

**NRNC MARKET AND PROGRAM TRACKING
REPORT
QUARTER 3, 2000**

FINAL

Prepared for

**Marian Brown
Southern California Edison Co
Statewide NRNC MA&E Program**

Prepared by

**QUANTUM CONSULTING INC.
2030 Addison Street
Berkeley, CA 94704**

P910-160

November, 2000

TABLE OF CONTENTS

Section		Page
1	INTRODUCTION	1
2	STATEWIDE NONRESIDENTIAL NEW CONSTRUCTION TRENDS	3
	2.1 New Construction Market Characteristics in Quarter 3, 2000	3
	2.2 SBD New Construction Program Participation in Quarter 3, 2000	8
3	STATEWIDE NONRESIDENTIAL ALTERATION (R&R) TRENDS	11
	3.1 Alteration (R&R) Market Characteristics in Quarter 3, 2000	11
	3.2 SBD R&R Program Participation in Quarter 3, 2000	14
4	SBD PROGRAM PENETRATION INTO THE NRNC MARKET IN QUARTER 3, 2000	17
5	NRNC MARKET AND PROGRAM TRACKING SUMMARY	20
6	MARKET PLAYERS IN QUARTER 3, 2000	29
Appendix		
A	GLOSSARY OF BUILDING TYPES RECORDED BY F.W. DODGE	34
B	GLOSSARY OF BUILDING/PROJECT TYPES RECORDED BY THE CIRB	35
C	CEC ZIP CODE – TO – UTILITY MAPPING	36
D	GLOSSARY OF MEASURES IMPLEMENTED BY SBD PARTICIPANTS	37

1. INTRODUCTION

This is one of a series of quarterly reports produced by the statewide Market Characterization and Program Activity Tracking (MCPAT) Study. The MCPAT Study tracks trends in both the nonresidential new construction (NRNC) market, and in the Savings By Design statewide NRNC program, in years 2000 - 2001.

The Savings By Design (SBD) statewide NRNC program, currently implemented by the three California electric investor-owned utilities (IOUs) PG&E, SCE, and SDG&E, is designed to transform energy-efficiency investment behavior in the commercial construction market. The program seeks to change the design practice of professionals in the construction industry by promoting the understanding and use of energy efficient and integrated design techniques in commercial building construction; to increase awareness of building owners of the benefits associated with integrated designs; and to increase the penetration of energy efficient materials, equipment, and systems in the commercial building market.

The SBD program targets specific links in the commercial building construction decision-making chain, reflecting differences in design activities and priorities between large and small buildings and various occupancies. The Whole Building Approach is used for complex projects where the design team can work closely to integrate the energy systems. The Systems Approach is used for projects where design of the energy systems is done at different phases: where one energy system predominates, where intervention occurs late in the design, or for buildings with simple system interactions.

Within the SBD program, “new construction” program elements address the commercial new construction market segments, including the public, private, and speculative markets. Remodeling and renovation (“R&R”) program elements address the commercial remodeling and renovation market segments specific to “gut-rehabilitation” and tenant improvement projects, including the public, private, and speculative markets.

The MCPAT Study conducts the NRNC market characterization using two sources of information. The F.W. Dodge Reports provide detailed project information on construction projects that have *started* within a given time period (e.g. a quarter): title and location of project, type of project (new, addition or alteration), type of building under construction, area (square feet) of new or added space, project cost (valuation), and contact information (owner, architect, engineer, contractor, as available). Appendix A contains a glossary of building types tracked by F.W. Dodge.

Regarding project types, F.W. Dodge makes a clear distinction between new/addition projects, in which new building area is produced, and alteration projects (which include remodeling, renovation, tenant improvement, and retrofit projects). Even though the SBD program excludes retrofit projects from its R&R element, the F.W. Dodge alteration data are

still the best source of information available regarding the commercial R&R construction market.

The Construction Industry Research Board (CIRB) database records building permit data from the more than 515 city and county building departments in California. The CIRB tracks monthly data by county and building type, describing permit value. While these data are not as complete as the F.W. Dodge Reports, they provide a framework for the value of commercial projects in California that start construction in each quarter.

It must be noted that there are differences between the *permit* valuation reported by CIRB and the *project start* valuation reported by F.W. Dodge. Some of these differences are attributable to the time delay that naturally occurs between permit filing and construction start. Others are attributable to the fact that F.W. Dodge records publicly-bid projects, while some projects do not go to public bid.

Regarding project types, CIRB records new construction by building type, and clearly separates it from additions and alterations. Additions and alterations are grouped together, without an indication regarding building type. Furthermore, CIRB records only building-related projects, while leaving out permits for heating, HVAC, electrical, and other remodeling/renovation projects. Appendix B contains a glossary of building/project types recorded by CIRB.

This quarterly report is structured as follows. Chapter 2 characterizes the NRNC market in Quarter 3, 2000, as described by the Construction Industry Research Board and F.W. Dodge. It then draws on the Savings By Design program participation databases maintained by the three California electric investor-owned utilities (IOUs) PG&E, SCE, and SDG&E, to track the characteristics of new construction program participants in Quarter 3, 2000.

Chapter 3 presents the market characteristics for alteration projects, as described by F.W. Dodge. It then characterizes program participation activities in Quarter 3, 2000 for the renovation/remodel/first tenant improvement (R&R) element of the SBD program.

Chapter 4 contains an evaluation of SBD program penetration into the market in the Third Quarter of 2000.

Chapter 5 summarizes quarterly market and SBD participation data, as well as estimates for the SBD program penetration into the market since program inception in July 1999.

Chapter 6 presents the most active market actors (architects and engineers) in Quarter 3, 2000.

2. STATEWIDE NONRESIDENTIAL NEW CONSTRUCTION TRENDS

This chapter presents information on the nonresidential new construction activity that has occurred in Quarter 3, 2000, in the State of California. The first section covers the total valuation, the number of project starts, and the total square footage of new construction projects by county. To verify the completeness of F.W. Dodge data, the section starts with a table summarizing the value of permits filed in Quarter 3, 2000, as reported by the CIRB.

The second section analyzes the Savings By Design (SBD) program activity for new construction projects for which the IOUs have committed funds in Quarter 3, 2000.

2.1 NEW CONSTRUCTION MARKET CHARACTERISTICS IN QUARTER 3, 2000

The following tables summarize market activity by building segment and county, in terms of valuation, number of permits, and square feet. When summarizing the market activity by utility territory, project zip codes were used in conjunction with California Energy Commission's zip code-to-utility territory mapping to allocate projects to IOU and non-IOU utilities. Such a mapping was not possible in the case of CIRB data, because CIRB data are summarized at city and county level (project zip codes are not available). Appendix C contains a short description of the CEC zip code-to-utility territory mapping.

Table 2.1 summarizes the value of nonresidential permits filed during Quarter 3, 2000, as reported by the Construction Industry Research Board (CIRB). Note that CIRB reports addition and alteration projects combined, separately from new construction. CIRB data indicate that Santa Clara, Los Angeles, San Francisco, and Orange Counties account for the highest value of permits filed in the State during Quarter 3, 2000. Among building types, the highest permit value was recorded in the office, industrial, and retail segments.

Table 2.2 presents the F.W. Dodge valuation for nonresidential new construction projects that have started construction during Quarter 3, 2000. To emulate SBD program scope as closely as possible, additions reported by F.W. Dodge were included with "new construction". Los Angeles, Santa Clara, San Diego, and San Francisco Counties account for the highest value of projects that have started construction in Quarter 3, 2000.

Table 2.3 shows the number of nonresidential new construction projects (including additions) that have started construction during Quarter 3, 2000, as reported by F.W. Dodge. Los Angeles, San Diego, Santa Clara, and Orange Counties have the highest number of new construction project starts. Among building types, office, retail, and storage account for the highest number of new construction project starts.

Table 2.4 presents the number of square feet of nonresidential new construction projects (including additions) that have started construction during Quarter 3, 2000, as reported by F.W. Dodge. The counties with the largest number of square feet attributable to new project starts are Los Angeles, Santa Clara, Orange and San Diego.

