Policy and Procedures Guide
API Committee on Refinery Equipment

Standards Department
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API COMMITTEE ON REFINERY EQUIPMENT
Policy and Procedures Guide

Foreword

This guide describes the Committee on Refinery Equipment's (CRE) policies and procedures for the management and coordination of the API refining standards development program and related activities.

1 References

1.1 API Policies and Procedures

The applicable portions of the following API Policy Statements shall apply:

a) Policy 402—Protection of Copyrights Belonging to Third Parties;

b) Policy 403—Protection of API's Copyrights and Trademarks;

c) Policy 404—API Records Retention;

d) Policy 501—Committee Membership and Structure;

e) Policy 502—Compliance with Antitrust Laws;

f) Policy 602—Voluntary Industry Standards Program ;

g) Policy 603—API Publications Review.

1.2 API Procedures for Standards Development

The API *Procedures for Standards Development* (*Procedures*) provide guidance for API standards activities. API standards are developed, revised, and interpreted in accordance with these procedures. The procedures also provide guidance on the submission of API standards to the American National Standards Institute for approval as American National Standards.

2 Purpose

2.1 Mission

The mission of the API Committee on Refinery Equipment (CRE) is to promulgate safe and proven engineering practices for the design, fabrication, installation, inspection, and use of materials and equipment in refineries and related processing facilities. These practices are developed and approved as API standards, API specifications, and API recommended practices, in accordance with the API *Procedures* (Section 1.2)*.*

2.2 Objectives

The objectives of the CRE are as follows:

a) Develop equipment standards and recommended practices for the design, construction, operation, maintenance, and inspection of petroleum refining equipment. Encourage other standards-developing organizations to adopt API documents when such adoptions are in the best interest of the petroleum industry.

b) Ensure API membership, participation, and support to national and international standards-developing organizations having significant impact on the petroleum and petrochemical industries.

c) Sponsor and administer research projects that result in improved standards and techniques for managing refinery design, construction, operation, maintenance, and inspection.

d) Monitor the codes and standards-development activities of other organizations, regulatory agencies, and legislative bodies, and identify those that will have significant impact on the petroleum refining industry. Recommend actions to the General Committee on Refining (GCR) and coordinate budgetary activities with the Global Industry Services Committee (GISC).

e) Provide a forum for the dissemination of technical information to refiners, vendors, and contractors.

f) Identify technical concerns relating to refinery equipment, and make recommendations for new API or international standards.

g) Coordinate with API member companies to adequately staff the CRE subcommittees and achieve API's objectives for balance and consensus.

h) Work with other non-U.S. organizations, such as FuelsEurope and IPIECA, to ensure appropriate participation, communication, and coordination.

3 Organization

3.1 Committee on Refinery Equipment (CRE)

The CRE reports to the API Refining Subcommittee (RSC) on segment policy issues and coordinates with the Global Industry Services Committee (GISC) on budgetary and resource issues. Committee membership is discussed in Section 4. Committee officers and their duties are discussed in Section 5.

CRE Subcommittees

There are 11 standing subcommittees of the CRE:

a) Corrosion and Materials;

b) Inspection and Mechanical Integrity;

c) Instruments and Control Systems;

d) Electrical Equipment;

e) Heat Transfer Equipment;

f) Mechanical Equipment;

g) Pressure Relieving Systems;

h) Piping and Valves;

i) Aboveground Storage Tanks;

j) Technical Data Book;

k) Refractory Materials.

CRE subcommittee members:

a) prepare, review, and revise API standards, specifications, and recommended practices;

b) guide API participation in related research;

c) maintain liaison activities with other domestic and international standard-writing bodies, government agencies, industry associations, and independent research organizations;

d) sponsor meetings and general interest sessions during the spring and fall refining meeting associated with refinery equipment and practices related to the subcommittee area of specialty.

3.2 Project Coordination Committee (PCC)

The PCC is responsible for reviewing proposed projects (standards actions, research and contracted expert requests, special funding activities, etc.), for recommendation to the CRE. The PCC:

a) reviews Standards Research and Resource Requests (SR[3]) and considers such factors as demand for the proposed or existing document, duplication, or potential duplication of efforts by API or another standards-developing organization, benefit to industry, resource requirements, and need for coordination with other CRE subcommittees or outside organizations;

b) monitors research requests considering the importance of continuity, competing priorities, relative timing of each project, and other factors.

At each refining meeting, the PCC shall submit a report to the CRE recommending acceptance or rejection of each Standards Research and Resource Request submitted since the last meeting and a budget summary recommending spending levels for the current budget year with a four-year projection.

The PCC chair is the presiding officer at all meetings of the PCC and ensures that the activities of the PCC conform to the CRE objectives and procedures.

