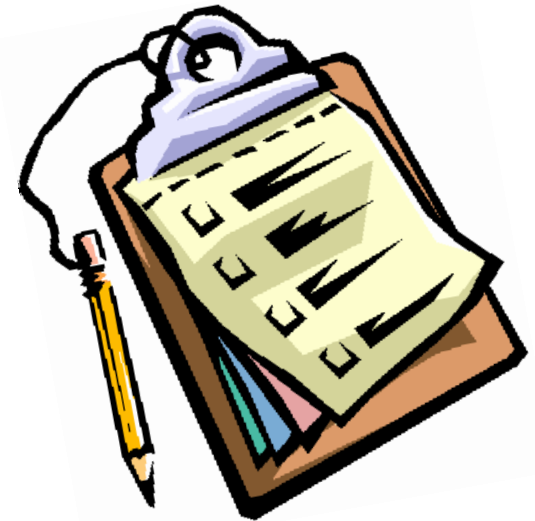# Standards Development Process Tips

**Malia Zaman
IEEE-SA
PE/Insulated Conductors Meeting.
Scottsdale, AZ**

Agenda

- IEEE-SA Governance Structure
- Standards Development Lifecycle Tips
  - Stage 1: Initiating a Project
  - Stage 2: Mobilizing the Working Group
  - Stage 3: Drafting the Standard
  - Stage 4: Balloting the Draft
  - Stage 5: Gaining Final Approval

