

Exhibit No.:  
Issues: DSM/Low Income Assistance  
Witness: Matthew E. Daunis  
Sponsoring Party: Aquila Networks-MPS  
And L&P  
Case No.: ER-2005-0436

Before the Public Service Commission  
of the State of Missouri

Surrebuttal Testimony

of

Matthew E. Daunis

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ON BEHALF OF AQUILA, INC.  
D/B/A AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P  
CASE NO. ER-2005-0436**

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**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI  
SURREBUTTAL TESTIMONY OF MATTHEW E. DAUNIS  
ON BEHALF OF AQUILA, INC.  
D/B/A AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P  
CASES NO. ER-2005-0436**

1 Q. Please state your name and business address.

2 A. My name is Matthew E. Daunis. My business address is 10700 East 350 Highway,  
3 Kansas City, MO 64138.

4 Q. By whom are you presently employed and in what capacity?

5 A. I am employed as Manager of Energy Efficiency Programs for Aquila, Inc. I am  
6 testifying on behalf of Aquila, Inc. d/b/a Aquila Networks ("Aquila").

7 Q. What is your educational background?

8 A. I received a Bachelor's degree in Mechanical Engineering from the University of Maine  
9 in 1976. I received a Masters degree in Business Administration from the University of  
10 Nebraska in 1985.

11 Q. Please describe your professional experience.

12 A. I have been employed in the utility industry in positions requiring knowledge of Demand  
13 Side Management, customer service, and marketing for about 18 years. Prior to that, I  
14 was employed by a major HVAC manufacturer for ten years in various marketing and  
15 sales positions.

16 **EXECUTIVE SUMMARY**

17 Q. What is the purpose of your surrebuttal testimony?

1 A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of Lena  
2 M. Mantle of the Missouri Public Service Commission (“MPSC”) Staff with regard to the  
3 MPSC Staff’s positions on Weatherization Assistance and other energy efficiency  
4 programs.

5 Q. What positions are you responding to?

6 A. Ms. Mantle indicates that the Staff’s position is as follows:

7 - to accept a proposed increase in low-income weatherization program funding to

8 \$108,000 with fifty percent of the cost paid for by Aquila shareholders

9 - to accept a proposed increase in the Change a Light, Change the World program from

10 \$20,000 to \$40,000 with fifty percent of the cost paid for by Aquila shareholders

11 - to accept a funding level of \$75,000 for the Commercial Audit program with fifty  
12 percent of the cost paid for by Aquila shareholders

13 - to reject a residential energy efficiency program.

14 Q. How will you address these positions?

15 A. First, it is important that I address the nature of demand side resources and their  
16 relationship to supply side resources and integrated resource planning.

17 Second, I will describe how demand side management programs are selected through the  
18 2005 Integrated Resource Plan (IRP).

19 Third, I will address recovery of the costs of these programs.

20 **DEMAND SIDE RESOURCES AND INTEGRATED RESOURCE PLANNING**

21 Q. Does the MPSC require that demand side resources be considered on an equivalent basis  
22 as supply side resources?

1 A. Yes. 4 CSR 240-22.010 (2)(A) states that in order to meet the objective of the resource  
2 planning process the utility shall “Consider and analyze demand-side efficiency and energy  
3 management measures on an equivalent basis with supply-side alternatives in the resource  
4 planning process.”

5 Q. How is demand side resource load impact estimates incorporated into the resource plan?

6 A. The load impacts are incorporated in a manner consistent with a supply side resource. In  
7 order to meet the company’s projected load requirements, portfolios of resources are  
8 developed. These portfolios contain supply side resources that provide additional  
9 generation at specified costs as well as demand side resources that reduce demand and  
10 energy requirements at specified costs.

11 Q. How does Aquila choose among the various portfolios that are developed?

12 A. The specifics of the decision process are beyond the scope of this testimony, however, in  
13 general terms the financial impact, rate impact, environmental impact and risk profile are  
14 considered. In accordance with 4 CSR 240-22.70 (6)(A), Aquila chooses a preferred  
15 resource plan from among the portfolios that in the Company’s judgment strikes an  
16 appropriate balance between the various planning objectives specified in 4 CSR 240-  
17 22.010 (2).

18 Q. Please summarize the requirements of 4 CSR 240-22.010 (2)?

19 A. The broad requirement is to provide the public with energy services that are safe, reliable  
20 and efficient, at just and reasonable rates, in a manner that serves the public interest. To  
21 meet this requirement the utility must assess tradeoffs and determine the appropriate  
22 balance between minimization of expected utility costs and other considerations  
23 including, but not limited to:

- 1       - Risks associated with critical uncertain factors that will affect the actual costs  
2       associated with alternative resource plans;  
3       - Risks associated with new or more stringent environmental laws or regulations that may  
4       be imposed at some point within the planning horizon; and  
5       - Rate increases associated with alternative resource plans.

6   Q.   Did Aquila determine the appropriate demand side management programs to meet the  
7       requirements of 4 CSR 240-22?

8   A.   Yes. The “Aquila Networks State of Missouri Electric Demand-Side Management Plan,  
9       2006-2010” (DSM Plan) develops the appropriate demand side management programs.  
10       These were incorporated into the 2005 IRP.

11   Q.   Are demand side management programs generally accepted as an integral component of  
12       resource portfolios?

13   A.   Yes. In addition to the requirements of the MPSC as I’ve outlined, they are actively  
14       encouraged by both the National Association of Regulatory Utility Commissioners  
15       (NARUC) and the Federal government. On July 23, 1999, NARUC adopted a resolution  
16       entitled “Resolution Supporting Energy Efficiency and Load Management As Cost-  
17       Effective Approaches to Reliability Concerns.” In part the resolution reads:

18               “Resolved, That NARUC urges State public utility commissions to encourage  
19               and support programs for cost-effective energy efficiency and load management  
20               investments as both a short-term and long-term strategy for enhancing the  
21               reliability of the nation’s electric system, and reducing its costs.”

1 The Federal government in Section 111(a) (7) of the Energy Policy act of 1992 states that  
2 “Each electric utility shall employ integrated resource planning”. Integrated resource  
3 planning is defined as:

4 “a planning process for new energy resources that evaluates the full range of  
5 alternatives, including new generating capacity, power purchases, energy  
6 conservation and efficiency, cogeneration and district heating and cooling  
7 applications, and renewable energy resources, in order to provide adequate and  
8 reliable service to its electric customers at the lowest system cost. The process  
9 shall take into account necessary features for system operation, such as diversity,  
10 reliability, dispatchability, and other factors of risk; shall take into account the  
11 ability to verify energy savings achieved through energy conservation and  
12 efficiency and the projected durability of such savings measured over time; and  
13 shall treat demand and supply resources on a consistent and integrated basis.”

14 Q. Do you conclude that demand side resources are an accepted and appropriate component  
15 of a utility’s resource portfolio?

16 A. Yes.

17 **DEMAND SIDE RESOURCES IN AQUILA NETWORKS-MISSOURI INTEGRATED**  
18 **RESOURCE PLAN**

19 Q. Does Ms. Mantle address each of the demand side programs that were incorporated in the  
20 IRP?

21 A. No. Ms. Mantle only addresses a subset of the programs. Specifically, those that were  
22 proposed in the direct testimony of Missouri Department of Natural Resources witness  
23 Anita Randolph.

1 Q. Ms. Mantle indicates that she was unable to find how these or any other demand side  
2 programs impacted the Company's IRP (Mantle Rebuttal Testimony, page 4, lines 2-6).  
3 Please explain how they were incorporated.

4 A. The DSM Plan was developed as part of the IRP analysis. First, measures were bundled  
5 into resource options for portfolio analysis. Measures within the selected resource  
6 options were then incorporated into DSM programs. Table 3-8 of the IRP defines the  
7 DSM options that were used for portfolio development. Table 3-9 of the IRP illustrates  
8 that the DSM options that contained Residential, Commercial and Industrial measures  
9 screened at cost level A (less than \$30 MWh) and cost level B (less than \$45 MWh)  
10 resulted in the greatest reduction in cost for both the Least Cost Plan and the Preferred  
11 Plan. Schedule MED- 1 lists the programs that fall into these cost categories. These  
12 programs are described in more detail in Appendix A of the IRP, which is attached as my  
13 Schedule MED- 3.

14 Q. Is the Company proposing to only implement the programs referenced by Ms. Mantle?

15 A. No. The Company believes that the Preferred Portfolio, including all of the selected DSM  
16 programs, best meets the requirements of the Electric Utility Resource Planning rules that  
17 I outlined previously.

### 18 **COST RECOVERY**

19 Q. How does Ms. Mantle propose that the costs of the programs be recovered?

20 A. Ms. Mantle is proposing a 50/50 sharing of the costs between shareholders and  
21 ratepayers.

22 Q. Do you agree with her proposal?



1 A. No. Demand side resources are simply a component of the overall portfolio of resources  
2 that the Company acquires to meet its projected load requirements. There is no  
3 justification to require shareholders to bear the cost of either demand side or supply side  
4 resources. I believe that doing so would be in direct violation of the MPSC requirement  
5 to consider and analyze demand-side efficiency and energy management measures on an  
6 equivalent basis with supply-side alternatives, not to mention the possible confiscation  
7 issues.

8 Q. Is Aquila funding its energy efficiency programs with shareholder money currently?

9 A. Yes. In Case No. ER-2004-0034, the Company agreed to a stipulated resolution of the  
10 case. The stipulation called for shareholder funding of \$93,500 per year until the next  
11 general rate case.

12 Q. Why are you not requesting any revenue requirement to fund the programs that were  
13 incorporated in the 2005 IRP?

14 A. The stipulation in Case No. ER-2004-0034 also established a collaborative work group to  
15 explore and propose appropriate cost recovery mechanisms for the DSM programs.  
16 Consequently, cost recovery was not included in this rate case. We have been working  
17 with the collaborative group, but have not reached a consensus on the appropriate  
18 recovery mechanism.

19 Q. Do you believe that a specific cost recovery mechanism is necessary for demand side  
20 resources?

21 A. Yes. Demand side resources are purchased in small increments, rarely large enough to  
22 warrant specific rate filings. This is unlike supply side resources that often trigger a rate  
23 increase at the time of completion. Consequently, other mechanisms are necessary for

1 the cost recovery of demand side resources. These mechanisms generally fall into one of  
2 two categories. One approach is that the costs may be accumulated in a balance sheet  
3 account and amortized over a period of time, much like an accounting authority order.  
4 A second approach has been adopted in several jurisdictions. This approach matches a  
5 funding mechanism or tariff rider with the annual expenditures. Expenditures  
6 accumulate in a balancing account and are offset by the collections from the funding  
7 mechanism. The level of the funding mechanism is adjusted on a regular basis to  
8 maintain a balance in the balancing account that is near zero.

9 Q. Do you have examples of these various funding mechanisms?

10 A. Yes. Schedule MED – 2 is a compilation of the funding mechanisms in use across the  
11 country.

12 Q. Has the Federal government provided any guidance on appropriate cost recovery for  
13 DSM programs?

14 A. Yes, in both the 1992 and 2005 Energy Policy Acts. Section 111(a) (8) of the 1992  
15 Energy Policy Act states:

16 The rates allowed to be charged by a State regulated electric utility shall be such  
17 that the utility's investment in and expenditures for energy conservation, energy  
18 efficiency resources, and other demand side management measures are at least as  
19 profitable, giving appropriate consideration to income lost from reduced sales due  
20 to investments in and expenditures for conservation and efficiency, as its  
21 investments in and expenditures for the construction of new generation,  
22 transmission, and distribution equipment. Such energy conservation, energy

1 efficiency resources and other demand side management measures shall be  
2 appropriately monitored and evaluated.

3 Section 139 of the 2005 Energy Policy Act directs the Secretary of Energy in  
4 consultation with NARUC and the National Association of State Energy Officials to  
5 conduct a study that considers among other things:

6 Section 139 (a) (5) methods of—

7 (A) removing disincentives for utilities to implement energy efficiency  
8 programs;

9 (B) encouraging utilities to undertake voluntary energy efficiency programs;

10 and

11 (C) ensuring appropriate returns on energy efficiency programs.

12 Q. Does a funding mechanism that requires a 50% shareholder contribution meet the criteria  
13 set forth in either the 1992 or 2005 Energy Policy Acts?

14 A. No. Such a mechanism would clearly not allow the demand side programs to be “at least  
15 as profitable” as the supply side programs as set forth in the 1992 Act, nor would it  
16 ensure an appropriate return as set forth in the 2005 Act.

17 **SUMMARY**

18 Q. Please summarize your testimony.

19 A. My testimony demonstrates three points:

20 1) Demand side resources should be considered on an equivalent basis to supply side  
21 resources as directed by the MPSC and encouraged by both NARUC and Federal  
22 legislation,

1        2) The demand side programs referred to by Ms. Mantle were correctly analyzed,  
2        developed and incorporated into the 2005 IRP. In addition, the 2005 IRP identified  
3        programs that were not included in Ms. Mantle's testimony.

4        3) Ms. Mantle's proposed cost recovery mechanism is inconsistent with the directive to  
5        consider demand side resources on an equivalent basis with supply side resources and  
6        fails to allow the Company an opportunity to recover its costs and earn a return on its  
7        investment that is comparable to that which it would earn on a supply side resource.

8        Demand side programs must be funded by a mechanism that meets this criteria.

9    Q.    Does this conclude your surrebuttal testimony?

10 A.    Yes.

## Summary of Aquila Networks State of Missouri Electric Demand-Side Management Plan Programs

<b>Integrated Resource Plan Cost Category</b>	<b>Expected MWh Savings, 5th Year of Plan</b>
A: Less than \$30/MWh	81,841
B: \$30 to \$45/MWh	19,822
<b>Total Incorporated in IRP</b>	<b>101,663</b>

<b>Programs Included in Cost Categories A and B (*)</b>	<b>MWh Savings, 5th Year of Plan</b>	<b>Levelized Cost / mWh</b>
Residential Lighting (includes Change-A-Light)	26,383	\$15.39
Residential Thermal Envelope (includes Home Performance w/ ES)	9,326	\$45.90
Residential Space Heating & Cooling Replacement	4,260	\$40.60
Residential Programmable Thermostats & HVAC Maintenance	3,768	\$34.90
Residential New Construction (based on ES new homes)	5,423	\$41.45
Residential Audit	5,512	\$38.51
Comprehensive C&I Program	53,041	\$23.41
<b>Program Totals</b>	<b>107,714</b>	

(\*) Savings by program were updated and presented to the MPSC and Company on August 4, 2005.

### Summary of DSM Integration and Cost Recovery

State	Cost recovery Methodology	Integrated Resource Plan Requirement?	Shareholder Incentives
Kentucky	Tariff rider	Yes	No
Florida	Rates	Yes	Yes
Colorado	Tariff riders	Yes	No
Wyoming	Rates	No	No
Washington	Tariff rider	Yes, every two years	No
Oregon	3.5% tariff rider	No	No
Idaho	Tariff riders	Yes, every two years	No
Maine	\$.0015/kWh tariff rider	No	No
New Jersey	2% tariff rider	No	No
Minnesota	1.5-2.0% of gross operating revenues required EE spending recovered through rates and a tariff rider	Biennial IRPs	Yes
Nevada	Rates	Triennial Resource Plan	Yes
Montana	2.4% tariff rider	IRP and Portfolio	No
Arizona	1.45% tariff rider	No	No
California	3% tariff rider	Yes	Yes
Connecticut	4.05% tariff rider	No	No
Delaware	0.6% tariff rider	No	No
Illinois	.9% tariff rider	No	No
Massachusetts	3.06% tariff rider	No	No
Michigan	0.7% tariff rider	No	No
Pennsylvania	1.0% tariff rider	Yes	No
Rhode Island	2.3% tariff rider	No	No
Texas	1.65% tariff rider	Yes	No
Vermont	3.4% tariff rider	Yes	No
Wisconsin	4.3% tariff rider	Yes	No
New Mexico	Tariff rider	Yes	No
Utah	Tariff rider	Yes	No
Missouri	Rates	Yes	No
Georgia	Rates	Yes	No
Indiana	Tariff rider	Yes	No
South Dakota	Rates	No	No
North Dakota	Rates	No	No
Hawaii	Rates	Yes	No
Iowa	Tariff rider	Yes	No

Information was compiled from the Regulatory Assistance Project (RAP), the American Council for an Energy Efficiency Economy (ACE<sup>3</sup>) and the Southwest Energy Efficiency Project (SWEPP).



# **Appendices:**

## **Aquila Networks State of Missouri Electric Demand-Side Management Plan, 2006 – 2010**

***Prepared for:***  
Missouri Public Service Commission

***Prepared by:***  
Aquila Networks

***April 15, 2005***

## ***Appendix A. Baseline Data***

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**Econometric Forecast of Sales in  
GWh by Area**

Year	MPS	SJD
2004	2,355	707
2005	2,518	745
2006	2,600	761
2007	2,684	777
2008	2,768	792
2009	2,843	802
2010	2,925	814
2011	3,011	826
2012	3,103	841
2013	3,182	851
2014	3,272	864
2015	3,366	878
2016	3,470	894
2017	3,560	906
2018	3,660	920
2019	3,762	935
2020	3,875	952
2021	3,983	967
2022	4,094	982
2023	4,210	998
2024	4,329	1,014
2025	4,452	1,031

**Forecast of Percentages of Families Living in  
Single/Multi Family Homes, by Area**

Year	Area	Multi Family	Single Family
2004	MPS	21.32%	78.68%
2005	MPS	21.28%	78.72%
2006	MPS	21.24%	78.76%
2007	MPS	21.21%	78.79%
2008	MPS	21.18%	78.82%
2009	MPS	21.16%	78.84%
2010	MPS	21.14%	78.86%
2011	MPS	21.13%	78.87%
2012	MPS	21.12%	78.88%
2013	MPS	21.12%	78.88%
2014	MPS	21.12%	78.88%
2015	MPS	21.13%	78.87%
2016	MPS	21.14%	78.86%
2017	MPS	21.16%	78.84%
2018	MPS	21.19%	78.81%
2019	MPS	21.22%	78.78%
2020	MPS	21.25%	78.75%
2021	MPS	21.27%	78.73%
2022	MPS	21.30%	78.70%
2023	MPS	21.33%	78.67%
2024	MPS	21.36%	78.64%
2025	MPS	21.39%	78.61%
2004	SJD	21.32%	78.68%
2005	SJD	21.28%	78.72%
2006	SJD	21.24%	78.76%
2007	SJD	21.21%	78.79%
2008	SJD	21.18%	78.82%
2009	SJD	21.16%	78.84%
2010	SJD	21.14%	78.86%
2011	SJD	21.13%	78.87%
2012	SJD	21.12%	78.88%
2013	SJD	21.12%	78.88%
2014	SJD	21.12%	78.88%
2015	SJD	21.13%	78.87%
2016	SJD	21.14%	78.86%
2017	SJD	21.16%	78.84%
2018	SJD	21.19%	78.81%
2019	SJD	21.22%	78.78%
2020	SJD	21.25%	78.75%
2021	SJD	21.27%	78.73%
2022	SJD	21.30%	78.70%
2023	SJD	21.33%	78.67%
2024	SJD	21.36%	78.64%
2025	SJD	21.39%	78.61%

Forecast of Customers by Area

Year	Area	Number of Customers
2004	MPS	196,752
2005	MPS	200,668
2006	MPS	204,584
2007	MPS	208,500
2008	MPS	212,580
2009	MPS	216,729
2010	MPS	220,884
2011	MPS	225,070
2012	MPS	229,090
2013	MPS	233,141
2014	MPS	237,253
2015	MPS	241,466
2016	MPS	245,732
2017	MPS	249,986
2018	MPS	254,223
2019	MPS	258,457
2020	MPS	262,709
2021	MPS	266,976
2022	MPS	271,251
2023	MPS	275,557
2024	MPS	279,889
2025	MPS	284,223
2004	SJD	57,202
2005	SJD	57,586
2006	SJD	58,002
2007	SJD	58,419
2008	SJD	58,778
2009	SJD	59,145
2010	SJD	59,513
2011	SJD	59,862
2012	SJD	60,249
2013	SJD	60,628
2014	SJD	60,987
2015	SJD	61,316
2016	SJD	61,626
2017	SJD	61,936
2018	SJD	62,245
2019	SJD	62,552
2020	SJD	62,855
2021	SJD	63,147
2022	SJD	63,433
2023	SJD	63,707
2024	SJD	63,973
2025	SJD	64,241

End-Use Saturations By Building Type and Vintage

Building Type	End-Use	vintage	saturation
Single Family	Central Heat	Existing	84.81%
Single Family	Room Heat	Existing	9.70%
Single Family	Heat Pump	Existing	5.49%
Single Family	Central AC	Existing	78.04%
Single Family	Room AC	Existing	11.60%
Single Family	Lighting Bulbs	Existing	90.00%
Single Family	Lighting Fixtures	Existing	10.00%
Single Family	Water Heat	Existing	100.00%
Single Family	Cooking	Existing	100.00%
Single Family	Refrigerator	Existing	123.00%
Single Family	Freezer	Existing	59.00%
Single Family	Dryer	Existing	98.00%
Single Family	Plug Load	Existing	100.00%
Single Family	Other	Existing	100.00%
Multi Family	Central Heat	Existing	77.47%
Multi Family	Room Heat	Existing	15.39%
Multi Family	Heat Pump	Existing	7.14%
Multi Family	Central AC	Existing	79.66%
Multi Family	Room AC	Existing	11.42%
Multi Family	Lighting Bulbs	Existing	90.00%
Multi Family	Lighting Fixtures	Existing	10.00%
Multi Family	Water Heat	Existing	100.00%
Multi Family	Cooking	Existing	100.00%
Multi Family	Refrigerator	Existing	100.00%
Multi Family	Freezer	Existing	41.00%
Multi Family	Dryer	Existing	86.00%
Multi Family	Plug Load	Existing	100.00%
Multi Family	Other	Existing	100.00%
Single Family	Central Heat	New	84.81%
Single Family	Room Heat	New	9.70%
Single Family	Heat Pump	New	5.49%
Single Family	Central AC	New	78.04%
Single Family	Room AC	New	11.60%
Single Family	Lighting Bulbs	New	90.00%
Single Family	Lighting Fixtures	New	10.00%
Single Family	Water Heat	New	100.00%
Single Family	Cooking	New	100.00%
Single Family	Refrigerator	New	123.00%
Single Family	Freezer	New	59.00%
Single Family	Dryer	New	98.00%
Single Family	Plug Load	New	100.00%
Single Family	Other	New	100.00%
Multi Family	Central Heat	New	77.47%
Multi Family	Room Heat	New	15.39%
Multi Family	Heat Pump	New	7.14%
Multi Family	Central AC	New	79.66%
Multi Family	Room AC	New	11.42%
Multi Family	Lighting Bulbs	New	90.00%
Multi Family	Lighting Fixtures	New	10.00%
Multi Family	Water Heat	New	100.00%
Multi Family	Cooking	New	100.00%
Multi Family	Refrigerator	New	100.00%
Multi Family	Freezer	New	41.00%
Multi Family	Dryer	New	86.00%
Multi Family	Plug Load	New	100.00%
Multi Family	Other	New	100.00%

**Fuel Shares by Building Type, End-Use and Fuel**

Building Type	End-Use	Fuel Type	Base Avg Electric Share	Base Marg Electric Share Existing	Base Marg Electric Share Conversion	Base Marg Electric Share New
Single Family	Central Heat	Electric	4.98%	4.98%	4.98%	4.98%
Single Family	Room Heat	Electric	19.95%	19.95%	19.95%	19.95%
Single Family	Heat Pump	Electric	100.00%	100.00%	100.00%	100.00%
Single Family	Central AC	Electric	100.00%	100.00%	100.00%	100.00%
Single Family	Room AC	Electric	100.00%	100.00%	100.00%	100.00%
Single Family	Lighting Bulbs	Electric	100.00%	100.00%	100.00%	100.00%
Single Family	Lighting Fixtures	Electric	100.00%	100.00%	100.00%	100.00%
Single Family	Water Heat	Electric	32.32%	32.32%	32.32%	32.32%
Single Family	Cooking	Electric	83.10%	83.10%	83.10%	83.10%
Single Family	Refrigerator	Electric	100.00%	100.00%	100.00%	100.00%
Single Family	Freezer	Electric	100.00%	100.00%	100.00%	100.00%
Single Family	Dryer	Electric	80.57%	80.57%	80.57%	80.57%
Single Family	Plug Load	Electric	100.00%	100.00%	100.00%	100.00%
Single Family	Other	Electric	100.00%	100.00%	100.00%	100.00%
Multi Family	Central Heat	Electric	16.43%	16.43%	16.43%	16.43%
Multi Family	Room Heat	Electric	17.09%	17.09%	17.09%	17.09%
Multi Family	Heat Pump	Electric	100.00%	100.00%	100.00%	100.00%
Multi Family	Central AC	Electric	100.00%	100.00%	100.00%	100.00%
Multi Family	Room AC	Electric	100.00%	100.00%	100.00%	100.00%
Multi Family	Lighting Bulbs	Electric	100.00%	100.00%	100.00%	100.00%
Multi Family	Lighting Fixtures	Electric	100.00%	100.00%	100.00%	100.00%
Multi Family	Water Heat	Electric	18.16%	18.16%	18.16%	18.16%
Multi Family	Cooking	Electric	89.77%	89.77%	89.77%	89.77%
Multi Family	Refrigerator	Electric	100.00%	100.00%	100.00%	100.00%
Multi Family	Freezer	Electric	100.00%	100.00%	100.00%	100.00%
Multi Family	Dryer	Electric	88.28%	88.28%	88.28%	88.28%
Multi Family	Plug Load	Electric	100.00%	100.00%	100.00%	100.00%
Multi Family	Other	Electric	100.00%	100.00%	100.00%	100.00%

**Efficiency Shares by Building Type, End-Use and Fuel**

Building Type	End-Use	Fuel Type	Stock Efficiency Share	Standard Efficiency Share	High Efficiency Share	Premium Efficiency Share
Multi Family	Central AC	Electric	50%	40%	9%	1%
Multi Family	Central Heat	Electric	100%			
Multi Family	Cooking	Electric	90%	10%		
Multi Family	Dryer	Electric	90%	10%		
Multi Family	Freezer	Electric	50%	45%	5%	
Multi Family	Heat Pump	Electric	50%	40%	9%	1%
Multi Family	Lighting Bulbs	Electric	100%			
Multi Family	Lighting Fixtures	Electric	100%			
Multi Family	Other	Electric	100%			
Multi Family	Plug Load	Electric	90%	10%		
Multi Family	Refrigerator	Electric	50%	45%	5%	
Multi Family	Room AC	Electric	50%	45%	5%	
Multi Family	Room Heat	Electric	100%			
Multi Family	Water Heat	Electric	50%	45%	5%	
Multi Family	Central Heat	Gas	100%			
Multi Family	Cooking	Gas	100%			
Multi Family	Dryer	Gas	100%			
Multi Family	Room Heat	Gas	100%			
Multi Family	Water Heat	Gas	100%			
Single Family	Central AC	Electric	50%	40%	9%	1%
Single Family	Central Heat	Electric	100%			
Single Family	Cooking	Electric	90%	10%		
Single Family	Dryer	Electric	90%	10%		
Single Family	Freezer	Electric	50%	45%	5%	
Single Family	Heat Pump	Electric	50%	40%	9%	1%
Single Family	Lighting Bulbs	Electric	100%			
Single Family	Lighting Fixtures	Electric	100%			
Single Family	Other	Electric	100%			
Single Family	Plug Load	Electric	90%	10%		
Single Family	Refrigerator	Electric	50%	45%	5%	
Single Family	Room AC	Electric	50%	45%	5%	
Single Family	Room Heat	Electric	100%			
Single Family	Water Heat	Electric	50%	45%	5%	
Single Family	Central Heat	Gas	100%			
Single Family	Cooking	Gas	100%			
Single Family	Dryer	Gas	100%			
Single Family	Room Heat	Gas	100%			
Single Family	Water Heat	Gas	100%			

**UECs by Building Type, End-Use and Fuel**

<b>Building Type</b>	<b>End-Use</b>	<b>Fuel Type</b>	<b>Stock UEC</b>	<b>Standard UEC</b>	<b>Stock Efficiency</b>	<b>Standard Efficiency</b>
Multi Family	Central AC	Electric	1144.2	942.6	10.7	13.0
Multi Family	Central Heat	Electric	7413.5	7413.5	1.0	1.0
Multi Family	Cooking	Electric	465.5	465.5	1.0	1.0
Multi Family	Dryer	Electric	811.9	811.9	1.0	1.0
Multi Family	Freezer	Electric	631.2	504.9	0.8	1.0
Multi Family	Heat Pump	Electric	4929.1	4042.1	1.0	1.2
Multi Family	Lighting Bulbs	Electric	1088.0	1088.0	1.0	1.0
Multi Family	Lighting Fixtures	Electric	1088.0	1088.0	1.0	1.0
Multi Family	Other	Electric	0.0	0.0	1.0	1.0
Multi Family	Plug Load	Electric	2000.0	2000.0	1.0	1.0
Multi Family	Refrigerator	Electric	817.2	653.7	0.8	1.0
Multi Family	Room AC	Electric	752.9	721.9	9.3	9.7
Multi Family	Room Heat	Electric	7657.8	7657.8	1.0	1.0
Multi Family	Water Heat	Electric	3166.3	3038.5	0.9	0.9
Single Family	Central AC	Electric	2370.5	1952.9	10.7	13.0
Single Family	Central Heat	Electric	14693.7	14693.7	1.0	1.0
Single Family	Cooking	Electric	602.5	602.5	1.0	1.0
Single Family	Dryer	Electric	866.9	866.9	1.0	1.0
Single Family	Freezer	Electric	643.0	514.4	0.8	1.0
Single Family	Heat Pump	Electric	10225.4	8971.2	1.0	1.1
Single Family	Lighting Bulbs	Electric	2004.0	2004.0	1.0	1.0
Single Family	Lighting Fixtures	Electric	2004.0	2004.0	1.0	1.0
Single Family	Other	Electric	0.0	0.0	1.0	1.0
Single Family	Plug Load	Electric	3500.0	3500.0	1.0	1.0
Single Family	Refrigerator	Electric	867.0	693.6	0.8	1.0
Single Family	Room AC	Electric	1316.3	1262.1	9.3	9.7
Single Family	Room Heat	Electric	14594.7	14594.7	1.0	1.0
Single Family	Water Heat	Electric	3447.7	3308.6	0.9	0.9
Multi Family	Central Heat	Gas	1.0	1.0	1.0	1.0
Multi Family	Cooking	Gas	1.0	1.0	1.0	1.0
Multi Family	Dryer	Gas	1.0	1.0	1.0	1.0
Multi Family	Room Heat	Gas	1.0	1.0	1.0	1.0
Multi Family	Water Heat	Gas	1.0	1.0	1.0	1.0
Single Family	Central Heat	Gas	1.0	1.0	1.0	1.0
Single Family	Cooking	Gas	1.0	1.0	1.0	1.0
Single Family	Dryer	Gas	1.0	1.0	1.0	1.0
Single Family	Room Heat	Gas	1.0	1.0	1.0	1.0
Single Family	Water Heat	Gas	1.0	1.0	1.0	1.0

**Econometric Forecast of Sales  
in GWh by Area**

<b>Year</b>	<b>MPS</b>	<b>SJD</b>
2004	1,705	571
2005	1,819	598
2006	1,915	614
2007	2,013	631
2008	2,086	644
2009	2,163	654
2010	2,250	667
2011	2,337	680
2012	2,432	695
2013	2,517	707
2014	2,610	721
2015	2,700	733
2016	2,796	748
2017	2,881	759
2018	2,975	773
2019	3,070	787
2020	3,173	803
2021	3,269	817
2022	3,366	830
2023	3,464	844
2024	3,562	858
2025	3,664	872

**Forecasts of Percentage of Customers by Building Type**

Year	Area	Small Office	Large Office	Restaurant	Retail	Grocery	Warehouse	School	Health	Lodging	Miscellaneous
2004	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2005	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2006	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2007	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2008	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2009	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2010	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2011	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2012	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2013	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2014	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2015	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2016	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2017	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2018	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2019	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2020	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2021	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2022	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2023	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2024	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2025	MPS	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2004	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2005	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2006	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2007	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2008	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2009	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2010	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2011	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2012	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2013	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2014	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2015	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2016	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2017	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2018	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2019	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2020	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2021	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2022	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2023	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2024	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%
2025	SJD	27.27%	2.03%	4.34%	19.50%	1.71%	7.46%	2.76%	5.15%	1.97%	27.82%

**Forecast of Customers by Area**

<b>Year</b>	<b>Area</b>	<b>Number of Customers</b>
2004	MPS	27,515
2005	MPS	28,606
2006	MPS	29,697
2007	MPS	30,788
2008	MPS	31,879
2009	MPS	32,970
2010	MPS	34,061
2011	MPS	35,152
2012	MPS	36,243
2013	MPS	37,334
2014	MPS	38,425
2015	MPS	39,516
2016	MPS	40,607
2017	MPS	41,698
2018	MPS	42,789
2019	MPS	43,880
2020	MPS	44,971
2021	MPS	46,062
2022	MPS	47,153
2023	MPS	48,244
2024	MPS	49,335
2025	MPS	50,426
2004	SJD	7,344
2005	SJD	7,486
2006	SJD	7,628
2007	SJD	7,770
2008	SJD	7,912
2009	SJD	8,054
2010	SJD	8,196
2011	SJD	8,338
2012	SJD	8,480
2013	SJD	8,622
2014	SJD	8,764
2015	SJD	8,906
2016	SJD	9,048
2017	SJD	9,190
2018	SJD	9,332
2019	SJD	9,474
2020	SJD	9,616
2021	SJD	9,758
2022	SJD	9,900
2023	SJD	10,042
2024	SJD	10,184
2025	SJD	10,326



### End-Use Saturations By Building Type and Vintage

Building Type	End-Use	Vintage	Saturation
Grocery	Cooking	Existing	67.0%
Grocery	Cooling_Chillers	Existing	1.8%
Grocery	Cooling_DX	Existing	53.5%
Grocery	Cooling_HeatPump	Existing	7.2%
Grocery	Lighting_2L4T12	Existing	5.2%
Grocery	Lighting_2L4T8	Existing	26.1%
Grocery	Lighting_2L8T12	Existing	0.4%
Grocery	Lighting_3L4T12	Existing	0.4%
Grocery	Lighting_3L4T8	Existing	17.7%
Grocery	Lighting_4L4T12	Existing	0.1%
Grocery	Lighting_4L4T8	Existing	8.7%
Grocery	Lighting_INC150W	Existing	20.7%
Grocery	Lighting_INC40W	Existing	20.7%
Grocery	Lighting_INC75W	Existing	20.7%
Grocery	Other	Existing	100.0%
Grocery	Plug_Load	Existing	100.0%
Grocery	Refrigeration	Existing	92.8%
Grocery	Space_Heat	Existing	56.1%
Grocery	Ventilation	Existing	100.0%
Grocery	Water_Heat	Existing	66.4%
Grocery	Cooking	New	67.0%
Grocery	Cooling_Chillers	New	1.8%
Grocery	Cooling_DX	New	53.5%
Grocery	Cooling_HeatPump	New	7.2%
Grocery	Lighting_2L4T12	New	5.2%
Grocery	Lighting_2L4T8	New	26.1%
Grocery	Lighting_2L8T12	New	0.4%
Grocery	Lighting_3L4T12	New	0.4%
Grocery	Lighting_3L4T8	New	17.7%
Grocery	Lighting_4L4T12	New	0.1%
Grocery	Lighting_4L4T8	New	8.7%
Grocery	Lighting_INC150W	New	20.7%
Grocery	Lighting_INC40W	New	20.7%
Grocery	Lighting_INC75W	New	20.7%
Grocery	Other	New	100.0%
Grocery	Plug_Load	New	100.0%
Grocery	Refrigeration	New	92.8%
Grocery	Space_Heat	New	56.1%
Grocery	Ventilation	New	100.0%
Grocery	Water_Heat	New	66.4%

### End-Use Saturations By Building Type and Vintage

Building Type	End-Use	Vintage	Saturation
Health	Cooking	Existing	81.7%
Health	Cooling_Chillers	Existing	13.2%
Health	Cooling_DX	Existing	30.8%
Health	Cooling_HeatPump	Existing	3.6%
Health	Lighting_2L4T12	Existing	25.1%
Health	Lighting_2L4T8	Existing	15.8%
Health	Lighting_2L8T12	Existing	2.1%
Health	Lighting_3L4T12	Existing	0.0%
Health	Lighting_3L4T8	Existing	9.9%
Health	Lighting_4L4T12	Existing	17.3%
Health	Lighting_4L4T8	Existing	11.2%
Health	Lighting_INC150W	Existing	9.4%
Health	Lighting_INC40W	Existing	9.4%
Health	Lighting_INC75W	Existing	9.4%
Health	Other	Existing	100.0%
Health	Plug_Load	Existing	100.0%
Health	Refrigeration	Existing	67.9%
Health	Space_Heat	Existing	61.8%
Health	Ventilation	Existing	100.0%
Health	Water_Heat	Existing	66.6%
Health	Cooking	New	81.7%
Health	Cooling_Chillers	New	13.2%
Health	Cooling_DX	New	30.8%
Health	Cooling_HeatPump	New	3.6%
Health	Lighting_2L4T12	New	25.1%
Health	Lighting_2L4T8	New	15.8%
Health	Lighting_2L8T12	New	2.1%
Health	Lighting_3L4T12	New	0.0%
Health	Lighting_3L4T8	New	9.9%
Health	Lighting_4L4T12	New	17.3%
Health	Lighting_4L4T8	New	11.2%
Health	Lighting_INC150W	New	9.4%
Health	Lighting_INC40W	New	9.4%
Health	Lighting_INC75W	New	9.4%
Health	Other	New	100.0%
Health	Plug_Load	New	100.0%
Health	Refrigeration	New	67.9%
Health	Space_Heat	New	61.8%
Health	Ventilation	New	100.0%
Health	Water_Heat	New	66.6%

### End-Use Saturations By Building Type and Vintage

Building Type	End-Use	Vintage	Saturation
Large_Office	Cooling_Chillers	Existing	23.7%
Large_Office	Cooling_DX	Existing	29.1%
Large_Office	Cooling_HeatPump	Existing	19.6%
Large_Office	Lighting_2L4T12	Existing	6.7%
Large_Office	Lighting_2L4T8	Existing	15.6%
Large_Office	Lighting_2L8T12	Existing	1.4%
Large_Office	Lighting_3L4T12	Existing	1.8%
Large_Office	Lighting_3L4T8	Existing	21.6%
Large_Office	Lighting_4L4T12	Existing	16.0%
Large_Office	Lighting_4L4T8	Existing	4.8%
Large_Office	Lighting_INC150W	Existing	16.0%
Large_Office	Lighting_INC40W	Existing	16.0%
Large_Office	Lighting_INC75W	Existing	16.0%
Large_Office	Other	Existing	100.0%
Large_Office	Plug_Load	Existing	100.0%
Large_Office	Space_Heat	Existing	63.7%
Large_Office	Ventilation	Existing	100.0%
Large_Office	Water_Heat	Existing	59.9%
Large_Office	Cooling_Chillers	New	23.7%
Large_Office	Cooling_DX	New	29.1%
Large_Office	Cooling_HeatPump	New	19.6%
Large_Office	Lighting_2L4T12	New	6.7%
Large_Office	Lighting_2L4T8	New	15.6%
Large_Office	Lighting_2L8T12	New	1.4%
Large_Office	Lighting_3L4T12	New	1.8%
Large_Office	Lighting_3L4T8	New	21.6%
Large_Office	Lighting_4L4T12	New	16.0%
Large_Office	Lighting_4L4T8	New	4.8%
Large_Office	Lighting_INC150W	New	16.0%
Large_Office	Lighting_INC40W	New	16.0%
Large_Office	Lighting_INC75W	New	16.0%
Large_Office	Other	New	100.0%
Large_Office	Plug_Load	New	100.0%
Large_Office	Space_Heat	New	63.7%
Large_Office	Ventilation	New	100.0%
Large_Office	Water_Heat	New	59.9%