**Table 2.1. CIRB Statewide Nonresidential Permit Valuation
in Quarter 3, 2000 (\$1,000)**

COUNTY	AMUSEMENT	CHURCH	HOTEL	MEDICAL	OFFICE	OTHER	EDUCATION	RETAIL	SERVICE	INDUSTRIAL	TOTAL NEW	ALTERATION	TOTAL
ALAMEDA	1,300	.	6,547	.	40,566	1,141	.	10,406	.	42,285	102,245	130,520	232,765
ALPINE	.	.	.	.	.	65	.	.	.	.	65	65	130
AMADOR	.	.	.	.	.	662	.	.	.	.	662	563	1,225
BUTTE	.	.	.	7,213	3,372	827	.	2,049	.	1,005	14,467	5,627	20,095
CALAVERAS	.	.	.	682	.	80	.	.	.	.	762	582	1,344
COLUSA	.	.	.	.	253	574	.	180	.	.	1,007	74	1,081
CONTRA COSTA	900	.	.	2,000	18,868	3,060	.	16,978	250	10,717	52,773	38,855	91,628
DEL NORTE	.	.	.	.	.	92	430	111	.	.	633	1,094	1,727
EL DORADO	3,373	.	.	.	1,118	675	.	5,303	190	.	10,659	3,129	13,788
FRESNO	330	409	.	.	10,449	2,491	581	18,791	.	31,012	64,062	18,217	82,279
GLENN	.	.	.	.	.	1,173	.	176	.	.	1,349	335	1,684
HUMBOLDT	.	.	.	.	315	167	.	2,698	130	.	3,310	3,290	6,600
IMPERIAL	.	235	.	.	.	903	.	1,065	172	9,451	11,827	1,263	13,090
INYO	.	.	.	.	.	.	.	.	.	.	0	50	50
KERN	601	2,585	990	171	8,835	3,985	141	2,465	1,568	1,857	23,199	10,680	33,879
KINGS	.	.	.	.	.	116	.	370	.	.	486	455	941
LAKE	.	127	.	1,980	.	152	.	.	.	.	2,259	126	2,385
LASSEN	.	.	.	.	.	105	.	.	.	.	105	66	171
LOS ANGELES	2,495	17,834	10,919	6,380	47,193	21,254	8,853	95,904	1,117	108,632	320,582	401,044	721,626
MADERA	.	.	.	.	.	882	.	741	.	1,342	2,965	3,242	6,207
MARIN	.	.	.	.	21,136	432	1,114	234	360	.	23,275	15,143	38,419
MARIPOSA	.	.	.	.	.	181	.	.	200	.	381	34	415
MENDOCINO	.	254	1,825	.	.	1,215	.	.	.	.	3,294	954	4,248
MERCED	3,800	.	.	.	2,150	2,928	.	160	.	622	9,659	3,057	12,716
MODOC	.	.	.	.	.	112	.	.	.	.	112	37	149
MONO	.	.	.	.	.	20	.	.	.	4,354	4,374	123	4,498
MONTEREY	121	.	2,609	.	10,167	1,754	.	3,655	.	1,666	19,972	14,143	34,115
NAPA	.	.	.	.	482	1,268	.	12,651	.	1,113	15,515	24,477	39,992
NEVADA	.	195	.	.	2,282	2,213	.	.	.	102	4,791	145	4,937
ORANGE	5,563	3,682	29,217	.	85,445	6,553	5,641	41,763	2,214	37,169	217,246	177,954	395,200
PLACER	.	.	.	.	3,219	682	677	12,930	428	16,691	34,626	20,410	55,036
PLUMAS	.	.	.	.	.	.	.	.	.	.	0	99	99
RIVERSIDE	7,635	.	6,165	.	10,191	3,595	1,671	60,177	355	22,828	112,616	42,032	154,648
SACRAMENTO	873	11,227	.	.	10,279	2,033	688	40,754	800	.	66,655	56,863	123,518
SAN BENITO	.	.	.	.	.	908	.	644	.	5,403	6,955	673	7,627
SAN BERNARDINO	1,840	631	1,022	.	5,026	3,355	.	11,447	897	110,967	135,186	32,312	167,498
SAN DIEGO	889	17,070	16,780	5,928	21,187	4,892	969	33,872	696	28,429	130,712	124,878	255,590
SAN FRANCISCO	.	.	.	10,000	338,900	6,508	.	32,788	.	.	388,195	166,196	554,391
SAN JOAQUIN	25	902	1,647	.	1,273	1,686	898	25,679	755	16,074	48,938	18,644	67,582
SAN LUIS OBISPO	.	.	.	2,662	3,358	4,156	.	6,263	619	2,573	19,632	7,033	26,664
SAN MATEO	.	.	3,200	707	75,812	1,746	.	9,713	.	15,900	107,078	51,390	158,468
SANTA BARBARA	.	.	2,093	1,100	3,697	1,272	1,585	6,100	.	450	16,297	12,207	28,503
SANTA CLARA	320	.	6,901	.	325,435	1,962	1,800	10,461	.	84,179	431,057	432,806	863,863
SANTA CRUZ	150	843	.	.	.	219	.	.	.	512	1,724	9,693	11,417
SHASTA	.	872	.	.	1,862	496	688	6,977	.	1,297	12,192	4,496	16,688
SIERRA	.	.	.	.	.	.	.	.	.	.	0	.	0
SISKIYOU	.	.	.	.	1,268	616	.	.	414	.	2,298	322	2,620
SOLANO	.	.	.	5,928	997	.	.	7,816	.	4,226	18,966	7,471	26,437
SONOMA	2,500	.	14,278	.	8,060	2,737	751	4,066	.	13,088	45,479	16,084	61,563
STANISLAUS	3,027	.	.	.	3,847	4,678	.	11,341	.	12,491	35,384	14,297	49,682
SUTTER	108	.	.	.	770	810	.	771	.	1,236	3,695	888	4,583
TEHAMA	.	152	.	.	.	945	.	144	.	698	1,938	464	2,402
TRINITY	.	1,109	.	.	.	68	.	.	.	.	1,177	159	1,336
TULARE	.	.	.	7,096	3,025	1,983	.	23,908	.	1,328	37,340	11,583	48,923
TUOLUMNE	.	.	.	.	.	879	.	502	.	.	1,381	884	2,265
VENTURA	.	211	.	10,013	19,232	5,025	.	1,622	1,578	2,712	40,393	22,985	63,377
YOLO	.	.	.	.	2,633	567	.	987	.	13,611	17,799	7,082	24,881
YUBA	676	.	.	.	.	623	.	.	.	.	1,300	1,576	2,876
CALIFORNIA	36,526	58,338	104,193	55,932	1,097,633	108,520	26,487	524,660	12,743	606,019	2,631,052	1,918,869	4,549,921

Table 2.2 F.W. Dodge Nonresidential Construction Valuation for New Construction Projects in Quarter 3, 2000 (\$1,000)

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
COUNTY													
ALAMEDA	5,579	194			23,420	4,000	144,243	6,415	17,647	3,542	29,881	14,256	249,177
ALPINE													0
AMADOR				55							117		172
BUTTE		550				8,000	4,624	1,550				4,000	18,724
CALAVERAS					2,000							162	2,162
COLUSA													0
CONTRA COSTA	12,054	2,395		1,952		16,128	6,395	4,378	23,695	23,910	160	14,098	105,165
DEL NORTE													0
EL DORADO				1,760			24,025	13,676	4,996		967		45,424
FRESNO	797	5,240		1,100		750	162	5,899	6,323	7,681	7,178		35,130
GLENN													0
HUMBOLDT						1,800				634			2,434
IMPERIAL		483					268	352		172	4,634	241	6,150
INYO													0
KERN		470		2,143		3,664	4,082	1,088	10,133	726	6,947	966	30,219
KINGS	5,600												5,600
LAKE							75				505		580
LASSEN													0
LOS ANGELES	199,492	16,176	14,910	25,859	6,000	57,171	38,188	115,601	123,143	71,019	69,046	2,706	739,311
MADERA	624						110	1,999					2,733
MARIN					6,000	3,999	15,797	7,202	111		674		33,783
MARIPOSA													0
MENDOCINO			1,000								650		1,650
MERCED							289	160				398	847
MODOC													0
MONO									287				287
MONTEREY	5,815				5,000		338	1,180	6,221		214		18,768
NAPA							712					2,299	3,011
NEVADA	309	195					1,266					1,839	3,609
ORANGE	10,610	3,600			12,142		95,584	23,738	54,417	23,642	37,066	198	260,997
PLACER	4,500						18,705	5,772	24,039	3,160	1,800	14,718	72,694
PLUMAS												99	99
RIVERSIDE	26,606	1,800	710	3,525	150	14,400	17,920	14,605	19,656	703	25,916	13,168	139,159
SACRAMENTO	15,182			234		118	40,290	22,757	49,445	12,008	14,954	2,000	156,988
SAN BENITO													0
SAN BERNARDINO	2,430	1,553		4,086	5,504	211	8,814	22,673	10,958	181	125,993	856	183,259
SAN DIEGO	30,544	7,507		1,488	101,939	10,943	55,228	35,814	44,265	68,163	38,356	8,834	403,081
SAN FRANCISCO	170,657	2,000		37,500			19,243	15,528	200	35,780	150	180	281,238
SAN JOAQUIN	2,800	1,500		750			21,741	2,239	14,018	2,170	4,491	21,462	71,171
SAN LUIS OBISPO	1,767				3,531	300	1,500	2,235	7,319	166	5,224	3,722	25,764
SAN MATEO	10,862						139,343	60	8,980	2,174		187	161,606
SANTA BARBARA		1,500			3,058	5,500	291	365	1,032	6,100	2,960	1,600	22,406
SANTA CLARA	2,260	2,127		2,691	33,300	10,830	217,914	601	34,340	107,956	4,150	56,807	472,976
SANTA CRUZ	3,000	2,605			1,500				20,103			2,389	29,597
SHASTA						2,449	517	10,104	250	1,510			14,830
SIERRA													0
SISKIYOU										494			494
SOLANO	14,650							4,741		1,050	2,124		22,565
SONOMA	800			11,046	1,023	150	13,488	450	160	301	868	2,073	30,359
STANISLAUS						276	355	8,000	49,791		185	867	59,474
SUTTER													0
TEHAMA											84		84
TRINITY													0
TULARE						844			28,682			149	29,675
TUOLUMNE	1,500												1,500
VENTURA	2,208	1,406		5,390	2,300	11,000	14,965	4,152	500	908	4,760	4,645	52,234
YOLO	93		100	5,800		930	364	1,000	46,000	142	30,025		84,454
YUBA				8,230									8,230
CALIFORNIA	530,739	51,301	16,720	113,609	206,867	153,463	906,836	334,334	606,711	374,292	421,918	173,080	3,889,870
UTILITY													
SCE	66,152	8,209	7,352	13,166	26,591	31,077	132,462	161,906	152,897	30,592	234,095	26,181	890,680
PG&E	246,919	18,388	1,100	73,027	76,739	58,776	615,490	108,212	331,182	192,455	91,185	134,144	1,947,617
SDG&E	35,815	9,401		1,488	100,000	5,443	87,832	40,312	53,439	71,169	37,914	10,330	453,143
Non-IOU	181,853	15,303	8,268	25,928	3,537	58,167	71,052	23,904	69,193	80,076	58,724	2,425	598,430

Table 2.3. F.W. Dodge Number of Nonresidential New Construction Project Starts in Quarter 3, 2000