IEEE-SASB Governance Structure

IEEE-SA Standards Board (SASB) oversees the standards development process and the following six committees.
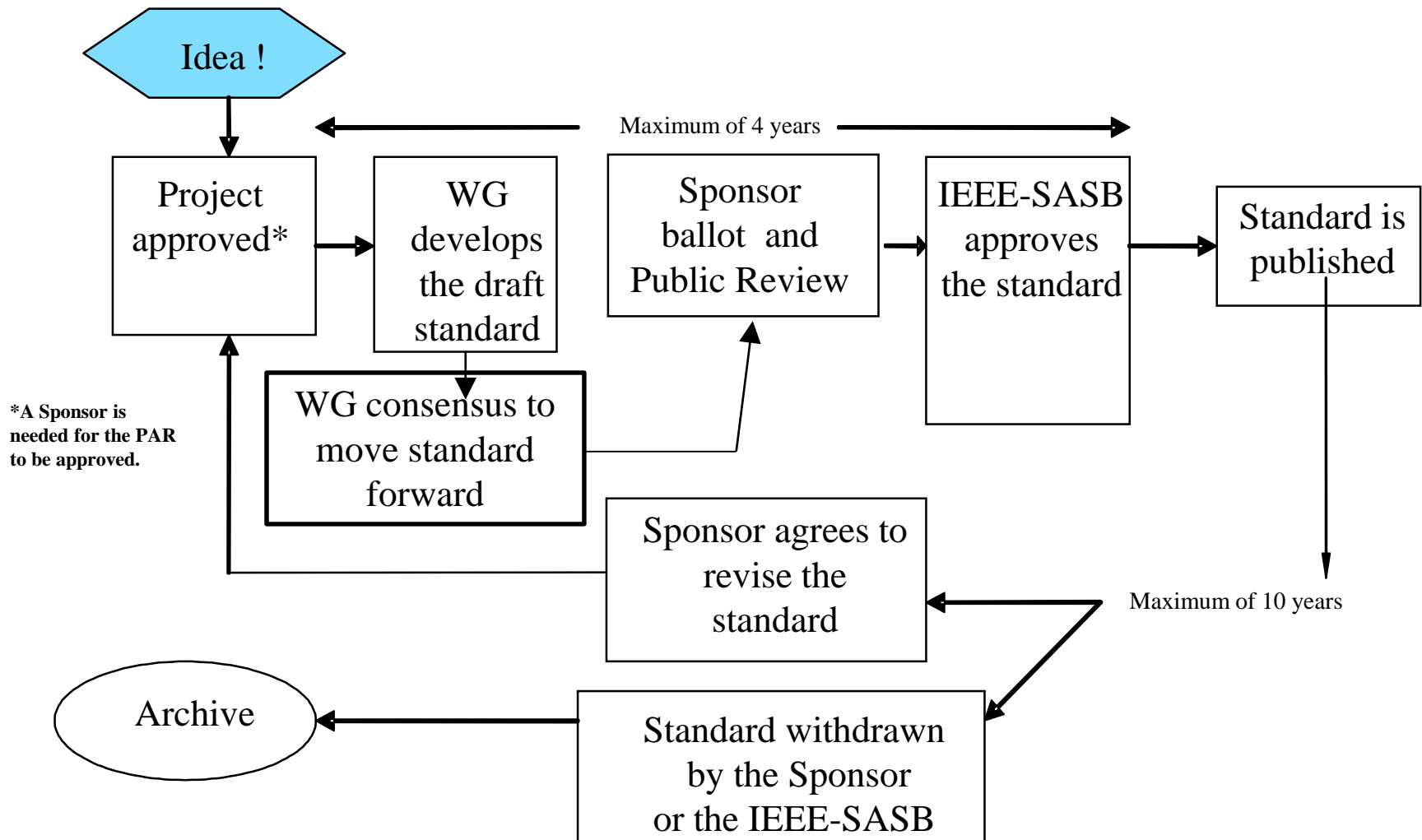
- ❏ **SASB Committees**:
  - New Standards Committee (NesCom): recommends the approval of project authorization requests (PARs) to the SASB.
  - Review Committee (RevCom): recommends the approval of standards to the SASB.
  - Audit Committee (AudCom): oversees the standards development activities. Reviews Sponsor and Working Group Policies and Procedures.
  - Procedures Committee (ProCom): recommends changes in procedures to the SASB.
  - Patents Committee (PatCom): provides oversight of the use of any patents and patent information in IEEE standards.
  - Industry Connection (ICCom): Industry Connections activities provide an efficient environment for building consensus and developing many different types of shared results.
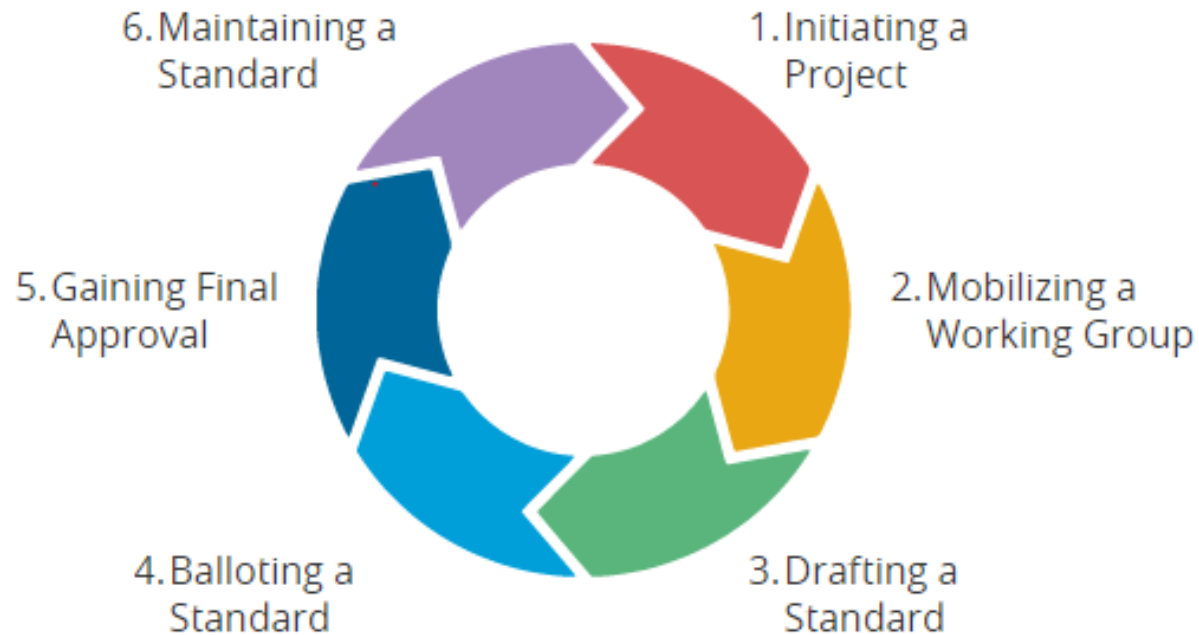
- ❏ **SASB Primary Governing Documents:**
  - SASB Bylaws: http://standards.ieee.org/develop/policies/bylaws/index.html
  - SASB Operations Manual: http://standards.ieee.org/develop/policies/opman/

Standards Development Lifecycle

Standards Process Overview: http://standards.ieee.org/develop/overview.html

Standards Development Lifecycle

6. Maintaining a Standard

1. Initiating a Project

2. Mobilizing a Working Group

3. Drafting a Standard

4. Balloting a Standard

5. Gaining Final Approval

Stage 1 : Initiating a Project

Tips for Submitting a PAR

- A PowerPoint presentation is available to assist you with the PAR submittal process. (https://mentor.ieee.org/etools_documentation/dcn/11/etools_documentation-11-0008-MYPR-nescom-par-submittal.pdf)

- NesCom has a number of **conventions** that it follows when it examines PARs. Look over these conventions to see if there are any issues they address that might directly affect your PAR.