### End-Use Saturations By Building Type and Vintage

Building Type	End-Use	Vintage	Saturation
Retail	Cooling_Chillers	Existing	12.3%
Retail	Cooling_DX	Existing	33.6%
Retail	Cooling_HeatPump	Existing	13.9%
Retail	Lighting_2L4T12	Existing	7.1%
Retail	Lighting_2L4T8	Existing	18.6%
Retail	Lighting_2L8T12	Existing	11.7%
Retail	Lighting_3L4T12	Existing	0.8%
Retail	Lighting_3L4T8	Existing	6.8%
Retail	Lighting_4L4T12	Existing	9.8%
Retail	Lighting_4L4T8	Existing	5.9%
Retail	Lighting_INC150W	Existing	19.7%
Retail	Lighting_INC40W	Existing	19.7%
Retail	Lighting_INC75W	Existing	19.7%
Retail	Other	Existing	100.0%
Retail	Plug_Load	Existing	100.0%
Retail	Space_Heat	Existing	82.3%
Retail	Ventilation	Existing	100.0%
Retail	Water_Heat	Existing	60.3%
Retail	Cooling_Chillers	New	12.3%
Retail	Cooling_DX	New	33.6%
Retail	Cooling_HeatPump	New	13.9%
Retail	Lighting_2L4T12	New	7.1%
Retail	Lighting_2L4T8	New	18.6%
Retail	Lighting_2L8T12	New	11.7%
Retail	Lighting_3L4T12	New	0.8%
Retail	Lighting_3L4T8	New	6.8%
Retail	Lighting_4L4T12	New	9.8%
Retail	Lighting_4L4T8	New	5.9%
Retail	Lighting_INC150W	New	19.7%
Retail	Lighting_INC40W	New	19.7%
Retail	Lighting_INC75W	New	19.7%
Retail	Other	New	100.0%
Retail	Plug_Load	New	100.0%
Retail	Space_Heat	New	82.3%
Retail	Ventilation	New	100.0%
Retail	Water_Heat	New	60.3%

### End-Use Saturations By Building Type and Vintage

Building Type	End-Use	Vintage	Saturation
Lodging	Cooking	Existing	41.1%
Lodging	Cooling_Chillers	Existing	29.2%
Lodging	Cooling_DX	Existing	2.7%
Lodging	Cooling_HeatPump	Existing	20.8%
Lodging	Lighting_2L4T12	Existing	14.6%
Lodging	Lighting_2L4T8	Existing	13.1%
Lodging	Lighting_2L8T12	Existing	0.0%
Lodging	Lighting_3L4T12	Existing	0.4%
Lodging	Lighting_3L4T8	Existing	0.2%
Lodging	Lighting_4L4T12	Existing	4.1%
Lodging	Lighting_4L4T8	Existing	1.8%
Lodging	Lighting_INC150W	Existing	32.9%
Lodging	Lighting_INC40W	Existing	32.9%
Lodging	Lighting_INC75W	Existing	32.9%
Lodging	Other	Existing	100.0%
Lodging	Plug_Load	Existing	100.0%
Lodging	Refrigeration	Existing	42.7%
Lodging	Space_Heat	Existing	67.5%
Lodging	Ventilation	Existing	100.0%
Lodging	Water_Heat	Existing	55.7%
Lodging	Cooking	New	41.1%
Lodging	Cooling_Chillers	New	29.2%
Lodging	Cooling_DX	New	2.7%
Lodging	Cooling_HeatPump	New	20.8%
Lodging	Lighting_2L4T12	New	14.6%
Lodging	Lighting_2L4T8	New	13.1%
Lodging	Lighting_2L8T12	New	0.0%
Lodging	Lighting_3L4T12	New	0.4%
Lodging	Lighting_3L4T8	New	0.2%
Lodging	Lighting_4L4T12	New	4.1%
Lodging	Lighting_4L4T8	New	1.8%
Lodging	Lighting_INC150W	New	32.9%
Lodging	Lighting_INC40W	New	32.9%
Lodging	Lighting_INC75W	New	32.9%
Lodging	Other	New	100.0%
Lodging	Plug_Load	New	100.0%
Lodging	Refrigeration	New	42.7%
Lodging	Space_Heat	New	67.5%
Lodging	Ventilation	New	100.0%
Lodging	Water_Heat	New	55.7%

### End-Use Saturations By Building Type and Vintage

Building Type	End-Use	Vintage	Saturation
Miscellaneous	Cooling_Chillers	Existing	2.6%
Miscellaneous	Cooling_DX	Existing	20.3%
Miscellaneous	Cooling_HeatPump	Existing	4.6%
Miscellaneous	Lighting_2L4T12	Existing	20.1%
Miscellaneous	Lighting_2L4T8	Existing	21.8%
Miscellaneous	Lighting_2L8T12	Existing	13.9%
Miscellaneous	Lighting_3L4T12	Existing	1.3%
Miscellaneous	Lighting_3L4T8	Existing	14.5%
Miscellaneous	Lighting_4L4T12	Existing	10.1%
Miscellaneous	Lighting_4L4T8	Existing	8.5%
Miscellaneous	Lighting_INC150W	Existing	4.9%
Miscellaneous	Lighting_INC40W	Existing	4.9%
Miscellaneous	Lighting_INC75W	Existing	4.9%
Miscellaneous	Other	Existing	100.0%
Miscellaneous	Plug_Load	Existing	100.0%
Miscellaneous	Space_Heat	Existing	54.5%
Miscellaneous	Ventilation	Existing	100.0%
Miscellaneous	Water_Heat	Existing	72.8%
Miscellaneous	Cooling_Chillers	New	2.6%
Miscellaneous	Cooling_DX	New	20.3%
Miscellaneous	Cooling_HeatPump	New	4.6%
Miscellaneous	Lighting_2L4T12	New	20.1%
Miscellaneous	Lighting_2L4T8	New	21.8%
Miscellaneous	Lighting_2L8T12	New	13.9%
Miscellaneous	Lighting_3L4T12	New	1.3%
Miscellaneous	Lighting_3L4T8	New	14.5%
Miscellaneous	Lighting_4L4T12	New	10.1%
Miscellaneous	Lighting_4L4T8	New	8.5%
Miscellaneous	Lighting_INC150W	New	4.9%
Miscellaneous	Lighting_INC40W	New	4.9%
Miscellaneous	Lighting_INC75W	New	4.9%
Miscellaneous	Other	New	100.0%
Miscellaneous	Plug_Load	New	100.0%
Miscellaneous	Space_Heat	New	54.5%
Miscellaneous	Ventilation	New	100.0%
Miscellaneous	Water_Heat	New	72.8%

### End-Use Saturations By Building Type and Vintage

Building Type	End-Use	Vintage	Saturation
Restaurant	Cooking	Existing	100.0%
Restaurant	Cooling_Chillers	Existing	0.0%
Restaurant	Cooling_DX	Existing	28.4%
Restaurant	Cooling_HeatPump	Existing	11.0%
Restaurant	Lighting_2L4T12	Existing	2.5%
Restaurant	Lighting_2L4T8	Existing	3.1%
Restaurant	Lighting_2L8T12	Existing	20.0%
Restaurant	Lighting_3L4T12	Existing	0.0%
Restaurant	Lighting_3L4T8	Existing	7.1%
Restaurant	Lighting_4L4T12	Existing	5.8%
Restaurant	Lighting_4L4T8	Existing	3.8%
Restaurant	Lighting_INC150W	Existing	28.8%
Restaurant	Lighting_INC40W	Existing	28.8%
Restaurant	Lighting_INC75W	Existing	28.8%
Restaurant	Other	Existing	100.0%
Restaurant	Plug_Load	Existing	100.0%
Restaurant	Refrigeration	Existing	100.0%
Restaurant	Space_Heat	Existing	81.2%
Restaurant	Ventilation	Existing	100.0%
Restaurant	Water_Heat	Existing	73.4%
Restaurant	Cooking	New	100.0%
Restaurant	Cooling_Chillers	New	0.0%
Restaurant	Cooling_DX	New	28.4%
Restaurant	Cooling_HeatPump	New	11.0%
Restaurant	Lighting_2L4T12	New	2.5%
Restaurant	Lighting_2L4T8	New	3.1%
Restaurant	Lighting_2L8T12	New	20.0%
Restaurant	Lighting_3L4T12	New	0.0%
Restaurant	Lighting_3L4T8	New	7.1%
Restaurant	Lighting_4L4T12	New	5.8%
Restaurant	Lighting_4L4T8	New	3.8%
Restaurant	Lighting_INC150W	New	28.8%
Restaurant	Lighting_INC40W	New	28.8%
Restaurant	Lighting_INC75W	New	28.8%
Restaurant	Other	New	100.0%
Restaurant	Plug_Load	New	100.0%
Restaurant	Refrigeration	New	100.0%
Restaurant	Space_Heat	New	81.2%
Restaurant	Ventilation	New	100.0%
Restaurant	Water_Heat	New	73.4%

### End-Use Saturations By Building Type and Vintage

Building Type	End-Use	Vintage	Saturation
School	Cooking	Existing	44.5%
School	Cooling_Chillers	Existing	3.5%
School	Cooling_DX	Existing	25.3%
School	Cooling_HeatPump	Existing	12.6%
School	Lighting_2L4T12	Existing	2.9%
School	Lighting_2L4T8	Existing	27.5%
School	Lighting_2L8T12	Existing	0.1%
School	Lighting_3L4T12	Existing	0.8%
School	Lighting_3L4T8	Existing	60.5%
School	Lighting_4L4T12	Existing	2.4%
School	Lighting_4L4T8	Existing	3.7%
School	Lighting_INC150W	Existing	1.0%
School	Lighting_INC40W	Existing	1.0%
School	Lighting_INC75W	Existing	1.0%
School	Other	Existing	100.0%
School	Plug_Load	Existing	100.0%
School	Refrigeration	Existing	61.5%
School	Space_Heat	Existing	78.9%
School	Ventilation	Existing	100.0%
School	Water_Heat	Existing	71.5%
School	Cooking	New	44.5%
School	Cooling_Chillers	New	3.5%
School	Cooling_DX	New	25.3%
School	Cooling_HeatPump	New	12.6%
School	Lighting_2L4T12	New	2.9%
School	Lighting_2L4T8	New	27.5%
School	Lighting_2L8T12	New	0.1%
School	Lighting_3L4T12	New	0.8%
School	Lighting_3L4T8	New	60.5%
School	Lighting_4L4T12	New	2.4%
School	Lighting_4L4T8	New	3.7%
School	Lighting_INC150W	New	1.0%
School	Lighting_INC40W	New	1.0%
School	Lighting_INC75W	New	1.0%
School	Other	New	100.0%
School	Plug_Load	New	100.0%
School	Refrigeration	New	61.5%
School	Space_Heat	New	78.9%
School	Ventilation	New	100.0%
School	Water_Heat	New	71.5%



### End-Use Saturations By Building Type and Vintage

Building Type	End-Use	Vintage	Saturation
Small_Office	Cooling_Chillers	Existing	23.7%
Small_Office	Cooling_DX	Existing	29.1%
Small_Office	Cooling_HeatPump	Existing	19.6%
Small_Office	Lighting_2L4T12	Existing	6.7%
Small_Office	Lighting_2L4T8	Existing	15.6%
Small_Office	Lighting_2L8T12	Existing	1.4%
Small_Office	Lighting_3L4T12	Existing	1.8%
Small_Office	Lighting_3L4T8	Existing	21.6%
Small_Office	Lighting_4L4T12	Existing	16.0%
Small_Office	Lighting_4L4T8	Existing	4.8%
Small_Office	Lighting_INC150W	Existing	16.0%
Small_Office	Lighting_INC40W	Existing	16.0%
Small_Office	Lighting_INC75W	Existing	16.0%
Small_Office	Other	Existing	100.0%
Small_Office	Plug_Load	Existing	100.0%
Small_Office	Space_Heat	Existing	63.7%
Small_Office	Ventilation	Existing	100.0%
Small_Office	Water_Heat	Existing	59.9%
Small_Office	Cooling_Chillers	New	23.7%
Small_Office	Cooling_DX	New	29.1%
Small_Office	Cooling_HeatPump	New	19.6%
Small_Office	Lighting_2L4T12	New	6.7%
Small_Office	Lighting_2L4T8	New	15.6%
Small_Office	Lighting_2L8T12	New	1.4%
Small_Office	Lighting_3L4T12	New	1.8%
Small_Office	Lighting_3L4T8	New	21.6%
Small_Office	Lighting_4L4T12	New	16.0%
Small_Office	Lighting_4L4T8	New	4.8%
Small_Office	Lighting_INC150W	New	16.0%
Small_Office	Lighting_INC40W	New	16.0%
Small_Office	Lighting_INC75W	New	16.0%
Small_Office	Other	New	100.0%
Small_Office	Plug_Load	New	100.0%
Small_Office	Space_Heat	New	63.7%
Small_Office	Ventilation	New	100.0%
Small_Office	Water_Heat	New	59.9%

### End-Use Saturations By Building Type and Vintage

Building Type	End-Use	Vintage	Saturation
Warehouse	Cooling_Chillers	Existing	6.6%
Warehouse	Cooling_DX	Existing	8.0%
Warehouse	Cooling_HeatPump	Existing	1.5%
Warehouse	Lighting_2L4T12	Existing	3.1%
Warehouse	Lighting_2L4T8	Existing	5.5%
Warehouse	Lighting_2L8T12	Existing	26.0%
Warehouse	Lighting_3L4T12	Existing	0.0%
Warehouse	Lighting_3L4T8	Existing	21.3%
Warehouse	Lighting_4L4T12	Existing	6.1%
Warehouse	Lighting_4L4T8	Existing	0.7%
Warehouse	Lighting_INC150W	Existing	18.7%
Warehouse	Lighting_INC40W	Existing	18.7%
Warehouse	Lighting_INC75W	Existing	18.7%
Warehouse	Other	Existing	100.0%
Warehouse	Plug_Load	Existing	100.0%
Warehouse	Refrigeration	Existing	40.0%
Warehouse	Space_Heat	Existing	46.4%
Warehouse	Ventilation	Existing	100.0%
Warehouse	Water_Heat	Existing	48.3%
Warehouse	Cooling_Chillers	New	6.6%
Warehouse	Cooling_DX	New	8.0%
Warehouse	Cooling_HeatPump	New	1.5%
Warehouse	Lighting_2L4T12	New	3.1%
Warehouse	Lighting_2L4T8	New	5.5%
Warehouse	Lighting_2L8T12	New	26.0%
Warehouse	Lighting_3L4T12	New	0.0%
Warehouse	Lighting_3L4T8	New	21.3%
Warehouse	Lighting_4L4T12	New	6.1%
Warehouse	Lighting_4L4T8	New	0.7%
Warehouse	Lighting_INC150W	New	18.7%
Warehouse	Lighting_INC40W	New	18.7%
Warehouse	Lighting_INC75W	New	18.7%
Warehouse	Other	New	100.0%
Warehouse	Plug_Load	New	100.0%
Warehouse	Refrigeration	New	40.0%
Warehouse	Space_Heat	New	46.4%
Warehouse	Ventilation	New	100.0%
Warehouse	Water_Heat	New	48.3%

**Fuel Shares By Building Type, End-Use and Fuel**

Building Type	End-Use	Fuel	Base Avg Electric Share	Base Marg Electric Share Existing	Base Marg Electric Share Conversion	Base Marg Electric Share New
Small Office	Space Heat	Electric	20%	20%	20%	20%
Small Office	Cooling Chillers	Electric	100%	100%	100%	100%
Small Office	Cooling DX	Electric	100%	100%	100%	100%
Small Office	Cooling HeatPump	Electric	100%	100%	100%	100%
Small Office	Ventilation	Electric	100%	100%	100%	100%
Small Office	Lighting 4L4T12	Electric	100%	100%	100%	100%
Small Office	Lighting 3L4T12	Electric	100%	100%	100%	100%
Small Office	Lighting 2L4T12	Electric	100%	100%	100%	100%
Small Office	Lighting 2L8T12	Electric	100%	100%	100%	100%
Small Office	Lighting 4L4T8	Electric	100%	100%	100%	100%
Small Office	Lighting 3L4T8	Electric	100%	100%	100%	100%
Small Office	Lighting 2L4T8	Electric	100%	100%	100%	100%
Small Office	Lighting INC40W	Electric	100%	100%	100%	100%
Small Office	Lighting INC75W	Electric	100%	100%	100%	100%
Small Office	Lighting INC150W	Electric	100%	100%	100%	100%
Small Office	Water Heat	Electric	50%	50%	50%	50%
Small Office	Plug Load	Electric	100%	100%	100%	100%
Small Office	Other	Electric	100%	100%	100%	100%
Large Office	Space Heat	Electric	20%	20%	20%	20%
Large Office	Cooling Chillers	Electric	100%	100%	100%	100%
Large Office	Cooling DX	Electric	100%	100%	100%	100%
Large Office	Cooling HeatPump	Electric	100%	100%	100%	100%
Large Office	Ventilation	Electric	100%	100%	100%	100%
Large Office	Lighting 4L4T12	Electric	100%	100%	100%	100%
Large Office	Lighting 3L4T12	Electric	100%	100%	100%	100%
Large Office	Lighting 2L4T12	Electric	100%	100%	100%	100%
Large Office	Lighting 2L8T12	Electric	100%	100%	100%	100%
Large Office	Lighting 4L4T8	Electric	100%	100%	100%	100%
Large Office	Lighting 3L4T8	Electric	100%	100%	100%	100%
Large Office	Lighting 2L4T8	Electric	100%	100%	100%	100%
Large Office	Lighting INC40W	Electric	100%	100%	100%	100%
Large Office	Lighting INC75W	Electric	100%	100%	100%	100%
Large Office	Lighting INC150W	Electric	100%	100%	100%	100%
Large Office	Water Heat	Electric	50%	50%	50%	50%
Large Office	Plug Load	Electric	100%	100%	100%	100%
Large Office	Other	Electric	100%	100%	100%	100%
Restaurant	Space Heat	Electric	42%	42%	42%	42%
Restaurant	Cooling Chillers	Electric	100%	100%	100%	100%
Restaurant	Cooling DX	Electric	100%	100%	100%	100%
Restaurant	Cooling HeatPump	Electric	100%	100%	100%	100%
Restaurant	Ventilation	Electric	100%	100%	100%	100%
Restaurant	Lighting 4L4T12	Electric	100%	100%	100%	100%
Restaurant	Lighting 3L4T12	Electric	100%	100%	100%	100%
Restaurant	Lighting 2L4T12	Electric	100%	100%	100%	100%
Restaurant	Lighting 2L8T12	Electric	100%	100%	100%	100%
Restaurant	Lighting 4L4T8	Electric	100%	100%	100%	100%
Restaurant	Lighting 3L4T8	Electric	100%	100%	100%	100%
Restaurant	Lighting 2L4T8	Electric	100%	100%	100%	100%
Restaurant	Lighting INC40W	Electric	100%	100%	100%	100%
Restaurant	Lighting INC75W	Electric	100%	100%	100%	100%
Restaurant	Lighting INC150W	Electric	100%	100%	100%	100%
Restaurant	Water Heat	Electric	36%	36%	36%	36%
Restaurant	Refrigeration	Electric	100%	100%	100%	100%
Restaurant	Cooking	Electric	43%	43%	43%	43%
Restaurant	Plug Load	Electric	100%	100%	100%	100%
Restaurant	Other	Electric	100%	100%	100%	100%
Retail	Space Heat	Electric	29%	29%	29%	29%
Retail	Cooling Chillers	Electric	100%	100%	100%	100%
Retail	Cooling DX	Electric	100%	100%	100%	100%
Retail	Cooling HeatPump	Electric	100%	100%	100%	100%
Retail	Ventilation	Electric	100%	100%	100%	100%
Retail	Lighting 4L4T12	Electric	100%	100%	100%	100%
Retail	Lighting 3L4T12	Electric	100%	100%	100%	100%
Retail	Lighting 2L4T12	Electric	100%	100%	100%	100%
Retail	Lighting 2L8T12	Electric	100%	100%	100%	100%
Retail	Lighting 4L4T8	Electric	100%	100%	100%	100%
Retail	Lighting 3L4T8	Electric	100%	100%	100%	100%
Retail	Lighting 2L4T8	Electric	100%	100%	100%	100%
Retail	Lighting INC40W	Electric	100%	100%	100%	100%
Retail	Lighting INC75W	Electric	100%	100%	100%	100%
Retail	Lighting INC150W	Electric	100%	100%	100%	100%
Retail	Water Heat	Electric	58%	58%	58%	58%
Retail	Plug Load	Electric	100%	100%	100%	100%
Retail	Other	Electric	100%	100%	100%	100%

**Fuel Shares By Building Type, End-Use and Fuel (continued 1)**

Building Type	End-Use	Fuel	Base Avg Electric Share	Base Marg Electric Share Existing	Base Marg Electric Share Conversion	Base Marg Electric Share New
Grocery	Space Heat	Electric	6%	6%	6%	6%
Grocery	Cooling Chillers	Electric	100%	100%	100%	100%
Grocery	Cooling DX	Electric	100%	100%	100%	100%
Grocery	Cooling HeatPump	Electric	100%	100%	100%	100%
Grocery	Ventilation	Electric	100%	100%	100%	100%
Grocery	Lighting 4L4T12	Electric	100%	100%	100%	100%
Grocery	Lighting 3L4T12	Electric	100%	100%	100%	100%
Grocery	Lighting 2L4T12	Electric	100%	100%	100%	100%
Grocery	Lighting 2L8T12	Electric	100%	100%	100%	100%
Grocery	Lighting 4L4T8	Electric	100%	100%	100%	100%
Grocery	Lighting 3L4T8	Electric	100%	100%	100%	100%
Grocery	Lighting 2L4T8	Electric	100%	100%	100%	100%
Grocery	Lighting INC40W	Electric	100%	100%	100%	100%
Grocery	Lighting INC75W	Electric	100%	100%	100%	100%
Grocery	Lighting INC150W	Electric	100%	100%	100%	100%
Grocery	Water Heat	Electric	49%	49%	49%	49%
Grocery	Refrigeration	Electric	100%	100%	100%	100%
Grocery	Cooking	Electric	74%	74%	74%	74%
Grocery	Plug Load	Electric	100%	100%	100%	100%
Grocery	Other	Electric	100%	100%	100%	100%
Warehouse	Space Heat	Electric	25%	25%	25%	25%
Warehouse	Cooling Chillers	Electric	100%	100%	100%	100%
Warehouse	Cooling DX	Electric	100%	100%	100%	100%
Warehouse	Cooling HeatPump	Electric	100%	100%	100%	100%
Warehouse	Ventilation	Electric	100%	100%	100%	100%
Warehouse	Lighting 4L4T12	Electric	100%	100%	100%	100%
Warehouse	Lighting 3L4T12	Electric	100%	100%	100%	100%
Warehouse	Lighting 2L4T12	Electric	100%	100%	100%	100%
Warehouse	Lighting 2L8T12	Electric	100%	100%	100%	100%
Warehouse	Lighting 4L4T8	Electric	100%	100%	100%	100%
Warehouse	Lighting 3L4T8	Electric	100%	100%	100%	100%
Warehouse	Lighting 2L4T8	Electric	100%	100%	100%	100%
Warehouse	Lighting INC40W	Electric	100%	100%	100%	100%
Warehouse	Lighting INC75W	Electric	100%	100%	100%	100%
Warehouse	Lighting INC150W	Electric	100%	100%	100%	100%
Warehouse	Water Heat	Electric	54%	54%	54%	54%
Warehouse	Refrigeration	Electric	100%	100%	100%	100%
Warehouse	Plug Load	Electric	100%	100%	100%	100%
Warehouse	Other	Electric	100%	100%	100%	100%
School	Space Heat	Electric	16%	16%	16%	16%
School	Cooling Chillers	Electric	100%	100%	100%	100%
School	Cooling DX	Electric	100%	100%	100%	100%
School	Cooling HeatPump	Electric	100%	100%	100%	100%
School	Ventilation	Electric	100%	100%	100%	100%
School	Lighting 4L4T12	Electric	100%	100%	100%	100%
School	Lighting 3L4T12	Electric	100%	100%	100%	100%
School	Lighting 2L4T12	Electric	100%	100%	100%	100%
School	Lighting 2L8T12	Electric	100%	100%	100%	100%
School	Lighting 4L4T8	Electric	100%	100%	100%	100%
School	Lighting 3L4T8	Electric	100%	100%	100%	100%
School	Lighting 2L4T8	Electric	100%	100%	100%	100%
School	Lighting INC40W	Electric	100%	100%	100%	100%
School	Lighting INC75W	Electric	100%	100%	100%	100%
School	Lighting INC150W	Electric	100%	100%	100%	100%
School	Water Heat	Electric	23%	23%	23%	23%
School	Refrigeration	Electric	100%	100%	100%	100%
School	Cooking	Electric	39%	39%	39%	39%
School	Plug Load	Electric	100%	100%	100%	100%
School	Other	Electric	100%	100%	100%	100%

**Fuel Shares By Building Type, End-Use and Fuel (continued 2)**

Building Type	End-Use	Fuel	Base Avg Electric Share	Base Marg Electric Share Existing	Base Marg Electric Share Conversion	Base Marg Electric Share New
Health	Space Heat	Electric	16%	16%	16%	16%
Health	Cooling Chillers	Electric	100%	100%	100%	100%
Health	Cooling DX	Electric	100%	100%	100%	100%
Health	Cooling HeatPump	Electric	100%	100%	100%	100%
Health	Ventilation	Electric	100%	100%	100%	100%
Health	Lighting 4L4T12	Electric	100%	100%	100%	100%
Health	Lighting 3L4T12	Electric	100%	100%	100%	100%
Health	Lighting 2L4T12	Electric	100%	100%	100%	100%
Health	Lighting 2L8T12	Electric	100%	100%	100%	100%
Health	Lighting 4L4T8	Electric	100%	100%	100%	100%
Health	Lighting 3L4T8	Electric	100%	100%	100%	100%
Health	Lighting 2L4T8	Electric	100%	100%	100%	100%
Health	Lighting INC40W	Electric	100%	100%	100%	100%
Health	Lighting INC75W	Electric	100%	100%	100%	100%
Health	Lighting INC150W	Electric	100%	100%	100%	100%
Health	Water Heat	Electric	23%	23%	23%	23%
Health	Refrigeration	Electric	100%	100%	100%	100%
Health	Cooking	Electric	43%	43%	43%	43%
Health	Plug Load	Electric	100%	100%	100%	100%
Health	Other	Electric	100%	100%	100%	100%
Lodging	Space Heat	Electric	66%	66%	66%	66%
Lodging	Cooling Chillers	Electric	100%	100%	100%	100%
Lodging	Cooling DX	Electric	100%	100%	100%	100%
Lodging	Cooling HeatPump	Electric	100%	100%	100%	100%
Lodging	Ventilation	Electric	100%	100%	100%	100%
Lodging	Lighting 4L4T12	Electric	100%	100%	100%	100%
Lodging	Lighting 3L4T12	Electric	100%	100%	100%	100%
Lodging	Lighting 2L4T12	Electric	100%	100%	100%	100%
Lodging	Lighting 2L8T12	Electric	100%	100%	100%	100%
Lodging	Lighting 4L4T8	Electric	100%	100%	100%	100%
Lodging	Lighting 3L4T8	Electric	100%	100%	100%	100%
Lodging	Lighting 2L4T8	Electric	100%	100%	100%	100%
Lodging	Lighting INC40W	Electric	100%	100%	100%	100%
Lodging	Lighting INC75W	Electric	100%	100%	100%	100%
Lodging	Lighting INC150W	Electric	100%	100%	100%	100%
Lodging	Water Heat	Electric	12%	12%	12%	12%
Lodging	Refrigeration	Electric	100%	100%	100%	100%
Lodging	Cooking	Electric	48%	48%	48%	48%
Lodging	Plug Load	Electric	100%	100%	100%	100%
Lodging	Other	Electric	100%	100%	100%	100%
Miscellaneous	Space Heat	Electric	10%	10%	10%	10%
Miscellaneous	Cooling Chillers	Electric	100%	100%	100%	100%
Miscellaneous	Cooling DX	Electric	100%	100%	100%	100%
Miscellaneous	Cooling HeatPump	Electric	100%	100%	100%	100%
Miscellaneous	Ventilation	Electric	100%	100%	100%	100%
Miscellaneous	Lighting 4L4T12	Electric	100%	100%	100%	100%
Miscellaneous	Lighting 3L4T12	Electric	100%	100%	100%	100%
Miscellaneous	Lighting 2L4T12	Electric	100%	100%	100%	100%
Miscellaneous	Lighting 2L8T12	Electric	100%	100%	100%	100%
Miscellaneous	Lighting 4L4T8	Electric	100%	100%	100%	100%
Miscellaneous	Lighting 3L4T8	Electric	100%	100%	100%	100%
Miscellaneous	Lighting 2L4T8	Electric	100%	100%	100%	100%
Miscellaneous	Lighting INC40W	Electric	100%	100%	100%	100%
Miscellaneous	Lighting INC75W	Electric	100%	100%	100%	100%
Miscellaneous	Lighting INC150W	Electric	100%	100%	100%	100%
Miscellaneous	Water Heat	Electric	50%	50%	50%	50%
Miscellaneous	Plug Load	Electric	100%	100%	100%	100%
Miscellaneous	Other	Electric	100%	100%	100%	100%

**Efficiency Shares By Building Type, End-Use and Fuel**

Building Type	End-Use	Fuel	Stock Efficiency	Standard Efficiency	High Efficiency	Premium Efficiency
Grocery	Cooking	Electric	90%	10%		
Grocery	Cooling Chillers	Electric	50%	40%	9%	1%
Grocery	Cooling DX	Electric	50%	45%	5%	
Grocery	Cooling HeatPump	Electric	50%	45%	5%	
Grocery	Lighting 2L4T12	Electric	100%			
Grocery	Lighting 2L4T8	Electric	100%			
Grocery	Lighting 2L8T12	Electric	100%			
Grocery	Lighting 3L4T12	Electric	100%			
Grocery	Lighting 3L4T8	Electric	100%			
Grocery	Lighting 4L4T12	Electric	100%			
Grocery	Lighting 4L4T8	Electric	100%			
Grocery	Lighting INC150W	Electric	100%			
Grocery	Lighting INC40W	Electric	100%			
Grocery	Lighting INC75W	Electric	100%			
Grocery	Other	Electric	100%			
Grocery	Plug Load	Electric	90%	10%		
Grocery	Refrigeration	Electric	90%	10%		
Grocery	Space Heat	Electric	100%			
Grocery	Ventilation	Electric	50%	40%	9%	1%
Grocery	Water Heat	Electric	50%	45%	5%	
Grocery	Cooking	Gas	100%			
Grocery	Space Heat	Gas	100%			
Grocery	Water Heat	Gas	100%			
Health	Cooking	Electric	90%	10%		
Health	Cooling Chillers	Electric	50%	40%	9%	1%
Health	Cooling DX	Electric	50%	45%	5%	
Health	Cooling HeatPump	Electric	50%	45%	5%	
Health	Lighting 2L4T12	Electric	100%			
Health	Lighting 2L4T8	Electric	100%			
Health	Lighting 2L8T12	Electric	100%			
Health	Lighting 3L4T12	Electric	100%			
Health	Lighting 3L4T8	Electric	100%			
Health	Lighting 4L4T12	Electric	100%			
Health	Lighting 4L4T8	Electric	100%			
Health	Lighting INC150W	Electric	100%			
Health	Lighting INC40W	Electric	100%			
Health	Lighting INC75W	Electric	100%			
Health	Other	Electric	100%			
Health	Plug Load	Electric	90%	10%		
Health	Refrigeration	Electric	90%	10%		
Health	Space Heat	Electric	100%			
Health	Ventilation	Electric	50%	40%	9%	1%
Health	Water Heat	Electric	50%	45%	5%	
Health	Cooking	Gas	100%			
Health	Space Heat	Gas	100%			
Health	Water Heat	Gas	100%			
Large Office	Cooling Chillers	Electric	50%	40%	9%	1%
Large Office	Cooling DX	Electric	50%	45%	5%	
Large Office	Cooling HeatPump	Electric	50%	45%	5%	
Large Office	Lighting 2L4T12	Electric	100%			
Large Office	Lighting 2L4T8	Electric	100%			
Large Office	Lighting 2L8T12	Electric	100%			
Large Office	Lighting 3L4T12	Electric	100%			
Large Office	Lighting 3L4T8	Electric	100%			
Large Office	Lighting 4L4T12	Electric	100%			
Large Office	Lighting 4L4T8	Electric	100%			
Large Office	Lighting INC150W	Electric	100%			
Large Office	Lighting INC40W	Electric	100%			
Large Office	Lighting INC75W	Electric	100%			
Large Office	Other	Electric	100%			
Large Office	Plug Load	Electric	90%	10%		
Large Office	Space Heat	Electric	100%			
Large Office	Ventilation	Electric	50%	40%	9%	1%
Large Office	Water Heat	Electric	50%	45%	5%	
Large Office	Space Heat	Gas	100%			
Large Office	Water Heat	Gas	100%			

**Efficiency Shares By Building Type, End-Use and Fuel**

Building Type	End-Use	Fuel	Stock Efficiency	Standard Efficiency	High Efficiency	Premium Efficiency
Lodging	Cooking	Electric	90%	10%		
Lodging	Cooling Chillers	Electric	50%	40%	9%	1%
Lodging	Cooling DX	Electric	50%	45%	5%	
Lodging	Cooling HeatPump	Electric	50%	45%	5%	
Lodging	Lighting 2L4T12	Electric	100%			
Lodging	Lighting 2L4T8	Electric	100%			
Lodging	Lighting 2L8T12	Electric	100%			
Lodging	Lighting 3L4T12	Electric	100%			
Lodging	Lighting 3L4T8	Electric	100%			
Lodging	Lighting 4L4T12	Electric	100%			
Lodging	Lighting 4L4T8	Electric	100%			
Lodging	Lighting INC150W	Electric	100%			
Lodging	Lighting INC40W	Electric	100%			
Lodging	Lighting INC75W	Electric	100%			
Lodging	Other	Electric	100%			
Lodging	Plug Load	Electric	90%	10%		
Lodging	Refrigeration	Electric	90%	10%		
Lodging	Space Heat	Electric	100%			
Lodging	Ventilation	Electric	50%	40%	9%	1%
Lodging	Water Heat	Electric	50%	45%	5%	
Lodging	Cooking	Gas	100%			
Lodging	Space Heat	Gas	100%			
Lodging	Water Heat	Gas	100%			
Miscellaneous	Cooling Chillers	Electric	50%	40%	9%	1%
Miscellaneous	Cooling DX	Electric	50%	45%	5%	
Miscellaneous	Cooling HeatPump	Electric	50%	45%	5%	
Miscellaneous	Lighting 2L4T12	Electric	100%			
Miscellaneous	Lighting 2L4T8	Electric	100%			
Miscellaneous	Lighting 2L8T12	Electric	100%			
Miscellaneous	Lighting 3L4T12	Electric	100%			
Miscellaneous	Lighting 3L4T8	Electric	100%			
Miscellaneous	Lighting 4L4T12	Electric	100%			
Miscellaneous	Lighting 4L4T8	Electric	100%			
Miscellaneous	Lighting INC150W	Electric	100%			
Miscellaneous	Lighting INC40W	Electric	100%			
Miscellaneous	Lighting INC75W	Electric	100%			
Miscellaneous	Other	Electric	100%			
Miscellaneous	Plug Load	Electric	90%	10%		
Miscellaneous	Space Heat	Electric	100%			
Miscellaneous	Ventilation	Electric	50%	40%	9%	1%
Miscellaneous	Water Heat	Electric	50%	45%	5%	
Miscellaneous	Space Heat	Gas	100%			
Miscellaneous	Water Heat	Gas	100%			
Restaurant	Cooking	Electric	90%	10%		
Restaurant	Cooling Chillers	Electric	50%	40%	9%	1%
Restaurant	Cooling DX	Electric	50%	45%	5%	
Restaurant	Cooling HeatPump	Electric	50%	45%	5%	
Restaurant	Lighting 2L4T12	Electric	100%			
Restaurant	Lighting 2L4T8	Electric	100%			
Restaurant	Lighting 2L8T12	Electric	100%			
Restaurant	Lighting 3L4T12	Electric	100%			
Restaurant	Lighting 3L4T8	Electric	100%			
Restaurant	Lighting 4L4T12	Electric	100%			
Restaurant	Lighting 4L4T8	Electric	100%			
Restaurant	Lighting INC150W	Electric	100%			
Restaurant	Lighting INC40W	Electric	100%			
Restaurant	Lighting INC75W	Electric	100%			
Restaurant	Other	Electric	100%			
Restaurant	Plug Load	Electric	90%	10%		
Restaurant	Refrigeration	Electric	90%	10%		
Restaurant	Space Heat	Electric	100%			
Restaurant	Ventilation	Electric	50%	40%	9%	1%
Restaurant	Water Heat	Electric	50%	45%	5%	
Restaurant	Cooking	Gas	100%			
Restaurant	Space Heat	Gas	100%			
Restaurant	Water Heat	Gas	100%			