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
COUNTY													
ALAMEDA	5	1	.	.	4	1	24	7	4	3	4	3	56
ALPINE	.	.	.	.	.	.	.	.	.	.	.	.	0
AMADOR	.	.	.	1	.	.	.	.	.	.	1	.	2
BUTTE	.	1	.	.	.	2	4	3	.	.	.	1	11
CALAVERAS	.	.	.	.	1	.	.	.	.	.	.	1	2
COLUSA	.	.	.	.	.	.	.	.	.	.	.	.	0
CONTRA COSTA	4	3	.	1	.	1	4	6	5	4	2	1	31
DEL NORTE	.	.	.	.	.	.	.	.	.	.	.	.	0
EL DORADO	.	.	.	1	.	.	5	5	1	.	3	.	15
FRESNO	1	3	.	1	.	1	1	4	2	2	3	.	18
GLENN	.	.	.	.	.	.	.	.	.	.	.	.	0
HUMBOLDT	.	.	.	.	.	1	.	.	.	1	.	.	2
IMPERIAL	.	2	.	.	.	.	1	2	.	1	5	2	13
INYO	.	.	.	.	.	.	.	.	.	.	.	.	0
KERN	.	2	.	1	.	1	4	4	7	2	6	7	34
KINGS	1	.	.	.	.	.	.	.	.	.	.	.	1
LAKE	.	.	.	.	.	.	1	.	.	.	2	.	3
LASSEN	.	.	.	.	.	.	.	.	.	.	.	.	0
LOS ANGELES	18	3	3	3	2	9	39	48	16	24	15	6	186
MADERA	1	.	.	.	.	.	1	1	.	.	.	.	3
MARIN	.	.	.	.	1	2	4	7	1	.	2	.	17
MARIPOSA	.	.	.	.	.	.	.	.	.	.	.	.	0
MENDOCINO	.	.	1	.	.	.	.	.	.	.	1	.	2
MERCED	.	.	.	.	.	.	1	1	.	.	.	1	3
MODOC	.	.	.	.	.	.	.	.	.	.	.	.	0
MONO	.	.	.	.	.	.	.	.	1	.	.	.	1
MONTEREY	3	.	.	.	1	.	1	1	3	.	1	.	10
NAPA	.	.	.	.	.	.	2	.	.	.	.	4	6
NEVADA	1	1	.	.	.	.	4	.	.	.	2	.	8
ORANGE	9	3	.	.	4	.	24	18	6	9	6	1	80
PLACER	1	.	.	.	.	.	11	9	4	2	2	2	31
PLUMAS	.	.	.	.	.	.	.	.	.	.	.	1	1
RIVERSIDE	5	2	1	3	1	3	22	9	5	3	10	8	72
SACRAMENTO	6	.	.	1	.	1	14	18	8	8	5	1	62
SAN BENITO	.	.	.	.	.	.	.	.	.	.	.	.	0
SAN BERNARDINO	3	4	.	2	2	1	13	13	2	1	14	2	57
SAN DIEGO	11	7	.	1	6	5	30	33	9	12	17	6	137
SAN FRANCISCO	5	1	.	1	.	.	32	7	2	6	1	2	57
SAN JOAQUIN	1	1	.	1	.	.	5	4	2	3	4	4	25
SAN LUIS OBISPO	3	.	.	.	3	1	1	8	1	1	12	6	36
SAN MATEO	4	.	.	.	.	.	16	1	2	1	.	2	26
SANTA BARBARA	.	1	.	.	2	3	3	1	2	2	5	2	21
SANTA CLARA	7	2	.	1	4	2	35	3	9	9	2	9	83
SANTA CRUZ	1	2	.	.	1	.	.	.	3	.	.	3	10
SHASTA	.	.	.	.	.	2	4	5	1	1	.	.	13
SIERRA	.	.	.	.	.	.	.	.	.	.	.	.	0
SISKIYOU	.	.	.	.	.	.	.	.	.	1	.	.	1
SOLANO	2	.	.	.	.	.	.	3	.	2	.	.	9
SONOMA	2	.	.	1	1	1	5	2	1	2	2	8	25
STANISLAUS	.	.	.	.	.	1	1	1	2	.	1	2	8
SUTTER	.	.	.	.	.	.	.	.	.	.	.	.	0
TEHAMA	.	.	.	.	.	.	.	.	.	.	1	.	1
TRINITY	.	.	.	.	.	.	.	.	.	.	.	.	0
TULARE	.	.	.	.	.	1	.	.	2	.	.	1	4
TUOLUMNE	1	.	.	.	.	.	.	.	.	.	.	.	1
VENTURA	2	2	.	3	1	2	5	5	1	2	3	2	28
YOLO	1	.	1	1	.	1	2	1	1	1	5	.	14
YUBA	.	.	.	1	.	.	.	.	.	.	.	.	1
CALIFORNIA	98	41	6	24	34	42	319	230	103	103	139	88	1,227
UTILITY													
SCE	29	12	3	9	9	9	83	72	21	18	40	20	325
PG&E	45	16	2	11	17	20	162	77	53	40	48	45	536
SDG&E	12	7	.	1	6	5	33	35	9	13	14	6	141
Non-IOU	12	6	1	3	2	8	41	46	20	32	37	17	225

**Table 2.4. F.W. Dodge Area of Nonresidential New Construction Project Starts
in Quarter 3, 2000 (1,000 sqft)**

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
COUNTY													
ALAMEDA	39	3			243	56	1,565	102	69	34	447	129	2,687
ALPINE													0
AMADOR				0							2		3
BUTTE		8				148	92	23				50	320
CALAVERAS					45							3	48
COLUSA													0
CONTRA COSTA	61	23		7		60	44	35	155	362	1	35	783
DEL NORTE													0
EL DORADO				10			322	168	5		26		531
FRESNO	11	36		9		5	2	112	32	129	88		424
GLENN													0
HUMBOLDT						27				12			39
IMPERIAL		7					5	7		3	214	5	241
INYO													0
KERN		7		13		49	50	15	73	13	219	19	458
KINGS	43												43
LAKE							1				20		21
LASSEN													0
LOS ANGELES	438	105	59	262	54	380	602	1,617	767	1,411	1,731	45	7,471
MADERA	9						2	60					71
MARIN					28	34	156	107	2		12		338
MARIPOSA													0
MENDOCINO			3								9		12
MERCED							4	3				5	11
MODOC													0
MONO									3				3
MONTEREY	37				71		4	10	39		5		166
NAPA							9					57	65
NEVADA	3	3					23				52		81
ORANGE	82	37			261		1,003	487	370	729	713	5	3,686
PLACER	34						331	95	163	53	51	177	905
PLUMAS												2	2
RIVERSIDE	259	24	5	24	3	170	300	364	134	13	533	157	1,985
SACRAMENTO	147			2		2	457	416	302	477	167	12	1,981
SAN BENITO													0
SAN BERNARDINO	27	22		31	79	2	159	356	76	4	2,684	24	3,462
SAN DIEGO	229	96		9	896	104	1,034	633	272	458	936	144	4,811
SAN FRANCISCO	807	12		97			376	189	3	393	3	3	1,883
SAN JOAQUIN	30	20		6			393	31	117	40	127	456	1,220
SAN LUIS OBISPO	20				55	4	19	34	36	3	152	41	363
SAN MATEO	79						1,624	2	38	51		4	1,797
SANTA BARBARA		12			34	73	6	7	13	161	99	27	431
SANTA CLARA	27	26		17	513	114	2,896	12	159	2,046	84	545	6,437
SANTA CRUZ	39	16			19				270				401
SHASTA						28	7	200	2	29			267
SIERRA													0
SISKIYOU										5			5
SOLANO	91							65		19	72		247
SONOMA	7			60	15	2	161	5	3	6	21	37	318
STANISLAUS						4	4	106	265		4	11	393
SUTTER													0
TEHAMA											2		2
TRINITY													0
TULARE						9			128			4	140
TUOLUMNE	20												20
VENTURA	26	18		41	47	186	171	91	7	12	124	102	824
YOLO	1		1	35		12	5	15	106	3	708		886
YUBA				37									37
CALIFORNIA	2,566	474	68	657	2,362	1,469	11,825	5,365	3,608	6,464	9,306	2,153	46,315
UTILITY													
SCE	478	106	28	97	390	373	1,677	2,549	982	912	4,996	416	13,003
PG&E	1,409	158	4	290	1,005	616	7,812	1,645	1,865	3,210	1,840	1,508	21,363
SDG&E	241	110		9	862	98	1,389	685	323	508	924	180	5,330
Non-IOU	437	100	36	262	104	382	946	486	437	1,834	1,545	49	6,619

2.2 SBD NEW CONSTRUCTION PROGRAM PARTICIPATION IN QUARTER 3, 2000

The following pages summarize SBD program activity for nonresidential new construction participants for whom the IOUs have committed funds in Quarter 3, 2000. Program commitment indicates that the customer has filed an application, that the utility has reviewed it and found that it fits within the scope of the SBD program, and that an agreement was signed between the utility and the customer, detailing the conditions of participation in the program. Program commitment was established using the following dates from the tracking systems maintained by the IOUs: the “coupon issue date” for SCE participants, the “acceptance date” for PG&E participants, and the “sign date” for SDG&E participants.

The following pages summarize program participation by building type or measure. Participation is shown for the whole building approach and the systems approach separately.

Table 2.5 presents the number of new construction nonresidential participants to the SBD program for which funds were committed in Quarter 3, 2000.

Table 2.6 shows the number of square feet of new construction committed in Quarter 3, 2000.

Table 2.7 presents estimated annual MWh savings attributable to new construction measures committed in Quarter 3, 2000.

Table 2.8 summarizes the estimated annual MWh savings by measure type, in new construction committed in Quarter 3, 2000. A glossary of the measures is presented in Appendix D.

Table 2.5. Number of Nonresidential New Construction SBD Participants in Quarter 3, 2000

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
CALIFORNIA													
Whole Building Approach							2		2		1		5
Systems Approach		6			4	1	16	15	21	2	2	4	71
Total		6			4	1	18	15	23	2	3	4	76
SCE													
Whole Building Approach									2		1		3
Systems Approach		3			2		4	8	5		1	2	25
Total		3			2		4	8	7		2	2	28
PG&E													
Whole Building Approach							2						2
Systems Approach		2			1	1	3	3	16	2	1		29
Total		2			1	1	5	3	16	2	1		31
SDG&E													
Whole Building Approach													0
Systems Approach		1			1		9	4				2	17
Total		1			1		9	4				2	17

The majority of SBD program participants belong to the school, office and retail segments. This result reflects the NRNC market conditions presented in Table 2.3.

Table 2.6. Area of Nonresidential New Construction SBD Participants in Quarter 3, 2000 (1,000 sqft)

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
CALIFORNIA													
Whole Building Approach							226		531		253		1,010
Systems Approach		162			304	24	1,380	595	644	113	738	389	4,347
Total		162			304	24	1,605	595	1,175	113	991	389	5,357
SCE													
Whole Building Approach									531		253		785
Systems Approach		85			68		422	335	191		652	199	1,951
Total		85			68		422	335	722		905	199	2,736
PG&E													
Whole Building Approach							226						226
Systems Approach		35			126	24	201	58	453	113	86		1,096
Total		35			126	24	426	58	453	113	86		1,322
SDG&E													
Whole Building Approach													0
Systems Approach		41			110		757	201				191	1,300
Total		41			110		757	201				191	1,300

The majority of SBD program activity in terms of area committed in Quarter 3, 2000 belongs to office, school and storage segments. This result is also observed for estimated MWh savings.

Table 2.7. Estimated Annual MWh Savings for New Construction SBD Participants in Quarter 3, 2000

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
CALIFORNIA													
Whole Building Approach							522		2,036		2,392		4,951
Systems Approach		374			446	6	1,809	1,559	808	28	993	963	6,986
Total		374			446	6	2,331	1,559	2,844	28	3,386	963	11,936
SCE													
Whole Building Approach									2,036		2,392		4,428
Systems Approach		278			310		189	699	234		707	369	2,785
Total		278			310		189	699	2,270		3,099	369	7,213
PG&E													
Whole Building Approach							522						522
Systems Approach		41			54	6	255	327	574	28	287		1,571
Total		41			54	6	777	327	574	28	287		2,093
SDG&E													
Whole Building Approach													0
Systems Approach		55			82		1,366	533					2,631
Total		55			82		1,366	533					2,631

Table 2.8. Estimated Annual MWh Savings by Measure for New Construction SBD Participants in Quarter 3, 2000

	WHOLE BUILDING	DAY-LIGHTING	SKYLIGHT	HVAC CHILLER	HVAC PACKAGE	HVAC CONTROLS	HVAC OTHER	MOTORS	LIGHTING	ENVELOPE	OTHER	TOTAL
CALIFORNIA												
Whole Building Approach	4,951											4,951
Systems Approach		798		663	1,517		202	5	2,719		1,082	6,986
Total	4,951	798		663	1,517		202	5	2,719		1,082	11,936
SCE												
Whole Building Approach	4,428											4,428
Systems Approach		798		195	353			5	1,304		129	2,785
Total	4,428	798		195	353			5	1,304		129	7,213
PG&E												
Whole Building Approach	522											522
Systems Approach				301	192				1,078			1,571
Total	522			301	192				1,078			2,093
SDG&E												
Whole Building Approach												0
Systems Approach				167	972		202		337		953	2,631
Total				167	972		202		337		953	2,631

Among measures, the whole building design, lighting and unitary HVAC account for most of the committed MWh savings in new construction.