PAR Process

A. Assigned Project Number:

If left blank, a project number will be assigned by the NesCom Administrator when your PAR is received (SPDC uses the C62 numbering – contact your standards coordinator)

B. Type of Document: Standards, Guides and Recommended Practices are generically referred to as IEEE Standards.

- **Standards** are documents with mandatory requirements. Standards are generally characterized by the use of the verb "shall."

- **Recommended Practices** are documents in which procedures and positions preferred by the IEEE are presented. Recommended practices are generally characterized by the use of the very "should."

- **Guides** are documents in which alternative approaches to good practice are suggested, but no clear-cut recommendations are made. Guides are generally categorized by the use of the verb "may."

Tips for PAR submission

C. Project Title:

- The title shall not contain the acronym "IEEE." It is added later after approval of the project.

- If a general term is used to represent ranges (e.g. high, medium, low) within the title, scope or purpose, numerically define such ranges where they first appear (title, scope or purpose as applicable).

D. Expected Date of Submission of Draft to the IEEE-SA for Initial Sponsor Ballot

Month: 07   Year: 2018

E. Projected Completion Date for Submittal to RevCom
Month: 02   Year: 2019

It is suggested to allow at least 6 months after Initial Sponsor Ballot for the ballot process.

Cutoff dates for submitting draft standards to RevCom are generally in February, May, August, and October.

F. Title, Scope and Purpose:

- Should appear as it will in the draft standard, shall be written in <u>present tense</u>, in <u>complete sentences</u>, and <u>with proper grammar</u> as it <u>is intended to appear in the published standard.</u>

- All <u>acronyms shall be spelled out at first use</u>.

- The title and (if appropriate) date of any document referenced in the Scope/Purpose shall be listed in the Additional Explanatory (Sec. 8.1)

Tips for Submitting a PAR

G. Need for the project:

Details the <u>specific problem </u>that the standard will resolve and the <u>benefit</u> that users will gain by the publication of the standard.

H. Intellectual Property:

- proposed standard uses <u>copyrighted material, copyright releases must be obtained by the working group</u> and shall be included in the final package submitted to the IEEE-SA Standards Board.

- during development of your approved project, the proper IEEE copyright notices must be maintained on all drafts.

I. Joint Development - Is it the intent to develop this document jointly with another organization?

If this document will be developed jointly with another organization, your <u>IEEE-SA Staff Liaison must be made aware of this prior to final approval </u>of the document by the IEEE-SA Standards Board [RevCom]. Please indicate the;

- organization, technical committee name and number and contact person within external organization

Tips of Submitting a PAR

J. International Standards Activities

Adoptions/Harmonization - Is there potential for this standard to be adopted by another organization?:

If this document is to be adopted by another organization, the document must be <u>adopted intact (whole and unmodified)</u> and the requested contact persons entered on the submittal form. Please indicate the;

- organization, technical committee name/number and contact person within external organization

K. Additional Explanatory Notes:

- Include the Item # in front of each explanation to distinguish which PAR field it is referring to. (E.g Sect.5.4)

- If there is any further information that may assist NesCom in recommending approval for this project, include this information here. The title of any documents referenced in the PAR should be listed here.

*Please respond to comments from NesCom on time.

Stage 2 : Mobilizing the Working group

Overview of Sponsor Responsibilities

❑ Sponsor responsibilities are defined in the IEEE-SA Bylaws:
   http://standards.ieee.org/develop/policies/opman/sect5.html#5.1

❑ Key Sponsor responsibilities include the following:
   - Submit properly completed Project Authorization Requests **(PAR)** **to initiate new standards projects**
   - **Organize the technical work of the standard**.
   - Ensure that all **standards meetings are open** to all interested parties.
   - Ensure that each **WG follows a written set of policies and procedures** that is approved by the Sponsor.
   - **Manage and host standards development meetings.**
   - Sponsors typically **delegate the technical development** to a Working Groups (WG).

