ASCE Codes and Standards

By **Ronald Carrington**, ASCE—Electrical Transmission Structures

It has been a busy year. As a kid watching black-and-white television, I was always mesmerized by the performer who could keep a dozen or more plates spinning on slender poles. The performer would scramble from pole to pole to impart just enough energy to keep each of the plates spinning. Sure enough, as more and more plates were added, a plate would fall and shatter if the performer was a split second late. The shattering of plates is burned into my mind as a clear example of the pressures of too much work and too little time. The good news is that the performer kept most of the plates spinning, just as the engineers, scientists, managers and support staff in our industry do with their work on a daily basis.

No matter where I turn, my colleagues, clients and coworkers are inundated with work. I have to wonder if this is a perfect storm for our industry; a confluence of historically high level of capital spend, aging infrastructure needing replacement, projects to support a renewable build out all combined with a less experienced workforce. On top of this, we add in major distractions such as the natural wonder of the total solar eclipse and the devastation from hurricanes and wildfires.

Our engineers and designers are under amazing pressure to complete massive volumes of engineering and design in shorter timeframes, with higher quality and less cost. With this awareness, it is little wonder that the five task committees of the ASCE's Electrical Transmission Structures committee are making less progress than anticipated. However, this important work has continued with four documents scheduled for publication in 2018.

• Guidelines for Wood Pole Structures for Electrical Transmission Lines. The development of this document is complete and is awaiting review by the Blue Ribbon Panel. Expectations are high that this manual of practice (MoP) will fill gaps and provide consistency in the design of wood transmission structures. This document will be published in 2018.

• ASCE-104 Recommended Practice for Fiber-Reinforced Polymer Products for Overhead Utility Line Structures. This MoP is complete and under review by the Blue Ribbon Panel. Much anticipation surrounds this second edition as it captures significant advancements in the understanding, acceptance and use of fiber-reinforced polymer products since the 2003 edition. ASCE-104 is set to be published in 2018.

• ASCE-74 Guidelines for Electrical Transmission Line Structural Loading. Frank Agnew, chair of the task committee for ASCE MoP 74 and the editorial subcommittee are addressing comments from the Blue Ribbon Panel and putting the finishing touches on the fourth edition. This latest edition is highly anticipated as it includes a draft Pre-Standard Minimum Design Loads for Electrical Transmission Line Facilities. ASCE-74 is set to publish in 2018.

• Aesthetic Design of Transmission Line Structures. The finishing touches are being put on the committee report with publication expected in 2018. The report will raise awareness of the role aesthetics can play in the design of transmission line structures.

• ASCE-113 Substation Structure Design Guide. Revisions and updates to the current MoP are continuing with final editing of the base document in progress.

In these times of high expectations and constant pressure to complete high-quality work, it is important to recognize the individuals who selflessly serve on technical committees as well as their colleagues and managers.

To those of you who are colleagues of committee members, you perform a vital role in advising, reviewing, validating and, most importantly, applying the technical results these efforts. Please continue to make this support a priority. Your efforts are preparing you to take a seat at the table when the next committee is formed.

To those who manage committee members, you hold the key to the success of ASCE's committees and task groups. Without encouraging our subject matter experts to be mentors, provide training, share expertise and, yes, participate in technical committees, our industry would have stagnated years ago. Continue to encourage younger engineers to look past the day-to-day tasks to see where they can contribute to the larger common good. Set an example by spending some of your time and energy contributing to efforts beyond your day-to-day responsibilities. And finally, recognize and celebrate those who are willing to contribute their free time to advancing the state of our industry.

To those individuals who serve on these committees, it should go without saying that you have to prioritize your day job while trying to achieve some level of work-life-family balance. Take pride in the fact that you play a critical role in conceiving, designing, building, operating and maintaining the largest machine ever created by mankind. Keep the faith, have patience, keep working hard and know that your efforts are benefitting those that will follow in your footsteps.

Our industry owes a big thank you to all of you who keep the plates spinning. TDW

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