



Show Me The Money: A Review of Recent Utility Energy Efficiency Performance Incentive Designs

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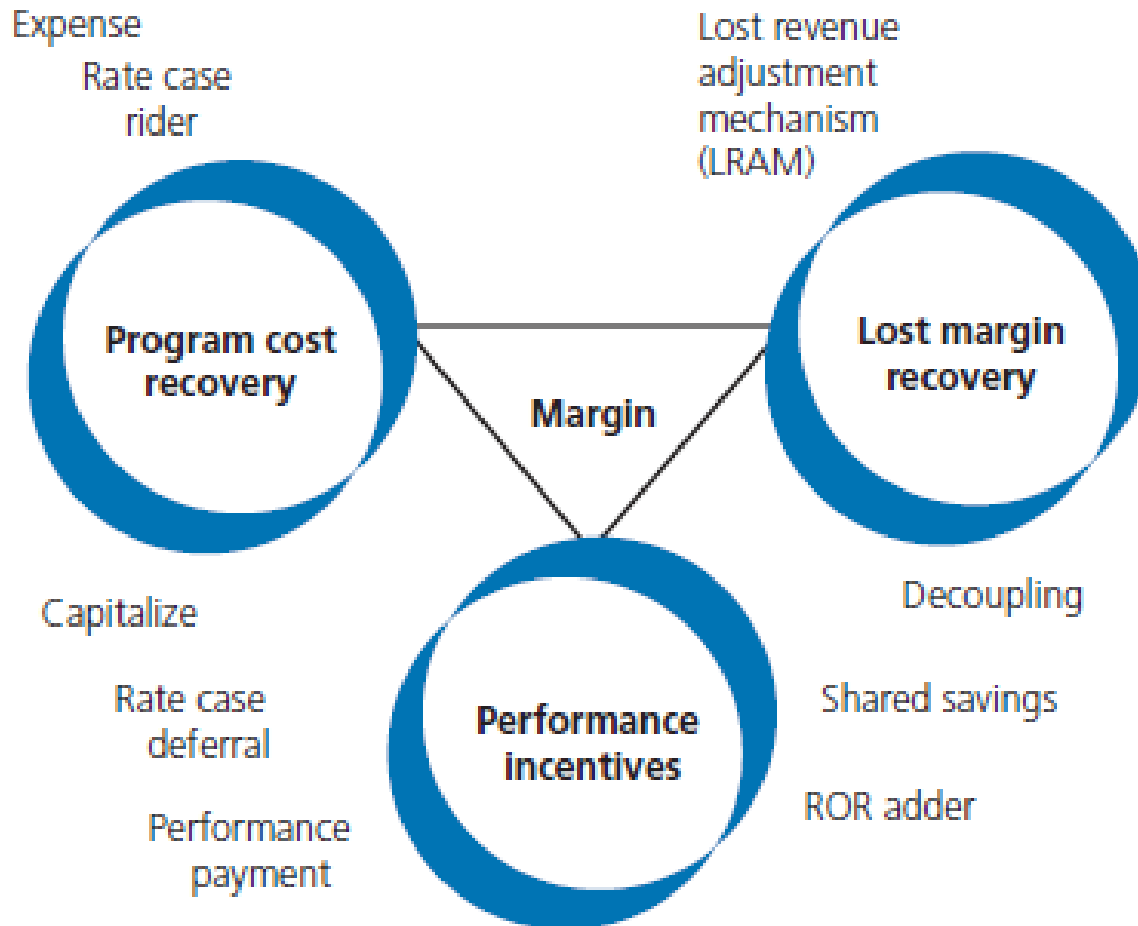
