

Efficiency Takes Center Stage

▶ THINK OF ALL THE ELECTRIC POWER USED by residential consumers in New York City. Multiply that vast virtual battery by 14.

That is the amount of electricity that can be saved in 2030 if we finally get serious about rescuing every wasted crumb of an electron that can be scrounged from our energy feast. The price tag would range between \$19 billion and \$47 billion, according to a yearlong study just completed by the Electric Power Research Institute. Given the amount of money being thrown around to bail out crippled financial institutions lately, it is a mere drop. What the money would buy would be a 22 percent cut in the growth in energy consumption over the next two decades.

The strategies must be terribly complex and difficult, you say. Not really.

The lowest of the low-hanging fruit is commercial lighting, said Omar Siddiqui, EPRI project manager of the study. The technology now exists to slash the amount of energy used to light office buildings, hotels, hospitals and malls a grand total of 90 billion kilowatt-hours a year by 2030, he said. That is more than one-third of the overall total energy savings – 236 billion kilowatt-hours – that the study identified. Siddiqui said that future studies will dig deeper into the commercial lighting sector to identify where and how the greatest savings can be achieved.

Another leading target of opportunity is consumer electronics – roughly 45 billion kilowatt-hours a year by 2030. A like amount of energy savings can be achieved by industrial energy users by moving to more efficient machinery.

The potential energy savings vary by region. The South, with the highest electricity consumption, has the greatest overall savings potential. The West, with the

highest forecasted growth rate, 0.6 percent per year, “has the largest potential in percentage terms,” the study said.

The study should be closely reviewed by every utility in every region of the country to identify where they can get the biggest bang for their efficiency buck. Each power company should then proceed to work with commercial customers to see what lighting technologies should be deployed for maximum energy savings. As an industry, all utilities must get consumer electronics manufacturers focused like never before on getting our thin-screen TVs to glow without pumping up our monthly utility bills and harvest energy savings on other electronics products.

State utility regulators, state legislators, city councils and county governments should ponder the report to see what

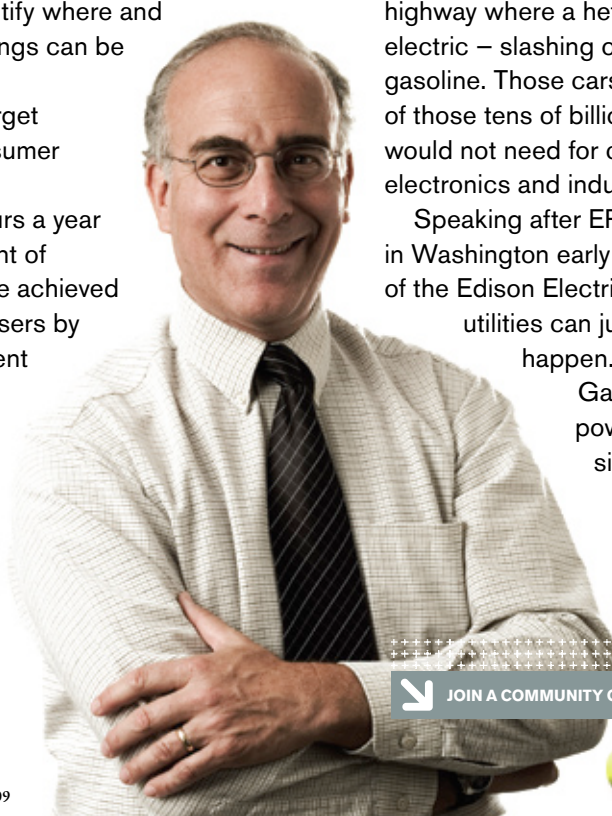
regulations, building codes and policies can make EPRI’s vision a reality.

Think of 14 New York metropolitan areas – 115 million consumers – and all the electricity they consume in a year. Imagine if that demand could be erased. Picture the coal trains that would not have to run, the coal that would be kept in the ground, the emissions avoided and the natural gas that could be preserved in underground storage. Conjure up a highway where a hefty share of the automobiles are electric – slashing our reliance on imported oil and gasoline. Those cars could be powered by many of those tens of billions of kilowatt hours that we would not need for commercial lighting, consumer electronics and industrial machines.

Speaking after EPRI announced the study results in Washington early this year, Tom Kuhn, president of the Edison Electric Institute, observed, “The utilities can jump-start and make this stuff happen.”

Game-changing approaches to powering our lives start with one simple concept. Efficiency.

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