



Summary of Energy Commission Staff Paper on Historical Efficiency Program Activities and Impacts

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Summary of EE History

- The conundrum of how to treat energy efficiency programs as alternatives to building new central power plants arose in CA (and a few other places) in the 1970s
- CA Context: Utilities proposing to build large numbers of nuclear power plants along the coast and coal fired power plants in Nevada---in order to meet 7% annual growth rates in peak and energy demand
 - Dynamos and Virgins, David Roe, EDF, 1984:Key reading on these developments and the key “actors” (i.e. Amory Lovins, Arthur Rosenfeld, various people at the CEC and CPUC)



Personal Disclosure

- Began work at the CEC in June, 1980, in the Conservation Division, transferred to the Demand Assessment Office in 1983
- Transferred to the CPUC (Public Staff Division) in 1986, became energy efficiency lead analyst through the 1980s, 1990s, and into the 21st Century.
- Retired from the CPUC/DRA in summer of 2008, returned to the CEC as Retired Annuitant in Sept 2008
- A primary focus of my work at CEC as been establishing a new/better approach to account for the impacts of utility efficiency programs in an IEPR context
- Personal Observation: "We"—those who have assessed the utility energy efficiency conundrum, have had minimal success



California Energy Commission

Efficiency Program Treatment by Period

<i>Program Years</i>	<i>Examples/ Types of Dominant Programs</i>	<i>Characteristics of Reporting and EM&V Requirements</i>	<i>CPUC Proceeding(s) addressing/resolving disputes</i>
Pre-1990	<p>Late 70s/early 80's: mostly non-EE programs (e.g., Voltage Reduction).</p> <p>Early-mid 1980s: Information and Education; Res Audits; Direct Assistance; Loans and rebates for weatherization; "Load Management" standards and incentives;</p> <p>Mid-late 1980s: sharp decline in activities</p>	Limited mostly to "March 31 st Reports (annual reports on prior year expenditures and accomplishments and current year plans); no verification of utility-reported costs or benefits (e.g. energy savings)	General Rate Cases (prospectively, focus on expenditure/budget requests)
1990-92	Ramped up spending for audits/rebates in all sectors (Res, Commercial, Industrial, Ag)	Limited to ad hoc agreements in periodic stakeholder meetings. Completion of studies, or results of studies NOT linked to earnings amounts.	Energy Cost Adjustment Accounts and Biennial Cost Allocation Proceedings used to address disputes; Different types of earnings mechanisms, per utility "choice" from 1990 "DSM Collaborative"



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1993-97	Full range of Programs (all major sectors); energy savings linked to shareholder earnings opportunities. Major dollars and reported savings for customized rebate programs in the nonresidential sector.	Comprehensive set of EM&V Protocols, under the “governance” of the CA (CADMAC) Agreements to establish and maintain DEER Data Base and Measure Cost Studies	Annual Earnings Assessment Proceeding (AEAP); “Shared Savings” earning mechanism for all/most utilities/programs.
1998-2001	Shift away from dominant role of utility as program administrator; the rise of the Standard Performance Contract (SPC) program design in Non-residential sector.	Ad hoc agreements under the “governance” of the CBEE and LIGB; CALMAC “established” as unofficial repository of all/most EM&V studies	AEAP (for PY 94-97 earnings claims)



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2002-05	Return of customized rebate program, decline of SPC program design emphasis; increased role for Local Governments as "sub-implementers"	Energy Division and their consultants assume dominant role in conducting/overseeing EM&V	Ad hoc (non-evidentiary hearings)
2006-2008 & 2009	Resurrection of earnings opportunity; earnings claims re-linked to energy savings claims	Energy Division and consultants dominate EM&V	Ad hoc (non-evidentiary hearings)