The PCC vice-chair assists the chair in the duties of the PCC and, in the absence of the chair, or at the chair's request, assumes the duties of the chair.

CRE subcommittee sponsors are encouraged to attend when the subcommittee they sponsor is presenting resource requests to the PCC and assist the subcommittee chair in project management and coordination with other CRE subcommittees.

The two PCC at-large members assist the subcommittee chairs with overall project coordination and management.

The PCC members should refer to the applicable specific subcommittee procedures or manuals, including the following:

— *Subcommittee on Aboveground Storage Tanks Member Manual*;

— *Subcommittee on Mechanical Equipment Chairman's Guide*.

4 Membership

4.1 Committee on Refinery Equipment

CRE members shall be employees of API corporate members or representatives designated by API member companies that are engaged in the petroleum refining or related process industries. Members should have the support of their companies to participate in CRE activities and attend meetings as required. Multiple memberships from a single company are prohibited.

4.2 Project Coordination Committee

PCC members shall be members of the CRE and represent a broad working knowledge of the programs and activities of each of the nine CRE subcommittees. The CRE chair shall appoint two at-large members to serve as members of the PCC.

CRE subcommittee sponsors are encouraged to attend PCC meetings when the subcommittee they sponsor is presenting resource requests to the PCC.

4.3   CRE Subcommittees

CRE subcommittees are organized by subject area and are assigned the responsibility by the CRE to form, guide, and coordinate standards-development activities in their subject areas. Subcommittees may contain voting and non-voting members. Subcommittees may function as standards committees in accordance with Section 5.5 of the API *Procedures*; therefore, the roster of voting members must meet the due process and balance requirements of Section 5.2.2.2 of the API *Procedures* for the purposes of developing consensus on a standards action. With the diversity of industry represented on API Downstream Standards Committees, additional interest categories beyond the three primary interest categories of Operator-User, Manufacturer-Service Supplier, and General Interest may be established to appropriately reflect the diversity of interests on the consensus group. These additional categories include the following:

- Refiners – Integrated
- Refiners – Independent
- Refiners – Co-Op/Other
- Chemical Manufacturers
- Petrochemical Manufacturers
- Exploration and Production Organizations
- Pipeline Operators
- Terminal Operators
- Engineering Consultants
- Contractors
- Material Suppliers
- Fabricators
- Labor
- Academia
- Government
- Associations
- Public Interest

To more accurately reflect the consensus group, the other interest categories listed in 5.2.2.2 of the Procedures may also be used. This policy is applicable to all of API's Downstream Standards programs.

Alternatively, subcommittees may form subgroups with a voting membership that meets the due process and balance requirements for the same purpose.

Subcommittees also provide oversight to task groups responsible for (1) the definitive content of one or more standards, and (2) the development of responses to views and objections resulting from ballots and public comments.

To provide for a reasonably sized subcommittee organization, the number of voting members historically has been approximately 35. In the interest of allowing membership by all interested parties, however, the subcommittee chair has the option to review membership requests, provide guidance in filling vacancies, and endeavor to obtain additional appointments in order to maintain balance. Preference for voting members is usually assigned to those individuals that can contribute to the broadest range of technical content for that subcommittee. Multiple memberships from a single company are prohibited

Subcommittees may be formed or discharged by the CRE by two-thirds majority vote of the voting members, considering the resource requirements and industry needs for such action.

4.4 Task Groups

Task groups are subgroups representing one or more subcommittees assigned to develop a particular project, such as the revision or development of a standard, specification, or recommended practice. Task groups also provide a resource to address ongoing revisions for continuously updated standards, and assist API in responding to requests for interpretations. Subcommittee approval is required to create a task group.

Task groups should be formed to address a specific task and by a majority approval by the parent body. The CRE may form ad hoc task groups to address specific policy or technical issues.

When task groups are established, the task group chair shall attempt to maintain a reasonable balance of representation of users and non-users, provided that, in achieving this balance, the requisite technical expertise is obtained. Membership on the parent body is not a prerequisite. Task groups may be dissolved upon completion of a particular task or continue on an ongoing basis to respond to technical inquiries, or maintain a continuously updated standard, specification, or recommended practice.

4.4.1 Steering and Executive Committees

Subcommittee chairs may appoint steering or executive committees in order to facilitate the work of the subcommittee. Members typically include the subcommittee officers, immediate past chair, CRE sponsor, active task group chairs, and others who bring special skills, experience, or viewpoints to the group.

4.5 Removal from Membership

Members of the CRE and any subordinate group may be removed from membership by the CRE chair, in consultation with the subgroup chair, for failure to attend regular meetings, failure to return ballots, or failure to otherwise contribute to the work of the committee or subcommittee for two years or longer. When any one or a combination of these factors is observed, the CRE staff will notify the nominating company that the member will be removed. If the company desires to continue to be represented, a new member may be nominated.

