Reduce Growth In Electricity Consumption By 22 Percent-Realistically

Energy efficiency programs in the United States could realistically reduce the rate of growth for electricity consumption by 22 percent over the next two decades if key barriers can be addressed, according to recently released analysis by the Electric Power Research Institute (EPRI) [1]. The potential energy savings in 2030 could be 236 billion kilowatt hours, equivalent to the annual electricity consumption of 14 New York Cities. Stated differently, EPRI believes that the demand for electricity over the next two decades could be reduced from the 1.07 percent annual growth rate projected by the U.S. Energy Information Administration (EIA) in its "2008 Annual Energy Outlook" down to 0.83 percent, slowing the rate of increase by approximately 22 percent. The analysis comes at a time when utilities, regulators and policymakers are aggressively seeking ways to meet growing electricity demand while reducing the nations carbon footprint. The key challenge is to not only maximize potential gains in energy efficiency, but also ensure adequate new electric generation to maintain reliability and meet future demand. The EPRI's analysis entitled "Assessment of Achievable Savings Potential From Energy Efficiency and Demand Response in the U.S." found that, under an ideal set of conditions conducive to energy efficiency programs, the consumption growth rate could be further reduced to as low as 0.68 percent annually by 2030. However, achieving this ideal would require costly investments, as well as political and regulatory support. Moreover, the report defines a realistic achievable figure that includes a forecast of likely customer behavior, taking into account existing market, societal and attitudinal barriers, in addition to regulatory and program funding barriers. The barriers could reflect customers resistance to doing more than the minimum required or a rejection of the attributes of the efficient technology. A maximum achievable figure assumes a scenario of perfect customer awareness of utility- or agency-administered programs and effective, fully funded program execution. The maximum achievable number includes the effect of customer rejection of efficiency technologies. For its baseline assumptions, the EPRI study relied on EIA projections of growth in electricity consumption, and peak demand for the residential, commercial and industrial sectors from its "2008 Annual Energy Outlook." The EPRI report and its executive summary can be downloaded at www.epri.com [1]. "This study is well-suited to inform utilities, policymakers, regulators and other stakeholder groups," says EPRI Power Delivery and Utilization Vice President Arshad Mansoor. "Estimates of energy-efficiency potential affect forecasts of electricity demand, and electric utilities must make prudent investments in generation, transmission, and distribution infrastructure to reliably and cost-effectively address this demand." Faced with the challenges of managing energy resources wisely, maintaining low-cost reliable power service and reducing carbon emissions, utilities and policymakers are looking to energy efficiency as a means to achieve these objectives. Many states have established, or are considering to establish, legislation to mandate energy-efficiency savings levels.

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