PTI Quality Management System Manual for Certification Programs

PTI CRT-140 G2 (online appendices)

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Contents

Appendix A	3
Appendix B	
Appendix C	
Appendix D	
Appendix E	
Appendix F	
Appendix G	
Appendix H	
Appendix I	
5.4.3 Administrative Procedures Including Document Control	Error! Bookmark not defined.
5.4.4 Due Notice of Changes	Error! Bookmark not defined.

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

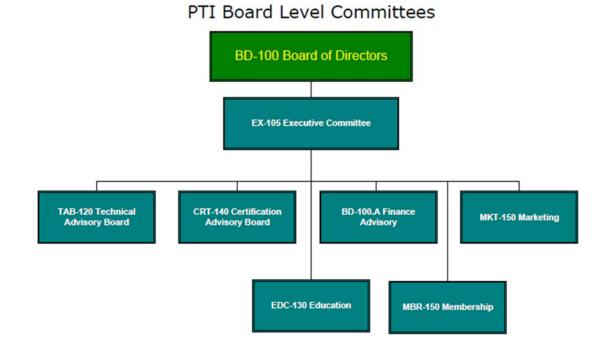


Fig. A.1—Committee organizational chart.

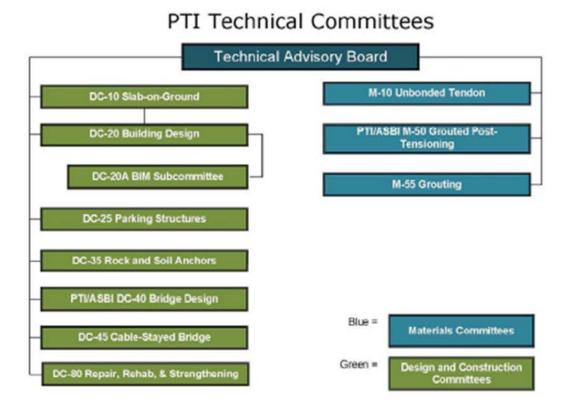


Fig. A.2—PTI Technical Committees.

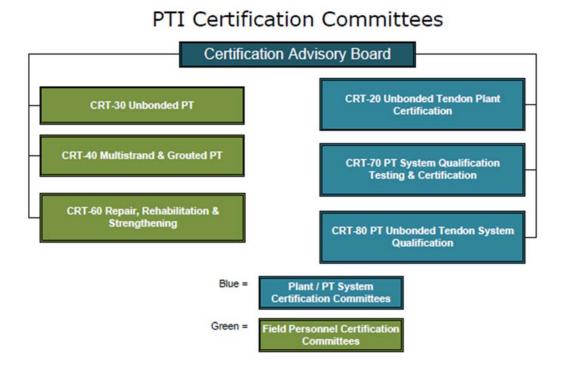


Fig. A.3—PTI Certification Committees

CRT-20 Unbonded Tendon Plant Certification Committee

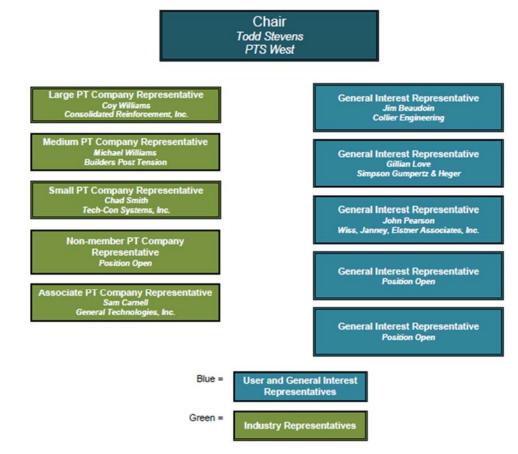


Fig. A.4—CRT-20 Unbonded Tendon Plant Certification Committee.

