§25.181(I) continued

- (5) For residential and small commercial customer projects involving over 30 installations, a statistically significant sample of installations will be subject to on-site inspection in accordance with the protocol set out for the project. Inspection shall occur within 30 days of notification of measure installation to ensure that measures are installed and capable of performing their intended function. The energy efficiency service provider shall not receive final compensation until the customer documents work completion and the utility has conducted its inspection on the sample of installations.
- (6) Residential and small commercial customer projects of less than 30 installations may be aggregated and a statistically significant sample of the aggregate installations will be subject to on-site inspection in accordance with the protocol set out for the projects. Inspection shall occur within 30 days of notification of measure installation to ensure that measures are installed and capable of performing their intended function. The energy efficiency service provider shall not receive final compensation until the customer documents work completion and the utility has conducted its inspection on the sample of installations.
 - (A) An energy efficiency service provider shall not be penalized for the inspection failure rate of another energy efficiency service provider.
 - (B) An energy efficiency service provider with unsatisfactory inspection results shall be subject to further inspections.
- (7) The sample size for on-site inspections may decrease over time for a contractor under a particular contract that has consistently yielded satisfactory inspection results.
- (m) Independent measurement and verification (M&V) expert. An independent M&V expert shall be selected to verify energy and peak demand savings, including deemed savings, reported by energy efficiency service providers statewide for the calendar year 2002, and periodically thereafter as determined by the commission.
 - (1) The independent M&V expert shall be selected by the commission by competitive solicitation.
 - (2) The independent M&V expert shall be funded from the utilities' program administration budgets.
 - (3) The independent M&V expert shall perform:
 - (A) A verification of energy efficiency service providers' reported energy and peak demand savings, based on a statistically representative sample of completed projects;
 - (B) A limited process evaluation; and
 - (C) Any other task the commission deems necessary.
 - (4) By March 1, 2003, the independent M&V expert shall report its preliminary conclusions to the commission and make a recommendation whether the utilities' energy and peak demand savings should be adjusted. By March 2004, the independent M&V expert shall provide its full report.
- (n) Energy efficiency implementation project. The commission shall initiate an implementation project to make recommendations to the commission for its consideration with regard to best practices in standard offer programs and market transformation programs. All orders approved by the commission under Project Number 22241, Energy Efficiency Program Implementation Docket, and that are consistent with this section shall be transferred to the energy efficiency implementation project. Material submitted to the commission in this project believed to contain proprietary or confidential information shall be identified as such, and the commission may enter an appropriate protective order. The following functions may be undertaken in the energy efficiency implementation project:

§25.181(n) continued

- (1) Development and review of statewide standard offer programs.
- (2) Identification, design, and review of market transformation programs.
- (3) Development of the appropriate baseline for programs addressing new construction.
- (4) Determination of measures for which deemed savings are appropriate and participation in the development of deemed savings estimates for those measures.
- (5) Recommendation to the commission of one or more independent M&V expert to conduct the audit in accordance with subsection (m) of this section.
- (6) Review of and recommendations on the independent M&V expert's report with respect to whether utilities will meet the minimum legislative goal by January 1, 2004, and annually thereafter.
- (7) Review of and recommendations on incentive payment levels and the adequacy to induce the desired level of participation by the energy efficiency service providers and customer classes.
- (8) Review of and recommendations on the utility annual energy efficiency reports with respect to whether all customer classes have access to energy efficiency programs.
- (9) Periodic reviews of the cost effectiveness methodology.
- (10) Development of information packets for potential residential and commercial customers.
- (11) Other activities as requested by the commission.
- (o) Customer protection. The customer protection provisions under this section shall apply to residential and small commercial customers only. Each energy efficiency service provider who provides energy efficiency services to the end-use utility customer shall provide:
 - (1) Clear disclosure to the customer of the following:
 - (A) The customer's right to a cooling-off period of three business days, in which the contract may be canceled, if applicable under law.
 - (B) The name, telephone number, and street address of the energy services provider, the contractor, and written disclosure of all warranties.
 - (C) The fact that incentives are made available to the energy efficiency services provider through a ratepayer funded program, manufacturers or other entities.
 - (D) Notice of provisions that will be included in the customer's contract as described in paragraph (3) of this subsection.
 - (2) A form developed and approved by the commission may be used to satisfy the requirements of paragraph (1) of this subsection
 - (3) Contractual provisions to be included:
 - (A) Information on work activities, completion dates, and the terms and conditions that protect residential customers in the event of non-performance by the energy efficiency service provider.
 - (B) Written and oral disclosure of the financial arrangement between the energy efficiency service provider and customer. This includes an explanation of the: total customer payments, the total expected interest charged, all possible penalties for non-payment, and whether the customer's installment sales agreement may be sold.
 - (C) Disclosure of contractor liability insurance to cover property damage.
 - (D) An "All Bills Paid" affidavit be given to the customer to protect against claims of subcontractors.
 - (E) Provisions prohibiting the waiver of consumer protection statutes, performance warranties, false claims of energy savings and reductions in energy costs.

§25.181(0)(3) continued

- (F) Information on complaint procedures offered by the contractor, or the utility, as required under subsection (j)(2)(L) of this section, and toll free numbers for the Office of Customer Protection of the Public Utility Commission of Texas, and the Office of Attorney General's Consumer Protection Hotline.
- (G) Disclosure that the energy efficiency service provider is not part of, or endorsed by the commission or the utility.
- (p) Effective date: This section shall be in effect for any energy efficiency programs pursuant to this section with a start date of January 1, 2003 and thereafter.

DEMAND-S	ENTERGY GULF STATES , INC. IDE MANAGEMENT PROGRAM COSTS - TEST YEA FOR THE TEST YEAR ENDED JUNE 30, 1998	Schedule N-2.7 1988 TX Rate Case DEMAND-SIDE MANAGEMENT PROGRAM COSTS - TEST YEAR ADJUSTMENTS FOR THE TEST YEAR ENDED JUNE 30, 1998
LINE	PROGRAM NAME	Test Year Adjustments (<u>\$000)</u>
₩	EntergyAssist Low Income Weatherization Program	863 Pro forma adjustment #31 to reflect expected annual expenditures for the program
	EntergyAssist Low Income Weatherization Program	(8) Pro forma adjustment # DHS01 to remove start-up costs of the program that occurred in the test year
	TOTAL	\$855
Sponsored by: Dan Baw and Neal Jansonius		

This page has been intentionally left blank.

2-58

Page 1 - Model Inputs and Assumptions

Cells marked with an asterisk * require input by the utility. Cells marked with a pound sign: # are assumptions and do not require utility inputs.

UHI		
uu		

Entergy Gulf States

inputs

Peak Load and Demand Reduction Goal

Year	Peak Load (MW) *	Goal (%)*	
2000	3075	. 0%	
2001	3012	0%	
2002	3079	5%	
2003	3145	10%	
2004	3202	10%	
2005	3285	10%	
2006	3331	10%	
2007	3402	10%	
2008	3468	10%	
2009	3550	10%	

Customer Class Allocation

Customer Class	Allocation Percentage *
L Commercial and Industrial	50%
Residential and S Commercial	34%
Hard to Reach	18%
Load Management	0%

Notes:

- 1. Peak Load represents anticipated peak system demand (minus wholesale transactions) for each year, based on official load forecast.

 2. Demand Reduction Goal represents the percent (%) of Annual Growth in Demand to be achieved by January 1 of each year.

 3. Customer Class Allocation represents the distribution of Demand Goals among customer classes.

Assumptions

Parameter	Description	Value #	Source
Utility Administrative Cost	Cost of utility administration as % of total program budget	10%	Energy Efficiency Rule
Annual Hours	Number of hours in a year	8760	
Capacity Cost	Cost of new combustion turbine (\$/MW/yr)	\$78,500	Energy Efficiency Rule
Discount Rate	Utility planning discount rate	10%	
Energy Cost	Off-peak market price for energy (\$/MWh)	\$26,80	Energy Efficiency Rule
Escalation Rate	Annual escalation rate of energy and capacity costs	3%	
Incentive Caps	Incentive cap as % of cost-effective ceiling for:		Energy Efficiency Rule
(by customer class)	Commercial and Industrial	35%	
-	Residential	50%	
	Hard to Reach	100%	
	Load Management	15%	
Independent Auditor Cost	Cost of independent auditor as a % of total program budget	0%	Energy Efficiency Rule
Line Losses	System distribution losses	7%	Energy Efficiency Rule
Load Factor	Average demand/peak demand for:		Survey of data from programs for
(by customer class)	Large Commercial and Industrial	0.42	each customer class similar to
•	Residential and Small Commercial	0.31	those proposed. Observed range
	Hard to Reach	0.78	of load factors from 0.4-0.8 for
			C&I, and 0.1-0.5 for
	Load Management	0.05	Residential/Hard to Reach.
Project Life	Project lifetime in years	10	Energy Efficiency Rule
Reserve Margin	Reserve capacity, as % of system demand	12%	Energy Efficiency Rule

8/5/2005

Inputs

Version 2

Page 2 - Demand and Energy Goals

Utility:

Enterpy Gulf States

Average Load Factor - All Customer Classes

Class	Customer Class Allocation [*]	Customer Class Load Factor [W]	Average Load Factor Contribution
Lg. Com. and Ind.	50%	0.42	0.21
Residential and Sm. Com.	34%	0.31	0.11
Hard to Reach	16%	0,78	0.12
Load Management	0%	0.06	0.00
		Average Load Factor:	0.44

noise;
1. The Average Load Factor Contribution for each class is the product of the Customer Class Altocation and Customer Class Load Factor,
2. The Average Load Factor for all oustomer classes is the sum of the Average Load Factor Contribution for each customer class.

Demand and Energy Goals - All Customer Classes

Year	Annual Growth in Demand (MW)	Demand Reduction Goal (%) 11	System Level Demand Goal (MW)	Project Level Demand Goal (MW)	Project Level Energy Goal (MWh
2001	•	0%	•	•	•
2002	67	5%	3.4	3,1	12,033
2003	56	10%	6.6	6,1	23,708
2004	57	10%	5.7	5.3	20,475
2005	83	10%	8.3	7.7	29,814
2006	46	10%	4.6	4.3	16,524
2007	71	10%	7.1	6.6	25,504
2008	66	10%	6.6	6.1	23,708
2009	82	10%	8.2	7.6	29,455

1. Armusi Growth in Demend for each year is the Peak Load for that year, minus Peak Load for the previous year.
2. System Level Demend Goal is the product of the Annual Growth in Demend and the Demand Reduction Goal.
3. Project Level Demand Goal is the System Level Goal reduced to account for Line Losses.
4. Project Level Energy Goal is the product of the Project Level Demand Goal, Annual Hours, and the Average Load Factor.