5 Officers and Their Duties

5.1 Committee on Refinery Equipment

The officers of the Committee on Refinery Equipment are chair, vice-chair, and secretary (a non-voting API department staff member). The chair and vice-chair are appointed for a two-year term commencing January 1. These terms may be extended for up to one year upon approval by the approval authority in the event that additional time is necessary to ensure a smooth transition of officers. The vice-chair normally succeeds the chair.

5.1.1 Chair

The chair is the presiding officer at all meetings of the CRE and, in consultation with API staff, establishes the time, date, and agenda for committee meetings, and ensures that the activities and policies of the CRE conform to the objectives of API.

The chair is responsible for keeping the RSC and the GISC informed of the activities of the CRE and its subcommittees by preparing brief summary reports and presenting them, in writing and in person, if required. The chair also serves as a member of the API GISC.

5.1.2 Vice-Chair

The vice-chair assists the chair in all the administrative duties of committee leadership, resource assignment, and in long-range planning. In the absence of the chair, or at the chair's request, the vice-chair assumes the duties of the chair. The vice-chair also serves as chair of the Project Coordination Committee (PCC).

5.1.3 API Staff

An API staff person is responsible for communicating API policy and providing procedural guidance and administrative support to the committee. The staff person is also responsible for the preparation of the minutes, record of attendance of all CRE meetings, and maintaining files and records in accordance with the appropriate API policies and procedures.

The staff person shall give timely written notice to each subcommittee chair of the need to revise or reaffirm any publication, and shall handle all correspondence and maintain all records of requests for interpretations of API standards, specifications, and recommended practices in the CRE subject area.

API staff should be present at meetings where the following actions are being performed:

a) CRE and subcommittee meetings;

b) the first meeting of any new project;

c) steering group meetings;

d) ballot comment resolution meetings;

e) discussions addressing funded research and contracted experts.

5.2 CRE Subcommittees

The officers of the CRE subcommittees are chair, vice-chair, and secretary (when assigned). The officers of each subcommittee are appointed for a three-year term. The vice-chair will normally succeed the chair. The goal of succession is to maintain continuity in committee programs. The subcommittee chair may nominate other officers to assist the chair in carrying out subcommittee activities.

Subcommittee chairs are responsible for guiding the activities of their respective membership in the accomplishment of the purpose for which the subcommittees were appointed. The subcommittee chair appoints the chair of any task groups established within a subcommittee. The chair establishes the time, date, and agenda for committee meetings and submits the agenda to the CRE secretary for distribution. The chair is responsible for the preparation of minutes for all meetings. The chair may appoint a secretary to prepare minutes. The chair informs the CRE of the progress of his subcommittee work by presenting oral reports at the spring and fall refining meetings.

Subcommittee vice-chairs assist the chairs in all the administrative duties of committee leadership and in long-range planning. In the absence of a chair, or at the chair's request, the vice-chair assumes the duties of the chair.

The subcommittee secretary is responsible for the preparation of subcommittee minutes and record of attendance of all meetings of the subcommittee. The secretary receives changes and corrections to the minutes for approval at the next subcommittee meeting.

5.3 Task Groups

Task group chairs are responsible for managing the task group activities, including the development and maintenance of one or more standards and the handling of technical inquiries in accordance with the API *Procedures.* Task group chairs work closely with subcommittee officers on the development of research and resource requests and participate at PCC meetings when necessary.

Task group chairs shall attempt to maintain a reasonable balance of representation of users and non-users, provided that, in achieving this balance, the requisite technical expertise is obtained

5.4 Project Coordination Committee

The chair of the Project Coordination Committee is normally the vice-chair of the CRE. The vice-chair is normally the past chair of the CRE. The CRE chair shall appoint two at-large members to serve as members of the PCC.

5.5 API ICP Governance Board (ICPGB)

5.5.1 Objective

The objective of the ICPGB is to ensure that API's Individual Certification Programs (ICP) continue to meet the needs of the oil and gas industry through its certifications. The ICPGB provides advice and guidance to maintain the integrity and impartiality of ICP.

The ICPGB may form and discharge task groups and work groups as necessary to accomplish its objectives. These tasks can be assigned to other groups within the CRE subcommittee structure, after consultation with CRE leadership or the leadership of any applicable committee.

5.5.2 Function

The functions of the ICPGB are:

— Review and provide advice on policies to ensure that the processes are effective and consistent, and continue to deliver value to the stakeholders and meet the standards set forth by certification best practices.

— Provide advice regarding the advancement of programs to meet current and future industry needs.

— Review, make recommendations on new program development priorities, and help create task groups for new program development

— Provide advice on the relevance and representation of the ICP program, as well as opportunities to expand existing programs, across all industry streams.

