual.
- Formulation of policies and procedures related to the ~~Unbonded Tendon Plant~~ Certification Program
- Oversight of decisions on certification
- Development of the technical basis for certification
- Delegation of authority to undertake certification activities
- Oversight of the certification program implementation. New – in response to 2021 ANSI Citation
- Provide explanation and/or clarification of the program's technical documents upon request of client, inspection agency, or interested party.
- In addition, the UTPC-Certification Committee shall be responsible for supervision of the ~~Unbonded Tendon Plant Certification~~ Program's finances and budgeting. As part of this responsibility, the UTPC-Certification Committee shall annually set the program fees in accordance the policies and procedures set forth in Section 5.5 of this manual.

The UTPC-Certification Committee shall prepare a semi-annual report on the status of the ~~Unbonded Tendon Plant given-~~ Certification Program. At a minimum, the report should include the following:

- Summary of certification actions during the period (i.e. number of plants certified, re-certified or de-certified, or in the case of the CRT-70, systems that were certified, re-certified, or de-certified)
- Summary of the disposition of all appeals, complaints and disputes received during the period
- Financial status
- Independent Inspection Agency Observations and Recommendations

The semi-annual status reports shall be submitted to the Certification Advisory Board no later than April 15, and September 15 of each year.

Membership: ~~Membership of the certification committees shall be as~~ As specified in the PTI By-Laws (<https://www.post-tensioning.org/membership/memberresources/by-laws.aspx>). ~~Other certification committee membership composition shall be listed in the specific program's Administrative Manual.; membership in the Unbonded Tendon Plant Certification Committee is open to any interested party, including but not limited to post-tensioning and associate company representatives; contractors; engineers; government officials; and users of post-tensioning. The Committee shall consist of no more than eleven (11) members selected from nominations received from interested stakeholders. The Committee shall include the Chair; a minimum of three (3) representatives of Post-Tensioning Company Members; one (1) representative of a non-member post-tensioning company; one (1) representative of Associate Members; and a minimum of five (5) general interest or user representatives. Committee~~

~~members shall be appointed for a three (3) year term with one possible reappointment. Current members of the committee are listed in Appendix A.~~

5.2.3 PTI CRT-140 Certification Advisory Board (CAB)

The Certification Advisory Board is a Board-level committee that is responsible for overseeing all of PTI's certification committees. With respect to the Unbonded Tendon Plant Certification Program, CAB shall be responsible for the following:

- Appointment of the Chair and members of the ~~Unbonded Tendon Plant~~ Certification Committee
- Review of all de-certifications and certification denials to ensure compliance with PTI and ANSI certification requirements and procedures for committees that are ANSI certified.
- Oversight of PTI's Quality Management System, including the annual internal audit, for the Unbonded Tendon Plant Certification Program
- Processing of all appeals, disputes and complaints regarding the ~~UBT-UTPC~~ Plant Certification Program and other certification programs.
- Review of certification documents to ensure technical correctness and editorial quality

CAB shall not be responsible for the development of the technical basis for certification, and the formulation of policies and procedures related to the ~~Unbonded Tendon Plant~~various Certification Programs, which are solely the purview of the ~~Unbonded Tendon Plant~~respective Certification Committees.

Current members of CAB are listed ~~in Appendix B.~~ at https://www.post-tensioning.org/committees/committeerooster.aspx?committee_code=CRT140.

5.2.4 PTI Board of Directors

The PTI Board of Directors is responsible for directing and overseeing all activities of PTI. With respect to the Unbonded Tendon Plant Certification Program and other certification programs, the Board is responsible for overseeing the Certification Advisory Board and appointing its members. In addition, the Board shall annually set PTI's financial contribution to the ~~UBT-UTPC~~ Plant Certification Program and other Certification Programs as defined in Section 5.5.1 of this manual.

Current members of the PTI Board of Directors are listed at https://www.post-tensioning.org/committees/committeerooster.aspx?committee_code=BD-100~~in Appendix C.~~

5.2.5 PTI Certification Staff

In addition to the aforementioned groups, PTI has staff that supports the committees and carries out the administration and day-to-day implementation of the certification program. PTI Staff with assignments related to certification programs are listed at: www.post-tensioning.org/QualatyManagementProgram - Appendix C.. These staff ~~employees~~ position descriptions include:

5.2.5.1 Executive Director

The Executive Director is the chief executive officer of the Institute, responsible to the Board of Directors for the effective conduct of the affairs of the Institute. Refer to Appendix C for key responsibilities related to the Unbonded Tendon Plant Certification Programs include:

- ~~▪ Financial management~~
- ~~▪ Staff supervision and performance reviews~~
- ~~▪ Internal quality management and audit~~
- ~~▪ Legal oversight (in consultation with PTI's Legal Counsel)~~
- ~~▪ Contract administration (Independent Inspection Agency and other 3rd party contractors)~~
- ~~▪ Staff Liaison to the Board of Directors~~
- ~~▪ Review of certification applications~~
- ~~▪ Issuing notifications of certification actions to applicants/participating plants~~

Requisite Qualifications

In order to fulfill the ~~above~~ responsibilities outlined in Appendix C, the Executive Director shall have the following minimum qualifications:

- 5 years or more experience in managing a non-profit trade association,
- Working knowledge of and competence in financial management and budgeting
- Working knowledge of and competence in staff management and supervision
- Working knowledge of association and contract law
- Working knowledge of and competence in contract administration and specifically in managing professional services contracts

Current Position Holder

~~Tony Johnson is the current PTI Executive Director, and has held this position since 2019. He is a licensed professional engineer previously worked for the Concrete Reinforcing Steel Institute where he was responsible for providing technical assistance, outreach, and education to engineers, architects, owners, contractors, as well as student groups.~~

~~Additional information regarding Mr. Johnson's experience and training are on file in PTI's Human Resource department.~~

5.2.5.2 Certification Director

The Certification Director is responsible for overseeing the day-to-day administration of PTI's certification programs. Refer to Appendix C for key responsibilities related to the Unbonded Tendon Plant Certification Programs include:

- ~~▪ Serving as staff liaison to and provide support to the Unbonded Tendon Plant Certification Committee~~
- ~~▪ Examination of inspectors, and verification of their qualifications~~

- ~~▪ Audit review of Independent Inspection Agency~~
- ~~▪ Review of Independent Inspection Agency evaluation and a plant's compliance with program requirements~~
- ~~▪ Decisions on a plant's certification status~~

Requisite Qualifications

In order to fulfill the ~~above~~ responsibilities outlined in Appendix C, the Certification Director shall have the following minimum qualifications:

- Licensed professional engineer
- Extensive knowledge of post-tensioned concrete design and construction
- Working knowledge of and competence in committee management
- Working knowledge of and competence in standards and specification development
- Check of Independent Inspection Agency evaluation reports for conformance with PTI and ANSI requirements or other requirements if not ANSI.
- Coordination and processing of committee ballots
- Monitoring and maintaining a record of corrective actions taken by plants, by staff and by committees
- Working knowledge of and competence in applying the procedures and standards of other certification programs.

~~Current Position Holder~~

~~Amy Dowell is the current Director, Certification, and has been at PTI since 2013. She is a licensed professional engineer, and has Bachelors and Masters of Science in Civil Engineering. Ms. Dowell has experience in field investigation of structures and condition assessment. In her prior work, she was a project manager responsible for construction observation and quality control. As a student, she did cooperative work with concrete technicians to conduct standardized concrete and masonry testing protocols and conducted concrete material testing research.~~

~~Additional information regarding Ms. Dowell's experience and training are on file in PTI's Human Resource department.~~

5.2.5.3 Director of Technical, Education & Promotion Programs

The Certification Director is responsible for providing backup for review of compliance with administrative and technical criteria for PTI's certification programs. Refer to Appendix C for kKey responsibilities related to the ~~Unbonded Tendon Plant~~ Certification Programs include:

- ~~▪ Review compliance with administrative criteria~~
- ~~▪ Review of compliance with technical criteria~~

Requisite Qualifications

In order to fulfill the ~~above~~ responsibilities outlined in Appendix C, the Director of Technical, Education & Promotion Programs shall have the following minimum qualifications:

- Licensed professional engineer
- Knowledge of post-tensioned concrete design and construction
- Working knowledge of and competence in committee management
- Working knowledge of and competence in standards and specification development
- Working knowledge of and competence in applying the procedures and standards of certification programs.

5.2.5.3-4 Certification Engineer

The Certification Engineer is responsible for assisting the Certification Director in overseeing the day-to-day administration of PTI's certification programs. Refer to Appendix C for k~~Key~~ responsibilities related to the Unbonded Tendon Plant Certification Program. ~~_include:~~

In order to fulfill the ~~above~~ responsibilities outlined in Appendix C, the ~~Manager~~Certification Engineer~~-Certification~~ shall have the following minimum qualifications:

- Licensed professional engineer, or working toward licensing in the next 5 years
- Basic knowledge of post-tensioned concrete design and construction
- Working knowledge of and competence in committee management, and of PTI's certification committee policies and procedures
- ~~▪ Working knowledge of and competence in applying the UTPC procedures and standards~~
- Working knowledge of and competence in applying the procedures and standards of other certification programs

~~Current Position Holder~~

Position currently vacant

5.2.5.45 Certification Programs Coordinator

The Certification Programs Coordinator is responsible for providing the day-to-day administrative support of PTI's certification programs. Refer to Appendix C for k~~Key~~ responsibilities related to the ~~Unbonded Tendon Plant~~ Certification Programs. ~~_include:~~

- ~~▪ Processing of certification applications~~
- ~~▪ Filing and recordkeeping~~
- ~~▪ Maintenance of certification databases~~
- ~~▪ Maintenance of certified plant directories and listings~~ or systems certification listings
- ~~▪ Maintenance of PTI's certification web pages~~
- ~~▪ Overseeing general administration of the certification program~~

~~■ Preparing correspondence~~

Requisite Qualifications

In order to fulfill the ~~above~~ responsibilities outlined in Appendix C, the Certification Programs Coordinator shall have the following minimum qualifications:

- Working knowledge of and competence in the use of computers and administrative software (e.g. Word, Excel, Access etc.)
- High school degree with at least two years experience as an administrative assistant, or equivalent
- Competence in composing and formatting business letters and reports

~~Current Position Holder~~

~~Kim Curtis is the current PTI Certification Programs Coordinator, and has held this position since 2018.~~

~~She has experience in administrative support and her training includes numerous courses in the use of computers and administrative software.~~

~~Additional information regarding Ms. Curtis' experience and training are on file in PTI's Human Resource department.~~

5.2.5.56 Member Services Coordinator

The Member Services Coordinator is responsible for processing membership applications and for providing support to PTI members. Refer to Appendix C for kkey responsibilities related to the Unbonded Tendon Plant Certification Program. ~~include:~~

- ~~■ Processing of certification fee payments~~
- ~~■ Invoicing and following up on accounts receivable~~

Requisite Qualifications

In order to fulfill the ~~above~~ responsibilities outlined in Appendix C, the Member Services Coordinator shall have the following minimum qualifications:

- Working knowledge of and competence in the use of computers and administrative software (e.g. Word, Excel, Access etc.)
- High school degree with at least two years experience as an administrative assistant, or equivalent
- Competence in composing and formatting business letters and reports

~~Current Position Holder~~

~~Michelle Stern is the current PTI Member Services Coordinator, and has held this position since 2009.~~

~~Her training includes numerous courses in the use of computers and administrative software, and in membership administration.~~

~~Additional information regarding Ms. Stern's experience and training are on file in PTI's Human Resource department.~~

5.2.5.67 Certification Staff Selection & Training

As required, PTI will hire new staff as either replacements for, or additions to the above staff. New hires will be selected on the basis of their experience and qualifications (keeping the aforementioned requisite qualifications in mind), performance in job interviews and personal references.

