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October 28, 1999

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Blanca S. Bayó, Director
Records and Reporting
Florida Public Service Commission
4075 Esplanade Way, Room 110
Tallahassee, Florida 32399-0850

By Hand Delivery

**Re: Petition of Florida Power & Light Company
for Approval of BuildSmart™ Program
Docket No. 951536-EG**

990000

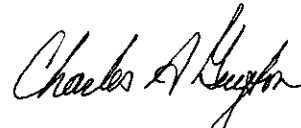
Dear Ms. Bayó:

Pursuant to Order No. PSC-97-1017-EG issued August 25, 1997, enclosed for filing on behalf of Florida Power & Light Company ("FPL") are the original and fifteen (15) copies of FPL's BuildSmart Program Evaluation in Docket No. 951536-EG.

If you or your Staff have any questions regarding this filing, please contact me.

AFA _____
APP _____
CAF _____
CMU _____
CTR _____
EAG Colson
LEG I
MAS _____
CPC _____
PAI _____
SEC I
WAW _____
OTH _____

Very truly yours,



Charles A. Guyton

CAG/ld
encs.

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cc: L. Colson
R. Floyd

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DOCUMENT NUMBER-DATE

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ORIGINAL

**FPL BuildSmart Program Evaluation
October, 1999**

DOCUMENT NUMBER-DATE

13256 OCT 28 89

FPSC-RECORDS/REPORTING

FPL BuildSmart Program Evaluation

Introduction

In Order No. PSC-97-1017-S-EG issued August 25, 1997, which approved the BuildSmart Program, FPL was requested to perform the following:

- Conduct end-use metering and billing analyses to compare kW and kWh consumption between BuildSmart and non-BuildSmart homes.
- Within 24 months of the roll-out of the BuildSmart Program, assess the cost-effectiveness of the Program, prepare and file a report on that assessment with the Commission.

In response to this order, FPL conducted the analysis required to validate the kW and the kWh impacts utilized for the original Program cost-effective analysis, and performed an updated cost-effectiveness analysis.

Metering and Billing Analysis

FPL contracted with Quantum Consulting to perform metering and billing analysis to compare BuildSmart and non-BuildSmart homes. The analysis performed and the results of the analysis are as follows:

- BuildSmart Summer and Winter kW impacts were validated by conducting two independent analyses:
 - Over the past year, 22 new BuildSmart homes were whole-premise metered and audited. Average peak loads were calculated and compared to peak loads expected, using BuildSmart program design estimates.
 - In addition, audit and end-use metering data were collected from 409 new homes as part of the research used to develop the BuildSmart Program. EPI levels were estimated for each home, allowing each to be designated “program-qualifying” or “non-participant.” Differences between “program-qualifying” and “non-participant” mean peak loads were calculated and compared against the program design impacts for cooling, heating and whole-premise usage.
- Annual kWh savings were validated using statistically adjusted engineering analyses. This analysis was conducted using a sample of participant and non-participant homes. Models were developed that employed billing data and respondents’ appliance holdings to verify program design per square foot energy impacts. The energy impact analysis also made use of the 201 telephone surveys conducted in 1999 among BuildSmart program participants and non-participants.

The results of these evaluations confirm the original per square foot kW and kWh estimates. In addition to verifying the square foot impacts, FPL also evaluated the average size of the BuildSmart participating homes. FPL found that these homes are up to 25% larger than estimated in the original Program design. Therefore, the per-participant impacts have increased by up to a corresponding 25%. A summary of the kW and kWh used in the original Program filing and the values used in this analysis can be found in Attachments 1 & 2, respectively.

Cost-effectiveness Analysis

Using these values, FPL updated the BuildSmart Program cost-effectiveness analysis using the most recent planning process assumptions. Attachment 3 is a copy of the updated cost-effectiveness analysis. The resulting cost-effectiveness analysis ratios are as follows:

- RIM = 1.31
- TRC = 1.03
- Participant Test = 1.21

These results show an improvement in program cost-effectiveness, which is not surprising given the participant increase in savings.

Summary

In summary, the evaluation of the first two years of participation in FPL's BuildSmart Program confirms previous estimates of demand and energy savings associated with BuildSmart participation. Per participant savings are actually greater than forecast due to larger home size. The BuildSmart Program is more cost-effective than originally projected. BuildSmart homes will continue to realize cost-effective savings for homeowners, the utility, and all of FPL's customers.

FPL BuildSmart Program Evaluation
Attachment 1
Demand (kW) and Energy (kWh) Impact Estimates*

DCA Climate Zone	Certification Level	Conditioned Square Footage of Prototypes	Per Square Foot Impacts			Per Participant Impacts		
			Annual Energy Impact (kWh)	Summer Demand Impact (W)	Winter Demand Impact (W)	Annual Energy Impact (kWh)	Summer Demand Impact (kW)	Winter Demand Impact (kW)
South	Bronze	2,060	0.47	0.22	0.29	962	0.46	0.60
	Silver		0.74	0.36	0.29	1,520	0.75	0.60
	Gold		0.91	0.45	0.29	1,876	0.92	0.60
Central	Bronze	1,792	0.44	0.27	0.51	793	0.48	0.91
	Silver		0.64	0.41	0.55	1,148	0.73	0.99
	Gold		0.76	0.48	0.59	1,355	0.86	1.06
North	Bronze	1,777	0.30	0.25	0.36	528	0.45	0.64
	Silver		0.47	0.39	0.40	829	0.70	0.71
	Gold		0.56	0.47	0.44	999	0.83	0.78