Demand and Energy Goals - By Customer Class

Ţ		Project Level Demand	Project Level Energy
Class	Year	Goal (MW)	Goal (MWh)
	2001		
	2002	1.6	5,731
f	2003	3.1	11,291
Lg. Com. & Ind.	2004	2.7	9,752
ľ	2005	3.9	14,200
f	2008	2.1	7,870
Ī	2007	3.3	12,147
Ī	2008	3.1	11,291
f	2009	3.8	14,029
	2001	•	•
Ĩ	2002	1.1	2,914
Residential and	2003	2.1	5,740
Small Commercial	2004	1.8	4,958
1	2005	2.6	7,219
!	2006	1.5	4,001
ľ	2007	2.2	6,175
	2008	2.1	5,740
	2009	2.8	7,132
	2001	•	•
	2002	0.5	3389
-	2003	1.0	6,676
Hard to Reach	2004	0.8	5,766
	2005	1.2	8,396
	2006	0.7	4,653
	2007	1.1	7,182
	2008	1 1.0	6,676
†	2009	1.2	8,294
<u> </u>	2001	-	
Ì	2002	0.0	0
1	2003	0.0	0
Load Management	2004	0.0	0
	2005	0.0	Ō
1	2006	1 00	0
1	2007	0.0	i o
1	2008	0.0	iò
	2009	0.0	1 0

1. Project Level Demand Goal for each class is the product of the Project Level Demand Goal (all customer classes) and the Customer Class Allocation fo 2. Project Level Energy Goal for each class is the product of the Project Level Demand Goal for that class, Annual Hours, and the Load Factor for that class

Oraft

Goels

Version 2

Page 3 - Budgets

Utility:

Enlargy Gulf States

Avoided Costs

Cost	Annual	Lifetime
Avoided Capacity Cost (\$MW)	\$ 93,415	\$ 707,349
Avoided Energy Cost (\$MWh)	\$ 28.7	\$ 217,1
Total Avoided Cost (S/MW)	\$ 204,175	\$ 1,548,038

- Notes:
 1. Annual Avoided Capacity Cost reflects credit for Reserve Margin and Line Losses.
 2. Annual Avoided Energy Cost reflects credit for Line Losses.
 3. Lifetime costs represent NPV of avoided costs over Measure Lifetime, Avoided costs are escalated by the Escalation Rate and discounted by the Utility Discount Rate.
 4. Total Avoided Cost Includes capacity and energy components based on Average Load Factor.

Budgets by Customer Class

Class	Year	Demand incentive Budget	Energy incentive Budget	Total incentive Budget	Utility Admin Budget	independent Auditor Admin Budget	Total Admin Budget	Total Budget
	2001			_			-	
	2002	\$385,658	\$435,567	\$821,223	\$91,247	\$0	\$91,247	\$912,470
	2003	\$759,799	\$858,132	\$1,817,932	\$179,770	\$0	\$179,770	\$1,797,702
	2004	\$656,190	\$741,114	\$1,397,305	\$155,258	30	\$155,258	\$1,552,581
Commercial and Industrial	2005	\$955,505	\$1,079,166	\$2,034,672	\$226,075	\$0	\$226,075	\$2,260,746
-	2008	\$529,557	\$598,092	\$1,127,649	\$125,294	\$0	\$125,294	\$1,252,944
	2007	\$817,360	\$923,142	\$1,740,502	\$193,389	\$0	\$193,3891	\$1,933,891
	2008	\$759,799	\$858,132	\$1,017,932	\$179,770	\$0	\$179,770	\$1,797,702
	2009	\$943,993	\$1,066,164	\$2,010,158	\$223,351	\$0	\$223,351	\$2,233,508
	2001						•	
	2002	\$374,637	\$318,334	\$690,971	\$76,775	\$0	\$76,775	\$767,748
	2003	\$738,091	\$623,226	\$1,351,317	\$151,257	\$0	\$151,257	\$1,512,574
Residential	2004	\$637,442	\$538,241	\$1,175,683	\$130,631	\$0	\$130,631	\$1,305,314
	2005	\$928,205	\$763,754	\$1,711,959	\$190,218	30	\$190,218	\$1,902,177
	2006	\$514,427	\$434,370	\$948,797	\$105,422	\$0	\$105,422	\$1,054,218
	2007	\$794,007	\$670,440	\$1,464,447	\$162,716	\$0	\$162,716	\$1,627,163
	2008	\$738,091	\$623,226	\$1,361,317	\$151,257	20	\$151,257	\$1,512,574
	2009	\$917,022	\$774,311	\$1,691,333	\$187,926	\$0	\$187,926	\$1,679,250
	2001		-					
	2002	\$317,340	\$662,204	\$979,544	\$77,087	\$0	\$77,087	\$1,058,611
	2003	\$625,206	\$1,304,641	\$1,929,848	\$151,833	\$0	\$151,833	\$2,081,881
Hard to Reach	2004	\$539,951	\$1,126,738	\$1,866,687	\$131,129	\$0	\$131,129	\$1,797,815
	2005	\$786,244	\$1,640,685	\$2,426,930	\$180,942	30	\$190,942	\$2,617,871
	2006	\$435,750	\$909,298	\$1,345,045	\$105,823	\$0	\$105.823	\$1,450,868
	2007	\$672,570	\$1,403,478	\$2,078,048	\$163,336	\$0	\$163,336	\$2,239,384
	2008	\$625,208	\$1,304,641	\$1,929,848	\$151,833	\$0	\$151.833	\$2,081,681
	2009	\$776,772	\$1,620,918	\$2,397,690	\$188,641	\$0	\$188,641	\$2,586,331
	2001							
	2002		\$0	\$0	\$0	50	\$0	\$0
	2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Load Management	2004	\$0		\$0	30	\$0	\$0	\$0
•	2005	\$0			\$0	\$0	\$0	\$0
	2006	\$0			\$0	\$0	\$0	\$0
	2007	\$0			\$0	\$0	\$0	\$0
	2008	\$0	\$0		\$0	\$0	\$0	\$0
	2009	\$0			\$0	\$0	\$0	SO

- Notes:

 1. Demand Incentive Budget for each class (except Load Management) is based on Project Level Demand Goal for that class, Avoided Capacity Cost (Lifetime), and incentive cap for that class. For Load Management, calculation uses Avoided Capacity Cost (Annual).

 2. Emergy Incentive Budget for each class (except Load Management) is based on Project Level Energy Goal for that class, Avoided Energy Cost (Lifetime), and the incentive cap for that class. For Load Management, calculation uses Avoided Energy Cost (Annual).

 3. Utility Administrative Budget is based on or the Total Budget and the Utility Administrative Cost as a % of total budget.

 4. Independent Auditor Budget is based on the Total Budget and the Independent Auditor Cost as a % of total budget.

 5. Total Budget is capped by the cost-effectiveness standard, as defined in the Energy Efficiency Rule.

Budgets - All Customer Classes

Class	Year	Demand Incentive Budget	Energy Incentive Budget	Total Incentive Budget	Utility Admin Budget	independent Auditor Admin Budget	Total Admin Budget	Total Budget
i '	2001	•	•		•		-	*
	2002	\$1,077,632	\$1,414,108	\$2,491,738	\$245,088	\$0	\$245,088	\$2,736,827
1	2003	\$2,123,097	\$2,786,000	\$4,909,096	\$482,861	80	\$482,861	\$5,391,957
	2004	\$1,833,583	\$2,408,091	\$4,239,674	\$417,018	\$0	\$417,018	\$4,656,890
At	2005	\$2,669,965	\$3,503,808	\$6,173,560	\$607,234	\$0	\$607,234	\$8,780,794
•	2008	\$1,479,734	\$1,941,757	\$3,421,491	\$336,539	\$0	\$336,539	\$3,758,031
	2007	\$2,283,937	\$2,997,080	\$5,280,997	\$519,441	\$0	\$519,441	\$5,800,439
1	2008	\$2,123,097	\$2,786,000		\$482,861	\$0		\$5,391,957
	2009	\$2,637,787	\$3,481,394	\$8,099,180		30		
Budget Totals		\$16,228,521	\$21,296,013	\$37,524,834	\$3,690,958	\$0	\$3,690,958	\$41,215,792

1. Sum of Budgets by Customer Class.

Draft

Budgets

Page 4 - Cash flow

Includes all costs essociated with meeting goals through 1/1/2009 includes full annual budgets through 2007

Enterpy Gulf States

		· · · · · · · · · · · · · · · · · · ·										
					Milesto						Total	Total Budgeted
	3/1/2000	1/1/2001	1/1/2002	1/1/2003	1/1/2004	1/1/2006	1/1/2006	1/1/2007	1/1/2008	1/1/2009	Recoverable	
Demand Goal (MM)				1								
Large Commercial & Industrial	-		1.6	3.1	27	3,9	2.1	3,3	3.1	3.4		
Residental and Small Commercial	-		1.1	21	1.8	2.6	1.5	22	2.1	2.6		
Hard to Reach	•	-	0.5	1.0	9.8	1.2	0,7	9.1	1.0	1.2		
Load Management	•		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Demand Geel (MAV)			3,1	6,1	5.3	7.7	4.3	8.8	6,1	7,6		
Contracted Goals (MM)												
Large Commercial & industrial		1.0	3.1	2.7	3.9	2.1	3.3	3,1	3.8	780		
Residential and Small Commercial	•	5.1	2.1		2.6	1.6	22	21	2.6			
Herd to Reach		0.5	1.0	0.8	1.2	0.7	_1,1	1.0		TBD		
Load Management Total Contracted Goals (MW)			0.0		6.0	0.0	0.0	0.0			1	
Total Contracted Goals (MAV)	١	3,1	6.1	5.3	7.7	4.3	6,6	6.1	7.6	780		
Incentive Contract Commitments Lg. Commercial & Industrial Residential and Small Commercial				1								
Lg. Commercial & Industrial	•	\$ 821,223	\$1,617,932	\$ 1,397,305	\$ 2,034,672	\$1,127,849	\$ 1,740,502	\$ 1,617,932	\$ 2,010,158	780		
Residential and Small Commercial		\$ 690,971	\$ 1,361,317	\$ 1,175,683	\$ 1,711,959	\$ 948,797	\$ 1,740,502 \$ 1,454,447	\$ 1,361,317	\$ 1,691,333	TBO	L	<u> </u>
Hard to Reach	-	\$ 979,544	\$ 1,929,848	\$ 1,686,687	\$ 2,426,830	\$1,345,045	\$ 2,076,048	\$ 1,929,848	\$ 2,397,090	780		L
Load Management	•		3 0	3 0	3 0	\$ 0.	3 0	3 0	8 0	3 0	L	<u> </u>
Total Incentive Contract Commitments	-	\$ 2,491,738	\$ 4,909,096	\$ 4,239,674	\$6,173,580	\$ 3,421,491	\$ 5,280,997	\$ 4,909,098	3 6,099,180	3 0	8 37,524,834	\$ 37,524,534