Efficiency Shares By Building Type, End-Use and Fuel

Building Type	End-Use	Fuel	Stock Efficiency	Standard Efficiency	High Efficiency	Premium Efficiency
Retail	Cooling Chillers	Electric	50%	40%	9%	1%
Retail	Cooling DX	Electric	50%	45%	5%	
Retail	Cooling HeatPump	Electric	50%	45%	5%	
Retail	Lighting 2L4T12	Electric	100%			
Retail	Lighting 2L4T8	Electric	100%			
Retail	Lighting 2L8T12	Electric	100%			
Retail	Lighting 3L4T12	Electric	100%			
Retail	Lighting 3L4T8	Electric	100%			
Retail	Lighting 4L4T12	Electric	100%			
Retail	Lighting 4L4T8	Electric	100%			
Retail	Lighting INC150W	Electric	100%			
Retail	Lighting INC40W	Electric	100%			
Retail	Lighting INC75W	Electric	100%			
Retail	Other	Electric	100%			
Retail	Plug Load	Electric	90%	10%		
Retail	Space Heat	Electric	100%			
Retail	Ventilation	Electric	50%	40%	9%	1%
Retail	Water Heat	Electric	50%	45%	5%	
Retail	Space Heat	Gas	100%			
Retail	Water Heat	Gas	100%			
School	Cooking	Electric	90%	10%		
School	Cooling Chillers	Electric	50%	40%	9%	1%
School	Cooling DX	Electric	50%	45%	5%	
School	Cooling HeatPump	Electric	50%	45%	5%	
School	Lighting 2L4T12	Electric	100%			
School	Lighting 2L4T8	Electric	100%			
School	Lighting 2L8T12	Electric	100%			
School	Lighting 3L4T12	Electric	100%			
School	Lighting 3L4T8	Electric	100%			
School	Lighting 4L4T12	Electric	100%			
School	Lighting 4L4T8	Electric	100%			
School	Lighting INC150W	Electric	100%			
School	Lighting INC40W	Electric	100%			
School	Lighting INC75W	Electric	100%			
School	Other	Electric	100%			
School	Plug Load	Electric	90%	10%		
School	Refrigeration	Electric	90%	10%		
School	Space Heat	Electric	100%			
School	Ventilation	Electric	50%	40%	9%	1%
School	Water Heat	Electric	50%	45%	5%	
School	Cooking	Gas	100%			
School	Space Heat	Gas	100%			
School	Water Heat	Gas	100%			
Small Office	Cooling Chillers	Electric	50%	40%	9%	1%
Small Office	Cooling DX	Electric	50%	45%	5%	
Small Office	Cooling HeatPump	Electric	50%	45%	5%	
Small Office	Lighting 2L4T12	Electric	100%			
Small Office	Lighting 2L4T8	Electric	100%			
Small Office	Lighting 2L8T12	Electric	100%			
Small Office	Lighting 3L4T12	Electric	100%			
Small Office	Lighting 3L4T8	Electric	100%			
Small Office	Lighting 4L4T12	Electric	100%			
Small Office	Lighting 4L4T8	Electric	100%			
Small Office	Lighting INC150W	Electric	100%			
Small Office	Lighting INC40W	Electric	100%			
Small Office	Lighting INC75W	Electric	100%			
Small Office	Other	Electric	100%			
Small Office	Plug Load	Electric	90%	10%		
Small Office	Space Heat	Electric	100%			
Small Office	Ventilation	Electric	50%	40%	9%	1%
Small Office	Water Heat	Electric	50%	45%	5%	
Small Office	Space Heat	Gas	100%			
Small Office	Water Heat	Gas	100%			
Warehouse	Cooling Chillers	Electric	50%	40%	9%	1%
Warehouse	Cooling DX	Electric	50%	45%	5%	
Warehouse	Cooling HeatPump	Electric	50%	45%	5%	
Warehouse	Lighting 2L4T12	Electric	100%			
Warehouse	Lighting 2L4T8	Electric	100%			
Warehouse	Lighting 2L8T12	Electric	100%			
Warehouse	Lighting 3L4T12	Electric	100%			
Warehouse	Lighting 3L4T8	Electric	100%			
Warehouse	Lighting 4L4T12	Electric	100%			
Warehouse	Lighting 4L4T8	Electric	100%			
Warehouse	Lighting INC150W	Electric	100%			
Warehouse	Lighting INC40W	Electric	100%			
Warehouse	Lighting INC75W	Electric	100%			
Warehouse	Other	Electric	100%			
Warehouse	Plug Load	Electric	90%	10%		
Warehouse	Refrigeration	Electric	90%	10%		
Warehouse	Space Heat	Electric	100%			
Warehouse	Ventilation	Electric	50%	40%	9%	1%
Warehouse	Water Heat	Electric	50%	45%	5%	
Warehouse	Space Heat	Gas	100%			
Warehouse	Water Heat	Gas	100%			



**EUIs by Building Type, End-Use and Fuel**

Building Type	End-Use	Fuel	Stock EUI	Standard EUI	Stock Eff	Standard Eff
Small_Office	Space_Heat	Electric	6.18	6.18	1	1
Small_Office	Cooling_Chillers	Electric	4.19	3.56	0.85	1
Small_Office	Cooling_DX	Electric	4.19	3.77	0.9	1
Small_Office	Cooling_HeatPump	Electric	4.19	3.77	0.9	1
Small_Office	Ventilation	Electric	1.43	1.43	1	1
Small_Office	Lighting_4L4T12	Electric	5.29	5.29	1	1
Small_Office	Lighting_3L4T12	Electric	5.29	5.29	1	1
Small_Office	Lighting_2L4T12	Electric	5.29	5.29	1	1
Small_Office	Lighting_2L8T12	Electric	5.29	5.29	1	1
Small_Office	Lighting_4L4T8	Electric	4.24	4.24	1	1
Small_Office	Lighting_3L4T8	Electric	4.24	4.24	1	1
Small_Office	Lighting_2L4T8	Electric	4.24	4.24	1	1
Small_Office	Lighting_INC40W	Electric	5.29	5.29	1	1
Small_Office	Lighting_INC75W	Electric	5.29	5.29	1	1
Small_Office	Lighting_INC150W	Electric	5.29	5.29	1	1
Small_Office	Water_Heat	Electric	0.95	0.90	0.95	1
Small_Office	Plug_Load	Electric	1.59	1.59	1	1
Small_Office	Other	Electric	0.00	0.00	1	1
Large_Office	Space_Heat	Electric	6.18	6.18	1	1
Large_Office	Cooling_Chillers	Electric	4.19	3.56	0.85	1
Large_Office	Cooling_DX	Electric	4.19	3.77	0.9	1
Large_Office	Cooling_HeatPump	Electric	4.19	3.77	0.9	1
Large_Office	Ventilation	Electric	1.43	1.43	1	1
Large_Office	Lighting_4L4T12	Electric	5.29	5.29	1	1
Large_Office	Lighting_3L4T12	Electric	5.29	5.29	1	1
Large_Office	Lighting_2L4T12	Electric	5.29	5.29	1	1
Large_Office	Lighting_2L8T12	Electric	5.29	5.29	1	1
Large_Office	Lighting_4L4T8	Electric	4.24	4.24	1	1
Large_Office	Lighting_3L4T8	Electric	4.24	4.24	1	1
Large_Office	Lighting_2L4T8	Electric	4.24	4.24	1	1
Large_Office	Lighting_INC40W	Electric	5.29	5.29	1	1
Large_Office	Lighting_INC75W	Electric	5.29	5.29	1	1
Large_Office	Lighting_INC150W	Electric	5.29	5.29	1	1
Large_Office	Water_Heat	Electric	0.95	0.90	0.95	1
Large_Office	Plug_Load	Electric	1.59	1.59	1	1
Large_Office	Other	Electric	0.00	0.00	1	1
Restaurant	Space_Heat	Electric	3.76	3.76	1	1
Restaurant	Cooling_Chillers	Electric	4.49	3.82	0.85	1
Restaurant	Cooling_DX	Electric	4.49	4.04	0.9	1
Restaurant	Cooling_HeatPump	Electric	4.49	4.04	0.9	1
Restaurant	Ventilation	Electric	2.75	2.75	1	1
Restaurant	Lighting_4L4T12	Electric	8.74	8.74	1	1
Restaurant	Lighting_3L4T12	Electric	8.74	8.74	1	1
Restaurant	Lighting_2L4T12	Electric	8.74	8.74	1	1
Restaurant	Lighting_2L8T12	Electric	8.74	8.74	1	1
Restaurant	Lighting_4L4T8	Electric	6.99	6.99	1	1
Restaurant	Lighting_3L4T8	Electric	6.99	6.99	1	1
Restaurant	Lighting_2L4T8	Electric	6.99	6.99	1	1
Restaurant	Lighting_INC40W	Electric	8.74	8.74	1	1
Restaurant	Lighting_INC75W	Electric	8.74	8.74	1	1
Restaurant	Lighting_INC150W	Electric	8.74	8.74	1	1
Restaurant	Water_Heat	Electric	9.19	8.73	0.95	1
Restaurant	Refrigeration	Electric	7.67	7.67	1	1
Restaurant	Cooking	Electric	25.07	25.07	1	1
Restaurant	Plug_Load	Electric	0.23	0.23	1	1
Restaurant	Other	Electric	0.00	0.00	1	1
Retail	Space_Heat	Electric	4.59	4.59	1	1
Retail	Cooling_Chillers	Electric	3.14	2.67	0.85	1
Retail	Cooling_DX	Electric	3.14	2.83	0.9	1
Retail	Cooling_HeatPump	Electric	3.14	2.83	0.9	1
Retail	Ventilation	Electric	1.39	1.39	1	1
Retail	Lighting_4L4T12	Electric	5.89	5.89	1	1
Retail	Lighting_3L4T12	Electric	5.89	5.89	1	1
Retail	Lighting_2L4T12	Electric	5.89	5.89	1	1
Retail	Lighting_2L8T12	Electric	5.89	5.89	1	1
Retail	Lighting_4L4T8	Electric	4.71	4.71	1	1
Retail	Lighting_3L4T8	Electric	4.71	4.71	1	1
Retail	Lighting_2L4T8	Electric	4.71	4.71	1	1
Retail	Lighting_INC40W	Electric	5.89	5.89	1	1
Retail	Lighting_INC75W	Electric	5.89	5.89	1	1
Retail	Lighting_INC150W	Electric	5.89	5.89	1	1
Retail	Water_Heat	Electric	1.01	0.96	0.95	1
Retail	Plug_Load	Electric	0.15	0.15	1	1
Retail	Other	Electric	0.00	0.00	1	1

**EUIs by Building Type, End-Use and Fuel**

Building Type	End-Use	Fuel	Stock EUI	Standard EUI	Stock Eff	Standard Eff
Grocery	Space_Heat	Electric	5.42	5.42	1	1
Grocery	Cooling_Chillers	Electric	4.10	3.49	0.85	1
Grocery	Cooling_DX	Electric	4.10	3.69	0.9	1
Grocery	Cooling_HeatPump	Electric	4.10	3.69	0.9	1
Grocery	Ventilation	Electric	2.52	2.52	1	1
Grocery	Lighting_4L4T12	Electric	12.76	12.76	1	1
Grocery	Lighting_3L4T12	Electric	12.76	12.76	1	1
Grocery	Lighting_2L4T12	Electric	12.76	12.76	1	1
Grocery	Lighting_2L8T12	Electric	12.76	12.76	1	1
Grocery	Lighting_4L4T8	Electric	10.21	10.21	1	1
Grocery	Lighting_3L4T8	Electric	10.21	10.21	1	1
Grocery	Lighting_2L4T8	Electric	10.21	10.21	1	1
Grocery	Lighting_INC40W	Electric	12.76	12.76	1	1
Grocery	Lighting_INC75W	Electric	12.76	12.76	1	1
Grocery	Lighting_INC150W	Electric	12.76	12.76	1	1
Grocery	Water_Heat	Electric	2.40	2.28	0.95	1
Grocery	Refrigeration	Electric	28.13	28.13	1	1
Grocery	Cooking	Electric	7.31	7.31	1	1
Grocery	Plug_Load	Electric	0.41	0.41	1	1
Grocery	Other	Electric	0.00	0.00	1	1
Warehouse	Space_Heat	Electric	4.02	4.02	1	1
Warehouse	Cooling_Chillers	Electric	1.66	1.42	0.85	1
Warehouse	Cooling_DX	Electric	1.66	1.50	0.9	1
Warehouse	Cooling_HeatPump	Electric	1.66	1.50	0.9	1
Warehouse	Ventilation	Electric	0.77	0.77	1	1
Warehouse	Lighting_4L4T12	Electric	2.94	2.94	1	1
Warehouse	Lighting_3L4T12	Electric	2.94	2.94	1	1
Warehouse	Lighting_2L4T12	Electric	2.94	2.94	1	1
Warehouse	Lighting_2L8T12	Electric	2.94	2.94	1	1
Warehouse	Lighting_4L4T8	Electric	2.36	2.36	1	1
Warehouse	Lighting_3L4T8	Electric	2.36	2.36	1	1
Warehouse	Lighting_2L4T8	Electric	2.36	2.36	1	1
Warehouse	Lighting_INC40W	Electric	2.94	2.94	1	1
Warehouse	Lighting_INC75W	Electric	2.94	2.94	1	1
Warehouse	Lighting_INC150W	Electric	2.94	2.94	1	1
Warehouse	Water_Heat	Electric	0.42	0.40	0.95	1
Warehouse	Refrigeration	Electric	10.45	10.45	1	1
Warehouse	Plug_Load	Electric	0.15	0.15	1	1
Warehouse	Other	Electric	0.00	0.00	1	1
School	Space_Heat	Electric	2.77	2.77	1	1
School	Cooling_Chillers	Electric	1.51	1.28	0.85	1
School	Cooling_DX	Electric	1.51	1.36	0.9	1
School	Cooling_HeatPump	Electric	1.51	1.36	0.9	1
School	Ventilation	Electric	0.77	0.77	1	1
School	Lighting_4L4T12	Electric	2.68	2.68	1	1
School	Lighting_3L4T12	Electric	2.68	2.68	1	1
School	Lighting_2L4T12	Electric	2.68	2.68	1	1
School	Lighting_2L8T12	Electric	2.68	2.68	1	1
School	Lighting_4L4T8	Electric	2.14	2.14	1	1
School	Lighting_3L4T8	Electric	2.14	2.14	1	1
School	Lighting_2L4T8	Electric	2.14	2.14	1	1
School	Lighting_INC40W	Electric	2.68	2.68	1	1
School	Lighting_INC75W	Electric	2.68	2.68	1	1
School	Lighting_INC150W	Electric	2.68	2.68	1	1
School	Water_Heat	Electric	0.90	0.85	0.95	1
School	Refrigeration	Electric	0.48	0.48	1	1
School	Cooking	Electric	1.21	1.21	1	1
School	Plug_Load	Electric	0.11	0.11	1	1
School	Other	Electric	0.00	0.00	1	1
Health	Space_Heat	Electric	4.96	4.96	1	1
Health	Cooling_Chillers	Electric	3.36	2.86	0.85	1
Health	Cooling_DX	Electric	3.36	3.02	0.9	1
Health	Cooling_HeatPump	Electric	3.36	3.02	0.9	1
Health	Ventilation	Electric	3.58	3.58	1	1
Health	Lighting_4L4T12	Electric	10.77	10.77	1	1
Health	Lighting_3L4T12	Electric	10.77	10.77	1	1
Health	Lighting_2L4T12	Electric	10.77	10.77	1	1
Health	Lighting_2L8T12	Electric	10.77	10.77	1	1
Health	Lighting_4L4T8	Electric	8.62	8.62	1	1
Health	Lighting_3L4T8	Electric	8.62	8.62	1	1
Health	Lighting_2L4T8	Electric	8.62	8.62	1	1
Health	Lighting_INC40W	Electric	10.77	10.77	1	1
Health	Lighting_INC75W	Electric	10.77	10.77	1	1
Health	Lighting_INC150W	Electric	10.77	10.77	1	1
Health	Water_Heat	Electric	2.27	2.16	0.95	1
Health	Refrigeration	Electric	0.65	0.65	1	1
Health	Cooking	Electric	4.33	4.33	1	1
Health	Plug_Load	Electric	0.52	0.52	1	1
Health	Other	Electric	0.00	0.00	1	1

**EUIs by Building Type, End-Use and Fuel**

Building Type	End-Use	Fuel	Stock EUI	Standard EUI	Stock Eff	Standard Eff
Lodging	Space_Heat	Electric	2.54	2.54	1	1
Lodging	Cooling_Chillers	Electric	2.83	2.41	0.85	1
Lodging	Cooling_DX	Electric	2.83	2.55	0.9	1
Lodging	Cooling_HeatPump	Electric	2.83	2.55	0.9	1
Lodging	Ventilation	Electric	1.20	1.20	1	1
Lodging	Lighting_4L4T12	Electric	3.01	3.01	1	1
Lodging	Lighting_3L4T12	Electric	3.01	3.01	1	1
Lodging	Lighting_2L4T12	Electric	3.01	3.01	1	1
Lodging	Lighting_2L8T12	Electric	3.01	3.01	1	1
Lodging	Lighting_4L4T8	Electric	2.41	2.41	1	1
Lodging	Lighting_3L4T8	Electric	2.41	2.41	1	1
Lodging	Lighting_2L4T8	Electric	2.41	2.41	1	1
Lodging	Lighting_INC40W	Electric	3.01	3.01	1	1
Lodging	Lighting_INC75W	Electric	3.01	3.01	1	1
Lodging	Lighting_INC150W	Electric	3.01	3.01	1	1
Lodging	Water_Heat	Electric	2.79	2.65	0.95	1
Lodging	Refrigeration	Electric	0.54	0.54	1	1
Lodging	Cooking	Electric	4.32	4.32	1	1
Lodging	Plug_Load	Electric	0.10	0.10	1	1
Lodging	Other	Electric	0.00	0.00	1	1
Miscellaneous	Space_Heat	Electric	2.76	2.76	1	1
Miscellaneous	Cooling_Chillers	Electric	2.39	2.03	0.85	1
Miscellaneous	Cooling_DX	Electric	2.39	2.15	0.9	1
Miscellaneous	Cooling_HeatPump	Electric	2.39	2.15	0.9	1
Miscellaneous	Ventilation	Electric	0.94	0.94	1	1
Miscellaneous	Lighting_4L4T12	Electric	2.12	2.12	1	1
Miscellaneous	Lighting_3L4T12	Electric	2.12	2.12	1	1
Miscellaneous	Lighting_2L4T12	Electric	2.12	2.12	1	1
Miscellaneous	Lighting_2L8T12	Electric	2.12	2.12	1	1
Miscellaneous	Lighting_4L4T8	Electric	1.70	1.70	1	1
Miscellaneous	Lighting_3L4T8	Electric	1.70	1.70	1	1
Miscellaneous	Lighting_2L4T8	Electric	1.70	1.70	1	1
Miscellaneous	Lighting_INC40W	Electric	2.12	2.12	1	1
Miscellaneous	Lighting_INC75W	Electric	2.12	2.12	1	1
Miscellaneous	Lighting_INC150W	Electric	2.12	2.12	1	1
Miscellaneous	Water_Heat	Electric	1.65	1.57	0.95	1
Miscellaneous	Plug_Load	Electric	1.00	1.00	1	1
Miscellaneous	Other	Electric	0.00	0.00	1	1
Small_Office	Space_Heat	Gas	57.20	57.20	1	1
Small_Office	Water_Heat	Gas	5.88	5.88	1	1
Large_Office	Space_Heat	Gas	57.20	57.20	1	1
Large_Office	Water_Heat	Gas	5.88	5.88	1	1
Restaurant	Space_Heat	Gas	47.98	47.98	1	1
Restaurant	Water_Heat	Gas	78.51	78.51	1	1
Restaurant	Cooking	Gas	132.36	132.36	1	1
Retail	Space_Heat	Gas	53.33	53.33	1	1
Retail	Water_Heat	Gas	8.20	8.20	1	1
Grocery	Space_Heat	Gas	89.38	89.38	1	1
Grocery	Water_Heat	Gas	27.31	27.31	1	1
Grocery	Cooking	Gas	50.64	50.64	1	1
Warehouse	Space_Heat	Gas	55.82	55.82	1	1
Warehouse	Water_Heat	Gas	3.63	3.63	1	1
School	Space_Heat	Gas	49.16	49.16	1	1
School	Water_Heat	Gas	10.76	10.76	1	1
School	Cooking	Gas	8.76	8.76	1	1
Health	Space_Heat	Gas	112.32	112.32	1	1
Health	Water_Heat	Gas	41.82	41.82	1	1
Health	Cooking	Gas	49.15	49.15	1	1
Lodging	Space_Heat	Gas	47.05	47.05	1	1
Lodging	Water_Heat	Gas	34.69	34.69	1	1
Lodging	Cooking	Gas	31.96	31.96	1	1
Miscellaneous	Space_Heat	Gas	42.05	42.05	1	1
Miscellaneous	Water_Heat	Gas	11.87	11.87	1	1

## ***Appendix B. Residential and Commercial Measures***

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Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 EMS Optimization				1.0%	-	5	100.0%	75.0%	75.0%	0.041	4.10	0.03	0.04	\$0.00	\$0.00	A	A
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 Two-Speed Cooling Tower, 300 Tons				14.0%	\$ 0.01	15	50.0%	90.0%	45.0%	0.574	4.07	0.26	0.57	\$0.00	\$0.00	A	A
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 High Efficiency Windows, Low-e; U=0.35				5.4%	\$ 0.03	30	75.0%	100.0%	75.0%	0.221	3.81	0.15	0.21	\$0.01	\$0.01	A	A
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 VSD Cooling Tower, 300 Tons				18.0%	\$ 0.08	15	50.0%	90.0%	45.0%	0.738	3.66	0.30	0.66	\$0.01	\$0.01	A	A
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 Insulation of Pipes				1.0%	\$ 0.01	20	50.0%	50.0%	25.0%	0.041	3.36	0.01	0.03	\$0.02	\$0.03	A	A
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 Installation of Energy Management Systems				10.0%	\$ 0.20	10	50.0%	100.0%	50.0%	0.410	3.35	0.17	0.34	\$0.08	\$0.09	E	E
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 Primary/Secondary De-coupled Chilled Water System				12.0%	\$ 0.49	15	50.0%	80.0%	40.0%	0.492	3.19	0.15	0.38	\$0.12	\$0.16	F	F
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)				10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.03	0.15	0.30	\$0.12	\$0.17	F	F
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 Installation of Chiller Economizers (water side)				50.0%	\$ 0.12	3	100.0%	98.6%	98.6%	0.615	3.42	0.57	0.51	\$0.09	\$0.15	F	F
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 Chiller Tune-Up / Diagnostics				5.0%	\$ 0.12	5	100.0%	90.0%	90.0%	0.205	2.74	0.12	0.14	\$0.16	\$0.24	F	F
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 Optimize Chilled Water and Condenser Water Settings				5.0%	\$ 0.21	10	33.0%	50.0%	16.5%	0.205	2.61	0.02	0.13	\$0.17	\$0.26	F	F
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 Ceiling R-0 to R-19 Insulation				2.1%	\$ 0.24	20	50.0%	20.0%	10.0%	0.086	2.59	0.01	0.05	\$0.30	\$0.47	F	F
MPS Grocery	Cooling_Chillers	Electric Stock	Existing	4.1 Ceiling R-19 to R-38 Insulation				0.9%	\$ 0.24	20	50.0%	20.0%	10.0%	0.037	2.59	0.00	0.02	\$0.69	\$1.10	F	F
MPS Grocery	Cooling_DX	Electric Stock	Existing	4.1 Duct Insulation				3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.123	4.10	0.01	0.12	\$0.01	\$0.01	A	A
MPS Grocery	Cooling_DX	Electric Stock	Existing	4.1 Clock / Programmable Thermostat				10.0%	\$ 0.07	10	100.0%	84.7%	84.7%	0.410	4.09	0.35	0.41	\$0.03	\$0.03	A	A
MPS Grocery	Cooling_DX	Electric Stock	Existing	4.1 High Efficiency Windows, Low-e; U=0.35				5.0%	\$ 0.07	30	75.0%	100.0%	75.0%	0.205	3.75	0.14	0.19	\$0.03	\$0.03	B	B
MPS Grocery	Cooling_DX	Electric Stock	Existing	4.1 Duct Repair and Sealing				1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.041	3.61	0.00	0.04	\$0.10	\$0.12	F	F
MPS Grocery	Cooling_DX	Electric Stock	Existing	4.1 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)				10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.60	0.18	0.36	\$0.12	\$0.14	F	F
MPS Grocery	Cooling_DX	Electric Stock	Existing	4.1 Installation of Air Side Economizers				15.0%	\$ 0.59	3	100.0%	98.6%	98.6%	0.615	3.42	0.57	0.51	\$0.09	\$0.15	F	F
MPS Grocery	Cooling_DX	Electric Stock	Existing	4.1 DX Tune-Up / Diagnostics				10.0%	\$ 0.25	3	100.0%	90.0%	90.0%	0.410	2.91	0.26	0.29	\$0.26	\$0.37	F	F
MPS Grocery	Cooling_DX	Electric Stock	Existing	4.1 Ceiling R-0 to R-19 Insulation				2.1%	\$ 0.24	20	50.0%	20.0%	10.0%	0.086	2.65	0.01	0.06	\$0.30	\$0.46	F	F
MPS Grocery	Cooling_DX	Electric Stock	Existing	4.1 Ceiling R-19 to R-38 Insulation				0.9%	\$ 0.24	20	50.0%	20.0%	10.0%	0.037	2.65	0.00	0.02	\$0.69	\$1.07	F	F
MPS Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1 Duct Insulation				3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.123	4.10	0.01	0.12	\$0.01	\$0.01	A	A
MPS Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1 Clock / Programmable Thermostat				10.0%	\$ 0.07	10	100.0%	84.7%	84.7%	0.410	4.09	0.35	0.41	\$0.03	\$0.03	A	A
MPS Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1 High Efficiency Windows, Low-e; U=0.35				5.0%	\$ 0.07	30	75.0%	100.0%	75.0%	0.205	3.75	0.14	0.19	\$0.03	\$0.03	B	B
MPS Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1 Duct Repair and Sealing				1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.041	3.61	0.00	0.04	\$0.10	\$0.12	F	F
MPS Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)				10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.60	0.18	0.36	\$0.12	\$0.14	F	F
MPS Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1 Installation of Air Side Economizers				15.0%	\$ 0.59	10	100.0%	98.6%	98.6%	0.615	3.42	0.51	0.51	\$0.15	\$0.19	F	F
MPS Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1 DX Tune-Up / Diagnostics				10.0%	\$ 0.25	3	100.0%	90.0%	90.0%	0.410	2.91	0.26	0.29	\$0.26	\$0.37	F	F
MPS Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1 Ceiling R-0 to R-19 Insulation				2.1%	\$ 0.24	20	50.0%	20.0%	10.0%	0.086	2.65	0.01	0.06	\$0.30	\$0.46	F	F
MPS Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1 Ceiling R-19 to R-38 Insulation				0.9%	\$ 0.24	20	50.0%	20.0%	10.0%	0.037	2.65	0.00	0.02	\$0.69	\$1.07	F	F
MPS Grocery	Lighting_2L4T12	Electric Stock	Existing	12.76 Occupancy Sensor, 8-4" Fluorescent Fixtures				30.0%	\$ 0.45	7	10.0%	100.0%	10.0%	3.828	12.76	0.38	3.83	\$0.02	\$0.02	A	A
MPS Grocery	Lighting_2L4T12	Electric Stock	Existing	12.76 4' 1L T8 Premium, EB, reflector				61.1%	\$ 1.55	12	33.3%	100.0%	33.3%	7.798	12.76	2.60	7.80	\$0.03	\$0.03	A	A
MPS Grocery	Lighting_2L4T12	Electric Stock	Existing	12.76 4' 2L T8 Premium, EB				25.0%	\$ 0.76	12	33.3%	100.0%	33.3%	3.190	12.76	1.06	3.19	\$0.03	\$0.03	B	B
MPS Grocery	Lighting_2L4T12	Electric Stock	Existing	12.76 4' 1L T5HO, EB				13.9%	\$ 0.58	12	33.3%	100.0%	33.3%	1.774	12.76	0.59	1.77	\$0.05	\$0.05	C	C
MPS Grocery	Lighting_2L4T12	Electric Stock	Existing	12.76 Continuous Dimming, 10-4" Fluorescent Fixtures				75.0%	\$ 3.75	8	26.0%	100.0%	26.0%	9.570	12.76	2.49	9.57	\$0.07	\$0.07	D	D
MPS Grocery	Lighting_2L4T8	Electric Stock	Existing	10.21 Occupancy Sensor, 8-4" Fluorescent Fixtures				30.0%	\$ 0.45	7	10.0%	100.0%	10.0%	3.063	10.21	0.31	3.06	\$0.03	\$0.03	B	B
MPS Grocery	Lighting_2L4T8	Electric Stock	Existing	10.21 4' 2L T8 Premium, EB				8.5%	\$ 0.26	12	100.0%	100.0%	100.0%	0.868	10.21	0.87	0.87	\$0.04	\$0.04	B	B
MPS Grocery	Lighting_2L8T12	Electric Stock	Existing	12.76 8' 2L T8, EB				52.8%	\$ 1.37	12	50.0%	100.0%	50.0%	6.737	12.76	1.74	6.74	\$0.07	\$0.07	A	A
MPS Grocery	Lighting_2L8T12	Electric Stock	Existing	12.76 8' 1L T12, 60W, EB, reflector				55.3%	\$ 0.82	12	25.0%	100.0%	25.0%	7.056	12.76	1.76	7.06	\$0.02	\$0.02	A	A
MPS Grocery	Lighting_2L8T12	Electric Stock	Existing	12.76 8' 2L T12, 60W, EB				10.6%	\$ 0.18	12	25.0%	54.2%	13.6%	1.349	12.76	0.18	1.35	\$0.02	\$0.02	A	A
MPS Grocery	Lighting_2L8T12	Electric Stock	Existing	12.76 Occupancy Sensor, 4-8" Fluorescent Fixtures				30.0%	\$ 0.56	7	10.0%	100.0%	10.0%	3.828	12.76	0.38	3.83	\$0.03	\$0.03	B	B
MPS Grocery	Lighting_2L8T12	Electric Stock	Existing	12.76 Continuous Dimming, 5-8" Fluorescent Fixtures				75.0%	\$ 4.24	8	26.0%	100.0%	26.0%	9.570	12.76	2.49	9.57	\$0.08	\$0.08	E	E
MPS Grocery	Lighting_3L4T12	Electric Stock	Existing	12.76 4' 1L T5HO, EB				46.1%	\$ 0.06	12	75.0%	100.0%	75.0%	5.881	12.76	4.41	5.88	\$0.00	\$0.00	A	A
MPS Grocery	Lighting_3L4T12	Electric Stock	Existing	12.76 4' 3L T8, EB				22.6%	\$ 0.06	12	75.0%	100.0%	75.0%	2.885	12.76	2.16	2.88	\$0.00	\$0.00	A	A
MPS Grocery	Lighting_3L4T12	Electric Stock	Existing	12.76 4' 2L T8 Premium, EB, reflector				53.0%	\$ 0.35	12	40.0%	100.0%	40.0%	6.768	12.76	2.71	6.77	\$0.01	\$0.01	A	A
MPS Grocery	Lighting_3L4T12	Electric Stock	Existing	12.76 4' 3L T8 Premium, EB				22.6%	\$ 0.16	12	75.0%	100.0%	75.0%	2.885	12.76	2.16	2.88	\$0.01	\$0.01	A	A
MPS Grocery	Lighting_3L4T8	Electric Stock	Existing	10.21 4' 3L T8 Premium, EB				6.7%	\$ 0.42	12	100.0%	100.0%	100.0%	0.694	10.21	0.68	0.68	\$0.09	\$0.09	E	E
MPS Grocery	Lighting_4L4T12	Electric Stock	Existing	12.76 4' 3L T8, EB				38.2%	\$ 0.10	12	16.7%	100.0%	16.7%	4.874	12.76	0.81	4.87	\$0.00	\$0.00	A	A
MPS Grocery	Lighting_4L4T12	Electric Stock	Existing	12.76 4' 3L T8 Premium, EB				42.4%	\$ 0.31	12	16.7%	100.0%	16.7%	5.405	12.76	0.90	5.41	\$0.01	\$0.01	A	A
MPS Grocery	Lighting_4L4T12	Electric Stock	Existing	12.76 4' 4L T8, EB				22.2%	\$ 0.20	12	16.7%	100.0%	16.7%	2.836	12.76	0.47	2.84	\$0.01	\$0.01	A	A
MPS Grocery	Lighting_4L4T12	Electric Stock	Existing	12.76 4' 2L T8 Premium, EB, reflector				62.5%	\$ 0.74	12	16.7%	100.0%	16.7%	7.975	12.76	1.33	7.98	\$0.01	\$0.01	A	A
MPS Grocery	Lighting_4L4T12	Electric Stock	Existing	12.76 4' 2L T5HO, EB				18.8%	\$ 0.29	12	16.7%	100.0%	16.7%	2.393	12.76	0.40	2.39	\$0.02	\$0.02	A	A
MPS Grocery	Lighting_4L4T12	Electric Stock	Existing	12.76 4' 4L T8 Premium, EB				25.0%	\$ 0.49	12	16.7%	100.0%	16.7%	3.190	12.76	0.53	3.19	\$0.02	\$0.02	A	A
MPS Grocery	Lighting_4L4T12	Electric Stock	Existing	12.76 Occupancy Sensor, 4-4" Fluorescent Fixtures				30.0%	\$ 0.52	7	10.0%	100.0%	10.0%	3.828	12.76	0.38	3.83	\$0.03	\$0.03	A	A
MPS Grocery	Lighting_4L4T12	Electric Stock	Existing	12.76 Continuous Dimming, 5-4" Fluorescent Fixtures				75.0%	\$ 3.90	8	26.0%	100.0%	26.0%	9.570	12.76	2.49	9.57	\$0.08	\$0.08	E	E
MPS Grocery	Lighting_4L4T8	Electric Stock	Existing	10.21 Occupancy Sensor, 4-4" Fluorescent Fixtures				30.0%	\$ 0.52	7	10.0%	100.0%	10.0%	3.063	10.21	0.31	3.06	\$0.03	\$0.03	B	B
MPS Grocery	Lighting_4L4T8	Electric Stock	Existing	10.21 4' 4L T8 Premium, EB				3.8%	\$ 0.30	12	100.0%	100.0%	100.0%	0.368	10.21	0.37	0.37	\$0.11	\$0.11	F	F
MPS Grocery	Lighting_INC150W	Electric Stock	Existing	12.76 Halogen PAR Flood, 90W				40.0%	\$ 0.37	1	10.0%	99.6%	99.6%	0.104	12.76	0.01	0.10	\$0.01	\$0.01	A	A
MPS Grocery	Lighting_INC150W	Electric Stock	Existing	12.76 HPS, 50W				56.0%	\$ 0.89	4	45.0%	94.3%	42.4%	7.146	12.76	3.03	7.15	\$0.41	\$0.41	F	F
MPS Grocery	Lighting_INC150W	Electric Stock	Existing	12.76 Metal Halide, 50W				52.0%	\$ 1.72	4	45.0%	94.3%	42.4%	6.635	12.76	2.82	6.64	\$0.87	\$0.87	F	F
MPS Grocery	Lighting_INC40W	Electric Stock	Existing	12.76 LED Exit Signs				80.0%	\$ 0.05	20	90.0%	90.0%	81.0%	10.208	12.76	8.27	10.21	\$0.00	\$0.00	A	A
MPS Grocery	Lighting_INC75W	Electric Stock	Existing	12.76 CFL Screw-in, Modular 18W				65.3%	\$ 2.36	3	90.0%	95.4%	85.8%	8.332	12.76	7.15	8.33	\$0.12	\$0.12	F	F
MPS Grocery	Plug_Load	Electric Stock	Existing	0.41 Smart Networks				6.6%	\$ 0.00	4	90.0%	40.0%	36.0%	0.027	0.41	0.01	0.03	\$0.01	\$0.01	A	A
MPS Grocery	Plug_Load	Electric Stock	Existing	0.41 ENERGY STAR or Better Office Equipment: Monitors				15.9%	\$ 0.01	4	100.0%	71.0%	71.0%	0.065	0.40	0.05	0.06	\$0.03	\$0.03	A	A
MPS Grocery	Plug_Load	Electric Stock	Existing	0.41 ENERGY STAR or Better Office Equipment: Computer				1													