3. STATEWIDE NONRESIDENTIAL ALTERATION (R&R) TRENDS

This chapter summarizes the nonresidential alterations that have occurred in Quarter 3, 2000 in the State of California. Similar to Chapter 2, the first section will present the total valuation and the number of project starts of alteration projects by county (F.W. Dodge does not track square feet for alteration projects.) The second section will present the SBD program activity for tenant improvement, renovation and remodeling projects (R&R) in Quarter 3, 2000.

3.1 ALTERATION (R&R) MARKET CHARACTERISTICS IN QUARTER 3, 2000

The following tables present the alteration market activity by building segment and county in Quarter 3, 2000. When summarizing market activity by utility territory, project zip codes were used in conjunction with California Energy Commission's zip code-to-utility territory mapping to allocate projects to IOU and non-IOU utilities.

Table 3.1 presents the F.W. Dodge valuation for the nonresidential alteration projects that have started construction during Quarter 3, 2000. The valuation reported by F.W. Dodge is roughly half of that reported by CIRB (Table 2.1). One explanation is that CIRB categorizes additions as alteration projects. Another is that CIRB records only building-related projects, while leaving out permits for heating, HVAC, electrical, and other remodeling/renovation projects.

The F.W. Dodge data indicate that the counties with the most active alteration activity in terms of valuation are Los Angeles, San Francisco, San Diego, and Sacramento. Among building types, school, amusement, office and retail account for the highest value of alteration projects that have started construction in Quarter 3, 2000.

Table 3.2 summarizes the number of nonresidential alteration projects that have started construction during Quarter 3, 2000. The counties with the largest number of alteration project starts are Los Angeles, San Diego, San Francisco, and Santa Clara. Among building types, the office, retail, and school segments account for the highest number of alteration project starts.

**Table 3.1. F.W. Dodge Nonresidential Construction Valuation for Alteration Projects
in Quarter 3, 2000 (\$1,000)**

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
COUNTY													
ALAMEDA	1,632	750	307			720	26,554	12,348	31,325	325	1,931	2,154	78,046
ALPINE													0
AMADOR	1,300												1,300
BUTTE							624	850	525				1,999
CALAVERAS													0
COLUSA													0
CONTRA COSTA	345	85	150			275	4,299	2,533	10,250			263	18,200
DEL NORTE													0
EL DORADO		164					606	602	138				1,510
FRESNO									8,820		621		9,441
GLENN													0
HUMBOLDT													0
IMPERIAL								362	3,319	193		224	4,098
INYO									183				183
KERN	905	417				1,798	2,244	175	500				6,039
KINGS									900			9,238	10,138
LAKE													0
LASSEN													0
LOS ANGELES	5,994	316	616	600	805	2,040	48,833	31,014	87,212	1,419	590	11,280	190,719
MADERA									133				133
MARIN							609	125	7,353				8,087
MARIPOSA													0
MENDOCINO													0
MERCED							180	100	1,176				1,456
MODOC													0
MONO													0
MONTEREY				1,500		1,413	180	576	4,034				7,703
NAPA	6,000					1,000	4,747	1,050					12,797
NEVADA									65				65
ORANGE	163	893	100	356		1,035	13,610	21,715	870	93	771	4,923	44,529
PLACER				563		843	3,088	6,415				354	11,263
PLUMAS													0
RIVERSIDE	300			185	510		3,707	6,254	22,191	102	1,650	92	34,991
SACRAMENTO	46,000	172		9,485		150	6,831	1,073	19,280	1,359	2,310	853	87,513
SAN BENITO													0
SAN BERNARDINO	935						778	2,531	4,605	187	1,019	2,544	12,599
SAN DIEGO	1,245	411	5,387		509	312	28,606	5,869	37,904	281	1,124	10,502	92,150
SAN FRANCISCO	17,041	6,229	1,200		15,245	190	28,611	4,085	9,840	1,265	20,400	290	104,396
SAN JOAQUIN	26						80	75	6,169		125		6,475
SAN LUIS OBISPO	1,070	187		750			2,630	1,650		252	82		6,621
SAN MATEO		80				228	10,734	1,825	7,591	80		277	20,815
SANTA BARBARA	1,060	1,692			30,000		507	1,887	1,822			525	37,493
SANTA CLARA	7,845	180	1,070	886	105	5,024	40,825	2,448	19,652		200	968	79,203
SANTA CRUZ	137			3,000			773		5,726				9,636
SHASTA							100	148	250				498
SIERRA													0
SISKIYOU						250					2,347		2,597
SOLANO							250	1,297	3,696			76	5,319
SONOMA	100			80		150	974	3,924	809			2,800	8,837
STANISLAUS	2,000							90	285				2,375
SUTTER													0
TEHAMA													0
TRINITY													0
TULARE									656			157	813
TUOLUMNE									285				285
VENTURA	48		71			77	6,232	1,312	21,379		479	451	30,049
YOLO	550						565	75	7,409			182	8,781
YUBA													0
CALIFORNIA	94,696	11,576	8,901	17,405	47,174	15,505	237,777	112,541	326,219	5,556	33,649	48,153	959,152
UTILITY													
SCE	6,722	2,461	787	1,141	31,174	1,461	39,291	27,259	79,969	659	3,311	13,403	207,638
PG&E	38,951	8,046	2,727	6,779	15,350	11,596	132,362	40,690	129,228	1,922	23,277	17,159	428,087
SDG&E	1,270	411	5,387		400	507	27,985	14,105	37,824	281	1,124	9,910	99,204
Non-IOU	47,753	658		9,485	250	1,941	38,139	30,487	79,198	2,694	5,937	7,681	224,223

**Table 3.2. F.W. Dodge Number of Nonresidential Alteration Project Starts
in Quarter 3, 2000**

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
COUNTY													
ALAMEDA	3	1	1	.	.	4	44	15	19	2	2	5	96
ALPINE	.	.	.	.	.	.	.	.	.	.	.	.	0
AMADOR	1	.	.	.	.	.	.	.	.	.	.	.	1
BUTTE	.	.	.	.	.	.	1	1	1	.	.	.	3
CALAVERAS	.	.	.	.	.	.	.	.	.	.	.	.	0
COLUSA	.	.	.	.	.	.	.	.	.	.	.	.	0
CONTRA COSTA	1	1	1	.	.	2	14	14	4	.	.	2	39
DEL NORTE	.	.	.	.	.	.	.	.	.	.	.	.	0
EL DORADO	.	1	.	.	.	.	6	1	1	.	.	.	9
FRESNO	.	.	.	.	.	.	.	.	3	.	1	.	4
GLENN	.	.	.	.	.	.	.	.	.	.	.	.	0
HUMBOLDT	.	.	.	.	.	.	.	.	.	.	.	.	0
IMPERIAL	.	.	.	.	.	.	.	1	3	1	.	1	6
INYO	.	.	.	.	.	.	.	.	1	.	.	.	1
KERN	2	3	.	.	.	3	11	2	1	.	.	.	22
KINGS	.	.	.	.	.	.	.	.	1	.	.	1	2
LAKE	.	.	.	.	.	.	.	.	.	.	.	.	0
LASSEN	.	.	.	.	.	.	.	.	.	.	.	.	0
LOS ANGELES	15	3	1	1	3	7	155	70	46	6	3	17	327
MADERA	.	.	.	.	.	.	.	1	.	.	.	.	1
MARIN	.	.	.	.	.	.	5	1	10	.	.	.	16
MARIPOSA	.	.	.	.	.	.	.	.	.	.	.	.	0
MENDOCINO	.	.	.	.	.	.	.	.	.	.	.	.	0
MERCED	.	.	.	.	.	.	1	1	1	.	.	.	3
MODOC	.	.	.	.	.	.	.	.	.	.	.	.	0
MONO	.	.	.	.	.	.	.	.	.	.	.	.	0
MONTEREY	.	.	.	2	.	1	1	2	1	.	.	.	7
NAPA	1	.	.	.	.	1	4	3	.	.	.	.	9
NEVADA	.	.	.	.	.	.	.	.	1	.	.	.	1
ORANGE	1	3	1	1	.	3	45	23	4	1	2	5	89
PLACER	.	.	.	1	.	4	17	44	.	.	.	2	68
PLUMAS	.	.	.	.	.	.	.	.	.	.	.	.	0
RIVERSIDE	1	.	.	1	2	.	11	13	2	1	2	1	34
SACRAMENTO	2	1	.	3	.	1	17	10	11	1	1	2	49
SAN BENITO	.	.	.	.	.	.	.	.	.	.	.	.	0
SAN BERNARDINO	2	.	.	.	.	.	6	9	5	1	2	6	31
SAN DIEGO	5	1	3	.	2	2	105	29	17	3	3	13	183
SAN FRANCISCO	4	3	1	.	4	1	85	21	7	3	3	1	133
SAN JOAQUIN	1	.	.	.	.	.	1	1	4	.	1	.	8
SAN LUIS OBISPO	1	1	.	1	.	.	4	3	.	1	1	.	12
SAN MATEO	.	1	.	.	.	1	24	4	7	1	.	1	39
SANTA BARBARA	4	2	.	.	1	.	4	11	3	.	.	2	27
SANTA CLARA	4	2	1	1	1	6	72	14	7	.	1	7	116
SANTA CRUZ	1	.	.	1	.	.	2	.	4	.	.	.	8
SHASTA	.	.	.	.	.	.	1	1	1	.	.	.	3
SIERRA	.	.	.	.	.	.	.	.	.	.	.	.	0
SISKIYOU	.	.	.	.	.	1	.	.	.	.	1	.	2
SOLANO	.	.	.	.	.	.	1	3	4	.	.	1	9
SONOMA	1	.	.	1	.	1	9	2	2	.	.	1	17
STANISLAUS	1	.	.	.	.	.	.	1	1	.	.	.	3
SUTTER	.	.	.	.	.	.	.	.	.	.	.	.	0
TEHAMA	.	.	.	.	.	.	.	.	.	.	.	.	0
TRINITY	.	.	.	.	.	.	.	.	.	.	.	.	0
TULARE	.	.	.	.	.	.	.	.	2	.	.	1	3
TUOLUMNE	.	.	.	.	.	.	.	.	1	.	.	.	1
VENTURA	1	.	1	.	.	1	11	5	10	.	1	4	34
YOLO	1	.	.	.	.	.	2	1	4	.	.	1	9
YUBA	.	.	.	.	.	.	.	.	.	.	.	.	0
CALIFORNIA	53	23	10	13	13	39	659	307	189	21	24	74	1,425
UTILITY													
SCE	17	5	3	3	6	5	121	65	36	4	6	21	292
PG&E	22	12	4	7	5	24	285	135	87	7	8	24	620
SDG&E	5	1	3	.	1	3	99	29	16	3	3	13	176
Non-IOU	9	5	.	3	1	7	154	78	50	7	7	16	337

3.2 SBD R&R PROGRAM PARTICIPATION IN QUARTER 3, 2000

This section summarizes SBD program activity for nonresidential customers that have a first tenant improvement/renovation/remodel project (R&R customers), and for whom the IOUs have committed funds in Quarter 3, 2000. Program commitment indicates that the customer has filed an application, that the utility has reviewed it and found that it fits within the scope of the SBD program, and that an agreement was signed between the utility and the customer, detailing the conditions of participation in the program. Program commitment was established using the following dates from the tracking systems maintained by the IOUs: the “coupon issue date” for SCE participants, the “acceptance date” for PG&E participants, and the “sign date” for SDG&E participants.