Overview of Working Groups and Study Groups

- WGs **operate in accordance with a written set of policies and procedures** that has been approved by the Sponsor. (Voting , Quorum , Membership Req)

  - A WG can **officially begin to develop a standard when the PAR is approved** by the SASB.

  - Working groups may meet via the following : face-to-face, teleconference, etc.

  - The IEEE-SA may issue a **call for participation in order to increase working group membership.**

- Sponsor may form a **Study Group to examine the proposal for Pre-PAR activities**

  - Study Groups are formed when enough interest has been identified in a particular area of study.

  - **If the proposal merits formation of a project, the Study Group will draft a Project Authorization Request (PAR**) for consideration by the Sponsor.

  - The **lifespan of a study group is typically 6 months**

  - IEEE-SA Study Group Guidelines offer guidance to Study Groups

    - *Note- Study Group Guidelines are located at:* *http://standards.ieee.org/develop/corpchan/studygrp.pdf*

Tips for Working Group Meetings

- Every WG must have WG Policies & Procedures (P&Ps).

- The WG P&Ps explain the role of the WG officers, actions requiring a vote, and additional info. Baseline P&Ps are available on AudCom site.

- Send out <u>agendas</u> in accordance with the WG P&Ps.

- Remember to disclose <u>affiliations</u> during meetings.

- Establish <u>quorum</u> during meetings; see WG P&Ps for requirements.

- Make a <u>Call for Patents</u> at the start of each WG meeting; show information on the Patent Policy and <u>record it in your minutes</u>.

- <u>Do not discuss commercial activities</u> or terms.

- If the WG creates a Task Force (TF) or a Writing group (WG), remember to record their charter and scope of work in the WG minutes.

- Follow guidance on meetings minutes in the WG P&Ps and Standards and the Law. (https://standards.ieee.org/develop/policies/stdslaw.pdf)

- Distribute meeting minutes on time.

- Maintain an updated roster so quorum can be achieved.

Stage 3: Drafting the Standard

Tips for Drafting the Standard

- **Break the document down into segments or sections.**

- **Develop an Outline**. Often, this outline will also serve as the structure for the standard, and can help create writing assignments.

- Using material from other copyrighted documents also needs to be addressed.

- **Help Videos on Template available** online along with latest template:
  - http://standards.ieee.org/develop/stdswritten.html
  - Remember always to **save the word template as a .doc and not .docx**

- The initial review by IEEE-SA Editors — Mandatory Editorial Coordination (MEC) — is required prior to the start of the initial Sponsor Ballot in order to help ensure conformance.

- The IEEE-SA Standards Style Manual establishes preferred style for the preparation of proposed IEEE standards (drafts).

- If you run into issues with the Template, inform your IEEE-SA Program Manager/IEEE-SA Content Manager
  - For corrupted Template or Macros issues.

MEC Review Checklist.

Some of the key items reviewed and checked by the Editor include :

- **Draft number and date identification** on every page
- Proper **copyright statements**
- Correct **structuring of clauses**
- **References** current and handled properly
- **Appropriate standards verbs** (shall, should, or may) used predominantly and correctly through out the draft
- **Permissions obtained from copyright holders for reprinted material**, including material from IEEE publications
- **Trademark names**
- **Units used consistently**, with metric units appearing first
- Inclusion of an Introduction
- See checklist at http://standards.ieee.org/develop/draft_cklst.pdf

Tips on Copyright

- Be **familiar with IEEE-SA Copyright policies**

- The **request for permission should be made as soon as the WG is aware that it will incorporate contributions** from previously published sources (including from another IEEE standard).

- **Contact stds-ipr@ieee.org to obtain permission to reprint information from an IEEE standard.**

- All copyright permissions must be obtained **prior** to including the relevant text in the draft, prior to Sponsor Ballot invitation.

- If new contributions from previously published sources are included after Sponsor ballot initiation, the permissions shall be obtained prior to the recirculation.

- **For questions or assistance in determining whether copyright permission is needed, please contact the stds-ipr@ieee.org.**

Stage 4: Balloting a Standard

Tips on Initiating Sponsor Ballot Process

What documents do I need prepare to start the Sponsor ballot in myBallot?

- For an initial ballot and all other ballots, you will need the draft in **pdf format**.

- For the recirculation ballot, you will need the revised draft, including **current date** and **updated draft number**, with **changes highlighted** or a **summary sheet showing changes made from the last draft**.