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS Health		Cooling_Chillers	Electric	Stock	Existing	3.36	Chiller Tune-Up / Diagnostics	5.0%	0.17	5	100.0%	90.0%	90.0%	0.168	2.36	0.11	0.12	\$0.27	\$0.39	F	F
MPS Health		Cooling_Chillers	Electric	Stock	Existing	3.36	Optimize Chilled Water and Condenser Water Settings	5.0%	0.30	10	33.0%	50.0%	16.5%	0.168	2.25	0.02	0.11	\$0.28	\$0.42	F	F
MPS Health		Cooling_Chillers	Electric	Stock	Existing	3.36	Ceiling R-0 to R-19 Insulation	2.1%	0.21	20	50.0%	20.0%	10.0%	0.071	2.23	0.00	0.05	\$0.32	\$0.49	F	F
MPS Health		Cooling_Chillers	Electric	Stock	Existing	3.36	Ceiling R-19 to R-38 Insulation	0.9%	0.21	20	50.0%	20.0%	10.0%	0.030	2.23	0.00	0.02	\$0.75	\$1.13	F	F
MPS Health		Cooling_DX	Electric	Stock	Existing	3.36	Duct Insulation	3.0%	0.01	20	25.0%	25.0%	6.3%	0.101	3.36	0.01	0.10	\$0.01	\$0.01	A	A
MPS Health		Cooling_DX	Electric	Stock	Existing	3.36	High Efficiency Windows, Low-e; U=0.35	5.0%	0.03	30	75.0%	66.0%	49.5%	0.168	3.35	0.08	0.17	\$0.02	\$0.02	A	A
MPS Health		Cooling_DX	Electric	Stock	Existing	3.36	Clock / Programmable Thermostat	10.0%	0.09	10	100.0%	60.0%	60.0%	0.336	3.27	0.20	0.33	\$0.04	\$0.04	B	B
MPS Health		Cooling_DX	Electric	Stock	Existing	3.36	Duct Repair and Sealing	1.0%	0.04	20	25.0%	50.0%	12.5%	0.034	3.07	0.00	0.03	\$0.13	\$0.14	F	F
MPS Health		Cooling_DX	Electric	Stock	Existing	3.36	Installation of Air Side Economizers	15.0%	0.59	10	100.0%	40.0%	40.0%	0.504	3.07	0.18	0.46	\$0.19	\$0.20	F	F
MPS Health		Cooling_DX	Electric	Stock	Existing	3.36	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.44	10	50.0%	100.0%	60.0%	0.336	2.89	0.14	0.29	\$0.21	\$0.24	F	F
MPS Health		Cooling_DX	Electric	Stock	Existing	3.36	Ceiling R-0 to R-19 Insulation	2.1%	0.21	20	50.0%	20.0%	10.0%	0.071	2.74	0.01	0.06	\$0.32	\$0.39	F	F
MPS Health		Cooling_DX	Electric	Stock	Existing	3.36	DX Tune-Up / Diagnostics	10.0%	0.35	3	100.0%	90.0%	90.0%	0.336	2.74	0.25	0.27	\$0.44	\$0.54	F	F
MPS Health		Cooling_DX	Electric	Stock	Existing	3.36	Ceiling R-19 to R-38 Insulation	0.9%	0.21	20	50.0%	20.0%	10.0%	0.030	2.49	0.00	0.02	\$0.75	\$1.01	F	F
MPS Health		Cooling_HeatPump	Electric	Stock	Existing	3.36	Duct Insulation	3.0%	0.01	20	25.0%	25.0%	6.3%	0.101	3.36	0.01	0.10	\$0.01	\$0.01	A	A
MPS Health		Cooling_HeatPump	Electric	Stock	Existing	3.36	High Efficiency Windows, Low-e; U=0.35	5.0%	0.03	30	75.0%	66.0%	49.5%	0.168	3.35	0.08	0.17	\$0.02	\$0.02	A	A
MPS Health		Cooling_HeatPump	Electric	Stock	Existing	3.36	Clock / Programmable Thermostat	10.0%	0.09	10	100.0%	60.0%	60.0%	0.336	3.27	0.20	0.33	\$0.04	\$0.04	B	B
MPS Health		Cooling_HeatPump	Electric	Stock	Existing	3.36	Duct Repair and Sealing	1.0%	0.04	20	25.0%	50.0%	12.5%	0.034	3.07	0.00	0.03	\$0.13	\$0.14	F	F
MPS Health		Cooling_HeatPump	Electric	Stock	Existing	3.36	Installation of Air Side Economizers	15.0%	0.59	10	100.0%	40.0%	40.0%	0.504	3.07	0.18	0.46	\$0.19	\$0.20	F	F
MPS Health		Cooling_HeatPump	Electric	Stock	Existing	3.36	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.44	10	50.0%	100.0%	60.0%	0.336	2.89	0.14	0.29	\$0.21	\$0.24	F	F
MPS Health		Cooling_HeatPump	Electric	Stock	Existing	3.36	Ceiling R-0 to R-19 Insulation	2.1%	0.21	20	50.0%	20.0%	10.0%	0.071	2.74	0.01	0.06	\$0.32	\$0.39	F	F
MPS Health		Cooling_HeatPump	Electric	Stock	Existing	3.36	DX Tune-Up / Diagnostics	10.0%	0.35	3	100.0%	90.0%	90.0%	0.336	2.74	0.25	0.27	\$0.44	\$0.54	F	F
MPS Health		Cooling_HeatPump	Electric	Stock	Existing	3.36	Ceiling R-19 to R-38 Insulation	0.9%	0.21	20	50.0%	20.0%	10.0%	0.030	2.49	0.00	0.02	\$0.75	\$1.01	F	F
MPS Health		Lighting_2L4T12	Electric	Stock	Existing	10.77	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	0.44	7	50.0%	90.0%	45.0%	3.231	10.77	1.45	3.23	\$0.03	\$0.03	A	A
MPS Health		Lighting_2L4T12	Electric	Stock	Existing	10.77	4" 1L T8 Premium, EB, reflector	61.1%	1.54	12	33.3%	100.0%	33.3%	6.582	10.77	2.19	6.58	\$0.03	\$0.03	B	B
MPS Health		Lighting_2L4T12	Electric	Stock	Existing	10.77	4" 2L T8 Premium, EB	25.0%	0.76	12	33.3%	100.0%	33.3%	2.693	10.77	0.90	2.69	\$0.04	\$0.04	B	B
MPS Health		Lighting_2L4T12	Electric	Stock	Existing	10.77	4" 1L T5HO, EB	13.9%	0.58	12	33.3%	100.0%	33.3%	1.497	10.77	0.50	1.50	\$0.05	\$0.05	C	C
MPS Health		Lighting_2L4T12	Electric	Stock	Existing	10.77	Continuous Dimming, 10-4" Fluorescent Fixtures	75.0%	3.74	8	10.0%	100.0%	10.0%	8.078	10.77	0.81	8.08	\$0.09	\$0.09	E	E
MPS Health		Lighting_2L4T8	Electric	Stock	Existing	8.62	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	0.44	7	50.0%	90.0%	45.0%	2.586	8.62	1.16	2.59	\$0.04	\$0.04	B	B
MPS Health		Lighting_2L8T12	Electric	Stock	Existing	8.62	4" 2L T8 Premium, EB	52.8%	0.26	12	30.0%	100.0%	66.7%	0.733	8.62	0.73	0.73	\$0.05	\$0.05	C	C
MPS Health		Lighting_2L8T12	Electric	Stock	Existing	10.77	8" T8, EB	52.8%	0.35	12	50.0%	100.0%	50.0%	5.667	10.77	2.84	5.69	\$0.09	\$0.09	A	A
MPS Health		Lighting_2L8T12	Electric	Stock	Existing	10.77	8" 1L T12, 60W, EB, reflector	55.3%	0.77	12	25.0%	100.0%	25.0%	5.956	10.77	1.49	5.96	\$0.02	\$0.02	A	A
MPS Health		Lighting_2L8T12	Electric	Stock	Existing	10.77	8" 2L T12, 60W, EB	10.6%	0.17	12	25.0%	50.0%	12.5%	1.138	10.77	0.14	1.14	\$0.02	\$0.02	A	A
MPS Health		Lighting_2L8T12	Electric	Stock	Existing	10.77	Occupancy Sensor, 4-8" Fluorescent Fixtures	30.0%	0.53	7	50.0%	90.0%	45.0%	3.231	10.77	1.45	3.23	\$0.03	\$0.03	B	B
MPS Health		Lighting_2L8T12	Electric	Stock	Existing	10.77	Continuous Dimming, 5-8" Fluorescent Fixtures	75.0%	3.99	8	10.0%	100.0%	10.0%	8.078	10.77	0.81	8.08	\$0.09	\$0.09	E	E
MPS Health		Lighting_3L4T12	Electric	Stock	Existing	10.77	4" 1L T5HO, EB	46.1%	0.01	12	75.0%	100.0%	75.0%	4.964	10.77	3.72	4.96	\$0.00	\$0.00	A	A
MPS Health		Lighting_3L4T12	Electric	Stock	Existing	10.77	4" 3L T8, EB	22.6%	0.01	12	75.0%	100.0%	75.0%	2.435	10.77	1.83	2.43	\$0.00	\$0.00	A	A
MPS Health		Lighting_3L4T12	Electric	Stock	Existing	10.77	4" 2L T8 Premium, EB, reflector	53.0%	0.07	12	40.0%	100.0%	40.0%	5.713	10.77	2.29	5.71	\$0.00	\$0.00	A	A
MPS Health		Lighting_3L4T12	Electric	Stock	Existing	10.77	4" 3L T8 Premium, EB	22.6%	0.03	12	75.0%	100.0%	75.0%	2.435	10.77	1.83	2.43	\$0.00	\$0.00	A	A
MPS Health		Lighting_3L4T12	Electric	Stock	Existing	8.62	4" 3L T8 Premium, EB	6.7%	0.04	12	100.0%	100.0%	100.0%	0.578	8.62	0.68	0.58	\$0.10	\$0.10	F	F
MPS Health		Lighting_4L4T12	Electric	Stock	Existing	10.77	4" 3L T8, EB	16.7%	0.09	12	16.7%	100.0%	16.7%	0.681	10.77	0.68	1.14	\$0.00	\$0.00	A	A
MPS Health		Lighting_4L4T12	Electric	Stock	Existing	10.77	4" 3L T8 Premium, EB	42.4%	0.31	12	16.7%	100.0%	16.7%	4.562	10.77	0.76	4.56	\$0.01	\$0.01	A	A
MPS Health		Lighting_4L4T12	Electric	Stock	Existing	10.77	4" 4L T8, EB	22.2%	0.20	12	16.7%	100.0%	16.7%	2.393	10.77	0.40	2.39	\$0.01	\$0.01	A	A
MPS Health		Lighting_4L4T12	Electric	Stock	Existing	10.77	4" 2L T8 Premium, EB, reflector	62.5%	0.72	12	16.7%	100.0%	16.7%	6.731	10.77	1.12	6.73	\$0.02	\$0.02	A	A
MPS Health		Lighting_4L4T12	Electric	Stock	Existing	10.77	4" 2L T5HO, EB	18.8%	0.28	12	16.7%	100.0%	16.7%	2.019	10.77	0.34	2.02	\$0.02	\$0.02	A	A
MPS Health		Lighting_4L4T12	Electric	Stock	Existing	10.77	4" 4L T8 Premium, EB	25.0%	0.48	12	16.7%	100.0%	16.7%	2.693	10.77	0.45	2.69	\$0.03	\$0.03	A	A
MPS Health		Lighting_4L4T12	Electric	Stock	Existing	10.77	Occupancy Sensor, 4-4" Fluorescent Fixtures	30.0%	0.51	7	50.0%	90.0%	45.0%	3.231	10.77	1.45	3.23	\$0.03	\$0.03	B	B
MPS Health		Lighting_4L4T12	Electric	Stock	Existing	10.77	Continuous Dimming, 5-4" Fluorescent Fixtures	75.0%	3.84	8	10.0%	100.0%	10.0%	8.078	10.77	0.81	8.08	\$0.09	\$0.09	E	E
MPS Health		Lighting_4L4T8	Electric	Stock	Existing	8.62	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	0.51	7	50.0%	90.0%	45.0%	2.586	8.62	1.16	2.59	\$0.04	\$0.04	B	B
MPS Health		Lighting_4L4T8	Electric	Stock	Existing	8.62	4" 4L T8 Premium, EB	3.6%	0.30	12	100.0%	100.0%	100.0%	0.310	8.62	0.31	0.31	\$0.13	\$0.13	F	F
MPS Health		Lighting_INC150W	Electric	Stock	Existing	10.77	Halogen PAR Flood, 90W	40.0%	0.10	1	100.0%	90.0%	90.0%	4.308	10.77	0.41	4.31	\$0.03	\$0.03	A	A
MPS Health		Lighting_INC150W	Electric	Stock	Existing	10.77	HPS, 50W	56.0%	2.85	4	45.0%	90.0%	40.5%	6.031	10.77	2.44	6.03	\$0.15	\$0.15	F	F
MPS Health		Lighting_INC150W	Electric	Stock	Existing	10.77	Metal Halide, 50W	52.0%	0.59	4	45.0%	90.0%	40.5%	5.600	10.77	2.27	5.60	\$0.33	\$0.33	F	F
MPS Health		Lighting_INC40W	Electric	Stock	Existing	10.77	LED Exit Signs	80.0%	0.17	20	90.0%	90.0%	81.0%	8.616	10.77	6.98	8.62	\$0.00	\$0.00	A	A
MPS Health		Lighting_INC75W	Electric	Stock	Existing	10.77	CFL Screw-in, Modular 18W	65.3%	2.29	3	90.0%	85.0%	76.5%	7.033	10.77	5.38	7.03	\$0.14	\$0.14	F	F
MPS Health		Plug_Load	Electric	Stock	Existing	0.52	Smart Networks	6.4%	0.00	4	90.0%	40.0%	36.0%	0.033	0.52	0.01	0.03	\$0.04	\$0.04	B	B
MPS Health		Plug_Load	Electric	Stock	Existing	0.52	ENERGY STAR or Better Office Equipment: Monitors	15.4%	0.06	4	100.0%	71.0%	71.0%	0.080	0.51	0.06	0.08	\$0.23	\$0.23	F	F
MPS Health		Plug_Load	Electric	Stock	Existing	0.52	ENERGY STAR or Better Office Equipment: Copiers	10.2%	0.04	4	100.0%	65.0%	65.0%	0.093	0.45	0.03	0.05	\$0.24	\$0.28	F	F
MPS Health		Plug_Load	Electric	Stock	Existing	0.52	ENERGY STAR or Better Office Equipment: Computer	17.4%	0.11	4	100.0%	65.0%	65.0%	0.080	0.42	0.05	0.07	\$0.40	\$0.50	F	F
MPS Health		Plug_Load	Electric	Stock	Existing	0.52	ENERGY STAR or Better Office Equipment: Printers	12.2%	0.11	4	100.0%	65.0%	65.0%	0.083	0.37	0.03	0.05	\$0.73	\$0.53	F	F
MPS Health		Space_Heat	Electric	Stock	Existing	4.96	Duct Repair and Sealing	2.0%	0.00	20	25.0%	50.0%	12.5%	0.099	4.96	0.01	0.10	\$0.00	\$0.00	A	A
MPS Health		Space_Heat	Electric	Stock	Existing	4.96	Duct Insulation	2.0%	0.01	20	25.0%	70.3%	17.6%	0.099	4.95	0.02	0.10	\$0.01	\$0.01	A	A
MPS Health		Space_Heat	Electric	Stock	Existing	4.96	Clock / Programmable Thermostat	30.0%	0.15	10	100.0%	70.0%	70.0%	1.488	4.93	1.04	1.48	\$0.02	\$0.02	A	A
MPS Health		Space_Heat	Electric	Stock	Existing	4.96	Ceiling R-0 to R-19 Insulation	7.0%	0.21	20	50.0%	40.0%	20.0%	0.347	3.89	0.05	0.27	\$0.07	\$0.08	D	E
MPS Health		Space_Heat	Electric	Stock	Existing	4.96	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	0.28	15	50.0%	100.0%	50.0%	0.248	3.84	0.10	0.19	\$0.14	\$0.18	F	F
MPS Health		Space_Heat	Electric	Stock	Existing	4.96	Ceiling R-19 to R-38 Insulation	3.0%	0.21	20	50.0%	40.0%	20.0%	0.149	3.74	0.02	0.11	\$0.15	\$0.20	F	F
MPS Health</																					

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Ceiling R-0 to R-19 Insulation	2.1%	0.16	20	50.0%	8.7%	4.4%	0.088	3.43	0.00	0.07	\$0.20	\$0.24	F	F
MPS	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	DX Tune-Up / Diagnostics	10.0%	0.23	3	100.0%	90.0%	90.0%	0.419	3.43	0.31	0.34	\$0.24	\$0.29	F	F
MPS	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Ceiling R-19 to R-38 Insulation	0.9%	0.16	20	50.0%	8.7%	4.4%	0.038	3.12	0.00	0.03	\$0.46	\$0.62	F	F
MPS	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	0.45	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.05	\$0.05	C	C
MPS	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	4" 1L T8 Premium, EB, reflector	61.1%	1.58	16	33.3%	100.0%	33.3%	3.233	5.29	1.08	3.23	\$0.06	\$0.06	C	C
MPS	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	4" 2L T8 Premium, EB	25.0%	0.77	16	33.3%	100.0%	33.3%	1.323	5.29	0.44	1.32	\$0.07	\$0.07	D	D
MPS	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	4" 1L T5HO, EB	13.9%	0.59	16	33.3%	100.0%	33.3%	0.735	5.29	0.25	0.74	\$0.09	\$0.09	E	E
MPS	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	Continuous Dimming, 10-4" Fluorescent Fixtures	75.0%	3.82	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.14	\$0.14	F	F
MPS	Large_Office	Lighting_2L4T8	Electric	Stock	Existing	4.24	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	0.45	9	40.0%	79.6%	31.8%	1.272	4.24	0.40	1.27	\$0.06	\$0.06	D	D
MPS	Large_Office	Lighting_2L4T8	Electric	Stock	Existing	4.24	4" 2L T8 Premium, EB	8.5%	0.27	16	100.0%	100.0%	100.0%	0.360	4.24	0.36	0.36	\$0.09	\$0.09	E	E
MPS	Large_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	8" 2L T8, EB	52.8%	0.36	16	50.0%	100.0%	50.0%	2.793	5.29	1.40	2.79	\$0.02	\$0.02	A	A
MPS	Large_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	8" 1L T12, 60W, EB, reflector	55.3%	0.79	16	25.0%	100.0%	25.0%	2.925	5.29	0.73	2.93	\$0.03	\$0.03	B	B
MPS	Large_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	8" 2L T12, 60W, EB	10.6%	0.17	16	25.0%	26.6%	6.6%	0.559	5.29	0.04	0.56	\$0.04	\$0.04	B	B
MPS	Large_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	Occupancy Sensor, 4-8" Fluorescent Fixtures	30.0%	0.54	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.06	\$0.06	C	C
MPS	Large_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	Continuous Dimming, 5-8" Fluorescent Fixtures	75.0%	4.09	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F
MPS	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	4" 1L T5HO, EB	46.1%	0.05	16	75.0%	100.0%	75.0%	2.438	5.29	1.83	2.44	\$0.00	\$0.00	A	A
MPS	Large_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4" 3L T8, EB	22.6%	0.05	16	75.0%	100.0%	75.0%	1.196	5.29	0.90	1.20	\$0.00	\$0.00	A	A
MPS	Large_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4" 2L T8 Premium, EB, reflector	53.0%	0.28	16	40.0%	100.0%	40.0%	2.806	5.29	1.12	2.81	\$0.01	\$0.01	A	A
MPS	Large_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4" 3L T8 Premium, EB	22.5%	0.07	16	75.0%	100.0%	75.0%	0.529	5.29	0.20	0.53	\$0.00	\$0.00	A	A
MPS	Large_Office	Lighting_3L4T8	Electric	Stock	Existing	6.24	4" 3L T8 Premium, EB	6.7%	0.43	16	100.0%	100.0%	100.0%	0.284	4.24	0.28	0.28	\$0.18	\$0.18	F	F
MPS	Large_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4" 3L T8, EB	38.2%	0.10	16	16.7%	100.0%	16.7%	2.021	5.29	0.34	2.02	\$0.01	\$0.01	A	A
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 3L T8 Premium, EB	42.4%	0.32	16	16.7%	100.0%	16.7%	2.241	5.29	0.37	2.24	\$0.02	\$0.02	A	A
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 4L T8, EB	22.2%	0.21	16	16.7%	100.0%	16.7%	1.176	5.29	0.20	1.18	\$0.02	\$0.02	A	A
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 2L T8 Premium, EB, reflector	62.5%	0.74	16	16.7%	100.0%	16.7%	3.306	5.29	0.55	3.31	\$0.03	\$0.03	A	A
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 2L T5HO, EB	18.8%	0.29	16	16.7%	100.0%	16.7%	0.992	5.29	0.17	0.99	\$0.03	\$0.03	B	B
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 4L T8 Premium, EB	25.0%	0.50	16	16.7%	100.0%	16.7%	1.323	5.29	0.22	1.32	\$0.04	\$0.04	B	B
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	Occupancy Sensor, 4-4" Fluorescent Fixtures	30.0%	0.52	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.06	\$0.06	C	C
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	Continuous Dimming, 5-4" Fluorescent Fixtures	75.0%	3.93	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F
MPS	Large_Office	Lighting_4L4T8	Electric	Stock	Existing	4.24	Occupancy Sensor, 4-4" Fluorescent Fixtures	30.0%	0.45	9	40.0%	79.6%	31.8%	1.272	4.24	0.40	1.27	\$0.07	\$0.07	F	F
MPS	Large_Office	Lighting_4L4T8	Electric	Stock	Existing	4.24	4" 4L T8 Premium, EB	3.6%	0.30	16	100.0%	100.0%	100.0%	0.153	4.24	0.15	0.15	\$0.24	\$0.24	F	F
MPS	Large_Office	Lighting_INC150W	Electric	Stock	Existing	5.29	Halogen PAR Flood, 90W	40.0%	0.18	1	10.0%	100.0%	10.0%	2.116	5.29	0.21	2.12	\$0.10	\$0.10	E	E
MPS	Large_Office	Lighting_INC150W	Electric	Stock	Existing	5.29	HPS, 50W	56.0%	4.80	6	45.0%	93.9%	42.2%	2.962	5.29	1.25	2.96	\$0.38	\$0.38	F	F
MPS	Large_Office	Lighting_INC150W	Electric	Stock	Existing	5.29	Metal Halide, 50W	52.0%	9.40	6	45.0%	93.9%	42.2%	2.751	5.29	1.16	2.75	\$0.80	\$0.80	F	F
MPS	Large_Office	Lighting_INC40W	Electric	Stock	Existing	5.29	LED Exit Signs	80.0%	0.05	20	90.0%	90.0%	81.0%	4.232	5.29	3.43	4.23	\$0.00	\$0.00	A	A
MPS	Large_Office	Lighting_INC75W	Electric	Stock	Existing	5.29	CFL Screw-in, Modular 18W	65.3%	2.25	5	90.0%	72.5%	65.2%	3.454	5.29	2.25	3.45	\$0.18	\$0.18	F	F
MPS	Large_Office	Plug_Load	Electric	Stock	Existing	1.59	Smart Networks	9.1%	0.01	4	90.0%	40.0%	36.0%	0.145	1.59	0.05	0.15	\$0.02	\$0.02	A	A
MPS	Large_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Monitors	21.9%	0.09	4	100.0%	71.0%	71.0%	0.349	1.54	0.24	0.34	\$0.09	\$0.09	E	E
MPS	Large_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Copiers	4.8%	0.03	4	100.0%	65.0%	65.0%	0.077	1.30	0.04	0.06	\$0.14	\$0.18	F	F
MPS	Large_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Computer	24.7%	0.19	4	100.0%	65.0%	65.0%	0.393	1.26	0.20	0.31	\$0.19	\$0.15	F	F
MPS	Large_Office	Space_Heat	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Printers	8.0%	0.10	4	100.0%	65.0%	65.0%	0.127	1.06	0.08	0.08	\$0.26	\$0.40	F	F
MPS	Large_Office	Space_Heat	Electric	Stock	Existing	6.18	Duct Repair and Sealing	2.0%	0.01	20	25.0%	50.0%	12.5%	1.324	6.18	0.02	1.12	\$0.01	\$0.01	A	A
MPS	Large_Office	Space_Heat	Electric	Stock	Existing	6.18	Clock / Programmable Thermostat	30.0%	0.15	10	100.0%	58.5%	58.5%	1.854	6.18	1.08	1.85	\$0.01	\$0.01	A	A
MPS	Large_Office	Space_Heat	Electric	Stock	Existing	6.18	Duct Insulation	2.0%	0.02	20	25.0%	58.5%	14.6%	0.124	5.08	0.01	0.10	\$0.02	\$0.02	A	A
MPS	Large_Office	Space_Heat	Electric	Stock	Existing	6.18	Ceiling R-0 to R-19 Insulation	7.0%	0.16	20	50.0%	12.9%	6.5%	0.433	5.07	0.02	0.35	\$0.04	\$0.05	B	C
MPS	Large_Office	Space_Heat	Electric	Stock	Existing	6.18	Ceiling R-19 to R-38 Insulation	3.0%	0.16	20	50.0%	12.9%	6.5%	0.185	5.05	0.01	0.15	\$0.09	\$0.11	E	F
MPS	Large_Office	Space_Heat	Electric	Stock	Existing	6.18	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	0.28	15	50.0%	100.0%	50.0%	0.309	5.04	0.13	0.25	\$0.11	\$0.14	F	F
MPS	Large_Office	Water_Heat	Electric	Stock	Existing	0.95	Hot Water (SHW) Pipe Insulation	5.0%	0.00	15	50.0%	39.3%	19.6%	0.048	0.95	0.01	0.05	\$0.01	\$0.01	A	A
MPS	Large_Office	Water_Heat	Electric	Stock	Existing	0.95	Heat Pump Water Heater	30.0%	0.58	15	75.0%	100.0%	75.0%	0.285	0.94	0.21	0.28	\$0.25	\$0.25	F	F
MPS	Large_Office	Water_Heat	Electric	Stock	Existing	0.95	Demand controlled circulating systems	5.0%	0.91	15	50.0%	93.2%	46.6%	0.049	0.73	0.02	0.04	\$2.35	\$3.36	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	EMS Optimization	1.0%	0.59	5	100.0%	75.0%	0.028	1.83	0.02	0.03	\$0.00	\$0.00	A	A	
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	Two-Speed Cooling Tower, 300 Tons	14.0%	0.01	15	50.0%	90.0%	45.0%	0.396	2.81	0.18	0.39	\$0.00	\$0.00	A	A
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	VSD Cooling Tower, 300 Tons	18.0%	0.11	15	50.0%	90.0%	45.0%	0.509	2.63	0.21	0.47	\$0.03	\$0.03	A	A
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	High Efficiency Windows, Low-e; U=0.35	7.0%	0.06	30	75.0%	92.9%	69.7%	0.199	2.42	0.12	0.17	\$0.03	\$0.03	A	B
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	Insulation of Pipes	1.0%	0.03	20	50.0%	50.0%	25.0%	0.028	2.30	0.01	0.02	\$0.13	\$0.16	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	Installation of Energy Management Systems	10.0%	0.29	10	50.0%	37.5%	18.7%	0.283	2.29	0.04	0.23	\$0.16	\$0.20	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	Ceiling R-0 to R-19 Insulation	2.1%	0.11	20	50.0%	17.3%	0.059	0.283	2.25	0.01	0.05	\$0.19	\$0.24	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	Installation of Chiller Economizers (water side)	10.0%	0.59	20	50.0%	40.1%	20.0%	0.283	2.24	0.04	0.22	\$0.22	\$0.28	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	Primary/Secondary De-coupled Chilled Water System	12.0%	0.71	15	50.0%	80.0%	40.0%	0.340	2.20	0.11	0.26	\$0.26	\$0.33	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.19	10	50.0%	100.0%	50.0%	0.283	2.09	0.10	0.21	\$0.24	\$0.35	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	Ceiling R-19 to R-38 Insulation	0.9%	0.18	5	100.0%	90.0%	90.0%	0.142	1.90	0.09	0.10	\$0.44	\$0.49	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	Optimize Chilled Water and Condenser Water Settings	5.0%	0.31	10	33.0%	50.0%	16.5%	0.142	1.90	0.02	0.09	\$0.35	\$0.52	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	Existing	2.83	Ceiling R-19 to R-38 Insulation	0.9%	0.11	20	50.0%	34.6%	17.3%	0.025	1.88	0.00	0.02	\$0.44	\$0.68	F	F
MPS	Lodging	Cooling_DX	Electric	Stock	Existing	2.83	Duct Insulation	3.0%	0.01	20	25.0%	25.0%	6.3%	0.085	2.83	0.01	0.08	\$0.02	\$0.02	A	A
MPS	Lodging	Cooling_DX	Electric	Stock	Existing	2.83	Occupancy Sensor for room HVAC units	35.0%	0.30	15	51.0%	100.0%	51.0%	0.991	2.82	0.50	0.99	\$0.04	\$0.04	B	B
MPS	Lodging	Cooling_DX	Electric	Stock	Existing	2.83	Clock / Programmable Thermostat	10.0%	0.10	10	100.0%										

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Cost Group	Stacked Cost Group
MPS Lodging	Lighting_3L4T12	Electric Stock	Existing	3.01 4' 3L T8 Premium, EB		22.8%	\$ 0.05	26	75.0%	100.0%	75.0%	0.681	0.681	3.01	0.51	0.68	\$0.01	\$0.01	A	A	
MPS Lodging	Lighting_3L4T8	Electric Stock	Existing	2.41 4' 3L T8 Premium, EB		6.7%	\$ 0.21	26	100.0%	100.0%	100.0%	0.161	0.161	2.41	0.16	0.16	\$0.13	\$0.13	F	F	
MPS Lodging	Lighting_4L4T12	Electric Stock	Existing	3.01 4' 3L T8, EB		38.2%	\$ 0.05	26	16.7%	100.0%	16.7%	1.150	1.150	3.01	0.19	1.15	\$0.00	\$0.00	A	A	
MPS Lodging	Lighting_4L4T12	Electric Stock	Existing	3.01 4' 3L T8 Premium, EB		42.4%	\$ 0.15	26	16.7%	100.0%	16.7%	1.275	1.275	3.01	0.21	1.28	\$0.01	\$0.01	A	A	
MPS Lodging	Lighting_4L4T12	Electric Stock	Existing	3.01 4' 4L T8, EB		22.2%	\$ 0.10	26	16.7%	100.0%	16.7%	0.669	0.669	3.01	0.11	0.67	\$0.01	\$0.01	A	A	
MPS Lodging	Lighting_4L4T12	Electric Stock	Existing	3.01 4' 2L T8 Premium, EB, reflector		62.5%	\$ 0.36	26	16.7%	100.0%	16.7%	1.881	1.881	3.01	0.31	1.88	\$0.02	\$0.02	A	A	
MPS Lodging	Lighting_4L4T12	Electric Stock	Existing	3.01 4' 2L T5HO, EB		18.8%	\$ 0.14	26	16.7%	100.0%	16.7%	0.564	0.564	3.01	0.09	0.56	\$0.02	\$0.02	A	A	
MPS Lodging	Lighting_4L4T12	Electric Stock	Existing	3.01 4' 2L T8 Premium, EB		25.0%	\$ 0.24	26	16.7%	100.0%	16.7%	0.753	0.753	3.01	0.13	0.75	\$0.03	\$0.03	B	B	
MPS Lodging	Lighting_4L4T12	Electric Stock	Existing	3.01 Occupancy Sensor, 4-4' Fluorescent Fixtures		30.0%	\$ 0.26	15	20.0%	98.8%	17.5%	0.903	0.903	3.01	0.16	0.90	\$0.03	\$0.03	B	B	
MPS Lodging	Lighting_4L4T12	Electric Stock	Existing	3.01 Continuous Dimming, 5-4' Fluorescent Fixtures		75.0%	\$ 1.92	19	30.0%	100.0%	2.258	3.01	0.68	2.26	0.68	2.26	\$0.09	\$0.09	E	E	
MPS Lodging	Lighting_4L4T8	Electric Stock	Existing	2.41 Occupancy Sensor, 4-4' Fluorescent Fixtures		30.0%	\$ 0.26	15	20.0%	98.8%	17.5%	0.723	0.723	2.41	0.13	0.72	\$0.04	\$0.04	B	B	
MPS Lodging	Lighting_4L4T8	Electric Stock	Existing	2.41 4' 4L T8 Premium, EB		3.6%	\$ 0.15	26	100.0%	100.0%	100.0%	0.087	0.087	2.41	0.09	0.09	\$0.16	\$0.16	F	F	
MPS Lodging	Lighting_INC150W	Electric Stock	Existing	3.01 Halogen PAR Flood, 90W		40.0%	\$ 0.07	1	10.0%	99.0%	9.9%	1.204	1.204	3.01	0.12	1.20	\$0.07	\$0.07	D	D	
MPS Lodging	Lighting_INC150W	Electric Stock	Existing	3.01 HPS, 50W		56.0%	\$ 1.98	9	45.0%	92.2%	41.5%	1.686	1.686	3.01	0.70	1.69	\$0.20	\$0.20	F	F	
MPS Lodging	Lighting_INC150W	Electric Stock	Existing	3.01 Metal Halide, 50W		52.0%	\$ 3.88	9	45.0%	92.2%	41.5%	1.565	1.565	3.01	0.65	1.57	\$0.42	\$0.42	F	F	
MPS Lodging	Lighting_INC40W	Electric Stock	Existing	3.01 LED Exit Signs		80.0%	\$ 0.32	20	90.0%	90.0%	81.0%	2.408	2.408	3.01	1.95	2.41	\$0.01	\$0.01	A	A	
MPS Lodging	Lighting_INC75W	Electric Stock	Existing	3.01 CFL Screw-in, Modular 18W		65.3%	\$ 1.24	8	70.0%	72.5%	50.8%	1.966	1.966	3.01	1.00	1.97	\$0.12	\$0.12	F	F	
MPS Lodging	Plug_Load	Electric Stock	Existing	0.1 Smart Networks		4.5%	\$ 0.00	4	90.0%	40.0%	36.0%	0.005	0.005	0.10	0.00	0.00	\$0.03	\$0.03	A	A	
MPS Lodging	Plug_Load	Electric Stock	Existing	0.1 ENERGY STAR or Better Office Equipment: Copiers		20.2%	\$ 0.00	4	100.0%	65.0%	65.0%	0.020	0.020	0.10	0.01	0.01	\$0.02	\$0.02	B	B	
MPS Lodging	Plug_Load	Electric Stock	Existing	0.1 ENERGY STAR or Better Office Equipment: Monitors		10.5%	\$ 0.00	4	100.0%	71.0%	0.011	0.09	0.01	0.01	0.01	0.01	\$0.14	\$0.17	F	F	
MPS Lodging	Plug_Load	Electric Stock	Existing	0.1 ENERGY STAR or Better Office Equipment: Computer		12.2%	\$ 0.01	4	100.0%	65.0%	65.0%	0.012	0.08	0.01	0.01	0.01	\$0.26	\$0.33	F	F	
MPS Lodging	Plug_Load	Electric Stock	Existing	0.1 ENERGY STAR or Better Office Equipment: Printers		7.6%	\$ 0.01	4	100.0%	65.0%	65.0%	0.008	0.07	0.00	0.01	0.01	\$0.45	\$0.61	F	F	
MPS Lodging	Space_Heat	Electric Stock	Existing	2.54 Duct Repair and Sealing		2.0%	\$ 0.01	20	25.0%	50.0%	12.5%	0.051	2.54	0.01	0.05	0.01	\$0.01	\$0.01	A	A	
MPS Lodging	Space_Heat	Electric Stock	Existing	2.54 Duct Insulation		2.0%	\$ 0.01	20	25.0%	79.1%	19.8%	0.051	2.53	0.01	0.05	0.03	\$0.03	\$0.03	A	A	
MPS Lodging	Space_Heat	Electric Stock	Existing	2.54 Occupancy Sensor for room HVAC units		35.0%	\$ 0.20	15	51.0%	100.0%	51.0%	0.889	2.52	0.45	0.88	\$0.03	\$0.03	A	A		
MPS Lodging	Space_Heat	Electric Stock	Existing	2.54 Clock / Programmable Thermostat		30.0%	\$ 0.15	10	100.0%	59.4%	59.4%	0.762	2.07	0.37	0.62	\$0.03	\$0.04	B	B		
MPS Lodging	Space_Heat	Electric Stock	Existing	2.54 Ceiling R-0 to R-19 Insulation		7.0%	\$ 0.11	20	50.0%	62.3%	31.1%	0.178	1.70	0.04	0.12	\$0.06	\$0.09	D	E		
MPS Lodging	Space_Heat	Electric Stock	Existing	2.54 Ceiling R-19 to R-38 Insulation		3.0%	\$ 0.11	20	50.0%	62.3%	31.1%	0.076	1.67	0.02	0.05	\$0.15	\$0.22	F	F		
MPS Lodging	Space_Heat	Electric Stock	Existing	2.54 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		5.0%	\$ 0.26	15	50.0%	100.0%	50.0%	0.127	1.65	0.04	0.08	\$0.42	\$0.42	F	F		
MPS Lodging	Water_Heat	Electric Stock	Existing	2.79 Hot Water (SHW) Pipe Insulation		5.0%	\$ 0.03	15	50.0%	100.0%	50.0%	0.140	2.79	0.07	0.14	\$0.03	\$0.03	B	B		
MPS Lodging	Water_Heat	Electric Stock	Existing	2.79 Heat Pump Water Heater		30.0%	\$ 3.47	15	75.0%	100.0%	75.0%	0.837	2.72	0.61	0.82	\$0.51	\$0.52	F	F		
MPS Lodging	Water_Heat	Electric Stock	Existing	2.79 Demand controlled circulating systems		5.0%	\$ 0.45	15	50.0%	100.0%	50.0%	0.140	2.11	0.05	0.11	\$4.81	\$6.38	F	F		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 EMS Optimization		1.0%	\$ -	5	100.0%	75.0%	75.0%	0.024	2.39	0.02	0.02	\$0.00	\$0.00	A	A		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 Two-Speed Cooling Tower, 300 Tons		14.0%	\$ 0.01	15	50.0%	90.0%	45.0%	0.335	2.37	0.15	0.33	\$0.00	\$0.00	A	A		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 VSD Cooling Tower, 300 Tons		18.0%	\$ 0.05	15	50.0%	90.0%	45.0%	0.430	2.22	0.18	0.40	\$0.01	\$0.01	A	A		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 High Efficiency Windows, Low-e; U=0.35		2.5%	\$ 0.02	30	75.0%	76.3%	57.2%	0.059	2.04	0.03	0.05	\$0.03	\$0.04	A	B		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 Insulation of Pipes		1.0%	\$ 0.01	20	50.0%	50.0%	25.0%	0.024	2.01	0.01	0.02	\$0.04	\$0.05	B	C		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 Installation of Energy Management Systems		10.0%	\$ 0.12	10	50.0%	100.0%	50.0%	0.239	2.01	0.10	0.20	\$0.08	\$0.09	E	E		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 Primary/Secondary De-coupled Chilled Water System		12.0%	\$ 0.30	15	50.0%	80.0%	40.0%	0.287	1.91	0.09	0.28	\$0.18	\$0.18	F	F		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		5.0%	\$ 0.19	15	50.0%	100.0%	50.0%	0.239	1.82	0.08	0.18	\$0.13	\$0.17	F	F		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 Chiller Tune-Up / Diagnostics		5.0%	\$ 0.08	5	100.0%	90.0%	90.0%	0.120	1.73	0.08	0.09	\$0.17	\$0.24	F	F		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 Optimize Chilled Water and Condenser Water Settings		5.0%	\$ 0.13	10	33.0%	50.0%	16.5%	0.120	1.65	0.01	0.08	\$0.18	\$0.25	F	F		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 Installation of Chiller Economizers (water side)		10.0%	\$ 0.59	20	50.0%	76.3%	38.1%	0.239	1.63	0.06	0.16	\$0.26	\$0.38	F	F		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 Ceiling R-0 to R-19 Insulation		2.1%	\$ 0.22	20	50.0%	40.2%	20.1%	0.050	1.57	0.01	0.03	\$0.47	\$0.71	F	F		
MPS Miscellaneous	Cooling_Chillers	Electric Stock	Existing	2.39 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.22	20	50.0%	40.2%	20.1%	0.022	1.57	0.00	0.01	\$1.09	\$1.66	F	F		
MPS Miscellaneous	Cooling_DX	Electric Stock	Existing	2.39 Duct Insulation		3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.072	2.39	0.00	0.07	\$0.02	\$0.02	A	A		
MPS Miscellaneous	Cooling_DX	Electric Stock	Existing	2.39 Clock / Programmable Thermostat		10.0%	\$ 0.04	10	100.0%	35.9%	35.9%	0.239	2.39	0.09	0.24	\$0.03	\$0.03	A	A		
MPS Miscellaneous	Cooling_DX	Electric Stock	Existing	2.39 High Efficiency Windows, Low-e; U=0.35		5.0%	\$ 0.05	30	75.0%	76.3%	57.2%	0.120	2.30	0.07	0.11	\$0.04	\$0.04	B	B		
MPS Miscellaneous	Cooling_DX	Electric Stock	Existing	2.39 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.19	10	50.0%	100.0%	50.0%	0.239	2.23	0.11	0.22	\$0.13	\$0.14	F	F		
MPS Miscellaneous	Cooling_DX	Electric Stock	Existing	2.39 Duct Repair and Sealing		2.0%	\$ 0.04	20	25.0%	50.0%	25.0%	0.024	2.12	0.00	0.02	\$0.10	\$0.20	F	F		
MPS Miscellaneous	Cooling_DX	Electric Stock	Existing	2.39 Installation of Air Side Economizers		15.0%	\$ 0.59	10	100.0%	79.7%	79.7%	0.359	2.12	0.25	0.32	\$0.26	\$0.29	F	F		
MPS Miscellaneous	Cooling_DX	Electric Stock	Existing	2.39 DX Tune-Up / Diagnostics		10.0%	\$ 0.16	3	100.0%	90.0%	90.0%	0.239	1.87	0.17	0.19	\$0.28	\$0.35	F	F		
MPS Miscellaneous	Cooling_DX	Electric Stock	Existing	2.39 Ceiling R-0 to R-19 Insulation		2.1%	\$ 0.22	20	50.0%	40.2%	20.1%	0.050	1.70	0.01	0.04	\$0.47	\$0.66	F	F		
MPS Miscellaneous	Cooling_DX	Electric Stock	Existing	2.39 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.22	20	50.0%	40.2%	20.1%	0.022	1.69	0.00	0.02	\$1.09	\$1.54	F	F		
MPS Miscellaneous	Cooling_HeatPump	Electric Stock	Existing	2.39 Duct Insulation		3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.072	2.39	0.00	0.07	\$0.02	\$0.02	A	A		
MPS Miscellaneous	Cooling_HeatPump	Electric Stock	Existing	2.39 Clock / Programmable Thermostat		10.0%	\$ 0.04	10	100.0%	35.9%	35.9%	0.239	2.39	0.09	0.24	\$0.03	\$0.03	A	A		
MPS Miscellaneous	Cooling_HeatPump	Electric Stock	Existing	2.39 High Efficiency Windows, Low-e; U=0.35		5.0%	\$ 0.05	30	75.0%	76.3%	57.2%	0.120	2.30	0.07	0.11	\$0.04	\$0.04	B	B		
MPS Miscellaneous	Cooling_HeatPump	Electric Stock	Existing	2.39 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.19	10	50.0%	100.0%	50.0%	0.239	2.23	0.11	0.22	\$0.13	\$0.14	F	F		
MPS Miscellaneous	Cooling_HeatPump	Electric Stock	Existing	2.39 Duct Repair and Sealing		1.0%	\$ 0.04	20	25.0%	50.0%	25.0%	0.024	2.12	0.00	0.02	\$0.10	\$0.20	F	F		
MPS Miscellaneous	Cooling_HeatPump	Electric Stock	Existing	2.39 Installation of Air Side Economizers		15.0%	\$ 0.59	10	100.0%	79.7%	79.7%	0.359	2.12	0.25	0.32	\$0.26	\$0.29	F	F		
MPS Miscellaneous	Cooling_HeatPump	Electric Stock	Existing	2.39 DX Tune-Up / Diagnostics		10.0%	\$ 0.16	3	100.0%	90.0%	90.0%	0.239	1.87	0.17	0.19	\$0.28	\$0.35	F	F		
MPS Miscellaneous	Cooling_HeatPump	Electric Stock	Existing	2.39 Ceiling R-0 to R-19 Insulation		2.1%	\$ 0.22	20	50.0%	40.2%	20.1%	0.050	1.70	0.01	0.04	\$0.47	\$0.66	F	F		
MPS Miscellaneous	Cooling_HeatPump	Electric Stock	Existing	2.39 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.22	20	50.0%	40.2%	20.1%	0.022	1.69	0.00	0.02	\$1.09	\$1.54	F	F		
MPS Miscellaneous	Lighting_2L4T12	Electric Stock	Existing	2.12 Occupancy Sensor, 8-4' Fluorescent Fixtures		30.0%	\$ 0.43	21	20.0%	95.0%	19.0%	0.636	2.12	0.12	0.64	\$0.07	\$0.07	D	D		
MPS Miscellaneous	Lighting_2L4T12	Electric Stock	Existing	2.12 4' 1L T8 Premium, EB, reflector		61.1%	\$ 1.49	36	33.3%	100.0%	33.3%	1.296	2.12	0.43	1.30	\$0.10	\$0.10	F	F		
MPS Miscellaneous	Lighting_2L4T12	Electric Stock	Existing	2.12 4' 2L T8 Premium, EB		25.0%	\$ 0.73	36	33.3%	100.0%	33.3%	0.530	2.12	0.18	0.53	\$0.12	\$0.12	F	F		
MPS Miscellaneous	Lighting_2L4T12	Electric Stock	Existing	2.12 4' 1L T5HO, EB		13.9%	\$ 0.56	36	33.3%	100.0%	33.3%	0.295	2.12	0.10	0.29	\$0.16	\$0.16	F	F		
MPS Miscellaneous	Lighting_2L4T12	Electric Stock	Existing	2.12 Continuous Dimming, 10-4' Fluorescent Fixtures		75.0%	\$ 3.62	28	30.0%	100.0%	30.0%	1.590	2.12	0.48							



Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS	Miscellaneous	Plug_Load	Electric	Stock	Existing	1	ENERGY STAR or Better Office Equipment: Copiers	11.4%	\$ 0.04	4	100.0%	65.0%	65.0%	0.114	0.98	0.07	0.11	\$0.12	\$0.13	F	F
MPS	Miscellaneous	Plug_Load	Electric	Stock	Existing	1	ENERGY STAR or Better Office Equipment: Monitors	16.5%	\$ 0.07	4	100.0%	71.0%	71.0%	0.165	0.90	0.11	0.15	\$0.14	\$0.16	F	F
MPS	Miscellaneous	Plug_Load	Electric	Stock	Existing	1	ENERGY STAR or Better Office Equipment: Computer	18.6%	\$ 0.15	4	100.0%	65.0%	65.0%	0.186	0.80	0.10	0.15	\$0.26	\$0.32	F	F
MPS	Miscellaneous	Plug_Load	Electric	Stock	Existing	1	ENERGY STAR or Better Office Equipment: Printers	9.2%	\$ 0.11	4	100.0%	65.0%	65.0%	0.092	0.70	0.04	0.06	\$0.38	\$0.54	F	F
MPS	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76	Duct Repair and Sealing	2.0%	\$ 0.01	20	25.0%	50.0%	12.5%	0.055	2.76	0.01	0.06	\$0.01	\$0.01	A	A
MPS	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76	Duct Insulation	2.0%	\$ 0.01	20	25.0%	83.4%	20.9%	0.055	2.75	0.01	0.06	\$0.02	\$0.02	A	A
MPS	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76	Clock / Programmable Thermostat	30.0%	\$ 0.15	10	100.0%	41.8%	41.8%	0.828	2.74	0.34	0.82	\$0.03	\$0.03	A	A
MPS	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76	Ceiling R-0 to R-19 Insulation	7.0%	\$ 0.22	20	50.0%	13.4%	6.7%	0.193	2.40	0.01	0.17	\$0.12	\$0.14	F	F
MPS	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.198	2.39	0.06	0.12	\$0.25	\$0.29	F	F
MPS	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76	Ceiling R-19 to R-38 Insulation	3.0%	\$ 0.22	20	50.0%	13.4%	6.7%	0.083	2.33	0.01	0.07	\$0.28	\$0.34	F	F
MPS	Miscellaneous	Water_Heat	Electric	Stock	Existing	1.65	Hot Water (SHW) Pipe Insulation	5.0%	\$ 0.01	15	50.0%	100.0%	50.0%	0.083	1.65	0.04	0.08	\$0.01	\$0.01	A	A
MPS	Miscellaneous	Water_Heat	Electric	Stock	Existing	1.65	Heat Pump Water Heater	30.0%	\$ 0.39	15	75.0%	100.0%	75.0%	0.495	1.61	0.36	0.48	\$0.84	\$0.87	F	F
MPS	Miscellaneous	Water_Heat	Electric	Stock	Existing	1.65	Demand controlled circulating systems	5.0%	\$ 5.32	15	50.0%	100.0%	50.0%	0.083	1.25	0.03	0.06	\$7.94	\$10.51	F	F
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	EMS Optimization	1.0%	\$ -	5	100.0%	75.0%	75.0%	0.045	4.49	0.03	0.04	\$0.00	\$0.00	A	A
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	Two-Speed Cooling Tower, 300 Tons	14.0%	\$ 0.01	15	50.0%	90.0%	45.0%	0.629	4.46	0.28	0.62	\$0.00	\$0.00	A	A
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	VSD Cooling Tower, 300 Tons	18.0%	\$ 0.05	15	50.0%	90.0%	45.0%	0.808	4.18	0.34	0.75	\$0.01	\$0.01	A	A
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	High Efficiency Windows, Low-e; U=0.35	5.4%	\$ 0.02	30	50.0%	100.0%	50.0%	0.242	3.84	0.10	0.21	\$0.01	\$0.01	A	A
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	Installation of Energy Management Systems	10.0%	\$ 0.11	10	50.0%	100.0%	50.0%	0.449	3.73	0.19	0.37	\$0.04	\$0.05	B	C
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	Insulation of Pipes	5.0%	\$ 0.02	20	50.0%	50.0%	25.0%	0.539	3.55	0.01	0.04	\$0.06	\$0.07	D	D
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.18	10	50.0%	100.0%	50.0%	0.539	3.54	0.17	0.42	\$0.07	\$0.08	D	E
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.18	10	50.0%	100.0%	50.0%	0.449	3.37	0.17	0.34	\$0.07	\$0.09	D	E
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	Chiller Tune-Up / Diagnostics	5.0%	\$ 0.07	5	100.0%	90.0%	90.0%	0.225	3.20	0.14	0.16	\$0.09	\$0.12	E	F
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.13	10	33.0%	50.0%	16.5%	0.225	3.06	0.03	0.15	\$0.09	\$0.13	E	F
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	Installation of Chiller Economizers (water side)	10.0%	\$ 0.59	20	50.0%	100.0%	50.0%	0.449	3.03	0.15	0.30	\$0.14	\$0.21	F	F
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.22	20	50.0%	100.0%	50.0%	0.094	2.88	0.03	0.06	\$0.25	\$0.39	F	F
MPS	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.22	20	50.0%	100.0%	50.0%	0.040	2.85	0.01	0.03	\$0.59	\$0.93	F	F
MPS	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49	Duct Insulation	3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.135	4.49	0.01	0.13	\$0.01	\$0.01	A	A
MPS	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49	Clock / Programmable Thermostat	10.0%	\$ 0.04	10	100.0%	80.4%	80.4%	0.449	4.48	0.36	0.45	\$0.01	\$0.01	A	A
MPS	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.05	30	50.0%	100.0%	50.0%	0.225	4.12	0.10	0.21	\$0.02	\$0.02	A	A
MPS	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.18	10	50.0%	100.0%	50.0%	0.449	4.02	0.20	0.40	\$0.07	\$0.07	D	D
MPS	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49	Duct Repair and Sealing	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.045	3.82	0.00	0.04	\$0.09	\$0.11	E	F
MPS	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49	Installation of Air Side Economizers	15.0%	\$ 0.59	10	100.0%	55.4%	55.4%	0.674	3.81	0.32	0.57	\$0.14	\$0.16	F	F
MPS	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49	DX Tune-Up / Diagnostics	10.0%	\$ 0.15	3	100.0%	90.0%	90.0%	0.449	3.50	0.31	0.35	\$0.14	\$0.18	F	F
MPS	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.22	20	50.0%	100.0%	50.0%	0.094	3.18	0.03	0.07	\$0.25	\$0.36	F	F
MPS	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.22	20	50.0%	100.0%	50.0%	0.040	3.15	0.01	0.03	\$0.59	\$0.84	F	F
MPS	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49	Duct Insulation	3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.135	4.49	0.01	0.13	\$0.01	\$0.01	A	A
MPS	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49	Clock / Programmable Thermostat	10.0%	\$ 0.04	10	100.0%	80.4%	80.4%	0.449	4.48	0.36	0.45	\$0.01	\$0.01	A	A
MPS	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.05	30	50.0%	100.0%	50.0%	0.225	4.12	0.10	0.21	\$0.02	\$0.02	A	A
MPS	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.18	10	50.0%	100.0%	50.0%	0.449	4.02	0.20	0.40	\$0.07	\$0.07	D	D
MPS	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49	Duct Repair and Sealing	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.045	3.82	0.01	0.04	\$0.09	\$0.11	E	F
MPS	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49	Installation of Air Side Economizers	15.0%	\$ 0.59	10	100.0%	55.4%	55.4%	0.674	3.81	0.32	0.57	\$0.14	\$0.16	F	F
MPS	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49	DX Tune-Up / Diagnostics	10.0%	\$ 0.15	3	100.0%	90.0%	90.0%	0.449	3.49	0.31	0.35	\$0.14	\$0.18	F	F
MPS	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.22	20	50.0%	100.0%	50.0%	0.094	3.18	0.03	0.07	\$0.25	\$0.36	F	F
MPS	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.22	20	50.0%	100.0%	50.0%	0.040	3.14	0.01	0.03	\$0.59	\$0.84	F	F
MPS	Restaurant	Lighting_2L4T12	Electric	Stock	Existing	8.74	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	\$ 0.46	13	10.0%	95.7%	9.6%	2.622	8.74	0.25	2.62	\$0.02	\$0.02	A	A
MPS	Restaurant	Lighting_2L4T12	Electric	Stock	Existing	8.74	4" 1L T8 Premium, EB, reflector	61.1%	\$ 1.60	22	33.3%	100.0%	33.3%	5.341	8.74	1.78	5.34	\$0.03	\$0.03	B	B
MPS	Restaurant	Lighting_2L4T12	Electric	Stock	Existing	8.74	4" 2L T8 Premium, EB	25.0%	\$ 0.79	22	33.3%	100.0%	33.3%	2.185	8.74	0.73	2.19	\$0.04	\$0.04	B	B
MPS	Restaurant	Lighting_2L4T12	Electric	Stock	Existing	8.74	4" 1L T5HO, EB	13.9%	\$ 0.60	22	33.3%	100.0%	33.3%	1.215	8.74	0.40	1.21	\$0.05	\$0.05	C	C
MPS	Restaurant	Lighting_2L4T12	Electric	Stock	Existing	8.74	Continuous Dimming, 10-4" Fluorescent Fixtures	75.0%	\$ 0.39	16	12.0%	100.0%	12.0%	6.555	8.74	0.79	6.56	\$0.03	\$0.03	D	D
MPS	Restaurant	Lighting_2L4T8	Electric	Stock	Existing	6.99	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	\$ 0.46	13	10.0%	95.7%	9.6%	2.622	6.99	0.20	2.10	\$0.03	\$0.03	B	B
MPS	Restaurant	Lighting_2L4T8	Electric	Stock	Existing	6.99	4" 2L T8 Premium, EB	8.5%	\$ 0.27	22	100.0%	100.0%	100.0%	0.594	6.99	0.59	0.59	\$0.05	\$0.05	C	C
MPS	Restaurant	Lighting_2L8T12	Electric	Stock	Existing	8.74	8" 2L T8, EB	52.8%	\$ 0.38	22	50.0%	100.0%	50.0%	4.615	8.74	2.31	4.61	\$0.01	\$0.01	A	A
MPS	Restaurant	Lighting_2L8T12	Electric	Stock	Existing	8.74	8" 1L T12, 60W, EB, reflector	55.3%	\$ 0.84	22	25.0%	100.0%	25.0%	4.833	8.74	1.21	4.83	\$0.02	\$0.02	A	A
MPS	Restaurant	Lighting_2L8T12	Electric	Stock	Existing	8.74	8" 2L T12, 60W, EB	10.6%	\$ 0.18	22	25.0%	68.1%	17.0%	0.924	8.74	0.16	0.92	\$0.02	\$0.02	A	A
MPS	Restaurant	Lighting_2L8T12	Electric	Stock	Existing	8.74	Occupancy Sensor, 4-8" Fluorescent Fixtures	30.0%	\$ 0.58	13	10.0%	95.7%	9.6%	2.622	8.74	0.25	2.62	\$0.03	\$0.03	A	A
MPS	Restaurant	Lighting_2L8T12	Electric	Stock	Existing	8.74	Continuous Dimming, 5-8" Fluorescent Fixtures	75.0%	\$ 0.37	16	12.0%	100.0%	12.0%	6.555	8.74	0.79	6.56	\$0.08	\$0.08	E	E
MPS	Restaurant	Lighting_3L4T12	Electric	Stock	Existing	8.74	4" 1L T5HO, EB	46.1%	\$ 0.04	22	75.0%	100.0%	75.0%	4.028	8.74	3.02	4.03	\$0.00	\$0.00	A	A
MPS	Restaurant	Lighting_3L4T12	Electric	Stock	Existing	8.74	4" 3L T8, EB	22.8%	\$ 0.04	22	75.0%	100.0%	75.0%	1.976	8.74	1.48	1.98	\$0.00	\$0.00	A	A
MPS	Restaurant	Lighting_3L4T12	Electric	Stock	Existing	8.74	4" 2L T8 Premium, EB, reflector	53.0%	\$ 0.22	22	40.0%	100.0%	40.0%	0.636	8.74	0.64	0.64	\$0.04	\$0.04	A	A
MPS	Restaurant	Lighting_3L4T12	Electric	Stock	Existing	8.74	4" 3L T8 Premium, EB	22.8%	\$ 0.10	22	75.0%	100.0%	75.0%	1.976	8.74	1.48	1.98	\$0.01	\$0.01	A	A
MPS	Restaurant	Lighting_3L4T8	Electric	Stock	Existing	6.99	4" 3L T8 Premium, EB	6.7%	\$ 0.43	22	100.0%	100.0%	100.0%	0.468	6.99	0.47	0.47	\$0.09	\$0.09	E	E
MPS	Restaurant	Lighting_4L4T12	Electric	Stock	Existing	8.74	4" 3L T8, EB	38.2%	\$ 0.10	22	16.7%	100.0%	16.7%	3.339	8.74	0.56	3.34	\$0.00	\$0.00	A	A
MPS	Restaurant	Lighting_4L4T12	Electric	Stock	Existing	8.74	4" 3L T8 Premium, EB	42.4%	\$ 0.32	22	16.7%	100.0%	16.7%	3.702	8.74	0.62	3.70	\$0.01	\$0.01	A	A
MPS	Restaurant	Lighting_4L4T12	Electric	Stock	Existing	8.74	4" 4L T8, EB	22.2%	\$ 0.21	22	16.7%	100.0%	16.7%	1.942	8.74	0.32	1.94	\$0.01	\$0.01	A	A
MPS	Restaurant	Lighting_4L4T12	Electric	Stock	Existing	8.74	4" 2L T8 Premium, EB, reflector	62.5%	\$ 0.76	22</											

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS	Restaurant	Space_Heat	Electric	Stock	Existing	3.76	Ceiling R-19 to R-38 Insulation	3.0%	0.22	20	50.0%	67.0%	33.5%	0.113	3.07	0.03	0.09	\$0.21	\$0.26	F	F
MPS	Restaurant	Water_Heat	Electric	Stock	Existing	9.19	Hot Water (SHW) Pipe Insulation	5.0%	0.02	15	50.0%	100.0%	50.0%	0.460	9.19	0.23	0.46	\$0.01	\$0.01	A	A
MPS	Restaurant	Water_Heat	Electric	Stock	Existing	9.19	Heat Pump Water Heater	30.0%	1.80	15	75.0%	100.0%	75.0%	2.757	8.96	2.02	2.69	\$0.08	\$0.08	E	E
MPS	Restaurant	Water_Heat	Electric	Stock	Existing	9.19	Demand controlled circulating systems	5.0%	2.83	15	50.0%	100.0%	50.0%	0.460	6.94	0.17	0.35	\$0.76	\$1.00	F	F
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	EMS Optimization	1.0%	-	5	100.0%	75.0%	75.0%	0.031	3.14	0.02	0.03	\$0.00	\$0.00	A	A
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	Two-Speed Cooling Tower, 300 Tons	14.0%	0.01	15	50.0%	90.0%	45.0%	0.440	3.12	0.20	0.44	\$0.00	\$0.00	A	A
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	High Efficiency Windows, Low-e; U=0.35	10.3%	0.03	30	75.0%	100.0%	75.0%	0.324	2.92	0.23	0.30	\$0.01	\$0.01	A	A
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	VSD Cooling Tower, 300 Tons	18.0%	0.06	15	50.0%	90.0%	45.0%	0.565	2.69	0.22	0.48	\$0.01	\$0.02	A	A
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	Installation of Energy Management Systems	10.0%	0.15	10	50.0%	100.0%	50.0%	0.314	2.48	0.12	0.25	\$0.10	\$0.08	E	E
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	Insulation of Pipes	1.0%	0.03	20	50.0%	60.0%	30.0%	0.031	2.35	0.01	0.02	\$0.09	\$0.12	F	F
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	Primary/Secondary De-coupled Chilled Water System	12.0%	0.38	15	50.0%	80.0%	40.0%	0.377	2.35	0.11	0.22	\$0.12	\$0.16	F	F
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.24	10	50.0%	100.0%	50.0%	0.314	2.23	0.11	0.28	\$0.12	\$0.17	F	F
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	Optimize Chilled Water and Condenser Water Settings	5.0%	0.17	10	33.0%	50.0%	16.5%	0.157	2.12	0.02	0.11	\$0.17	\$0.25	F	F
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	Installation of Chiller Economizers (water side)	10.0%	0.59	20	50.0%	100.0%	50.0%	0.314	2.10	0.11	0.21	\$0.20	\$0.30	F	F
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	Ceiling R-0 to R-19 Insulation	2.1%	0.24	20	50.0%	100.0%	50.0%	0.066	2.00	0.02	0.04	\$0.38	\$0.60	F	F
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	Ceiling R-19 to R-38 Insulation	0.9%	0.24	20	50.0%	100.0%	50.0%	0.028	1.98	0.01	0.02	\$0.89	\$1.41	F	F
MPS	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14	Chiller Tune-Up / Diagnostics	0.9%	0.09	5	100.0%	90.0%	50.0%	0.028	1.97	0.02	0.02	\$0.90	\$1.43	F	F
MPS	Retail	Cooling_DX	Electric	Stock	Existing	3.14	Ceiling R-19 to R-38 Insulation	0.9%	0.24	20	50.0%	100.0%	50.0%	0.028	3.14	0.01	0.03	\$0.00	\$0.00	A	A
MPS	Retail	Cooling_DX	Electric	Stock	Existing	3.14	Clock / Programmable Thermostat	10.0%	0.05	10	100.0%	50.0%	50.0%	0.314	3.13	0.16	0.31	\$0.03	\$0.03	A	A
MPS	Retail	Cooling_DX	Electric	Stock	Existing	3.14	Duct Insulation	3.0%	0.03	20	25.0%	25.0%	6.3%	0.094	2.97	0.01	0.09	\$0.04	\$0.04	B	B
MPS	Retail	Cooling_DX	Electric	Stock	Existing	3.14	High Efficiency Windows, Low-e; U=0.35	10.0%	0.08	30	75.0%	100.0%	75.0%	0.157	2.96	0.11	0.15	\$0.05	\$0.05	B	C
MPS	Retail	Cooling_DX	Electric	Stock	Existing	3.14	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.24	10	50.0%	100.0%	50.0%	0.314	2.85	0.14	0.29	\$0.12	\$0.14	F	F
MPS	Retail	Cooling_DX	Electric	Stock	Existing	3.14	Duct Repair and Sealing	1.0%	0.04	20	25.0%	50.0%	12.5%	0.031	2.71	0.00	0.03	\$0.14	\$0.16	F	F
MPS	Retail	Cooling_DX	Electric	Stock	Existing	3.14	Installation of Air Side Economizers	15.0%	0.59	10	100.0%	92.3%	92.3%	0.471	2.71	0.37	0.41	\$0.20	\$0.23	F	F
MPS	Retail	Cooling_DX	Electric	Stock	Existing	3.14	DX Tune-Up / Diagnostics	10.0%	0.20	3	100.0%	90.0%	90.0%	0.314	2.33	0.21	0.23	\$0.26	\$0.35	F	F
MPS	Retail	Cooling_DX	Electric	Stock	Existing	3.14	Ceiling R-0 to R-19 Insulation	2.1%	0.24	20	50.0%	100.0%	50.0%	0.066	2.12	0.02	0.04	\$0.38	\$0.56	F	F
MPS	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14	Clock / Programmable Thermostat	10.0%	0.05	10	100.0%	50.0%	50.0%	0.314	3.14	0.16	0.31	\$0.03	\$0.03	A	A
MPS	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14	Duct Insulation	3.0%	0.03	20	25.0%	25.0%	6.3%	0.094	2.98	0.01	0.09	\$0.04	\$0.04	B	B
MPS	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14	High Efficiency Windows, Low-e; U=0.35	5.0%	0.08	30	75.0%	100.0%	75.0%	0.157	2.98	0.11	0.15	\$0.05	\$0.05	B	B
MPS	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.24	10	50.0%	100.0%	50.0%	0.314	2.87	0.14	0.29	\$0.12	\$0.13	F	F
MPS	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14	Duct Repair and Sealing	1.0%	0.04	20	25.0%	50.0%	12.5%	0.031	2.72	0.00	0.03	\$0.14	\$0.16	F	F
MPS	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14	Installation of Air Side Economizers	15.0%	0.59	10	100.0%	92.3%	92.3%	0.471	2.72	0.38	0.41	\$0.20	\$0.23	F	F
MPS	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14	DX Tune-Up / Diagnostics	10.0%	0.20	3	100.0%	90.0%	90.0%	0.314	2.34	0.21	0.23	\$0.26	\$0.35	F	F
MPS	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14	Ceiling R-0 to R-19 Insulation	2.1%	0.24	20	50.0%	100.0%	50.0%	0.066	2.13	0.02	0.04	\$0.38	\$0.56	F	F
MPS	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14	Ceiling R-19 to R-38 Insulation	0.9%	0.24	20	50.0%	100.0%	50.0%	0.028	2.11	0.01	0.02	\$0.89	\$1.32	F	F
MPS	Retail	Lighting_2L4T12	Electric	Stock	Existing	5.89	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	0.52	14	10.0%	100.0%	10.0%	1.767	5.89	0.18	1.77	\$0.04	\$0.04	B	B
MPS	Retail	Lighting_2L4T12	Electric	Stock	Existing	5.89	4' 1L T8 Premium, EB, reflector	61.1%	1.80	25	33.3%	100.0%	33.3%	3.599	5.89	1.20	3.60	\$0.05	\$0.05	C	C
MPS	Retail	Lighting_2L4T12	Electric	Stock	Existing	5.89	4' 2L T8 Premium, EB	25.0%	0.88	25	33.3%	100.0%	33.3%	1.473	5.89	0.49	1.47	\$0.06	\$0.06	C	C
MPS	Retail	Lighting_2L4T12	Electric	Stock	Existing	5.89	4' 1L T5HO, EB	13.9%	0.67	25	33.3%	100.0%	33.3%	0.819	5.89	0.27	0.82	\$0.08	\$0.08	E	E
MPS	Retail	Lighting_2L4T12	Electric	Stock	Existing	5.89	Continuous Dimming, 10-4" Fluorescent Fixtures	50.0%	4.35	18	50.0%	100.0%	50.0%	4.418	5.89	2.21	4.42	\$0.11	\$0.11	F	F
MPS	Retail	Lighting_2L4T8	Electric	Stock	Existing	4.71	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	0.52	14	10.0%	100.0%	10.0%	1.413	4.71	0.14	1.41	\$0.05	\$0.05	C	C
MPS	Retail	Lighting_2L4T8	Electric	Stock	Existing	4.71	4' 2L T8 Premium, EB	8.5%	0.30	25	100.0%	100.0%	100.0%	0.400	4.71	0.40	0.40	\$0.07	\$0.07	D	D
MPS	Retail	Lighting_2L8T12	Electric	Stock	Existing	5.89	8' 2L T8, EB	52.8%	0.44	25	50.0%	100.0%	50.0%	3.110	5.89	1.55	3.11	\$0.01	\$0.01	A	A
MPS	Retail	Lighting_2L8T12	Electric	Stock	Existing	5.89	8' 1L T12, 60W, EB, reflector	55.3%	0.96	25	25.0%	100.0%	25.0%	3.257	5.89	0.81	3.26	\$0.03	\$0.03	A	A
MPS	Retail	Lighting_2L8T12	Electric	Stock	Existing	5.89	8' 2L T12, 60W, EB	10.6%	0.21	25	25.0%	95.4%	0.623	5.89	0.15	0.62	\$0.03	\$0.03	B	B	
MPS	Retail	Lighting_2L8T12	Electric	Stock	Existing	5.89	Occupancy Sensor, 4-8" Fluorescent Fixtures	30.0%	0.67	14	10.0%	100.0%	10.0%	1.767	5.89	0.18	1.77	\$0.05	\$0.05	C	C
MPS	Retail	Lighting_2L8T12	Electric	Stock	Existing	5.89	Continuous Dimming, 5-8" Fluorescent Fixtures	75.0%	0.52	18	20.0%	100.0%	20.0%	4.418	5.89	0.88	4.42	\$0.13	\$0.13	F	F
MPS	Retail	Lighting_3L4T12	Electric	Stock	Existing	5.89	4' 1L T5HO, EB	46.1%	0.12	25	75.0%	100.0%	75.0%	2.715	5.89	2.04	2.71	\$0.00	\$0.00	A	A
MPS	Retail	Lighting_3L4T12	Electric	Stock	Existing	5.89	4' 3L T8, EB	22.6%	0.11	25	75.0%	100.0%	75.0%	1.332	5.89	1.30	1.33	\$0.01	\$0.01	A	A
MPS	Retail	Lighting_3L4T12	Electric	Stock	Existing	5.89	4' 2L T8 Premium, EB, reflector	63.0%	0.70	25	40.0%	100.0%	40.0%	3.124	5.89	1.25	3.12	\$0.02	\$0.02	A	A
MPS	Retail	Lighting_3L4T12	Electric	Stock	Existing	5.89	4' 3L T8 Premium, EB	22.6%	0.31	25	75.0%	100.0%	75.0%	1.332	5.89	1.00	1.33	\$0.02	\$0.02	A	A
MPS	Retail	Lighting_3L4T8	Electric	Stock	Existing	4.71	4' 3L T8 Premium, EB	6.7%	0.49	25	100.0%	100.0%	100.0%	0.316	4.71	0.32	0.32	\$0.15	\$0.15	F	F
MPS	Retail	Lighting_4L4T12	Electric	Stock	Existing	5.89	4' 3L T8, EB	38.2%	0.11	25	16.7%	100.0%	16.7%	2.250	5.89	0.37	2.25	\$0.00	\$0.00	A	A
MPS	Retail	Lighting_4L4T12	Electric	Stock	Existing	5.89	4' 3L T8 Premium, EB	42.4%	0.35	25	16.7%	100.0%	16.7%	2.495	5.89	0.42	2.50	\$0.01	\$0.01	A	A
MPS	Retail	Lighting_4L4T12	Electric	Stock	Existing	5.89	4' 4L T8, EB	22.2%	0.23	25	16.7%	100.0%	16.7%	1.309	5.89	0.22	1.31	\$0.02	\$0.02	A	A
MPS	Retail	Lighting_4L4T12	Electric	Stock	Existing	5.89	4' 2L T8 Premium, EB, reflector	62.5%	0.83	25	16.7%	100.0%	16.7%	3.681	5.89	0.61	3.68	\$0.02	\$0.02	A	A
MPS	Retail	Lighting_4L4T12	Electric	Stock	Existing	5.89	4' 2L T5HO, EB	18.8%	0.32	25	16.7%	100.0%	16.7%	1.104	5.89	0.18	1.10	\$0.03	\$0.03	A	A
MPS	Retail	Lighting_4L4T12	Electric	Stock	Existing	5.89	4' 4L T8 Premium, EB	25.0%	0.55	25	16.7%	100.0%	16.7%	1.473	5.89	0.25	1.47	\$0.04	\$0.04	B	B
MPS	Retail	Lighting_4L4T12	Electric	Stock	Existing	5.89	Occupancy Sensor, 4-4" Fluorescent Fixtures	30.0%	0.52	14	10.0%	100.0%	10.0%	1.777	5.89	0.18	1.77	\$0.04	\$0.04	B	B
MPS	Retail	Lighting_4L4T12	Electric	Stock	Existing	5.89	Continuous Dimming, 5-4" Fluorescent Fixtures	75.0%	4.37	18	50.0%	100.0%	50.0%	4.418	5.89	2.21	4.42	\$0.11	\$0.11	F	F
MPS	Retail	Lighting_4L4T8	Electric	Stock	Existing	4.71	Occupancy Sensor, 4-4" Fluorescent Fixtures	30.0%	0.58	14	10.0%	100.0%	10.0%	1.413	4.71	0.14	1.41	\$0.05	\$0.05	C	C
MPS	Retail	Lighting_4L4T8	Electric	Stock	Existing	4.71	4' 4L T8 Premium, EB	3.6%	0.34	25	100.0%	100.0%	100.0%	0.170	4.71	0.17	0.17	\$0.19	\$0.19	F	F
MPS	Retail	Lighting_INC150W	Electric	Stock	Existing	5.89	Halogen PAR Flood, 90W	40.0%	0.19	1	10.0%	99.3%	9.9%	2.356	5.89	0.23	2.36	\$0.09	\$0.09	E	E
MPS	Retail	Lighting_INC150W	Electric	Stock	Existing	5.89	HPS, 50W	56.0%	5.13	8	45.0%	91.6%	41.2%	3.298	5.89	1.36	3.30	\$0.29	\$0.29	F	F
MPS	Retail	Lighting_INC150W	Electric	Stock	Existing	5.89	Metal Halide, 50W	52.0%	10.05	8	45.0%	91.6%	41.2%	3.063	5.89	1.26	3.06</				

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS School	Cooling_DX	Electric Stock	Existing	1.51 Clock / Programmable Thermostat				100.0%	0.05	10	100.0%	41.1%	0.151	0.151	1.51	0.06	0.15	\$0.05	\$0.05	C	C
MPS School	Cooling_DX	Electric Stock	Existing	1.51 High Efficiency Windows, Low-e; U=0.35				5.0%	0.04	30	75.0%	66.0%	49.5%	0.076	1.44	0.04	0.07	\$0.05	\$0.05	C	C
MPS School	Cooling_DX	Electric Stock	Existing	1.51 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)				10.0%	0.22	10	50.0%	100.0%	50.0%	0.151	1.41	0.07	0.14	\$0.23	\$0.25	F	F
MPS School	Cooling_DX	Electric Stock	Existing	1.51 Duct Repair and Sealing				1.0%	0.04	20	25.0%	50.0%	12.5%	0.015	1.34	0.00	0.01	\$0.28	\$0.32	F	F
MPS School	Cooling_DX	Electric Stock	Existing	1.51 Installation of Air Side Economizers				15.0%	0.59	10	100.0%	41.1%	0.111	0.227	1.34	0.08	0.20	\$0.41	\$0.47	F	F
MPS School	Cooling_DX	Electric Stock	Existing	1.51 DX Tune-Up / Diagnostics				10.0%	0.18	3	100.0%	90.0%	90.0%	0.151	1.25	0.11	0.13	\$0.49	\$0.59	F	F
MPS School	Cooling_DX	Electric Stock	Existing	1.51 Ceiling R-0 to R-19 Insulation				2.1%	0.23	20	50.0%	23.4%	11.7%	0.032	1.14	0.00	0.02	\$0.78	\$1.04	F	F
MPS School	Cooling_HeatPump	Electric Stock	Existing	1.51 Duct Insulation				3.0%	0.01	20	25.0%	25.0%	6.3%	0.045	1.51	0.00	0.05	\$0.02	\$0.02	A	A
MPS School	Cooling_HeatPump	Electric Stock	Existing	1.51 Clock / Programmable Thermostat				10.0%	0.05	10	100.0%	41.1%	0.111	0.151	1.51	0.06	0.15	\$0.05	\$0.05	C	C
MPS School	Cooling_HeatPump	Electric Stock	Existing	1.51 High Efficiency Windows, Low-e; U=0.35				5.0%	0.04	30	75.0%	66.0%	49.5%	0.076	1.45	0.04	0.07	\$0.05	\$0.05	C	C
MPS School	Cooling_HeatPump	Electric Stock	Existing	1.51 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)				10.0%	0.22	10	50.0%	100.0%	50.0%	0.151	1.41	0.07	0.14	\$0.23	\$0.25	F	F
MPS School	Cooling_HeatPump	Electric Stock	Existing	1.51 Duct Repair and Sealing				1.0%	0.04	20	25.0%	50.0%	12.5%	0.015	1.34	0.00	0.01	\$0.28	\$0.32	F	F
MPS School	Cooling_HeatPump	Electric Stock	Existing	1.51 Installation of Air Side Economizers				15.0%	0.59	10	100.0%	41.1%	0.111	0.227	1.34	0.08	0.20	\$0.41	\$0.47	F	F
MPS School	Cooling_HeatPump	Electric Stock	Existing	1.51 DX Tune-Up / Diagnostics				10.0%	0.18	3	100.0%	90.0%	90.0%	0.151	1.25	0.11	0.13	\$0.49	\$0.59	F	F
MPS School	Cooling_HeatPump	Electric Stock	Existing	1.51 Ceiling R-0 to R-19 Insulation				2.1%	0.23	20	50.0%	23.4%	11.7%	0.032	1.14	0.00	0.02	\$0.78	\$1.03	F	F
MPS School	Cooling_HeatPump	Electric Stock	Existing	1.51 Ceiling R-19 to R-38 Insulation				0.9%	0.23	20	50.0%	23.4%	11.7%	0.014	1.14	0.00	0.01	\$1.83	\$2.42	F	F
MPS School	Lighting_2L4T12	Electric Stock	Existing	2.68 Occupancy Sensor, 8-4" Fluorescent Fixtures				30.0%	0.40	20	50.0%	94.7%	47.4%	0.804	2.68	0.38	0.80	\$0.05	\$0.05	C	C
MPS School	Lighting_2L4T12	Electric Stock	Existing	2.68 4' 1L T8 Premium, EB, reflector				61.1%	1.40	34	33.3%	100.0%	33.3%	1.638	2.68	0.55	1.64	\$0.08	\$0.08	E	E
MPS School	Lighting_2L4T12	Electric Stock	Existing	2.68 4' 2L T8 Premium, EB				25.0%	0.04	34	33.3%	100.0%	33.3%	0.870	2.68	0.22	0.67	\$0.09	\$0.09	A	A
MPS School	Lighting_2L4T12	Electric Stock	Existing	2.68 4' 1L T5HO, EB				13.0%	0.52	34	33.3%	100.0%	33.3%	0.373	2.68	0.12	0.37	\$0.12	\$0.12	F	F
MPS School	Lighting_2L4T12	Electric Stock	Existing	2.68 Continuous Dimming, 10-4" Fluorescent Fixtures				75.0%	3.38	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.17	\$0.17	F	F
MPS School	Lighting_2L4T8	Electric Stock	Existing	2.14 Occupancy Sensor, 8-4" Fluorescent Fixtures				30.0%	0.40	20	50.0%	94.7%	47.4%	0.642	2.14	0.30	0.64	\$0.07	\$0.07	D	D
MPS School	Lighting_2L4T8	Electric Stock	Existing	2.14 4' 2L T8 Premium, EB				8.5%	0.24	34	100.0%	100.0%	100.0%	0.182	2.14	0.18	0.18	\$0.11	\$0.11	F	F
MPS School	Lighting_2L8T12	Electric Stock	Existing	2.68 8' 2L T8, EB				52.8%	0.36	34	50.0%	100.0%	50.0%	1.415	2.68	0.71	1.42	\$0.02	\$0.02	A	A
MPS School	Lighting_2L8T12	Electric Stock	Existing	2.68 8' 1L T12, 60W, EB, reflector				55.3%	0.79	34	25.0%	100.0%	25.0%	1.482	2.68	0.37	1.48	\$0.05	\$0.05	C	C
MPS School	Lighting_2L8T12	Electric Stock	Existing	2.68 8' 2L T12, 60W, EB				10.6%	0.17	34	25.0%	32.9%	8.2%	0.283	2.68	0.02	0.28	\$0.05	\$0.05	C	C
MPS School	Lighting_2L8T12	Electric Stock	Existing	2.68 Occupancy Sensor, 4-8" Fluorescent Fixtures				30.0%	0.55	20	50.0%	94.7%	47.4%	0.804	2.68	0.38	0.80	\$0.07	\$0.07	D	D
MPS School	Lighting_2L8T12	Electric Stock	Existing	2.68 Continuous Dimming, 5-8" Fluorescent Fixtures				75.0%	4.12	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.20	\$0.20	F	F
MPS School	Lighting_3L4T12	Electric Stock	Existing	2.68 4' 1L T5HO, EB				46.1%	0.04	34	75.0%	100.0%	75.0%	1.235	2.68	0.93	2.68	\$0.00	\$0.00	A	A
MPS School	Lighting_3L4T12	Electric Stock	Existing	2.68 4' 3L T8, EB				22.8%	0.04	34	75.0%	100.0%	75.0%	0.606	2.68	0.45	0.61	\$0.01	\$0.01	A	A
MPS School	Lighting_3L4T12	Electric Stock	Existing	2.68 4' 2L T8 Premium, EB, reflector				53.0%	0.23	34	40.0%	100.0%	40.0%	1.422	2.68	0.57	1.42	\$0.01	\$0.01	A	A
MPS School	Lighting_3L4T12	Electric Stock	Existing	2.68 4' 3L T8 Premium, EB				22.6%	0.10	34	75.0%	100.0%	75.0%	0.606	2.68	0.45	0.61	\$0.02	\$0.02	A	A
MPS School	Lighting_3L4T8	Electric Stock	Existing	2.14 4' 3L T8 Premium, EB				6.7%	0.38	34	100.0%	100.0%	100.0%	0.143	2.14	0.14	0.14	\$0.23	\$0.23	F	F
MPS School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 3L T8, EB				38.2%	0.09	34	16.7%	100.0%	16.7%	1.024	2.68	0.17	1.02	\$0.01	\$0.01	A	A
MPS School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 3L T8 Premium, EB				42.4%	0.28	34	16.7%	100.0%	16.7%	1.135	2.68	0.19	1.14	\$0.02	\$0.02	A	A
MPS School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 4L T8, EB				22.2%	0.18	34	16.7%	100.0%	16.7%	0.596	2.68	0.10	0.60	\$0.03	\$0.03	A	A
MPS School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 2L T8 Premium, EB, reflector				62.5%	0.66	34	16.7%	100.0%	16.7%	1.675	2.68	0.28	1.68	\$0.04	\$0.04	B	B
MPS School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 2L T5HO, EB				18.8%	0.26	34	16.7%	100.0%	16.7%	0.503	2.68	0.08	0.50	\$0.05	\$0.05	C	C
MPS School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 4L T8 Premium, EB				25.0%	0.04	34	16.7%	100.0%	16.7%	0.870	2.68	0.11	0.67	\$0.06	\$0.06	C	C
MPS School	Lighting_4L4T12	Electric Stock	Existing	2.68 Occupancy Sensor, 4-4" Fluorescent Fixtures				30.0%	0.47	20	50.0%	94.7%	47.4%	0.804	2.68	0.38	0.80	\$0.06	\$0.06	D	D
MPS School	Lighting_4L4T12	Electric Stock	Existing	2.68 Continuous Dimming, 5-4" Fluorescent Fixtures				75.0%	3.52	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.17	\$0.17	F	F
MPS School	Lighting_4L4T8	Electric Stock	Existing	2.14 Occupancy Sensor, 4-4" Fluorescent Fixtures				30.0%	0.47	20	50.0%	94.7%	47.4%	0.642	2.14	0.30	0.64	\$0.08	\$0.08	E	E
MPS School	Lighting_4L4T8	Electric Stock	Existing	2.14 4' 4L T8 Premium, EB				3.6%	0.27	34	100.0%	100.0%	100.0%	0.077	2.14	0.08	0.08	\$0.31	\$0.31	F	F
MPS School	Lighting_INC150W	Electric Stock	Existing	2.68 Halogen PAR Flood, 90W				40.0%	0.08	1	10.0%	97.3%	9.7%	1.072	2.68	0.10	1.07	\$0.08	\$0.08	E	E
MPS School	Lighting_INC150W	Electric Stock	Existing	2.68 HPS, 50W				56.0%	2.09	12	45.0%	85.5%	38.5%	1.501	2.68	0.58	1.50	\$0.20	\$0.20	F	F
MPS School	Lighting_INC150W	Electric Stock	Existing	2.68 Metal Halide, 50W				52.0%	4.09	12	45.0%	85.5%	38.5%	1.394	2.68	0.54	1.39	\$0.41	\$0.41	F	F
MPS School	Lighting_INC40W	Electric Stock	Existing	2.68 LED Exit Signs				80.0%	0.05	20	90.0%	90.0%	81.0%	2.144	2.68	1.74	2.14	\$0.00	\$0.00	A	A
MPS School	Lighting_INC75W	Electric Stock	Existing	2.68 CFL Screw-in, Modular 18W				65.3%	1.92	10	90.0%	88.4%	0.998	1.750	2.68	1.39	1.75	\$0.17	\$0.17	F	F
MPS School	Plug_Load	Electric Stock	Existing	0.11 Smart Networks				7.2%	0.00	4	90.0%	40.0%	36.0%	0.008	0.11	0.00	0.01	\$0.19	\$0.19	F	F
MPS School	Plug_Load	Electric Stock	Existing	0.11 ENERGY STAR or Better Office Equipment: Copiers				9.0%	0.01	4	100.0%	65.0%	65.0%	0.010	0.11	0.01	0.01	\$0.48	\$0.48	F	F
MPS School	Plug_Load	Electric Stock	Existing	0.11 ENERGY STAR or Better Office Equipment: Monitors				17.3%	0.06	4	100.0%	71.0%	71.0%	0.019	0.10	0.01	0.02	\$0.99	\$1.08	F	F
MPS School	Plug_Load	Electric Stock	Existing	0.11 ENERGY STAR or Better Office Equipment: Printers				11.2%	0.06	4	100.0%	65.0%	65.0%	0.012	0.09	0.01	0.01	\$1.69	\$2.10	F	F
MPS School	Plug_Load	Electric Stock	Existing	0.11 ENERGY STAR or Better Office Equipment: Computer				19.5%	0.12	4	100.0%	65.0%	65.0%	0.021	0.08	0.01	0.02	\$1.77	\$2.37	F	F
MPS School	Space_Heat	Electric Stock	Existing	2.77 Duct Repair and Sealing				2.0%	0.00	20	25.0%	50.0%	12.5%	0.055	2.77	0.01	0.06	\$0.01	\$0.01	A	A
MPS School	Space_Heat	Electric Stock	Existing	2.77 Duct Insulation				2.0%	0.01	20	25.0%	71.8%	18.0%	0.055	2.76	0.01	0.06	\$0.01	\$0.01	A	A
MPS School	Space_Heat	Electric Stock	Existing	2.77 Clock / Programmable Thermostat				30.0%	0.15	10	100.0%	41.1%	0.111	0.831	2.75	0.34	0.83	\$0.03	\$0.03	A	A
MPS School	Space_Heat	Electric Stock	Existing	2.77 Ceiling R-0 to R-19 Insulation				7.0%	0.23	20	50.0%	44.9%	22.5%	0.194	2.41	0.04	0.17	\$0.13	\$0.15	F	F
MPS School	Space_Heat	Electric Stock	Existing	2.77 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)				5.0%	0.28	15	50.0%	100.0%	50.0%	0.139	2.38	0.06	0.12	\$0.25	\$0.29	F	F
MPS School	Space_Heat	Electric Stock	Existing	2.77 Ceiling R-19 to R-38 Insulation				23.0%	0.02	20	44.9%	44.9%	22.5%	0.232	2.02	0.02	0.07	\$0.38	\$0.38	F	F
MPS School	Water_Heat	Electric Stock	Existing	0.9 Hot Water (SHW) Pipe Insulation				5.0%	0.02	15	50.0%	9.9%	0.045	0.90	0.08	0.05	0.04	\$0.04	\$0.04	B	B
MPS School	Water_Heat	Electric Stock	Existing	0.9 Heat Pump Water Heater				30.0%	2.53	15	75.0%	87.2%	65.4%	0.270	0.90	0.18	0.27	\$1.15	\$1.16	F	F
MPS School	Water_Heat	Electric Stock	Existing	0.9 Demand controlled circulating systems				5.0%	3.97	15	50.0%	100.0%	50.0%	0.045	0.72	0.02	0.04	\$10.86	\$13.55	F	F
MPS Small_Office	Cooling_Chillers	Electric Stock	Existing	4.19 EMS Optimization				1.0%	-	5	100.0%	75.0%	75.0%	0.042	4.19	0.03	0.04	\$0.00	\$0.00	A	A
MPS Small_Office	Cooling_Chillers	Electric Stock	Existing	4.19 Two-Speed Cooling Tower, 300 Tons				14.0%	0.01	15	50.0%	90.0%	45.0%	0.587	4.16	0.26	0.58	\$0.00	\$0.00	A	A
MPS Small_Office	Cooling_Chillers	Electric Stock	Existing	4.19 Insulation of Pipes				1.0%	0.00	20	50.0%	50.0%	25.0%	0.042	3.90	0.01	0.04	\$0.01	\$0.01	A	A
MPS Small_Office	Cooling_Chillers	Electric Stock	Existing	4.19 VSD Cooling Tower, 300 Tons				18.0%	0.07	15	50.0%	90.0%	45.0%	0.754	3.89	0.31	0.70	\$0.01	\$0.01	A	A