Training will be provided to all staff as needed to strengthen needed skills and to improve their overall efficiency and effectiveness. Records of all training will be maintained by PTI Human Resources department.

5.2.5.78 Monitoring of Performance

Close to the end of each calendar year, an evaluation of all employees is performed. Its purpose is to pinpoint strengths and weaknesses, and to agree to an improvement program if necessary. Performance evaluations are kept on file by PTI's Human Resource department.

5.2.6 INDEPENDENT INSPECTION AGENCY

The Certification Committees shall each select inspection firms (Independent Inspection Agency) to perform the certification reviews of the plants or systems and shall be responsible for all of the inspection firm's contracted activities. The Independent Inspection Agency shall be an independent contractor and shall not be an employee of PTI. The specifics of the term, qualifications and scope shall be defined within the given Certification Committee's administrative Manual.

The Unbonded Tendon Plant Certification Committee shall select an inspection firm (Independent Inspection Agency) to perform the certification reviews of individual plants, and shall be responsible for all of the inspection firm's contracted activities. The Independent Inspection Agency shall be an independent contractor and shall not be an employee of PTI. The Independent Inspection Agency shall be appointed for a minimum initial term of three (3) years. The Independent Inspection Agency's activities shall terminate at the close of the contract term unless renewed by mutual agreement.

The Independent Inspection Agency shall be staffed by competent personnel experienced and familiar with unbonded post-tensioning materials, components, and production processes; as well as unbonded post-tensioning design and construction. The Independent Inspection Agency shall have a minimum of one licensed professional engineer on staff responsible for overseeing the firm's certification inspection activities.

Unless otherwise approved by the Unbonded Tendon Plant Certification Committee, the inspection personnel shall individually meet the minimum qualifications set forth in Appendix D at www.post-tensioning.org/Quality ManagementProgram. As noted in this exhibit, each inspector shall pass the PTI Plant Certification Inspector examination as approved by the UTPC Committee.

The Independent Inspection Agency shall be responsible for conducting plant inspections, preparing an evaluation report, and sending copies of the evaluation report to the Post-Tensioning Institute within

15-days of any inspection. All inspection reports shall be signed by the inspector and a licensed professional engineer (if the inspector is not so qualified.)

CRT-70: PT Systems Qualification Testing and Certification Program

- Inspection agency and inspectors not identified.

5.2.6.1 Conflict of Interest

The Independent Inspection Agency shall not be affiliated in any manner with any company or individual who has an ownership stake in a facility that participates in, or is eligible to participate in, the Plant Certification Program or PTS System Certification. The Independent Inspection Agency and its employees shall not be employed by any company or individual who has an ownership stake in a facility that is eligible to participate in the given Certification Program. An individual who was previously employed by a company eligible to participate in the given Certification Program shall not serve in the capacity of an inspector or auditor for a period of two (2) years following his/her separation from the company.

5.2.6.2 Confidentiality

Independent Inspection Agency will not at any time or in any manner, either directly or indirectly, use for its personal benefit, or divulge, disclose, or communicate in any manner any information that is proprietary to PTI or participating plants or PTS Systems. The Independent Inspection Agency will protect such information and treat it as strictly confidential.

The Independent Inspection Agency shall be required to sign a confidentiality agreement with each participating plant/company to protect all confidential, proprietary or trade secret information of the participating plants and/or PTS Systems. In addition, all project records, communications and committee deliberations shall also be considered strictly confidential and shall not be released to anyone without the express written approval of PTI. Further, the Independent Inspection Agency shall maintain the anonymity of the participants, while keeping an accurate confidential record. Upon termination of its agreement with PTI, the Independent Inspection Agency will return to PTI all records, notes, documentation and other items that were used, created, or controlled by the Independent Inspection Agency during the term of the agreement.

5.2.6.3 Impartiality

The Independent Inspection Agency, and the personnel that it uses, shall not be involved, either directly or through any other employer, in such a way that the credibility of the results of the Unbonded Tendon Plant Certification Program, or other certification programs could be compromised.

5.2.6.4 Corrective Action

Should the Independent Inspection Agency fail to comply with its contractual agreement with PTI or other requirements of 5.2.6, the ~~Unbonded Tendon Plant Certification~~ relevant Committee and PTI shall take appropriate corrective actions.

5.2.6.5 Current Independent Inspection Agency/Personnel

~~Charles R. Adams & Associates, Inc., 820 E. 10th Avenue, New Smyrna Beach, Florida 32169 is the current Independent Inspection Agency for the PTI Unbonded Tendon Plant Certification Program. The firm has served in this capacity since 2005. Presently, the company has three employees who are qualified and have been approved to be inspectors:~~

~~CHARLES R. ADAMS, P.E.~~

~~Key Qualifications:~~

- ~~• Consulting Structural Engineer specializing in post tensioned construction—licensed in the states of California, Florida, New Jersey, Maryland and Massachusetts~~
- ~~• Over 40 years experience in post tensioning industry~~
- ~~• Worked as southeast regional manager for Atlas Prestressing from 1969—1977~~
- ~~• Past owner of a post tensioning fabrication company (PTSI) 1977—1993~~
- ~~• Has provided engineering oversight of PTI Unbonded Tendon Program inspections since 2005.~~

~~CHARLES SKARBREVIK~~

~~Key Qualifications:~~

- ~~• Over 30 years experience in the post tensioning industry~~
- ~~• Previously worked for Post Tensioning Systems, Inc.—a post tensioning fabrication company. In this capacity, he trained and managed personnel for unbonded tendon fabrication at four fabrication facilities.~~
- ~~• Has served as a PTI Unbonded Tendon Program inspector since 2001.~~

~~RICK D. COOLER~~

~~Key Qualifications:~~

- ~~• Over 20 years experience in the construction industry~~
- ~~• In his previous positions, worked as a quality control manager, and as a consultant responsible for ensuring ISO 9000 and ITIL certification compliance.~~
- ~~• Has served as a PTI Unbonded Tendon Program inspector since 2006.~~

~~More detailed i~~Information regarding the current agency, inspectors, and their qualifications and experience ~~of the above inspectors~~ can be found in Appendix E at www.post-tensioning.org/QualatyManagementProgram. Other agency information can be found in the given program's administrative manual.

5.3 PROCEDURES FOR ASSESSING, RECORDING AND MONITORING OF PERFORMANCE

In particular, tThe PTI Unbonded Tendon Plant Certification Program is based on a review of materials, test data, and fabrication procedures during two or more plant inspections by the Independent Inspection Agency each year that the plant is involved in the program. During the plant's first year in

the program, there will be one in-depth announced inspection and one unannounced inspection. During the second and following years, a minimum of two unannounced inspections will be made of each plant.

Inspections by the Independent Inspection Agency shall include detailed review of records, previously reported nonconformities, test data, fabrication procedures, materials, equipment, and Quality Control Program as outlined in the PTI Unbonded Tendon Plant Certification Program Manual.

Procedures for how the plant or PTS is inspected and what is reviewed as well as frequency and type of inspections are included in the respective Administrative and Technical Manuals for the given committee and program.

5.3.1 Review of evaluation reports

Each evaluation report prepared and submitted by the Independent Inspection Agency shall be reviewed for compliance with established program standards and criteria by the PTI Managing Director. Areas of non-compliance shall be identified and reported to the Independent Inspection Agency and the ~~Unbonded Tendon Plant~~appropriate Certification Committee.

5.3.2 Audit Review of Independent Inspection Agency

In accordance with Section 5.4.12.2.3 of this manual, an internal audit review of the Independent Inspection Agency's activities shall be conducted a minimum of once per year.

5.3.3 Year-end Performance Evaluation

At the end of each year, the Chair of the ~~Unbonded Tendon Plant~~given Certification Committee and the PTI Managing Director shall meet with the Independent Inspection Agency to discuss any identified non-conformities, and other recommended improvements to enhance the quality and efficiency of the program. Minutes of the meeting shall be prepared and distributed to the full committee and the Chair of the Certification Advisory Board. Within 30 days of this meeting, the Independent Inspection Agency shall formally respond in writing to the recommendations and document what action has, or will be taken.

5.4 QUALITY MANAGEMENT PROCEDURES

PTI's Quality Management System for the Unbonded Tendon Plant Certification Program and other Certification Programs is comprised of several inter-related policies and procedures designed to provide multiple levels of review, and checks and balances to facilitate and ensure the effectiveness and continuous improvement of the program.

5.4.1 Management of Impartiality

5.4.1.1 All certification activities shall be undertaken impartially. The Certification Committee (such as PTI CRT20 UTPC Committee) shall be responsible for the impartiality of the Certification Committee (such as UTPC Certification Program) activities and shall not allow commercial, financial or other pressures to compromise impartiality. All certification body personnel (either internal or external) or committees who could influence the certification activities shall act impartially.

5.4.1.2 The UTPC-Certification Committee shall identify risks to impartiality on an ongoing basis ~~in accordance with the procedure set forth in Appendix J. Identification of risks to impartiality is a standing agenda item on the spring and fall meeting agendas for active plant of PT systems qualification programs.~~ The ~~PTI-CRT20-UTPC-Certification~~ Committee shall take action to respond to any risks to the impartiality of the UTPC-Certification Program, arising from the actions of other persons, bodies or organizations, of which it becomes aware. If a risk to impartiality is identified, the ~~PTI-CRT20-UTPC-Certification~~ Committee shall be able to demonstrate how it eliminates or minimizes such risk. This information shall be made available to the Certification Advisory Board as specified in 5.4.2.

5.4.2 Mechanism for Safeguarding Impartiality

5.4.2.1 The Certification Advisory Board (CAB) shall be responsible for safeguarding the impartiality of the Certification Programs (such as the UTPC Program). CAB shall provide input to the UTPC Certification Committees and the PTI Board of Directors on the following:

- a) the policies and principles relating to the impartiality of the Certification Program and UTPC certification activities;
- b) any tendency on the part of the Certification Committee and UTPC Committee to allow commercial or other considerations to prevent the consistent impartial provision of certification activities;
- c) matters affecting impartiality and confidence in certification, including openness.

CAB shall be provided access to all the information necessary to enable it to fulfill its risk-safeguarding functions. Risks to impartiality that have been identified by any Certification Committee including the UTPC Committee along with any corrective actions taken shall be reported to CAB and incorporated in the Annual Quality Management Review report.

5.4.2.2 If PTI does not follow the recommendations of CAB, CAB shall have the right to take independent action (e.g. informing authorities, accreditation bodies, stakeholders). In taking appropriate action, the confidentiality requirements of the given Certification Program such as the UTPC Program shall be respected. PTI management shall document the reasoning behind the decision to not follow the recommendations of CAB and shall maintain the document for review by appropriate personnel.