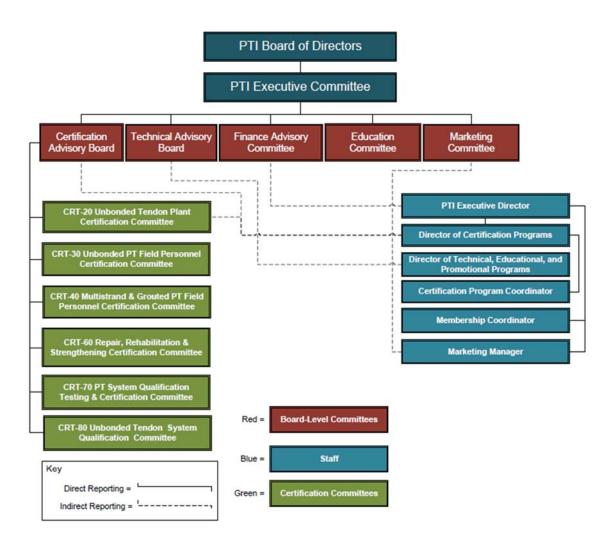


Fig. A.5—Lines of Authority and Certification Committees

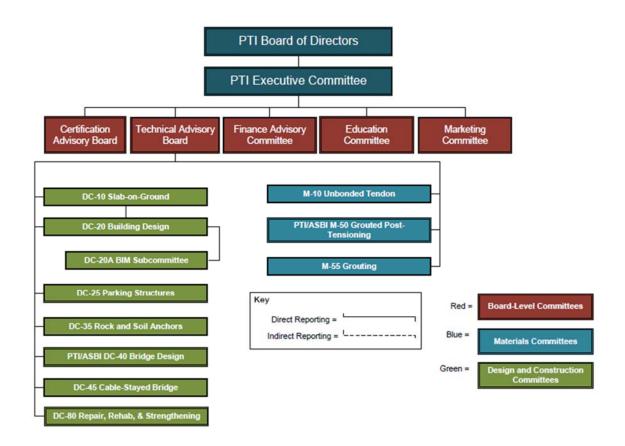


Fig. A.6—Lines of Authority Board-Level and Technical Committees

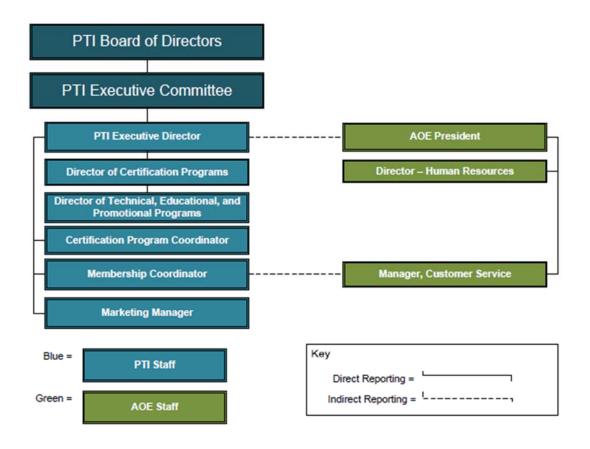


Fig. A.7—Lines of Authority, PTI and AOE Staff

PTI Unbonded Tendon Plant Certification Program Management Organization

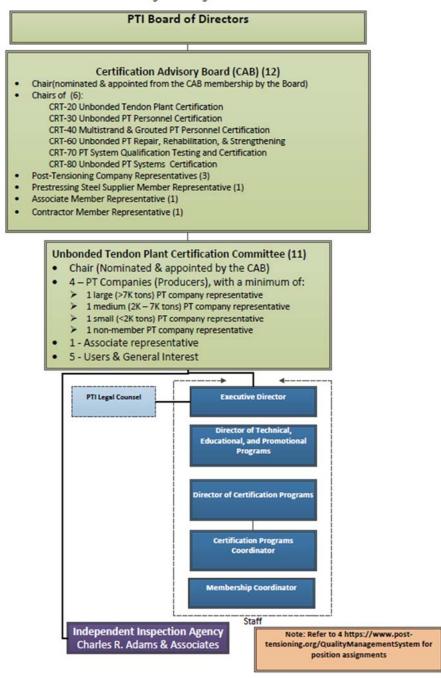
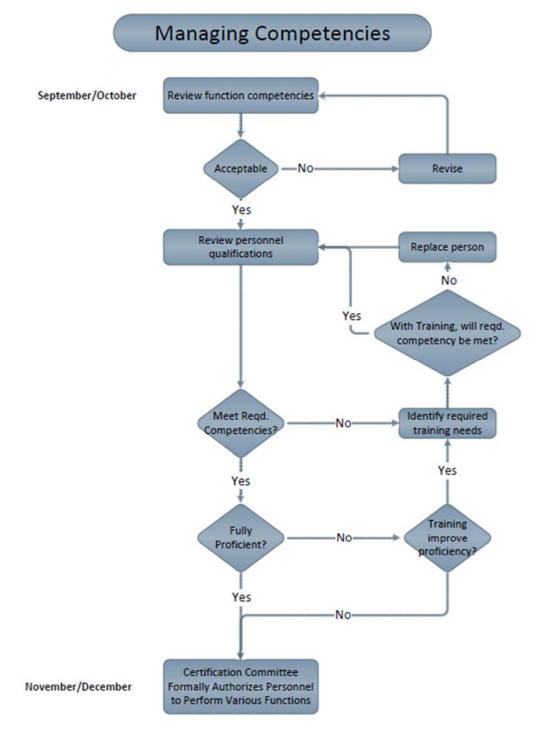


Fig. A.8—Certification Management Organization.

Appendix B Managing PTI Staff Competencies



Appendix C PTI Certification Staff Assignments and Key Responsibilities

Section 5.2.5

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.

Executive Director – Position currently filled by interim ED not directly involved in this program. Program updates will be realigned upon start of permanent ED.

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.

Tim Christle is the current Director of Technical, Education & Promotion Programs, and has been at PTI since 2018. He is a licensed professional engineer, and has a Bachelors in Civil Engineering. Mr. Christle has experience in PT construction administration and sales/marketing.

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

Miguel Zuniga is the current Certification Engineer and has been at PTI since 2021. He has a Bachelors in Civil engineering and experience in PT detailing. Additional information regarding Mr. Zuniga's experience and training are on file in PTI's Human Resource department.

Certification Engineer – Position currently vacant

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.

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.

View Individual Task Assignments and Key Responsibilities

Minimum Qualifications for PTI Unbonded Tendon Plant Inspectors

Section 5.2.6 Independent Inspection Agency

Appendix D

I. Experience

Unless otherwise approved by the PTI Unbonded Tendon Plant Certification Committee, an inspector shall possess the following minimum experience:

- a. One year of working in or managing an unbonded post-tensioning fabrication facility, or
- b. Three years working as a quality assurance inspector of manufacturing processes, preferably in a related field.

II. Conflict of Interest

The inspector 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. The inspector shall not be employed by any company or individual who has an ownership stake in a facility that is eligible to participate in the Certification Program.

An inspector must disclose all past affiliations and relationships 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. For example, if an inspector was previously employed by a company participating in the program, this information must be disclosed to PTI.

III. Licensing/Certifications

Unless otherwise approved by the Unbonded Tendon Plant Certification Committee, a PTI Plant inspector shall possess one or more of the following professional licenses or certifications

- Licensed Professional Engineer, or
- Quality Inspector Certification CQI or equivalent

In addition the inspector shall have field experience and/ or knowledge of unbonded post-tensioning construction. Either of the following would satisfy this requirement:

- PTI Certification as a Level 2 Unbonded PT Inspector, or
- PTI Certification as a Level 2 Unbonded Tendon Field Specialist, or
- 500 hours documented experience working on post-tensioned construction. For this option, submission of an Affidavit of Work Experience is required.

IV. Examination

All proposed inspectors shall take and pass the PTI Unbonded Tendon Plant Certification Inspector Qualification examination as established by the PTI Unbonded Tendon Plant Certification Committee. This examination will be closed-book test with 50 questions designed to test the inspector's knowledge of the unbonded tendon fabrication process of applicable industry standards, and of the PTI Unbonded Tendon Plant Certification Program. A grade score of 80% or greater is required to pass the examination.

V. Trial Inspections

If the proposed inspector has had no previous experience as an inspector in PTI's Unbonded Tendon Plant Certification Program, he/she shall fulfill one of the following prior to conducting an actual plant inspection:

- a. Accompany a currently approved inspector on a minimum of 2 plant inspections, or
- b. If no current inspector is available, accompany PTI staff on two "mock" inspections.