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Group	Stacked Cost Group
MPS Small_Office	Lighting_2L4T12	Electric Stock	Existing	5.29	4' 1L T5HO, EB	13.9%	\$ 0.59	16	33.3%	100.0%	33.3%	0.735	5.29	0.25	0.74	\$0.09	\$0.09	E	E		
MPS Small_Office	Lighting_2L4T12	Electric Stock	Existing	5.29	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	\$ 3.82	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.14	\$0.14	F	F		
MPS Small_Office	Lighting_2L4T8	Electric Stock	Existing	4.24	Occupancy Sensor, 8-4' Fluorescent Fixtures	30.0%	\$ 0.45	9	40.0%	79.6%	31.8%	1.272	4.24	0.40	1.27	\$0.06	\$0.06	D	D		
MPS Small_Office	Lighting_2L4T8	Electric Stock	Existing	4.24	4' 2L T8 Premium, EB	8.5%	\$ 0.27	16	100.0%	100.0%	100.0%	0.360	4.24	0.36	0.36	\$0.09	\$0.09	E	E		
MPS Small_Office	Lighting_2L8T12	Electric Stock	Existing	5.29	8' 2L T8, EB	52.8%	\$ 0.36	16	50.0%	100.0%	50.0%	2.793	5.29	1.40	2.79	\$0.02	\$0.02	A	A		
MPS Small_Office	Lighting_2L8T12	Electric Stock	Existing	5.29	8' 1L T12, 60W, EB, reflector	55.3%	\$ 0.79	16	25.0%	100.0%	25.0%	2.925	5.29	0.73	2.93	\$0.03	\$0.03	B	B		
MPS Small_Office	Lighting_2L8T12	Electric Stock	Existing	5.29	8' 2L T12, 60W, EB	10.6%	\$ 0.17	16	25.0%	26.6%	6.6%	0.559	5.29	0.04	0.56	\$0.04	\$0.04	B	B		
MPS Small_Office	Lighting_2L8T12	Electric Stock	Existing	5.29	Occupancy Sensor, 4-8' Fluorescent Fixtures	30.0%	\$ 0.54	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.06	\$0.06	C	C		
MPS Small_Office	Lighting_2L8T12	Electric Stock	Existing	5.29	Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	\$ 4.09	11	100.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F		
MPS Small_Office	Lighting_3L4T12	Electric Stock	Existing	5.29	4' 1L T5HO, EB	46.1%	\$ 0.05	16	75.0%	100.0%	75.0%	2.438	5.29	0.81	2.44	\$0.00	\$0.00	A	A		
MPS Small_Office	Lighting_3L4T12	Electric Stock	Existing	5.29	4' 3L T8, EB	22.6%	\$ 0.05	16	75.0%	100.0%	75.0%	1.196	5.29	0.90	1.20	\$0.00	\$0.00	A	A		
MPS Small_Office	Lighting_3L4T12	Electric Stock	Existing	5.29	4' 2L T8 Premium, EB, reflector	53.0%	\$ 0.28	16	40.0%	100.0%	40.0%	2.806	5.29	1.12	2.81	\$0.01	\$0.01	A	A		
MPS Small_Office	Lighting_3L4T12	Electric Stock	Existing	5.29	4' 3L T8 Premium, EB	22.6%	\$ 0.13	16	75.0%	100.0%	75.0%	1.196	5.29	0.90	1.20	\$0.01	\$0.01	A	A		
MPS Small_Office	Lighting_3L4T8	Electric Stock	Existing	4.24	4' 3L T8 Premium, EB	6.7%	\$ 0.43	16	100.0%	100.0%	100.0%	0.284	4.24	0.28	0.28	\$0.18	\$0.18	F	F		
MPS Small_Office	Lighting_4L4T12	Electric Stock	Existing	5.29	4' 3L T8, EB	38.2%	\$ 0.10	16	16.7%	100.0%	16.7%	2.021	5.29	0.34	2.02	\$0.01	\$0.01	A	A		
MPS Small_Office	Lighting_4L4T12	Electric Stock	Existing	5.29	4' 3L T8 Premium, EB	42.4%	\$ 0.32	16	16.7%	100.0%	16.7%	2.241	5.29	0.37	2.24	\$0.02	\$0.02	A	A		
MPS Small_Office	Lighting_4L4T12	Electric Stock	Existing	5.29	4' 4L T8, EB	22.2%	\$ 0.21	16	16.7%	100.0%	16.7%	1.176	5.29	0.20	1.18	\$0.02	\$0.02	A	A		
MPS Small_Office	Lighting_4L4T12	Electric Stock	Existing	5.29	4' 2L T8 Premium, EB, reflector	62.5%	\$ 0.74	16	16.7%	100.0%	16.7%	3.306	5.29	0.55	3.31	\$0.03	\$0.03	A	A		
MPS Small_Office	Lighting_4L4T12	Electric Stock	Existing	5.29	4' 2L T5HO, EB	18.8%	\$ 0.09	16	16.7%	100.0%	16.7%	0.992	5.29	0.17	0.99	\$0.03	\$0.03	B	B		
MPS Small_Office	Lighting_4L4T12	Electric Stock	Existing	5.29	4' 4L T8 Premium, EB	25.0%	\$ 0.50	16	16.7%	100.0%	16.7%	1.323	5.29	0.22	1.32	\$0.04	\$0.04	B	B		
MPS Small_Office	Lighting_4L4T12	Electric Stock	Existing	5.29	Occupancy Sensor, 4-4' Fluorescent Fixtures	30.0%	\$ 0.52	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.06	\$0.06	C	C		
MPS Small_Office	Lighting_4L4T12	Electric Stock	Existing	5.29	Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	\$ 3.93	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F		
MPS Small_Office	Lighting_4L4T8	Electric Stock	Existing	4.24	Occupancy Sensor, 4-4' Fluorescent Fixtures	30.0%	\$ 0.52	9	40.0%	79.6%	31.8%	1.272	4.24	0.40	1.27	\$0.07	\$0.07	D	D		
MPS Small_Office	Lighting_4L4T8	Electric Stock	Existing	4.24	4' 4L T8 Premium, EB	3.6%	\$ 0.30	16	100.0%	100.0%	100.0%	0.153	4.24	0.15	0.15	\$0.24	\$0.24	F	F		
MPS Small_Office	Lighting_INC150W	Electric Stock	Existing	5.29	Halogen PAR Flood, 90W	40.0%	\$ 0.18	1	10.0%	100.0%	10.0%	2.116	5.29	0.21	2.12	\$0.10	\$0.10	E	E		
MPS Small_Office	Lighting_INC150W	Electric Stock	Existing	5.29	HPS, 50W	56.0%	\$ 4.80	6	45.0%	93.9%	42.2%	2.962	5.29	1.25	2.96	\$0.38	\$0.38	F	F		
MPS Small_Office	Lighting_INC150W	Electric Stock	Existing	5.29	Metal Halide, 50W	52.0%	\$ 9.40	6	45.0%	93.9%	42.2%	2.751	5.29	1.16	2.75	\$0.80	\$0.80	F	F		
MPS Small_Office	Lighting_INC40W	Electric Stock	Existing	5.29	LED Exit Signs	80.0%	\$ 0.05	20	90.0%	90.0%	81.0%	4.232	5.29	3.43	4.23	\$0.00	\$0.00	A	A		
MPS Small_Office	Lighting_NC75W	Electric Stock	Existing	5.29	CFL Screw-in, Modular 18W	65.3%	\$ 2.05	5	90.0%	72.5%	65.2%	3.454	5.29	2.25	3.45	\$0.18	\$0.18	F	F		
MPS Small_Office	Plug_Load	Electric Stock	Existing	1.59	Smart Networks	9.1%	\$ 0.01	4	40.0%	40.0%	36.0%	0.145	1.59	0.05	0.15	\$0.02	\$0.02	A	A		
MPS Small_Office	Plug_Load	Electric Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Monitors	21.9%	\$ 0.09	4	100.0%	71.0%	71.0%	0.349	1.54	0.24	0.34	\$0.09	\$0.09	E	E		
MPS Small_Office	Plug_Load	Electric Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Copiers	4.8%	\$ 0.03	4	100.0%	65.0%	65.0%	0.077	1.30	0.04	0.06	\$0.14	\$0.14	F	F		
MPS Small_Office	Plug_Load	Electric Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Computer	24.7%	\$ 0.18	4	100.0%	65.0%	65.0%	0.393	1.26	0.20	0.31	\$0.15	\$0.15	F	F		
MPS Small_Office	Plug_Load	Electric Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Printers	8.0%	\$ 0.10	4	100.0%	65.0%	65.0%	0.127	1.06	0.05	0.08	\$0.26	\$0.26	F	F		
MPS Small_Office	Space_Heat	Electric Stock	Existing	6.18	Duct Repair and Sealing	2.0%	\$ 0.01	20	25.0%	50.0%	12.5%	0.124	6.18	0.02	0.12	\$0.01	\$0.01	A	A		
MPS Small_Office	Space_Heat	Electric Stock	Existing	6.18	Clock / Programmable Thermostat	30.0%	\$ 0.15	10	100.0%	58.5%	58.5%	1.854	6.18	1.08	1.85	\$0.01	\$0.01	A	A		
MPS Small_Office	Space_Heat	Electric Stock	Existing	6.18	Duct Insulation	2.0%	\$ 0.02	20	25.0%	58.5%	14.6%	0.124	5.08	0.01	0.10	\$0.02	\$0.02	A	A		
MPS Small_Office	Space_Heat	Electric Stock	Existing	6.18	Ceiling R-0 to R-19 Insulation	7.0%	\$ 0.16	20	50.0%	12.9%	6.5%	0.433	5.07	0.02	0.35	\$0.04	\$0.05	B	C		
MPS Small_Office	Space_Heat	Electric Stock	Existing	6.18	Ceiling R-19 to R-38 Insulation	10.0%	\$ 0.19	20	50.0%	12.9%	6.5%	0.505	5.05	0.01	0.15	\$0.09	\$0.11	E	F		
MPS Small_Office	Water_Heat	Electric Stock	Existing	6.18	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.309	6.18	0.25	0.11	\$0.14	\$0.14	A	A		
MPS Small_Office	Water_Heat	Electric Stock	Existing	0.95	Hot Water (SHW) Pipe Insulation	5.0%	\$ 0.00	15	50.0%	39.3%	19.6%	0.048	0.95	0.01	0.05	\$0.01	\$0.01	A	A		
MPS Small_Office	Water_Heat	Electric Stock	Existing	0.95	Heat Pump Water Heater	30.0%	\$ 0.58	15	75.0%	100.0%	75.0%	0.285	0.94	0.21	0.28	\$0.25	\$0.25	F	F		
MPS Small_Office	Water_Heat	Electric Stock	Existing	0.95	Demand controlled circulating systems	5.0%	\$ 0.91	15	50.0%	93.2%	46.6%	0.048	0.73	0.02	0.04	\$2.35	\$3.06	F	F		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	EMS Optimization	1.0%	\$ -	5	100.0%	75.0%	75.0%	0.017	1.66	0.01	0.02	\$0.00	\$0.00	A	A		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	Two-Speed Cooling Tower, 300 Tons	14.0%	\$ 0.00	15	50.0%	90.0%	45.0%	0.232	1.65	0.10	0.23	\$0.00	\$0.00	A	A		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	VSD Cooling Tower, 300 Tons	18.0%	\$ 0.02	15	50.0%	90.0%	45.0%	0.299	1.54	0.13	0.28	\$0.01	\$0.01	A	A		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	Insulation of Pipes	1.0%	\$ 0.00	20	50.0%	50.0%	25.0%	0.017	1.42	0.00	0.01	\$0.01	\$0.01	A	A		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	High Efficiency Windows, Low-e; U=0.35	5.4%	\$ 0.01	30	75.0%	100.0%	75.0%	0.090	1.42	0.06	0.08	\$0.01	\$0.01	A	A		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	Installation of Energy Management Systems	10.0%	\$ 0.09	10	50.0%	80.0%	40.0%	0.165	1.36	0.05	0.14	\$0.05	\$0.06	E	F		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.14	15	50.0%	80.0%	40.0%	0.199	1.30	0.05	0.16	\$0.08	\$0.11	E	F		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.09	10	50.0%	100.0%	50.0%	0.166	1.24	0.06	0.12	\$0.08	\$0.11	E	F		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	Chiller Tune-Up / Diagnostics	5.0%	\$ 0.03	5	100.0%	90.0%	90.0%	0.083	1.18	0.05	0.06	\$0.11	\$0.16	F	F		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.06	10	33.0%	50.0%	16.5%	0.083	1.13	0.01	0.06	\$0.11	\$0.17	F	F		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	Installation of Chiller Economizers (water side)	10.0%	\$ 0.59	20	50.0%	100.0%	50.0%	0.166	1.12	0.06	0.11	\$0.38	\$0.56	F	F		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.23	20	50.0%	20.0%	10.0%	0.035	1.06	0.00	0.02	\$0.69	\$1.08	F	F		
MPS Warehouse	Cooling_Chillers	Electric Stock	Existing	1.66	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.23	20	50.0%	20.0%	10.0%	0.015	1.06	0.00	0.01	\$1.61	\$2.53	F	F		
MPS Warehouse	Cooling_DX	Electric Stock	Existing	1.66	Ceiling R-19 to R-38 Insulation	0.9%	\$ -	20	50.0%	20.0%	10.0%	0.015	1.66	0.00	0.01	\$0.00	\$0.00	A	A		
MPS Warehouse	Cooling_DX	Electric Stock	Existing	1.66	Duct Insulation	3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.050	1.66	0.00	0.05	\$0.01	\$0.01	A	A		
MPS Warehouse	Cooling_DX	Electric Stock	Existing	1.66	Clock / Programmable Thermostat	10.0%	\$ 0.02	10	100.0%	46.6%	46.6%	0.166	1.06	0.08	0.17	\$0.02	\$0.02	A	A		
MPS Warehouse	Cooling_DX	Electric Stock	Existing	1.66	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.03	30	75.0%	100.0%	75.0%	0.083	1.58	0.06	0.08	\$0.03	\$0.03	B	B		
MPS Warehouse	Cooling_DX	Electric Stock	Existing	1.66	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.09	10	50.0%	100.0%	50.0%	0.166	1.52	0.08	0.15	\$0.08	\$0.09	E	E		
MPS Warehouse	Cooling_DX	Electric Stock	Existing	1.66	DX Tune-Up / Diagnostics	10.0%	\$ 0.07	3	100.0%	90.0%	90.0%	0.166	1.44	0.13	0.14	\$0.18	\$0.21	F	F		
MPS Warehouse	Cooling_DX	Electric Stock	Existing	1.66	Duct Repair and Sealing	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.017	1.31	0.00	0.01	\$0.26	\$0.32	F	F		
MPS Warehouse	Cooling_DX	Electric Stock	Existing	1.66	Installation of Air Side Economizers	15.0%	\$ 0.59	10	100.0%	53.5%	53.5%	0.249	1.31	0.11	0.20	\$0.38	\$0.48	F	F		
MPS Warehouse	Cooling_DX	Electric Stock	Existing	1.66	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.23	20	50.0%	20.0%	10.0%	0.035	1.21	0.00	0.03	\$0.69	\$0.95	F	F		
MPS Warehouse	Cooling_HeatPump	Electric Stock	Existing	1.66	Duct Insulation	3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.050	1.66	0.00	0.05	\$0.01	\$0.01	A	A		
MPS Warehouse	Cooling_HeatPump	Electric Stock	Existing	1.66	Clock / Programmable Thermostat	10.0%	\$ 0.02	10	100.0%	46.6%	46.6%	0.166	1.66	0.08	0.17	\$0.02	\$0.02	A	A		
MPS Warehouse	Cooling_HeatPump	Electric Stock	Existing	1.66	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.03	30	75.0%	100.0%	75.0%	0.083	1.58	0.06	0.08	\$0.03	\$0.03	B	B		
MPS Warehouse	Cooling_HeatPump	Electric Stock	Existing																		

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Group	Stacked Cost Group
MPS Warehouse	Lighting_4L4T12	Electric Stock	Existing	2.94	4' 4L T8 Premium, EB	25.0%	\$ 0.25	22	16.7%	100.0%	100.0%	0.735	2.94	0.12	0.74	\$0.03	\$0.03	B	B		
MPS Warehouse	Lighting_4L4T12	Electric Stock	Existing	2.94	Occupancy Sensor, 4-4' Fluorescent Fixtures	30.0%	\$ 0.26	12	20.0%	98.0%	19.6%	0.882	2.94	0.17	0.88	\$0.04	\$0.04	B	B		
MPS Warehouse	Lighting_4L4T12	Electric Stock	Existing	2.94	Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	\$ 1.95	16	40.0%	100.0%	40.0%	2.205	2.94	0.88	2.21	\$0.11	\$0.11	F	F		
MPS Warehouse	Lighting_4L4T8	Electric Stock	Existing	2.36	Occupancy Sensor, 4-4' Fluorescent Fixtures	30.0%	\$ 0.26	12	20.0%	98.0%	19.6%	0.708	2.36	0.14	0.71	\$0.05	\$0.05	C	C		
MPS Warehouse	Lighting_4L4T8	Electric Stock	Existing	2.36	4' 4L T8 Premium, EB	3.6%	\$ 0.15	22	100.0%	100.0%	100.0%	0.085	2.36	0.08	0.08	\$0.18	\$0.18	F	F		
MPS Warehouse	Lighting_INC150W	Electric Stock	Existing	2.94	Halogen PAR Flood, 90W	40.0%	\$ 0.10	1	10.0%	100.0%	10.0%	1.176	2.94	0.12	1.18	\$0.10	\$0.10	E	E		
MPS Warehouse	Lighting_INC150W	Electric Stock	Existing	2.94	HPS, 50W	56.0%	\$ 2.69	7	45.0%	90.2%	40.6%	1.646	2.94	0.67	1.65	\$0.34	\$0.34	F	F		
MPS Warehouse	Lighting_INC150W	Electric Stock	Existing	2.94	Metal Halide, 50W	52.0%	\$ 5.28	7	45.0%	90.2%	40.6%	1.529	2.94	0.62	1.53	\$0.71	\$0.71	F	F		
MPS Warehouse	Lighting_INC40W	Electric Stock	Existing	2.94	LED Exit Signs	80.0%	\$ 0.06	20	90.0%	90.0%	81.0%	2.352	2.94	1.91	2.35	\$0.00	\$0.00	A	A		
MPS Warehouse	Lighting_INC75W	Electric Stock	Existing	2.94	CFL Screw-in, Modular 18W	65.3%	\$ 1.34	6	90.0%	88.7%	78.8%	1.920	2.94	1.53	1.93	\$0.16	\$0.16	F	F		
MPS Warehouse	Plug_Load	Electric Stock	Existing	0.15	Smart Networks	7.8%	\$ 0.00	4	90.0%	40.0%	36.0%	0.012	0.15	0.00	0.01	\$0.11	\$0.11	F	F		
MPS Warehouse	Plug_Load	Electric Stock	Existing	0.15	ENERGY STAR or Better Office Equipment: Monitors	18.6%	\$ 0.05	4	100.0%	71.0%	71.0%	0.028	0.15	0.02	0.03	\$0.58	\$0.59	F	F		
MPS Warehouse	Plug_Load	Electric Stock	Existing	0.15	ENERGY STAR or Better Office Equipment: Copiers	7.1%	\$ 0.02	4	100.0%	65.0%	65.0%	0.011	0.13	0.01	0.01	\$0.66	\$0.78	F	F		
MPS Warehouse	Plug_Load	Electric Stock	Existing	0.15	ENERGY STAR or Better Office Equipment: Computer	21.0%	\$ 0.10	4	100.0%	65.0%	65.0%	0.031	0.12	0.02	0.03	\$1.02	\$1.27	F	F		
MPS Warehouse	Plug_Load	Electric Stock	Existing	0.15	ENERGY STAR or Better Office Equipment: Printers	11.4%	\$ 0.06	4	100.0%	65.0%	65.0%	0.017	0.10	0.01	0.01	\$1.20	\$1.73	F	F		
MPS Warehouse	Space_Heat	Electric Stock	Existing	4.02	Duct Repair and Sealing	2.0%	\$ 0.00	20	25.0%	50.0%	12.5%	0.080	4.02	0.01	0.08	\$0.00	\$0.00	A	A		
MPS Warehouse	Space_Heat	Electric Stock	Existing	4.02	Duct Insulation	2.0%	\$ 0.01	20	25.0%	62.3%	15.6%	0.080	4.01	0.01	0.08	\$0.01	\$0.01	A	A		
MPS Warehouse	Space_Heat	Electric Stock	Existing	4.02	Clock / Programmable Thermostat	30.0%	\$ 0.15	10	100.0%	41.8%	41.8%	1.206	4.00	0.50	1.20	\$0.02	\$0.02	A	A		
MPS Warehouse	Space_Heat	Electric Stock	Existing	4.02	Ceiling R-0 to R-19 Insulation	7.0%	\$ 0.23	20	50.0%	50.0%	53.7%	16.8%	0.281	3.50	0.04	0.24	\$0.10	\$0.09	E	E	
MPS Warehouse	Space_Heat	Electric Stock	Existing	4.02	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.201	3.45	0.09	0.17	\$0.17	\$0.20	F	F		
MPS Warehouse	Space_Heat	Electric Stock	Existing	4.02	Ceiling R-19 to R-38 Insulation	3.0%	\$ 0.23	20	50.0%	33.7%	16.8%	1.21	3.37	0.02	0.10	\$0.20	\$0.24	F	F		
MPS Warehouse	Water_Heat	Electric Stock	Existing	0.42	Hot Water (SHW) Pipe Insulation	5.0%	\$ 0.00	15	50.0%	95.2%	47.6%	0.021	0.42	0.01	0.02	\$0.01	\$0.01	A	A		
MPS Warehouse	Water_Heat	Electric Stock	Existing	0.42	Heat Pump Water Heater	30.0%	\$ 0.11	15	75.0%	100.0%	75.0%	0.126	0.41	0.09	0.12	\$0.10	\$0.11	F	F		
MPS Warehouse	Water_Heat	Electric Stock	Existing	0.42	Demand controlled circulating systems	5.0%	\$ 0.17	15	50.0%	100.0%	50.0%	0.021	0.32	0.01	0.02	\$0.98	\$1.29	F	F		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	EMS Optimization	1.0%	\$ -	5	100.0%	75.0%	75.0%	0.041	4.10	0.03	0.04	\$0.00	\$0.00	A	A		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	Two-Speed Cooling Tower, 300 Tons	14.0%	\$ 0.01	15	50.0%	90.0%	45.0%	0.574	4.07	0.26	0.57	\$0.00	\$0.00	A	A		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	High Efficiency Windows, Low-e; U=0.35	5.4%	\$ 0.03	30	75.0%	100.0%	75.0%	0.221	3.81	0.15	0.21	\$0.01	\$0.01	A	A		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	YSD Cooling Tower, 300 Tons	18.0%	\$ 0.08	15	50.0%	90.0%	45.0%	0.738	3.68	0.30	0.66	\$0.01	\$0.01	A	A		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	Insulation of Pipes	1.0%	\$ 0.01	20	50.0%	50.0%	25.0%	0.041	3.36	0.01	0.03	\$0.02	\$0.03	E	E		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	Installation of Energy Management Systems	10.0%	\$ 0.20	10	50.0%	100.0%	50.0%	0.410	3.35	0.17	0.34	\$0.08	\$0.09	E	E		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.49	15	50.0%	80.0%	40.0%	0.492	3.19	0.15	0.38	\$0.12	\$0.16	F	F		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.03	0.15	0.30	\$0.12	\$0.17	F	F		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	Installation of Chiller Economizers (water side)	10.0%	\$ 0.59	20	50.0%	100.0%	50.0%	0.410	2.88	0.14	0.29	\$0.15	\$0.22	F	F		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	Chiller Tune-Up / Diagnostics	5.0%	\$ 0.12	5	100.0%	90.0%	90.0%	0.205	2.74	0.12	0.14	\$0.16	\$0.24	F	F		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.21	10	33.0%	50.0%	16.5%	0.205	2.61	0.02	0.13	\$0.17	\$0.26	F	F		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.24	20	50.0%	20.0%	10.0%	0.086	2.59	0.01	0.05	\$0.30	\$0.47	F	F		
SJD Grocery	Cooling_Chillers	Electric Stock	Existing	4.1	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.24	20	50.0%	20.0%	10.0%	0.037	2.59	0.00	0.02	\$0.69	\$1.10	F	F		
SJD Grocery	Cooling_DX	Electric Stock	Existing	4.1	Duct Insulation	3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.123	4.10	0.01	0.12	\$0.01	\$0.01	A	A		
SJD Grocery	Cooling_DX	Electric Stock	Existing	4.1	Clock / Programmable Thermostat	10.0%	\$ 0.07	10	100.0%	84.7%	84.7%	0.410	4.09	0.35	0.41	\$0.03	\$0.03	A	A		
SJD Grocery	Cooling_DX	Electric Stock	Existing	4.1	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.07	30	75.0%	100.0%	75.0%	0.205	3.75	0.14	0.19	\$0.03	\$0.03	B	B		
SJD Grocery	Cooling_DX	Electric Stock	Existing	4.1	Duct Repair and Sealing	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.041	3.61	0.00	0.04	\$0.10	\$0.12	F	F		
SJD Grocery	Cooling_DX	Electric Stock	Existing	4.1	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.60	0.18	0.36	\$0.12	\$0.14	F	F		
SJD Grocery	Cooling_DX	Electric Stock	Existing	4.1	Installation of Air Side Economizers	15.0%	\$ 0.59	10	100.0%	98.6%	98.6%	0.615	3.42	0.51	0.51	\$0.15	\$0.18	F	F		
SJD Grocery	Cooling_DX	Electric Stock	Existing	4.1	DX Tune-Up / Diagnostics	10.0%	\$ 0.25	3	100.0%	90.0%	90.0%	0.410	2.91	0.26	0.29	\$0.26	\$0.37	F	F		
SJD Grocery	Cooling_DX	Electric Stock	Existing	4.1	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.24	20	50.0%	20.0%	10.0%	0.086	2.65	0.01	0.06	\$0.30	\$0.46	F	F		
SJD Grocery	Cooling_DX	Electric Stock	Existing	4.1	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.24	20	50.0%	20.0%	10.0%	0.037	2.65	0.00	0.02	\$0.69	\$1.07	F	F		
SJD Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1	Duct Insulation	3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.123	4.10	0.01	0.12	\$0.01	\$0.01	A	A		
SJD Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1	Clock / Programmable Thermostat	10.0%	\$ 0.07	10	100.0%	84.7%	84.7%	0.410	4.09	0.35	0.41	\$0.03	\$0.03	A	A		
SJD Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.07	30	75.0%	100.0%	75.0%	0.205	3.75	0.14	0.19	\$0.03	\$0.03	B	B		
SJD Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1	Duct Repair and Sealing	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.041	3.61	0.00	0.04	\$0.10	\$0.12	F	F		
SJD Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.60	0.18	0.36	\$0.12	\$0.14	F	F		
SJD Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1	Installation of Air Side Economizers	15.0%	\$ 0.59	10	100.0%	98.6%	98.6%	0.615	3.42	0.51	0.51	\$0.15	\$0.18	F	F		
SJD Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1	DX Tune-Up / Diagnostics	10.0%	\$ 0.25	3	100.0%	90.0%	90.0%	0.410	2.91	0.26	0.29	\$0.26	\$0.37	F	F		
SJD Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.24	20	50.0%	20.0%	10.0%	0.086	2.65	0.01	0.06	\$0.30	\$0.46	F	F		
SJD Grocery	Cooling_HeatPump	Electric Stock	Existing	4.1	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.24	20	50.0%	20.0%	10.0%	0.037	2.65	0.00	0.02	\$0.69	\$1.07	F	F		
SJD Grocery	Lighting_2L4T12	Electric Stock	Existing	12.76	Occupancy Sensor, 8-4' Fluorescent Fixtures	30.0%	\$ 0.45	7	10.0%	100.0%	10.0%	3.828	12.76	0.38	3.83	\$0.02	\$0.02	A	A		
SJD Grocery	Lighting_2L4T12	Electric Stock	Existing	12.76	4' 1L T8 Premium, EB, reflector	61.1%	\$ 1.55	12	33.3%	100.0%	33.3%	7.798	12.76	2.60	7.80	\$0.03	\$0.03	A	A		
SJD Grocery	Lighting_2L4T12	Electric Stock	Existing	12.76	4' 2L T8 Premium, EB	25.0%	\$ 0.76	12	33.3%	100.0%	33.3%	3.190	12.76	1.06	3.19	\$0.03	\$0.03	B	B		
SJD Grocery	Lighting_2L4T12	Electric Stock	Existing	12.76	4' 1L T5HO, EB	13.9%	\$ 0.58	12	100.0%	13.9%	0.58	12.76	0.59	1.77	\$0.05	\$0.05	A	A			
SJD Grocery	Lighting_2L4T12	Electric Stock	Existing	12.76	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	\$ 3.90	8	26.0%	100.0%	26.0%	9.570	12.76	2.49	9.57	\$0.07	\$0.07	D	D		
SJD Grocery	Lighting_2L4T8	Electric Stock	Existing	10.21	Occupancy Sensor, 8-4' Fluorescent Fixtures	30.0%	\$ 0.45	7	10.0%	100.0%	10.0%	3.063	10.21	0.31	3.06	\$0.03	\$0.03	B	B		
SJD Grocery	Lighting_2L4T8	Electric Stock	Existing	10.21	4' 2L T8 Premium, EB	8.5%	\$ 0.26	12	100.0%	100.0%	100.0%	0.868	10.21	0.87	0.87	\$0.04	\$0.04	B	B		
SJD Grocery	Lighting_2L8T12	Electric Stock	Existing	12.76	8' 2L T8, EB	52.8%	\$ 0.37	12	50.0%	100.0%	50.0%	6.737	12.76	3.37	6.74	\$0.01	\$0.01	A	A		
SJD Grocery	Lighting_2L8T12	Electric Stock	Existing	12.76	8' 1L T12, 60W, EB, reflector	55.3%	\$ 0.82	12	25.0%	100.0%	25.0%	7.056	12.76	1.76	7.06	\$0.02	\$0.02	A	A		
SJD Grocery	Lighting_2L8T12	Electric Stock	Existing	12.76	8' 1L T12, 60W, EB	10.6%	\$ 0.18	12	25.0%	54.2%	13.6%	1.349	12.76	0.18	1.35	\$0.02	\$0.02	A	A		
SJD Grocery	Lighting_2L8T12	Electric Stock	Existing	12.76	Occupancy Sensor, 4-8' Fluorescent Fixtures	30.0%	\$ 0.56	7	10.0%	100.0%	10.0%	3.828	12.76	0.38	3.83	\$0.03	\$0.03	B	B		
SJD Grocery	Lighting_2L8T12	Electric Stock	Existing	12.76	Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	\$ 4.24	8	26.0%	100.0%	26.0%	9.570	12.76	2.49	9.57	\$0.08	\$0.08	E	E		
SJD Grocery	Lighting_3L4T12	Electric Stock	Existing	12.76	4' 1L T5HO, EB	46.1%	\$ 0.06	12	75.0%	100.0%	75.0%	5.881	12.76	4.41	5.88	\$0.00	\$0.00	A	A		
SJD Grocery	Lighting_3L4T12	Electric Stock	Existing	12.76	4' 3L T8, EB																