- Remember to **Upload the completed comment resolution in myBallot first** and **then Initiate the recirculation ballot.**

- For the Recirculation ballot, upload the Cover letter (required) outlining the major changes to the document. Next upload the Marked Up draft showing changes and finally upload any additional material/ Clean **draft (File may be zipped)**

Tips on Initiating Sponsor Ballot Process

Sponsor Ballot

- The **MEC and Invitation can be initiated simultaneously** (both 30 days)

- **No one ballot classification can be more than 1/3 (33%)** of the ballot group for the Invitation.

- You will need to achieve a 75% response rate & 75% Approval rate. If not, you will need to reopen/extend the ballot or begin the ballot process again.

- Once the draft standard has achieved 75% approval and 75% response rate is achieved, comments in subsequent ballots shall be based on:
    - the **changed portions of the balloted** proposed standard
    - **portions of the balloted proposed standard affected by the changes**
    - portions of the balloted proposed standard that are the **subject of unresolved comments associated with Do Not Approve votes**

- Any changes made to the draft will require a recirculation ballot

Tips on Comment Resolution

- All comments **shall be considered, & evidence of consideration** provided
- Comments **not based on the proposed standard** may be deemed **out of scope**.
- The WG may form a CRG (Comment Resolution Group), which is a group of individuals to work between meetings on resolving the comments and then bringing them back to the WG.
- Make sure to **notate in the minutes the charter of the CRC**.
- **Track changes on your draft** as you implement changes.
- **Do not make any or promise to make, any post-ballot changes** to the draft.
- **Recirculate any changes that you want to guarantee will be made**.
- **Do not cross reference** the disposition detail of other comments.
- **Copy textual disposition details**, don't reference submissions
- References to comment disposition details in external documents should be public URLs
- Ensure accepted changes are incorporated into the Draft
- Provide guidance for identifying substantive Draft changes to balloters during recirculation/Noting substantive changes in the cover letter

Definitions of the Disposition status

Disposition status is "Accepted"

- Means: The **CRG agreed exactly with comment and change proposed by the commenter.**

- Prerequisite: The changes proposed in the comment contain sufficient detail so that voters can understand the specific changes that satisfy the commenter and the editor can make the change.

- **The disposition detail field should be left blank.**

Disposition status is "Revised"

- Means: CRG **agrees in principle** with the comment and/or proposed change

- the CRG **disagrees with all or part of the specific**

- the proposed change in the **comment does not contain sufficient detail** so that the CRG can understand the specific changes that satisfy the commenter, or

- the **changes made by the CRG contain additions or modifications** to what was proposed by the commenter

- The **disposition details field should contain sufficient detail so that voters can understand the specific changes,** and the editor can make the change

Definition of Disposition Status

Disposition status is "Rejected" is Used when one or more of these applies:

- the CRG <u>disagrees with the comment</u> – provide an explanation of why the CRG disagrees with the comment

- the comment <u>is out of scope</u> – provide a **statement that the comment is out of scope, and the rationale**, the comment does not contain sufficient detail

- the CRG <u>cannot come to a consensus</u> to make changes necessary to address the comment –provide a **statement that the CRG could not reach consensus on the changes necessary to address the comment, along with the reason**

- the comment <u>is in support of an unsatisfied previous comment associated with a disapprove vote and does not provide substantive additional rationale</u> – provide a statement that the **CRG has previously considered the comment** (or a substantively similar comment), along with **identification (by reference or copy) of the original comment and its disposition detail and status**

- the comment <u>includes an attachment that does not meet the criteria indicated by the myBallot system</u>; that the CRG cannot address as a single issue; or that does not relate to a specific line, paragraph, figure, or equation in the balloted draft - Provide a statement why the comment attachment was rejected.

Stage 5: Gaining Final Approval

# Gaining Final Approval

Submitting to RevCom

- The next step is to submit the draft to RevCom (Review Committee)

- RevCom ensures that <u>procedural requirements</u> of the IEEE-SA, as outlined in IEEE-SA Standards Board Bylaws & Operations Manual, have been met.

- The Working Group Chair submits the draft to RevCom through myProject and will then receive an email acknowledgement of receipt from the RevCom Admin.

Key Items for RevCom Submittal

- Address <u>all outstanding negative ballots</u> with comment(s) before submitting

- If there are <u>outstanding negative</u> from the last round of balloting,

- <u>Email the balloter a reason for rejecting the comment</u> and Inform the balloter that the draft is being submitted to RevCom.