* Source: Residential New Construction Research Project, Final Report Appendices, September 1995

**FPL BuildSmart Program Evaluation
Attachment 2
Demand (kW) and Energy (kWh) Impacts**

Per Square Foot Impacts

DCA Climate Zone	Certification Level	Annual Energy Impact (kWh)			Summer Demand Impact (W)			Winter Demand Impact (W)		
		1995 RNC Research Estimate*	1999 Evaluation Estimate	90% Confidence Interval	1995 RNC Research Estimate*	1999 Evaluation Estimate	90% Confidence Interval	1995 RNC Research Estimate*	1999 Evaluation Estimate	90% Confidence Interval
South	Bronze	0.47	0.46	+/- 0.11	0.22	0.22	+/- 0.07	0.29	0.48	+/- 0.32
	Silver	0.74	0.73	+/- 0.17	0.36	0.36	+/- 0.12	0.29	0.48	+/- 0.32
	Gold	0.91	0.90	+/- 0.21	0.45	0.45	+/- 0.14	0.29	0.48	+/- 0.32
Central	Bronze	0.44	0.44	+/- 0.10	0.27	0.27	+/- 0.09	0.51	0.83	+/- 0.55
	Silver	0.64	0.63	+/- 0.15	0.41	0.41	+/- 0.13	0.55	0.90	+/- 0.60
	Gold	0.76	0.74	+/- 0.18	0.48	0.48	+/- 0.15	0.59	0.97	+/- 0.64
North	Bronze	0.30	0.29	+/- 0.07	0.25	0.25	+/- 0.08	0.36	0.59	+/- 0.39
	Silver	0.47	0.46	+/- 0.11	0.39	0.39	+/- 0.13	0.40	0.65	+/- 0.43
	Gold	0.56	0.55	+/- 0.13	0.47	0.47	+/- 0.15	0.44	0.72	+/- 0.48

* source: Residential New Construction Research Project, Final Report Appendices, September 1995

**1999 BuildSmart Evaluation
Per Participant Impacts**

DCA Climate Zone	Certification Level	Conditioned Square Footage per Participant**	Annual Energy Impact (kWh)	Summer Demand Impact (kW)	Winter Demand Impact (kW)
South	Bronze	2,419	1,130	0.54	0.70
	Silver		1,785	0.88	0.70
	Gold		2,203	1.08	0.70
Central	Bronze	2,653	1,174	0.71	1.35
	Silver		1,700	1.08	1.47
	Gold		2,006	1.27	1.57
North	Bronze	2,060	612	0.52	0.74
	Silver		961	0.81	0.82
	Gold		1,158	0.96	0.90

** source: BuildSmart participant database

**FPL BuildSmart Program
Cost-effectiveness Evaluation
Attachment 3**

I. PROGRAM DEMAND SAVINGS & LINE LOSSES

(1) CUSTOMER KW REDUCTION AT METER	0.95	KW
(2) GENERATOR KW REDUCTION PER CUSTOMER	1.22	KW
(3) KW LINE LOSS PERCENTAGE	9.01	%
(4) GENERATOR kWh REDUCTION PER CUSTOMER	1,528.3	kWh
(5) kWh LINE LOSS PERCENTAGE	7.02	%
(6) GROUP LINE LOSS MULTIPLIER.....	1.0000	
(7) CUSTOMER kWh INCREASE AT METER	0.0	kWh

II. ECONOMIC LIFE & K FACTORS

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM	27	YEARS
(2) GENERATOR ECONOMIC LIFE	30	YEARS
(3) T&D ECONOMIC LIFE	35	YEARS
(4) K FACTOR FOR GENERATION	1.61524	
(5) K FACTOR FOR T & D.....	1.46985	

III. UTILITY & CUSTOMER COSTS

(1) UTILITY NON RECURRING COST PER CUSTOMER	***	\$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER	***	\$/CUST
(3) UTILITY COST ESCALATION RATE	***	%**
(4) CUSTOMER EQUIPMENT COST	***	\$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE	***	%**
(6) CUSTOMER O & M COST	***	\$/CUST/YR
(7) CUSTOMER O & M COST ESCALATION RATE	***	%**
* (8) INCREASED SUPPLY COSTS	***	\$/CUST/YR
* (9) SUPPLY COSTS ESCALATION RATES.....	***	%**
* (10) UTILITY DISCOUNT RATE	8.98	%
* (11) UTILITY AFUDC RATE.....	10.30	%
* (12) UTILITY NON RECURRING REBATE/INCENTIVE	***	\$/CUST
* (13) UTILITY RECURRING REBATE/INCENTIVE	***	\$/CUST
* (14) UTILITY REBATE/INCENTIVE ESCALATION RATE	***	%

