

IEEE Power & Energy Society Guidelines for Preparing Visuals for PES Presentations

(Last revised December 2004)

*(Adapted from the IEEE Regional Activities, Section/Chapter Support document
“Guidelines for Preparing Effective Presentations”)*

Well constructed visuals can make your presentation more exciting, effective and memorable. However, in order for the visuals to accomplish this, it is critical that they be properly planned and prepared or they can become a liability rather than an asset. The guidelines on these pages are designed to help you make the most of your visual presentation.

Presentation Overview

Your visual presentation should emphasize the most important points and ideas of your oral presentation. Use the visuals to reinforce, clarify, illustrate or highlight individual points. Visuals are illustrating, not repeating, your presentation. Their purpose is to add interest and emphasis, not to compete with what you are saying.

Some key points to remember when preparing your visuals:

- Simplicity is a key to gaining your audience’s attention and retaining their interest.
- Focus on one idea at a time. To include three or four ideas in a single visual usually detracts from your presentation and is apt to confuse your audience.
- Do not repeat the text of your presentation word-for-word on the visual.
- Keep statements simple and to the point, using key words and phrases.
- Use only essential information which supports your statements; for example, do not project all the statistics you are using. Pick only the key ones.
- Experiment with a variety of layouts to determine the most effective ones. Remember that people retain information best through a picture or a chart than words.
- Consider audience size. Visuals must be prepared properly so that they are clear to even those at the back of a large room.
- Consider handing out copies of your visual presentation. Be sure to have sufficient quantity available for your audience.

General Guidelines

- **Keep it simple.** It is easier for the audience if you use three simple visuals than a single complex one.
- **Keep your audience in mind** when designing your visual aides. What terminology will they understand? What examples have meaning for them?
- **Proofread very carefully.** Try to have someone else proof in addition to yourself. It is hard to overlook errors when they are magnified in front of an audience. Remember, even a small error in such a focal part of your program can undermine the credibility of your entire presentation.

- **Fonts should be clear and easy to read.** Use Helvetica or similar sans serif fonts. Decorative fonts are not recommended. Use only one typeface per visual. Add variety by using different sizes and bolding title lines.
- **Colored fonts should have a dark background** (dark blue is best) with primary titles in either yellow or white and secondary titles in the remaining color. Details should be shown in clear bright, light contrasting colors. Use no more than three colors per visual.
- **Avoid using shades of the background color for titles or details.**
- **Avoid commercial endorsements.** A photograph of apparatus which incidentally includes a trade name is allowed, but a table comparing attributes of identified vendor's products will not be allowed. There is much gray area in between these two examples; discuss any concerns you may have with your session chair. The display of the logo of the company with which you are associated is restricted for use to the first PowerPoint slide or visual (usually the title slide). This restriction applies to logos of educational institutions as well. Be particularly careful to avoid using company/school PowerPoint templates that feature a logo or other form of identification on every slide.
- **Test your presentation ahead of time.** Make sure it is easy to read from an appropriate distance, and that everything is in the proper order.

Text Pointers

The text (or word) portion of presentations is used to state facts or objectives. When lines of text alone do not illustrate your point, a chart, graph or graphic might be more appropriate.

- Avoid using more than six or seven words (30-40 characters) per line, six or seven lines per visual. Make sure type is well spaced and not crowded.
- Eliminate words that do not add meaning, for example: the, an, etc.
- Avoid complete sentences. Use bulleted phrases.
- Be consistent in grammatical construction of lists; for example, use all verbs or use all noun phrases.
- Use 36 point type for all titles, and for the text of visual aids to be used in very large rooms.

This is 36 point Helvetica

- Use at least 18 point type for the main text in other than the largest rooms.

This is 18 point Helvetica

- Use bullets at beginning of lines to separate ideas.
- If you are using PowerPoint, use functions that allow you to build information, bullet by bullet, on a slide, to keep the audience from reading ahead.

Title Pages

- Use title pages to introduce new topics or add special emphasis to a very important point. The best titles are a few simple lines in large type.

Graphs, Charts and Diagrams

NOTE: The statistics used for illustration are examples only. Please do not duplicate.