	1	Budget Year							Total	Total Budgeted				
		2000		2001	2002	2003	2004	2905	2905	2907	2008	2009	Recoverable	
ncentive Cash Flow														
Lg. Commercial & Industrial		2,122	3 49	0.242	\$ 1,197,515	\$ 1,571,355	\$ 1,625,268	\$ 1,642,446	\$ 1,421,819	8 1,718,440	\$ 1,613,029	********		
Positiontal and Small Commercial	\$ 6	9,097	\$ 78	8,006	\$ 1,342,763	\$ 1,229,310	\$ 1,635,843	\$ 1,000,362	\$ 1,454,134	\$ 1,394,318	\$ 1,522,200	\$ 0		
Hard to Renot	8 9	7,954	\$ 1,07	4.574	\$ 1,903,532	8 1,742,711	\$ 2,318,741	\$ 1,418,148	\$ 2,051,428	\$ 1,878,632	\$ 2,167,921	\$ 0		
Load Menagement	1			0	\$ 6	\$ -	\$	\$			\$	8 -		
Total Incentive Ceah Flow	\$ 24	9,174	\$ 2,32	2,863	\$ 4,443,800	\$ 4,543,376	\$ 5,579,870	\$ 4,060,953	\$ 4,937,381	\$ 5,089,390	\$ 5,293,149	******	\$ 37,824,834	\$ 37,834,834
Administrative Gash Flow	I													
July Administrative Budget	1													
Program Design and Material Development (*)	\$ 25	0,000	\$ 60	0,000								T	\$ 850,000	\$ 450,000
Contract Administration/Processing	T												8 -	\$ -
M&V Validation and Due Diligence	1									,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1	1	\$ -	\$ -
Provider Outreach [*]	1										•		\$	
Infrastructure Development [1]	1					***************************************					i	1	\$ -	*
Market (Research/Validation [*]	1								***************************************	·	·	1	\$ -	3 .
Total Utility Admiristration	T	0	5	0,142	-	-	217.290	259,303	196,282	231,410	211,780	46,141	\$ 1,954,295	\$ 2,704,299
PUCT Auditing	T					242,064			l	T	I	T	3 242,064	8 242,004
Total Administrative Costs (Utility-PUCT)	13	6.	\$ 6	0.162	3 399,846	\$ 484,168	\$ 217.290	\$ 259,303	\$ 196,282	\$ 231,410	\$ 211,780	\$ 46,141	\$ 2,006,383	\$ 2,946,383
Total Program Costs	13	0	\$ 50	11,516	\$ 3,998,464	\$ 4,841,681	\$4,345,798	\$ 5,184,068	8 3,925,650	\$ 4,628,206	\$ 4,235,605	\$ 922,310	\$ 32,504,500	\$ 33,436,866
% Administrative	1***	100%		10%			5%	5%	5%	6%	5%	5%		

Average USBy Admin. 2002 \$329,565

Budget assemptions:				
Incentive Cosh Flow associated with each goal is distributed over three years as follows:	CALIE	Res F Here	to Reach [#]	Load Mgmt [F]
Portion paid in the budget year contracts are signed:	10%	10%	10%	0%
Person paid in the budget year following contract signing (installation and initial verification):	40%	90%	90%	100%
Portion paid the second budget year following contract signing (final verification);	50%	0%	0%	0%
Program Design and Material Development, Provider Outreach, Infrastructure Development, and Market Research/Mildution pouls				
are assimated as front-and loaded food costs, and are not calculated as a % of program budgets.				
Contract Administration/Processing cost is calculated as a % of incentive Contract Commitments in year centracts are signed:	4%	4%	4%	2%
M&V Validation and Due Diligence cost is calculated as a % of incentive Contract Commitments, distributed over two years as follows:				
Perfor of MEV sudget spent in budget year following contract signing (natellation and initial verification);	8%	7%	7%	1%
Portion of M&V budget spent in second budget year following contract signing (final verification):	2%	1%	196	9%
PLICT Audit Cost is enfoulated as a M. of incenting Contract Commitments in account by the day of the land and administrative	444	444	494	194

Motes:
TBD - To be determined - Orinen by goals beyond 17/2009
TBD - To be determined - Orinen by goals beyond 17/2009
Couls reflect only activities related to activiting goals through the 1/1/2009 goal. Costs associated with the 1/1/2019 goal and beyond are assisted.

Texas Utility Energy Efficiency Group

Program Descriptions

DRAFT

prepared by:

Schiller Associates

1333 Broadway, Suite 1015 Oakland, California 94612 (510) 444-6500 www.schiller.com

3 March 2000

Program Descriptions

This document presents descriptions of six programs developed to comply with the Energy Efficiency Rule §25.181 implementing Texas Senate Bill 7. These programs have been developed as preliminary program designs to be refined following April 1, 2000 through an energy efficiency implementation docket sponsored the Public Utility Commission of Texas.

Table of Contents

Commercial and Industrial Standard Offer Program	3
Residential Standard Offer Program	9
Air Conditioning Distributor Program	14
Energy Star Homes Program	
Hard to Reach Program	24
Load Cooperative Program	

Commercial and Industrial Standard Offer Program

Program Overview

Description

The Commercial and Industrial Standard Offer Program provides incentives for the retrofit installation of a wide range of measures that reduce demand and save energy in non-residential facilities. Incentives are paid to energy service providers on the basis of deemed savings or verified demand and energy savings. This program has been developed to comply with the Energy Efficiency Rule §25.181 implementing Senate Bill 7.

Rationale

This program seeks to encourage market activity by energy service companies that provide a range of installation, financing and verification services. These service providers have demonstrated success in commercial and industrial markets through similar programs offered by utilities in California, Texas, New York and New Jersey. This program type will serve as a central program in meeting the requirements of the Energy Efficiency Rule.

Program Objectives

The primary objective of this program is to provide cost-effective reduction in peak summer demand. Additional objectives of the program are to:

- Encourage private sector delivery of energy efficiency products and services
- Encourage customer energy and cost savings
- Minimize barriers to participation by streamlining program procedures and measurement and verification (M&V) requirements

Program Pricing

Pricing Structure

Standard incentive prices are offered for demand savings (maximum of \$208 /kW) and energy savings (maximum of \$0.071/kWh). These incentive levels correspond to 35% of avoided costs. Incentive payments will be based on savings over a one-year period. Savings will be either stipulated through standardized savings values or formulas ("deemed savings") or estimated through measurement and verification.

Savings will reflect the difference between the energy consumption of the equipment to be installed and the energy consumption of similar equipment that just meets minimum federal or industry standards (e.g., ASHRAE 90.1, NEMA).

Demand savings will be calculated as the maximum 15-minute demand reduction that occurs during the peak summer period, defined as weekdays, between the hours of 12 pm and 8 pm during the months of May, June, July, August, and September. For each

Schiller Associates Page 3 of 25 March 3, 2000

project, incentive payments for energy savings will be capped by assuming a maximum project load factor.

Cost-Effectiveness

The Energy Efficiency Rule requires that incentive payments for this program do not exceed 35% of avoided costs and that administrative costs do not exceed 5% of total program cost. With these requirements, overall costs for the utility to acquire end-use savings of demand and energy through this program do not exceed 37% of the cost of acquiring equivalent supply-side resources.

Avoided costs are based on state-wide values stipulated by the Public Utility Commission of Texas (PUCT) of \$66,000/MW/yr and \$25/MWh for energy. The avoided capacity cost is increased to account for a 12% reserve margin and 7% line losses. The avoided energy cost is increased to account for 7% line losses. Avoided costs are represented as the present value of a stream of annual costs, assuming a measure life of 10 years, a discount rate of 10%, and inflation of 3% per year.

Eligibility

Participant

Any entity that installs eligible demand-side management (DSM) measures at a facility with non-residential electricity distribution service provided by the sponsoring utility is eligible to participate in the program as a project sponsor. Eligible project sponsors may include:

- National or local energy service companies (ESCOs)
- National or local companies that provide energy-related services (e.g., contracting) or products (e.g., lighting, HVAC equipment)
- Individual customers that install measures in their own facilities

To ensure that the program's incentive budget is allocated to projects that are likely to meet with success, all project sponsors will be required to demonstrate a commitment to fulfilling program objectives and competency in completing the proposed project. Project sponsors will be required to submit the following information as part of the application process:

- A description of the project sponsor firm, including relevant experience, areas of expertise and references
- A work plan that covers the design, implementation, operation, and management of the project
- Evidence of credit rating
- Proof of applicable insurance, licenses and permits

To ensure that incentives are available to multiple energy service providers, no project sponsor may receive more than 20% of the program incentive budget.

Schiller Associates Page 4 of 25 March 3, 2000

Project

A project is defined by a set of proposed or installed measures and estimated demand and energy savings included in a single application. All projects must meet the following requirements:

- Each project must include a total estimated demand reduction of at least 100 kW. This limitation is included to ensure that projects contribute to the primary goal of reducing summer peak demand and to minimize administrative costs. This limitation will be revised based on the size of the total program budget.
- One project may involve the installation of measures at more than one customer site, so long as the customers and sites are similar. For example, installation of measures at a chain of grocery stores may include more than one customer, but may constitute a single project. This limitation is included to limit administrative costs for due-diligence review of applications and projects.

Projects that include a range of measure types are encouraged. If a project includes lighting measures only, incentive payments will be limited to 65% of the otherwise available amount.

Measure

The program does not specify specific eligible measures in order to provide energy service providers flexibility in packaging services. Project sponsors may propose the inclusion of any measure in their project that meets the following requirements:

- Measure must produce a measurable and verifiable electric demand reduction during the peak summer period and must reduce electricity consumption.
- Measure must produce savings through an increase in energy efficiency or a substitution of another energy source for electricity supplied through the transmission grid.
- Measure must be installed in a retrofit application.
- Measure must have a minimum useful life of 10 years.
- Measure must exceed minimum equipment standards as provided in the program manual.

The following measures are excluded from consideration in the program:

- Measures that involve plug loads.
- Measures that involve self-generation or cogeneration, except for renewable technologies.
- Measures that rely on changes in customer behavior and require no capital investment.
- Measures that result in negative environmental or health effects.

Schiller Associates Page 5 of 25 March 3, 2000

Measurement and Verification

Purpose

Measurement and verification (M&V) activities will be conducted for projects in order to verify incentive payments and project savings.

Responsibility

The project sponsor will be responsible for conducting all M&V activities. The program administrator will conduct a review of M&V reports. The independent auditor may also conduct an audit of M&V reporting and review activities.

