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<u>Appendix</u>

Results of Annual Inspections, Inspection Forms/Equipment Tables,

Lighting Table

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Retention Study of 1994 PowerSaving Partners ProgramPacific Gas & Electric Company Study:399R1 March 1, 1999 Page 1 document, or represents that its use will not infringe any privately-owned rights, including but not limited to, patents, trademarks or copyrights.

Executive Summary

The Power Saving Partners (PSP) program was designed to provide Pacific Gas and Electric Company customers an opportunity to purchase turnkey energy efficiency services supplied by the private energy services industry. This submittal evaluates Program Year 1994 electric energy savings measured for Pacific Gas and Electric Company's Power Saving Partners I Program. This study is governed by Appendix H of the Measurement Protocols adopted in Decision 94-05-063.

After successfully meeting its subscription targets and entering into a performance mode, the PowerSaving Partners I program was followed by Power Saving Partners II, (the Integrated Bid pilot program) in mid-1996. The following study verifies the equipment tables that support the energy savings in peak kW and kWh for the end uses installed in PSP I Program Year 1994, and claimed in the 1995 AEAP Earnings Claim. The following Power Saving Partners I program measure evaluated include:

• Commercial Lighting

Most Power Saving Partners I contracts agree to deliver energy savings for a period of ten years. PSP Partners receive monthly payments over the life of their contracts; and are required by contract language to maintain the operational performance of retrofitted systems or adjust the equipment tables to compensate for performance variations. To substantiate the payments Partners receive for reported energy savings, Pacific Gas and Electric Company representatives perform inspections to verify the accuracy of a sample of the equipment tables associated with this claim.

For PSP Program Year 1994, five PSP I Partners installed energy efficiency measures at 39 customer sites. Pacific Gas and Electric Company claimed 2,513 kW, and 10,142 MWh of annual energy savings from these projects in the 1995 AEAP claim. Table One (1), which lists the results of the Annual Measure Retention Study for these contracts, shows that the retention for these measures is high.

PACIFIC GAS AND ELECTRIC COMPANY TABLE ONE PSP 1 RETENTION STUDY

PY1994 Retention Study Power Saving Partners I Study ID #399R1	Effective Useful Life
PY94 Commercial Lighting	0.994

Program Background

In March 1992, the CPUC mandated that Pacific Gas & Electric Company implement a bidding pilot program of DSM resources (D.92-03-038). In response, Pacific Gas and Electric Company conducted an auction and announced the list of winning bidders in April 1993. The CPUC determined the winning bidder contracts were reasonable and documented these findings in Decisions 93-11-067, 94-04-039 and 95-10-037.

Each PSP I contract is based on pay-for-performance over a contract life of ten years. During this period, the PSP I Partners are required to conduct measurement and verification studies of the

Retention Study of 1994 PowerSaving Partners ProgramPacific Gas & Electric Company Study:399R1 March 1, 1999 installed measures for the purpose of verifying the annual energy savings and documenting the continued presence of the retrofitted equipment. Initial payments are based on projected energy savings and then reconciled according to actual verified savings at the end of the first year of performance. If savings are not achieved, payments are adjusted and future savings projections are reduced. A method for collecting overpayments resulting from the mis-estimation of energy savings, is contained in each contract.

All project M&V plans are consistent with the Measurement and Evaluation (M&E) protocols adopted by the Commission in all instances where such protocols exist. The Commission emphasized in decision 93-05-063, p. 75:

Payments to winning bidders do not need to be linked to the completion of specific ex-ante measurement studies in the same manner as utility earnings. The utilities are expected to apply the basic concepts...., but to allow reasonable differences between these protocols and bidders' measurements and payments schedules.

Pacific Gas and Electric Company has fully complied with the Commission ruling by creating and applying a rigorous energy verification plan as accurate for site-specific measurement as the Protocols used for the utility programs.

Retention Study Verification Methodology

The 1994 Pacific Gas and Electric Company savings claim was comprised of savings from 39 project Sites. The Sites involved represent eight customer types, and are differentiated by separate Partner submitted Measurement and Verification Plans. For the retention study, Pacific Gas and Electric Company representatives performed a minimum of one site inspection for each customer type. Random selection of lines from the site's equipment tables based on an Assurance Quality Level (AQL) of 10. For each particular population, the AQL assigns the number of samples to be inspected and further identifies the number of errors allowed as a passing rate for any inspection. All inspections for the 1994 Retention Study were within the allowed number of errors required to pass inspection. If an error was discovered, the original claim was corrected. The ratio of the corrected wattage to the total wattage originally claimed was used to calculate Effective Useful Life (EUL) factors. Of the 113 lines selected for inspection for this retention study, six errors were found, resulting in a overall savings reduction of 1.40 kW. Table two (2) show the results of the annual inspections.

Table 2

Results of Annual Inspections for Commercial Lighting

	Customer Type	Population in PY1994	Selected Sample Project	Maximum kW	Lines inspected	Number of errors found allowed		Reduction		Comments
Partner								kW % of total kW		
			PALAALARKS							
Alameda	County Building	6		23.722	13	0	3	0.000	0.000	
Alameda	Jail	11	PALACON34 ***	10.786	13	1	3	0.026	0.002	fixture count error
Alameda	Hospital	3	PALAHOSR22	2.668	8	0	3	0.000	0.000	
			PCCCCCCLKE							
EUA Citizens	Residential Common Areas **	1 *		14.553	13	1	3	0.073	0.005	couldn't locate 1 F22LL fixture
			PCCCCCCLKW							
	Residential									
EUA Citizens	Common Areas **	1 *		32.786	8	0	3	0.000	0.000	
Noresco	Grocery Stores	1	PNORNOBB22	43.937	13	3	3	0.403	0.009	remodeling issues, missing fixtures
Noresco	Grocery Stores	6	PNORSAF316	25.735	13	1	3	0.896	0.035	remodeling issues
Proven			PPROKAIILP							
Alternatives	Hospital	9		35.360	32	0	7	0.000	0.000	
			PSANPSANLC							
San Jose	City Building	1		30.000	2	0	1	0.000	0.000	
	Total	39		219.547	115	6	29	1.398	0.006	
Ef	fective Useful Life								0.994	

* 100% of the Residential Common Use Area Projects included in the 1995 AEAP were inspected

*** In 1994 Residential common Use a rease were only eligible for service under commercial electric rate schedules *** Inspections at Jail Facility can only be performed on unoccupied Buildings.

As all of the Jail Buildings included in the 1995 AEAP claim were occupied at time of inspection, a substitute building at the site was inspected.

The Appendix contains two sets of documents for each type of project. The first set of documents are the inspection letters summarizing the results of the inspections sent to the PSP I Partners from Pacific Gas and Electric Company. The second set of documents are copies of the actual inspection sheets, which show the total equipment table and each of the lines selected for inspection, and the detailed results of the inspection.

Summary

Pacific Gas and Electric Company has adhered to or exceeded the basic concepts of ex post measurement protocols by implementing the adjusted NAESCO as the framework for Measurement and Verification requirements used in the Power Saving Partners program. The PSP contracts specify that each Partner must maintain the operational performance of retrofitted systems, or adjust the equipment tables and subsequent payment stream. The Effective Useful Life factors in this report reflect these adjustments and link to the savings reported in the E-table filed in support of Pacific Gas and Electric Company's 1995 Earnings claim.