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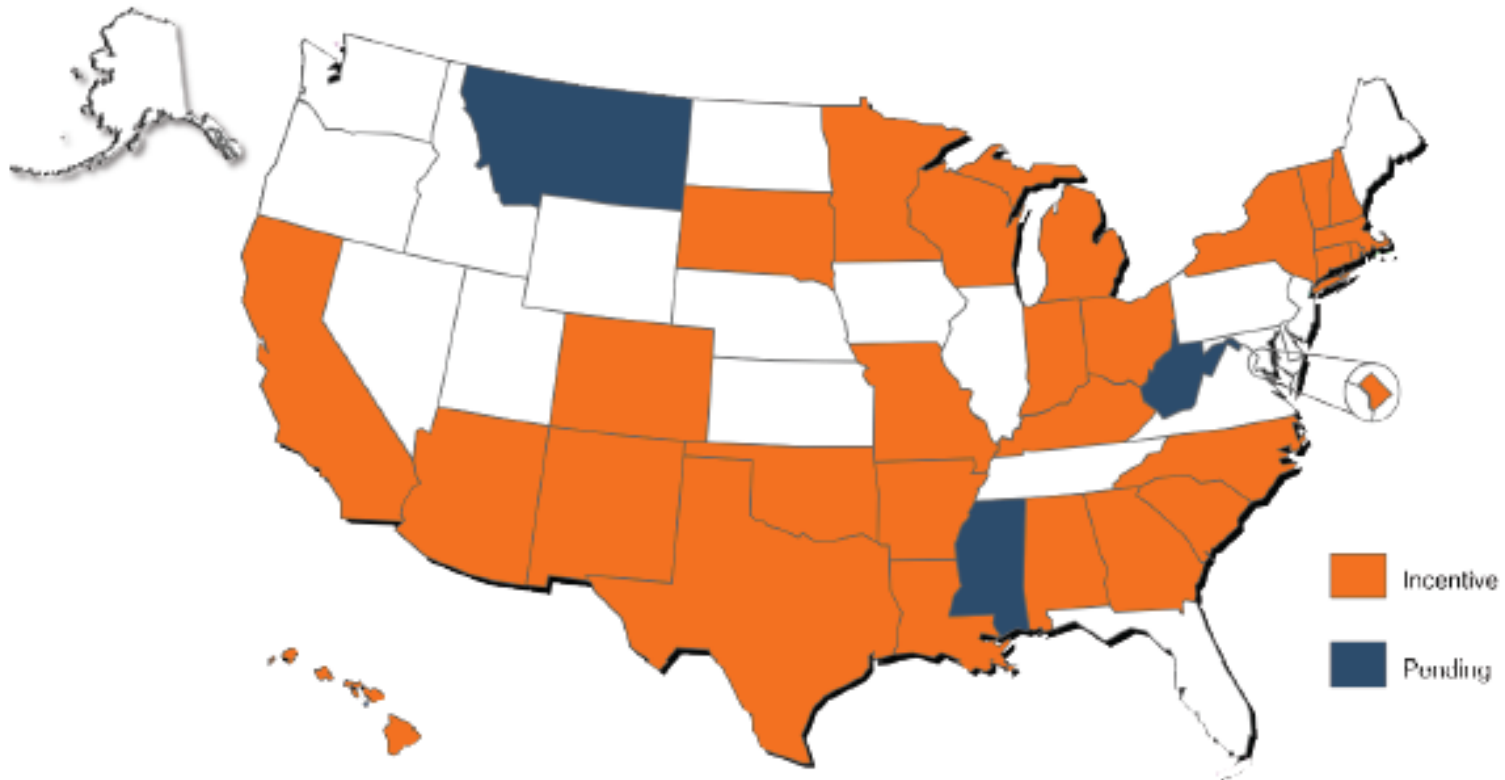
Utility Performance Incentives- One Part of the DSM Business Model