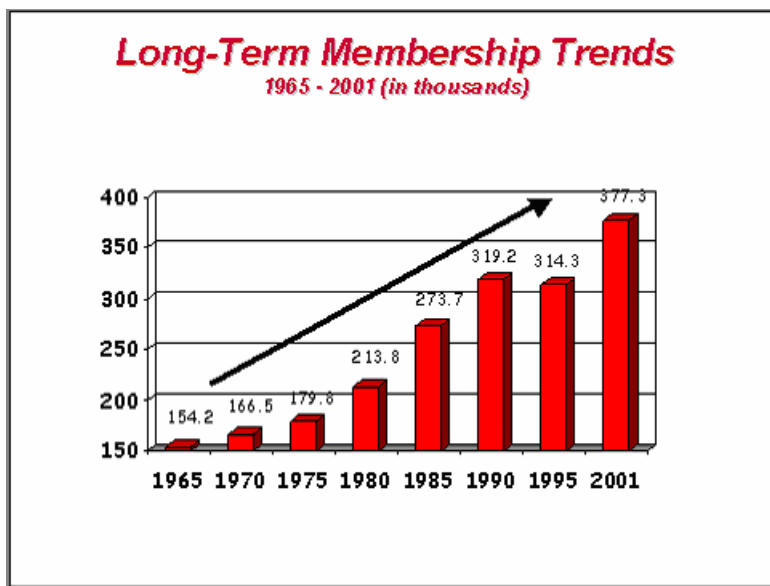
Tabular Charts

Tabular charts are used to show raw data and numerical relationships. Use only a few key examples on the visual to illustrate your point.

	2001	2000	% Change
1	44,168	44,281	(-0.3%)
2	35,943	35,646	+0.8%
3	32,239	31,778	+1.5%
4	25,701	25,828	(-0.5%)
5	31,832	31,706	+0.4%
6	65,708	64,733	+1.5%
US	235,591	233,972	+0.7%
7	16,037	15,491	+3.5%
8	52,808	48,157	+9.7%
9	14,744	13,474	+9.4%
10	58,162	55,041	+5.7%
Non US	141,751	132,163	+7.3%
Total	377,342	366,135	+3.1%

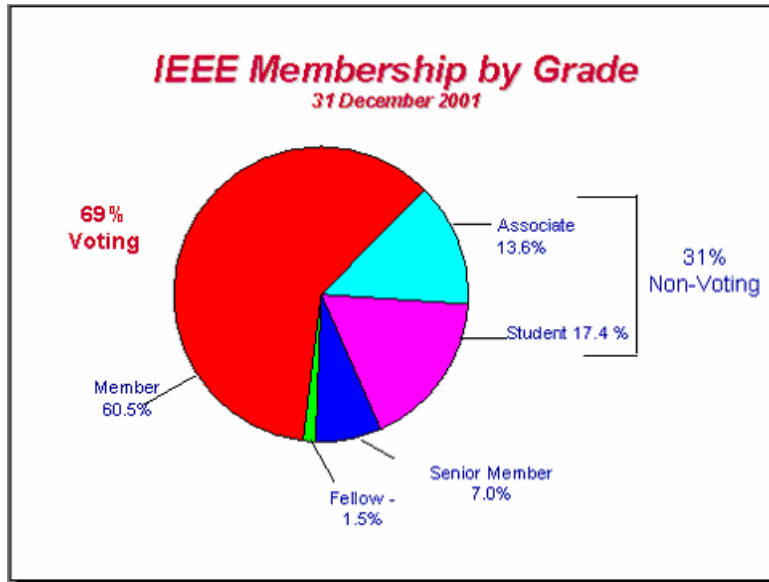
Bar Graphs

Bar graphs are used to show absolute data or relationships and comparisons. Be sure to include scales and values. Be sure the type is legible.



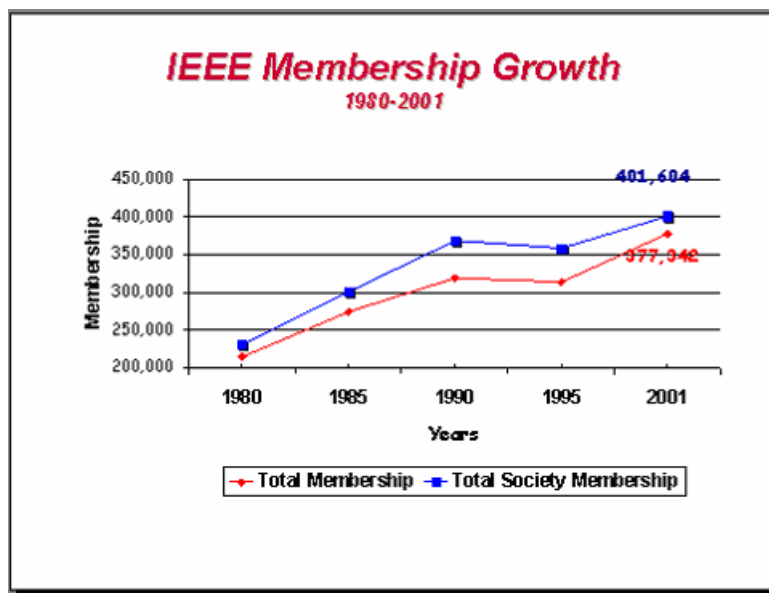
Pie Charts

Pie charts are good for illustrating percentage relationships or parts of a whole. No more than eight segments are recommended.