- Do monitor email for RevCom comments prior to the RevCom meeting.

- Do not include a <u>confidentiality statement within any communication to RevCom or the IEEE-SA Standards Board.</u>

- <u>Electronic source file(s) of the last balloted draft should be uploaded</u>. You may zip the figures and draft and upload the source file.

- When you receive comments from RevCom, please respond on time.

Publication phase information

- A thorough edit of the document is conducted to ensure that the standard is grammatically and syntactically correct using American English.

- A single, primary contact who works with the working group chair or technical editor in the final stages of the document.
  - Content Program Manager (CPM) assigned will discuss any questions or potentially problematic changes with the chair (or assigned contact).
  - The chair will also receive the final standard to review and approve prior to publication.
  - If there are comments during the Ballot that were editorial and rejected, may be addressed at this phase.

- A clean PDF version of document is published and the IEEE standard is made available online.

- XML and HTML versions of the standard are created.
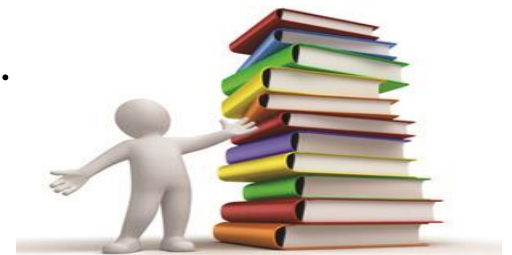
Questions?

Visit the IEEE-SA web site:
http://standards.ieee.org

Annex A : Working Group Tools

❑ **Document Management, Calendar, Project Management, e-mail, Wiki:**
- iMeet Central: **http**s://www.imeetcentral.com
- iMeet Central New User Training: https://www.centraldesktop.com/overview
- IEEE-SA iMeet Central Webinar: http://standards.ieee.org/webinars/

❑ **E-Mail listserv**:
- IEEE Listserv overview: http://eleccomm.ieee.org/maillist.shtml

❑ **Teleconference & Web Conference Services:**
- Join-Me
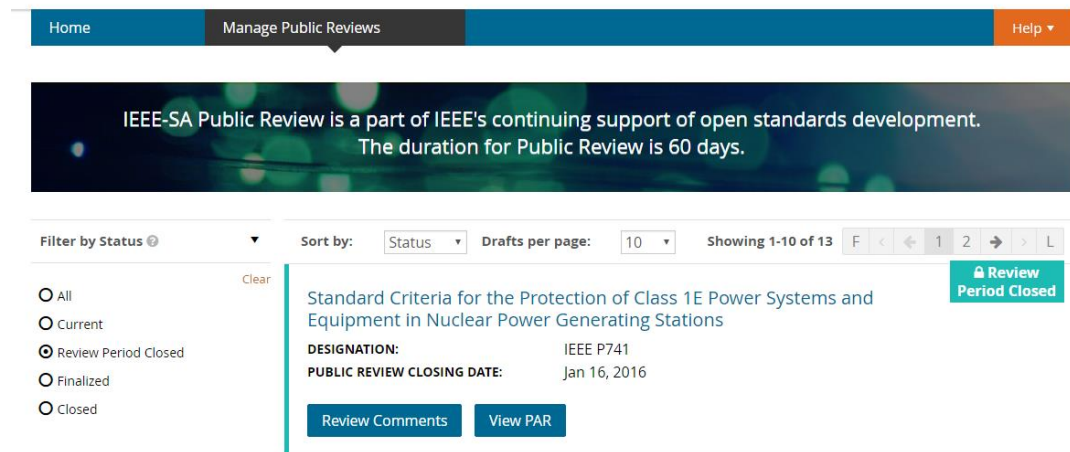
❑ **Public website:**
- Option 1 – Word Press
  - o WG is responsible for maintaining the website. IEEE-SA does not provide tools to manage the website. IEEE-SA will help you setup Wordpress.
- Options 2 – iMeet Central
  - o Example: https://ieee-sa.centraldesktop.com/1876public/

Public Review Status – Checking Comments

- If you have received a Public Review has Closed email. Log on to the IEEE-SA Public Review Site: http://publicreview.standards.ieee.org/public-review-web/public-app

- Remember to Sign in (Web Account Log In)

- To View Comments – Click on Manage Public Review TAB

- Select the Review Period Closed button

- Find the Standard and click on the comments Review Comments button to check for comments.