5.4.3 Administrative Procedures including Document Control

Information regarding PTI certification administrative procedures can be found in the respective Certification Committees Administrative Manual such as the PTI-CRT20 G4 Certification Administration and Operations Guide

Appendix F found at www.post-tensioning.org/CertificationQualityManualReferences Appendix F includes figures that outline the step-by-step procedures for key administrative processes of the UTPC program. ~~Additional information regarding PTI certification administrative procedures can be found in the PTI-CRT20 G4 Certification Administration and Operations Guide.~~ Appendix G lists the UTPC Program record-keeping organization and structure. The management review team(s) will examine a

representative sampling of various staff and committee actions to check for conformance with these procedures and to verify that the required records/documentation has been generated and filed. An internal staff audit of record retention will be conducted annually reviewing paper and electronic documents are retained for the minimum time period defined in Appendix H. Records shall be retained in accordance with the PTI-CRT20 P2 Certification Document Retention and Destruction Policy included as Appendix H.

5.4.4 Due Notice of Changes

PTI shall give due notice of any changes it intends to make in the requirements for certification. All proposed changes and certification documents will be available to the general public for review and comment at the PTI Web site. Discussions are open for 45 days. In addition, PTI will distribute proposed documents to interested stakeholders for review and comment. PTI will maintain a database of interested parties for review and distribution. Any person interested in being included on this distribution list, may contact PTI at any time.

Comments returned to PTI staff within the discussion period shall be considered by the relevant Certification Committee, such as the UTPC Committee, for closure in accordance with the ***PTI-CRT140 G3 Certification Committee Manual***.

5.4.5 Procedure for Evaluating a Plant's or System Quality Control Process

The procedure and frequency for inspections shall be in accordance with the procedures and criteria set forth in the Administrative Certification Manual

Specifically, for the UTPC, a minimum of two inspections will be performed by the Independent Inspection Agency in accordance with the procedures and criteria set forth in the PTI Unbonded Tendon Plant Certification Manual. In a plant's first year in the program, the first inspection will be scheduled at a mutually convenient time. However, all subsequent inspections will be random and unannounced.

5.4.6 Conditions for Issue, Retention & Withdrawal of Certification Documents

In order to become and remain certified, a plant or PTS Supplier must satisfy all of the following requirements as set forth in the PTI Unbonded Tendon Plantgiven Certification Manual and the PTI Plant Certification Contract:

- Be in good financial standing with PTI
- Abide by the terms and conditions of the PTI Certification Contract at all times
- Have all of its facilities either certified, or in the process of being certified
- Notify PTI of any materially-changed condition within 30 days of the change
- Failure to comply with any of these obligations will result in withdrawal of the certification.
- Receive a grade score of 75% or greater on the Independent Inspection Agency's evaluation of the plant

5.4.7 Procedure for Reviewing Changed Conditions

Upon receipt of a notification from a certified plant, or PTS Supplier, of a material change in their ownership, operations, manufacturing process, equipment, etc., the PTI staff will forward the notification to the respective Certification Committee (such as the UTPC Committee) for review, whereupon the Committee will determine whether an additional inspection is warranted to ensure the plant's or PTS Supplier conformance with program requirements. This determination shall be made as quickly as possible, but no more than 21 days after PTI's receipt of the notification.

If an additional inspection is deemed necessary, PTI staff will notify the Independent Inspection Agency, who in turn will schedule an unannounced inspection of the plant or in the case of PTS scheduling a new audit.

5.4.8 Controls over the Use and Application of Documents used in the Certification Program

The provisions for display of wall plaques or certificates, use of reference in company literature and correspondence and the general marketing information associated with all Certification Programs shall be identified in the Certification Program Administrative Manual.

Plants, and PTS Suppliers, may reference their certified status in company literature and correspondence for as long as the certification is in effect and provided the reference is to the specific plant(s) or PTS certified and not the company or product line as a whole.

For the UTPC, aAs set forth in Section 3.7 of the PTI-CRT20 G1 Unbonded Tendon Certification Program Manual, qualifying plants are registered with PTI and are awarded the right to display the PTI Certification Certificate designating them as PTI Certified Plants and are added to the PTI's published list of certified plants. In addition, PTI will provide each plant with a mountable wall plaque suitable for office display.

PTI will monitor a company's use of the PTI Plant Certification Mark for compliance. Each year as part of the annual certification renewal, a company with one or more qualifying plants must submit samples of the use of the PTI certification mark on correspondence, marketing literature, advertising and its website to PTI. A company with more than one certified plant only need submit one set of samples unless there are different usages of the PTI certification mark between certified plant locations. PTI staff will review the samples for compliance with the PTI Plant Certification Contract requirements. The plant and CRT-20 Committee will be formally notified in writing of any areas of nonconformance. Failure of the plant to correct any cited nonconformities will jeopardize the plant's certification status. Per Section 12 of the PTI Plant Certification Contract, any misrepresentation by Participant or misuse of the Certification Mark, constitutes grounds for PTI to withdraw Participant's privilege to participate in the Certification Program.

Plants or suppliers which fail to pass future inspections or which choose to discontinue their participation in the Certification Program shall not be permitted to display any previously awarded certified plant, or system, plaques or certificates. Additionally, they may not reference prior certified plant or system status in company literature or correspondence including the use of PTI Certified Plant Tags on shipments.

In the event of a change in certification such as the following:

- A change in the plant's type and/or category of certification
- A change in the plant's ,or PTS's certification status (e.g. fully, conditional, or suspended)
- A change in location of the plant or PTS Supplier location
- A change in the company name of the plant or PTS Supplier

PTI will notify the plant or supplier in writing that it must discontinue the use of any previously awarded certified plant or PTS plaques or certificates, and not reference prior certified plant or PTS status in company literature, advertising materials or correspondence including the use of PTI Certified Plant Tags on shipments. In addition, PTI shall issue a new certified plant ,or PTS, plaque and certificate reflecting the change.

5.4.9 Procedure for Dealing with Appeals, Complaints and Disputes

An applicant may file an appeal, dispute or complaint with PTI within the guidelines set forth within. Typically an appeal or dispute will relate to the evaluation and inspection of the plant by the Independent Inspection Agency or to an issue with a particular PTS evaluation by the Independent Inspection Agency. Complaints typically will relate to procedural matters or the conduct of inspectors or PTI staff. A party wishing to file either should clearly define whether the matter relates to an evaluation and PTI's subsequent certification decision (i.e. an Appeal/Dispute), or whether it relates to another issue.

5.4.10 Appeals and Disputes

In the event a dispute arises between an applicant and PTI concerning the applicant's evaluation report, applicant may appeal the decision. An appeal shall be made in writing to the Post-Tensioning Institute and received by the PTI within 21 days of receiving the PTI's Certification decision and the Independent Inspection Agency's evaluation report. The applicant shall state in writing its position to PTI.

An appeal shall be sent by certified mail or other delivery methods such that the time and date of delivery can be verified. If the appeal is not received by PTI within the required 21-day period, the plant loses its ability to appeal and the applicant's evaluation report stands.

Upon receipt, the PTI staff shall acknowledge receipt of the appeal in writing, and shall refer the matter to the Certification Advisory Board (CAB). CAB will then establish an Appeal Board to review the matter.

5.4.10.1 Appeal Board

The Appeal Board shall consist of five members. The CAB Chair shall serve as Chair of Appeal Board; if CAB Chair has a conflict of interest on the matter, then the Vice-Chair of CAB shall serve as Chair. If the Vice-Chair of CAB has a conflict of interest on this matter, the CAB Chair shall appoint another CAB member without a conflict of interest as Chair of the Appeal Board. The CAB Chair will appoint three members of the Appeal Board selected from the current Unbonded Tendon Plant Certification Committee, or the other relevant Certification Committee as follows:

- Two (2) General Interest/User representatives
- One (1) Post-Tensioning Company representative

The Applicant shall designate one (1) representative who is not an officer, employee, or is otherwise affiliated with the Applicant as the fifth member of the Appeal Board. Any person who has been involved in the certification evaluation and decision that is being appealed shall not be eligible to serve on the Appeal Board.

5.4.10.2 Appeal Board Review

The Appeal Board will forward the Applicant's written appeal to the Independent Inspection Agency for review and comment. The Independent Inspection Agency will then submit a written statement either re-affirming and/or clarifying its position on the matter within 7 days to the Appeal Board, with a copy to the applicant. Based on the Independent Inspection Agency's response, the Applicant may then decide whether a formal meeting with the Appeal Board is desired. If so, the Applicant must submit a formal meeting request in writing to PTI. This written request must be accompanied by an appeal board meeting fee deposit of \$7,500, which will be refunded to the Applicant if the Appeal Board decides that the Applicant should be certified. If not, PTI will retain the deposit to defray the cost of the meeting.

The meeting will be scheduled by PTI within the next two to four weeks, with the meeting to be held at PTI's office in Farmington Hills, Michigan. The Applicant shall be afforded a full opportunity, in person and by counsel if desired, to be heard by and to present any relevant additional evidence to the Appeal Board. In addition, a representative of the Independent Inspection Agency shall also attend if so directed by the Appeal Board.

5.4.10.3 Appeal Board Decision

The Appeal Board will review the testimony, written statements and other supporting documentation and decide the matter within 14 days. The Applicant will be notified in writing of the Appeal Board's decision. The Appeal Board's decision shall be final, and binding upon both parties.

5.4.11 Complaints

An applicant or other interested party may also file a complaint with PTI. A complaint will typically involve an administrative matter of some sort. Examples of instances that might generate a complaint include: an inspector not following good safety practices, staff not responding to an inquiry in a timely manner, a competitor misusing the PTI certification mark, etc.

PTI staff shall acknowledge receipt of the complaint in writing, and will forward the complaint to the Certification Advisory Board for review within 7 days of receipt. If a person files a complaint by telephone, they will be asked to submit a written summary of the complaint (i.e. by letter, fax or e-mail). As needed, CAB will request additional information from the submitter, staff and/or the Independent Inspection Agency. Based on the information provided, CAB will decide what action, if any, is warranted.

The submitter will be notified in writing of CAB's decision as well as any follow-up action that is directed. Follow-up actions will be documented in PTI's certification files; the effectiveness of those

actions will be evaluated as part of future quality management reviews as provided for in Section 5.4.12 of this manual.

5.4.12 Policies and Procedures for Conducting Management Reviews

The Certification Advisory Board and the PTI Executive Director shall be jointly responsible for implementing the quality management review. The review shall be performed at least once per year and should include the following elements:

- Internal Audit of:
 - Committee operations
 - Staff administration
 - Independent Inspection Agency
- Review of external audits (ex. ANSI for UTPC)
- Review of all appeals, complaints and disputes received during the review period
- Review and assessment of public comments received during the review period
- Performance reviews of staff
- Review of nonconformities previously identified in past quality management reviews, and the related status of preventive and corrective actions taken
- Review of risks to impartiality as identified by the individual Certification-UTPC Committees
- Review and the evaluation of the effectiveness of follow-up actions from previous management reviews
- Review of changes that could affect the management system
- Assessment of the fulfilment of program objectives

Specific procedures for each quality review element are detailed below. The general process to be followed in a management review is detailed in Figures 9 – 20 at www.post-tensioning.org/QualityManagementProgram

5.4.12.1 Internal Audits

PTI shall conduct internal audits of its certification processes to ensure that the quality management system is implemented and is effective. (See www.post-tensioning.org/QualityManagementProgram ~~Figure 10.~~) The principal objectives of these audits are to:

- Meet requirements for certification to a management system standard;
- Verify conformance with PTI ~~and~~
- Contribute to the improvement of the management system.
- Verify conformance with ANSI requirements for the UTPC Program.