Appendix E Section 5.2.6.5 Current Independent Agency/Personnel	 Current UTPC Independent Inspection Agency/Personnel 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, Inca 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.
	 JOE C. HARRISON Key Qualifications - Consulting engineer specializing in Post-tensioning projects and
	Construction Management. Licensed in the state of Washington.
	 Over 40 years experience in the post-tensioning industry
	• - Worked at J.C. Harrison & Associates, Ltd, General Technologies, Inc. and
	Tamm Tacy & Associates, Ltd.

Appendix F Step by Step Administrative Procedures for the PTI Unbonded Tendon Plant Certification Program

- Appendix F includes flowcharts that outline the step-by-step procedures for the following key administrative processes of the program:
- Applications
- Initial Evaluation of Plants
- Unannounced Inspections
- Certification of Plants
- De-Certification
- Appeals, Disputes, and Complaints
- Evaluation of Non-conformity Corrective Action
- Notice of Program Changes

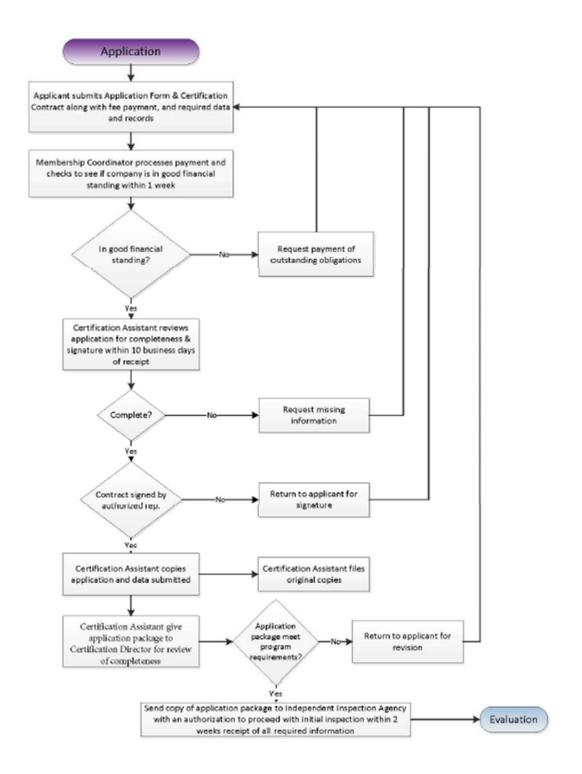


Fig. F-1—PTI Administrative procedure for processing certification applications.

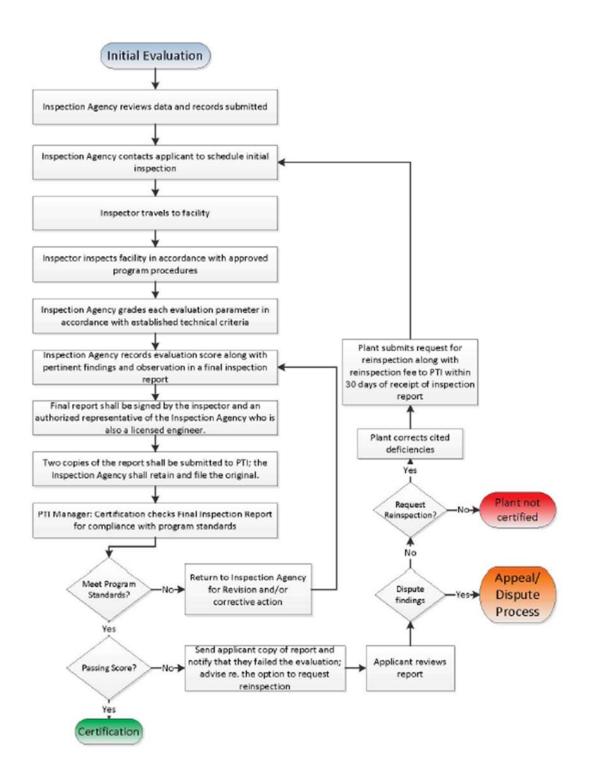


Fig. F-2—PTI Administrative procedure for initial plant inspections.

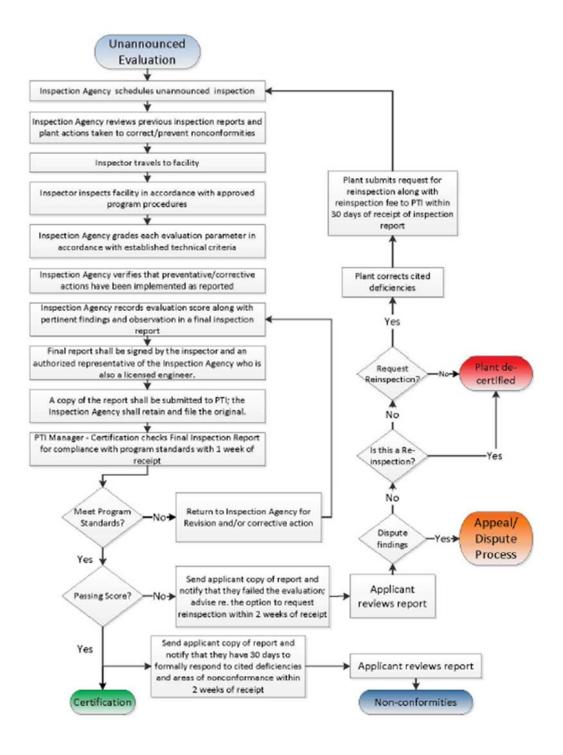


Fig. F-3—PTI Administrative procedure for unannounced plant inspections.

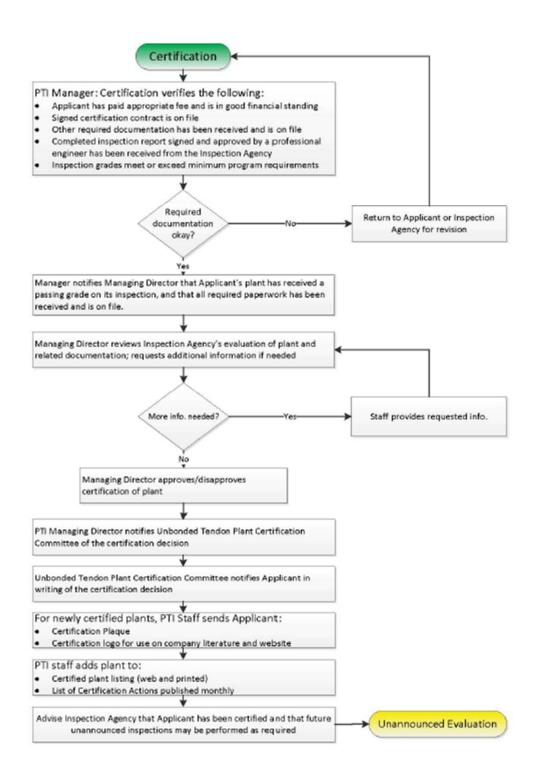


Fig. F-4—PTI Administrative procedure for certifying plants.