Procedures

M&V procedures will vary in detail and rigor depending on the measures installed. For each installed measure, the chosen procedures will depend upon the predictability of equipment operation, the availability of evaluation data from previous programs, and the benefits of the chosen M&V approach relative to its cost.

Project-specific M&V procedures may be classified according to three distinct approaches that represent increasing levels of detail and rigor.

- Deemed savings: Savings values are stipulated based on engineering calculations using typical equipment characteristics and operating schedules developed for particular applications, without on-site testing or metering.
- Simple M&V: Savings values are based on engineering calculations using typical equipment characteristics and operating schedules developed for particular applications, with some short-term testing or simple long-term metering.
- Full M&V: Savings are estimated using a higher level of rigor than in the deemed savings or simple M&V approaches through the application of metering, billing analysis, or computer simulation.

An M&V plan will be required of each project sponsor that describes all measures to be installed, methods for calculating savings, and a schedule for conducting and reporting on M&V activities. The time required to complete M&V activities will range from less than a month up to 12 months.

Program Process

Application

Potential project sponsors must complete a two-part application to participate in the program. The initial application identifies the proposed measures, project sites, estimated demand and energy savings, and estimated incentive payments. A letter of credit of 5% of the estimated incentive payment will be required with the initial application. Approval of the initial application will reserve funding for the project. Applications will be accepted on a first-come, first-served basis.

If the project meets eligibility criteria, the project sponsor will submit a final application that presents an engineering study of the proposed project with estimates of incentive

Schiller Associates Page 6 of 25 March 3, 2000

payments and an M&V plan. The final application must also include a letter of intent from all customers involved in the application.

Installation

Project sponsors participating in the program will be required to sign a standard offer contract with the utility. The terms of the contract will be standard for all participants, and will include estimates of demand and energy savings along with a maximum incentive payment associated with the project. After signing a program contract, the project sponsor may install measures. Project sponsors will be required to submit an installation report that documents the actual installation of measures. Project sites will be inspected by the program administrator to verify baseline and post-installation conditions.

Payment

After each project is installed, documented, and accepted, the project sponsor will receive an initial payment that represents 40% of the total estimated incentive payment. After all M&V activities are complete, documented, and accepted, the project sponsor will receive the remaining incentive payment based on verified savings (up to 60% of the total estimated incentive payment).

Program Promotion

One of the advantages of the standard offer program design is that utilities may rely on the marketing capabilities of energy service providers to sell projects to individual customers. However, the utility must take a significant role in promoting the program in order to encourage participation within the eligible project sponsor community. The utility will conduct outreach for the program by providing complete program information and application materials on the web, by producing a one-page program brochure, and by conducting workshops for potential participants.

Web site

To minimize administrative costs to the utility, a web site will serve as the primary source for all program information and materials. The web site will include:

- Information that describes the program design and requirements
- Contact information to receive more information about the program
- A list of frequently-asked questions (FAQ) about the program
- Status updates on program funding available and committed (updated weekly)
- A list of participating project sponsors, so that individual customers may identify project sponsors who have submitted successful applications
- Downloadable program application and submittal forms

Brochures

A one-page program brochure will be developed to explain basic program information. This brochure will have a target audience of project sponsors. However, it is anticipated that project sponsors may use this brochure to establish program legitimacy with their

Schiller Associates Page 7 of 25 March 3, 2000

customers. The brochures will be available upon request and at workshops described below. The sponsoring utility will not undertake direct mailing of brochures to consumers.

Workshops

A series of workshops will be held to explain the program process and requirements to potential project sponsors. Workshops will be advertised in public media and through direct mailings to potential project sponsors.

Schiller Associates Page 8 of 25 March 3, 2000

Residential Standard Offer Program

Program Overview

Description

The Residential Standard Offer Program provides incentives for the retrofit installation of a wide range of measures that reduce demand and save energy for residential customers. Incentives are paid to energy service providers on the basis of deemed savings. This program has been developed to comply with the Energy Efficiency Rule §25.181 implementing Senate Bill 7.

Rationale

This program seeks to encourage market activity by energy service companies that install a wide range of residential measures and are capable of aggregating households to receive energy efficiency services.

Program Objectives

The primary objective of this program is to provide cost-effective reduction in peak summer demand. Additional objectives of the program are to:

- Encourage private sector delivery of energy efficiency products and services
- Encourage customer energy and cost savings
- Minimize barriers to participation by streamlining program procedures and measurement and verification (M&V) requirements
- Encourage participation by a wide range of residential energy service providers

Program Pricing

Pricing Structure

Standard incentive prices are offered for demand savings (maximum of \$297/kW) and energy savings (maximum of \$0.101/kWh). These incentive levels correspond to 50% of avoided costs. Savings will be stipulated through standardized savings values or formulas ("deemed savings") for a wide range of measures in representative building types. Incentive payments will be based on savings over a one-year period.

Savings will reflect the difference between the energy consumption of the equipment to be installed and the energy consumption of similar equipment that just meets minimum federal or industry standards (e.g., ASHRAE 90.2, NAECA).

Demand savings will be calculated as the maximum 15-minute demand reduction that occurs during the peak summer period, defined as weekdays, between the hours of 12 pm and 8 pm during the months of May, June, July, August, and September. For each project, incentive payments for energy savings will be capped by assuming a maximum project load factor. Project sponsors will have the option to propose deemed savings

Schiller Associates Page 9 of 25 March 3, 2000

values for measures that have not been included in the program that meet eligibility criteria.

Cost-Effectiveness

The Energy Efficiency Rule requires that incentive payments for this program do not exceed 50% of avoided costs and that administrative costs do not exceed 5% of total program cost. With these requirements, overall costs for the utility to acquire end-use savings of demand and energy through this program do not exceed 53% of the cost of acquiring equivalent supply-side resources.

Avoided costs are based on state-wide values stipulated by the Public Utility Commission of Texas (PUCT) of \$66,000/MW/yr and \$25/MWh for energy. The avoided capacity cost is increased to account for a 12% reserve margin and 7% line losses. The avoided energy cost is increased to account for 7% line losses. Avoided costs are represented as the present value of a stream of annual costs. The calculation assumes a measure life of 10 years, a discount rate of 10%, and inflation of 3% per year.

Eligibility

Participant

Any third-party entity that installs eligible demand-side management (DSM) measures at a customer site with residential electricity distribution service provided by the sponsoring utility (including single-family, multi-family, and mobile home units) is eligible to participate in the program as a project sponsor. Eligible project sponsors may include:

- National or local energy service companies (ESCOs)
- National or local companies that provide energy-related services (e.g., contracting) or products (e.g., lighting, HVAC equipment)

To ensure that the program's incentive budget is allocated to projects that are likely to meet with success, all project sponsors will be required to demonstrate a commitment to fulfilling program objectives and competency in completing the proposed project. Project sponsors will be required to submit the following information as part of the application process:

- A description of the project sponsor firm, including relevant experience, areas of expertise and references
- A work plan that covers the design, implementation, operation, and management of the project, including measurement and verification of the project
- Evidence of credit rating
- Proof of applicable insurance, licenses and permits

To ensure that incentives are available to multiple energy service providers, no project sponsor may receive more than 20% of the program incentive budget.

Schiller Associates Page 10 of 25 March 3, 2000

Project

A project is defined by a set of proposed or installed measures, a target population of homes, and estimated demand and energy savings included in a single application. All projects must meet the following requirements:

- Each project must include a total estimated demand reduction of at least 20 kW. This limitation is included to ensure that projects contribute to the primary goal of reducing summer peak demand and to minimize administrative costs. The 20 kW limitation will be revised to balance administrative cost constraints based on the total program budget.
- Each project may include a maximum of 2000 homes (or residential units). This limitation is included to ensure that service providers demonstrate performance before reserving additional funding. The 2000 home limitation will be revised to balance administrative cost constraints based on the total program budget.

Projects that include a range of measure types are encouraged. If a project includes lighting measures only, incentive payments will be limited to 65% of the otherwise available amount.

Measure

Project sponsors may install any measure for which a deemed savings value has been provided, including appliance, water heating, lighting, space conditioning, and building shell measures installed in single-family, multi-family, and mobile homes. Project sponsors may propose additional measures (with deemed savings) that meet the following requirements:

- Measure must produce a measurable and verifiable electric demand reduction during the peak period and produce electricity consumption savings.
- Measure must produce savings through an increase in energy efficiency or a substitution of another energy source for electricity.
- Measure must be installed in a retrofit application.
- Measure must have a minimum useful life of 10 years.
- Measure must exceed minimum equipment standards as provided in the program manual.

The following measures are excluded from consideration in the program:

- Measures that involve plug loads.
- Measures that involve self-generation or cogeneration, except for renewable technologies.
- Measures that rely on changes in customer behavior and require no capital investment.
- Measures that result in negative environmental or health effects.

Schiller Associates Page 11 of 25 March 3, 2000

Measurement and Verification

Purpose

Information on the number, type, and installation of each measure will be verified to ensure the accuracy of reported savings.

Responsibility

The project sponsor will be responsible for providing submittals in order to document all measure installations. The program administrator will review project submittals and conduct site inspections. The independent auditor may also conduct an audit of M&V reporting and review activities.

Procedures

Information provided by the project sponsor will be verified through site inspection of a random sample representing approximately 10% of each measure type. Inspection results ratios will be applied to adjust requested incentive amounts.

Program Process

Application

Potential project sponsors must complete an application to participate in the program. The application provides evidence of qualifications and identifies the target market, proposed measures to be installed, the total estimated project size (in kW and kWh savings), the total requested incentive amount, and a project timeline. A letter of credit of 5% of the estimated incentive payment will be required with the initial application. Approval of the initial application will reserve funding for the project. Applications will be accepted on a first-come, first-served basis.

Installation

Project sponsors participating in the program will be required to sign a standard offer contract with the utility. The terms of the contract will be standard for all participants, and will include estimates of demand and energy savings along with a maximum incentive payment associated with the project. After signing a program contract, the project sponsor may install measures. Project sponsors will be required to submit an installation report that documents the installation of measures.

Payment

After each project is installed, documented, and accepted, the project sponsor will receive an initial payment that represents 40% of the total estimated incentive payment. After all inspections are complete, the project sponsor will receive the remaining incentive payment as adjusted (up to 60% of the total estimated incentive payment).

Program Promotion

One of the advantages of the standard offer program design is that utilities may rely on the marketing capabilities of energy service providers to sell projects to individual customers. However, the utility must take a significant role in promoting the program in

Schiller Associates Page 12 of 25 March 3, 2000

order to encourage participation within the eligible project sponsor community. The utility will conduct outreach for the program by providing complete program information and application materials on the web, by producing a one-page program brochure, and by conducting workshops for potential participants.