5.4.12.1.1 Selection & Training of Auditors

Auditors for internal management reviews shall be selected per 5.4.12.1.3.1, 5.4.12.1.3.2 and 5.4.12.1.3.3, and as shown www.post-tensioning.org/QualityManagementProgram ~~on Figure 11~~. Training shall be provided for the auditors as needed. At a minimum, a webinar shall be held presenting the pertinent requirements of the UTPC Program and ISO/IEC 17065. Other training including as required by other Certification Committees shall be conducted in addition to this webinar.

5.4.12.1.2 Timing & Frequency of Reviews

Internal audit review shall be performed a minimum of once per year per certification committee. If warranted by the findings of the previous-year audit, CAB may elect to direct that an additional audit be performed.

The committee audit review shall be initiated prior to the committee's normally scheduled fall meeting (typically in October.) The Headquarters/Staff and Inspection Agency audits shall be conducted during the fourth quarter of each year.

5.4.12.1.3 Responsibilities & Procedures

5.4.12.1.3.1 Committee Review & Assessment

PTI's annual internal audit shall assess, in a separate audit, the operations of the Unbonded Tendon Plant Certification Committee and all other Certification Committees. (Appendix F.9 Figure 12 at www.post-tensioning.org/QualityManagementProgram)

illustrates the process that shall be followed in performing the committee audit.

The Certification Advisory Board will designate a representative to work with the PTI Executive Director who together will serve as the committee auditor team. The CAB representative shall not be the Chair or a member of the given Certification Committee (for example the Unbonded Tendon Plant Certification Committee), and should have knowledge of ANSI criteria for accreditation, due process and consensus procedures.

The committee audit will be comprised of three parts:

1. Select surveys of committee members to assess their knowledge of procedures and certification requirements, and to obtain their observations regarding committee operations. CAB may identify survey topics as needed.
2. Committee meeting observation to evaluate conformance with CCM
3. Review of committee documents and records to determine completeness and accuracy of minutes, voting summaries, ballot resolutions, etc.

The committee auditor will prepare a final report outlining its findings and recommendations. The report shall be submitted to CAB for inclusion in the overall annual quality management review. CAB will review the report and make recommendations for improving the given UTPC Committee's (such as the UTPC) operations.

A copy of the committee audit report and CAB's recommendations will be provided to the UTPC Certification Committee (such as the UTPC) for implementation.

5.4.12.1.3.2 PTI Staff/Headquarters Review & Assessment

PTI's annual internal audit shall also assess the administrative activities of the PTI certification staff. Figure 13 at www.post-tensioning.org/QualityManagementProgram illustrates the process that shall be followed in performing the staff audit.

In alternate years, the Certification Advisory Board and the given Certification Committee (such as the UTPC Committee) will designate a representative to serve as the staff auditor. CAB will conduct the review one year and the respective Certification UTPC Committee the next. The audit will be comprised of three parts:

1. Interviews of certification staff members to assess their knowledge of procedures and certification requirements, and to obtain their observations regarding implementation of the program.
2. Observation of the staff handling typical certification transactions such as application processing, inspection report review, complaint handling, record filing of records, etc...
3. Review of certification documents and records.

The auditor will prepare a final report outlining its findings and recommendations. The report shall be submitted to CAB for inclusion in the overall annual quality management review. CAB will review the report and make recommendations for improving staff operations.

A copy of the committee audit report and CAB's recommendations will be provided to the given Certification Committee (such as the UTPC Committee) and the Executive Director for implementation.

5.4.12.1.3.3 Independent Inspection Agency Review & Assessment

The final component of PTI's annual internal audit shall be a review and assessment of the Independent Inspection Agency. Figure 14 illustrates the process that shall be followed in performing the Independent Inspection Agency audit.

The inspection agency review will be conducted by either a representative of ~~t~~the UTPC Committee or by PTI staff (either the Managing Director or the Manager of Certification.) Every other year, the UTPC Committee will designate a representative to serve as the Independent Inspection Agency auditor. The UTPC Committee representative shall not be a post-tensioning company member of the Unbonded Tendon Plant Certification Committee, and should not have a real or apparent conflict of interest. The representative should be experienced in and have knowledge of PTI's technical certification criteria and procedures.

The Independent Inspection Agency audit will be comprised of four parts:

1. Interviews of certified plant personnel to obtain their observations and views regarding recent inspections performed by the Independent Inspection Agency.
2. Interviews of inspectors to assess their knowledge of program requirements and to evaluate their respective inspection practices.

3. On-site visits accompanying an inspector on 1 – 2 plant inspections to evaluate the adequacy of inspection procedures (UTPC audit only)
4. Review of inspection documents and records to determine completeness and accuracy.
- ~~4.5.~~ Review of at least one PTS approval together with the inspector that occurred within the current period (PTS audit only).

The auditor will prepare a final report outlining its findings and recommendations. The report shall be submitted to CAB and the given Certification Committee (such as the UTPC Committee) for inclusion in the overall annual quality management review. UTPC Committee will review the report and make recommendations for improving the Independent Inspection Agency's operations.

A copy of the Independent Inspection Agency audit report and CAB's recommendations will be provided to the Independent Inspection Agency and the Certification UTPC Committee for implementation.

5.4.12.1.3.4 Audit Criteria

The internal audits shall use the following references as the criteria for the evaluation:

- ANSI Accreditation Criteria as set forth in ISO/IEC 17065 and ANSI Form PRO-FR-105
- Approved committee procedures as set forth in the *PTI-CRT140 G3 Certification Committee Manual*
- PTI By-Laws

- Approved PTI certification policies and procedures in effect at the time of the audit as set forth in this manual (Appendices F, G, and H).
- PTI-CRT20 G1 PTI Unbonded Tendon Plant Certification Manual
- Approved PTI certification policies and procedures in effect at the time of the audit as set forth in the given Certification Committee Administrative Manual [non-UTPC only]

Any conflict between these references shall be referred to the given Certification Committee (such as the PTI CRT20 UTPC Committee) for consideration.

5.4.12.1.3.5 Reporting

The auditors shall each prepare an audit report outlining their findings and recommendations. The report shall be submitted to CAB no later than December 31st of each year. At a minimum, the reports shall identify:

- Needed corrective action and/or suggested Improvements
- Areas where policies and procedures are not in conformance with specified audit standards.

CAB will incorporate the various audit reports into the overall quality management review report. Copies of the report shall be made available to the PTI Board of Directors, the [given Certification Committee \(such as the UTPC Committee\)](#) and the PTI Executive Director.

5.4.12.1.3.6 Auditor Confidentiality

Auditors shall re-affirm in writing their agreement to comply with PTI's confidentiality provisions prior to conducting the audit. These written commitments shall be retained in PTI's certification files and included in the final audit report. In addition, the identity of plants visited as part of the on-site assessment of the Independent Inspection Agency shall not be revealed and shall be kept confidential.

5.4.12.1.3.7 Reimbursement for Travel and other Related Expenses

PTI will reimburse auditors for reasonable travel and other related expenses associated with the performance of internal quality audits in accordance with approved PTI Travel policies in effect at the time.

5.4.12.1.3.8 Evaluate the Effectiveness of the Audits

As the final component of the annual quality management review, CAB shall evaluate the effectiveness of the internal audits and develop recommendations for improving the audit program. These recommendations should be implemented in subsequent audits.

5.4.12.2 Review of External Audits

The Certification Advisory Board shall review the findings of external audits (ANSI and others if applicable) along with any preventive or corrective actions taken. CAB shall evaluate the progress and effectiveness of these actions, and shall document its assessment in the Annual Management Review Report. (See Figure 10 [on www.post-tensioning.org/QualityManagementProgram](http://www.post-tensioning.org/QualityManagementProgram).)

5.4.12.3 Review Procedure for Handling of Public Comments, Appeals, Complaints and Disputes

For the annual Quality Management Review, staff will compile records of the following:

- [All public comments received along with documentation of the other Certification Committee's resolution of those comments](#)
- All appeals, complaints and disputes along with documentation of corrective and/or preventative action taken

The Certification Advisory Board will designate a team, who along with the Executive Director will review the extent, nature and validity of comments, appeals, complaints and disputes received. The team will also evaluate the sufficiency of PTI's follow-up actions. The review team will summarize its findings in a report to be submitted to CAB. (See Figure 15 [on www.post-tensioning.org/QualityManagementProgram](http://www.post-tensioning.org/QualityManagementProgram).)

- All public comments received along with documentation of the PTI CRT20 UTPC Committee's resolution of those comments

5.4.12.4 Performance Reviews of Staff

Each year, the respective supervisors shall conduct performance evaluations for each certification staff member to determine if they are competent to perform their respective certification functions. The employee evaluations shall be maintained on file in PTI's Human Resources department. In addition, the supervisor shall provide an affidavit attesting that the staff person has the required competencies for the certification duties and responsibilities they undertake. If the employee is not deemed to be fully competent, the supervisor shall identify required training and/or corrective action necessary to bring the employee to a full competence level. The supervisor affidavits and any identified training needs should be included in the Annual Management Review Report. (See Figure 16 [on www.post-tensioning.org/QualityManagementProgram](http://www.post-tensioning.org/QualityManagementProgram).) Appropriate training will be provided as required.

5.4.12.5 Procedure for Handling Non-conformities

CAB's final management review report shall identify any areas that do not conform to established PTI procedures and standards. The [Certification Committee \(including, but not limited to PTI CRT20 UTPC Committee\)](#) shall formally respond to each identified non-conformity and propose corrective or preventative action if appropriate. (See Figure 17 [on www.post-tensioning.org/QualityManagementProgram](http://www.post-tensioning.org/QualityManagementProgram).)

5.4.12.6 Review of Risks to Impartiality

The Certification Advisory Board shall review risks to impartiality that have been identified by [any of the Certification Committees \(such as the PTI CRT20 UTPC Committee\)](#) along with any corrective actions taken. CAB shall evaluate the progress and effectiveness of these actions, and shall provide input to the [originating Certification Committee \(for example PTI CRT20 UTPC Committee\)](#) and the PTI Board of Directors in accordance with 5.4.12.1.3.5 CAB's review and related input shall be noted in the Annual Management Review Report. (See Figure 16 [on www.post-tensioning.org/QualityManagementProgram](http://www.post-tensioning.org/QualityManagementProgram).)

5.4.12.7 Procedure for Assuring Effectiveness of Corrective/Preventative Actions

In the subsequent year, the management review will examine the previously-identified areas of nonconformity and risks to impartiality to verify that appropriate action was taken. Findings will be reported in the subsequent year management review report along with the team's assessment regarding the effectiveness of the action. Figure F-7 in Appendix F outlines the step-by-step procedure for evaluating actions taken to prevent/correct non-conformities. (See Figure 17 [on www.post-tensioning.org/QualityManagementProgram](http://www.post-tensioning.org/QualityManagementProgram).)