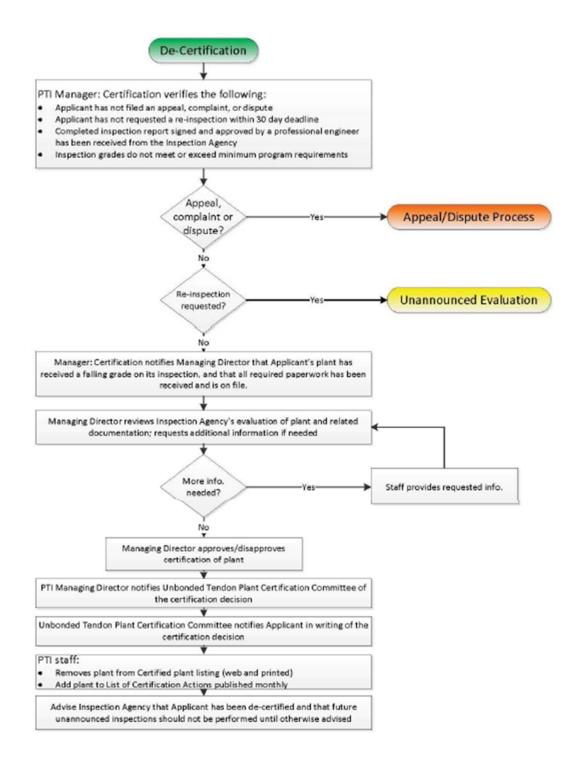


Fig. F-5—PTI de-certification process.

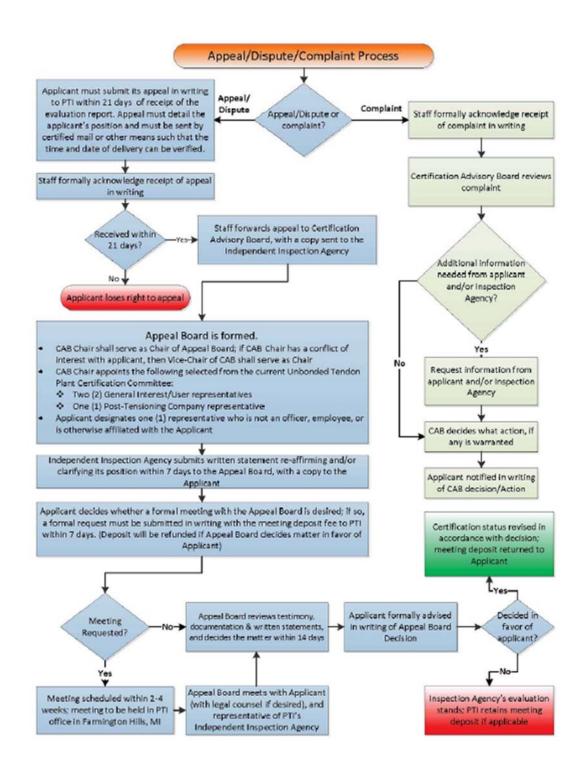


Fig. F-6—PTI administrative procedure for the appeal, dispute, and complaint process.

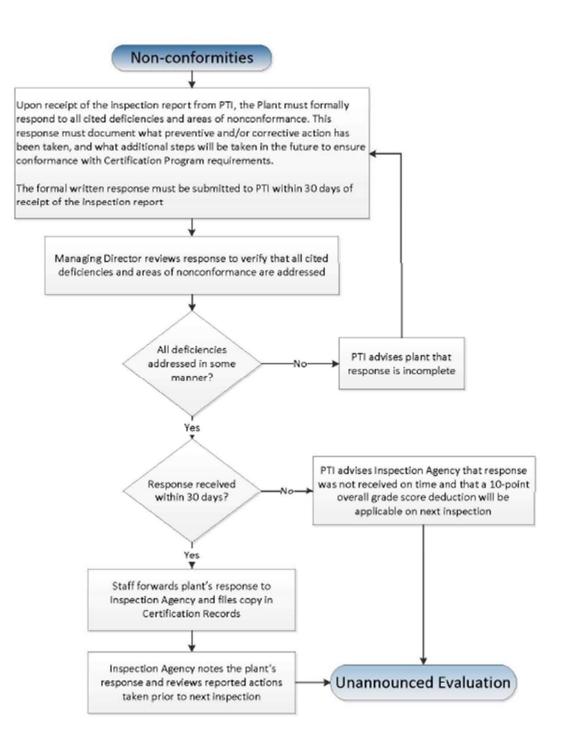


Fig. F-7—PTI procedure for evaluating actions taken to prevent/correct non-conformities.

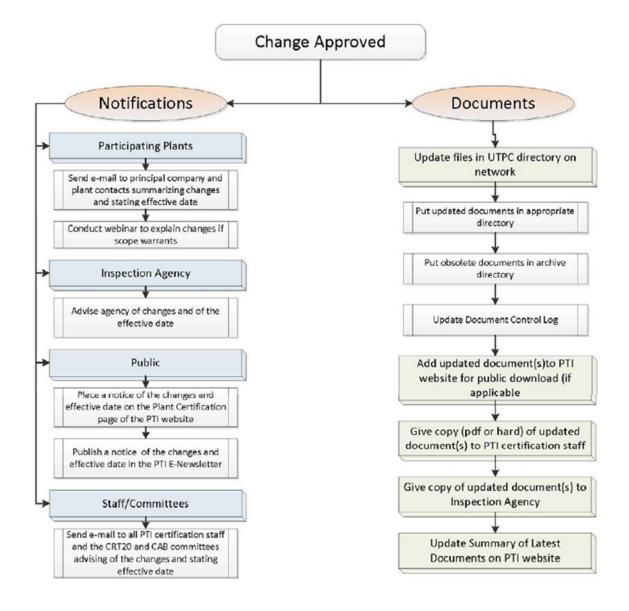


Fig. F-8—Procedure for notifying stakeholders of approved program changes.