Source: National Action Plan for Energy Efficiency (2007), *Aligning Utility Incentives with Investments in Energy Efficiency*. Prepared by Val R. Jensen, ICF International. www.epa.gov/eeactionplan

Most States (28) Use Performance Incentives to Motivate /Reward Utilities- Majority “Percent of Shared Savings” ...followed by “ Percent of Spend”

EE Performance Incentives for Electric Efficiency Providers by State



Source: State Electric Efficiency Regulatory Frameworks, IEE Report, Edison Foundation, July, 2013

How is the industry designing performance incentives today ?

- » Typically - collaborative process, input from stakeholders, final decision by regulator
 - Process of designing performance incentive mechanism varies widely!
- » Sometimes PI's are structured to complement/drive portfolio objectives beyond what was initially specified by legislative body that created initial authorization for energy efficiency targets.
- » Performance incentives clearly drive utility portfolio management objectives
- » Art, science, and politics to incentive mechanism design

What makes a great performance incentive?

- » Clear performance goals- representing a short set of the most critical objectives*
- » Clarity with respect to how performance will be measured*
- » A timely and transparent process defined for independent measurement and verification of performance results*
- » Incentive earnings opportunities sufficient to motivate IOU performance, while providing cost-effective value to ratepayers*
- » Incentive structure that rewards value and results, not just spending

*Source: DECISION ADOPTING EFFICIENCY SAVINGS AND PERFORMANCE INCENTIVE MECHANISM, CPUC.
Decision 13-09-023 . September 5, 2013

State-by-State Summary Review of Performance Incentive Structures

Utility	State	Decoupling/ LRAM	Gross or Net Reported Savings	Type of Performance Incentive	Est. Annual Performance Incentive (\$Million)	Max. Incentive as Percent of Annual DSM Budget
Arizona Public Service	AZ	No	Gross	Shared Savings w/cap	\$6.9	11%
Efficiency Vermont	VT	Decoupling	Net	% of Spend	\$1.6	4.1%
Duke Energy Progress	NC	LRAM	Net	Shared Savings- No cap	\$12.5	26%
DTE Energy (Electric)	MI	No	Net	% of Spend	\$10.5	15%
DC Sustainable Energy Utility	DC	No	Net	% of Spend	\$0.6	4%
PG&E	CA	Decoupling	Net	% of Spend	\$41	10%

Arizona: Arizona Public Service

Arizona Public Service Company (APS) - 2012 Tiered Performance Incentive

- » Caps at whichever dollar value is less (% of net benefits or % of program costs)
- » Societal Cost Test (SCT) used to determine net benefits

Achievement Relative to Energy Efficiency Goals	Performance Incentive as % of Net Benefits	Performance Incentive as % of Program Costs
<85%	0%	0%
85-95%	6%	12%
96-105%	7%	14%
106-115%	8%	16%
116-125%	9%	18%
>125%	10%	20%

¹ACC Decision 73089 (April 5, 2012), <http://images.edocket.azcc.gov/docketpdf/0000135933.pdf>

APS' 2012 Performance Incentive- 14% of DSM Costs¹

2012 Results	
Electric savings as % of Previous Year's Sales	1.8%
Electric Savings Achieved	551, 639 MWh
Goal Type	Annual Target Towards Cumulative EE Standard
Percent of Goal Achieved	105%
Gross or Net Electric Savings	Gross
Decoupling	No
Lost Revenue Recovery Mechanism (LRAM)	Partial – for T&D Investments
DSM Program Budget	\$61.6 M
2012 Performance Incentive (whichever is lower) Percent of Net Benefits: 7% of \$211M = \$14.8 M <u>OR</u> Percent of Delivery Costs: 14% of \$61.6M = \$8.6 M	\$8.6 M
Incentive as Percent of Portfolio Budget	14%

¹APS 2012 Annual DSM Report (March 28, 2013), <http://images.edocket.azcc.gov/docketpdf/0000143824.pdf>

Proposed Changes for 2013 (\$6.9 million based on 2012 savings)

- » Per APS' 2012 rate case decision, a new performance incentive structure was proposed as part of a stakeholder process in November 2012¹
- » Some general comments received at stakeholder meetings included:
 - Proposed PI to be tied to performance
 - Cap to ensure budget certainty
 - Provide incentive to achieve EE savings goals, yet at least cost to maximize cost effectiveness
 - The cap ensures budget certainty while avoiding any incentive to increase spending to maximize the performance incentive.

¹APS ' Application for Approval of PI Proposal (December 31, 2012), <http://images.edocket.azcc.gov/docketpdf/0000141217.pdf>

Proposed changes for 2013 (\$6.9 million based on 2012 savings)

- » New structure - effectively reduces performance incentive by ~20% (compared to the 2012 structure)
- » Settlement compromise between APS and stakeholders- driver is net benefits- not DSM budget
- » Incentive as a percent of 2012 budget would be ~11% (as opposed to 14% in 2012)

Achievement Relative to Annual Goal Approved in APS' Energy Efficiency Implementation Plan	Performance Incentive as % of Net Benefits	Performance Incentive Cap
<85%	0%	Performance Incentive Will Not Exceed \$0.0125/kWh Saved
85-95%	6%	
96-105%	7%	
106-115%	8%	

¹APS ' Application for Approval of PI Proposal (December 31, 2012), <http://images.edocket.azcc.gov/docketpdf/0000141217.pdf>