— Advise on matters affecting confidence in certification, including openness, stakeholder perception, and program effectiveness.

— Monitor and evaluate the health of certification programs and make recommendations for improvements in the delivery and effectiveness to ensure industry needs continue to be met.

— Report on effectiveness and stakeholder perception to API staff, the CRE, and other relevant committees.

— Provide support and input to the CRE and other relevant committees on certification requirements contained in the applicable codes/standards.

— Review and provide advice relating to ICP policy documents and their continuing conformity to the requirements of ISO 17024.

— Conduct a confidential review of the internal audits of ICP programs and further assess and report, as required, on the effectiveness, consistency, and stakeholder perception of the programs via a subgroup of ICPGB members.

— Conduct an annual confidential review of, and provide input to, the impartiality analysis conducted by the ICP programs via a subgroup of ICPGB members.

The ICPGB tasks do not have jurisdiction relating to:

— ICP business, financial, and personnel decisions that impact the day-to-day operations for running certification programs, including application processing activities;

— exam maintenance or regular development activities for programs in place, unless issues need to be escalated from unresolved discussions from task group-related activities.

5.5.3 Officers

Officers shall be a chair and a vice-chair. The chair and vice-chair shall be a member of the user interest category and appointed by the CRE chair in consultation with API staff and with input from relevant segment committees. The ICPGB chair shall serve for a minimum of two years, unless service is terminated sooner by resignation. The chair can be reappointed to an additional term(s). The vice-chair normally succeeds the chair. An API staff member serves as ICPGB secretary.

5.5.4 Members

Voting members of the ICPGB shall be employees or designated representatives of API member companies, are nominated by CRE members or members of other relevant committees, and are appointed by the chair of the ICPGB. Membership is limited to one representative per company. Members shall be qualified by reason of training, experience, and company responsibilities. Membership should include a good distribution of interested categories, including upstream, midstream, and downstream, as well as representatives of users, service providers, contractors, and manufacturers related to the ICP certification activities. Others who bring special skills, experience, or viewpoints to the ICPGB may be invited by the chair of the ICPGB, in consultation with the relevant committee chairs and API staff.

The chair of the ICPGB shall periodically review membership to ensure expertise, competence, and balance in interest categories. The results of the review shall be presented to the CRE on an annual basis.

5.5.4.1 Removal from Membership

Members on ICPGB who fail to attend, in person or virtually, any three consecutive meetings may have their voting privileges removed and the company notified. A review of participation will be conducted by the ICPGB chair in consultation with API staff, and API will send warning letters of pending committee removal to those voting members who have missed three consecutive meetings. In absence of circumstances acceptable to the chair and API staff, the voting privileges may be suspended.

The companies of members removed from ICPGB for non-participation shall be required to petition the chair for reinstatement of their voting rights after waiting a period of no less than six months from the date that the privileges were withdrawn.

5.5.5 Task Groups

5.5.5.1 ICPGB's Certification Task Group

Members: Made up of technical experts focused on exam development and maintenance of knowledge-based programs.

Objectives:

— Align programs to certification standards.

— Ensure technical consistency across programs.

— Ensure impartiality in ICP process.

— Recruit subject-matter experts (SMEs) for maintenance and new program development.

5.5.5.2   ICPGB's Non-Destructive Examination (NDE) Oversight Task Group

Members: Made up of representatives of member companies across all segments and technical expertise on exam development and prioritization.

Objectives:

— Discuss possible certification, training, and research programs that can benefit the entirety of the NDE industry (to submit for approval with respective sector committees).

— Identify cross-stream opportunities for resource and idea sharing that could lead to advancements in the professional development of NDE technicians.

— Advise API on the structure and strategy of approved programs (audience, purpose, responsible parties, etc.)

— Recommend action plans for carrying out examination/training programs and the responsible parties for storing sensible materials relating to each program.

— Carry out a gap analysis of current programs to determine the opportunities for reworking existing programs or creating subprograms that can work for other industry streams.