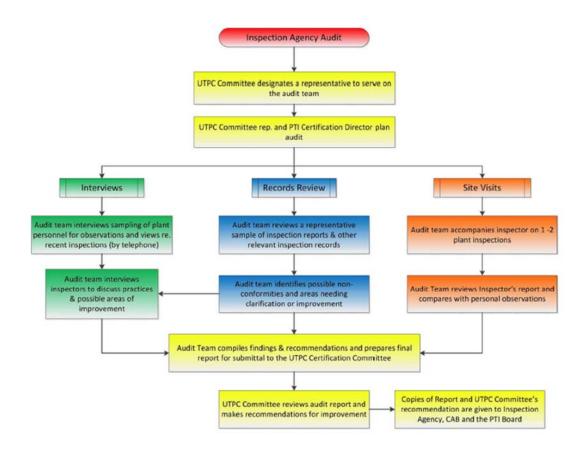


Fig. F-9—Internal audit procedures.

Appendix G PTI Unbonded Tendon Plant Certification Program Recordkeeping Organization & Structure

The following is the general organization of files for the UTPC program. As noted below, various portions of the records and files are maintained by different departments within PTI. With the exception of personnel and financial records maintained by the Human Resources and Finance departments respectively, all certification records are to be maintained in digital format on PTI's network. Only current versions of certification documents are to be stored in the active certification directory; obsolete historical documents will be stored in a separate archive directory and retained in accordance with Appendix H, PTI Certification Document Retention and Destruction Policy.

- 1. General
 - 1.1. Program Requirements
 - 1.1.1. Plant Certification Manual
 - 1.1.2. Related References
 - 1.2. Certified Plant Listing
 - 1.3. Monthly Summary of Certification Action
 - 1.4. ANSI Accreditation
 - 1.4.1. Application
 - 1.4.2. Supporting Documentation
 - 1.4.3. ANSI Reviews & Audits
 - 1.4.4. ANSI Communication & Correspondence
 - 1.5. Committees
 - 1.5.1. Certification Advisory Board
 - 1.5.1.1. Roster
 - 1.5.1.2. Committee member bios
 - 1.5.1.3. Meetings
 - 1.5.1.3.1. Agendas
 - 1.5.1.3.2. Minutes
 - 1.5.1.4. Ballots
 - 1.5.1.4.1. Item Description
 - 1.5.1.4.2. Vote Summary
 - 1.5.1.4.3. Resolution of Negatives
 - 1.5.1.5. Reports
 - 1.5.2. Unbonded Tendon Plant Certification Committee
 - 1.5.2.1. Roster
 - 1.5.2.2. Committee member bios
 - 1.5.2.3. Meetings
 - 1.5.2.3.1. Agendas
 - 1.5.2.3.2. Minutes
 - 1.5.2.4. Ballots
 - 1.5.2.4.1. Item description
 - 1.5.2.4.2. Vote summary
 - 1.5.2.4.3. Resolution of negatives

- 1.5.2.5. Reports
- 1.5.3. Plant
 - 1.5.3.1. Companies
 - 1.5.3.1.1. Year
 - 1.5.3.1.2. Application Renewal Forms
 - 1.5.3.1.3. Supporting documentation
 - 1.5.3.1.4. Contract
 - 1.5.3.1.5. Correspondence
 - 1.5.3.1.6. Evaluations & Inspections
 - 1.5.3.1.7. Certificates
 - 1.5.3.1.8. Misc. (e.g. company literature, etc.)
- 1.5.4. Inspection Agency
 - 1.5.4.1. Contracts / FRPs
 - 1.5.4.2. Inspectors
 - 1.5.4.2.1. Qualifications / bios
 - 1.5.4.2.2. Exams
- 1.5.5. PTI Staff*
 - 1.5.5.1. Job Descriptions*
 - 1.5.5.2. Work History & Qualifications*
 - 1.5.5.3. Performance Reviews*
- 1.5.6. Public Comments
 - 1.5.6.1. Notices
 - 1.5.6.2. Comments Received
 - 1.5.6.3. Resolution & Follow-up action
- 1.5.7. Appeals, Complaints & Disputes
- 1.5.8. Quality Management System
 - 1.5.8.1. Quality Management Manual
 - 1.5.8.2. Internal Audits
 - 1.5.8.2.1. Committee
 - 1.5.8.2.2. Staff
 - 1.5.8.2.3. Inspection Agency
- 1.5.9. Annual Budget
 - 1.5.9.1. Analysis of PTI Fee Contribution
 - 1.5.9.2. Plant Invoices^
 - 1.5.9.3. Payment Records^

Responsible Department Code

Certification Department

Human Resources Department*

Finance Department[^]

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 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

- *Certification inspection reports* –final evaluation reports prepared by the Independent Inspection Agency
- Appeals, complaints and disputes records pertaining to appeals, complaints and/or disputes filed with PTI with respect to certification.
- 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