Vermont: Efficiency Vermont

Select and Targeted Performance Incentives Drive Performance and Policy Goals

- » Efficiency Vermont (EVT) operates under a performance incentive structure which establishes seven PIs for the cumulative three-year contract period
- » Clear targets - balancing multiple policy priorities
- » Minimum performance targets exist which must be met to achieve performance incentives
- » Performance incentives for EVT are: 60% performance based and 40% as straight operation fee based on percent of spending (regardless of performance). EVT explains this operations fee is needed for financial stability.
- » Performance incentives, by metric, generally start to accrue at 75% of target goal (at which point 50% of the award is achieved).
- » Goal/reward thereafter scale proportionately up to 100% of target goal/100% of performance incentive.
- » Vermont Public Service Department is responsible for verification

Summary of Efficiency Vermont's 2012-2014 Performance Incentive

2012-2014 Period Goals	
Electric savings as % of Previous Year's Sales	~1.9%
Electric Savings Goal for Period	274,000 MWh
Goal Type	Annual Target Towards Cumulative EE
Percent of Goal Achieved	TBD
Gross or Net Electric Savings	Net
Decoupling	Yes
Lost Revenue Recovery Mechanism (LRAM)	No
DSM Program Budget (2012-2014)	\$122 M
Max. Performance Based Incentive (2012-2014)	\$2.9 M
Operations Fee Incentive (2012-2014)	\$2.0M
Maximum Performance Incentive (2012-2014)	\$4.9M
Incentive as Percent of Portfolio Budget	4.1%

Efficiency Vermont's 2012-2014 Performance Incentives

PI#	Title	Performance Indicator for 2012-2014 Cumulative time Period	Target	Incentive Weight	Incentive (100%)
1	Electricity Savings	Annual incremental net MWh savings	274,000 MWh	34%	\$826,666
2	Total Resource Benefits	Present worth of lifetime electric, fossil, and water benefits	\$315,710,000	25%	\$607,842
3	Summer Peak kW Savings	Cumulative net summer peak demand savings	41,920 kW	20%	\$486,274
4.a.	Summer Peak kW Savings in Geographic Area "A"	Cumulative net summer net peak demand savings in the St Albans geographic area	1,800 kW	6%	\$136,765
4.b.	Summer Peak kW Savings in Geographic Areas "B"	Cumulative net summer net peak demand savings in the Chittenden geographic areas	1,570 kW	4%	\$106,372
5	Business Comprehensiveness	Custom, Business Retrofit or Equipment Replacement Projects with multiple end-uses	378 Projects	5%	\$121,568
6	Market Transformation Residential	Residential new construction program participation in 2014 as % market share of total residential new construction permits in 2013	40% of Vermont 1-4 unit building permits	3%	\$72,941
7	Market Transformation Business	Instances where an energy efficiency measure supply chain partner is attached to completed business project	7,360 instances where a supply chain partner is linked to a business project	3%	\$72,941
				100%	\$2,431,370

Efficiency Vermont: 2012-2014 Electric EEU Funds Minimum Performance Requirements

MRP #	Title	Minimum Requirement	Performance Incentive Award Reduction %	Financial Impact at 100% Performance Incentive Amount
8	Minimum Electric Benefits	Benefit-cost ratio greater than 1.2 (Societal Test)	-100%	\$2,931,370
9	Level of Participation by Residential Customers	Total residential sector spending greater than \$22,000,000	-18%	\$437,647
10	Level of Participation by Low-Income Households	Total low-income single and multifamily spending is greater than \$7,500,000	-18%	\$437,647
11	Level of Participation by Small Business Customers	Number of total non-residential premises with annual electric use of 40,000 kWh/yr or less that acquire kwh savings is greater than 1,950	-18%	\$437,647
12	Geographic Equity	Total Resource Benefits (TRB) target for each geographic county in Vermont is achieved.	-6%	\$145,882
13	Administrative Efficiency - Management Span of Control	Maintaining a supervisor-to-staff FTE ratio of 8.5-to-1 or greater	-2%	\$48,627
14	Administrative Efficiency - Key Process Improvements	Meet all pre-determined milestones on schedule	-2%	\$48,627
15	Service Quality	Achieve 92 or more metric points in the Service Quality and Reliability Plan over the course of the Performance Period	-6%	\$150,000

North Carolina: Duke Energy Progress

Duke Energy Progress North Carolina (f/k/a Progress Energy Carolinas)