Web site

To minimize administrative costs to the utility, a web site will serve as the primary source for all program information and materials. The web site will include:

- Information that describes the program design and requirements
- Contact information to receive more information about the program
- A list of frequently-asked questions (FAQ) about the program
- Status updates on program funding available and committed (updated weekly)
- A list of participating project sponsors, so that individual customers may identify project sponsors who have submitted successful applications
- Downloadable program application and submittal forms

Brochures

A one-page program brochure will be developed to explain basic program information. This brochure will have a target audience of project sponsors. However, it is anticipated that project sponsors may use this brochure to establish program legitimacy with their customers. The brochures will be available upon request and at workshops described below. The sponsoring utility will not undertake direct mailing of brochures to consumers.

Workshops

A series of workshops will be held to explain the program process and requirements to potential project sponsors. Workshops will be advertised in public media and through direct mailings to potential project sponsors.

Schiller Associates Page 13 of 25 March 3, 2000

Air Conditioning Distributor Program

Program Overview

Description

The Air Conditioning Distributor Program provides incentives for the installation of high-efficiency air conditioning units less than 20 tons in size that are typically used in small commercial and residential applications. Incentives are paid to air conditioner distributors on the basis of deemed savings. This program has been developed to comply with the Energy Efficiency Rule §25.181 implementing Senate Bill 7.

Rationale

This program targets cooling loads that are typically coincident with the summer peak in residential and small commercial markets. The program targets upstream distributors of high-efficiency air conditioning equipment, instead of installers directly, to limit administrative costs and maximize market impact.

Program Objectives

The primary objective of this program is to increase the market penetration of highefficiency air conditioning units in order to provide cost-effective reduction in peak summer demand. Additional objectives of the program are to:

- Impact a significant portion of the new air conditioning market in the utility distribution service territory
- Encourage customer energy and cost savings
- Encourage private sector delivery of energy efficiency products and services

Program Pricing

Pricing Structure

Standard incentive prices are offered for each air conditioning unit sold in \$/increment of SEER above baseline. Separate incentive payments will be established for units in different size categories. Incentive payments will be based on standard demand and energy incentive prices of \$297/kW and \$0.101/kWh, and simulation modeling of demand and energy savings. These incentive levels correspond to 50% of avoided costs. Incentive payments will be based on savings over a one-year period.

Savings will reflect the difference between the energy consumption of the equipment to be installed and the energy consumption of similar equipment that just meets minimum established by ASHRAE 90.1 1989.

Demand savings included in the deemed savings values will be calculated as the maximum 15-minute demand reduction that occurs during the peak summer period, defined as weekdays, between the hours of 12 pm and 8 pm during the months of May, June, July, August, and September. Incentive payments for energy savings will be capped by assuming a maximum project load factor.

Schiller Associates Page 14 of 25 March 3, 2000

Cost-Effectiveness

The Energy Efficiency Rule requires that incentive payments for this program do not exceed 50% of avoided costs and that administrative costs do not exceed 5% of total program cost. With these requirements, overall costs for the utility to acquire end-use savings of demand and energy through this program do not exceed 53% of the cost of acquiring equivalent supply-side resources.

Avoided costs are based on state-wide values stipulated by the Public Utility Commission of Texas (PUCT) of \$66,000/MW/yr and \$25/MWh for energy. The avoided capacity cost is increased to account for a 12% reserve margin and 7% line losses. The avoided energy cost is increased to account for 7% line losses. Avoided costs are represented as the present value of a stream of annual costs. The calculation assumes a measure life of 10 years, a discount rate of 10%, and inflation of 3% per year.

Eligibility

Participant

Only distributors of air conditioners are eligible to receive incentives directly under this program as project sponsors. For purposes of this program, a distributor is defined as any entity that sells or sources equipment to contractors or dealers. This definition includes manufacturer's representatives, wholesalers, or entities commonly referred to as "supply houses."

To receive program incentives, each air conditioning unit sold must be installed at a customer site that receives power distribution service from the sponsoring utility. It is the responsibility of the distributor to collect information about the ultimate customer through its dealers and to provide this information to program administrator. A mechanism for distributors to verify the account status of customers will be developed by the sponsoring utility.

To ensure that the program's incentive budget is allocated to projects that are likely to meet with success, all project sponsors will be required to demonstrate a commitment to fulfilling program objectives and competency in completing the proposed project. Project sponsors will be required to submit the following information as part of the application process:

- A description of the project sponsor firm, including relevant experience, areas of expertise and references
- Evidence of credit rating
- Proof of applicable insurance and licenses

To ensure that incentives are available to multiple distributors, no project sponsor may receive more than 20% of the program incentive budget. This requirement may be adjusted depending on the number of distributors present in the utility service area.

Schiller Associates Page 15 of 25 March 3, 2000

Project

A project is defined by a number of air conditioning units sold. Each project application must include a commitment to sell at least 100 air conditioning units over a maximum period of one year.

Equipment

Air conditioning equipment that meets the following requirements is eligible for incentive payment under the program:

- Equipment must be a split or packaged air-conditioning unit less than 20 tons in size.
- Equipment must include both a matched condensing unit and a blower coil with an overall efficiency rating. Payment will not be made for the sale of condensing units or coils separately.
- All units must be either Energy Star certified (for units less than 6 tons) or exceed ASHRAE 90.1 1999 standards (for larger units). The requirement of Energy Star rating for applicable units will leverage the name recognition and marketing materials offered by Energy Star.

Window air conditioning units are excluded from eligibility because they are not typically hard-wired and thus have uncertain persistence.

Measurement and Verification

Purpose

Information about the units sold and the provider of electrical distribution service will be verified to ensure accurate representation of program results.

Responsibility

The distributor will be responsible for providing information documenting each sale and documenting the provider of electrical distribution service for each customer. The program administrator will conduct an audit of program submittals. The independent auditor may also conduct an audit of reporting and review activities.

Procedures

Distributor reports will be verified through random audit of approximately 10% of submittals. The random audit may consist of a simple telephone call to the end-use customer to verify the unit was purchased and installed. Audit results will be applied to adjust requested incentive amounts.

Program Process

Application

Potential project sponsors must complete an application to participate in the program. The application includes a commitment to sell a certain quantity of eligible air conditioning units, a project timeline, and the estimated incentive payment for the project. A letter of credit of 5% of the estimated incentive payment will be required with

Schiller Associates Page 16 of 25 March 3, 2000

the initial application. Applications will be accepted on a first-come, first-served basis. Approval of the application will reserve funding for the project.

Sales

Project sponsors participating in the program will be required to sign a standard offer contract with the utility. The terms of the contract will be standard for all participants, and will include estimates of demand and energy savings along with a maximum incentive payment associated with the project.

After a program contract has been executed, the distributor may begin tracking units sold and submitting periodic sales reports to the program administrator. The sales reports will provide detail on each air conditioning unit sold by the distributor. The sales reports will also require contact information for the ultimate end-use customer who bought the unit. Sales reports may be submitted at any time after contract signature, but each report must document sales of at least 100 air conditioning units.

Payment

After sales and installation reports are submitted and accepted, the project sponsor will receive an initial payment that represents 60% of the total estimated incentive payment. After all verification activities are complete, the project sponsor will receive the remaining incentive payment (adjusted based on verification activities).

Program Promotion

The utility will conduct outreach for the program by providing complete program information and application materials on the web, by providing distributors with an information package that explains the value of high-efficiency air conditioning units (targeted to installers and customers), and by conducting meetings with potential program participants.

Web site

To minimize administrative costs to the utility, a web site will serve as the primary source for all program information and materials. The web site will include:

- Information that describes the program design and requirements
- Contact information to receive more information about the program
- A list of frequently-asked questions (FAQ) about the program
- Status updates on program funding available and committed (updated weekly)
- A list of participating project sponsors
- Downloadable program application and submittal forms

Informational materials

An information package will be developed that describes the benefits of high-efficiency air conditioning units. This package will be targeted to both installers and customers, and may be used by installers to assist in making sales of high-efficiency equipment to

Schiller Associates Page 17 of 25 March 3, 2000

customers. The information package will be made available to distributors participating in the program.

Program sponsor outreach

Meetings will be held to explain the program process and requirements to potential project sponsors. The program will be advertised through trade and professional organizations and through direct mailings to potential project sponsors.

Schiller Associates Page 18 of 25 March 3, 2000

Energy Star Homes Program

Program Overview

Description

The Energy Star Homes Program provides incentives for the installation of a comprehensive set of measures in new housing. Standard incentives per home are paid to builders or other project sponsors for the construction of homes that meet the Environmental Protection Agency's (EPA's) Energy Star standards. This program has been developed to comply with the Energy Efficiency Rule §25.181 implementing Senate Bill 7.

Rationale

This program builds on the past success of similar programs offered in Texas. The program sets eligibility criteria using the EPA Energy Star standard. This standard allows compliance through the installation of a fixed set of measures using Builder Option Packages developed by the EPA, or through the use of a Home Energy Rating System (HERS). The HERS rating allows flexibility in the installation of measures, but ensures compliance with a performance-based standard. Both the Energy Star and HERS standards are recognized nationally.

Program Objectives

The primary objective of this program is to raise residential new construction standards in order to provide cost-effective reduction in peak summer demand. Additional objectives of the program are to:

- Impact a significant portion of the new home market in the utility distribution service territory
- Encourage the use of nationally-recognized standards for energy-efficient building practices and home energy ratings
- Encourage customer energy and cost savings
- Encourage private sector delivery of energy efficiency products and services

Program Pricing

Pricing Structure

One standard incentive payment will be offered for each home meeting eligibility requirements. The incentive payment will be established at a minimum level to attract interest from project sponsors, not to exceed the avoided cost associated with the estimated demand and energy savings associated with a typical Energy Star home.

The savings will be estimated using a theoretical baseline corresponding to a home just meeting 1993 Model Energy Code standard. Avoided costs will be based on the savings estimate and demand and energy incentive prices of \$297/kW and \$0.101/kWh. These incentive levels correspond to 50% of avoided costs.

Schiller Associates Page 19 of 25 March 3, 2000

Demand savings included in the savings estimate will be calculated as the maximum 15-minute demand reduction that occurs during the peak summer period, defined as weekdays, between the hours of 12 pm and 8 pm during the months of May, June, July, August, and September. Energy savings will be capped by assuming a maximum project load factor.

Cost-Effectiveness

The Energy Efficiency Rule requires that incentive payments for this program do not exceed 50% of avoided costs and that administrative costs do not exceed 5% of total program cost. With these requirements, overall costs for the utility to acquire end-use savings of demand and energy through this program do not exceed 53% of the cost of acquiring equivalent supply-side resources.