5.4.12.8 Review of Follow-up Actions from Previous Management Reviews

The Certification Advisory Board shall be responsible for reviewing the findings and recommendations of the annual quality management review (including internal audits). On the basis of this review, CAB will identify the need for corrective and preventative actions, and opportunities for improvement, and determine recommended follow-up.

CAB will forward these recommendations to the [Unbonded Relevant Certification Committee \(such as the Unbonded Tendon Plant Certification Committee\)](#) for consideration and implementation. The

~~UTPC~~given Certification Committee shall consider and document its actions (or reasons for not taking action) with respect to each CAB recommendation. (See Figure 18 on www.post-tensioning.org/QualityManagementProgram.)

5.4.12.9 Review of Changes that could affect the Management System

The Certification Advisory Board should identify changes in personnel, the industry, related standards, government regulations and laws, and other developments that could affect the ~~UTPC~~PTI Quality Management System. These changes and any related recommendations should be noted in the Annual Management Review Report for the consideration of the PTI CRT20 Unbonded Tendon Committee, other Certification Committees and the PTI Board of Directors. (See Figure 18 on www.post-tensioning.org/QualityManagementProgram.)

5.4.12.10 Assessment of the Fulfillment of Program Objectives

Based on the above reviews, the Certification Advisory Board should make an assessment as to whether the Unbonded Tendon Plant Certification Program has fulfilled its program objectives over the past year. CAB's findings and recommendations in this regards shall be noted in the Annual Management Review Report. (See Figure 19 on www.post-tensioning.org/QualityManagementProgram.)

5.4.12.11 Annual Management Review Report

The PTI Executive Director shall compile the inputs from the aforementioned reviews and shall draft the annual management review report for the Certification Advisory Board's review and approval. The draft shall be submitted to CAB no later than February 28 of each year. CAB shall approve the report and provide recommendations for follow-up action to the given Certification Committee (such as the PTI CRT20 Unbonded Tendon Plant Certification ~~(UTPC)~~ Committee) and the PTI Board of Directors. (Figure 20 on www.post-tensioning.org/QualityManagementProgram.)

The Certification Committee (such as the UTPC Committee) shall review the CAB recommendations and shall decide on appropriate follow-up action.

5.5 PROCEDURES FOR FINANCIAL MANAGEMENT AND BUDGETING

The Unbonded Tendon Plant Certification Program shall be managed as an independent cost center within PTI. The UTPC Committee shall be responsible for the direct financial management and budgeting of the program in cooperation with the PTI Board of Directors and the PTI Finance Advisory Committee.

The PTS Certification Program shall be managed as an independent cost center within PTI. The CRT70 Committee shall be responsible for the direct financial management and budgeting of the program in cooperation with the PTI Board of Directors and the PTI Finance Advisory Committee.

Other Certification Programs shall be managed as an independent cost center within PTI. The given Certification Committee shall be responsible for the direct financial management and budgeting of the program in cooperation with the PTI Board of Directors and the PTI Finance Advisory Committee

5.5.1 Program Budgeting

As shown in Figure 21 [on www.post-tensioning.org/QualityManagementProgram](http://www.post-tensioning.org/QualityManagementProgram), each year prior to the PTI Fall Board meeting, the PTI Finance Advisory Committee (FAC) will develop cost estimates for the certification program. Based on these estimates, the PTI Board of Directors will establish PTI's financial contribution to the Unbonded Tendon Plant Certification Program [as well as the other certification programs](#), for the following fiscal year (Jan. 1 – December 31.) This contribution will cover PTI's anticipated administrative expenses (e.g. staff salary, overhead, meeting space, storage and shipping, travel etc.), legal services, insurance, website and marketing associated with ~~the each~~ program. In addition, the contribution will include a research and development charge to reflect PTI's ongoing efforts to develop technical standards used by the Unbonded Tendon Plant Certification Program, [and if applicable, the other certification programs](#).

The UTPC Committee [and other Certification Committees](#) will be notified of PTI's annual contribution following the Board's Fall meeting (typically in October.) The UTPC Committee will then set the program fees and budget to result in a break-even position (i.e. no significant loss or surplus) at year-end based on anticipated plant participation. [The CRT70 PTS Committee will also set the program fees and budget to result in a break-even position \(i.e. no significant loss or surplus\) at year-end based on anticipated plant participation.](#)

If the actual year-end financial performance should vary significantly from the budget, then the subsequent year's budget and fees should be adjusted to move the program back to a break-even basis.

5.5.2 Member Dues Credit

Through payment of membership dues and other member assessments, PTI member companies help finance PTI's annual financial contribution to the Unbonded Tendon Plant Certification Program. In addition, PTI member companies have financed the development of the program for the last 22 years. To reflect these contributions to the program and to avoid member companies having to make duplicate contributions, PTI member plants will receive an annual credit on their plant certification fees. The credit will be set by the UTPC Committee and will be based on the sum of the PTI annual contribution and the annual development recovery charge divided by the estimated number of member plants participating in the program.

The credit will be paid at the beginning of each year. Only companies that are members and are in good financial standing will be eligible to receive the credit. Companies that join PTI during the year and that maintain their membership through the end of the year will also be eligible for the credit. Any company who begins the year as a member but later drops its membership will have to re-pay to PTI the pro-rated share of the annual member credit for the balance of the year, in order to maintain its certification(s).

Figures 22 and 23 [on www.post-tensioning.org/QualityManagementProgram](http://www.post-tensioning.org/QualityManagementProgram) contain the analyses of the current year PTI annual contribution, and the PTI Certification Fees, respectively.

APPENDIX A – PTI ORGANIZATIONAL CHARTS

Please visit <https://www.post-tensioning.org/committees/committeedirectory.aspx> for the official rosters of committees named in Appendix A.

Please visit <https://www.post-tensioning.org/QualityManagementProgram> for staff assignments and other details relating to PTI Certification Programs

PTI Board Level Committees

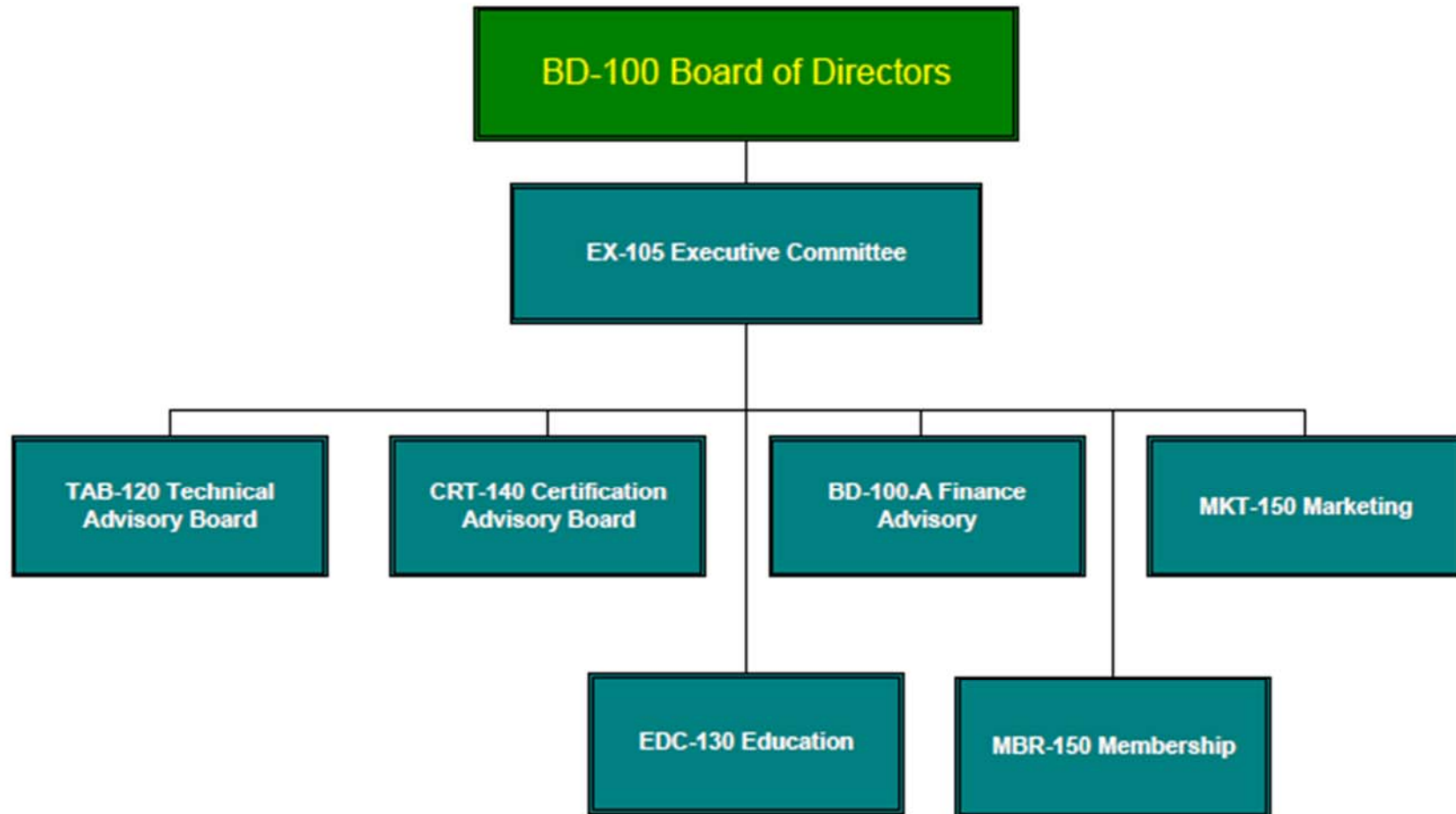


Fig. A.1—Committee organizational chart.