— Conduct any necessary reports and research required to ensure the technical integrity of certification programs.
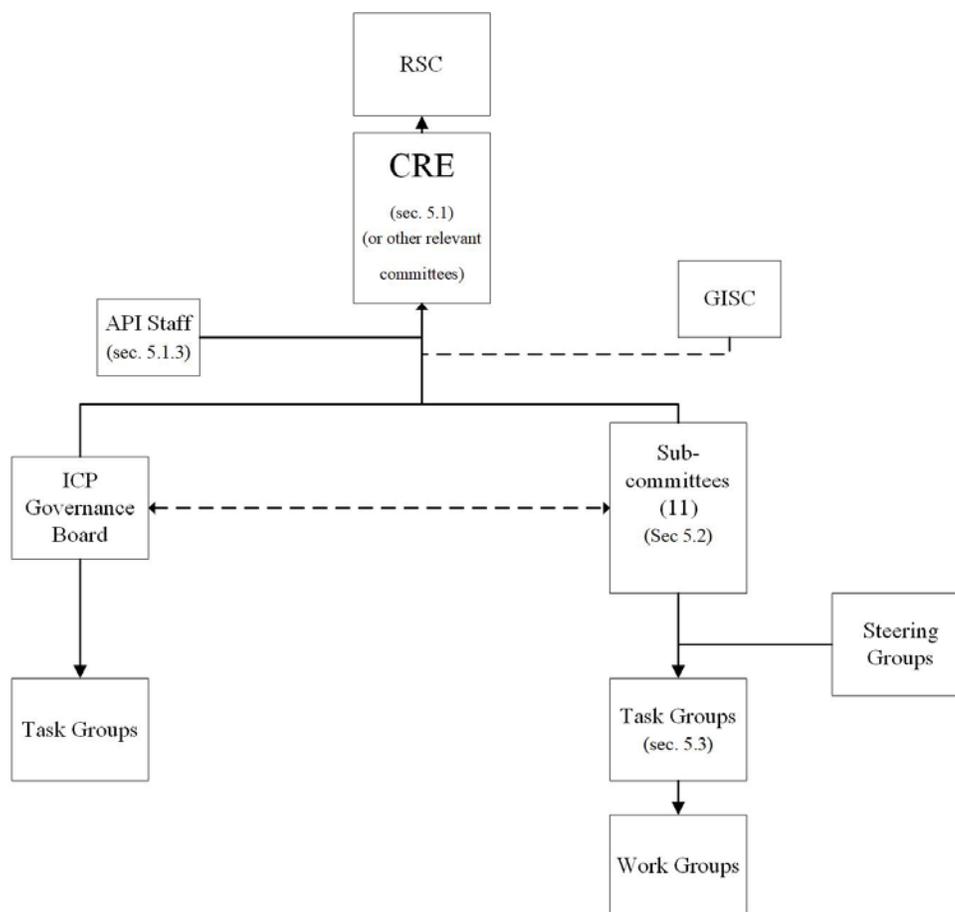
5.6   Appointing Authorities

Table 1 defines authorities for appointing officers and members of the committee, subcommittee, work groups, and task groups. Members of API committees are nominated by their respective companies.

Table 1—Appointing Authorities

Officers/Members to be Appointed	Appointing Authority
CRE committee chair	Refining Committee (RSC) chair
CRE vice-chair	CRE chair in consultation with API staff
CRE members	API member companies
ICPGB chair	CRE chair in consultation with API staff
ICPGB vice-chair	CRE chair in consultation with API staff
ICPGB members	CRE or other relevant committee member
Subcommittee chair	CRE chair in consultation with CRE subcommittee sponsor
Subcommittee vice-chair	Subcommittee chair in consultation with CRE subcommittee sponsor
Task group and work group chairs	Subcommittee chair
Task group and work group members	Task group or work group chair, as appropriate
At-large members of the PCC	CRE chair in consultation with CRE subcommittee sponsor

5.6.1 Appointment Letters

To keep API records as complete and up-to-date as possible, all appointing authorities shall inform API of desired appointments, and the API office will issue all appointment letters on behalf of the appointing authorities.

6 Operations

6.1 Meetings

Operations of the CRE will be conducted in accordance with API Policy 602 and the API *Procedures*.

6.1.1 Regular CRE and CRE Subcommittee Meetings

CRE standards activities are open to all interested parties having a direct and material interest, including users, manufacturers, contractors, consultants, and the general public. The CRE and its subcommittees meet twice each year in conjunction with the spring and fall refining meetings. Agendas shall be prepared for each meeting and submitted to the appropriate API staff for distribution to all attendees. A record of attendance shall be maintained of all attendees and returned to API headquarters for permanent retention.

6.1.2 Task Group Meetings

The task group chair will set the time, place, and frequency of task group meetings. Task groups may meet during the spring and fall refining meetings, and at other times, when necessary, to complete the work of the group. Use of teleconferencing and webconferencing, combined with electronic distribution of minutes and work products, is encouraged.

6.1.3 Notice of Meetings

Notice of regular committee and subcommittee meetings and an agenda for the meeting shall be provided to all members and other interested parties at least 30 days before the meeting date. The API Office of General Counsel shall review agendas in advance. It is the responsibility of the subcommittee chairs to advise API staff in advance of the meeting date of meeting space and visual aid requirements.

6.1.4 Meetings Procedures

The chair or his/her delegate will preside over all committee and subcommittee meetings. Attendance will be open to all, and all in attendance, including guests, shall sign the record of attendance. A quorum is not required for committee actions unrelated to standards approval. A simple majority of members present and voting can approve or disapprove matters brought before the group for action. Executive sessions deal only with administrative matters related to committee activities and do not deal with standardization matters.