Appendix I Quality Review Process and Procedure

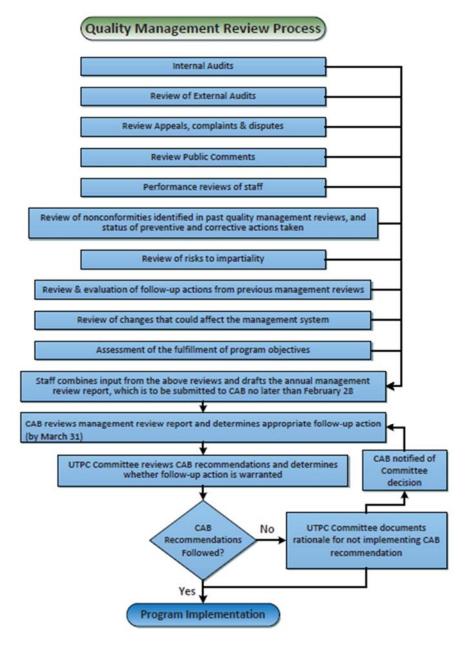


Fig. I.1—Quality Management Review Process

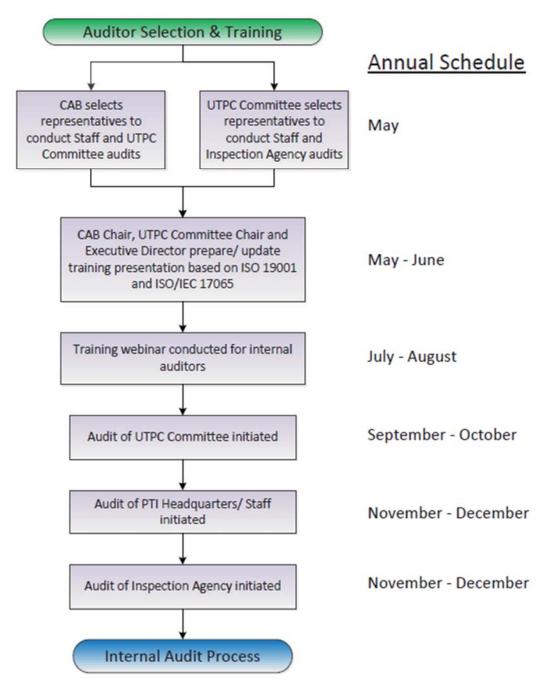


Fig. I.2—Auditor Selection and Training Process

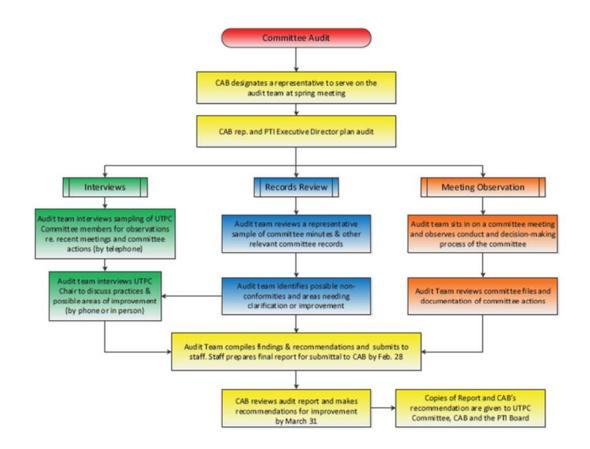


Fig. I.3—Committee Audit Procedure

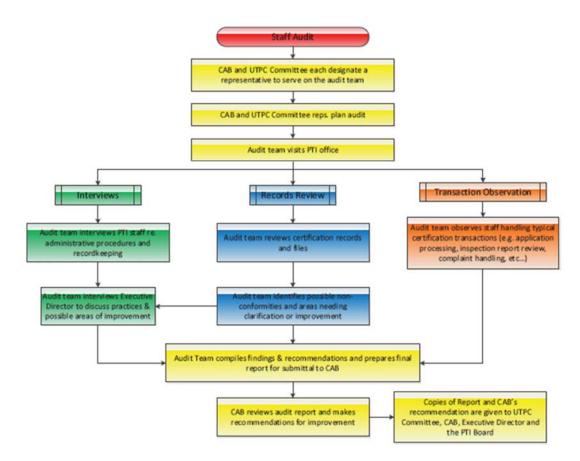


Fig. I.4—Staff Audit Procedure.

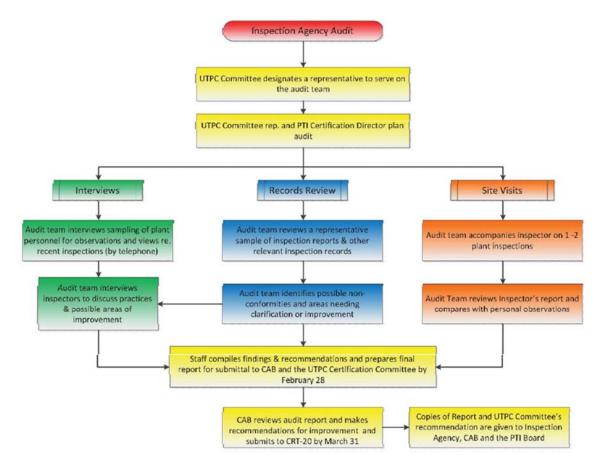
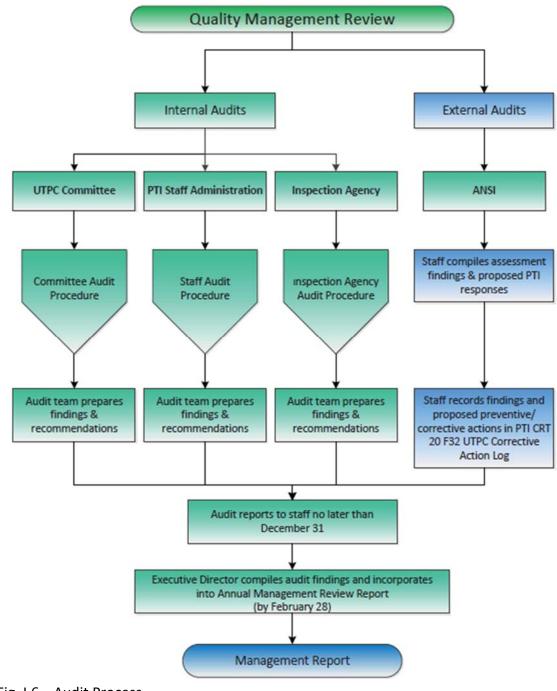
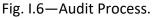


Fig. I.5—Independent Inspection Agency Audit Procedure





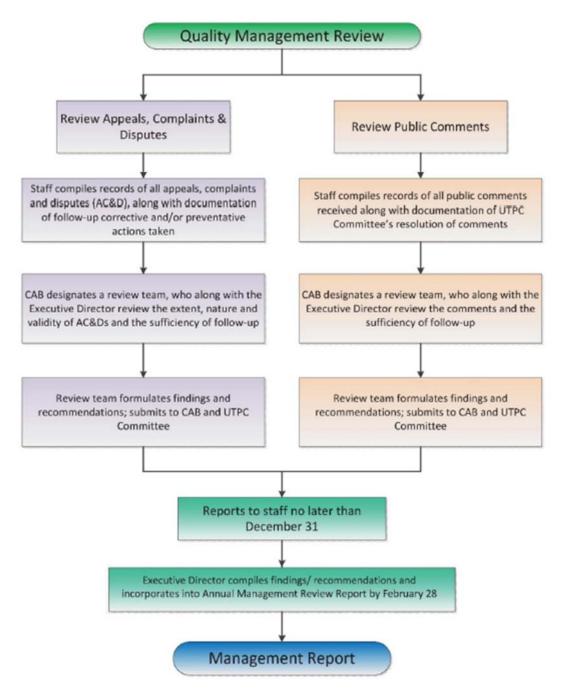


Fig. I.7—Process for Review of Appeals, Disputes, Complaints, and Public Comments.