PTI Technical Committees

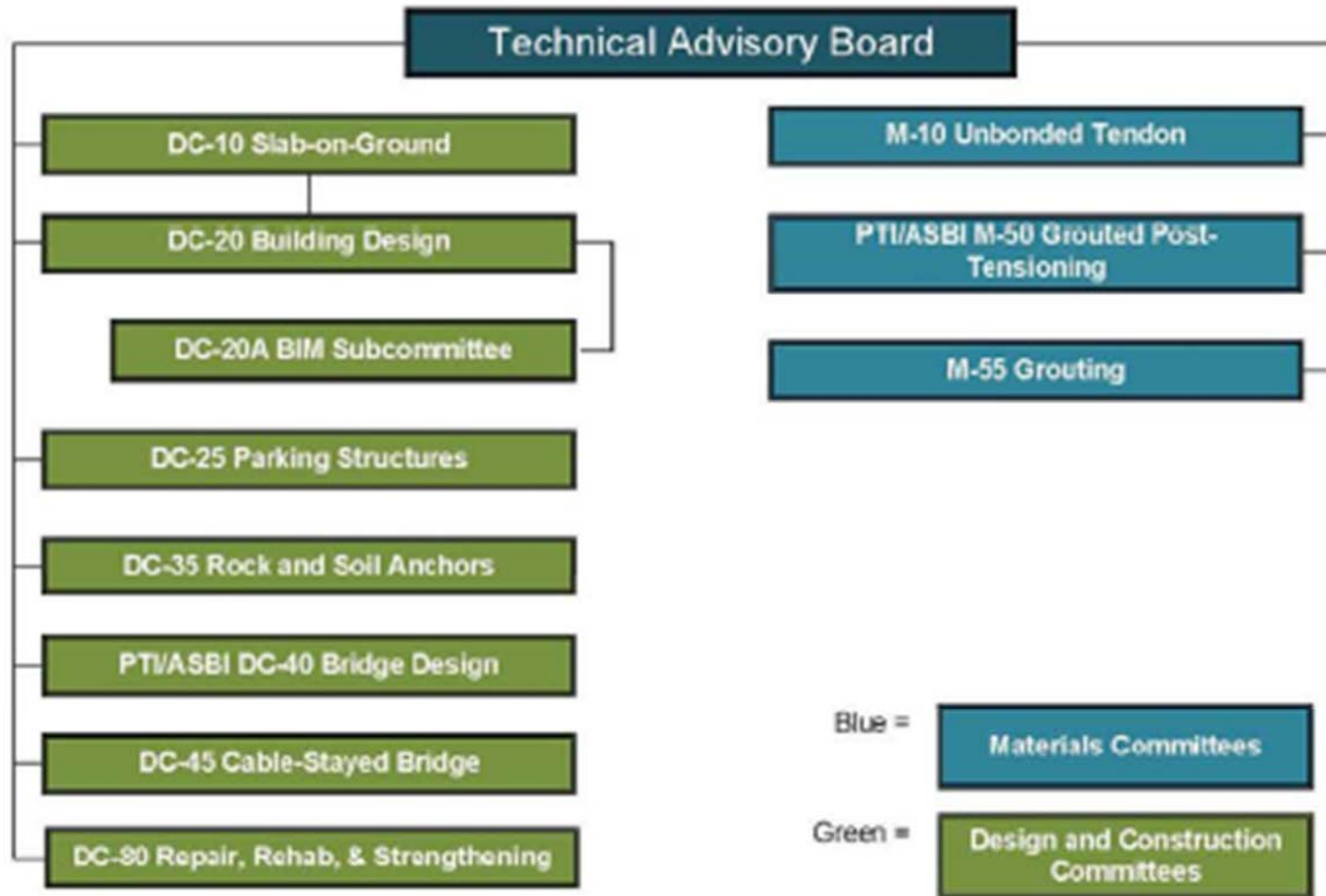


Fig. A.2—PTI Technical Committees.

PTI Certification Committees

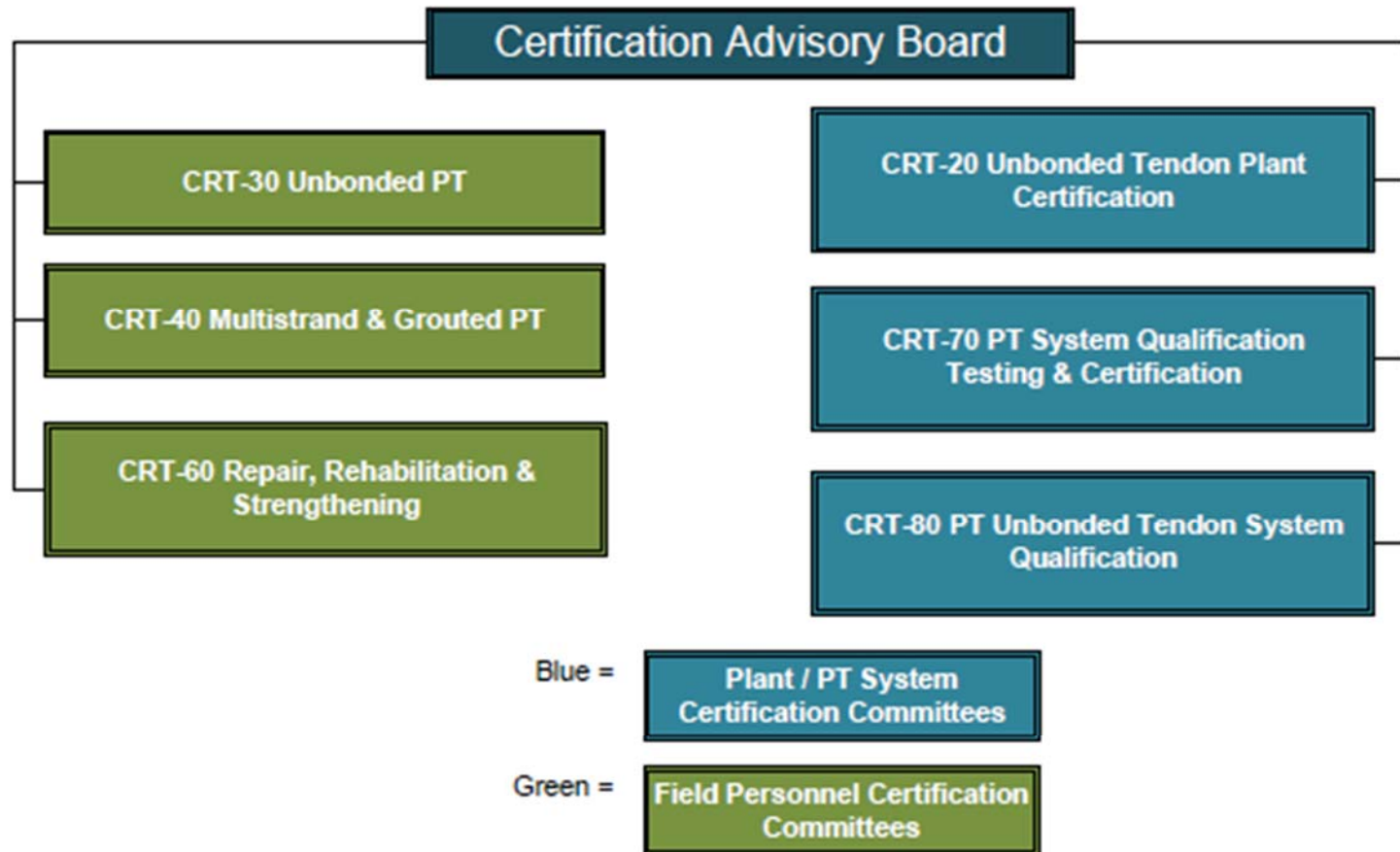


Fig. A.3—PTI Certification Committees

CRT-20 Unbonded Tendon Plant Certification Committee

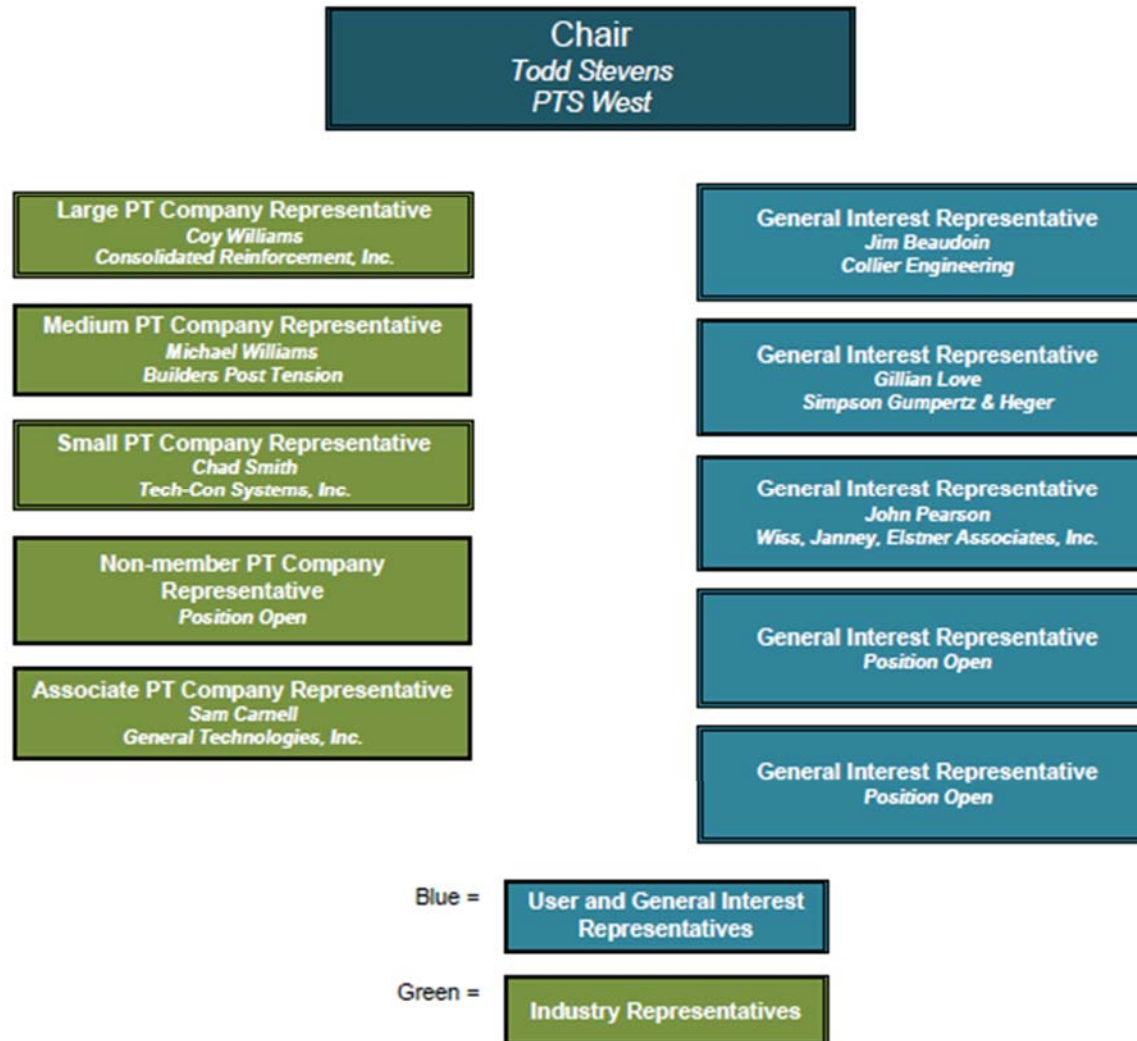


Fig. A.4—CRT-20 Unbonded Tendon Plant Certification Committee.