Table 3.3 presents the number of nonresidential R&R participants to the SBD program for which funds were committed in Quarter 3, 2000.

Table 3.4 shows the number of square feet of R&R construction committed as of Quarter 3, 2000.

Table 3.5 presents the estimated annual MWh savings attributable to R&R measures committed in Quarter 3, 2000.

Table 3.6 summarizes the estimated annual MWh savings by measure type, in R&R projects committed in Quarter 3, 2000. A glossary of the measures is presented in Appendix D.

**Table 3.3. Number of Nonresidential R&R SBD Participants
in Quarter 3, 2000**

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
CALIFORNIA													
Whole Building Approach	0
Systems Approach	.	2	.	.	.	1	12	1	13	.	3	4	36
Total	.	2	.	.	.	1	12	1	13	.	3	4	36
SCE													
Whole Building Approach	0
Systems Approach	1	3	.	3	.	2	3	12
Total	1	3	.	3	.	2	3	12
PG&E													
Whole Building Approach	0
Systems Approach	2	.	1	.	.	.	3
Total	2	.	1	.	.	.	3
SDG&E													
Whole Building Approach	0
Systems Approach	.	2	.	.	.	.	7	1	9	.	1	1	21
Total	.	2	.	.	.	.	7	1	9	.	1	1	21

The number of R&R participants is approximately half the number of new construction SBD participants. The school and office building types are the largest segments participating in the program, which is consistent with the market data presented in Table 3.2.

**Table 3.4. Area for Nonresidential R&R SBD Participants
in Quarter 3, 2000 (1,000 sqft)**

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
CALIFORNIA													
Whole Building Approach	0
Systems Approach	.	34	.	.	.	84	594	7	313	.	442	210	1,684
Total	.	34	.	.	.	84	594	7	313	.	442	210	1,684
SCE													
Whole Building Approach	0
Systems Approach	84	164	.	36	.	424	62	771
Total	84	164	.	36	.	424	62	771
PG&E													
Whole Building Approach	0
Systems Approach	141	.	20	.	.	.	161
Total	141	.	20	.	.	.	161
SDG&E													
Whole Building Approach	0
Systems Approach	.	34	.	.	.	.	289	7	257	.	18	148	753
Total	.	34	.	.	.	.	289	7	257	.	18	148	753

The majority of SBD R&R program activity in terms of area committed in Quarter 3, 2000 belongs to the office, storage and school building types.

Table 3.5. Estimated Annual MWh Savings for R&R SBD Participants in Quarter 3, 2000

	AMUSEMENT	ASSEMBLY	EDUCATION	GOVT	HOTEL	MEDICAL	OFFICE	RETAIL	SCHOOL	SERVICE	STORAGE	OTHER	TOTAL
CALIFORNIA													
Whole Building Approach	0
Systems Approach	.	32	.	.	.	2,562	615	8	265	.	720	675	4,878
Total	.	32	.	.	.	2,562	615	8	265	.	720	675	4,878
SCE													
Whole Building Approach	0
Systems Approach	2,562	222	.	26	.	642	384	3,835
Total	2,562	222	.	26	.	642	384	3,835
PG&E													
Whole Building Approach	0
Systems Approach	107	.	19	.	.	.	126
Total	107	.	19	.	.	.	126
SDG&E													
Whole Building Approach	0
Systems Approach	.	32	.	.	.	.	287	8	220	.	78	291	917
Total	.	32	.	.	.	.	287	8	220	.	78	291	917

Most of the estimated MWh savings is attributable to participating medical facilities, followed by storage and offices.

Table 3.6. Estimated Annual MWh Savings by Measure for R&R SBD Participants in Quarter 3, 2000

	WHOLE BUILDING	DAY-LIGHTING	SKYLIGHT	HVAC CHILLER	HVAC PACKAGE	HVAC CONTROLS	HVAC OTHER	MOTORS	LIGHTING	ENVELOPE	OTHER	TOTAL
CALIFORNIA												
Whole Building Approach	0
Systems Approach	.	603	.	224	439	.	.	20	482	.	3,110	4,878
Total	.	603	.	224	439	.	.	20	482	.	3,110	4,878
SCE												
Whole Building Approach	0
Systems Approach	.	603	.	224	34	.	.	20	53	.	2,901	3,835
Total	.	603	.	224	34	.	.	20	53	.	2,901	3,835
PG & E												
Whole Building Approach	0
Systems Approach	69	.	.	.	57	.	.	126
Total	69	.	.	.	57	.	.	126
SDG&E												
Whole Building Approach	0
Systems Approach	336	.	.	.	373	.	208	917
Total	336	.	.	.	373	.	208	917

Among measures, “other” (including variable speed drives and refrigeration systems) account for the highest MWh savings.

4. SBD PROGRAM PENETRATION INTO THE NRNC MARKET IN QUARTER 3, 2000

This chapter presents SBD program penetration into the NRNC market statewide, as well as by utility territory, in Quarter 3, 2000.

Program penetration for new construction participants was evaluated based on both construction area (square feet) and number of projects. As the area of alteration projects is not tracked by F.W. Dodge, program penetration for R&R participants was evaluated only based on number of projects.

When summarizing market activity by utility territory, project zip codes were used in conjunction with California Energy Commission's zip code-to-utility territory mapping to allocate projects to IOU and non-IOU utilities.

Table 4.1 presents the statewide SBD program participation.

Table 4.2 presents SBD program participation in the SCE service territory.

Table 4.3 shows SBD program participation in the PG&E service territory.

Table 4.4 summarizes SBD program participation in the SDG&E service territory.

In terms of square feet committed, the statewide new construction market penetration of the SBD program is 11.6%. This number is lower than in individual utility territories due to the fact that non-IOU areas are included in the statewide market. SBD committed square feet account for 21.0% market penetration in the SCE territory; 6.2% penetration in the PG&E territory; 24.4% penetration in the SDG&E territory.

In terms of number of projects committed, the statewide new construction market penetration of the SBD program is 6.2%. SBD committed projects account for 8.6% market penetration in the SCE territory; 5.8% penetration in the PG&E territory; 8.1% penetration in the SDG&E territory.

Among R&R participants, the statewide market penetration of the SBD program is 2.5%. SBD committed projects account for 4.1% market penetration in the SCE territory; 0.5% penetration in the PG&E territory; 11.9% penetration in the SDG&E territory.

Table 4.1 Statewide SBD Program Penetration in Quarter 3, 2000

Program Type	Year/Quarter	Source	Value (\$1,000)	Area (1,000 sqft)	%Area Penetration	Number of Projects	%Projects Penetration
New and Additions	2000 QTR 3	F. W. Dodge	3,889,870	46,315		1,227	
		SBD Whole Building	-	1,010	2.2%	5	0.4%
		SBD Systems Approach	-	4,347	9.4%	71	5.8%
		SBD Total	-	5,357	11.6%	76	6.2%
Alterations (R&R and TI)	2000 QTR 3	F. W. Dodge	959,152	-		1,425	
		SBD Whole Building	-	0	-	0	0.0%
		SBD Systems Approach	-	1,684	-	36	2.5%
		SBD Total	-	1,684	-	36	2.5%

Table 4.2 SBD Program Penetration in the SCE Service Territory in Quarter 3, 2000

Program Type	Year/Quarter	Source	Value (\$1,000)	Area (1,000 sqft)	%Area Penetration	Number of Projects	%Projects Penetration
New and Additions	2000 QTR 3	F. W. Dodge	890,680	13,003		325	
		SBD Whole Building	-	785	6.0%	3	0.9%
		SBD Systems Approach	-	1,951	15.0%	25	7.7%
		SBD Total	-	2,736	21.0%	28	8.6%
Alterations (R&R and TI)	2000 QTR 3	F. W. Dodge	207,638	-		292	-
		SBD Whole Building	-	.	-	.	.
		SBD Systems Approach	-	771	-	12	4.1%
		SBD Total	-	771	-	12	4.1%

Table 4.3 SBD Program Penetration in the PG&E Service Territory in Quarter 3, 2000

Program Type	Year/Quarter	Source	Value (\$1,000)	Area (1,000 sqft)	%Area Penetration	Number of Projects	%Projects Penetration
New and Additions	2000 QTR 3	F. W. Dodge	1,947,617	21,363		536	
		SBD Whole Building	-	226	1.1%	2	0.4%
		SBD Systems Approach	-	1,096	5.1%	29	5.4%
		SBD Total	-	1,322	6.2%	31	5.8%
Alterations (R&R and TI)	2000 QTR 3	F. W. Dodge	428,087	-		620	
		SBD Whole Building	-	.	-	.	0.0%
		SBD Systems Approach	-	161	-	3	0.5%
		SBD Total	-	161	-	3	0.5%

Table 4.4 SBD Program Penetration in the SDG&E Service Territory in Quarter 3, 2000

Program Type	Year/Quarter	Source	Value (\$1,000)	Area (1,000 sqft)	%Area Penetration	Number of Projects	%Projects Penetration
New and Additions	2000 QTR 3	F. W. Dodge	453,143	5,330		141	
		SBD Whole Building	-	.	0.0%	.	0.0%
		SBD Systems Approach	-	1,300	24.4%	17	12.1%
		SBD Total	-	1,300	24.4%	17	12.1%
Alterations (R&R and TI)	2000 QTR 3	F. W. Dodge	99,204	-		176	
		SBD Whole Building	-	.	-	.	0.0%
		SBD Systems Approach	-	753	-	21	11.9%
		SBD Total	-	753	-	21	11.9%

5. NRNC MARKET AND PROGRAM TRACKING SUMMARY

This chapter provides a summary of the NRNC market and SBD program activities from SBD program inception (July 1999).