- » Performance incentive mechanism approved in June 2009 as part of DSM/EE Cost Recovery Rider filing with NCUC¹
 - Shared savings incentive mechanism
 - 13% shared savings of UCT net benefits for EE programs and measures
 - 8% shared savings of UCT net benefits for DSM programs and measures
 - Distribution System Demand Response (DSDR), Low-Income, and Pilot programs not included in PPI
- » Conditions of the performance incentive mechanism:
 - **No minimum net savings target thresholds**
 - **No cap on the performance incentive with respect to percent of spending**
 - Programs' or measures' TRC B/C ratio must be ≥ 1.00

¹ Docket No. E-2, Sub 931 Order (June 15th, 2009), <http://ncuc.commerce.state.nc.us/cgi-bin/webview/senddoc.pgm?dispfmt=&itype=Q&authorization=&parm2=DCAAAA66190B&parm3=000128827>

Duke Energy Progress North Carolina 2012 Results¹

2012 Results	
Electric savings as % of 2012 sales	0.4%
Electric Savings Achieved in 2012	158,378 MWh
Gross or Net Electric Savings	Net
Decoupling	No
Lost Revenue Recovery	Yes/Partial - 3 years of lost revenue recovery
2012 EE/DSM Program Budget	\$49.0 million
2012 Proposed Performance Incentive ² - Percent of UCT Net Benefits: 13% (EE measures/ programs); 8% (DSM measures/ programs)	\$12.5 million
Incentive as a Percentage of Program Spending	26%

¹ Docket No. E-2, Sub 1002 Supplemental Filing (June 3rd, 2011)

² Docket No. E-2, Sub 1030 Rebuttal Testimony Filing (September 2013)

Michigan: DTE Energy (DTE Electric)

DTE Electric- 2012 Performance Incentive- Original Structure

- » Must achieve at least 100% of savings target and a portfolio Utility Cost Test score greater than 1.0 to achieve minimum of 5% of portfolio spending as a performance incentive.
- » Maximum incentive is 115% of DSM spending or 25% of net benefits (whichever is less) subject to :
 - » Portfolio achieved 115% of savings target and;
 - » Portfolio UCT score is greater than 1.25.
- » Incentive amount scales as percent of savings and UTC change.