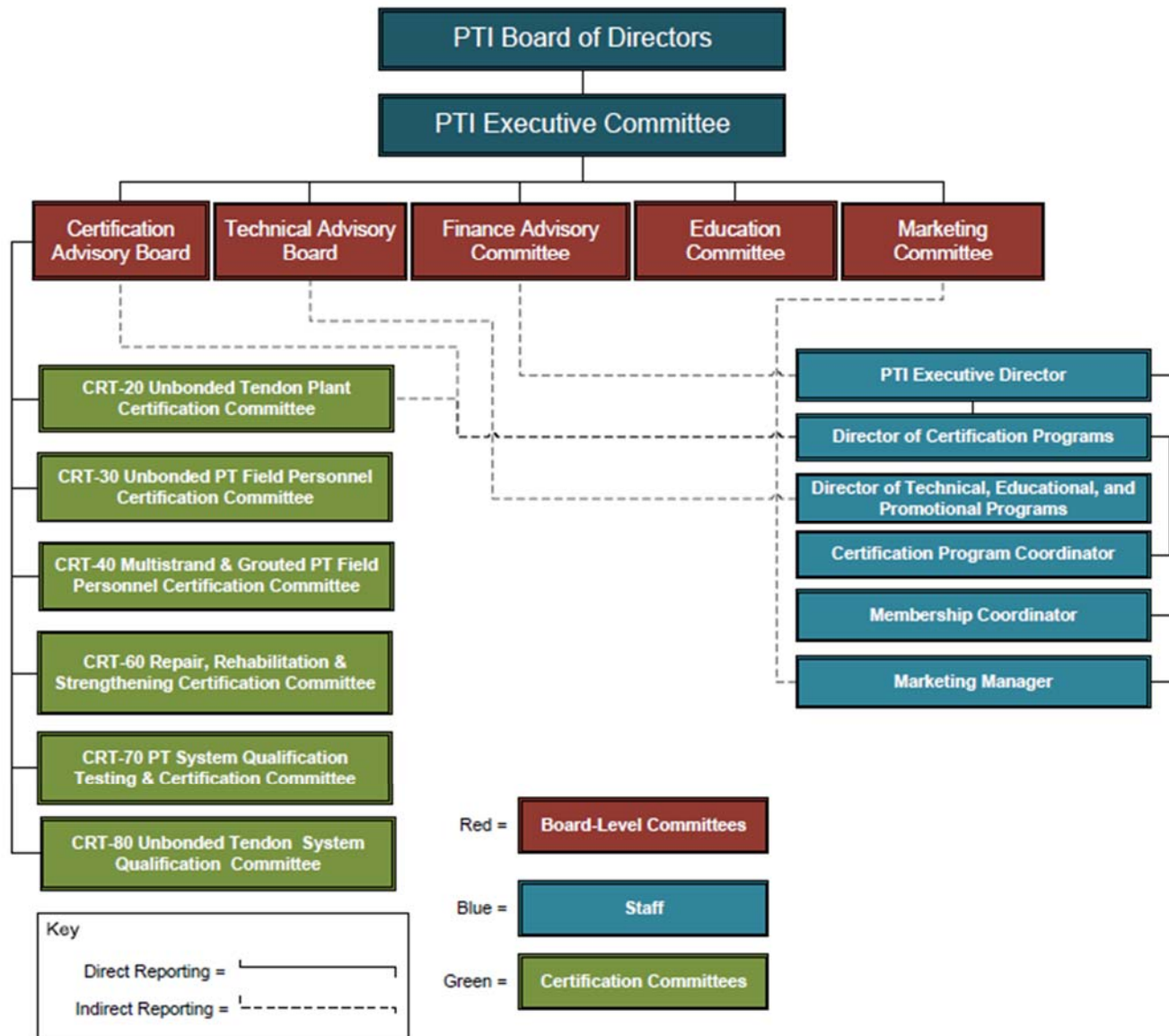


Fig. A.5—Lines of Authority and Certification Committees.

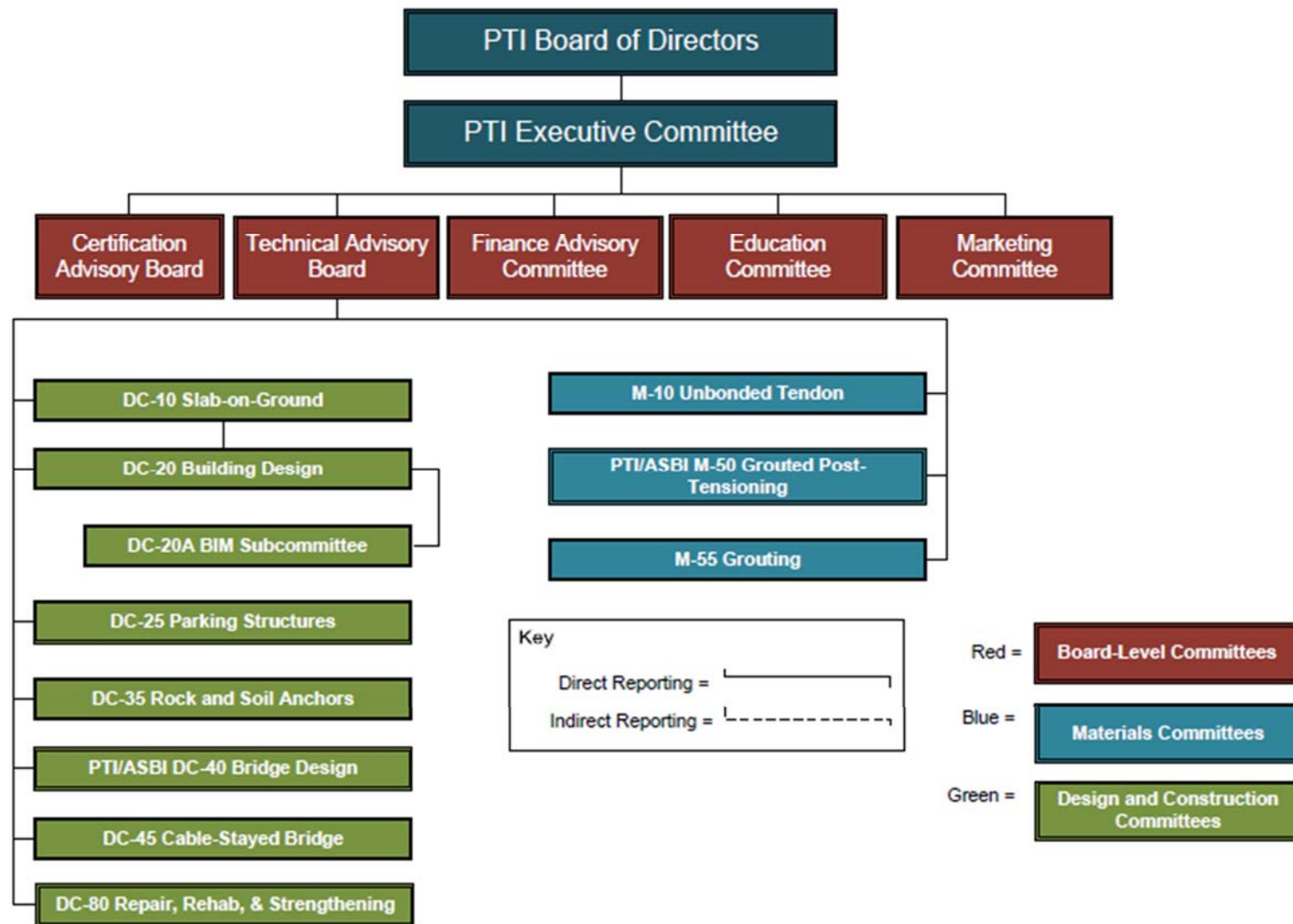


Fig. A.6—Lines of Authority Board-Level and Technical Committees

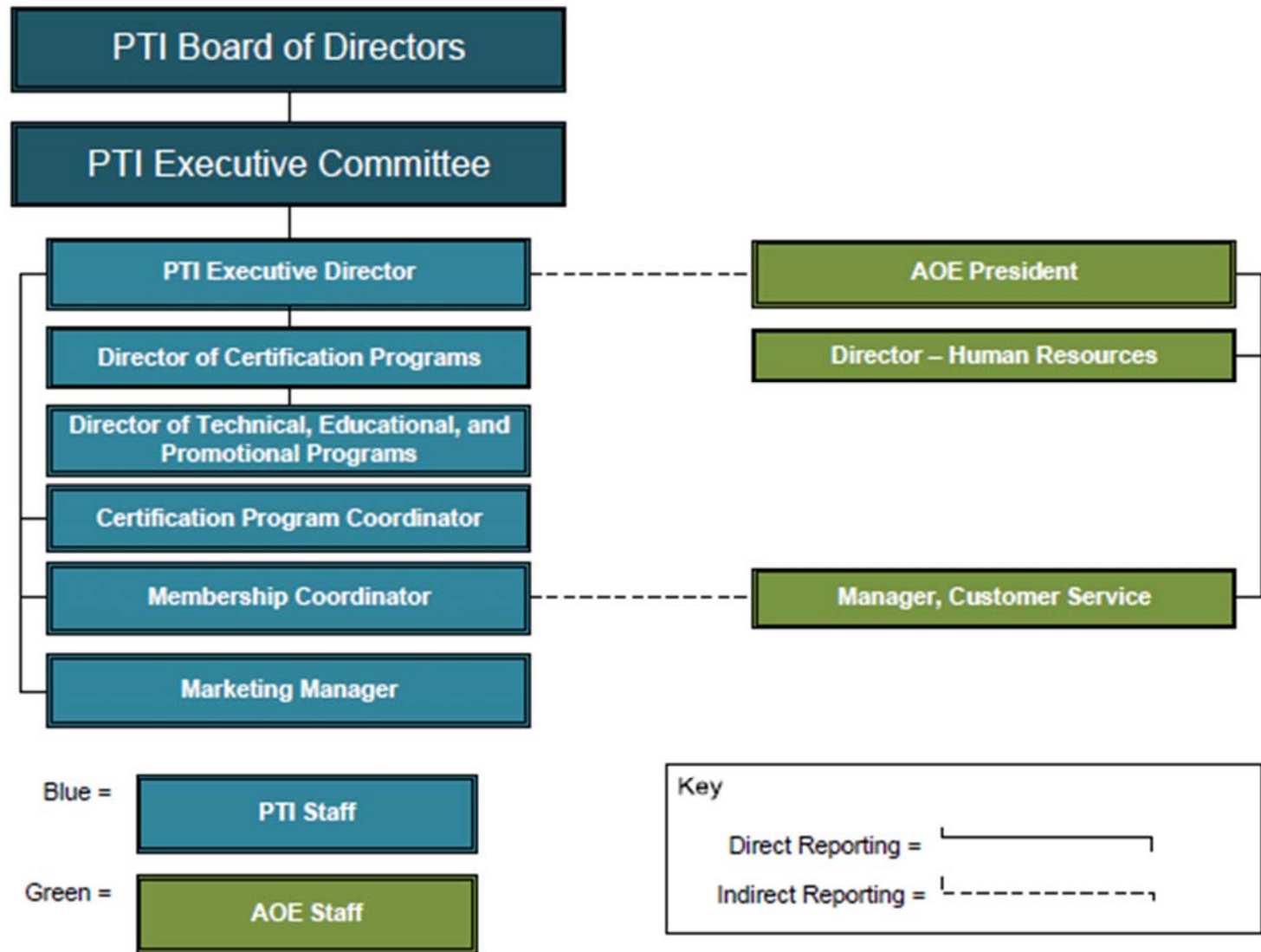


Fig. A.7—Lines of Authority, PTI and AOE Staff.