Tables 5.1 – 5.4 summarize the market activities quarterly, statewide and by utility territory, starting with Quarter 3, 1999. Consistent with the data reported the previous chapters, F.W. Dodge project zip codes were used in conjunction with California Energy Commission's zip code-to-utility territory mapping to allocate projects to IOU and non-IOU utilities.

The market activity does not vary much from quarter to quarter. Quarter 3, 1999, presents the largest volume of activity, while Quarter 4, 1999, presents the lowest volume of activity, consistently statewide, and across utility territories.

Tables 5.5 – 5.8 summarize the SBD program activities quarterly, statewide and by utility territory, starting with Quarter 3, 1999.

Tables 5.9 – 5.12 summarize the SBD program penetration quarterly, statewide and by utility territory, starting with Quarter 3, 1999.

The SBD program activity generally indicates that participation in Quarter 3, 2000 is very similar to participation in Quarter 3, 1999.

Table 5.1 Market Summary for Project Starts in California

Program Type	Year	Quarter	Value (\$1,000)	Area (1,000 sqft)	Number of Projects
New and additions	1999	3	3,492,468	50,226	1,443
	1999	4	2,473,923	38,156	1,068
	2000	1	3,004,270	48,078	1,160
	2000	2	2,855,153	39,770	1,096
	2000	3	3,889,870	46,315	1,227
	2000	4	.	.	.
Alterations	1999	3	1,102,056	-	1,374
	1999	4	851,088	-	1,026
	2000	1	709,826	-	983
	2000	2	958,409	-	1,101
	2000	3	959,152	-	1,425
	2000	4	.	-	.

Table 5.2 Market Summary for Project Starts within the SCE Service Territory

Program Type	Year	Quarter	Value (\$1,000)	Area (1,000 sqft)	Number of Projects
New and additions	1999	3	951,304	17,676	486
	1999	4	731,471	13,840	340
	2000	1	1,177,219	23,254	416
	2000	2	836,403	14,151	384
	2000	3	890,680	13,003	325
	2000	4	.	.	.
Alterations	1999	3	239,198	-	429
	1999	4	156,236	-	343
	2000	1	214,290	-	311
	2000	2	173,431	-	293
	2000	3	207,638	-	292
	2000	4	.	-	.

Table 5.3 Market Summary for Project Starts within the PG&E Service Territory

Program Type	Year	Quarter	Value (\$1,000)	Area (1,000 sqft)	Number of Projects
New and additions	1999	3	1,528,451	17,770	566
	1999	4	992,074	13,168	387
	2000	1	1,087,365	12,999	371
	2000	2	964,542	13,054	392
	2000	3	1,947,617	21,363	536
	2000	4	.	.	.
Alterations	1999	3	513,051	-	466
	1999	4	390,056	-	291
	2000	1	288,936	-	300
	2000	2	429,500	-	458
	2000	3	428,087	-	620
	2000	4	.	-	.

Table 5.4 Market Summary for Project Starts within the SDG&E Service Territory

Program Type	Year	Quarter	Value (\$1,000)	Area (1,000 sqft)	Number of Projects
New and additions	1999	3	412,207	5,275	132
	1999	4	361,650	5,056	136
	2000	1	296,577	5,293	141
	2000	2	450,674	5,541	110
	2000	3	453,143	5,330	210
	2000	4	.	.	.
Alterations	1999	3	73,780	-	139
	1999	4	142,455	-	126
	2000	1	104,878	-	140
	2000	2	116,430	-	106
	2000	3	99,204	-	176
	2000	4	.	-	.

Table 5.5 Statewide SBD Program Participation Summary

Program Type	Year	Quarter	Area (1,000 sqft)	M W h	Measures	Participants
NEW CONSTRUCTION						
Whole Building Approach	1999	3	104	288	2	2
	1999	4	3,960	11,692	24	24
	2000	1	334	2,550	3	3
	2000	2	2,507	8,232	21	21
	2000	3	1,010	4,951	5	5
	2000	4	.	.	.	.
Systems Approach	1999	3	3,861	8,005	60	29
	1999	4	7,448	18,290	154	77
	2000	1	1,670	3,545	32	16
	2000	2	3,541	8,003	132	52
	2000	3	4,347	6,986	192	71
	2000	4	.	.	.	.
Total	1999	3	3,965	8,293	62	31
	1999	4	11,408	29,983	178	101
	2000	1	2,003	6,095	35	19
	2000	2	6,048	16,236	153	73
	2000	3	5,357	11,936	197	76
	2000	4	0	0	0	0
R&R						
Whole Building Approach	1999	3	0	0	0	0
	1999	4	190	1,104	2	2
	2000	1	23	13	1	1
	2000	2	130	305	3	3
	2000	3	0	0	0	0
	2000	4	.	.	.	.
Systems Approach	1999	3	1,390	5,563	27	16
	1999	4	1,707	3,307	103	34
	2000	1	3,986	3,350	160	25
	2000	2	2,533	5,034	123	31
	2000	3	1,684	4,878	133	36
	2000	4	.	.	.	.
Total	1999	3	1,390	5,563	27	16
	1999	4	1,897	4,411	105	36
	2000	1	4,009	3,363	161	26
	2000	2	2,663	5,339	126	34
	2000	3	1,684	4,878	133	36
	2000	4	0	0	0	0

Table 5.6 SBD Program Participation Summary for SCE Territory

Program Type	Year	Quarter	Area (1,000 sqft)	M W h	Measures	Participants
NEW CONSTRUCTION						
Whole Building Approach	1999	3	.	.	.	.
	1999	4	270	1,571	1	1
	2000	1	93	1,753	1	1
	2000	2	650	1,587	1	1
	2000	3	785	4,428	3	3
	2000	4	.	.	.	.
Systems Approach	1999	3	3,780	7,975	58	27
	1999	4	5,504	14,271	83	48
	2000	1	1,211	3,086	12	7
	2000	2	1,983	5,179	33	18
	2000	3	1,951	2,785	47	25
	2000	4	.	.	.	.
Total	1999	3	3,780	7,975	58	27
	1999	4	5,774	15,842	84	49
	2000	1	1,304	4,839	13	8
	2000	2	2,633	6,765	34	19
	2000	3	2,736	7,213	50	28
	2000	4	0	0	0	0
R&R						
Whole Building Approach	1999	3	.	.	.	.
	1999	4	.	.	.	.
	2000	1	.	.	.	.
	2000	2	.	.	.	.
	2000	3	.	.	.	.
	2000	4	.	.	.	.
Systems Approach	1999	3	1,232	5,343	17	11
	1999	4	1,100	2,214	25	15
	2000	1	406	441	6	5
	2000	2	1,579	2,648	18	10
	2000	3	771	3,835	19	12
	2000	4	.	.	.	.
Total	1999	3	1,232	5,343	17	11
	1999	4	1,100	2,214	25	15
	2000	1	406	441	6	5
	2000	2	1,579	2,648	18	10
	2000	3	771	3,835	19	12
	2000	4	0	0	0	0

Table 5.7 SBD Program Participation Summary for PG&E Territory

Program Type	Year	Quarter	Area (1,000 sqft)	M W h	Measures	Participants
NEW CONSTRUCTION						
Whole Building Approach	1999	3	.	.	.	.
	1999	4	2,733	7,102	17	17
	2000	1	.	.	.	.
	2000	2	1,113	2,588	5	5
	2000	3	226	522	2	2
	2000	4	.	.	.	.
Systems Approach	1999	3	.	.	.	.
	1999	4	1,329	1,839	33	18
	2000	1	65	177	2	1
	2000	2	817	1,256	25	18
	2000	3	1,096	1,571	46	29
	2000	4	.	.	.	.
Total	1999	3	0	0	0	0
	1999	4	4,063	8,941	50	35
	2000	1	65	177	2	1
	2000	2	1,931	3,844	30	23
	2000	3	1,322	2,093	48	31
	2000	4	0	0	0	0
R&R						
Whole Building Approach	1999	3	.	.	.	.
	1999	4	.	.	.	.
	2000	1	.	.	.	.
	2000	2	93	211	1	1
	2000	3	.	.	.	.
	2000	4	.	.	.	.
Systems Approach	1999	3	.	.	.	.
	1999	4	336	564	9	6
	2000	1	39	98	2	2
	2000	2	311	1,250	14	6
	2000	3	161	126	4	3
	2000	4	.	.	.	.
Total	1999	3	0	0	0	0
	1999	4	336	564	9	6
	2000	1	39	98	2	2
	2000	2	404	1,461	15	7
	2000	3	161	126	4	3
	2000	4	0	0	0	0

Table 5.8 SBD Program Participation Summary for SDG&E Territory

Program Type	Year	Quarter	Area (1,000 sqft)	M W h	Measures	Participants
NEW CONSTRUCTION						
Whole Building Approach	1999	3	104	288	2	2
	1999	4	957	3,019	6	6
	2000	1	241	797	2	2
	2000	2	743	4,058	15	15
	2000	3	.	.	.	.
	2000	4	.	.	.	.
Systems Approach	1999	3	81	30	2	2
	1999	4	615	2,180	38	11
	2000	1	394	282	18	8
	2000	2	741	1,569	74	16
	2000	3	1,300	2,631	99	17
	2000	4	.	.	.	.
Total	1999	3	185	318	4	4
	1999	4	1,571	5,200	44	17
	2000	1	635	1,079	20	10
	2000	2	1,484	5,627	89	31
	2000	3	1,300	2,631	99	17
	2000	4	0	0	0	0
R&R						
Whole Building Approach	1999	3	.	.	.	.
	1999	4	190	1,104	2	2
	2000	1	23	13	1	1
	2000	2	37	94	2	2
	2000	3	.	.	.	.
	2000	4	.	.	.	.
Systems Approach	1999	3	158	220	10	5
	1999	4	271	529	69	13
	2000	1	3,541	2,812	152	18
	2000	2	643	1,136	91	15
	2000	3	753	917	110	21
	2000	4	.	.	.	.
Total	1999	3	158	220	10	5
	1999	4	461	1,632	71	15
	2000	1	3,564	2,824	153	19
	2000	2	680	1,229	93	17
	2000	3	753	917	110	21
	2000	4	0	0	0	0