IV. AVOIDED GENERATOR AND T&D COSTS

(1) BASE YEAR	1998	
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2005	
(3) IN-SERVICE YEAR FOR AVOIDED T&D	2001-2005	
(4) BASE YEAR AVOIDED GENERATING COST	519	\$/kW
(5) BASE YEAR AVOIDED TRANSMISSION COST	70	\$/kW
(6) BASE YEAR DISTRIBUTION COST	50	\$/kW
(7) GEN, TRAN & DIST COST ESCALATION RATE	1.78	%**
(8) GENERATOR FIXED O & M COST	35	\$/kW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE	4.10	%**
(10) TRANSMISSION FIXED O & M COST	2.73	\$/kW
(11) DISTRIBUTION FIXED O & M COST	13.01	\$/kW
(12) T&D FIXED O&M ESCALATION RATE	4.10	%**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.067	CENTS/kWh
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE	2.70	%**
(15) GENERATOR CAPACITY FACTOR	91%	** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST	2.17	CENTS PER kWh** (In-service y
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE	1.75	%**

V. NON-FUEL ENERGY AND DEMAND CHARGES

(1) NON FUEL COST IN CUSTOMER BILL	***	CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE	***	%
(3) DEMAND CHARGE IN CUSTOMER BILL	***	\$/kW/MO
(4) DEMAND CHARGE ESCALATION RATE	***	%

* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK
** VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)
*** PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

* INPUT DATA – PART 1 CONTINUED
 PROGRAM METHOD SELECTED: REV_REQ
 PROGRAM NAME: Buildmart

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES \$(000)	(2) UTILITY INCENTIVES \$(000)	(3) OTHER UTILITY COSTS \$(000)	(4) TOTAL UTILITY PROGRAM COSTS \$(000)	(5) ENERGY CHARGE REVENUE LOSSES \$(000)	(6) DEMAND CHARGE REVENUE LOSSES \$(000)	(7) PARTICIPANT EQUIPMENT COSTS \$(000)	(8) PARTICIPANT O&M COSTS \$(000)	(9) OTHER PARTICIPANT COSTS \$(000)	(10) TOTAL PARTICIPANT COSTS \$(000)
1998	0	0	0	0	0	0	0	0	0	
1999	0	0	0	0	0	0	0	0	0	
2000	227	0	0	227	53	0	1,013	0	1,013	
2001	233	0	0	233	159	0	1,039	0	1,039	
2002	239	0	0	239	265	0	1,066	0	1,066	
2003	246	0	0	246	377	0	1,095	0	1,095	
2004	252	0	0	252	486	0	1,123	0	1,123	
2005	0	0	0	0	545	0	0	0	0	
2006	0	0	0	0	544	0	0	0	0	
2007	0	0	0	0	547	0	0	0	0	
2008	0	0	0	0	549	0	0	0	0	
2009	0	0	0	0	549	0	0	0	0	
2010	0	0	0	0	562	0	0	0	0	
2011	0	0	0	0	562	0	0	0	0	
2012	0	0	0	0	566	0	0	0	0	
2013	0	0	0	0	569	0	0	0	0	
2014	0	0	0	0	576	0	0	0	0	
2015	342	0	0	342	579	0	1,523	0	1,523	
2016	352	0	0	352	584	0	1,567	0	1,567	
2017	362	0	0	362	584	0	1,613	0	1,613	
2018	372	0	0	372	588	0	1,660	0	1,660	
2019	383	0	0	383	592	0	1,708	0	1,708	
2020	0	0	0	0	596	0	0	0	0	
2021	0	0	0	0	599	0	0	0	0	
2022	0	0	0	0	603	0	0	0	0	
2023	0	0	0	0	607	0	0	0	0	
2024	0	0	0	0	611	0	0	0	0	