6.1.5 Minutes and Records

The chair is responsible for the preparation of minutes for meetings. Minutes for distribution will be submitted to the CRE secretary. Minutes of all regular and special meetings of the CRE and all its subcommittees shall be made available to the members of those groups and other attendees within 60 days following the meeting. API shall retain official copies of these minutes in accordance with its record retention policy.

Minutes are required and will be made available to all members of the committee or subcommittee.

6.2 Budgets

CRE subcommittees may submit budget requests for research, program funds, and resource assistance to the CRE for the coming budget year.

All budget requests should be fully supported, giving the justification for the work and the probable consequence if the work is not undertaken. For each new project, the subcommittee shall submit a Standards Research and Resource Request to the PCC that includes a title, the objectives of the project, and a description of the work.

In addition, each subcommittee shall submit estimates for budget requirements for four years beyond the current budget year. These requirements will be the basis for the CRE five-year research and special projects plan.

Following submittal by each subcommittee and review by the PCC, the budget proposals will be provided to the CRE members for priority ordering. The director of the Standards Department will present the proposed budget to the Global Industry Services Committee for review and approval. The CRE will be kept informed of adjustments to its budget requests and consulted for additional justification or guidance as required. Prior to the fall meeting, the chair of CRE will receive a final recap of the consolidated CRE budget for the coming year.

CRE subcommittees that have received funds are responsible for setting the scope and objectives of their work and monitoring its progress. Typically, members of the subcommittee carry out this responsibility, meet periodically with the individual or organization doing the work, and report to the subcommittee on progress at all regular meetings. The results of the work must be made available to industry and the general public. When appropriate, the research will be published by API and given wide distribution.

6.3   Roundtable Discussions

Subcommittees may hold meetings to discuss various approaches to a previously announced list of topics. These sessions are convened for the general purpose of sharing technical experiences with refinery equipment and operating practices. Since these discussions are informal, no records are kept. Legal guidelines must be observed in order to avoid inappropriate discussions concerning a supplier's quality control achievements or failures. Discussions must not (1) damage a supplier's competitive position; (2) inhibit any purchaser from selecting any quality level he chooses; or (3) establish any barriers for entry of any supplier into the field. Roundtable discussions should adhere to the following general guidelines:

a)   Never agree on or recommend the use or non-use of a specific item or manufacturer.

b)   Be sure that all statements about a product or manufacturer are factual and correct.

c)   Do not advertise, promote, or disparage proprietary products or processes.

d)   Do not estimate future prices or costs or supply and demand from which prices or costs might be extrapolated.

Additional information may be found in API's *Antitrust Guidelines* document, which is available on the CRE website.

6.4   Liaison with Outside Organizations

To provide coordination, to avoid duplication, and to represent the refining industry viewpoint in other standards-writing organizations, CRE subcommittees are encouraged to identify those bodies with which liaison is necessary. Examples are ASTM, American National Standards Institute, American Society of Mechanical Engineers, National Electrical Manufacturers Association, National Association of Corrosion Engineers, American Welding Society, Institute of Electrical and Electronics Engineers, National Fire Protection Association, Engineering Equipment and Material Users Association, Instrument Society of America, and other groups.

The liaison representative should present a written report at each regular meeting of the subcommittee and should seek guidance from the subcommittee or CRE so that the industry and API standards activities may be best represented.

6.5   CRE Subcommittee Sponsors

To improve communications and coordination between the CRE and its various subcommittees during the conduct of committee business, the CRE chair assigns liaison responsibilities to CRE members to maintain close coordination with a specific user subcommittee and its non-user counterpart.

The subcommittee sponsor will assist the subcommittee and its officers as an advisor and mentor, and serve as an advocate to increase the effectiveness of the subcommittee. The sponsor shall serve for a period of three years; rotation is staggered with the rotation of subcommittee chairs. For example, if the subcommittee chair is replaced at the beginning of one year, the sponsor remains the same for at least three more meetings, or 18 months. This term may be extended upon agreement between the sponsor and the CRE chair.

6.5.1   Qualifications

To qualify as a sponsor, the CRE member should ideally:

a)   be knowledgeable of the workings of the API;

b)   have a minimal amount of other responsibilities for other CRE committees in order to have sufficient time available to devote to subcommittee issues; and

c)   have a background in the technical area covered by the subcommittee.

6.5.2   Responsibilities

The sponsor's responsibilities, in relation to their roles, are:

— Advisor: Keep the subcommittee chair apprised of CRE proceedings that affect the subcommittee. Assist the subcommittee chair in the selection of candidates for resolutions of appreciation (this is also part of the "Advocate" role).