Avoided costs are based on state-wide values stipulated by the Public Utility Commission of Texas (PUCT) of \$66,000/MW/yr and \$25/MWh for energy. The avoided capacity cost is increased to account for a 12% reserve margin and 7% line losses. The avoided energy cost is increased to account for 7% line losses. Avoided costs are represented as the present value of a stream of annual costs. The calculation assumes a measure life of 10 years, a discount rate of 10%, and inflation of 3% per year.

Eligibility

Participant

Any third-party entity that builds eligible homes located within the electricity distribution service area of the sponsoring utility, or coordinates the participation of such builders, may participate in the program as a project sponsor.

To ensure that the program's incentive budget is allocated to projects that are likely to meet with success, all project sponsors will be required to demonstrate a commitment to fulfilling program objectives and competency in completing the proposed project. Project sponsors will be required to submit the following information as part of the application process:

- A description of the project sponsor firm, including relevant experience, areas of expertise and references
- Evidence of credit rating
- Proof of applicable insurance, licenses and permits

To ensure that incentives are available to multiple energy service providers, no project sponsor may receive more than 20% of the program incentive budget. This requirement may be revised to depending on the number of builders present in the utility service area.

Project

A project is defined by a number of planned or completed homes meeting Energy Star requirements. Each project application must include a commitment to complete at least 5 homes within a one-year period. The program certification process can accommodate a range of building types, including single-family, multi-family, and manufactured homes.

Schiller Associates Page 20 of 25 March 3, 2000

Measure

Any measure types are permitted as long as qualifying homes meet Energy Star requirements (exceed 1993 Model Energy Code by 30%). Energy Star compliance is determined only by measures related to building envelope improvements, upgraded heating and air conditioning equipment, and upgraded water heating equipment.

Measurement and Verification

Purpose

Documentation on the number of homes completed and evidence of Energy Star compliance (using prescriptive or performance-based methods) will be verified for each home to ensure accurate representation of program results.

Responsibility

The project sponsor will be responsible for establishing Energy Star compliance through the EPA and providing sufficient documentation of compliance to the program administrator. The program administrator will review program submittals and conduct inspections of homes to verify the accuracy of project submittals.

Procedures

A random sample of approximately 10% of homes will be inspected to verify the accuracy of project submittals. Inspections will include activities to verify the accuracy of HERS reports, and will not include a repetition of a HERS rating. Inspection pass ratios will be applied to the project to adjust requested incentive amounts.

Program Process

Application

Potential project sponsors must complete an application that provides evidence of qualification and identifies the size of the project, the total requested incentive amount, and a project timeline. The application must also be accompanied by a Memorandum of Understanding (MOU) signed by the project sponsor and the EPA (provided by EPA). A letter of credit of 5% of the estimated incentive payment will be required with the initial application. Applications will be accepted on a first-come, first-served basis. Approval of the application will reserve funding for the project.

Construction

Project sponsors participating in the program will be required to sign a standard offer contract with the utility. The terms of the contract will be standard for all participants, and will include estimates of demand and energy savings along with a maximum incentive payment associated with the project.

After a program contract has been executed, the project sponsor may construct homes. The project sponsor must participate in the EPA's Energy Star program to establish Energy Star certification. The Energy Star certification steps are as follows:

Sign a Memorandum of Understanding with the EPA Energy Star homes program.

Schiller Associates Page 21 of 25 March 3, 2000

- Submit plans for each model home to a certified home rater.
- Arrange for an inspection of each home, or a statistical sampling of production homes, by a certified home rater.
- Identify and correct any failures to meet the Energy Star standard.
- Have the home rater submit HERS reports, or results of the site inspection, to the EPA.

Copies of HERS reports and/or other evidence of Energy Star compliance will be made available to the program administrator.

Payment

The project sponsor may receive payment for 60% of the estimated incentive payment after presenting evidence of purchase and delivery and/or installation of the principle energy-savings measures (insulation, space conditioning equipment, and water heating equipment). After all inspections are complete, the project sponsor will receive the remaining incentive payment as adjusted.

Program Promotion

The utility will conduct outreach for the program by providing complete program information and application materials on the web, by making informational materials produced by Energy Star available to project sponsors, and by contacting potential project sponsors directly.

Web site

To minimize administrative costs to the utility, a web site will serve as the primary source for all program information and materials. The web site will include:

- Information that describes the program design and requirements
- Contact information to receive more information about the program
- A list of frequently-asked questions (FAQ) about the program
- Status updates on program funding available and committed (updated weekly)
- A list of participating project sponsors
- Downloadable program application and submittal forms

Informational materials

An information package will be assembled using material provided by Energy Star that describes the benefits of Energy Star certification. This package will be targeted to both project sponsors and customers. The information package will be made available to project sponsors participating in the program.

Schiller Associates Page 22 of 25 March 3, 2000

Program sponsor outreach

Meetings will be held to explain the program process and requirements to potential project sponsors. The program will be advertised through trade and professional organizations and through direct mailings to potential project sponsors.

Schiller Associates Page 23 of 25 March 3, 2000

Hard to Reach Program

Background

Hard to reach customers are defined by the Energy Efficiency Rule as customers with an annual household income at or below 200% of the federal poverty guidelines. The Energy Efficiency Rule requires that each utility meet at least 5% of its savings goal for each year through programs targeted to this customer class. The 1999 federal poverty guidelines are presented in Table 1. The poverty standard is established separately for households of different sizes.

Table 1 - Federal poverty guidelines

Size of Family	Maximum Poverty Level Income			Limited Income Threshold (200% of poverty level)			
1	\$	8,240	\$	16,480			
2	\$	11,060	\$	22,120			
3	\$	13,880	\$	27,760			
4	\$	16,700	\$	33,400			
5	\$	19,520	\$	39,040			
6	\$	22,340	\$	44,680			
7	\$	25,160	\$	50,320			
8	\$	27,980	\$	55,960			

Rationale

Several objectives may be identified for a program targeted to limited income customers. These objectives include:

- To safeguard access for limited income customers to publicly-funded energy efficiency programs
- To provide meaningful energy savings at the household level
- To contribute to demand and energy reduction goals for the sponsoring utility

To meet the needs of the hard to reach customer class and the requirements of the Energy Efficiency Rule, two preliminary program delivery options have been identified. The final program delivery option will be chosen based on the requirements of the Energy Efficiency Rule, negotiation during the energy efficiency program implementation docket, and the characteristics of the limited income population in the utility service territory.

Schiller Associates Page 24 of 25 March 3, 2000

Program Option 1

One approach is to conduct a competitive solicitation that allows service providers (with or without sponsorship from a limited-income community) to propose a program targeted to the hard to reach customer class. Proposals would include description of:

- The targeted population
- The program delivery mechanism
- Energy efficiency measures included in the program
- Outreach and education components of the program
- Proposed measurement and verification methods
- Estimated program savings
- A specific timeframe for implementing the program
- A requested program funding level

Criteria for project selection would be developed and included with the request for proposal. As examples, projects could be chosen based on the likelihood of program success, the needs of the targeted community, and the time frame and verifiability of program savings.

The program could be delivered state wide, with each utility providing funding commensurate with its savings goal. Administrative costs to be shared by the utilities would include only the preparation of the request for proposal, selection of winning projects, and management of the selected program sponsors.

Program Option 2

A second approach is to set aside money within a program similar to the Residential Standard Offer Program. This program would use a first-come, first-served approach and would simply pay an incentive premium for projects in which the recipient customers are identified as limited-income.

This program would rely on contractors to verify the limited income status of customers participating in each project. The assistance of an organization or consultant with a history of serving limited income customers in Texas could be arranged to facilitate the identification of limited income customers and their participation in the program. Program mechanisms would be required to ensure good-faith participation by contractors in the program and to discourage abuse of the program in order to access premium incentive rates.

Program Pricing

Pricing Structure

Program costs would be capped based on estimates of program savings and budget limits of \$595/kW for demand savings and \$0.203/kWh for energy savings. These incentive levels correspond to 100% of avoided costs.

Schiller Associates Page 25 of 25 March 3, 2000

Cost-Effectiveness Overall costs for the utility to acquire end-use savings of demand and energy through this program do not exceed the cost of acquiring equivalent supply-side resources. Avoided costs are based on state-wide values stipulated by the Public Utility Commission of Texas (PUCT) of \$66,000/MW/yr and \$25/MWh for energy. The avoided capacity cost is increased to account for a 12% reserve margin and 7% line losses. The avoided energy cost is increased to account for 7% line losses. Avoided costs are represented as the present value of a stream of annual costs. The calculation assumes a measure life of 10 years, a discount rate of 10%, and inflation of 3% per year.

Schiller Associates Page 26 of 25 March 3, 2000

Load Cooperative Program

Program Overview

Description

The Load Cooperative Program provides curtailment of a reliable quantity of electric load on short notice. Incentives are paid to one energy service provider selected by competitive bid based on the delivery of metered demand reduction. This program has been developed to comply with the Energy Efficiency Rule §25.181 implementing Senate Bill 7.

Rationale

This program provides one of the most cost-effective opportunities to reduce peak summer demand by directly targeting demand reduction during peak hours. Program costs are minimized by using a single provider to implement the program and negotiate curtailment arrangements with individual customers.

Program Objectives

The objective of this program is to provide cost-effective reduction in peak summer demand.

Program Pricing

Pricing Structure

A standard incentive payment will be offered of \$11.80/kW for capacity reduction during defined curtailment periods. These incentive levels correspond to 15% of avoided costs.

Cost-Effectiveness

The Energy Efficiency Rule requires that incentive payments for this program do not exceed 15% of avoided costs and that administrative costs do not exceed 5% of total program cost. With these requirements, overall costs for the utility to acquire end-use savings of demand and energy through this program do not exceed 16% of the cost of acquiring equivalent supply-side resources.

The avoided capacity cost is based on a state-wide value stipulated by the Public Utility Commission of Texas (PUCT) of \$66,000/MW/yr. The avoided capacity cost is increased to account for a 12% reserve margin and 7% line losses.

Eligibility

Participant

Participants in the load cooperative must purchase electricity distribution service from the sponsoring utility through a time-of-use, non-residential account.

Schiller Associates Page 27 of 25 March 3, 2000

The project administrator will be selected through competitive bid. The bid evaluation will include a review of:

- A description of the project sponsor firm, including relevant experience, areas of expertise and references
- Evidence of credit rating
- Proof of applicable insurance and licenses

Project

A project is defined by contractual requirements between the program administrator and the energy service provider. The project will include a target load reduction to be delivered on request by the sponsoring utility.

Measure

Load curtailments must meet the following requirements:

- Curtailment must be provided within one hour of notification by the utility.
- Curtailments will be limited (for example, up to 3 hours, for a minimum of 15 times a year).

Measurement and Verification

Purpose

Measurement and verification activities will be conducted for each project to verify incentive payments and program savings.

Responsibility

The energy service company will be responsible for providing an annual report of curtailments. Data will be audited and verified by the utility.