¹PA 295 of 2008

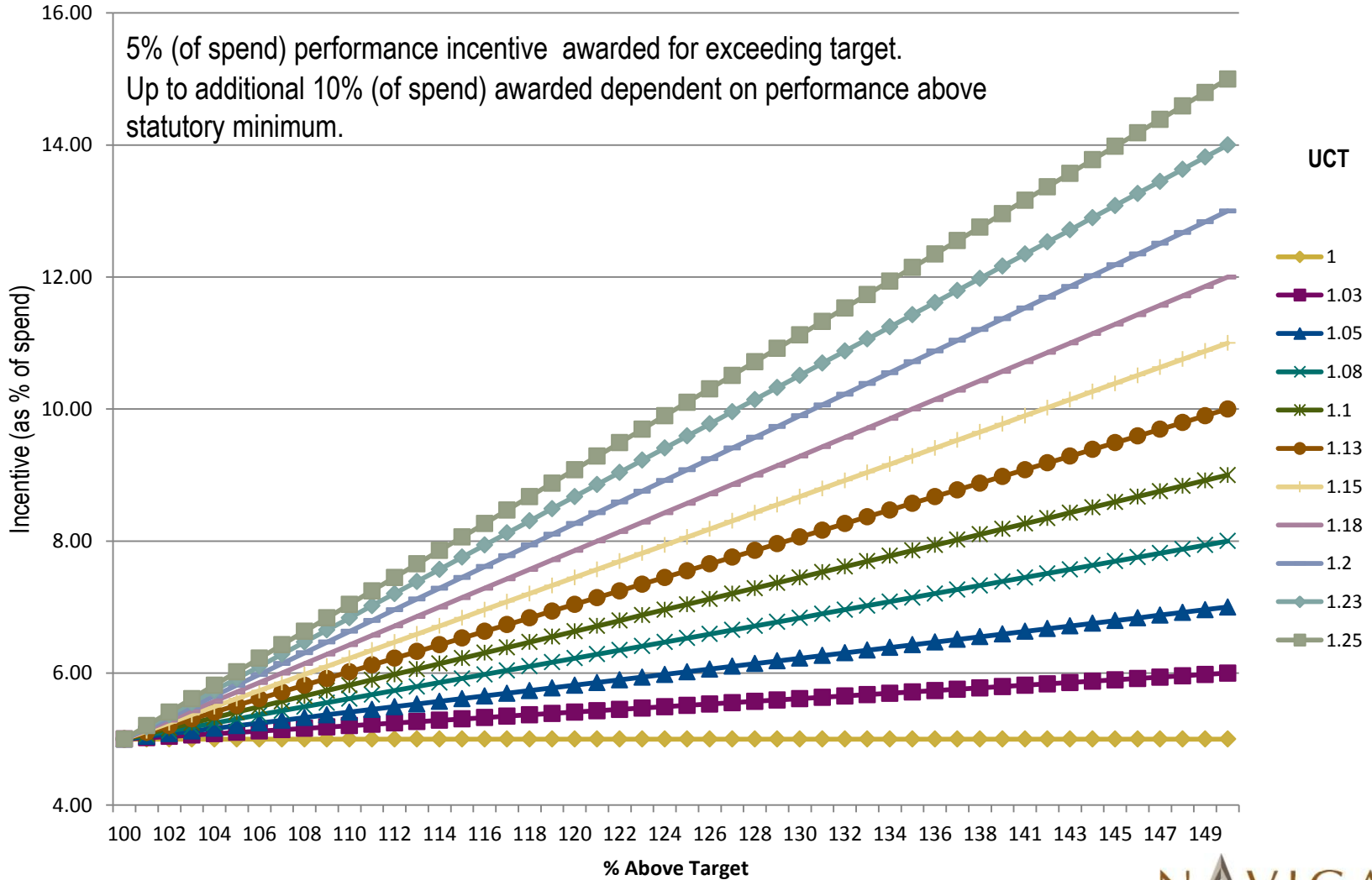
²Case No. U-17049

Summary of DTE Electric 2012 Performance Incentive

2012 Results	
Electric savings as % of Previous Year's Sales	1.34%
Electric Savings Achieved	~611,000 MWh
Goal Type	Annual Target
Percent of Goal Achieved	134%
Gross or Net Electric Savings	Net
Decoupling	No
Lost-Revenue Recovery	No
DSM Program Budget	\$69.6 M
2012 Performance Incentive	\$10.5 M
Performance Incentive as % of DSM Budget	15%

Michigan Performance Incentive Structure for 2012

Incentive cap is 15% of program spending for a portfolio that achieves a utility cost test score of >1.25 and at least 115% of savings target



New Incentive Mechanism Effective 2013- Expanding Policy Objectives

- » Maximum incentive is still 15% of spending, assuming portfolio UTC of 1.25 or greater- however, earned via some new metrics.
- » The maximum that DTE Energy may earn for energy savings is reduced to 12% of total program spending
- » DTE may earn an additional 3% of program spending (for a maximum of 15%) by achieving other metrics.
- » DTE Energy can earn a 10% energy savings bonus for savings attributed to measures that have a 10 year measure life for purposes of calculating a performance incentive. However, this multiplier does not count towards meeting the savings target for compliance purposes.

New Structure- More Metrics- Maximum of 15% of Budget- Pick & Choose

Performance Metric	Description	Additional attributes of Performance Metric	Minimum Performance to earn incentive	Incentive amount at Minimum Performance	Point at which Maximum Incentive is earned	Maximum Incentive as % of Budget
Base Energy Savings	GWh of energy savings from all programs)	Annual savings	100.1%	8%	115%	12%
Low Income Programs	GWh savings from low income programs	Annual target.	17 GWh	0.67%	20.4 GWh	2%
Multi-Measure Residential	Increase participants who install 3+ measures	Applies to Audit and Weatherization, Residential HVAC, Home Energy Survey and Home Energy Consultation programs	50% increase in 2013; 33% in 2014; 33% in 2015.	0.33%	60% increase in 2013; 40% increase in 2014; 40% increase in 2015.	1%
Multi-Measure C&I	Increase participants who install measure from 2+ measure groups	Only applies to certain measure categories within the Prescriptive and Non-Prescriptive programs, installed in one project/application.	Same as above	Same as above	Same as above	1%
Demand Savings	Total coincident peak savings from all programs	None	80 MW in 2013 85 MW in 2014 90 MW in 2015	0.33%	96 MW in 2013 102 MW in 2014 108 MW in 2015	1%

District of Columbia: DC Sustainable Energy Utility

DC Sustainable Energy Utility

Similar structure to Vermont- but customized for Washington, DC

Minimum performance targets exist which must be met to achieve maximum performance incentives