NOM	3,008	0	0	3,008	12,854	0	13,406	0	0	13,406
NPV	1,206	0	0	1,206	3,979	0	5,374	0	0	5,374

* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

** NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

CALCULATION OF GEN K-FACTOR
 PROGRAM METHOD SELECTED REV_REQ
 PROGRAM NAME: Buildsmart

YEAR	(2) MID-YEAR RATE BASE \$(000)	(3) DEBT \$(000)	(4) PREFERRED STOCK \$(000)	(5) COMMON EQUITY \$(000)	(6) INCOME TAXES \$(000)	(7) OTHER TAXES & INSURANCE \$(000)	(8) DEPREC. \$(000)	(9) DEFERRED TAXES \$(000)	(10) TOTAL FIXED CHARGES \$(000)	(11) PRESENT WORTH FIXED CHARGES \$(000)	(12) CUMULATIVE PW FIXED CHARGES \$(000)
2005	3,983	136	0	274	170	56	133	8	777	777	777
2006	3,816	130	0	262	111	56	133	60	752	690	1,487
2007	3,627	124	0	249	111	56	133	52	725	610	2,078
2008	3,445	118	0	237	110	56	133	45	698	540	2,617
2009	3,271	112	0	225	110	56	133	36	673	477	3,094
2010	3,104	106	0	213	109	56	133	31	648	422	3,516
2011	2,943	101	0	202	108	56	133	25	625	373	3,889
2012	2,787	95	0	192	107	56	133	20	602	330	4,219
2013	2,635	90	0	181	101	56	133	19	580	292	4,511
2014	2,483	85	0	171	94	56	133	19	558	257	4,768
2015	2,331	80	0	160	88	56	133	19	535	227	4,965
2016	2,179	75	0	150	81	56	133	19	513	199	5,194
2017	2,027	69	0	139	75	56	133	19	491	175	5,369
2018	1,875	64	0	129	68	56	133	19	469	153	5,523
2019	1,723	59	0	118	62	56	133	19	447	134	5,657
2020	1,571	54	0	108	55	56	133	19	424	117	5,773
2021	1,419	49	0	98	48	56	133	19	402	102	5,875
2022	1,267	43	0	87	42	56	133	19	380	88	5,963
2023	1,115	38	0	77	35	56	133	19	358	76	6,039
2024	963	33	0	66	29	56	133	19	336	66	6,105
2025	828	28	0	57	56	56	133	(14)	316	57	6,162
2026	726	25	0	50	85	56	133	(47)	301	49	6,211
2027	641	22	0	44	81	56	133	(47)	288	44	6,255
2028	555	19	0	38	78	56	133	(47)	278	38	6,293
2029	470	16	0	32	74	56	133	(47)	264	33	6,326
2030	384	13	0	26	70	56	133	(47)	251	29	6,356
2031	299	10	0	21	67	56	133	(47)	239	26	6,381
2032	213	7	0	15	63	56	133	(47)	226	22	6,403
2033	128	4	0	9	59	56	133	(47)	214	19	6,423
2034	43	1	0	3	55	56	133	(47)	201	17	6,439

IN SERVICE COS (\$000) 3,987
 IN SERVICE YEAR 2005
 BOOK LIFE (YRS) 30
 EFFEC. TAX RATE 38.575
 DISCOUNT RATE 8.98%
 OTAX & INS RATE 1.40%

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST
DEBT	45%	7.60 %
P/S	0%	0.00 %
C/S	55%	12.50 %

K-FACTOR = CPWFC / IN-SVC COST = 1.61524

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION
 PROGRAM METHOD SELECTED: REV_REQ
 PROGRAM NAI Buildsmart

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$(000)	ACCUMULATED TAX DEPRECIATION \$(000)	BOOK DEPRECIATION \$(000)	ACCUMULATED BOOK DEPRECIATION \$(000)	DEFERRED TAX DEPRECIATION \$(000)	BOOK DEPR FOR DEFERRED TAX \$(000)	ACCUMULATED DEFERRED TAX DUE TO DEPRECIATION \$(000)	TOTAL EQUITY AFUDC \$(000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE \$(000)	SALVAGE TAX RATE \$(000)	ANNUAL DEFERRED TAX (9)-(12)+(13) \$(000)	ACCUMULATED DEFERRED TAX \$(000)
2005	3.75%	145	145	133	133	123	123	8	295	0	0	0	8	(58)
2006	7.22%	279	424	133	266	123	246	60	295	0	0	0	60	2
2007	6.68%	258	682	133	399	123	369	52	295	0	0	0	52	54
2008	6.18%	239	921	133	532	123	492	45	295	0	0	0	45	98
2009	5.71%	221	1,142	133	664	123	615	38	295	0	0	0	38	136
2010	5.29%	204	1,346	133	797	123	738	31	295	0	0	0	31	168
2011	4.89%	189	1,535	133	930	123	861	25	295	0	0	0	25	193
2012	4.52%	175	1,710	133	1,063	123	984	20	295	0	0	0	20	213
2013	4.46%	172	1,882	133	1,196	123	1,107	19	295	0	0	0	19	232
2014	4.46%	172	2,055	133	1,329	123	1,231	19	295	0	0	0	19	251
2015	4.46%	172	2,227	133	1,462	123	1,354	19	295	0	0	0	19	270
2016	4.46%	172	2,399	133	1,595	123	1,477	19	295	0	0	0	19	289
2017	4.46%	172	2,572	133	1,728	123	1,600	19	295	0	0	0	19	308
2018	4.46%	172	2,744	133	1,860	123	1,723	19	295	0	0	0	19	327
2019	4.46%	172	2,917	133	1,993	123	1,846	19	295	0	0	0	19	346
2020	4.46%	172	3,089	133	2,126	123	1,969	19	295	0	0	0	19	365
2021	4.46%	172	3,262	133	2,259	123	2,092	19	295	0	0	0	19	384
2022	4.46%	172	3,434	133	2,392	123	2,215	19	295	0	0	0	19	403
2023	4.46%	172	3,606	133	2,525	123	2,338	19	295	0	0	0	19	422
2024	4.46%	172	3,779	133	2,658	123	2,461	19	295	0	0	0	19	441
2025	2.23%	86	3,865	133	2,791	123	2,584	(14)	295	0	0	0	(14)	427
2026	0.00%	0	3,865	133	2,923	123	2,707	(47)	295	0	0	0	(47)	380
2027	0.00%	0	3,865	133	3,056	123	2,830	(47)	295	0	0	0	(47)	332
2028	0.00%	0	3,865	133	3,189	123	2,953	(47)	295	0	0	0	(47)	285
2029	0.00%	0	3,865	133	3,322	123	3,076	(47)	295	0	0	0	(47)	237
2030	0.00%	0	3,865	133	3,455	123	3,199	(47)	295	0	0	0	(47)	190
2031	0.00%	0	3,865	133	3,588	123	3,322	(47)	295	0	0	0	(47)	142
2032	0.00%	0	3,865	133	3,721	123	3,446	(47)	295	0	0	0	(47)	95
2033	0.00%	0	3,865	133	3,854	123	3,569	(47)	295	0	0	0	(47)	48
2034	0.00%	0	3,865	133	3,987	123	3,692	(47)	295	0	0	0	(47)	0