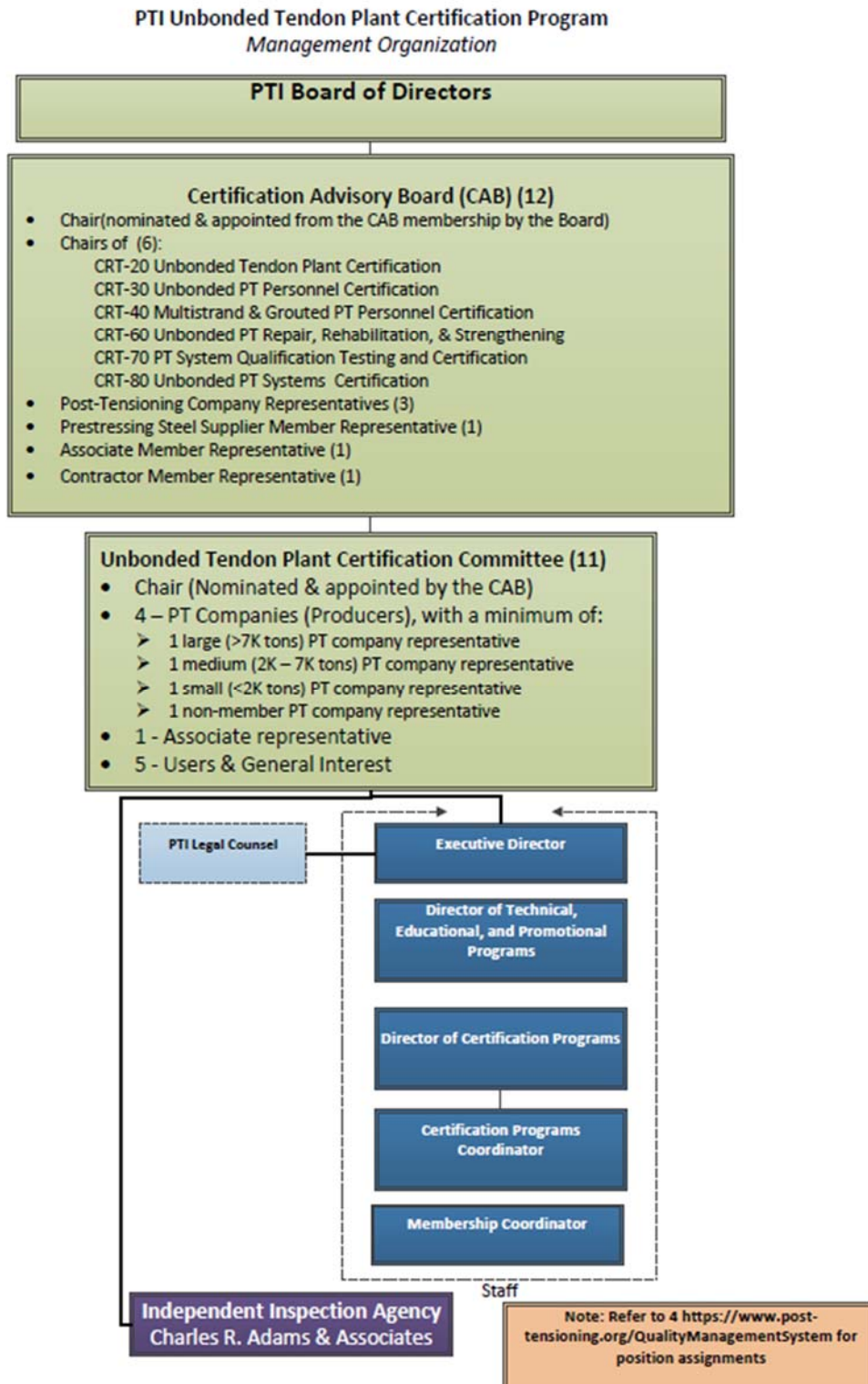
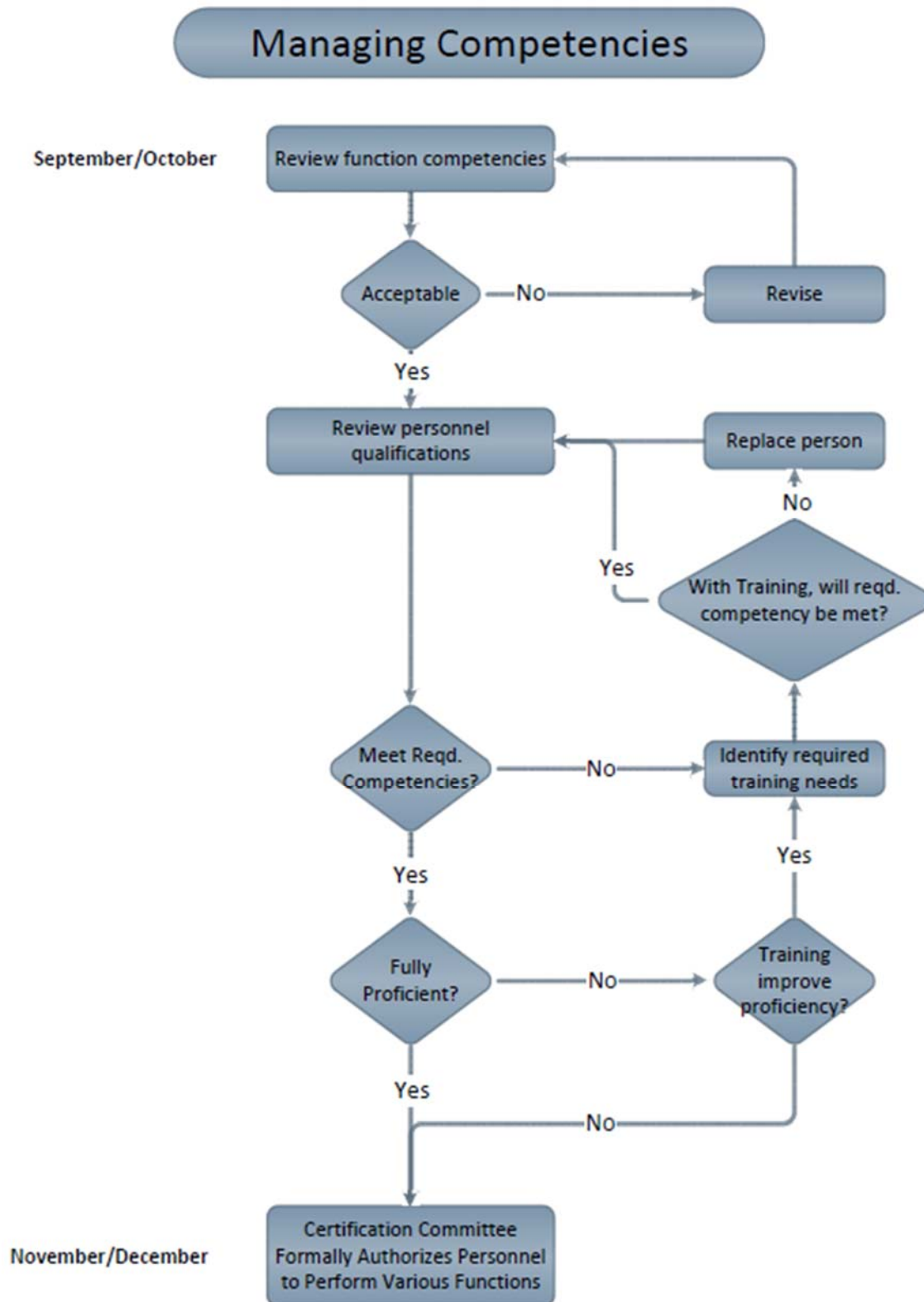


Fig. A.8—Certification Management Organization.

APPENDIX B – MANAGING PTI STAFF COMPETENCIES



APPENDIX C – PTI CERTIFICATION STAFF ASSIGNMENTS AND KEY RESPONSIBILITIES

Visit <https://www.post-tensioning.org/QualityManagementProgram> for current PTI Certification Staff assignments and key responsibilities

APPENDIX D – MINIMUM QUALIFICATIONS FOR PTI UNBONDED TENDON PLANT INSPECTORS

Visit <https://www.post-tensioning.org/QualityManagementProgram> for current Minimum Qualifications for Unbonded Tendon Plant Inspectors

APPENDIX E – CURRENT UPTC INDEPENDENT INSPECTION AGENCY PERSONNEL

Visit <https://www.post-tensioning.org/QualityManagementProgram> for current UPTC Independent Agency Personnel

APPENDIX F - STEP BY STEP ADMINISTRATIVE PROCEDURES FOR THE PTI UNBONDED TENDON PLANT CERTIFICATION PROGRAM

Visit <https://www.post-tensioning.org/QualityManagementProgram> for current step by step administrative procedures for the PTI Unbonded Tendon Plant Certification Program

APPENDIX G - PTI UNBONDED TENDON PLANT CERTIFICATION PROGRAM RECORDKEEPING ORGANIZATION & STRUCTURE

Visit <https://www.post-tensioning.org/QualityManagementProgram> for current PTI Unbonded Tendon Plant Certification Program Recordkeeping Organization & Structure

APPENDIX H – PTI CERTIFICATION DOCUMENT RETENTION AND DESTRUCTION POLICY

This Certification Document Retention and Destruction Policy of the Post-Tensioning Institute identifies the record retention responsibilities of staff, volunteers, members of the Board of Directors, and outsiders for maintaining and documenting the storage and destruction of the PTI's certification documents and records.

1. Rules. The Executive Director's staff, volunteers, members of the Board of Directors and outsiders (i.e., independent contractors via agreements with them) are required to honor these rules: (a) paper or electronic documents indicated under the terms for retention below will be transferred and maintained by the Human Resources, Legal or Administrative staffs/departments or their equivalents; (b) all other paper documents will be destroyed after three years; (c) all other electronic documents will be deleted from all individual computers, data bases, networks, and back-up storage after three years; and (d) **no paper or electronic documents will be destroyed or deleted if pertinent to any ongoing or anticipated government investigation or proceeding or private litigation.**

2. Terms for retention.

a. Retain permanently:

Governance records – Charter and amendments, Bylaws, other organizational documents,

governing board and board committee minutes.

Tax records – Filed state and federal tax returns/reports and supporting records, tax exemption determination letter and related correspondence, files related to tax audits.

Intellectual property records – Copyright and trademark registrations and samples of protected works.

Financial records – Audited financial statements, attorney contingent liability letters.

b. Retain for ten years:

Pension and benefit records -- Pension (ERISA) plan participant/beneficiary records, actuarial

reports, related correspondence with government agencies, and supporting records.

Government relations records – State and federal lobbying and political contribution reports and supporting records.

Certification applications and agreements—contracts and other formal agreements with

certification applicants, inspection agencies, internal auditors, etc.

Quality management audits – final internal audit reports

Certification actions – documentation related to a certification, re-certification or de-certification decision

Certification Committee records – minutes, rosters and other records of official committee

actions

Accreditation records – supporting documentation related to accreditation by ANSI or other

accreditation organization

c. Retain for five years:

Employee/employment records – Employee names, addresses, social security numbers, dates of birth, INS Form I-9, resume/application materials, job descriptions, dates of hire and termination/separation, evaluations, compensation information, promotions, transfers, disciplinary matters, time/payroll records, leave/comp time/FMLA, engagement and discharge correspondence, documentation of basis for independent contractor status (retain for all current employees and independent contractors and for three years after departure of each individual).

Certification inspection reports – final evaluation reports prepared by the Independent Inspection Agency

Certification Examinations – results of certification and inspector examinations

Appeals, complaints and disputes – records pertaining to appeals, complaints and/or disputes filed with PTI with respect to certification.

d. Retain for three years:

All other electronic records, documents and files – Correspondence files, past budgets, bank statements, publications, employee manuals/policies and procedures, survey information.

3. Exceptions. Exceptions to these rules and terms for retention may be granted only by the Executive Director or the President of the Board