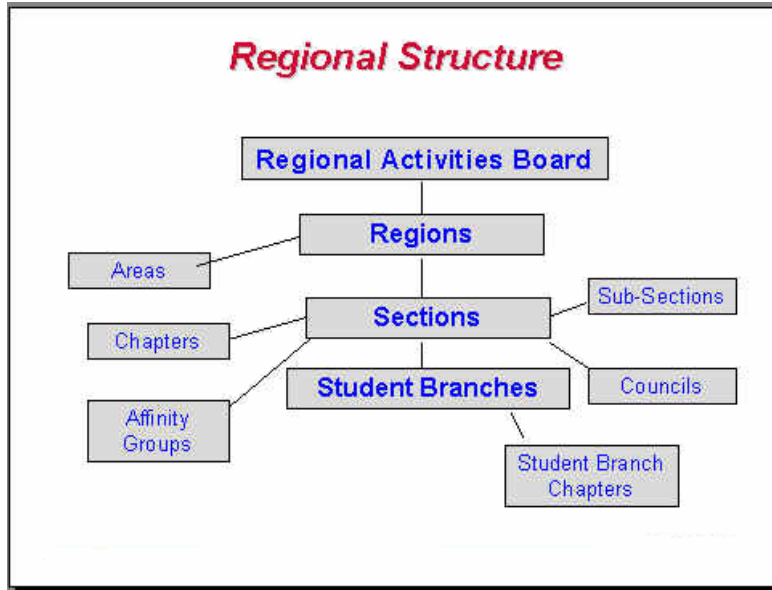
Line Graphs

Line graphs are ideal for illustrating trends or performance over time. Your scale should include significant dates and milestones. Graphs should include no more than three lines. In black and white visuals, the lines should be distinctly different, e.g., dashed, solid, dots, etc. In color visuals, the lines should be easily differentiated colors which contrast well with the background.



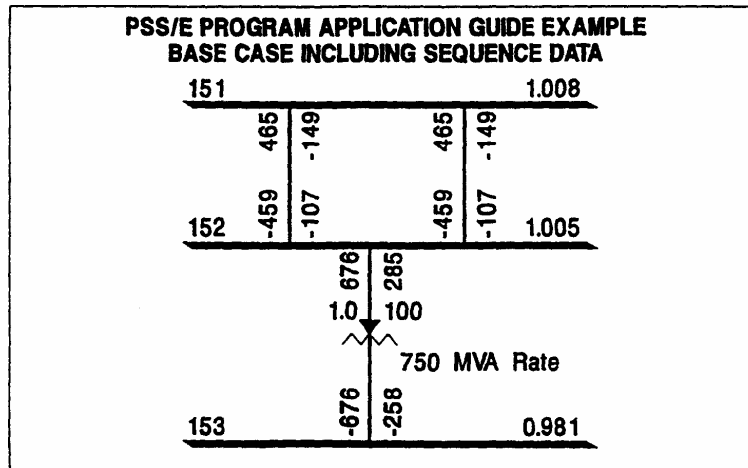
Block or Process Diagrams

Block or process diagrams are good for illustrating structural relationships and designs. Graphics of this type show how each piece contributes to the whole. Avoid overcrowding. Limit your chart to no more than 10 simple geometric shapes and titles connected by lines and arrows.



One-Line Diagrams

PES papers often contain electrical one-line diagrams which are an integral part of a technical discussion. You should limit applying these to needed segments of a system to make them legible to the audience.



Photographs

Good quality photographic visuals can make a major contribution to your presentation. Be extra careful with photographs: they must be very crisp and clear, with high contrast between light and dark areas. Do not superimpose text over the image. If text is needed on the visual, it should be placed in areas that have been cleared of the image. Be sure to test your photos, projecting them to the size they will be when used to ensure that they are clear and easily recognizable.