

transactive energy

providing an enabling environment

TRANSACTIVE (A WORD MY browser adamantly refuses to recognize) energy (TE) is fast emerging as one of the more novel and interesting approaches to the grid of the future. In simplistic terms, TE is an enabling environment for any number of users to partner with traditional providers to produce, buy, and sell electricity using automated control. The ensuing results should produce a grid offering reliability, affordability, sustainability, and efficiency. Projects related to TE are well underway in New York, California, and Texas and have generated keen interest by the U.S. Department of Energy as well as in Europe. The Gridwise Architecture Council (GWAC) has been created and is taking a leading role in the study of TE projects and issues. You will learn more about the GWAC in our articles.



©GRAPHICSTOCK

In This Issue

I am grateful to Ralph Masiello who, with assistance from Gerry Sheble, assembled the seven feature articles of our issue, which offer a comprehensive look at the structures and complexities that may possibly be involved and review the benefits that could ensue in this grid of the future. The feature

articles themselves, and the closing “In My View” column by Gerry, are introduced by Ralph in his “Guest Editorial” column.

A View of the Financial Side

The “Leader’s Corner” column, by IEEE Power & Energy Society (PES) Treasurer Chris Root, presents an opportunity for our members to familiarize themselves with the details and nuances of the financial state of our Society. Chris

offers a comprehensive, informative, and illustrated presentation that illuminates a previously little-known aspect of PES.

PES Members Receive IEEE Awards

In “Society News,” we are proud to announce that two stalwart PES members have been chosen as the recipients of prestigious 2016 IEEE awards. Arun Phadke will receive the IEEE Power Engineering Medal for his seminal contributions to synchrophasor technology, and Hermann Koch is being recognized for his work in the standards area as the recipient of the IEEE Charles Proteus Steinmetz Award. Their citations and photos can be found in the column.

The Standard in Circuit Breakers

The “History” column, authored by Russ Yeckley and Jerry Colclaser and edited by Carl Sulzberger, describes the development of the sulfur hexafluoride (SF₆) high-voltage circuit breaker in the 1950s at Westinghouse Electric. That technology remains the standard to this day. The story is a most interesting one and will certainly appeal to our readers. A special note of thanks to the facilitator of the piece, John Passerba, who was instrumental in its composition.