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Editorial



Energy Crunch Time

For many of us, when we flip a switch, we automatically expect a surge of energy to power up a process — whether it's something as simple as turning on the lights or as complicated as running critical equipment in a process plant. But what happens when the energy supply is drastically diminished, and prices have more than doubled? Most notably, the folks in California are finding out.

The highly publicized rolling blackouts have certainly had an impact on the chemical process industries (CPI) in California. As contributing editor, Irene Kim, points out in her article, "Powering Down," on pages 10–12, STC Plastics in Chino, CA, has already experienced over 20 outages this year, resulting in about 120 hours of forced downtime. Also, the recently released white paper from the Electric Power Research Institute (EPRI; Palo Alto, CA), "The Western States Power Crisis: Imperatives and Opportunities" noted that the total cost for power in California quadrupled from \$7 billion in 1999 to \$28 billion in 2000 (www.epri.com/WesternStatesPowerCrisisSynthesis.pdf). The California Independent System Operator (CAISO) expects this figure to reach at least \$50 billion this year.

California is not the only state to feel the ill effects of the energy crunch. Other nearby states have been affected as well. For instance, Atofina Chemicals in neighboring Oregon has decided to temporarily suspend operations at its chlor-alkali and sodium chlorate plant. Other energy-intensive industries, such as pulp-and-paper and cement, have also been hurt by the energy shortage.

But, things are not as dire as they may seem. Software solutions, particularly in the area of site-wide energy optimization, are garnering more attention, and new solutions are coming to market. The latest product targeting the CPI comes from a strategic alliance between Aspen Technology (Cambridge, MA) and Air Liquide (Paris). Others include offerings from Pavilion Technologies and Syska & Hennessy, as well as Power Measurement and ABB (p. 11).

Furthermore, there is renewed interest in monetary incentives being offered to reduce energy usage. Technical advice is also being given from third-party groups, such as EPRI. The white paper mentioned above outlines specific technical recommendations for addressing the power problems in the western U.S. that EPRI emphasizes are concrete and actionable. The DOE's Office of Industrial Technology (OIT) recently issued a request for proposals (RFP 3400013229, www.oit.doe.gov/bestpractices, closing date Oct. 15) on plant-wide energy assessment for manufacturing facilities, for which successful applicants can receive as much as \$100,000 in DOE funding.

For the time being, the energy crisis appears to be confined to the western U.S. But, there can be no guarantee that it won't spread to the rest of the nation. As contributing editor Kim puts it succinctly, "... energy may be a commodity, but we can't take it for granted."

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