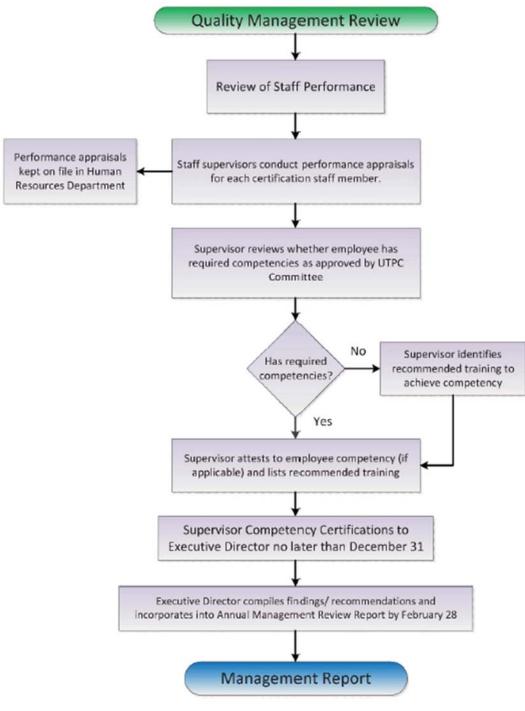


Fig. I.8—Staff Review Process.

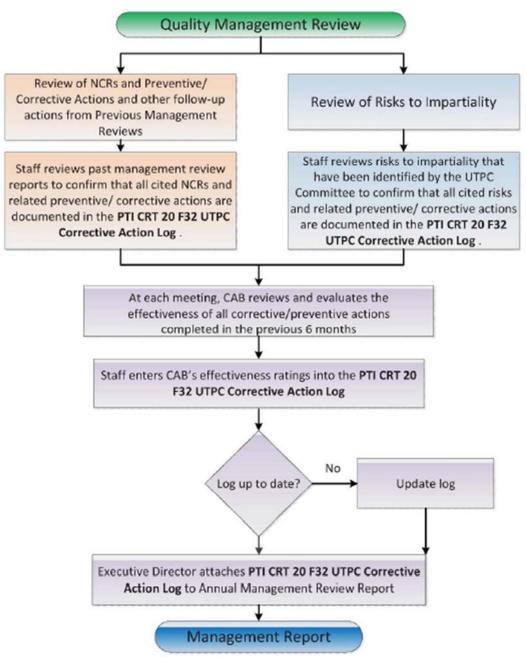


Fig. I.9—Process for Review of Nonconformities, Risks for Impartiality, and Related Preventive and Corrective Actions.

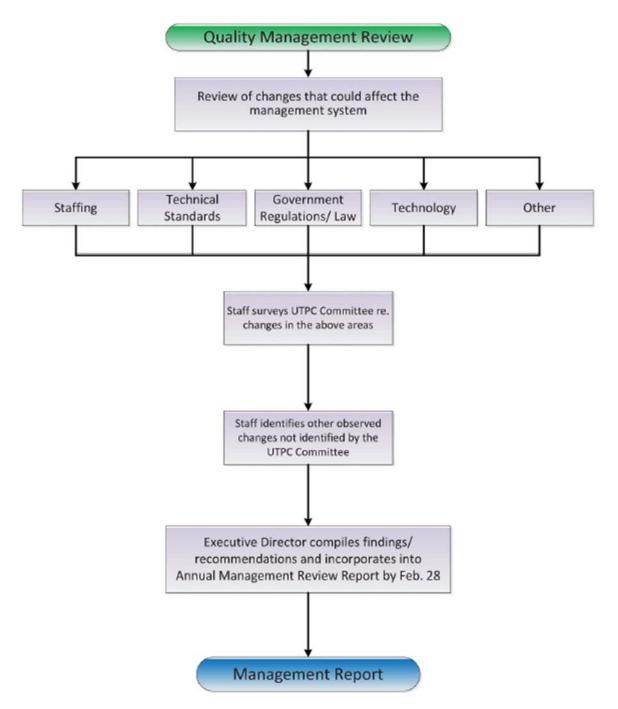


Fig. I.10—Process for Review of Changes that could Affect the Management System.

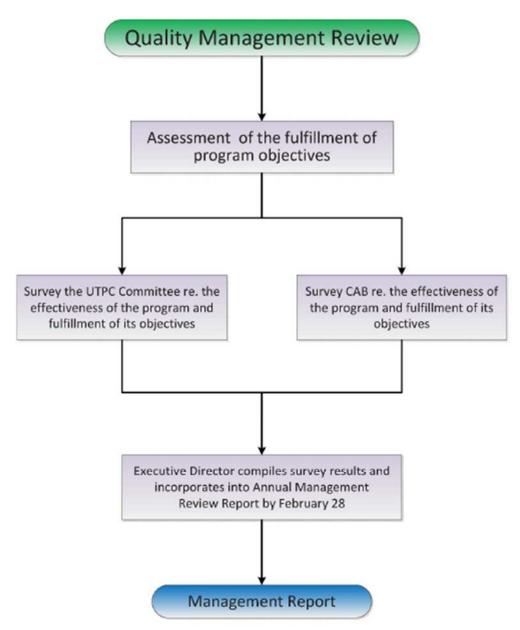


Fig. I.11—Process for Assessment of the Fulfillment of Program Objectives.