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2029
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	(67)
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	295
BOOK DEPR RATE - 1/USEFUL LIFE	3.33%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION
 PROGRAM METHOD SELECTED: REV_REQ
 PROGRAM NAI Buildsmart

(1)	(2)	(3)	(4)	(5)	(5a)*	(5b)*	(6)	(7)	(8)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION \$(000)	DEFERRED TAX \$(000)	END OF YEAR NET PLANT IN SERVICE \$(000)	ACCUMULATED DEPRECIATION \$(000)	ACCUMULATED DEF TAXES \$(000)	BEGINNING YEAR RATE BASE \$(000)	ENDING OF YEAR RATE BASE \$(000)	MID-YEAR RATE BASE \$(000)
2005	3.75%	145	8	3,854	133	(58)	4,053	3,912	3,983
2006	7.22%	279	60	3,721	266	2	3,912	3,719	3,816
2007	6.68%	258	52	3,588	399	54	3,719	3,534	3,627
2008	6.18%	239	45	3,455	532	98	3,534	3,357	3,445
2009	5.71%	221	38	3,322	664	136	3,357	3,186	3,271
2010	5.29%	204	31	3,189	797	168	3,186	3,022	3,104
2011	4.89%	189	25	3,056	930	193	3,022	2,863	2,943
2012	4.52%	175	20	2,923	1,063	213	2,863	2,711	2,787
2013	4.46%	172	19	2,791	1,196	232	2,711	2,559	2,635
2014	4.46%	172	19	2,658	1,329	251	2,559	2,407	2,483
2015	4.46%	172	19	2,525	1,462	270	2,407	2,255	2,331
2016	4.46%	172	19	2,392	1,595	289	2,255	2,103	2,179
2017	4.46%	172	19	2,259	1,728	308	2,103	1,951	2,027
2018	4.46%	172	19	2,126	1,860	327	1,951	1,799	1,875
2019	4.46%	172	19	1,993	1,993	346	1,799	1,647	1,723
2020	4.46%	172	19	1,860	2,126	365	1,647	1,495	1,571
2021	4.46%	172	19	1,728	2,259	384	1,495	1,343	1,419
2022	4.46%	172	19	1,595	2,392	403	1,343	1,191	1,267
2023	4.46%	172	19	1,462	2,525	422	1,191	1,039	1,115
2024	4.46%	172	19	1,329	2,658	441	1,039	887	963
2025	2.23%	86	(14)	1,196	2,791	427	887	769	828
2026	0.00%	0	(47)	1,063	2,923	360	769	683	726
2027	0.00%	0	(47)	930	3,056	332	683	598	641
2028	0.00%	0	(47)	797	3,189	285	598	512	555
2029	0.00%	0	(47)	664	3,322	237	512	427	470
2030	0.00%	0	(47)	532	3,455	190	427	342	384
2031	0.00%	0	(47)	399	3,588	142	342	256	299
2032	0.00%	0	(47)	266	3,721	95	256	171	213
2033	0.00%	0	(47)	133	3,854	48	171	85	128
2034	0.00%	0	(47)	(0)	3,987	0	85	0	43

* Column not specified in workbook

(1) YEAR	(2) NO. YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING (\$/kW)	(7) CUMULATIVE AVERAGE SPENDING (\$/kW)
1998	-7	0.00%	1.000	0.00%	0.00	0.00
1999	-6	1.78%	1.018	0.00%	0.00	0.00
2000	-5	1.53%	1.033	0.32%	1.72	0.86
2001	-4	2.64%	1.061	0.65%	3.58	3.51
2002	-3	2.62%	1.088	13.85%	78.24	44.42
2003	-2	2.28%	1.113	35.34%	204.20	185.63
2004	-1	2.27%	1.139	49.84%	294.50	434.98

100.00% 582.24

(8) NO. YEARS BEFORE IN-SERVICE	(8) CUMULATIVE SPENDING WITH AFUDC (\$/kW)	(8a)* DEBT AFUDC (\$/kW)	(8b)* CUMULATIVE DEBT AFUDC (\$/kW)	(9) YEARLY TOTAL AFUDC (\$/kW)	(9a)* CUMULATIVE TOTAL AFUDC (\$/kW)	(9b)* CONSTRUCTION PERIOD INTEREST (\$/kW)	(9c)* CUMULATIVE CPI (\$/kW)	(9d)* DEFERRED TAXES (\$/kW)	(9e)* CUMULATIVE DEFERRED TAXES (\$/kW)	(10) INCREMENTAL YEAR-END BOOK VALUE (\$/kW)	(11) CUMULATIVE YEAR-END BOOK VALUE (\$/kW)	
1998	-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1999	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000	-5	0.86	0.03	0.03	0.09	0.07	0.07	(0.01)	(0.01)	1.80	1.80	
2001	-4	3.59	0.12	0.15	0.37	0.46	0.34	(0.06)	(0.07)	3.95	5.75	
2002	-3	44.88	1.54	1.69	4.63	5.09	3.74	(0.72)	(0.79)	82.87	88.62	
2003	-2	190.72	8.55	8.24	19.72	24.80	14.39	18.13	(3.03)	(3.82)	223.91	312.54
2004	-1	459.79	15.86	24.09	47.73	72.53	34.44	52.57	(7.17)	(10.98)	342.23	654.77