Procedures

Demand reduction will be measured through time-of-use metering.

Program Process

Application

One energy service provider will be selected by competitive bid to operate the program an annual basis. A contract will be signed between the energy service company and the utility. Contract signature will reserve funding for a minimum number of load curtailments.

Operation

The energy service provider will deliver load curtailment upon request by the sponsoring utility as required by the program contract. The energy service provider will provide regular reports, as determined by the sponsoring utility that summarize curtailments to date and invoice for incentive payments.

Schiller Associates Page 28 of 25 March 3, 2000

Payment

Payments will be made in full after each metering report has been audited.

Program Promotion

The utility will conduct outreach for the program by providing complete program information on the web and by conducting meetings with potential participants.

Web site

To minimize administrative costs to the utility, a web site will serve as the primary source for all program information and materials. The web site will include:

- Information that describes the program design and requirements
- Contact information to receive more information about the program
- A list of frequently-asked questions (FAQ) about this program

Program sponsor outreach

Meetings will be held to explain the program process and requirements to potential project sponsors. The program will be advertised through trade and professional organizations and through direct mailings to potential project sponsors.

This page has been intentionally left blank.

2-92

Energy Efficiency Plan

INTRODUCTIO	N	2
REPORT ORGAN	NIZATION	2
1. EXECUTIV	VE SUMMARY	2
2. OBJECTIV	VES AND APPROACHES	3
3. SAVINGS	GOALS AND BUDGETS	6
3.1 PROJECTI	ED DEMAND AND ENERGY SAVINGS GOALS	6
3.2 BUDGET	ALLOCATIONS	
3.3 BUDGE	Γ CASH Flow	8
4. GENERAL	IMPLEMENTATION PLAN	10
	RUCTURE IMPROVEMENT	10
	CONTRACTS	10
4.3 Program	M DESIGN	10
4.4 Program	M IMPLEMENTATION	11
5. PROGRAM	M DETAILS	12
5.1 COMMER	CIAL AND INDUSTRIAL STANDARD OFFER PROGRAM	12
APPENDIX A	SAVINGS GOALS AND BUDGET PROJECTIONS	
APPENDIX B	EXISTING CONTRACTS	
APPENDIX C	PROGRAM DESCRIPTIONS	

INTRODUCTION

Utility presents this Energy Efficiency Plan (EEP) as required by the Energy Efficiency Rule §25.181 (EE Rule) implementing Senate Bill 7. This EEP outlines Utility's plans to meet the requirements of the EE Rule in order to achieve a 5% reduction in annual demand growth by January 1, 2003 and a 10% reduction each year thereafter beginning January 1, 2004.

This EEP covers a planning period beginning April 1, 2000 and ending December 31, 2004 as required by the EE Rule. This EEP presents projected demand and energy savings goals, budgets, and program implementation plans. Utility will submit an update of this plan on an annual basis beginning April 1, 2001. The updated EEP will be accompanied by an Annual Energy Efficiency Report (AEER) that will present revised savings goals and summarize the results of completed energy efficiency activities.

REPORT ORGANIZATION

This report consists of five main sections and several appendices.

- Section 1 provides an Executive Summary that provides the "big picture" of Utility's plan to meet the requirements of the EE Rule and establishes the direction for near-term activities. Objectives and administrative guidelines are summarized, followed by a summary overview of the estimated savings goals and budgets, and the proposed implementation plan.
- Section 2 describes Utility's objectives and approach in administrating energy efficiency programs to achieve the goals outlined in Senate Bill 7 and the EE Rule.
- Section 3 presents estimated savings goals and budgets for the planning period.
- Section 4 describes Utility's general implementation plan for meeting the requirements of the EE Rule, including a description of pre-program and program activities.
- Section 5 provides a more detailed description of Utility's near-term program implementation plans.
- Appendix A includes documentation for projected savings goals and budgets estimated to meet the requirements of the EE Rule.
- Appendix B includes a description of Utility's existing energy efficiency contracts and obligations.
- Appendix C includes descriptions of six programs, developed jointly with other Texas investor-owned utilities (IOUs), from which Utility has chosen its current program offerings.

1. EXECUTIVE SUMMARY

[To be written to reflect overall strategy]

DRAFT 2

This EEP outlines Utility's plans to achieve 5% reduction of annual demand growth by January 1, 2003 and a 10% reduction each year thereafter beginning by January 1, 2004, as stipulated by the EE Rule. Utility believes this to be an aggressive goal that will require Utility to maintain reasonable flexibility in designing program mechanisms, soliciting market providers, allocating budgets across market sectors, and other aspects of program administration.

2. OBJECTIVES AND APPROACHES

Utility is committed to implementing the requirements of Senate Bill 7 and the EE Rule in a cost-effective manner. This EEP translates the requirements of the EE Rule into operable plans and procedures. In preparing this plan, Utility has identified several issues that require clarification in order to demonstrate a workable plan for meeting the requirements of the EE Rule. These issues are identified below, presented as planned approaches that Utility believes are consistent with the intent of both Senate Bill 7 and the EE Rule.

- 1. Utility has projected costs required to meet the requirements of the EE Rule through 2004 and each year thereafter. However, actual costs may be considerably higher or lower than projected costs for two reasons. First, Utility must develop budgets using estimates of future demand goals while the EE Rule requires that actual demand goals be reset annually based on historical demand growth. Since demand goals depend on peak system loads, which are inherently volatile data points, Utility expects that actual demand goals may vary considerably from estimated goals. Second, programs may not be fully subscribed. Several factors related to program pricing and design influence service provider participation rates, most of which are not in the direct control of Utility. If programs are not fully subscribed, goals will not be met according to schedule. If actual budget requirements are less than estimated budgets, Utility will petition the Public Utility Commission of Texas (PUCT) to carry over unspent funds as allowed by the EE Rule. If actual budget requirements exceed accumulated budgets, Utility will petition the PUCT to recover these additional costs.
- 2. Utility has chosen to use its official load forecast as the best available indicator of future demand growth. Utility believes that the official forecast will provide a more consistent and accurate estimate of future demand growth than will the approach outlined in the EE Rule. The EE Rule requires that a single estimate of demand growth, based on data from 1995 to 1999, be projected through the year 2004. Utility does not believe that budgets based on this rough approximation of future growth rates can be adequately defended. Utility's official load forecast reflects the best estimate of future growth and is consistent with budgeting for other activities conducted by Utility. Utility plans to use this methodology for planning purposes only. Utility will begin calculating its annual growth in demand and demand goal using the methodology prescribed in the EE Rule beginning with its goal to be achieved by January 1, 2003.
- 3. [For consideration by each utility. This approach has not been included elsewhere in the draft and would be included to ensure that there is enough lead-time after the goal is set to redirect budgets and meet the goal.] Utility plans to set and report

demand goals two years in advance of the date that program savings will likely be credited towards the goal. For most programs, a two-year lead-time is required to design and kick-off programs, sign program contracts, and allow service providers to install measures. The EE Rule currently requires that a goal to be achieved by January 1, 2004 be submitted for PUCT review in a filing on April 1, 2003. By this date, Utility will have little opportunity to alter program schedules and affect the quantity of project savings that are installed by January 1, 2004. To provide sufficient lead-time for budgeting decisions to impact achieved goals, Utility plans to identify the goal for January 1, 2004 in its April 1, 2002 filing on the basis of historical data from 1997 through 2001. This goal-setting procedure differs from the requirements of the EE Rule only in that it includes one additional year of lead-time between the setting and crediting of goals.

- 4. Utility plans to limit the energy component of incentive payments at the project level to ensure that sufficient funds are reserved for meeting demand goals. Utility must allocate budgets in order to meet both demand and energy goals. Demand goals are set according to requirements in the EE Rule. In contrast, energy goals are estimated based on the demand goals and assumptions regarding typical ratios between project demand and energy savings. If the energy component of incentive payments is not limited at the project level, Utility runs the risk of overspending for energy savings and running out of incentive budget before meeting its demand goals.
- 5. Utility plans to credit savings to the goal once a project has been installed and initially verified. Utility recognizes that crediting adjustments can be made later if the final verification results differ substantially from the initial verification results.
- 6. Utility plans to limit its administrative costs to 10% of the total program budget in 2002 and 2003, and to 5% of the total program budget thereafter, as required by the EE Rule. Utility expects that some administrative costs will be front-loaded, and that administrative expenditures in years 2000 and 2001 may exceed the 10% cap.
- 7. Utility will coordinate program development efforts with other Texas IOUs to the greatest practical extent. Utility recognizes that state-wide consistency in program design and materials lowers participation costs for service providers. To this end, Utility has developed its current program implementation plans in cooperation with [all but one of] Central and South West Operating Companies, Entergy Gulf States, Reliant Energy, Southwestern Public Service Company, and TXU Electric Company.
- 8. Utility plans to implement programs that target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. Utility anticipates that targeted outreach to a broad range of service provider types and market segments will be necessary in order to meet the savings goals required by Senate Bill 7 on a continuing basis.
- 9. Utility plans to include market transformation elements in its program offerings so long as these elements increase program effectiveness and do not jeopardize cost-effectiveness requirements included in the EE Rule. [Identify whether programs will be submitted under the market transformation section of the EE Rule.]

- 10. Utility plans to assemble program design review teams that include key industry and stakeholder representatives to review and provide input on the design of all programs that are accepted in concept as part of this EEP. Utility believes that such input in the final program design will help ensure sustained program acceptance and support. This effort will complement a broader review in association with the energy efficiency implementation docket identified in the EE Rule.
- 11. Utility plans to encourage uninterrupted market activity even if demand goals have been met for the current planning year. Consistent incentive offers over time will reduce uncertainty for service providers and help encourage greater market participation. Once goals for a current planning year have been met, Utility will continue to offer programs and will plan to credit program savings to a subsequent year.
- 12. Utility plans to streamline program procedures to the greatest extent practical to encourage service provider participation and minimize administrative costs. Utility expects that the streamlining of measurement and verification (M&V) procedures offers the most significant opportunities to minimize costs to the service provider (for conducting M&V), and to the utility (for reviewing M&V reports). Efforts to streamline (M&V) procedures may include the development of state-wide M&V procedures, use of deemed savings to the greatest extent possible, and simplification of procedures manuals.

3. SAVINGS GOALS AND BUDGETS

The following sections present projected savings goals and budgets associated with meeting the requirements of the EE Rule. As discussed above in Section 2 (Item 1), actual costs required to meet the requirements of the EE Rule may be considerably higher or lower than the costs presented here. This is due to the fact that (1) projected demand goals will necessarily differ from actual demand goals and (2) programs may not be fully subscribed.