— Mentor: Provide constructive criticism to the subcommittee chair concerning the work of the subcommittee. Suggest ways to improve subcommittee processes.

— Advocate: Accompany the subcommittee chair to meetings with the Project Coordination Committee of the CRE to aid in the approval of projects, standards, or studies proposed by the subcommittee. Consult with the subcommittee chair (and officers), prepare to explain subcommittee proposals, consent agenda items, and address other issues of concern to the CRE members.

6.5.3   Duties

Specific duties include:

a)   consulting with the subcommittee chair on matters concerning the CRE at least once at each refining meeting;

b)   attending as many subcommittee meetings as practical, but particularly meeting with the subcommittee officers at a minimum; and

c)   helping to prepare the alternate sponsor to assume the position of sponsor.

6.6   Standards Development

Committee work on developing a new standard or revising an existing standard commences with CRE approval of the project. To obtain CRE approval, the subcommittee must justify the need for the new standard or the requirement for revising an existing standard. The justification should be prepared using the Standards Research and Resource Requests form and submitted to the PCC for review and recommendation to the CRE.

If the project justification is acceptable to the PCC, they will recommend CRE approval during the PCC report to the CRE. The PCC may refer projects back to the subcommittee for additional justification.

In preparing justifications, the subcommittee should consider at least the following:

a) Does the publication satisfy a technical or safety need?

b) Does any other publication (including the publications of other trade associations or private publishers) satisfy this need?

c) What resources (research, committee time, API staff, etc.) are required?

d) What is the priority of the project compared with other projects already underway within the subcommittee?

e) What subcommittee work could be curtailed if it is necessary or desirable to maintain only the current level of effort?

f) What would be the consequences if the project did not go forward?

g) What is the benefit to the industry?

The following additional considerations are required for publications that are to be revised:

a) Will the revision result in improvements in the technical requirements or safer operations?

b) What is the date of the current edition? Is it in error or significantly out of date?

c) What is the sales history of the current edition of the document? (API staff can supply this information.) Is interest in the document sufficient to warrant maintenance or updating?

Publications justifications should be signed by the subcommittee chair and endorsed by the CRE sponsor to the subcommittee.

Once the PCC and the CRE approve the project, the subcommittee shall form a task group responsible for drafting the standard. CRE may direct or the subcommittee may decide to solicit membership in the group from the membership of other subcommittees whose scope relates to the work being undertaken.

API staff is responsible for ensuring that any API groups that may have a related interest or concern review standards. API policy also requires that all proposed standards should be reviewed by legal counsel prior to publication. Comments and recommendations resulting from these reviews will be forwarded to the task group or subcommittee chair, or will be included in ballot summaries.

6.7   Recognition and Awards

The CRE places a high value on the resources that are represented by participants on subcommittee and task group activities. In many cases, volunteers spend a significant amount of personal time and effort to ensure that the documents produced are of the highest technical quality. Recognition for contributions made to the work of the CRE organization can be based upon demonstration of outstanding leadership or a significant technical contribution to a CRE work product. Both are equally important in advancing the work of the CRE and the industry.

There are five types of awards available for CRE participants:

6.7.1   CRE Subcommittee Resolution of Appreciation (ROA)

The CRE Subcommittee Resolution of Appreciation is presented to an individual who has demonstrated leadership, contributed significant technical expertise, or encouraged new innovations to a particular effort,

such as the development of a standard or recommended practice. A citation is prepared on behalf of the recipient and is included on the certificate that is signed by the CRE subcommittee chair and API staff. This recognition is announced by the CRE chair at the welcoming breakfast and presented at a subsequent subcommittee meeting.

6.7.2 API Citation for Service (CFS)

The API Citation for Service award is presented to an individual who has demonstrated continued and dedicated service, contributing leadership and technical expertise in support of a variety of CRE and subcommittee activities, typically for a minimum of 10 years. A certificate is prepared on behalf of the recipient that is signed by the CRE chair and API senior staff. The CRE chair presents the certificate to the recipient at the welcoming breakfast.

6.7.3 API Certificate of Appreciation (COA)

The API Certificate of Appreciation is typically reserved for a senior individual who has committed their career to advancing the work of the industry through participation in API activities. Typically, recipients of the COA have held multiple leadership positions within the CRE organization and have significantly influenced the work of the committee and its subgroups in a number of strategic areas, or chaired a senior-level committee. A specially prepared certificate is prepared on behalf of the recipient that is signed by the API President and CEO and API Corporate Secretary. The chair of the General Committee on Refining, the parent committee of the CRE, usually presents the certificate to the recipient at the welcoming breakfast, and the recipient is invited to make a brief comment.