24.09

72.53

52.57

(10.98)

654.77

IN SERVICE YEAR 2005
PLANT COSTS 519
AFUDC RATE 10.30%

	BOOK BASIS		
	BOOK BASIS	FOR DEF TAX	TAX BASIS
CONSTRUCTION CASH	3,545	3,545	3,545
EQUITY AFUDC	295		
DEBT AFUDC	147	147	
CPI			320
TOTAL	3,987	3,692	3,865

* Column not specified in workbook

INPUT DATA -- PART 2
 PROGRAM METHOD SELECTED : REV_REQ
 PROGRAM NAME Buildsmart

(1)	(2)	(3)	(4)	(5)	(6)*	(7)	(8)	(9)
YEAR	CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	UTILITY AVERAGE SYSTEM FUEL COST (C/kWh)	AVOIDED MARGINAL FUEL COST (C/kWh)	INCREASED MARGINAL FUEL COST (C/kWh)	REPLACEMENT FUEL COST (C/kWh)	PROGRAM kW EFFECTIVENESS FACTOR	PROGRAM kWh EFFECTIVENESS FACTOR
1998	0	0	2.00	2.42	2.04	0.00	1.00	1.00
1999	0	0	2.23	2.73	2.31	0.00	1.00	1.00
2000	1,000	1,000	2.45	3.05	2.54	0.00	1.00	1.00
2001	2,000	2,000	2.73	3.62	2.86	0.00	1.00	1.00
2002	3,000	3,000	2.81	3.21	2.73	0.00	1.00	1.00
2003	4,000	4,000	2.60	3.33	2.70	0.00	1.00	1.00
2004	5,000	5,000	2.78	3.60	2.90	0.00	1.00	1.00
2005	5,000	5,000	2.93	3.93	3.07	3.25	1.00	1.00
2006	5,000	5,000	3.01	4.02	3.15	3.34	1.00	1.00
2007	5,000	5,000	3.13	4.39	3.29	3.49	1.00	1.00
2008	5,000	5,000	3.07	4.20	3.22	3.45	1.00	1.00
2009	5,000	5,000	3.15	4.32	3.30	3.60	1.00	1.00
2010	5,000	5,000	3.14	4.49	3.30	3.57	1.00	1.00
2011	5,000	5,000	3.32	4.63	3.49	3.71	1.00	1.00
2012	5,000	5,000	3.38	4.75	3.55	3.77	1.00	1.00
2013	5,000	5,000	3.47	4.91	3.65	3.84	1.00	1.00
2014	5,000	5,000	3.55	5.08	3.72	3.92	1.00	1.00
2015	5,000	5,000	3.68	5.18	3.76	3.95	1.00	1.00
2016	5,000	5,000	3.82	5.29	3.80	4.00	1.00	1.00
2017	5,000	5,000	3.75	5.51	3.93	4.13	1.00	1.00
2018	5,000	5,000	3.93	5.79	4.13	4.35	1.00	1.00
2019	5,000	5,000	4.09	6.12	4.31	4.55	1.00	1.00
2020	5,000	5,000	4.23	6.36	4.47	4.79	1.00	1.00
2021	5,000	5,000	4.32	6.53	4.56	4.88	1.00	1.00
2022	5,000	5,000	4.41	6.73	4.68	4.97	1.00	1.00
2023	5,000	5,000	4.53	6.94	4.79	5.10	1.00	1.00
2024	5,000	5,000	4.64	7.17	4.91	5.23	1.00	1.00

* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS.
 THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

AVOIDED GENERATING BENEFITS
 PROGRAM METHOD SELECTED: REV_REQ
 PROGRAM NAME Buildsmart

YEAR	(2) AVOIDED GEN UNIT CAPACITY COS \$(000)	(3) AVOIDED GEN UNIT FIXED O&M \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M \$(000)	(5) AVOIDED GEN UNIT FUEL COST \$(000)	(6) REPLACEMENT FUEL COST \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
1998	0	0	0	0	0	0
1999	0	0	0	0	0	0
2000	0	0	0	0	0	0
2001	0	0	0	0	0	0
2002	0	0	0	0	0	0
2003	0	0	0	0	0	0
2004	0	0	0	0	0	0
2005	777	279	39	1,051	1,576	570
2006	752	290	41	1,101	1,667	518
2007	725	301	43	1,134	1,767	437
2008	698	314	44	1,148	1,743	461
2009	673	326	45	1,149	1,797	396
2010	648	339	44	1,119	1,716	434
2011	625	353	46	1,135	1,785	373
2012	602	367	47	1,168	1,814	370
2013	580	381	48	1,204	1,829	384
2014	558	397	49	1,239	1,849	393
2015	535	413	50	1,261	1,860	399
2016	513	429	51	1,282	1,866	409
2017	491	446	53	1,321	1,936	376
2018	469	464	55	1,361	2,045	304
2019	447	483	57	1,409	2,161	235
2020	424	502	58	1,452	2,278	161
2021	402	522	60	1,484	2,317	151
2022	380	543	62	1,518	2,361	141
2023	358	565	64	1,714	2,419	280
2024	336	587	65	1,714	2,482	220

