



Summary of Ratepayer-Funded Electric Efficiency Impacts, Expenditures, and Budgets (Based on CEE/IEE Industry Database)

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demand response among electric utilities.*

In 2009 the Consortium for Energy Efficiency (CEE), in coordination with the Institute for Electric Efficiency (IEE) and the American Gas Association (AGA), collected industry-wide data on ratepayer-funded energy impacts, expenditures, and budgets for energy efficiency programs from utility and non-utility administrators of energy efficiency in the U.S. and Canada. The results of this joint data collection were released in late December 2009. The U.S. electric efficiency results based on 133 respondents – 105 electric and combined utilities, eight non-utility energy efficiency (EE) administrators, and 20 organizations who declined to release their data at the organizational level – are summarized in this brief.

As shown in Table 1, based on the CEE/IEE database, electric efficiency budgets totaled \$4.4 billion in 2009 – including energy efficiency (EE), demand response (DR), and evaluation, measurement, and verification (EM&V) – showing a significant increase over 2008. *In each year, electric utilities were by far the largest providers of EE in the U.S., with budgets comprising between 85 percent and 89 percent of the total electric efficiency budget nationwide.*

Table 1. U.S. Ratepayer-Funded Electric Efficiency Budgets (EE, DR, EM&V): 2007-2009

Electric Efficiency 2007-2009 U.S. Budgets (CEE)			
	Total	Utility	Non-Utility
2007	\$2,722,788,884	\$2,413,639,443	\$309,149,441
2008	\$3,165,329,920	\$2,704,072,429	\$461,257,491
2009	\$4,370,445,097	\$3,796,110,308	\$574,334,789

Budgets increased over 18 percent from 2007 to 2008, and another 32 percent from 2008 to 2009. Some of this increase is due to the fact that CEE receives responses from more administrators each year, but this is also indicative of the recent dramatic increase in budgets for energy efficiency as a result of new state regulatory policies supporting utility energy efficiency programs as well as new state energy efficiency goals and targets. A recent report by LBNL forecasts \$12.4 billion in ratepayer funded electric efficiency by 2020 under its “high case scenario.” *Given the current political landscape, IEE believes that ratepayer funded electric efficiency budgets are highly likely to reach or exceed \$12 billion by 2020.*¹

At the state level, as shown in Table 2, several states, such as Illinois, Indiana, Massachusetts, Maryland, Michigan, and North Carolina, show substantially higher budgets in 2009 relative to their expenditures in 2008, while states that have previously dedicated few resources to efficiency, like Oklahoma, South Dakota, and Wyoming, have significantly higher budgets in 2009. *This is due in part to state regulatory*

¹ The Shifting Landscape of Ratepayer-Funded Energy Efficiency in the U.S. LBNL – 2258E. October 2009.

Table 2. Summary of U.S. Ratepayer-Funded Electric Efficiency Spending (2008) and Budgets (2009) by State, Based on Voluntary Responses to CEE Survey

State	2008 Electric Efficiency Expenditures (CEE)	2009 Electric Efficiency Budgets (CEE)	Population (2008 U.S. Census)	% of Total 2009 U.S. EE Budgets	% of U.S. Population (2008 U.S. Census)
AL	\$ 38,804,514	\$ 44,253,791	4,661,900	1.0%	1.5%
AK	-	-	686,293	-	0.2%
AR	\$ 412,105	\$ 7,676,285	2,855,390	0.2%	0.9%
AZ	\$ 40,337,709	\$ 57,863,994	6,500,180	1.3%	2.1%
BPA & NEEA	\$ 75,471,632	\$ 107,184,105	N/A	2.5%	N/A
CA	\$ 1,214,381,074	\$ 1,227,962,539	36,756,666	28.1%	12.1%
CO	\$ 33,336,661	\$ 79,643,379	4,939,456	1.8%	1.6%
CT	\$ 124,673,998	\$ 107,583,526	3,501,252	2.5%	1.2%
DE	-	-	873,092	-	0.3%
DC	-	-	591,833	-	0.2%
FL	\$ 290,774,087	\$ 314,539,903	18,328,340	7.2%	6.0%
GA	\$ 31,853,111	\$ 40,479,105	9,685,744	0.9%	3.2%
HI	\$ 34,016,981	\$ 41,839,478	1,288,198	1.0%	0.4%
IA	\$ 81,881,748	\$ 99,649,503	3,002,555	2.3%	1.0%
ID	\$ 27,985,496	\$ 49,131,401	1,523,816	1.1%	0.5%
IL*	\$ 12,465,000	\$ 65,607,000	12,901,563	1.5%	4.2%
IN	\$ 7,732,907	\$ 25,653,717	6,376,792	0.6%	2.1%
KS*	\$ 3,840,697	\$ 4,309,207	2,802,134	0.1%	0.9%
KY	\$ 12,017,323	\$ 27,237,524	4,269,245	0.6%	1.4%
LA	\$ 430,000	\$ 2,350,000	4,410,796	0.1%	1.5%
MA*	\$ 119,635,151	\$ 176,055,179	6,497,967	4.0%	2.1%
MD	\$ 39,373,685	\$ 76,753,978	5,633,597	1.8%	1.9%
ME	\$ 13,125,325	\$ 20,843,792	1,316,456	0.5%	0.4%
MI	\$ 6,200,000	\$ 56,245,561	10,003,422	1.3%	3.3%
MN*	\$ 61,121,579	\$ 68,130,267	5,220,393	1.6%	1.7%
MO	\$ 5,225,861	\$ 23,006,825	5,911,605	0.5%	1.9%
MS	\$ 3,940,378	\$ 4,440,378	2,938,618	0.1%	1.0%
MT*	\$ 9,715,986	\$ 225,200	967,440	0.0%	0.3%
NC	\$ 25,036,362	\$ 79,581,851	9,222,414	1.8%	3.0%
ND	\$ 1,018,022	\$ 895,327	641,481	0.0%	0.2%
NE	\$ 6,163,699	\$ 11,957,232	1,783,432	0.3%	0.6%
NH*	\$ 16,023,882	\$ 16,327,384	1,315,809	0.4%	0.4%
NJ	\$ 128,180,783	\$ 295,810,923	8,682,661	6.8%	2.9%
NM	\$ 9,214,672	\$ 19,760,122	1,984,356	0.5%	0.7%
NV	\$ 55,552,825	\$ 53,273,305	2,600,167	1.2%	0.9%
NY	\$ 316,225,658	\$ 393,170,293	19,490,297	9.0%	6.4%
OH*	\$ 10,172,968	\$ 24,086,540	11,485,910	0.6%	3.8%
OK	\$ 994,488	\$ 3,818,339	3,642,361	0.1%	1.2%
OR	\$ 54,355,305	\$ 85,272,602	3,790,060	2.0%	1.2%
PA	\$ 375,000	\$ 550,000	12,448,279	-	4.1%
RI	\$ 14,455,823	\$ 23,518,865	1,050,788	0.5%	0.3%
SC	\$ 7,604,362	\$ 18,732,026	4,479,800	0.4%	1.5%
SD	\$ 104,906	\$ 326,724	804,194	0.0%	0.3%
TN	\$ 89,722,387	\$ 174,262,739	6,214,888	4.0%	2.0%
TX	\$ 98,703,167	\$ 106,864,531	24,326,974	2.4%	8.0%
UT	\$ 35,466,323	\$ 44,123,589	2,736,424	1.0%	0.9%
VT	\$ 31,889,361	\$ 30,710,734	621,270	0.7%	0.2%
VA	-	-	7,769,089	-	2.6%
WA	\$ 111,267,967	\$ 147,712,827	6,549,224	3.4%	2.2%
WV	-	-	1,814,468	-	0.6%
WI	\$ 93,874,683	\$ 108,384,344	5,627,967	2.5%	1.9%
WY	\$ 117,412	\$ 2,639,164	532,668	0.1%	0.2%
Grand Total	\$ 3,395,273,063	\$ 4,370,445,097	304,059,724		