Table 5.9. Summary of Statewide SBD Program Penetration

Program Type	Year	Quarter	Dodge Area (1,000 sqft)	SBD Area (1,000 sqft)	%Area Penetration	F.W. Dodge Projects	SBD Participants	%Projects Penetration
New Construction	1999	3	50,226	3,965	7.9%	1,443	31	2.1%
	1999	4	38,156	11,408	29.9%	1,068	101	9.5%
	2000	1	48,078	2,003	4.2%	1,160	19	1.6%
	2000	2	39,770	6,048	15.2%	1,096	73	6.7%
	2000	3	46,315	5,357	11.6%	1,227	76	6.2%
2000	4	0	0	0.0%	0	0	0.0%	
Alterations (R&R)	1999	3	-	1,390	-	1,374	16	1.2%
	1999	4	-	1,897	-	1,026	36	3.5%
	2000	1	-	4,009	-	983	26	2.6%
	2000	2	-	2,663	-	1,101	34	3.1%
	2000	3	-	1,684	-	1,425	36	2.5%
2000	4	-	0	-	0	0	0.0%	

Table 5.10. Summary of SBD Program Penetration within the SCE Service Territory

Program Type	Year	Quarter	Dodge Area (1,000 sqft)	SBD Area (1,000 sqft)	%Area Penetration	F.W. Dodge Projects	SBD Participants	%Projects Penetration
New Construction	1999	3	17,676	3,780	21.4%	486	27	5.6%
	1999	4	13,840	5,774	41.7%	340	49	14.4%
	2000	1	23,254	1,304	5.6%	416	8	1.9%
	2000	2	14,151	2,633	18.6%	384	19	4.9%
	2000	3	13,003	2,736	21.0%	325	28	8.6%
2000	4	0	0	0.0%	0	0	0.0%	
Alterations (R&R)	1999	3	-	1,232	-	429	11	2.6%
	1999	4	-	1,100	-	343	15	4.4%
	2000	1	-	406	-	311	5	1.6%
	2000	2	-	1,579	-	293	10	3.4%
	2000	3	-	771	-	292	12	4.1%
2000	4	-	0	-	0	0	0.0%	

Table 5.11. Summary of SBD Program Penetration within the PG&E Service Territory

Program Type	Year	Quarter	Dodge Area (1,000 sqft)	SBD Area (1,000 sqft)	%Area Penetration	F.W. Dodge Projects	SBD Participants	%Projects Penetration
New Construction	1999	3	17,770	0	0.0%	566	0	0.0%
	1999	4	13,168	4,063	30.9%	387	35	9.0%
	2000	1	12,999	65	0.5%	371	1	0.3%
	2000	2	13,054	1,931	14.8%	392	23	5.9%
	2000	3	21,363	1,322	6.2%	536	31	5.8%
2000	4	0	0	0.0%	0	0	0.0%	
Alterations (R&R)	1999	3	-	0	-	466	0	0.0%
	1999	4	-	336	-	291	6	2.1%
	2000	1	-	39	-	300	2	0.7%
	2000	2	-	404	-	458	7	1.5%
	2000	3	-	161	-	620	3	0.5%
2000	4	-	0	-	0	0	0.0%	

Table 5.12. Summary of SBD Program Penetration within the SDG&E Service Territory

Program Type	Year	Quarter	Dodge Area (1,000 sqft)	SBD Area (1,000 sqft)	%Area Penetration	F.W. Dodge Projects	SBD Participants	%Projects Penetration
New Construction	1999	3	5,275	185	3.5%	132	4	3.0%
	1999	4	5,056	1,571	31.1%	136	17	12.5%
	2000	1	5,293	635	12.0%	141	10	7.1%
	2000	2	5,541	1,484	26.8%	110	31	28.2%
	2000	3	5,330	1,300	24.4%	141	17	12.1%
	2000	4	0	0	0.0%	0	0	0.0%
Alterations (R&R)	1999	3	-	158	-	139	5	3.6%
	1999	4	-	461	-	126	15	11.9%
	2000	1	-	3,564	-	140	19	13.6%
	2000	2	-	680	-	106	17	16.0%
	2000	3	-	753	-	176	21	11.9%
	2000	4	-	0	-	0	0	0.0%

6. MOST ACTIVE MARKET PLAYERS IN QUARTER 3, 2000

This chapter presents the most active market players in Quarter 3, 2000, by utility territory and statewide, as reported in the F.W. Dodge “Players” database. The most active market players are defined as the actors who contributed to projects that added up to the highest total value.

Our experience with the F.W. Dodge Reports indicates that, while most projects are associated with at least one market actor, that actor is not necessarily an architect or an engineer (the F.W. Dodge database also tracks owners and contractors). The data reported below are therefore subject to the limitations intrinsic to reporting within the F.W. Dodge Reports.

In preparing these results, all entries containing the same address, zip code, and similar names for the market actors, were considered to correspond to the same firm. Civil engineering, structural engineering, and landscape architecture firms were excluded only if their name included the words “civil”, “structural” or “landscape” (the F.W. Dodge database does not contain information regarding the specialty of an actor).

The mapping of market actors by utility service territory was done using the zip code associated with the *project* location, not that associated with the address of the *market actor*.

Table 6.1 presents the most active market players statewide, during Quarter 3, 2000.

Table 6.2 presents the most active market players in SCE territory during Quarter 3, 2000.

Table 6.3 shows the most active market players in PG&E territory during Quarter 3, 2000.

Table 6.4 summarizes the most active market players in SDG&E territory during Quarter 3, 2000.

Table 6.1 Most Active Market Players in California in Quarter 3, 2000

Firm Name	City	State	Total Project Value (\$1,000)	Project Area (1,000 sqft)	Nr Projects
ARCHITECTS					
Hill Pinckert Architects	NEWPORT BEACH	CA	255,090	4,879	14
Kwan Henmi Architecture/Planning Inc	SAN FRANCISCO	CA	179,203	840	6
Cini-Little International	SAN FRANCISCO	CA	169,940	800	1
Michael Willis & Associates	SAN FRANCISCO	CA	169,940	800	1
Paoletti Associates	SAN FRANCISCO	CA	169,940	800	1
Hornberger & Worstell Inc	SAN FRANCISCO	CA	127,500	1,040	2
RMW Architecture and Interior Design	SAN FRANCISCO	CA	115,730	1,410	6
Gensler & Associates	SAN FRANCISCO	CA	95,157	1,295	5
Carrier Johnson Architects	SAN DIEGO	CA	85,291	700	7
Perkowitz & Ruth Architects	LONG BEACH	CA	74,354	1,145	12
Korth Sunseri Hagey Architects	SAN FRANCISCO	CA	73,500	835	3
Esherick Homsey Dodge & Davis	SAN FRANCISCO	CA	70,103	417	3
Fentress Bradburn Architects LTD	DENVER	CO	68,000	479	1
Dreyfuss & Blackford	SACRAMENTO	CA	68,000	479	1
Stafford King Wiese Architects AIA	SACRAMENTO	CA	67,119	289	6
NBBJ Architects	SAN FRANCISCO	CA	66,209	416	2
RMW Architecture and Interior Design	SANTA ROSA	CA	65,000	800	1
RGAA Architectural Design	LONG BEACH	CA	62,500	1,288	2
Nadel Architects Inc.	LOS ANGELES	CA	58,401	893	7
Architectural Dimensions	WALNUT CREEK	CA	52,500	434	3
ENGINEERS					
Ajmani & Pamidi Inc.	SAN FRANCISCO	CA	209,977	897	3
The Engineering Enterprise	ALAMEDA	CA	201,278	943	6
Faye Bernstein & Associates	SAN FRANCISCO	CA	173,523	850	4
AGS Inc.	SAN FRANCISCO	CA	169,940	800	1
Critchfield Mechanical Inc	MENLO PARK	CA	155,500	2,034	3
Flack & Kurtz Consulting Engineers	SAN FRANCISCO	CA	152,500	750	3
Capital Engineering Consultants Inc	SACRAMENTO	CA	138,985	556	27
Skilling Ward Magnuson Barkshire Inc	SEATTLE	WA	126,850	1,010	3
Middlebrook & Louie	SAN FRANCISCO	CA	100,185	547	4
Project Design Consultants	SAN DIEGO	CA	90,000	600	1
Nishkian Menninger	SAN FRANCISCO	CA	87,500	1,392	2
Schwartz & Lindheim	OAKLAND	CA	87,500	1,555	2
FBA-Frederick Brown & Associates	NEWPORT BEACH	CA	85,166	351	11
Nolte Associates (Sacramento)	SACRAMENTO	CA	80,500	729	2
Harry Yee & Associates	SACRAMENTO	CA	79,871	319	13
Barrish Pelham & Partners	SACRAMENTO	CA	78,287	359	9
F T Andrews Inc	ANAHEIM	CA	72,580	152	13
Ove Arup & Partners California Ltd	SAN FRANCISCO	CA	69,775	423	3
Rosendin Electric Inc	SAN JOSE	CA	68,000	479	1
John Denton & Associates	LOS ANGELES	CA	54,227	349	10

Table 6.2 Most Active Market Players in SCE Territory in Quarter 3, 2000

Firm Name	City	State	Total Project Value (\$1,000)	Project Area (1,000 sqft)	Nr Projects
ARCHITECTS					
Hill Pinckert Architects	NEWPORT BEACH	CA	217,590	4,390	13
RGA Architectural Design	LONG BEACH	CA	62,500	1,288	2
Ware & Malcomb Architects	IRVINE	CA	49,918	450	5
Parsons Infrastructure & Technology Group Inc	PASADENA	CA	43,000	206	1
LPA	IRVINE	CA	38,986	614	5
CCS Architect	IRVINE	CA	37,500	998	1
NTD-Neptune Thomas Davis	GLENDORA	CA	34,786	230	3
R K Z Architects	TUSTIN	CA	34,500	397	4
Cearnal Architects	SANTA BARBARA	CA	30,000	0	1
H K S Architects	LOS ANGELES	CA	30,000	0	1
Perkowitz & Ruth Architects	LONG BEACH	CA	27,979	501	6
Porter Jensen Hansen Manzagol	SAN CLEMENTE	CA	26,690	46	2
Lewis Liets Architects	CULVER CITY	CA	25,000	170	1
Thomas Blurock Architects Inc.	COSTA MESA	CA	21,873	142	3
Skidmore Owings & Merrill LLP	SAN FRANCISCO	CA	21,000	40	1
GAA Architects Inc	IRVINE	CA	20,000	220	1
MCG Architects Inc	SAN DIEGO	CA	20,000	163	1
M C G Architects	BEVERLY HILLS	CA	17,500	133	2
Dougherty + Dougherty	COSTA MESA	CA	16,182	12	5
RSP Architects Ltd	MINNEAPOLIS	MN	15,000	270	2
ENGINEERS					
F T Andrews Inc	ANAHEIM	CA	65,015	102	9
FBA-Frederick Brown & Associates	NEWPORT BEACH	CA	45,392	163	6
Jacobs Engineering Group Inc	SIGNAL HILL	CA	43,000	206	1
John Denton & Associates	LOS ANGELES	CA	40,293	279	7
TMAD Engineers Inc.	ONTARIO	CA	39,502	264	8
John A Martin & Associates	LOS ANGELES	CA	35,580	227	2
KNA Consulting Engineers Inc	LAGUNA HILLS	CA	28,074	179	2
William J Yang & Assocs	BURBANK	CA	26,636	175	2
DL Engineering	GLENDALE	CA	26,250	175	1
Hillman Biddison & Loevenguth	LOS ANGELES	CA	26,250	175	1
California Engineering Design Group Inc.	BURBANK	CA	25,000	170	1
Norman A Cohen & Assocs	BEVERLY HILLS	CA	25,000	170	1
RHA Engineers/Surveyors	RIVERSIDE	CA	24,380	0	2
Nowak-Meulmester & Associates	SAN DIEGO	CA	24,000	263	2
Westland Heating & Air Conditioning	DUARTE	CA	22,126	221	3
R Dale Hadfield	LAGUNA NIGUEL	CA	21,690	0	1
Johnson & Nielson	MONROVIA	CA	21,616	66	5
Culp & Tanner	LAKE FOREST	CA	21,000	359	2
Hogle-Ireland	RIVERSIDE	CA	20,000	163	1
GLP Karjala Associates	COSTA MESA	CA	19,015	188	12