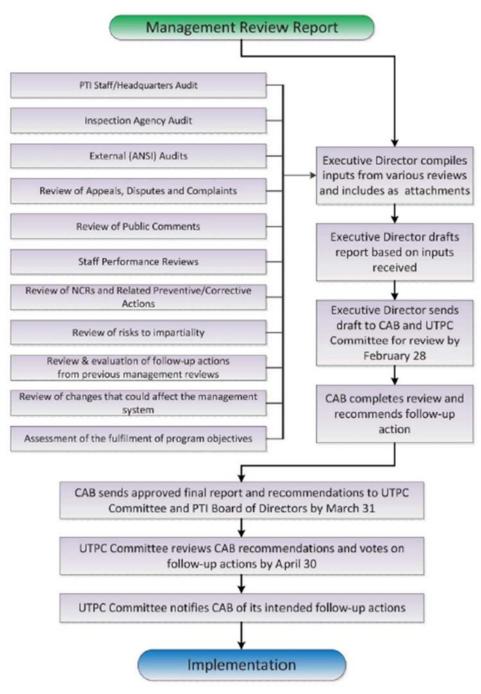


Fig. I.12—Management Review Report.

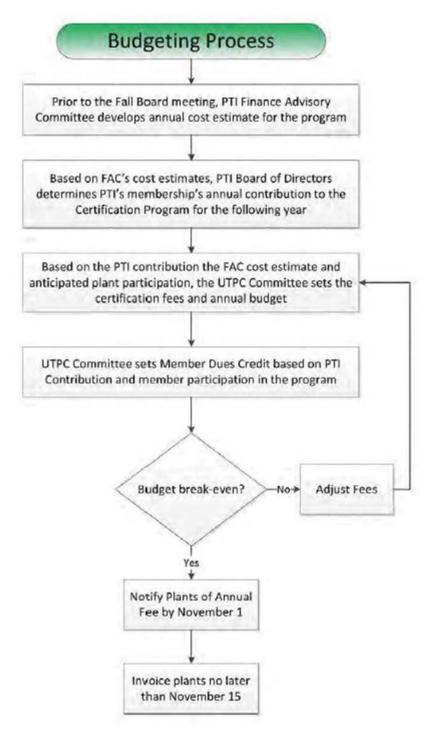


Fig. I.13—Certification Program Budgeting. Process

Proposed 2025 PTI Onbonde	Inbonded Tendon Plant Certification Program Fee Analysis				
	Proposed 2023 Fee	Projected 2022 Year-end	2023 vs. 2022		
Revenue					
Plant Fees					
Pabrication Pacifities (62@59,100)	\$364,200	\$558,000	\$6,200		
Extrusion Facilities (3@\$8,100)	\$24,300	\$32,000	(\$7,700)		
Reinspections (2)	\$7,000	\$3,500	\$3,500		
Total Revenue	\$595,500	\$593,500	\$2,000		
Expenses					
nspection Agency					
etrication Fedity Inspections	\$260,000	\$217,000	\$43,000		
Intrusion Fedility Inspections	\$11,400	\$9,900	\$1,500		
leinspections	\$4,000	\$4,000	\$0		
repector Meeting attendance/Travel	\$7,000	\$3,400	\$3,600		
Administrative Expense					
Staff Solories & Overhead	\$146,000	\$140,000	\$6,000		
Office & warehouse space	\$7,450	\$6,630	\$800		
Legal Services	\$25,000	\$30,000	(\$5,000)		
insurance	\$1,250	\$1,100	\$150		
Office Expense	\$1,000	\$1,000	50		
Website	\$5,700	\$4,000	\$1,700		
Postage & Shipping	\$1,500	\$1,500	50		
Meetings	\$10,300	\$4,000	\$6,300		
Stoff Travel	\$9,000	\$3,500	\$5,500		
Marketing	\$1,000	50	\$1,000		
ANSI Accreditation Expense	\$21,000	\$10,000	\$11,000		
internal Quality Audits	\$5,000	\$5,000	\$0		
Prior Year Development Recovery Charge (to PTI)	\$30,000	\$75,000	(\$25,000)		
Research and Development Charge (to PTI)	\$39,000	\$39,000	50		
Total Expense	\$605,600	\$555,050	\$50,550		
Carryover Surplus (Loss) from Previous Year	\$38,450	N/A	N/A		
Net Surplus (Loss)	\$28,350	\$38,450	(\$10,100)		

Fig. I.14—2023 PTI Contribution to the Unbonded Tendon Plant Certification Program.

2023 UTPC Certification Fee Ana	lysis	
Administrative Expense		
Staff Salaries & Overhead	\$	146,000
Office & warehouse space	s	7,450
Legal oversight	s	25,000
Insurance	s	1,250
Office supplies	s	1,000
Website	s	5,700
Postage & Shipping	s	1,500
Meeting space	s	10,300
Staff Travel	s	9,000
Marketing	s	1,000
Inspector Meeting attendance	s	7,000
Internal Quality Audits	\$	5,000
Administrative Expense	\$	220,200
ANSI Accreditation Expense	s	21,000
Annual Fee	\$4,000	
Auditor Travel: 3 trips @\$1500	\$4,500	
Auditor Labor: 7days @\$1250/day	\$12,500	
Inspection Costs \$4000 per fabrication plant, \$3800 per extrusion plant plus 6 additional random inspections (10% of plants)	s	291,400
Standard Fabrication Facility Inspections (2 per plant for 62 plants)	\$248,000	
Standard Extrusion Facility Inspections (2 per plant for 3 plants)	\$11,400	
Additional random inspections (10% of plants 6 inspections)	\$12,000	
Additional costs for international Inspections (4 plants) - paid by plant	\$16,000	
Reinspections (2)	\$4,000	
Less Prior Year Budget Surplus (Loss)	s	38,450
Total Estimated Program Expense	\$	494,150
Estimated Cost per Plant (65 Participating Plants)	\$	7,600
Prior Year Development Recovery Charge per plant	\$	900
2023 Research & Development Charge per plant	\$	600
Proposed Fee per PT Fabrication plant	\$	9,100
Proposed Fee per Extrusion plant	\$	8,100
Member Credit (pro-rated PTI Member Contribution + Annual		
Development Recovery Charge)	\$	(4,500)
Net Member Fee per fabrication plant	\$	4,600
Net Member Fee per extrusion plant	\$	3,600

Fig. I.15—2023 Certification Fee Analysis (effective January 1, 2022) for the latest fees contact PTI or visit www.post-tensioning.org.