Note: This database reflects voluntary responses to the CEE survey and is therefore not comprehensive and may not reflect all EE spending/budgets by state. Please see pp. 3-4 for discussion of possible limitations of the database.

*Information from at least one known electric program administrator is missing from this state.

policies supporting utility energy efficiency investments. Hence, over the next 10 years, we can expect many new states to become leaders in energy efficiency.

Table 3 shows aggregate electric efficiency program expenditures of \$3.395 billion in the U.S. in 2008, based on a combination of electric utilities and non-utility administrators and \$3.009 billion for electric utilities only. In comparison, 2008 expenditures reported to the EIA by electric utilities totaled about \$3.189 billion. Neither the CEE nor the EIA database includes all EE administrators as each database is based on voluntary reporting. The reported expenditures are similar, indicating that both databases have good (but not complete) coverage of the overall ratepayer-funded EE landscape in the U.S. *Comparing actual expenditures and budgets for 2008 (in Tables 3 and 1) indicates that EE budgets are exhausted each year.*

Table 3. U.S. Ratepayer-Funded Electric Efficiency Expenditures (2008)

Electric Efficiency 2008 U.S. Expenditures (CEE)			
Total		Utility	Non-Utility
EE Only	\$2,689,004,693		
DR Only	\$692,319,713		
EM&V*	\$13,948,657		
Total	\$3,395,273,063	\$3,009,521,643	\$385,751,420

Based on the CEE/IEE database, Table 4 provides aggregate data for 2008 electric efficiency and demand response savings impacts for program administrators by NERC region. *Overall, EE and DR programs saved over 96 TWh in 2008, enough to power almost 7.4 million U.S. homes for one year, and avoided the generation of 55 million metric tons of carbon dioxide. Electric efficiency savings were achieved at an average cost of 3.525 cents per kWh saved in 2008.*

Table 4. Aggregate EE and DR Savings (MWh) by U.S. Region (2008)

2008 US Electric Efficiency & DR Impacts (MWh)				
Region	Residential	C&I	Other	Total
MW	2,341,012	10,726,686	40,205	13,107,903
NE	4,255,018	10,002,506	141,735	14,399,260
S	13,325,812	8,945,176	0	22,270,989
W	12,599,099	18,036,465	15,905,255	46,540,819
Total US	32,520,942	47,710,834	16,087,196	96,318,971
Percentage of total	34%	50%	17%	

Survey Administration

The 2009 CEE survey was sent to 215 electric program administrators, which comprised electric utilities, combined electric and gas utilities, and non-utility administrators in the U.S. and Canada. The recipients consisted of CEE members, IEE member companies, and several administrators who had responded to CEE's surveys in the past. Out of the 215 electric administrators that received the survey, 202 were U.S. administrators. CEE received results from 133 electric efficiency program administrators in the U.S. Respondents were asked to fill out a survey instrument which included questions on the overall organization, 2008 program expenditures, 2008 program impacts (both incremental and annual), 2009 budgets, state regulatory policies related to efficiency, and efficiency products on offer. This database is based on voluntary responses to the survey.

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