Table 6.3 Most Active Market Players in PG&E Territory in Quarter 3, 2000

Firm Name	City	State	Total Project Value (\$1,000)	Project Area (1,000 sqft)	Nr Projects
ARCHITECTS					
Kwan Henmi Architecture/Planning Inc	SAN FRANCISCO	CA	179,203	840	6
Cini-Little International	SAN FRANCISCO	CA	169,940	800	1
Michael Willis & Associates	SAN FRANCISCO	CA	169,940	800	1
Paoletti Associates	SAN FRANCISCO	CA	169,940	800	1
RMW Architecture and Interior Design	SAN FRANCISCO	CA	115,730	1,410	6
Gensler & Associates	SAN FRANCISCO	CA	95,157	1,295	5
Korth Sunseri Hagey Architects	SAN FRANCISCO	CA	73,500	835	3
Esherick Homsey Dodge & Davis	SAN FRANCISCO	CA	70,103	417	3
RMW Architecture and Interior Design	SANTA ROSA	CA	65,000	800	1
DES Architects + Engineers	REDWOOD CITY	CA	43,291	300	6
Kaplan McLaughlin Diaz	SAN FRANCISCO	CA	40,000	810	3
Hoover Associates	PALO ALTO	CA	39,300	397	2
Alan R Dreyfuss Architect	OAKLAND	CA	37,500	260	1
Architectural Dimensions	WALNUT CREEK	CA	37,500	260	1
Fong & Chan Architects	SAN FRANCISCO	CA	37,500	97	1
Hornberger & Worstell Inc	SAN FRANCISCO	CA	37,500	440	1
Jordan Woodman Dobson	OAKLAND	CA	37,500	260	1
Kava Massih Architects	BERKELEY	CA	37,500	400	1
Edwin S Darden Associates Inc	FRESNO	CA	33,290	175	2
IBP-The Blurock Partnership	NEWPORT BEACH	CA	32,478	128	2
ENGINEERS					
Ajmani & Pamidi Inc.	SAN FRANCISCO	CA	209,977	897	3
The Engineering Enterprise	ALAMEDA	CA	201,278	943	6
Faye Bernstein & Associates	SAN FRANCISCO	CA	173,523	850	4
AGS Inc.	SAN FRANCISCO	CA	169,940	800	1
Middlebrook & Louie	SAN FRANCISCO	CA	100,185	547	4
Critchfield Mechanical Inc	MENLO PARK	CA	87,500	1,555	2
Nishkian Menninger	SAN FRANCISCO	CA	87,500	1,392	2
Schwartz & Lindheim	OAKLAND	CA	87,500	1,555	2
Capital Engineering Consultants Inc	SACRAMENTO	CA	72,519	256	18
Flack & Kurtz Consulting Engineers	SAN FRANCISCO	CA	62,500	150	2
Sandis Humber Jones	MOUNTAIN VIEW	CA	53,732	176	2
Fard Engineers Inc/Chamberlain & Painter	WALNUT CREEK	CA	49,915	419	4
Mazzetti & Associates Inc	SAN FRANCISCO	CA	40,942	381	3
Interstate Engineering	FRESNO	CA	38,651	138	3
Van Maren & Associates	PIEDMONT	CA	38,500	410	2
Guttman & Blaevet	SAN FRANCISCO	CA	38,278	322	3
Frank Electric Co	MILPITAS	CA	37,500	397	1
S C E Engineers	SAN FRANCISCO	CA	37,500	97	1
Therma	SAN JOSE	CA	37,500	397	1
G S Dodson and Associates	WALNUT CREEK	CA	39,272	0	1

Table 6.4 Most Active Market Players in SDG&E Territory in Quarter 3, 2000

Firm Name	City	State	Total Project Value (\$1,000)	Project Area (1,000 sqft)	Nr Projects
ARCHITECTS					
Hornberger & Worstell Inc	SAN FRANCISCO	CA	90,000	600	1
Carrier Johnson Architects	SAN DIEGO	CA	85,291	700	7
NBBJ Architects	SAN FRANCISCO	CA	66,209	416	2
Nadel Architects Inc.	LOS ANGELES	CA	27,453	448	2
Pacific Cornerstone Architects	SAN DIEGO	CA	25,175	351	7
Tucker Sadler & Associates	SAN DIEGO	CA	19,951	293	3
Smith Consulting Architects	SAN DIEGO	CA	15,494	71	5
Architectural Dimensions	WALNUT CREEK	CA	15,000	174	2
LR Design Associates	OCEANSIDE	CA	14,104	81	2
LPA	IRVINE	CA	12,529	150	1
Greenberg Farrow Architecture	TUSTIN	CA	10,847	227	2
GAA Architects Inc	IRVINE	CA	10,219	127	1
MPAG Associates	ORANGE	CA	10,174	61	1
Austin Veum Robbins Parshalle	SAN DIEGO	CA	9,173	65	5
Casco Inc. (Costa Mesa)	COSTA MESA	CA	7,903	171	2
Knauer Inc	HIGHLAND PARK	IL	7,500	14	1
Law/Kingdon Inc	WICHITA	KS	7,500	82	1
Salerno/Livingston Architects	SAN DIEGO	CA	7,500	0	1
M W Steele Group Inc	LA JOLLA	CA	7,395	38	1
George Miers & Assocs	MORAGA	CA	7,000	0	1
ENGINEERS					
Skilling Ward Magnuson Barkshire Inc	SEATTLE	WA	94,850	665	2
Flack & Kurtz Consulting Engineers	SAN FRANCISCO	CA	90,000	600	1
Project Design Consultants	SAN DIEGO	CA	90,000	600	1
Ove Arup & Partners California Ltd	SAN FRANCISCO	CA	65,000	390	1
Helfman/Haloosim & Associates	LOS ANGELES	CA	27,453	448	2
Allen Design	IRVINE	CA	20,000	250	1
Dalan Engineering	NORTHRIDGE	CA	20,000	250	1
Johnson Consulting Engineers	POWAY	CA	19,829	132	6
TMAD Engineering	SAN DIEGO	CA	19,426	288	2
Merrick & Associates	SAN DIEGO	CA	19,151	91	4
Nasland Engineering	SAN DIEGO	CA	17,276	128	2
Bechard - Long & Associates	SAN DIEGO	CA	17,037	131	2
KPFF/Alagia Consulting Engineers	SAN DIEGO	CA	16,887	127	1
Geotechnics Inc	SAN DIEGO	CA	16,887	127	1
Spurlock Poirier Associates	SAN DIEGO	CA	16,887	127	1
MFT Consulting Engineers	OAKLAND	CA	15,000	174	2
Simon Wong Engineering	SAN DIEGO	CA	14,576	223	1
Fraser Engineering Inc	OCEANSIDE	CA	13,990	81	1
RBF	SAN DIEGO	CA	12,529	150	1
OMB Electrical Engineers Inc	LAGUNA HILLS	CA	11,197	230	3

APPENDIX A. GLOSSARY OF BUILDING TYPES RECORDED BY F.W. DODGE

Amusement	amusement and recreational buildings
Assembly	religious and worship buildings
Education	libraries, museums
Government	government services
Hotel	hotels and motels
Medical	hospitals and other health-related buildings
Office	office and laboratory buildings
Retail	retail stores and shopping centers
School	schools, colleges and universities, including dorms
Service	service stations
Storage	warehouses and storage facilities
Other	other nonresidential buildings

APPENDIX B. GLOSSARY OF BUILDING/PROJECT TYPES RECORDED BY CIRB

Amusement	amusement and recreational buildings
Church	churches and religious buildings
Hotel	hotels and motels
Medical	hospitals and institutional buildings
Office	office and bank buildings
Other	other nonresidential buildings
Education	schools, colleges, universities, libraries, museums
Retail	stores and other mercantile buildings
Service	service stations
Industrial	manufacturing plants and affiliated buildings
Alterations	alterations, additions, and conversions to nonresidential structures (excludes special installation permits for electrical, plumbing, heating, AC, or similar mechanical work, or installation of fire escapes, elevators, signs, etc.)

APPENDIX C. CEC ZIP CODE-TO-UTILITY TERRITORY MAPPING

California Energy Commission's zip code-to-utility territory mapping consists of a list of 2,671 zip codes corresponding to 1,410 cities in California. In this list, each zip code is mapped to one of 16 territory zones. In turn, the territory zones correspond to utility territories as follows.

Zones 1 – 5 are in PG&E territory

Zone 6 is in SMUD territory

Zones 7 – 10 are in SCE territory

Zones 11 and 12 are in LADWP territory

Zone 13 is in SDG&E territory

Zones 14 – 16 comprise the Other Service area

To identify the utility territory based on zip code, the zip code must be first used to identify the territory zone, which then corresponds to a utility territory.

Note that the territory zones defined for this purpose by the CEC are not the same as the California Climate Zones.

APPENDIX D. GLOSSARY OF MEASURES IMPLEMENTED BY SBD PARTICIPANTS

Whole building	Measures installed as part of the whole building approach
Daylighting	Daylighting measures
Skylight	Skylights
HVAC chiller	High-efficiency chillers
HVAC package	High-efficiency unitary systems
HVAC controls	Controls for HVAC systems
HVAC other	Other measures labeled as “HVAC”
Motors “motors”	High-efficiency motors and other measures labeled as
Lighting	Lighting measures, including lighting power density reduction
Envelope	Envelope measures, including insulation and windows
Other	Refrigeration, process cooling and pumps, variable frequency drives and adjustable speed drives that are not specifically labeled “HVAC” or “motors”, controls that are not specifically labeled “HVAC” or “motors”, and measures labeled “other” or “miscellaneous”.