Budgets are presented below in two formats. First, budget allocations are presented that are based directly on the savings goals, avoided costs, and incentive caps included in the EE Rule. These budgets indicate the total cost associated with meeting savings goals and do not reflect the lead-time that actually exists between budgeting for program spending and crediting demand and energy savings towards the goal. Second, budget cash flows are presented that reflect project lead times and show actual annual budgets from year to year.

Because there can be a lead time of up to two years between program kick-off and the crediting of savings, the cash flow for any single year may be associated with a savings goal up to two years in the future. Accordingly, savings goals and allocated budgets are presented through January 1, 2006. The allocated budget projections are then used to estimate total annual budgets through 2004.

3.1 PROJECTED DEMAND AND ENERGY SAVINGS GOALS

Table 1 presents projected demand and energy savings goals to be achieved by January 1 of each year through 2006. Supporting documentation for the calculation of values presented in Table 1 are included in Appendix A.

Demand goals are presented both at the system level and at the project level. The system level goals represent reductions in overall system load. The system level demand goal for each date is calculated as follows:

System Level Demand Goal (MW) = Annual Growth in Demand (MW) × Demand Reduction Goal (%)

The project level goals take into account line losses and reflect savings as they are reported at the customer site. In accordance with the requirements of the EE Rule, the calculation of project level goals does not include consideration of the coincidence of demand reduction measured at the project site to reduction of peak system demand.

Utility has chosen to use its official load forecast as the best available indicator of future annual growth in demand (see Section 2, Item 2). Utility has based the annual growth in demand for each year during the planning period on the difference in forecasted peak demand over one year. As an example, the annual growth in demand defined for the January 1, 2003 goal is the growth in forecasted peak demand from 2002 to 2003. The demand savings goals are based on meeting one interim demand reduction goal corresponding to 5% of demand growth by January 1, 2003 and 10% each year thereafter.

For each demand savings goal, an energy savings goal is also estimated. Utility's projected energy goals are calculated based on the demand goal and an average load

DRAFT 6

factor for all customer classes. This load factor describes the ratio of demand savings to energy savings that are typically associated with projects to be installed. The calculation of energy goals is detailed in Appendix A. As discussed in Section 2 (Item 4), Utility will limit the energy component of incentive payments at the project level to ensure that sufficient funds are reserved for meeting estimated demand goals.

Table 1: Demand and Energy Savings Goals

Year	Annual Growth in Demand (MW)	Demand Reduction Goal (%)	System Level Demand Goal (MW)	Project Level Demand Goal (MW)	Project Level Energy Goal (MWh)
2000	-		-	-	-
2001	XX	0	0	0	0
2002	XX	0	0	0	0
2003	xx	XX	xx	XX	XX
2004	XX	XX	xx	XX	XX
2005	XX	XX	xx	XX	XX
2006	XX	XX	XX	XX	XX

3.2 BUDGET ALLOCATIONS

Table 2 presents projected budget allocations to meet demand and energy goals through January 1, 2006. The budget allocations are defined by the overall demand and energy goals presented above, avoided costs, allocation of demand goals among customer classes, and the incentive caps by customer class required by the EE Rule. The budget allocations presented in Table 2 are broken out by customer class and subdivided into costs for utility administration and incentive payments. Supporting documentation for the budget allocations are presented in Appendix A.

The budget allocations presented in Table 2 do not represent projected annual budgets. Annual budgets must reflect the lead-time required between budgeting for program spending and actually crediting demand and energy savings towards the goal. Budget cash flow is discussed and presented in Section 3.3.

Utility has created a separate budgeting category for each group of customers having unique budget caps and requirements under the EE Rule. While Utility has estimated budgets by customer class, Utility plans to track and report budgets by program, since individual programs may serve multiple customer classes. Program description, budgets, and a description of customer classes targeted by Utility's planned program offerings are included in Section 4.

Table 2: Budget Allocations

DRAFT 7

2002	C&I	\$0	\$0	\$0
	Res & Small Comm	\$0	\$0	\$0
	Hard to Reach	\$0	\$0	\$0
	Load Mgmnt	\$0	\$0	\$0
	Total	\$0	\$0	\$0
2003	C&I	\$XX	\$XX	\$XX
	Res & Small Comm	\$XX	\$XX	\$XX
	Hard to Reach	\$XX	\$XX	\$XX
	Load Mgmnt	\$XX	\$XX	\$XX
	Total	\$XX	\$XX	\$XX
through				
2006	C&I	\$XX	\$XX	\$XX
	Res & Small Comm	\$XX	\$XX	\$XX
_	Hard to Reach	\$XX	\$XX	\$XX
	Load Mgmnt	\$XX	\$XX	\$XX
	Total	\$XX	\$XX	\$XX

3.3 BUDGET CASH FLOW

Table 3 presents estimated annual budgets associated with meeting savings goals through January 1, 2006. The annual budgets indicate budget cash flow and reflect the lead-time required between budgeting for program spending and actually crediting demand and energy savings towards the goal. The total budget presented in Table 3 includes both the allocated budgets presented in Table 2 plus the amount that Utility receives in rates for energy efficiency in 2000 and 2001. The assumptions used to estimate this budget cash flow are included in Appendix A.

The estimated annual budgets presented in Table 3 do not include any costs associated with meeting goals beyond January 1, 2006. Including costs associated with goals beyond January 1, 2006 would greatly increase annual budgets in 2005 and 2006. The annual budget for 2004 includes all costs associated with meeting savings goals under Senate Bill 7, and includes costs for meeting savings goals over three years (January 1 of 2004, 2005, 2006).

This cash flow projection illustrates the lead-time required for budgeting purposes to achieve annual savings goals. In developing Table 3, Utility assumes that savings may be credited once a project has been installed and initially verified (see Section 2, Item 5). As an example, if a project must be installed and initially verified by December 31, 2002 to be credited for the January 1, 2003 goal, Utility must likely have the provider under contract at least one year earlier to ensure sufficient design and installation lead-time. Signing a contract with a provider in the year 2001 creates a financial obligation that must be budgeted by the utility, particularly since the provider may actually complete the project shortly after contract signing rather than up to a year later as expected. Therefore, program cash flow associated with meeting a demand goal by January 1, 2003 will typically begin in 2001. Costs will also be associated with performing due diligence on measurement and verification (M&V) and review by the independent auditor. These costs may be incurred up to a year after savings are credited.

Table 3: Annual Budgets (Cash Flow)

Year	Customer Class	Total Program Budget	Utility Administration Budget	Incentive Payment Budget
2000	C&I	\$0	\$0	\$0
	Res & Small Comm	\$0	\$0	\$0
	Hard to Reach	\$0	\$0	\$0
	Load Mgmnt	\$0	\$0	\$0
	Total	\$0	\$0	\$0
2001	C&I	\$XX	\$XX	\$XX
	Res & Small Comm	\$XX	\$XX	\$XX
	Hard to Reach	\$XX	\$XX	\$XX
	Load Mgmnt	\$XX	\$XX	\$XX
	Total	\$XX	\$XX	\$XX
through				
2006	C&I	\$XX	\$XX	\$XX
	Res & Small Comm	\$XX	\$XX	\$XX
	Hard to Reach	\$XX	\$XX	\$XX
	Load Mgmnt	\$XX	\$XX	\$XX
	Total	\$XX	\$XX	\$XX

4. GENERAL IMPLEMENTATION PLAN

Utility has developed the broad outlines of a program implementation plan for the planning period. This plan has been developed in cooperation with representatives from other Texas IOUs, including [all but one of] Central and South West Operating Companies, Entergy Gulf States, Reliant Energy, Southwestern Public Service Company, and TXU Electric Company. This utility group was formed in October 1999 in an effort to consolidate and leverage existing knowledge from all utility activities. By coordinating efforts, Utility seeks to expedite the planning process, reduce planning costs, and encourage state-wide consistency in program designs.

Utility's implementation plan includes four components:

- 1. Conduct infrastructure improvement activities to improve Utility's ability to implement programs
- 2. Continue operation of existing contracts through [date].
- 3. Finalize program details for [number] programs, chosen from six program concepts developed jointly by the utility group.
- 4. Implement the selected programs by [date] in order to meet demand goals beginning in January 1, 2003.

Each component of this plan is discussed in the following subsections.

4.1 INFRASTRUCTURE IMPROVEMENT

Utility plans to conduct activities to improve its ability to effectively implement programs. Utility anticipates that these activities will include:

- Hiring and training staff
- Conducting a survey of service providers to assess market pricing conditions in selected markets
- Developing database tracking and reporting procedures for all energy efficiency programs
- Developing common M&V guidelines for all Texas energy efficiency programs

4.2 EXISTING CONTRACTS

Utility plans to meet a portion of its savings goals through January 1, 200X with the continued implementation of existing contracts. A description of each existing contract, including information about the project type and duration, and the customer class that it serves is included in Appendix B.

4.3 PROGRAM DESIGN

Utility has developed six program concepts in cooperation with the utility group. These programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. Utility anticipates that targeted

DRAFT 10

outreach to a broad range of service provider types and market segments will be necessary in order to meet the savings goals required by Senate Bill 7 on a continuing basis. Table 4 summarizes the programs and target markets. A full description of all six programs is included in Appendix C.

Utility has included market transformation elements in the program offerings to the extent that these elements increase program effectiveness and do not jeopardize cost-effectiveness requirements included in the EE Rule. [Utility will rely on the Energy Efficiency Working Group to develop state-wide market transformation efforts that comply with the EE Rule and will consider participation in such an effort at a later date.]

Before implementing the selected programs, Utility plans to assemble program design review teams that include key industry and stakeholder representatives to review and provide input on the design of all programs that are accepted in concept as part of this EEP. Utility believes that such input in the final program design will help ensure sustained program acceptance and support. Utility will conduct all continuing program design activities in coordination with the energy efficiency implementation docket.

Table 4: Portfolio of Six Programs

Program	Target Market
Commercial and Industrial Standard Offer Program	Commercial and industrial retrofit market for a wide range of measures
Residential Standard Offer Program	Residential retrofit market for a wide range of measures
Energy Star Homes Program	Residential new construction market for a wide range of measures
Air Conditioning Distributor Program	Small commercial and residential new construction and replacement markets for air conditioning units up to 20 tons in size
Multi-Family and Limited Income Residential Program	Hard-to-reach residential retrofit market for a wide range of measures
Load Cooperative Program	Commercial, industrial, and agricultural customers able to curtail load on short notice

4.4 PROGRAM IMPLEMENTATION

Utility plans to implement X programs by [date] in order to meet demand goals beginning in January 1, 2003. Utility may implement additional programs from the six that have been developed, or may develop additional programs as needed to meet subsequent savings goals.

Once a program has been rolled out, Utility plans to offer the program on a continuous basis until new program priorities are identified. As discussed in Section 2 (Item 11), Utility believes that it is important to maintain uninterrupted market activity to encourage