NOM	10,994	8,300	1022	25,962	39,266	7,012
NPV	3,345	2,031	260	6,650	10,105	2,182

AVOIDED T&D AND PROGRAM FUEL SAVINGS
 PROGRAM METHOD SELECTED: REV_REQ
 PROGRAM NAME Buildsmart

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8a)*
YEAR	AVOIDED TRANSMISSION CAP COST \$(000)	AVOIDED TRANSMISSION O&M COST \$(000)	TOTAL AVOIDED TRANSMISSION COST \$(000)	AVOIDED DISTRIBUTION CAP COST \$(000)	AVOIDED DISTRIBUTION O&M COST \$(000)	TOTAL AVOIDED DISTRIBUTION COST \$(000)	PROGRAM FUEL SAVINGS \$(000)	PROGRAM OFF-PEAK PAYBACK \$(000)
1998	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	26	0
2001	16	4	20	10	16	27	96	0
2002	32	8	40	21	34	54	138	0
2003	47	12	59	31	53	84	204	0
2004	63	17	79	41	73	114	284	0
2005	78	22	99	50	95	146	349	0
2006	75	23	97	49	99	147	356	0
2007	72	24	96	47	103	150	396	0
2008	69	25	94	45	107	152	376	0
2009	66	26	92	43	111	154	387	0
2010	64	27	91	42	116	157	409	0
2011	61	28	89	40	120	160	417	0
2012	59	29	88	38	125	163	430	0
2013	56	30	86	37	130	167	446	0
2014	54	31	85	35	135	170	463	0
2015	52	32	84	33	141	174	473	0
2016	49	34	83	32	146	178	485	0
2017	47	35	82	30	152	183	507	0
2018	44	37	81	29	158	187	533	0
2019	42	38	80	27	165	192	567	0
2020	39	40	79	26	171	197	590	0
2021	37	41	78	24	178	202	608	0
2022	35	43	77	23	185	208	627	0
2023	33	44	77	21	193	214	648	0
2024	31	46	77	20	200	221	671	0

NOM.	1,219	694	1,913	792	3,009	3,801	10,485	0
NPV	430	186	616	279	808	1,087	2,911	0

* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

TOTAL RESOURCE COST TEST
 PROGRAM METHOD SELECTED: REV_REQ
 PROGRAM NAME: Buildsmart

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
1998	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	227	1,013	0	1,240	0	0	26	0	26	(1,213)	(1,022)
2001	0	233	1,039	0	1,272	0	46	96	0	142	(1,130)	(1,895)
2002	0	239	1,066	0	1,305	0	94	138	0	232	(1,073)	(2,656)
2003	0	245	1,095	0	1,340	0	143	204	0	347	(894)	(3,302)
2004	0	252	1,123	0	1,375	0	193	284	0	478	(898)	(3,838)
2005	0	0	0	0	0	570	245	349	0	1,164	1,164	(3,201)
2006	0	0	0	0	0	518	245	356	0	1,119	1,119	(2,638)
2007	0	0	0	0	0	437	245	396	0	1,079	1,079	(2,140)
2008	0	0	0	0	0	461	246	376	0	1,082	1,082	(1,682)
2009	0	0	0	0	0	396	247	387	0	1,030	1,030	(1,282)
2010	0	0	0	0	0	434	248	409	0	1,091	1,091	(893)
2011	0	0	0	0	0	373	249	417	0	1,039	1,039	(553)
2012	0	0	0	0	0	370	251	430	0	1,051	1,051	(238)
2013	0	0	0	0	0	384	253	446	0	1,083	1,083	60
2014	0	0	0	0	0	393	256	463	0	1,112	1,112	341
2015	0	342	1,523	0	1,865	399	258	473	0	1,130	(735)	171
2016	0	352	1,567	0	1,919	409	261	485	0	1,156	(763)	8
2017	0	362	1,613	0	1,975	376	264	507	0	1,147	(828)	(153)
2018	0	372	1,660	0	2,032	304	268	533	0	1,105	(827)	(319)
2019	0	383	1,708	0	2,091	235	272	567	0	1,073	(1,018)	(487)
2020	0	0	0	0	0	161	276	590	0	1,026	1,026	(332)
2021	0	0	0	0	0	151	280	608	0	1,038	1,038	(188)
2022	0	0	0	0	0	141	285	627	0	1,054	1,054	(54)
2023	0	0	0	0	0	280	291	648	0	1,220	1,220	88
2024	0	0	0	0	0	220	298	671	0	1,188	1,188	215
NOM	0	3,008	13,406	0	16,414	7,012	5,714	10,485	0	23,211	6,797	
NPV	0	1,206	5,374	0	6,580	2,182	1,703	2,911	0	6,795	215	