6.7.4 CRE Outgoing Chair's Award

6.7.4.1 The CRE Outgoing Chair's Award is presented to outgoing subcommittee chairs and the outgoing CRE chair at their last meeting in that position. The award consists of a half-gavel on a wooden plaque inscribed with the recipient's name, the name of the committee, and years of service. The CRE chair presents outgoing subcommittee chairs' plaques and the GCR chair presents the outgoing CRE chair's plaque at the welcoming breakfast.

6.7.5 Service Recognition

A Service Recognition award program recognizes volunteers on API standards committees for their long-term contributions. At each fall meeting, each committee participant is given a "Years of Service" pin based on API's records. Certificates are mailed to recipients achieving a milestone at the five-year to 20-year mark. A congratulatory letter is included with the certificate. Certificates for 25 years of service and greater are framed and presented at the refining meeting.

Individuals with 50 or more years of service are also invited to attend the API annual meeting, where they are honored.

7 Charter

Purpose: The purpose of the API Committee on Refinery Equipment (CRE) is to develop API refinery and petrochemical standards that promote safe, environmentally sound, and efficient operations in the petroleum refining and petrochemical industry.

Mission: The mission of the API Committee on Refinery Equipment (CRE) is to promulgate safe and proven engineering practices for the design, fabrication, installation, inspection, and use of materials and equipment in refineries and related processing facilities. These practices are developed and approved as API standards, API specifications, and API recommended practices, in accordance with the API *Procedures for Standards Development.*

Objectives: The objectives of the CRE are as follows:

a)   Develop equipment standards and recommended practices for the design, construction, operation, maintenance, and inspection of petroleum refining equipment. Encourage other standards-developing organizations to adopt API documents when such adoptions are in the best interest of the petroleum industry.

b)   Ensure API membership, participation, and support to national and international standards-developing organizations having significant impact on the petroleum and petrochemical industries.

c)   Sponsor and administer research projects that result in improved standards and techniques for managing refinery design, construction, operation, maintenance, and inspection.

d)   Monitor codes and standards-development activities of other organizations, regulatory agencies, and legislative bodies, and identify those that will have significant impact on the petroleum refining industry. Recommend actions to the General Committee on Refining (GCR) and coordinate budgetary activities with the Global Industry Services Committee (GISC).

e)   Provide a forum for dissemination of technical information to refiners, vendors, and contractors.

f)   Identify technical concerns relating to refinery equipment, and make recommendations for new API or international standards.

g)   Coordinate with API member companies to adequately staff the CRE subcommittees and achieve API's objectives for balance and consensus.

h)   Work with other non-U.S. organizations, such as FuelsEurope and IPIECA, to ensure appropriate participation, communication, and coordination.

Structure: The CRE reports to the API Refining Subcommittee on segment policy issues and coordinates with the Global Industry Services Committee on budgetary and standards policy issues. There are 11 standing subcommittees of the CRE:

a)   Corrosion and Materials;

b)   Inspection and Mechanical Integrity;

c)   Instruments and Control Systems;

d)   Electrical Equipment;

e)   Heat Transfer Equipment;

f)   Mechanical Equipment;

g)   Pressure Relieving Systems;

h)   Piping and Valves;

i)   Aboveground Storage Tanks;

j)   Technical Data Book;

k)   Refractory Materials.

Membership: CRE members shall be employees of API corporate members or representatives designated by API member companies that are engaged in the petroleum refining or related process industries. Members should have the support of their companies to participate in CRE activities and attend meetings as required. Multiple memberships from a single company are prohibited.

Roles and responsibilities: CRE members are expected to fully participate in the CRE's two annual meetings either in-person, via electronic means, or by naming a representative in advance of the meeting. In those meetings, CRE members are called upon to review governance and subcommittee reports and recommendations, and be prepared to express their corporate views on any requested actions, such as project approvals, two-year extensions, research and resource requests, and proposed revisions to the *Policy and Procedures Guide – API Committee on Refinery Equipment.* CRE members are also expected to coordinate resource requests with their API Refining Subcommittee members to ensure adequate staffing of the CRE subcommittee, project committees, and task groups. Members also participate on the Appeals Board in the review of appeals of standards actions pursuant to the API Procedures for Standards Development, as required

Resources: CRE subcommittees may submit budget requests for research, program funds, and resource assistance to the CRE for the coming budget year. All budget requests should be fully supported, giving the justification for the work and the probable consequence if the work is not undertaken. For each new project, the subcommittee shall submit a *Standards Research and Resource Request* to the Project Coordination Committee for review.

Selection and term of officers: The officers of the Committee on Refinery Equipment are chair, vice-chair, and secretary (a non-voting API department staff member). The chair and vice-chair are appointed for a two-year term commencing January 1 and endorsed by the API Refining Subcommittee. These terms may be extended for up to one year upon approval by the approval authority in the event that additional time is necessary to ensure a smooth transition of officers. The vice-chair normally succeeds the chair.