Is Energy Efficiency (EE) Enough? Part 2: A Different View on CA’s Electric IOUs EE Savings

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In looking at this data, it is important to know that the total cumulative savings is likely off/high by some order of magnitude. First, the historical CA utility EE program savings data used by the CEC in its DSM Forecasting Model is as reported by the utilities’ on an ex ante -- or prior to M&V. It was not until the early 1989 that utility reported savings were adjusted for freeridership. From 1989 – 1999, some billing analysis was also used to adjust reported savings on an ex post basis. Since time, the data reflect utility reported ex ante savings. Second, from 1975-1988, much if not most of the early period EE savings are attributable to information & energy audits programs, with the first cash rebate in 1982. Third, about 10% of the Gwh and MW savings are attributable to utility T&D CVR (conservation voltage reduction) implemented during 1975-1980. Such utility system efficiency savings are not generally classified as consumer EE.

NOTE: As of first 18 months of their 2006-2008 EE portfolios, PG&E, SCE, and SDG&E reported that 76% of all GWh energy and 67% of all MW peak demand savings were from lighting measures – with 60% of the GWH energy and 51% of MW peak demand savings from screw-in CFLs. Because the CA IOUs are relying on EE measures with relatively low expected useful lives (EULs) -- such as screw-in CFLs -- EE savings erode or decay out in a few to several years. This makes it very difficult from a resource procurement perspective to grow cumulative EE savings over time. As noted above, Figs. 16 & 17 analysis is based on the utilities’ forecast of 2006-2008 EE savings, which at the time stood at 55% GWH lighting, with 30% CFLs.