Discount Rate: 8.98 %
 Benefit/Cost Ratio (Col(11) / Col(5)) : 1.03

RATE IMPACT TEST
 PROGRAM METHOD SELECTED: REV_REQ
 PROGRAM NAME: Buildsmart

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT & FUEL BENEFITS \$(000)	AVOIDED T&D BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
1998	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	227	0	53	0	280	26	0	0	0	26	(253)	(213)
2001	0	233	0	159	0	392	96	46	0	0	142	(250)	(407)
2002	0	239	0	265	0	505	138	94	0	0	232	(273)	(600)
2003	0	246	0	377	0	622	204	143	0	0	347	(278)	(780)
2004	0	252	0	486	0	738	284	193	0	0	478	(260)	(935)
2005	0	0	0	545	0	545	919	245	0	0	1,164	618	(596)
2006	0	0	0	544	0	544	874	245	0	0	1,119	575	(307)
2007	0	0	0	547	0	547	834	245	0	0	1,079	532	(62)
2008	0	0	0	549	0	549	836	246	0	0	1,082	532	163
2009	0	0	0	549	0	549	783	247	0	0	1,030	481	350
2010	0	0	0	562	0	562	843	248	0	0	1,091	529	539
2011	0	0	0	562	0	562	790	249	0	0	1,039	478	695
2012	0	0	0	566	0	566	800	251	0	0	1,051	485	841
2013	0	0	0	569	0	569	829	253	0	0	1,083	513	982
2014	0	0	0	576	0	576	856	256	0	0	1,112	536	1,117
2015	0	342	0	579	0	921	872	258	0	0	1,130	209	1,166
2016	0	352	0	584	0	935	895	261	0	0	1,156	221	1,213
2017	0	362	0	584	0	946	883	264	0	0	1,147	201	1,252
2018	0	372	0	588	0	960	837	268	0	0	1,105	145	1,278
2019	0	383	0	592	0	975	801	272	0	0	1,073	98	1,294
2020	0	0	0	596	0	596	751	276	0	0	1,026	431	1,359
2021	0	0	0	599	0	599	758	280	0	0	1,038	439	1,420
2022	0	0	0	603	0	603	769	285	0	0	1,054	451	1,477
2023	0	0	0	607	0	607	928	291	0	0	1,220	612	1,549
2024	0	0	0	611	0	611	891	298	0	0	1,188	577	1,610

NOM.	0	3,008	0	12,854	0	15,862	17,497	5,714	0	0	23,211	7,349	
NPV	0	1,206	0	3,979	0	5,185	5,092	1,703	0	0	6,795	1,610	

Discount Rate 8.98 %
 Benefit/Cost Ratio (Col(12) / Col(7)) : 1.31

PARTICIPANT COSTS AND BENEFITS
 PROGRAM METHOD SELECTED: REV_REQ
 PROGRAM NAME Buildsmart

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
YEAR	SAVINGS IN PARTICIPANTS BILLS \$(000)	TAX CREDITS \$(000)	UTILITY REBATES \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	CUSTOMER EQUIPMENT COSTS \$(000)	CUSTOMER O&M COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
1998	0	0	0	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0	0	0	0
2000	86	0	0	0	86	1,013	0	0	1,013	(926)	(780)
2001	261	0	0	0	261	1,039	0	0	1,039	(778)	(1,381)
2002	435	0	0	0	435	1,066	0	0	1,066	(631)	(1,828)
2003	618	0	0	0	618	1,095	0	0	1,095	(477)	(2,139)
2004	796	0	0	0	796	1,123	0	0	1,123	(327)	(2,334)
2005	894	0	0	0	894	0	0	0	0	894	(1,844)
2006	892	0	0	0	892	0	0	0	0	892	(1,395)
2007	897	0	0	0	897	0	0	0	0	897	(982)
2008	901	0	0	0	901	0	0	0	0	901	(600)
2009	900	0	0	0	900	0	0	0	0	900	(251)
2010	921	0	0	0	921	0	0	0	0	921	78
2011	921	0	0	0	921	0	0	0	0	921	379
2012	928	0	0	0	928	0	0	0	0	928	657
2013	934	0	0	0	934	0	0	0	0	934	914
2014	945	0	0	0	945	0	0	0	0	945	1,153
2015	950	0	0	0	950	1,523	0	0	1,523	(573)	1,020
2016	957	0	0	0	957	1,567	0	0	1,567	(611)	890
2017	958	0	0	0	958	1,613	0	0	1,613	(655)	762
2018	964	0	0	0	964	1,660	0	0	1,660	(696)	638
2019	970	0	0	0	970	1,708	0	0	1,708	(738)	516
2020	976	0	0	0	976	0	0	0	0	976	664
2021	983	0	0	0	983	0	0	0	0	983	800
2022	989	0	0	0	989	0	0	0	0	989	926
2023	995	0	0	0	995	0	0	0	0	995	1,042
2024	1,002	0	0	0	1,002	0	0	0	0	1,002	1,149

NOM	21,072	0	0	0	21,072	13,406	0	0	13,406	7,666
NPV	6,523	0	0	0	6,523	5,374	0	0	5,374	1,149

In Service of Gen Unit: 2005
 Discount Rate : 8.98 %
 Benefit/Cost Ratio (Col(6) / Col(10)) 1.21