

NORTH AMERICAN TRANSMISSION STRUCTURE AESTHETIC COMPETITION

JUDGING CRITERIA

Recognizing that the fundamental purpose of transmission line structures is the safe, reliable, and resilient transmission of electricity over the wires these structures support, all submittals must first fulfill that purpose.

Wherever possible, ASCE Codes and Manuals of Practices shall be used for the transmission structure design and analysis.

Judging will be accomplished in two (2) stages

Stage I – Preliminary Submittals

This submittal will be used to determine if a preliminary design concept appears to be able to conform to the technical aspects of the contest:

- Does the submitted design appear to conform to the Engineering Design Parameters outlined for the contest?
- Does the structural design concept appear to be reasonable and practical?
- Does the concept appear to be:
 - Constructible,
 - Safe,
 - Cost Effective,
 - Resilient?

Entrant* shall provide the following items (at a minimum) for each design concept submitted (multiple entries can be submitted, but they should be uniquely different from each other):

1. Preliminary written description of the design concept (contemplated materials to be incorporated into the design, finishes, etc.)
2. Preliminary concept Sketches/Drawings of the proposed design.
3. Preliminary Structural Calculations and configuration dimensions, including electrical clearance measurements.

*Mentoring on the technical aspects of the design (calculations, etc.) may be available to the Entrant if requested.

Each entrant will be provided written feedback from the Stage I (Technical) review Panel that can be used to refine the submittal for the final Stage II required submittal.

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Stage II – Final Submittals

Only entries that have undergone Stage I review will be eligible for Stage II submittal - Final Judging.

Entrant shall provide the following information (at a minimum) for each design concept submitted:

1. A final written summary of each entry describing:
 - a. How will the submitted design incorporate the following “aesthetic concepts”:
 - i. Simplicity,
 - ii. Proportion,
 - iii. Color,
 - iv. Form,
 - v. Function,
 - vi. Balance,
 - vii. Texture.
 - b. In addition to the above aesthetic concepts, how does the submitted design address the one or more of the following general elements of current transmission line design:
 - i. Safety
 - ii. Technical Viability
 - iii. Constructability
 - iv. Practicality
 - v. Cost Effectiveness
 - vi. Resiliency
2. A written description of the overall philosophy and as well as the technical approach to the submitted design?
3. Final dimensioned drawings of the design including electrical clearance verification drawings.
4. Final Structural Calculations

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Judging of Final contest entries will be based on the following:

1. (40%) Design Quality
 - a. Overall aesthetic appeal of the design (Visual Impact)
 - b. Creativity of the design
 - c. Quality and clarity of the design presentation

2. (40%) Response to and understanding to the requirements of the competition (how well the design concept meets the Engineering Design Parameters of the contest... not “if” they meet those requirements):
 - a. Constructability
 - b. Technical viability
 - c. Safety
 - d. Functionality
 - e. Practicality

3. (20%) Overall philosophy and approach.
 - a. Was there an “aesthetic” inspiration for the design concept submitted?
 - b. Was there a key “purpose” incorporated into the design concept submitted?
 - c. How does the design concept incorporate American Society of Civil Engineers (ASCE) “[Aesthetic Policy](#)” themes?

4. The Stage II Judging panel will consist of both Technical and Non-Technical Judges impartially selected by the NATSAC Committee.