DC SEU performance incentives highlight local priorities for job creation, low income services

2012	
Electric savings as % of Previous Year's Sales	1% goal
Electric Savings Goal for Period	45,746 MWh
Goal Type	Annual Target Towards Cumulative EE
DSM Program Budget	\$14.4 M
Maximum Performance Incentive	\$600,000
Incentive as Percent of Portfolio Budget	~4%

DC SEU FY 2012 Performance Benchmarks

	Performance Target Name	Minimum Performance Target	Maximum Performance Incentive	Performance Incentive Percent
1a	Reduce per-capita consumption - Electricity	45,746 MWh	\$180,000	30%
1b	Reduce per-capita consumption - Natural Gas	120,000 Mcf		
2	Increase renewable energy generating capacity - Verify program cost effectiveness	Design a cost-effective replacement program to the District's Renewable Energy Incentive Program	\$30,000	5%
3	Reduce growth in peak demand	2,000 kW	\$30,000	5%
4	Improve energy efficiency in low-income housing - % of annual budget	\$ 2,624,841	\$120,000	20%
5	Reduce growth of energy demand of largest users	Complete report of DC largest energy users	\$60,000	10%
6	Increase number of green collar jobs - hours directly worked by DC residents, earning at least a Living Wage, on DC SEU activity; 2,080 hours = 1 green job	109,824	\$180,000	30%
	TOTAL		\$600,000	100%

California: Pacific Gas & Electric

California: Investor-owned Electric and Natural Gas Utilities

- » September 2013 – CPUC adopted the Efficiency Savings and Performance Incentive (ESPI) mechanism¹ to start with the 2013-2014 program cycle
- » Why the change:
 - Discussions of a revised PI started in January 2012 in response to controversies related to previously adopted incentive mechanisms, which were first adopted in 2008
 - Incentive based on percent of portfolio spending, as opposed to “shared savings”.
 - Targets set to meet lifecycle savings, as opposed to first year annual savings.
 - No minimum net savings target thresholds. Incentives are earned via a linear calculation toward target.
 - IOUs’ EE portfolios required to pass both the TRC and PAC tests before incentives can be paid

¹ Decision 13-09-023 (Sept. 5th, 2013), <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M076/K775/76775903.PDF>

Summary of PG&E's 2013-2014 Performance Incentive

2013-2014 Anticipated Results	
Electric savings as % of Expected Sales	
Electric Savings Planned	1,192 GWh
Gross or Net Electric Savings	Net
Decoupling	Yes
2013-2014 DSM Program Budget	\$823 M
2013-2014 Performance Incentive - Maximum	\$83 M
Maximum Incentive as Percent of Portfolio Budget	~10%

PG&E's 2013–2014 EE Cycle Performance Incentives – 10% of Budget

Performance Incentive Categories	Description of PI Category	Earnings Caps (Linear Scale- No “Cliff”)	2013-2014 Budget for PI Category (in millions) ¹	Maximum Earnings Potential (in millions) ¹
Energy Efficiency Resource Savings	Combination of ex ante “locked down” and ex post verified units of savings	9% of resource program budgets	~\$654	~\$59
Ex-Ante Review Process Performance	Incentive based on performance metric ratings	3% of resource program expenditures	~\$654	~\$20
C&S Program Management Fees	Estimating energy savings for Building C&S advocacy programs	12% of approved C&S program expenditures (minus admin. funds)	~\$12	~\$1
Non-Resource Program Management Fees	Programs which support savings but without direct savings	3% of non-resource program expenditures (minus admin. funds)	~\$95	~\$3
Other Costs ³	N/A	N/A	~\$62	\$0
TOTAL	N/A	N/A	~\$823²	~\$83

Conclusion

What makes a great performance incentive?

- » Clear performance goals- representing a short set of the most critical objectives*
- » Clarity with respect to how performance will be measured*
- » A timely and transparent process defined for independent measurement and verification of performance results*
- » Incentive earnings opportunities sufficient to motivate IOU performance, while providing cost-effective value to ratepayers*
- » Incentive structure that rewards value and results, not just spending

*Source: DECISION ADOPTING EFFICIENCY SAVINGS AND PERFORMANCE INCENTIVE MECHANISM, CPUC.
Decision 13-09-023 . September 5, 2013

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Thank you.