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Grocery	Refrigeration	Electric	Stock	Existing	28.13	Strip Curtains for Walk-Ins	4.0%	\$ 0.05	4	100.0%	30.0%	30.0%	1.132	24.93	0.30	1.00	\$0.01	\$0.02	A	A
SJD	Grocery	Refrigeration	Electric	Stock	Existing	28.13	Demand Control Defrost - Hot Gas	2.5%	\$ 0.07	10	100.0%	69.6%	69.6%	0.705	24.63	0.43	0.62	\$0.01	\$0.02	A	A
SJD	Grocery	Refrigeration	Electric	Stock	Existing	28.13	Refrigeration Commissioning	5.0%	\$ 0.06	3	100.0%	50.0%	50.0%	1.407	24.20	0.60	1.21	\$0.02	\$0.02	A	A
SJD	Grocery	Refrigeration	Electric	Stock	Existing	28.13	Compressor VSD retrofit	6.2%	\$ 0.41	10	50.0%	95.0%	47.5%	1.745	23.59	0.69	1.46	\$0.04	\$0.04	B	B
SJD	Grocery	Refrigeration	Electric	Stock	Existing	28.13	High Efficiency Case Fans	12.0%	\$ 1.16	16	100.0%	95.0%	95.0%	3.370	22.90	2.61	2.74	\$0.04	\$0.05	B	C
SJD	Grocery	Refrigeration	Electric	Stock	Existing	28.13	Reduced Speed or Cycling of Evaporator Fans	0.6%	\$ 0.09	5	100.0%	80.0%	80.0%	0.155	20.29	0.09	0.11	\$0.16	\$0.22	F	F
SJD	Grocery	Space_Heat	Electric	Stock	Existing	5.42	Duct Repair and Sealing	2.0%	\$ 0.01	20	25.0%	50.0%	12.5%	0.108	5.42	0.01	0.11	\$0.01	\$0.01	A	A
SJD	Grocery	Space_Heat	Electric	Stock	Existing	5.42	Duct Insulation	2.0%	\$ 0.01	20	25.0%	71.5%	17.9%	0.108	5.41	0.02	0.11	\$0.01	\$0.01	A	A
SJD	Grocery	Space_Heat	Electric	Stock	Existing	5.42	Clock / Programmable Thermostat	30.0%	\$ 0.01	10	50.0%	50.0%	50.0%	1.626	5.39	0.81	1.62	\$0.01	\$0.01	A	B
SJD	Grocery	Space_Heat	Electric	Stock	Existing	5.42	Ceiling R-0 to R-19 Insulation	7.0%	\$ 0.24	20	50.0%	95.0%	42.5%	0.379	4.58	0.14	0.32	\$0.07	\$0.08	D	E
SJD	Grocery	Space_Heat	Electric	Stock	Existing	5.42	Ceiling R-19 to R-38 Insulation	3.0%	\$ 0.12	20	50.0%	85.0%	42.5%	0.163	4.44	0.06	0.13	\$0.08	\$0.10	E	E
SJD	Grocery	Space_Heat	Electric	Stock	Existing	5.42	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.271	4.39	0.11	0.22	\$0.13	\$0.16	F	F
SJD	Grocery	Water_Heat	Electric	Stock	Existing	2.4	Hot Water (SHW) Pipe Insulation	5.0%	\$ 0.01	15	50.0%	100.0%	50.0%	0.120	2.40	0.06	0.12	\$0.01	\$0.01	A	A
SJD	Grocery	Water_Heat	Electric	Stock	Existing	2.4	Heat Pump Water Heater	30.0%	\$ 0.84	15	75.0%	100.0%	75.0%	0.720	2.34	0.53	0.70	\$0.14	\$0.15	F	F
SJD	Grocery	Water_Heat	Electric	Stock	Existing	2.4	Demand controlled circulating systems	5.0%	\$ 1.32	15	50.0%	100.0%	50.0%	0.120	1.81	0.05	0.09	\$1.35	\$1.79	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	EMS Optimization	1.0%	\$ -	5	100.0%	75.0%	75.0%	0.034	3.36	0.03	0.03	\$0.00	\$0.00	A	A
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	Two-Speed Cooling Tower, 300 Tons	14.0%	\$ 0.01	15	50.0%	90.0%	45.0%	0.470	3.33	0.21	0.47	\$0.00	\$0.00	A	A
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	VSD Cooling Tower, 300 Tons	18.0%	\$ 0.11	15	50.0%	90.0%	45.0%	0.605	3.12	0.25	0.56	\$0.02	\$0.02	A	A
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	Insulation of Pipes	1.0%	\$ 0.01	20	50.0%	50.0%	25.0%	0.101	2.87	0.01	0.03	\$0.03	\$0.03	A	B
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	High Efficiency Windows, Low-e; U=0.35	1.2%	\$ 0.01	30	75.0%	66.0%	0.039	2.86	0.02	0.03	\$0.03	\$0.04	B	B	
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	Installation of Energy Management Systems	10.0%	\$ 0.27	10	50.0%	75.0%	37.5%	0.336	2.85	0.11	0.28	\$0.13	\$0.15	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	Installation of Chiller Economizers (water side)	10.0%	\$ 0.59	20	50.0%	100.0%	50.0%	0.336	2.74	0.14	0.27	\$0.19	\$0.23	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.68	15	50.0%	80.0%	40.0%	0.403	2.60	0.12	0.31	\$0.21	\$0.27	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.44	10	50.0%	100.0%	50.0%	0.336	2.48	0.12	0.25	\$0.21	\$0.28	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	Chiller Tune-Up / Diagnostics	5.0%	\$ 0.17	5	100.0%	90.0%	90.0%	0.168	2.36	0.11	0.12	\$0.27	\$0.39	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.30	10	33.0%	50.0%	16.5%	0.168	2.25	0.02	0.11	\$0.28	\$0.42	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.21	20	50.0%	20.0%	10.0%	0.071	2.23	0.00	0.05	\$0.32	\$0.49	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	Existing	3.36	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.21	20	50.0%	20.0%	10.0%	0.030	2.23	0.00	0.02	\$0.75	\$1.13	F	F
SJD	Health	Cooling_DX	Electric	Stock	Existing	3.36	Duct Insulation	3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.191	3.36	0.01	0.10	\$0.01	\$0.01	A	A
SJD	Health	Cooling_DX	Electric	Stock	Existing	3.36	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.03	30	75.0%	66.0%	0.168	3.35	0.08	0.17	\$0.02	\$0.02	C	C	
SJD	Health	Cooling_DX	Electric	Stock	Existing	3.36	Clock / Programmable Thermostat	10.0%	\$ 0.09	10	100.0%	60.0%	60.0%	0.336	3.27	0.20	0.33	\$0.04	\$0.04	B	B
SJD	Health	Cooling_DX	Electric	Stock	Existing	3.36	Duct Repair and Sealing	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.034	3.07	0.00	0.03	\$0.13	\$0.14	F	F
SJD	Health	Cooling_DX	Electric	Stock	Existing	3.36	Installation of Air Side Economizers	15.0%	\$ 0.59	10	100.0%	40.0%	40.0%	0.504	3.07	0.18	0.46	\$0.19	\$0.20	F	F
SJD	Health	Cooling_DX	Electric	Stock	Existing	3.36	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.44	10	50.0%	100.0%	50.0%	0.336	2.89	0.14	0.29	\$0.21	\$0.24	F	F
SJD	Health	Cooling_DX	Electric	Stock	Existing	3.36	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.21	20	50.0%	20.0%	10.0%	0.071	2.74	0.01	0.06	\$0.32	\$0.39	F	F
SJD	Health	Cooling_DX	Electric	Stock	Existing	3.36	DX Tune-Up / Diagnostics	10.0%	\$ 0.35	3	100.0%	90.0%	90.0%	0.336	2.74	0.25	0.27	\$0.44	\$0.54	F	F
SJD	Health	Cooling_DX	Electric	Stock	Existing	3.36	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.21	20	50.0%	20.0%	10.0%	0.030	2.49	0.00	0.02	\$0.75	\$1.01	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	Existing	3.36	Duct Insulation	3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.101	3.36	0.01	0.10	\$0.01	\$0.01	A	A
SJD	Health	Cooling_HeatPump	Electric	Stock	Existing	3.36	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.03	30	75.0%	66.0%	0.168	3.35	0.08	0.17	\$0.02	\$0.02	C	C	
SJD	Health	Cooling_HeatPump	Electric	Stock	Existing	3.36	Clock / Programmable Thermostat	10.0%	\$ 0.09	10	100.0%	60.0%	60.0%	0.336	3.27	0.20	0.33	\$0.04	\$0.04	B	B
SJD	Health	Cooling_HeatPump	Electric	Stock	Existing	3.36	Duct Repair and Sealing	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.034	3.07	0.00	0.03	\$0.13	\$0.14	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	Existing	3.36	Installation of Air Side Economizers	15.0%	\$ 0.59	10	100.0%	40.0%	40.0%	0.504	3.07	0.18	0.46	\$0.19	\$0.20	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	Existing	3.36	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.44	10	50.0%	100.0%	50.0%	0.336	2.89	0.14	0.29	\$0.21	\$0.24	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	Existing	3.36	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.21	20	50.0%	20.0%	10.0%	0.071	2.74	0.01	0.06	\$0.32	\$0.39	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	Existing	3.36	DX Tune-Up / Diagnostics	10.0%	\$ 0.35	3	100.0%	90.0%	90.0%	0.336	2.74	0.25	0.27	\$0.44	\$0.54	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	Existing	3.36	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.21	20	50.0%	20.0%	10.0%	0.030	2.49	0.00	0.02	\$0.75	\$1.01	F	F
SJD	Health	Lighting_2L4T12	Electric	Stock	Existing	10.77	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	\$ 0.44	7	50.0%	90.0%	45.0%	3.231	10.77	1.45	3.23	\$0.03	\$0.03	A	A
SJD	Health	Lighting_2L4T12	Electric	Stock	Existing	10.77	4" 1L T8 Premium, EB, reflector	61.1%	\$ 1.54	12	33.3%	100.0%	33.3%	6.582	10.77	2.19	6.58	\$0.03	\$0.03	B	B
SJD	Health	Lighting_2L4T12	Electric	Stock	Existing	10.77	2" 2L T8 Premium, EB	25.0%	\$ 0.76	12	33.3%	100.0%	33.3%	2.893	10.77	0.90	2.89	\$0.03	\$0.04	B	B
SJD	Health	Lighting_2L4T12	Electric	Stock	Existing	10.77	4" 1L T5HO, EB	33.3%	\$ 0.58	12	33.3%	100.0%	33.3%	1.497	10.77	0.50	1.50	\$0.05	\$0.05	C	C
SJD	Health	Lighting_2L4T12	Electric	Stock	Existing	10.77	Continuous Dimming, 10-4" Fluorescent Fixtures	75.0%	\$ 3.74	8	10.0%	100.0%	10.0%	8.078	10.77	0.81	8.08	\$0.09	\$0.09	E	E
SJD	Health	Lighting_2L4T8	Electric	Stock	Existing	8.62	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	\$ 0.44	7	50.0%	90.0%	45.0%	2.586	8.62	1.16	2.59	\$0.04	\$0.04	B	B
SJD	Health	Lighting_2L4T8	Electric	Stock	Existing	8.62	4" 2L T8 Premium, EB	8.5%	\$ 0.26	12	100.0%	100.0%	100.0%	0.733	8.62	0.73	0.73	\$0.05	\$0.05	C	C
SJD	Health	Lighting_2L8T12	Electric	Stock	Existing	10.77	8" 2L T8, EB	52.8%	\$ 0.35	12	50.0%	100.0%	50.0%	5.687	10.77	2.84	5.69	\$0.01	\$0.01	A	A
SJD	Health	Lighting_2L8T12	Electric	Stock	Existing	10.77	8" 1L T12, 60W, EB, reflector	55.3%	\$ 0.77	12	25.0%	100.0%	25.0%	5.956	10.77	1.49	5.96	\$0.02	\$0.02	A	A
SJD	Health	Lighting_2L8T12	Electric	Stock	Existing	10.77	8" 2L T12, 60W, EB	10.6%	\$ 0.17	12	25.0%	50.0%	12.5%	1.138	10.77	0.14	1.14	\$0.02	\$0.02	A	A
SJD	Health	Lighting_2L8T12	Electric	Stock	Existing	10.77	Occupancy Sensor, 4-8" Fluorescent Fixtures	30.0%	\$ 0.53	7	50.0%	90.0%	45.0%	3.231	10.77	1.45	3.23	\$0.03	\$0.03	B	B
SJD	Health	Lighting_2L8T12	Electric	Stock	Existing	10.77	Continuous Dimming, 5-8" Fluorescent Fixtures	75.0%	\$ 3.99	8	10.0%	100.0%	10.0%	8.078	10.77	0.81	8.08	\$0.09	\$0.09	E	E
SJD	Health	Lighting_3L4T12	Electric	Stock	Existing	10.77	4" 1L T5HO, EB	46.1%	\$ 0.01	12	75.0%	100.0%	75.0%	0.964	10.77	3.72	4.96	\$0.03	\$0.04	A	A
SJD	Health	Lighting_3L4T12	Electric	Stock	Existing	10.77	4" 3L T8, EB	22.6%	\$ 0.07	12	75.0%	100.0%	75.0%	2.435	10.77	1.83	2.43	\$0.00	\$0.00	A	A
SJD	Health	Lighting_3L4T12	Electric	Stock	Existing	10.77	4" 2L T8 Premium, EB, reflector	53.0%	\$ 0.07	12	40.0%	100.0%	40.0%	5.713	10.77	2.29	5.71	\$0.00	\$0.00	A	A
SJD	Health	Lighting_3L4T12	Electric	Stock	Existing	10.77	4" 3L T8 Premium, EB	22.6%	\$ 0.03	12	75.0%	100.0%	75.0%	2.435	10.77	1.83	2.43	\$0.00	\$0.00	A	A
SJD	Health	Lighting_3L4T8	Electric	Stock	Existing	8.62	4" 3L T8 Premium, EB	6.7%	\$ 0.42	12	100.0%	100.0%	100.0%	0.578	8.62	0.58	0.58	\$0.10	\$0.10	F	F
SJD	Health	Lighting_4L4T12	Electric	Stock	Existing	10.77	4" 3L T8, EB	38.2%	\$ 0.09	12	16.7%	100.0%	16.7%	4.114	10.77	0.69	4.11	\$0.00	\$0.00	A	A
SJD	Health	Lighting_4L4T12	Electric	Stock	Existing	10.77	4" 3L T8 Premium, EB	42.4%	\$ 0.31	12	16.7%	100.0%	16.7%	4.562	10.77	0.76	4.56	\$0.01	\$		

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Large_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	High Efficiency Windows, Low-e; U=0.35	9.3%	0.06	30	75.0%	99.4%	74.6%	0.388	3.57	0.25	0.33	\$0.01	\$0.02	A	A
SJD	Large_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Installation of Energy Management Systems	10.0%	0.18	10	50.0%	19.1%	9.5%	0.419	3.33	0.03	0.33	\$0.07	\$0.09	D	E
SJD	Large_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Primary/Secondary De-coupled Chilled Water System	12.0%	0.45	15	50.0%	80.0%	40.0%	0.503	3.29	0.16	0.40	\$0.11	\$0.14	F	F
SJD	Large_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.29	10	50.0%	100.0%	50.0%	0.419	3.14	0.16	0.31	\$0.11	\$0.15	F	F
SJD	Large_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Chiller Tune-Up / Diagnostics	5.0%	0.11	5	100.0%	90.0%	90.0%	0.210	2.98	0.13	0.15	\$0.15	\$0.20	F	F
SJD	Large_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Installation of Chiller Economizers (water side)	10.0%	0.59	20	50.0%	56.9%	28.4%	0.419	2.84	0.08	0.28	\$0.15	\$0.22	F	F
SJD	Large_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Optimize Chilled Water and Condenser Water Settings	5.0%	0.20	10	33.0%	50.0%	16.5%	0.210	2.76	0.02	0.14	\$0.15	\$0.23	F	F
SJD	Large_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Ceiling R-0 to R-19 Insulation	2.1%	0.16	20	50.0%	8.7%	4.4%	0.088	2.74	0.00	0.06	\$0.20	\$0.30	F	F
SJD	Large_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Ceiling R-19 to R-38 Insulation	0.19%	0.15	20	50.0%	8.7%	0.038	2.74	0.00	0.06	\$0.20	\$0.30	F	F	
SJD	Large_Office	Cooling_DX	Electric	Stock	Existing	4.19	Duct Insulation	25.0%	0.02	20	25.0%	25.0%	6.3%	0.126	4.19	0.01	0.13	\$0.02	\$0.02	A	A
SJD	Large_Office	Cooling_DX	Electric	Stock	Existing	4.19	Clock / Programmable Thermostat	10.0%	0.06	10	100.0%	58.4%	58.4%	0.419	4.18	0.24	0.42	\$0.02	\$0.02	A	A
SJD	Large_Office	Cooling_DX	Electric	Stock	Existing	4.19	High Efficiency Windows, Low-e; U=0.35	5.0%	0.15	30	75.0%	99.4%	74.6%	0.210	3.94	0.15	0.20	\$0.06	\$0.07	D	D
SJD	Large_Office	Cooling_DX	Electric	Stock	Existing	4.19	Duct Repair and Sealing	1.0%	0.04	20	25.0%	50.0%	12.5%	0.042	3.79	0.00	0.04	\$0.10	\$0.11	F	F
SJD	Large_Office	Cooling_DX	Electric	Stock	Existing	4.19	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.29	10	50.0%	100.0%	50.0%	0.419	3.79	0.19	0.38	\$0.11	\$0.12	F	F
SJD	Large_Office	Cooling_DX	Electric	Stock	Existing	4.19	Installation of Air Side Economizers	15.0%	0.59	10	100.0%	30.4%	30.4%	0.629	3.60	0.16	0.54	\$0.15	\$0.17	F	F
SJD	Large_Office	Cooling_DX	Electric	Stock	Existing	4.19	Ceiling R-0 to R-19 Insulation	2.1%	0.16	20	50.0%	8.7%	4.4%	0.088	3.43	0.00	0.07	\$0.20	\$0.24	F	F
SJD	Large_Office	Cooling_DX	Electric	Stock	Existing	4.19	DX Tune-Up / Diagnostics	10.0%	0.23	3	100.0%	90.0%	90.0%	0.419	3.43	0.31	0.34	\$0.24	\$0.29	F	F
SJD	Large_Office	Cooling_DX	Electric	Stock	Existing	4.19	Ceiling R-19 to R-38 Insulation	0.9%	0.16	20	50.0%	8.7%	4.4%	0.038	3.12	0.00	0.03	\$0.46	\$0.62	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Duct Insulation	3.0%	0.02	20	25.0%	25.0%	6.3%	0.126	4.19	0.01	0.05	\$0.02	\$0.02	A	A
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Clock / Programmable Thermostat	10.0%	0.06	10	100.0%	58.4%	58.4%	0.419	4.18	0.24	0.42	\$0.02	\$0.02	A	A
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	High Efficiency Windows, Low-e; U=0.35	5.0%	0.15	30	75.0%	99.4%	74.6%	0.210	3.94	0.15	0.20	\$0.06	\$0.07	D	D
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Duct Repair and Sealing	1.0%	0.04	20	25.0%	50.0%	12.5%	0.042	3.79	0.00	0.04	\$0.10	\$0.11	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.29	10	50.0%	100.0%	50.0%	0.419	3.79	0.19	0.38	\$0.11	\$0.12	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Installation of Air Side Economizers	15.0%	0.59	10	100.0%	30.4%	30.4%	0.629	3.60	0.16	0.54	\$0.15	\$0.17	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Ceiling R-0 to R-19 Insulation	2.1%	0.16	20	50.0%	8.7%	4.4%	0.088	3.43	0.00	0.07	\$0.20	\$0.24	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	DX Tune-Up / Diagnostics	10.0%	0.23	3	100.0%	90.0%	90.0%	0.419	3.43	0.31	0.34	\$0.24	\$0.29	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Ceiling R-19 to R-38 Insulation	0.9%	0.16	20	50.0%	8.7%	4.4%	0.038	3.12	0.00	0.03	\$0.46	\$0.62	F	F
SJD	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	0.45	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.05	\$0.05	C	C
SJD	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	4" 1L T8 Premium, EB, reflector	61.1%	1.58	16	33.3%	100.0%	33.3%	3.233	5.29	1.08	3.23	\$0.06	\$0.06	B	B
SJD	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	4" 2L T8 Premium, EB	25.0%	0.77	16	33.3%	100.0%	33.3%	1.323	5.29	0.44	1.32	\$0.07	\$0.07	D	D
SJD	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	4" 1L TSHO, EB	13.9%	0.59	16	33.3%	100.0%	33.3%	0.735	5.29	0.25	0.74	\$0.09	\$0.09	E	E
SJD	Large_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	Continuous Dimming, 10-4" Fluorescent Fixtures	75.0%	0.32	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.14	\$0.14	F	F
SJD	Large_Office	Lighting_2L4T8	Electric	Stock	Existing	4.24	Occupancy Sensor, 8-4" Fluorescent Fixtures	30.0%	0.45	9	40.0%	79.6%	31.8%	1.272	4.24	0.40	1.27	\$0.06	\$0.06	D	D
SJD	Large_Office	Lighting_2L4T8	Electric	Stock	Existing	4.24	4" 2L T8 Premium, EB	8.5%	0.27	16	100.0%	100.0%	100.0%	0.360	4.24	0.36	0.36	\$0.09	\$0.09	E	E
SJD	Large_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	8" 2L T8, EB	52.8%	0.36	16	50.0%	100.0%	50.0%	2.793	5.29	1.40	2.79	\$0.02	\$0.02	A	A
SJD	Large_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	8" 1L T12, 60W, EB, reflector	55.3%	0.79	16	25.0%	100.0%	25.0%	2.925	5.29	0.73	2.93	\$0.03	\$0.03	B	B
SJD	Large_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	8" 2L T12, 60W, EB	10.6%	0.17	16	25.0%	26.6%	6.6%	0.559	5.29	0.04	0.56	\$0.04	\$0.04	B	B
SJD	Large_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	Occupancy Sensor, 4-8" Fluorescent Fixtures	30.0%	0.54	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.06	\$0.06	C	C
SJD	Large_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	Continuous Dimming, 5-8" Fluorescent Fixtures	75.0%	0.42	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F
SJD	Large_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4" 1L TSHO, EB	46.1%	0.05	16	75.0%	100.0%	75.0%	0.438	5.29	1.85	2.44	\$0.00	\$0.00	A	A
SJD	Large_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4" 3L T8, EB	22.6%	0.05	16	75.0%	100.0%	75.0%	1.196	5.29	0.90	1.20	\$0.00	\$0.00	A	A
SJD	Large_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4" 2L T8 Premium, EB, reflector	53.0%	0.28	16	40.0%	100.0%	40.0%	2.806	5.29	1.12	2.81	\$0.01	\$0.01	A	A
SJD	Large_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4" 3L T8 Premium, EB	22.6%	0.13	16	75.0%	100.0%	75.0%	1.196	5.29	0.90	1.20	\$0.01	\$0.01	A	A
SJD	Large_Office	Lighting_3L4T8	Electric	Stock	Existing	4.24	4" 3L T8 Premium, EB	6.7%	0.43	16	100.0%	100.0%	100.0%	0.284	4.24	0.28	0.28	\$0.18	\$0.18	F	F
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 3L T8, EB	38.2%	0.10	16	16.7%	100.0%	16.7%	2.021	5.29	0.34	2.02	\$0.01	\$0.01	A	A
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 3L T8 Premium, EB	42.4%	0.32	16	16.7%	100.0%	16.7%	2.241	5.29	0.37	2.24	\$0.02	\$0.02	A	A
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 4L T8, EB	22.2%	0.21	16	16.7%	100.0%	16.7%	1.176	5.29	0.20	1.18	\$0.02	\$0.02	A	A
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 2L T8 Premium, EB, reflector	62.5%	0.74	16	16.7%	100.0%	16.7%	3.306	5.29	0.55	3.31	\$0.03	\$0.03	A	A
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 2L T8, EB	18.8%	0.29	16	16.7%	100.0%	16.7%	0.992	5.29	0.17	0.99	\$0.03	\$0.03	B	B
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4" 4L T8 Premium, EB	25.0%	0.50	16	16.7%	100.0%	16.7%	1.323	5.29	0.44	1.32	\$0.04	\$0.04	B	B
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	Occupancy Sensor, 4-4" Fluorescent Fixtures	30.0%	0.52	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.06	\$0.06	C	C
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	Continuous Dimming, 5-4" Fluorescent Fixtures	75.0%	0.39	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F
SJD	Large_Office	Lighting_4L4T8	Electric	Stock	Existing	4.24	Occupancy Sensor, 4-4" Fluorescent Fixtures	30.0%	0.52	9	40.0%	79.6%	31.8%	1.272	4.24	0.40	1.27	\$0.07	\$0.07	D	D
SJD	Large_Office	Lighting_4L4T8	Electric	Stock	Existing	4.24	4" 4L T8 Premium, EB	3.6%	0.30	16	100.0%	100.0%	100.0%	0.153	4.24	0.15	0.15	\$0.24	\$0.24	F	F
SJD	Large_Office	Lighting_INC150W	Electric	Stock	Existing	5.29	Halogen PAR Flood, 90W	40.0%	0.18	1	10.0%	100.0%	10.0%	2.116	5.29	0.21	2.12	\$0.10	\$0.10	E	E
SJD	Large_Office	Lighting_INC150W	Electric	Stock	Existing	5.29	HPS, 50W	56.0%	0.48	6	45.0%	93.9%	42.2%	2.962	5.29	1.25	2.96	\$0.38	\$0.38	F	F
SJD	Large_Office	Lighting_INC150W	Electric	Stock	Existing	5.29	Metal Halide, 50W	52.0%	0.94	6	45.0%	93.9%	42.2%	2.751	5.29	1.16	2.75	\$0.80	\$0.80	F	F
SJD	Large_Office	Lighting_INC400W	Electric	Stock	Existing	5.29	LED Exit Signs	80.0%	0.05	20	90.0%	90.0%	81.0%	4.232	5.29	3.43	4.23	\$0.00	\$0.00	A	A
SJD	Large_Office	Lighting_INC750W	Electric	Stock	Existing	5.29	CFL Screw-in, Modular 18W	65.3%	0.25	5	90.0%	90.0%	65.2%	0.454	5.29	0.35	0.35	\$0.18	\$0.18	F	F
SJD	Large_Office	Plug_Load	Electric	Stock	Existing	1.59	Smart Networks	9.1%	0.01	4	90.0%	40.0%	15.0%	0.145	5.09	0.05	0.15	\$0.02	\$0.02	A	A
SJD	Large_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Monitors	21.9%	0.09	4	100.0%	71.0%	71.0%	0.349	1.54	0.24	0.34	\$0.09	\$0.09	E	E
SJD	Large_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Copiers	4.8%	0.03	4	100.0%	65.0%	65.0%	0.077	1.30	0.04	0.06	\$0.14	\$0.18	F	F
SJD	Large_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Computer	24.7%	0.18	4	100.0%	65.0%	65.0%	0.393	1.26	0.20	0.31	\$0.15	\$0.19	F	F
SJD	Large_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Printers	8.0%	0.10	4	100.0%	65.0%	65.0%	0.127	1.06	0.05	0.08	\$0.26	\$0.40	F	F
SJD	Large_Office	Space_Heat	Electric	Stock	Existing	6.18															

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Lodging	Cooling_HeatPump	Electric	Stock	Existing	2.83	Duct Insulation	3.0%	0.01	20	25.0%	25.0%	6.3%	0.085	2.83	0.01	0.08	\$0.02	\$0.02	A	A
SJD	Lodging	Cooling_HeatPump	Electric	Stock	Existing	2.83	Clock / Programmable Thermostat	10.0%	0.10	10	100.0%	80.0%	80.0%	0.283	2.82	0.23	0.28	\$0.05	\$0.05	C	C
SJD	Lodging	Cooling_HeatPump	Electric	Stock	Existing	2.83	High Efficiency Windows, Low-e; U=0.35	5.0%	0.16	30	75.0%	92.9%	69.7%	0.142	2.80	0.09	0.13	\$0.10	\$0.11	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	Existing	2.83	Duct Repair and Sealing	1.0%	0.04	20	25.0%	50.0%	12.5%	0.028	2.51	0.00	0.03	\$0.15	\$0.17	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	Existing	2.83	Ceiling R-0 to R-19 Insulation	2.1%	0.11	20	50.0%	34.6%	17.3%	0.059	2.51	0.01	0.05	\$0.19	\$0.21	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	Existing	2.83	Installation of Air Side Economizers	15.0%	0.59	10	100.0%	40.0%	40.0%	0.425	2.50	0.15	0.37	\$0.22	\$0.25	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	Existing	2.83	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.46	10	50.0%	100.0%	50.0%	0.283	2.35	0.12	0.23	\$0.26	\$0.31	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	Existing	2.83	Ceiling R-19 to R-38 Insulation	0.9%	0.11	20	50.0%	34.6%	17.3%	0.025	2.23	0.00	0.02	\$0.44	\$0.56	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	Existing	2.83	DX Tune-Up / Diagnostics	10.0%	0.37	3	100.0%	90.0%	90.0%	0.283	2.23	0.20	0.22	\$0.05	\$0.07	A	A
SJD	Lodging	Lighting_2L4T12	Electric	Stock	Existing	3.01	Occupancy Sensor, 8-4' Fluorescent Fixtures	30.0%	0.28	15	20.0%	89.6%	17.9%	0.093	3.01	0.16	0.90	\$0.04	\$0.03	B	B
SJD	Lodging	Lighting_2L4T12	Electric	Stock	Existing	3.01	4' 1L T8 Premium, EB, reflector	61.1%	0.78	26	33.3%	100.0%	33.3%	1.839	3.01	0.61	1.84	\$0.04	\$0.04	B	B
SJD	Lodging	Lighting_2L4T12	Electric	Stock	Existing	3.01	4' 2L T8 Premium, EB	25.0%	0.38	26	33.3%	100.0%	33.3%	0.753	3.01	0.25	0.75	\$0.05	\$0.05	C	C
SJD	Lodging	Lighting_2L4T12	Electric	Stock	Existing	3.01	4' 1L TSHO, EB	13.9%	0.29	26	33.3%	100.0%	33.3%	0.418	3.01	0.14	0.42	\$0.07	\$0.07	D	D
SJD	Lodging	Lighting_2L4T12	Electric	Stock	Existing	3.01	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	0.19	19	30.0%	100.0%	30.0%	2.258	3.01	0.68	2.26	\$0.09	\$0.09	E	E
SJD	Lodging	Lighting_2L4T8	Electric	Stock	Existing	2.41	Occupancy Sensor, 8-4' Fluorescent Fixtures	30.0%	0.22	15	20.0%	89.6%	17.9%	0.723	2.41	0.13	0.72	\$0.04	\$0.04	B	B
SJD	Lodging	Lighting_2L4T8	Electric	Stock	Existing	2.41	4' 2L T8 Premium, EB	8.5%	0.13	26	100.0%	100.0%	0.205	2.41	0.20	0.20	\$0.06	\$0.06	D	D	
SJD	Lodging	Lighting_2L8T12	Electric	Stock	Existing	3.01	8' 2L T8, EB	52.8%	0.18	26	50.0%	100.0%	50.0%	1.589	3.01	0.79	1.59	\$0.01	\$0.01	A	A
SJD	Lodging	Lighting_2L8T12	Electric	Stock	Existing	3.01	8' 1L T12, 60W, EB, reflector	55.3%	0.40	26	25.0%	100.0%	25.0%	1.665	3.01	0.42	1.66	\$0.02	\$0.02	A	A
SJD	Lodging	Lighting_2L8T12	Electric	Stock	Existing	3.01	8' 2L T12, 60W, EB	10.8%	0.08	26	25.0%	79.9%	20.0%	0.318	3.01	0.06	0.32	\$0.03	\$0.03	A	A
SJD	Lodging	Lighting_2L8T12	Electric	Stock	Existing	3.01	Occupancy Sensor, 4-8' Fluorescent Fixtures	30.0%	0.28	15	20.0%	89.6%	17.9%	0.903	3.01	0.16	0.90	\$0.04	\$0.04	B	B
SJD	Lodging	Lighting_2L8T12	Electric	Stock	Existing	3.01	Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	0.27	19	30.0%	100.0%	30.0%	2.258	3.01	0.68	2.26	\$0.10	\$0.10	E	E
SJD	Lodging	Lighting_3L4T12	Electric	Stock	Existing	3.01	4' 1L TSHO, EB	46.1%	0.02	26	75.0%	100.0%	75.0%	1.387	3.01	1.04	1.39	\$0.00	\$0.00	A	A
SJD	Lodging	Lighting_3L4T12	Electric	Stock	Existing	3.01	4' 3L T8, EB	22.6%	0.02	26	75.0%	100.0%	75.0%	0.681	3.01	0.51	0.68	\$0.00	\$0.00	A	A
SJD	Lodging	Lighting_3L4T12	Electric	Stock	Existing	3.01	4' 2L T8 Premium, EB, reflector	53.0%	0.11	26	40.0%	100.0%	40.0%	1.597	3.01	0.64	1.60	\$0.01	\$0.01	A	A
SJD	Lodging	Lighting_3L4T12	Electric	Stock	Existing	3.01	4' 3L T8 Premium, EB	22.6%	0.05	26	75.0%	100.0%	75.0%	0.681	3.01	0.51	0.68	\$0.01	\$0.01	A	A
SJD	Lodging	Lighting_3L4T8	Electric	Stock	Existing	2.41	4' 3L T8 Premium, EB	6.7%	0.21	26	100.0%	100.0%	100.0%	0.161	2.41	0.16	0.16	\$0.13	\$0.13	F	F
SJD	Lodging	Lighting_4L4T12	Electric	Stock	Existing	3.01	4' 3L T8, EB	38.2%	0.05	26	16.7%	100.0%	16.7%	1.150	3.01	0.19	1.15	\$0.00	\$0.00	A	A
SJD	Lodging	Lighting_4L4T12	Electric	Stock	Existing	3.01	4' 3L T8 Premium, EB	42.4%	0.15	26	16.7%	100.0%	16.7%	1.275	3.01	0.21	1.28	\$0.01	\$0.01	A	A
SJD	Lodging	Lighting_4L4T12	Electric	Stock	Existing	3.01	4' 4L T8, EB	22.2%	0.01	26	16.7%	100.0%	16.7%	0.869	3.01	0.11	0.67	\$0.01	\$0.01	A	A
SJD	Lodging	Lighting_4L4T12	Electric	Stock	Existing	3.01	4' 2L T8 Premium, EB, reflector	62.5%	0.36	26	16.7%	100.0%	16.7%	1.881	3.01	0.31	1.88	\$0.02	\$0.02	A	A
SJD	Lodging	Lighting_4L4T12	Electric	Stock	Existing	3.01	4' 2L TSHO, EB	18.8%	0.14	26	16.7%	100.0%	16.7%	0.564	3.01	0.09	0.56	\$0.02	\$0.02	A	A
SJD	Lodging	Lighting_4L4T12	Electric	Stock	Existing	3.01	4' 4L T8 Premium, EB	25.0%	0.24	26	16.7%	100.0%	16.7%	0.753	3.01	0.13	0.75	\$0.03	\$0.03	B	B
SJD	Lodging	Lighting_4L4T12	Electric	Stock	Existing	3.01	Occupancy Sensor, 4-4' Fluorescent Fixtures	30.0%	0.26	15	20.0%	89.6%	17.9%	0.903	3.01	0.16	0.90	\$0.03	\$0.03	B	B
SJD	Lodging	Lighting_4L4T12	Electric	Stock	Existing	3.01	Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	0.19	19	30.0%	100.0%	30.0%	2.258	3.01	0.68	2.26	\$0.09	\$0.09	E	E
SJD	Lodging	Lighting_4L4T8	Electric	Stock	Existing	2.41	Occupancy Sensor, 4-4' Fluorescent Fixtures	30.0%	0.26	15	20.0%	89.6%	17.9%	0.723	2.41	0.13	0.72	\$0.04	\$0.04	B	B
SJD	Lodging	Lighting_4L4T8	Electric	Stock	Existing	2.41	4' 4L T8 Premium, EB	3.6%	0.15	26	100.0%	100.0%	0.087	2.41	0.09	0.09	\$0.16	\$0.16	F	F	
SJD	Lodging	Lighting_INC150W	Electric	Stock	Existing	3.01	Halogen PAR Flood, 90W	40.0%	0.07	1	10.0%	99.0%	9.9%	1.204	3.01	0.12	1.20	\$0.07	\$0.07	D	D
SJD	Lodging	Lighting_INC150W	Electric	Stock	Existing	3.01	HPS, 50W	56.0%	0.19	9	45.0%	92.2%	41.5%	1.886	3.01	0.70	1.89	\$0.20	\$0.20	F	F
SJD	Lodging	Lighting_INC150W	Electric	Stock	Existing	3.01	Metal Halide, 50W	52.0%	0.33	9	45.0%	92.2%	41.5%	1.565	3.01	0.65	1.57	\$0.42	\$0.42	F	F
SJD	Lodging	Lighting_INC40W	Electric	Stock	Existing	3.01	LED Exit Signs	90.0%	0.32	20	90.0%	90.0%	81.0%	2.408	3.01	0.16	2.41	\$0.01	\$0.01	A	A
SJD	Lodging	Lighting_INC75W	Electric	Stock	Existing	3.01	CFL Screw-in, Modular 18W	65.3%	1.24	8	70.0%	72.5%	50.8%	1.968	3.01	1.00	1.97	\$0.12	\$0.12	F	F
SJD	Lodging	Plug_Load	Electric	Stock	Existing	0.1	Smart Networks	4.5%	0.00	4	90.0%	40.0%	36.0%	0.005	0.10	0.00	0.00	\$0.03	\$0.03	A	A
SJD	Lodging	Plug_Load	Electric	Stock	Existing	0.1	ENERGY STAR or Better Office Equipment: Copiers	20.2%	0.00	4	100.0%	65.0%	65.0%	0.020	0.10	0.01	0.02	\$0.04	\$0.04	B	B
SJD	Lodging	Plug_Load	Electric	Stock	Existing	0.1	ENERGY STAR or Better Office Equipment: Monitors	10.9%	0.00	4	100.0%	71.0%	71.0%	0.011	0.09	0.01	0.01	\$0.14	\$0.17	F	F
SJD	Lodging	Plug_Load	Electric	Stock	Existing	0.1	ENERGY STAR or Better Office Equipment: Computer	12.2%	0.01	4	100.0%	65.0%	65.0%	0.012	0.08	0.01	0.01	\$0.26	\$0.33	F	F
SJD	Lodging	Plug_Load	Electric	Stock	Existing	0.1	ENERGY STAR or Better Office Equipment: Printers	7.6%	0.01	4	100.0%	65.0%	65.0%	0.008	0.07	0.00	0.01	\$0.45	\$0.61	F	F
SJD	Lodging	Space_Heat	Electric	Stock	Existing	2.54	Duct Repair and Sealing	2.0%	0.01	20	25.0%	50.0%	12.5%	0.051	2.54	0.01	0.05	\$0.01	\$0.01	A	A
SJD	Lodging	Space_Heat	Electric	Stock	Existing	2.54	Duct Insulation	2.0%	0.01	20	25.0%	79.1%	19.8%	0.051	2.53	0.01	0.05	\$0.03	\$0.03	A	A
SJD	Lodging	Space_Heat	Electric	Stock	Existing	2.54	Occupancy Sensor for room HVAC units	35.0%	0.20	15	51.0%	100.0%	51.0%	0.889	2.52	0.45	0.89	\$0.03	\$0.03	A	A
SJD	Lodging	Space_Heat	Electric	Stock	Existing	2.54	Clock / Programmable Thermostat	30.0%	0.15	10	100.0%	69.4%	0.762	2.07	0.37	0.77	\$0.03	\$0.04	B	B	
SJD	Lodging	Space_Heat	Electric	Stock	Existing	2.54	Ceiling R-0 to R-19 Insulation	7.0%	0.11	20	50.0%	62.3%	31.1%	0.178	1.70	0.04	0.12	\$0.06	\$0.09	D	E
SJD	Lodging	Space_Heat	Electric	Stock	Existing	2.54	Ceiling R-19 to R-38 Insulation	3.0%	0.11	20	50.0%	62.3%	31.1%	0.076	1.67	0.02	0.05	\$0.15	\$0.22	F	F
SJD	Lodging	Space_Heat	Electric	Stock	Existing	2.54	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	0.28	15	50.0%	100.0%	50.0%	0.127	1.65	0.04	0.08	\$0.27	\$0.42	F	F
SJD	Lodging	Water_Heat	Electric	Stock	Existing	2.79	Hot Water (SHW) Pipe Insulation	5.0%	0.03	15	50.0%	100.0%	50.0%	0.140	2.79	0.07	0.14	\$0.03	\$0.03	B	B
SJD	Lodging	Water_Heat	Electric	Stock	Existing	2.79	Heat Pump Water Heater	30.0%	3.47	15	75.0%	100.0%	75.0%	0.837	2.72	0.61	0.82	\$0.51	\$0.52	F	F
SJD	Lodging	Water_Heat	Electric	Stock	Existing	2.79	Demand controlled circulating systems	5.0%	0.54	15	50.0%	100.0%	50.0%	0.140	2.11	0.05	0.11	\$4.81	\$6.36	F	F
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	Existing	2.39	EMS Optimization	1.0%	0.01	5	100.0%	75.0%	75.0%	0.024	2.39	0.02	0.02	\$0.00	\$0.00	A	A
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	Existing	2.39	Two-Speed Cooling Tower, 300 Tons	14.0%	0.01	15	50.0%	90.0%	45.0%	0.335	2.37	0.15	0.33	\$0.00	\$0.00	A	A
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	Existing	2.39	VSD Cooling Tower, 300 Tons	18.0%	0.01	15	50.0%	90.0%	45.0%	0.289	2.37	0.15	0.29	\$0.00	\$0.00	A	A
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	Existing	2.39	High Efficiency Windows, Low-e; U=0.35	2.5%	0.02	30	75.0%	90.0%	75.0%	0.059	2.04	0.05	0.05	\$0.03	\$0.04	B	B
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	Existing	2.39	Insulation of Pipes	1.0%	0.01	20	50.0%	50.0%	25.0%	0.024	2.01	0.01	0.02	\$0.04	\$0.05	B	C
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	Existing	2.39	Installation of Energy Management Systems	10.0%	0.12	10	50.0%	100.0%	50.0%	0.239	2.01	0.10	0.20	\$0.08	\$0.09	E	E
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	Existing	2.39	Primary/Secondary De-coupled Chilled Water System	12.0%	0.30	15	50.0%	80.0%	40.0%	0.287	1.91	0.09	0.23	\$0.13	\$0.16	F	F
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	Existing	2.39	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.19	10	50.0%	100.0%	50.0%	0.239	1.82	0.09	0.18	\$0.13	\$0.17	F	F
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	Existing	2.39	Chiller Tune-Up / Diagnostics	5.0%	0.08	5	100.0%	90.0%	90.0%	0.120	1.73	0.08	0.0				



Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Cost	Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Miscellaneous	Lighting_2L8T12	Electric	Stock	Existing	2.12 8' 2L T12, 60W, EB		10.6%	\$	0.17	36	25.0%	46.2%	11.5%	0.224	2.12	0.03	0.22	\$0.07	\$0.07	D	D
SJD	Miscellaneous	Lighting_2L8T12	Electric	Stock	Existing	2.12 Occupancy Sensor, 4-8' Fluorescent Fixtures		30.0%	\$	0.53	21	20.0%	95.0%	19.0%	0.636	2.12	0.12	0.64	\$0.09	\$0.09	E	E
SJD	Miscellaneous	Lighting_2L8T12	Electric	Stock	Existing	2.12 Continuous Dimming, 5-8' Fluorescent Fixtures		75.0%	\$	4.03	26	30.0%	100.0%	30.0%	1.590	2.12	0.48	1.59	\$0.24	\$0.24	F	F
SJD	Miscellaneous	Lighting_3L4T12	Electric	Stock	Existing	2.12 4' 1L T5HO, EB		46.1%	\$	0.03	36	75.0%	100.0%	75.0%	0.977	2.12	0.73	0.98	\$0.00	\$0.00	A	A
SJD	Miscellaneous	Lighting_3L4T12	Electric	Stock	Existing	2.12 4' 3L T8, EB		22.6%	\$	0.03	36	75.0%	100.0%	75.0%	0.479	2.12	0.36	0.48	\$0.01	\$0.01	A	A
SJD	Miscellaneous	Lighting_3L4T12	Electric	Stock	Existing	2.12 4' 2L T8 Premium, EB, reflector		53.0%	\$	0.19	36	40.0%	100.0%	40.0%	1.125	2.12	0.45	1.12	\$0.01	\$0.01	A	A
SJD	Miscellaneous	Lighting_3L4T12	Electric	Stock	Existing	2.12 4' 3L T8 Premium, EB		22.6%	\$	0.08	36	75.0%	100.0%	75.0%	0.479	2.12	0.36	0.48	\$0.02	\$0.02	A	A
SJD	Miscellaneous	Lighting_3L4T8	Electric	Stock	Existing	1.7 4' 3L T8 Premium, EB		6.7%	\$	0.41	36	100.0%	100.0%	100.0%	0.114	1.70	0.11	0.11	\$0.31	\$0.31	F	F
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	Existing	2.12 4' 3L T8, EB		38.2%	\$	0.19	36	16.7%	100.0%	16.7%	0.810	2.12	0.13	0.81	\$0.01	\$0.01	A	A
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	Existing	2.12 4' 3L T8 Premium, EB		42.4%	\$	0.30	36	16.7%	100.0%	16.7%	0.998	2.12	0.15	0.90	\$0.03	\$0.03	A	A
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	Existing	2.12 4' 4L T8, EB		22.2%	\$	0.19	36	16.7%	100.0%	16.7%	0.471	2.12	0.08	0.47	\$0.04	\$0.04	B	B
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	Existing	2.12 4' 2L T8 Premium, EB, reflector		62.5%	\$	0.70	36	16.7%	100.0%	16.7%	1.325	2.12	0.22	1.33	\$0.05	\$0.05	C	C
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	Existing	2.12 4' 2L T5HO, EB		18.8%	\$	0.27	36	16.7%	100.0%	16.7%	0.398	2.12	0.07	0.40	\$0.06	\$0.06	C	C
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	Existing	2.12 4' 4L T8 Premium, EB		25.0%	\$	0.46	36	16.7%	100.0%	16.7%	0.530	2.12	0.09	0.53	\$0.08	\$0.08	E	E
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	Existing	2.12 Occupancy Sensor, 4-4' Fluorescent Fixtures		30.0%	\$	0.49	21	20.0%	95.0%	19.0%	0.636	2.12	0.12	0.64	\$0.08	\$0.08	E	E
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	Existing	2.12 Continuous Dimming, 5-4' Fluorescent Fixtures		75.0%	\$	3.69	26	30.0%	100.0%	30.0%	1.590	2.12	0.48	1.59	\$0.22	\$0.22	F	F
SJD	Miscellaneous	Lighting_4L4T8	Electric	Stock	Existing	1.7 Occupancy Sensor, 4-4' Fluorescent Fixtures		30.0%	\$	0.49	21	20.0%	95.0%	19.0%	0.510	1.70	0.10	0.51	\$0.10	\$0.10	F	F
SJD	Miscellaneous	Lighting_4L4T8	Electric	Stock	Existing	1.7 4' 4L T8 Premium, EB		3.8%	\$	0.28	36	100.0%	100.0%	100.0%	0.061	1.70	0.06	0.06	\$0.40	\$0.40	F	F
SJD	Miscellaneous	Lighting_INC150W	Electric	Stock	Existing	2.12 Halogen PAR Flood, 90W		40.0%	\$	0.19	1	10.0%	98.7%	9.9%	0.849	2.12	0.08	0.85	\$0.27	\$0.27	F	F
SJD	Miscellaneous	Lighting_INC150W	Electric	Stock	Existing	2.12 HPS, 50W		56.0%	\$	5.25	12	45.0%	98.0%	44.1%	1.187	2.12	0.52	1.19	\$0.62	\$0.62	F	F
SJD	Miscellaneous	Lighting_INC150W	Electric	Stock	Existing	2.12 Metal Halide, 50W		52.0%	\$	10.29	12	45.0%	98.0%	44.1%	1.102	2.12	0.49	1.10	\$1.31	\$1.31	F	F
SJD	Miscellaneous	Lighting_INC40W	Electric	Stock	Existing	2.12 LED Exit Signs		80.0%	\$	0.06	20	90.0%	90.0%	81.0%	1.696	2.12	1.37	1.70	\$0.00	\$0.00	A	A
SJD	Miscellaneous	Lighting_INC75W	Electric	Stock	Existing	2.12 CFL Screw-in, Modular 18W		65.3%	\$	2.44	10	90.0%	95.3%	85.8%	1.384	2.12	1.19	1.38	\$0.28	\$0.28	F	F
SJD	Miscellaneous	Plug_Load	Electric	Stock	Existing	1 Smart Networks		6.9%	\$	0.01	4	90.0%	40.0%	36.0%	0.069	1.00	0.02	0.07	\$0.03	\$0.03	A	A
SJD	Miscellaneous	Plug_Load	Electric	Stock	Existing	1 ENERGY STAR or Better Office Equipment: Copiers		11.4%	\$	0.04	4	100.0%	65.0%	65.0%	0.114	0.98	0.07	0.11	\$0.12	\$0.13	F	F
SJD	Miscellaneous	Plug_Load	Electric	Stock	Existing	1 ENERGY STAR or Better Office Equipment: Monitors		16.5%	\$	0.07	4	100.0%	71.0%	71.0%	0.165	0.90	0.11	0.15	\$0.14	\$0.16	F	F
SJD	Miscellaneous	Plug_Load	Electric	Stock	Existing	1 ENERGY STAR or Better Office Equipment: Computer		18.6%	\$	0.15	4	100.0%	65.0%	65.0%	0.186	0.80	0.10	0.15	\$0.26	\$0.32	F	F
SJD	Miscellaneous	Plug_Load	Electric	Stock	Existing	1 ENERGY STAR or Better Office Equipment: Printers		9.2%	\$	0.11	4	100.0%	65.0%	65.0%	0.092	0.70	0.04	0.06	\$0.38	\$0.54	F	F
SJD	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76 Duct Repair and Sealing		2.0%	\$	0.01	20	25.0%	50.0%	12.5%	0.055	2.76	0.01	0.06	\$0.01	\$0.01	A	A
SJD	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76 Duct Insulation		2.0%	\$	0.01	20	25.0%	83.4%	20.9%	0.055	2.75	0.01	0.06	\$0.02	\$0.02	A	A
SJD	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76 Clock / Programmable Thermostat		30.0%	\$	0.15	10	100.0%	41.8%	41.8%	0.828	2.74	0.34	0.82	\$0.03	\$0.03	A	A
SJD	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76 Ceiling R-0 to R-19 Insulation		7.0%	\$	0.22	20	50.0%	13.4%	6.7%	0.193	2.40	0.01	0.17	\$0.12	\$0.14	F	F
SJD	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		5.0%	\$	0.28	15	50.0%	100.0%	50.0%	0.138	2.39	0.06	0.12	\$0.25	\$0.29	F	F
SJD	Miscellaneous	Space_Heat	Electric	Stock	Existing	2.76 Ceiling R-19 to R-38 Insulation		3.0%	\$	0.22	20	50.0%	10.0%	6.7%	0.083	2.33	0.00	0.07	\$0.28	\$0.34	F	F
SJD	Miscellaneous	Water_Heat	Electric	Stock	Existing	1.65 Hot Water (SHW) Pipe Insulation		5.0%	\$	0.01	15	50.0%	100.0%	50.0%	0.083	1.65	0.04	0.08	\$0.01	\$0.01	A	A
SJD	Miscellaneous	Water_Heat	Electric	Stock	Existing	1.65 Heat Pump Water Heater		30.0%	\$	3.39	15	75.0%	100.0%	75.0%	0.495	1.61	0.36	0.48	\$0.84	\$0.87	F	F
SJD	Miscellaneous	Water_Heat	Electric	Stock	Existing	1.65 Demand controlled circulating systems		5.0%	\$	5.32	15	50.0%	100.0%	50.0%	0.083	1.25	0.03	0.06	\$7.94	\$10.51	F	F
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 EMS Optimization		1.0%	\$		5	100.0%	75.0%	75.0%	0.045	4.49	0.03	0.04	\$0.00	\$0.00	A	A
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 Two-Speed Cooling Tower, 300 Tons		14.0%	\$	0.01	15	50.0%	90.0%	45.0%	0.629	4.48	0.28	0.63	\$0.02	\$0.02	A	A
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 VSD Cooling Tower, 300 Tons		18.0%	\$	0.05	15	50.0%	90.0%	80.0%	0.418	4.18	0.34	0.75	\$0.01	\$0.01	A	A
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 High Efficiency Windows, Low-e; U=0.35		5.4%	\$	0.02	30	50.0%	100.0%	50.0%	0.242	3.84	0.10	0.21	\$0.01	\$0.01	A	A
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 Installation of Energy Management Systems		10.0%	\$	0.11	10	50.0%	100.0%	50.0%	0.449	3.73	0.19	0.37	\$0.04	\$0.05	B	C
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 Insulation of Pipes		1.0%	\$	0.02	20	50.0%	50.0%	25.0%	0.045	3.55	0.01	0.04	\$0.06	\$0.07	C	D
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 Primary/Secondary De-coupled Chilled Water System		12.0%	\$	0.29	15	50.0%	80.0%	40.0%	0.539	3.54	0.17	0.42	\$0.07	\$0.08	D	E
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$	0.18	10	50.0%	100.0%	50.0%	0.449	3.37	0.17	0.34	\$0.07	\$0.09	D	E
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 Chiller Tune-Up / Diagnostics		5.0%	\$	0.07	5	100.0%	90.0%	90.0%	0.225	3.20	0.14	0.16	\$0.09	\$0.12	E	F
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 Optimize Chilled Water and Condenser Water Settings		5.0%	\$	0.13	10	33.0%	50.0%	16.5%	0.225	3.06	0.03	0.15	\$0.09	\$0.13	E	F
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 Installation of Chiller Economizers (water side)		10.0%	\$	0.59	20	50.0%	100.0%	50.0%	0.449	3.03	0.15	0.30	\$0.14	\$0.21	F	F
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 Ceiling R-0 to R-19 Insulation		2.1%	\$	0.22	20	50.0%	100.0%	50.0%	0.094	2.88	0.03	0.06	\$0.39	\$0.45	F	F
SJD	Restaurant	Cooling_Chillers	Electric	Stock	Existing	4.49 Ceiling R-19 to R-38 Insulation		0.9%	\$	0.22	20	50.0%	100.0%	50.0%	0.040	2.85	0.01	0.03	\$0.69	\$0.93	F	F
SJD	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49 Duct Insulation		3.0%	\$	0.01	20	25.0%	25.0%	6.3%	0.135	4.49	0.01	0.13	\$0.01	\$0.01	A	A
SJD	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49 Clock / Programmable Thermostat		10.0%	\$	0.04	10	100.0%	80.4%	80.4%	0.449	4.48	0.36	0.45	\$0.01	\$0.01	A	A
SJD	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49 High Efficiency Windows, Low-e; U=0.35		5.0%	\$	0.05	30	50.0%	100.0%	50.0%	0.225	4.12	0.10	0.21	\$0.02	\$0.02	A	A
SJD	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$	0.18	10	50.0%	100.0%	50.0%	0.449	4.02	0.20	0.40	\$0.07	\$0.07	D	D
SJD	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49 Duct Repair and Sealing		1.0%	\$	0.04	20	25.0%	50.0%	12.5%	0.045	3.82	0.00	0.04	\$0.09	\$0.11	E	F
SJD	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49 Installation of Air Side Economizers		15.0%	\$	0.59	10	100.0%	55.4%	55.4%	0.674	3.81	0.32	0.57	\$0.14	\$0.16	F	F
SJD	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49 DX Tune-Up / Diagnostics		10.0%	\$	0.15	3	100.0%	90.0%	90.0%	0.449	3.50	0.31	0.35	\$0.14	\$0.18	F	F
SJD	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49 Ceiling R-0 to R-19 Insulation		2.1%	\$	0.22	20	50.0%	100.0%	50.0%	0.094	3.18	0.03	0.07	\$0.25	\$0.36	F	F
SJD	Restaurant	Cooling_DX	Electric	Stock	Existing	4.49 Ceiling R-19 to R-38 Insulation		0.9%	\$	0.02	20	50.0%	100.0%	50.0%	0.040	3.15	0.01	0.03	\$0.59	\$0.84	F	F
SJD	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49 Duct Insulation		3.0%	\$	0.01	20	25.0%	25.0%	6.3%	0.135	4.49	0.01	0.13	\$0.01	\$0.01	A	A
SJD	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49 Clock / Programmable Thermostat		10.0%	\$	0.04	10	100.0%	80.4%	80.4%	0.449	4.48	0.36	0.45	\$0.01	\$0.01	A	A
SJD	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49 High Efficiency Windows, Low-e; U=0.35		5.0%	\$	0.05	30	50.0%	100.0%	50.0%	0.225	4.12	0.10	0.21	\$0.02	\$0.02	A	A
SJD	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$	0.18	10	50.0%	100.0%	50.0%	0.449	4.02	0.20	0.40	\$0.07	\$0.07	D	D
SJD	Restaurant	Cooling_HeatPump	Electric	Stock	Existing	4.49 Duct Repair and Sealing		1.0%	\$	0.04	20	50.0%	50.0%	25.0%	0.045	3.82	0.01	0.04	\$0.09</			

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group	
SJD	Restaurant	Lighting_INC150W	Electric	Stock	Existing	8.74 HPS, 50W		56.0%	\$ 5.10	8	45.0%	90.4%	40.7%	4.894	8.74	1.99	4.89	\$0.19	\$0.19	F	F	
SJD	Restaurant	Lighting_INC150W	Electric	Stock	Existing	8.74 Metal Halide, 50W		52.0%	\$ 9.99	8	45.0%	90.4%	40.7%	4.545	8.74	1.85	4.54	\$0.41	\$0.41	F	F	
SJD	Restaurant	Lighting_INC40W	Electric	Stock	Existing	8.74 LED Exit Signs		80.0%	\$ 0.08	20	90.0%	90.0%	81.0%	6.992	8.74	5.66	6.99	\$0.00	\$0.00	A	A	
SJD	Restaurant	Lighting_INC75W	Electric	Stock	Existing	8.74 CFL Screw-in, Modular 18W		65.3%	\$ 2.33	6	50.0%	89.1%	44.5%	5.707	8.74	2.54	5.71	\$0.10	\$0.10	E	E	
SJD	Restaurant	Plug_Load	Electric	Stock	Existing	0.23 Smart Networks		6.8%	\$ 0.00	4	90.0%	40.0%	36.0%	0.016	0.23	0.01	0.02	\$0.03	\$0.03	A	A	
SJD	Restaurant	Plug_Load	Electric	Stock	Existing	0.23 ENERGY STAR or Better Office Equipment: Monitors		16.3%	\$ 0.02	4	100.0%	71.0%	71.0%	0.038	0.22	0.03	0.04	\$0.13	\$0.14	F	F	
SJD	Restaurant	Plug_Load	Electric	Stock	Existing	0.23 ENERGY STAR or Better Office Equipment: Copiers		7.8%	\$ 0.01	4	100.0%	65.0%	65.0%	0.018	0.20	0.01	0.02	\$0.21	\$0.24	F	F	
SJD	Restaurant	Plug_Load	Electric	Stock	Existing	0.23 ENERGY STAR or Better Office Equipment: Computer		18.4%	\$ 0.03	4	100.0%	65.0%	65.0%	0.042	0.19	0.02	0.03	\$0.24	\$0.29	F	F	
SJD	Restaurant	Plug_Load	Electric	Stock	Existing	0.23 ENERGY STAR or Better Office Equipment: Printers		15.0%	\$ 0.04	4	100.0%	65.0%	65.0%	0.034	0.17	0.02	0.03	\$0.47	\$0.47	A	A	
SJD	Restaurant	Refrigeration	Electric	Stock	Existing	7.67 Night Covers for Display Cases		5.8%	\$ 0.01	5	50.0%	50.0%	47.5%	0.045	7.67	0.21	0.01	0.44	\$0.01	\$0.01	A	A
SJD	Restaurant	Refrigeration	Electric	Stock	Existing	7.67 Anti-Sweat (Humidistat) Controls		5.0%	\$ 0.02	12	100.0%	48.0%	48.0%	0.383	7.67	0.18	0.37	\$0.01	\$0.01	A	A	
SJD	Restaurant	Refrigeration	Electric	Stock	Existing	7.67 Demand Control Defrost - Electric		7.8%	\$ 0.04	10	100.0%	48.0%	48.0%	0.595	7.28	0.27	0.57	\$0.01	\$0.01	A	A	
SJD	Restaurant	Refrigeration	Electric	Stock	Existing	7.67 Installation of Floating Condenser Head Pressure Controls		6.8%	\$ 0.12	14	100.0%	44.4%	44.4%	0.524	7.01	0.21	0.48	\$0.03	\$0.03	B	B	
SJD	Restaurant	Refrigeration	Electric	Stock	Existing	7.67 Strip Curtains for Walk-Ins		4.0%	\$ 0.05	4	100.0%	30.0%	30.0%	0.309	6.80	0.08	0.27	\$0.05	\$0.06	C	C	
SJD	Restaurant	Refrigeration	Electric	Stock	Existing	7.67 Demand Control Defrost - Hot Gas		2.5%	\$ 0.07	10	100.0%	69.6%	69.6%	0.192	6.71	0.12	0.17	\$0.05	\$0.06	C	D	
SJD	Restaurant	Refrigeration	Electric	Stock	Existing	7.67 Refrigeration Commissioning		5.0%	\$ 0.06	3	100.0%	50.0%	50.0%	0.384	6.60	0.16	0.33	\$0.07	\$0.08	D	E	
SJD	Restaurant	Refrigeration	Electric	Stock	Existing	7.67 Compressor VSD retrofit		6.2%	\$ 0.41	10	50.0%	95.0%	47.5%	0.476	6.43	0.19	0.40	\$0.14	\$0.16	F	F	
SJD	Restaurant	Refrigeration	Electric	Stock	Existing	7.67 High Efficiency Case Fans		12.0%	\$ 1.16	16	100.0%	95.0%	95.0%	0.919	6.24	0.71	0.75	\$0.15	\$0.18	F	F	
SJD	Restaurant	Refrigeration	Electric	Stock	Existing	7.67 Reduced Speed or Cycling of Evaporator Fans		0.8%	\$ 0.09	5	100.0%	80.0%	80.0%	0.042	5.53	0.02	0.03	\$0.88	\$0.88	A	A	
SJD	Restaurant	Space_Heat	Electric	Stock	Existing	3.76 Duct Repair and Sealing		20.0%	\$ 0.01	20	25.0%	50.0%	12.5%	0.075	3.76	0.01	0.08	\$0.02	\$0.02	A	A	
SJD	Restaurant	Space_Heat	Electric	Stock	Existing	3.76 Clock / Programmable Thermostat		30.0%	\$ 0.15	10	100.0%	46.2%	46.2%	1.128	3.75	0.52	1.13	\$0.02	\$0.02	A	A	
SJD	Restaurant	Space_Heat	Electric	Stock	Existing	3.76 Duct Insulation		2.0%	\$ 0.03	20	25.0%	56.8%	14.2%	0.075	3.23	0.01	0.06	\$0.05	\$0.05	C	C	
SJD	Restaurant	Space_Heat	Electric	Stock	Existing	3.76 Ceiling R-0 to R-19 Insulation		7.0%	\$ 0.22	20	50.0%	67.0%	33.5%	0.263	3.22	0.08	0.23	\$0.09	\$0.11	E	F	
SJD	Restaurant	Space_Heat	Electric	Stock	Existing	3.76 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.188	3.15	0.08	0.16	\$0.18	\$0.22	F	F	
SJD	Restaurant	Space_Heat	Electric	Stock	Existing	3.76 Ceiling R-19 to R-38 Insulation		3.0%	\$ 0.22	20	50.0%	67.0%	33.5%	0.113	3.07	0.03	0.09	\$0.21	\$0.26	F	F	
SJD	Restaurant	Water_Heat	Electric	Stock	Existing	9.19 Hot Water (SHW) Pipe Insulation		5.0%	\$ 0.02	15	50.0%	100.0%	50.0%	0.460	9.19	0.23	0.46	\$0.01	\$0.01	A	A	
SJD	Restaurant	Water_Heat	Electric	Stock	Existing	9.19 Heat Pump Water Heater		30.0%	\$ 1.80	15	75.0%	100.0%	75.0%	2.757	8.96	2.02	2.69	\$0.08	\$0.08	E	E	
SJD	Restaurant	Water_Heat	Electric	Stock	Existing	9.19 Demand controlled circulating systems		5.0%	\$ 2.83	15	50.0%	100.0%	50.0%	0.460	6.94	0.17	0.35	\$0.76	\$1.00	F	F	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 EMS Optimization		1.0%	\$ 0.03	5	100.0%	75.0%	75.0%	0.031	3.14	0.02	0.03	\$0.00	\$0.00	A	A	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 Two-Speed Cooling Tower, 300 Tons		14.0%	\$ 0.01	15	50.0%	90.0%	45.0%	0.440	3.12	0.20	0.44	\$0.00	\$0.00	A	A	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 High Efficiency Windows, Low-e; U=0.35		10.3%	\$ 0.03	30	75.0%	100.0%	75.0%	0.324	2.92	0.23	0.30	\$0.01	\$0.01	A	A	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 VSD Cooling Tower, 300 Tons		18.0%	\$ 0.06	15	50.0%	90.0%	45.0%	0.565	2.69	0.22	0.48	\$0.01	\$0.02	A	A	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 Installation of Energy Management Systems		10.0%	\$ 0.15	10	50.0%	100.0%	50.0%	0.314	2.48	0.12	0.25	\$0.08	\$0.10	E	E	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 Insulation of Pipes		1.0%	\$ 0.03	20	50.0%	50.0%	25.0%	0.031	2.35	0.01	0.02	\$0.09	\$0.12	E	F	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 Primary/Secondary De-coupled Chilled Water System		12.0%	\$ 0.38	15	50.0%	80.0%	40.0%	0.377	2.35	0.11	0.28	\$0.12	\$0.16	F	F	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.24	10	50.0%	100.0%	50.0%	0.314	2.23	0.11	0.22	\$0.12	\$0.17	F	F	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 Optimize Chilled Water and Condenser Water Settings		5.0%	\$ 0.17	10	33.0%	50.0%	16.5%	0.157	2.12	0.02	0.11	\$0.17	\$0.25	F	F	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 Installation of Chiller Economizers (water side)		10.0%	\$ 0.59	20	50.0%	100.0%	50.0%	0.314	2.10	0.11	0.21	\$0.20	\$0.30	F	F	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 Ceiling R-0 to R-19 Insulation		2.1%	\$ 0.24	20	50.0%	100.0%	50.0%	0.066	2.10	0.02	0.04	\$0.38	\$0.38	F	F	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.24	20	50.0%	100.0%	50.0%	0.028	1.98	0.01	0.02	\$0.89	\$1.41	F	F	
SJD	Retail	Cooling_Chillers	Electric	Stock	Existing	3.14 Chiller Tune-Up / Diagnostics		0.9%	\$ 0.09	5	100.0%	90.0%	90.0%	0.028	1.97	0.02	0.02	\$0.90	\$1.43	F	F	
SJD	Retail	Cooling_DX	Electric	Stock	Existing	3.14 Clock / Programmable Thermostat		10.0%	\$ 0.05	10	100.0%	50.0%	50.0%	0.314	3.14	0.16	0.31	\$0.03	\$0.03	A	A	
SJD	Retail	Cooling_DX	Electric	Stock	Existing	3.14 Duct Insulation		3.0%	\$ 0.03	20	25.0%	25.0%	6.3%	0.094	2.98	0.01	0.09	\$0.04	\$0.04	B	B	
SJD	Retail	Cooling_DX	Electric	Stock	Existing	3.14 High Efficiency Windows, Low-e; U=0.35		5.0%	\$ 0.08	30	75.0%	100.0%	75.0%	0.157	2.98	0.11	0.15	\$0.05	\$0.05	B	C	
SJD	Retail	Cooling_DX	Electric	Stock	Existing	3.14 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.24	10	50.0%	100.0%	50.0%	0.314	2.87	0.14	0.29	\$0.12	\$0.13	F	F	
SJD	Retail	Cooling_DX	Electric	Stock	Existing	3.14 Duct Repair and Sealing		1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.031	2.72	0.00	0.03	\$0.14	\$0.16	F	F	
SJD	Retail	Cooling_DX	Electric	Stock	Existing	3.14 Installation of Air Side Economizers		15.0%	\$ 0.59	10	100.0%	92.3%	92.3%	0.471	2.72	0.38	0.41	\$0.20	\$0.23	F	F	
SJD	Retail	Cooling_DX	Electric	Stock	Existing	3.14 DX Tune-Up / Diagnostics		10.0%	\$ 0.20	3	100.0%	90.0%	90.0%	0.314	2.34	0.21	0.23	\$0.26	\$0.35	F	F	
SJD	Retail	Cooling_DX	Electric	Stock	Existing	3.14 Ceiling R-0 to R-19 Insulation		2.1%	\$ 0.24	20	50.0%	100.0%	50.0%	0.066	2.13	0.02	0.04	\$0.38	\$0.38	F	F	
SJD	Retail	Cooling_DX	Electric	Stock	Existing	3.14 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.24	20	50.0%	100.0%	50.0%	0.028	2.11	0.01	0.02	\$0.89	\$1.32	F	F	
SJD	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14 Clock / Programmable Thermostat		10.0%	\$ 0.05	10	100.0%	50.0%	50.0%	0.314	3.14	0.16	0.31	\$0.03	\$0.03	A	A	
SJD	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14 Duct Insulation		3.0%	\$ 0.03	20	25.0%	25.0%	6.3%	0.094	2.98	0.01	0.09	\$0.04	\$0.04	B	B	
SJD	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14 High Efficiency Windows, Low-e; U=0.35		5.0%	\$ 0.08	30	75.0%	100.0%	75.0%	0.157	2.98	0.11	0.15	\$0.05	\$0.05	B	C	
SJD	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.24	10	50.0%	100.0%	50.0%	0.314	2.87	0.14	0.29	\$0.12	\$0.13	F	F	
SJD	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14 Duct Repair and Sealing		1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.031	2.72	0.00	0.03	\$0.14	\$0.16	F	F	
SJD	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14 Installation of Air Side Economizers		15.0%	\$ 0.59	10	100.0%	92.3%	92.3%	0.471	2.72	0.38	0.41	\$0.20	\$0.23	F	F	
SJD	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14 DX Tune-Up / Diagnostics		10.0%	\$ 0.20	3	100.0%	90.0%	90.0%	0.314	2.34	0.21	0.23	\$0.26	\$0.35	F	F	
SJD	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14 Ceiling R-0 to R-19 Insulation		2.1%	\$ 0.24	20	50.0%	100.0%	50.0%	0.066	2.13	0.02	0.04	\$0.38	\$0.38	F	F	
SJD	Retail	Cooling_HeatPump	Electric	Stock	Existing	3.14 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.24	20	50.0%	100.0%	50.0%	0.028	2.11	0.01	0.02	\$0.89	\$1.32	F	F	
SJD	Retail	Lighting_2L4T12	Electric	Stock	Existing	5.89 Occupancy Sensor, 8-4" Fluorescent Fixtures		30.0%	\$ 0.52	14	10.0%	100.0%	1.767	5.89	0.18	1.77	\$0.00	\$0.04	B	B		
SJD	Retail	Lighting_2L4T12	Electric	Stock	Existing	5.89 4' 1L T8 Premium, EB, reflector		61.1%	\$ 1.80	25	33.3%	100.0%	33.3%	3.599	5.89	1.20	3.60	\$0.05	\$0.05	C	C	
SJD	Retail	Lighting_2L4T12	Electric	Stock	Existing	5.89 4' 2L T8 Premium, EB		25.0%	\$ 0.88	25	33.3%	100.0%	33.3%	1.473	5.89	0.49	1.47	\$0.06	\$0.06	C	C	
SJD	Retail	Lighting_2L4T12	Electric	Stock	Existing	5.89 4' 1L T5HO, EB		13.9%	\$ 0.67	25	33.3%	100.0%	33.3%	0.819	5.89	0.27	0.82	\$0.08	\$0.08	E	E	
SJD	Retail	Lighting_2L4T12	Electric	Stock	Existing	5.89 Continuous Dimming, 10-4" Fluorescent Fixtures		75.0%	\$ 4.35	18	50.0%	100.0%	50.0%	4.418	5.89	2.21	4.42	\$0.11	\$0.11	F	F	
SJD	Retail	Lighting_2L4T8	Electric	Stock	Existing	4.71 Occupancy Sensor, 8-4" Fluorescent Fixtures		30.0%	\$ 0.52	14	10.0%	100.0%	1.0%	1.413	4.71	0.14	1.41	\$0.05	\$0.05	C	C	
SJD	Retail	Lighting_2L4T8	Electric	Stock	Existing	4.71 4' 2L T8 Premium, EB		8.5%	\$ 0.30	25	100.0%	100.0%	100.0%	0.400	4.71	0.40	0.40	\$0.07	\$0.07	D	D	

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Group	Stacked Cost Group
SJD Retail	Space_Heat	Electric Stock	Existing	4.59 Duct Repair and Sealing		25.0%	2.0%	\$ 0.01	20	25.0%	50.0%	12.5%	0.092	4.59	0.01	0.09	\$0.01	\$0.01	A	A	
SJD Retail	Space_Heat	Electric Stock	Existing	4.59 Duct Insulation		25.0%	2.0%	\$ 0.01	20	25.0%	84.9%	21.2%	0.092	4.58	0.02	0.09	\$0.01	\$0.01	A	A	
SJD Retail	Space_Heat	Electric Stock	Existing	4.59 Clock / Programmable Thermostat		50.0%	30.0%	\$ 0.15	10	100.0%	50.0%	50.0%	1.377	4.56	0.68	1.37	\$0.02	\$0.02	A	A	
SJD Retail	Space_Heat	Electric Stock	Existing	4.59 Ceiling R-0 to R-19 Insulation		50.0%	7.0%	\$ 0.24	20	50.0%	55.7%	27.9%	0.321	3.88	0.08	0.27	\$0.08	\$0.09	E	E	
SJD Retail	Space_Heat	Electric Stock	Existing	4.59 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		50.0%	5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.230	3.80	0.09	0.19	\$0.15	\$0.18	F	F	
SJD Retail	Space_Heat	Electric Stock	Existing	4.59 Ceiling R-19 to R-38 Insulation		50.0%	3.0%	\$ 0.24	20	50.0%	55.7%	27.9%	0.138	3.70	0.03	0.11	\$0.18	\$0.23	F	F	
SJD Retail	Water_Heat	Electric Stock	Existing	1.01 Hot Water (SHW) Pipe Insulation		50.0%	5.0%	\$ 0.03	15	50.0%	100.0%	50.0%	0.051	1.01	0.03	0.05	\$0.06	\$0.06	D	D	
SJD Retail	Water_Heat	Electric Stock	Existing	1.01 Heat Pump Water Heater		50.0%	30.0%	\$ 2.49	15	75.0%	100.0%	75.0%	0.303	0.98	0.22	0.30	\$1.01	\$1.04	F	F	
SJD Retail	Water_Heat	Electric Stock	Existing	1.01 Demand controlled circulating systems		50.0%	5.0%	\$ 3.90	15	50.0%	100.0%	50.0%	0.051	0.76	0.02	0.04	\$9.50	\$12.58	F	F	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 EMS Optimization		50.0%	1.0%	\$ 5	5	100.0%	75.0%	75.0%	0.015	1.51	0.01	0.02	\$0.01	\$0.00	A	A	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 Two-Speed Cooling Tower, 300 Tons		50.0%	14.0%	\$ 0.01	15	50.0%	90.0%	45.0%	0.211	1.50	0.09	0.21	\$0.00	\$0.00	A	A	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 VSD Cooling Tower, 300 Tons		50.0%	18.0%	\$ 0.05	15	50.0%	90.0%	45.0%	0.272	1.40	0.11	0.25	\$0.02	\$0.03	A	A	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 High Efficiency Windows, Low-e; U=0.35		50.0%	3.9%	\$ 0.02	30	75.0%	66.0%	49.5%	0.059	1.29	0.02	0.05	\$0.03	\$0.03	A	B	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 Insulation of Pipes		50.0%	1.0%	\$ 0.02	20	50.0%	50.0%	25.0%	0.015	1.27	0.00	0.01	\$0.11	\$0.13	F	F	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 Installation of Energy Management Systems		50.0%	10.0%	\$ 0.14	10	50.0%	70.7%	35.3%	0.151	1.26	0.04	0.13	\$0.14	\$0.17	F	F	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 Primary/Secondary De-coupled Chilled Water System		50.0%	12.0%	\$ 0.34	15	50.0%	80.0%	40.0%	0.181	1.22	0.06	0.15	\$0.23	\$0.28	F	F	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		50.0%	10.0%	\$ 0.22	10	50.0%	100.0%	50.0%	0.151	1.16	0.06	0.12	\$0.23	\$0.30	F	F	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 Chiller Tune-Up / Diagnostics		50.0%	5.0%	\$ 0.08	5	100.0%	90.0%	90.0%	0.076	1.10	0.05	0.06	\$0.30	\$0.42	F	F	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 Optimize Chilled Water and Condenser Water Settings		50.0%	5.0%	\$ 0.15	10	33.0%	50.0%	16.5%	0.076	1.05	0.01	0.03	\$0.05	\$0.45	F	F	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 Installation of Chiller Economizers (water side)		50.0%	10.0%	\$ 0.59	20	50.0%	81.3%	40.6%	0.151	1.04	0.04	0.10	\$0.42	\$0.60	F	F	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 Ceiling R-0 to R-19 Insulation		50.0%	2.1%	\$ 0.23	20	50.0%	23.4%	11.7%	0.032	1.00	0.00	0.02	\$0.78	\$1.18	F	F	
SJD School	Cooling_Chillers	Electric Stock	Existing	1.51 Ceiling R-19 to R-38 Insulation		50.0%	0.9%	\$ 0.23	20	50.0%	23.4%	11.7%	0.014	1.00	0.00	0.01	\$1.83	\$2.76	F	F	
SJD School	Cooling_DX	Electric Stock	Existing	1.51 Duct Insulation		50.0%	3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.045	1.51	0.00	0.05	\$0.02	\$0.02	A	A	
SJD School	Cooling_DX	Electric Stock	Existing	1.51 Clock / Programmable Thermostat		50.0%	10.0%	\$ 0.05	10	100.0%	41.1%	41.1%	0.151	1.51	0.06	0.15	\$0.05	\$0.05	C	C	
SJD School	Cooling_DX	Electric Stock	Existing	1.51 High Efficiency Windows, Low-e; U=0.35		50.0%	5.0%	\$ 0.04	30	75.0%	66.0%	49.5%	0.076	1.45	0.04	0.07	\$0.05	\$0.05	C	C	
SJD School	Cooling_DX	Electric Stock	Existing	1.51 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		50.0%	10.0%	\$ 0.22	10	50.0%	100.0%	50.0%	0.151	1.41	0.07	0.14	\$0.23	\$0.25	F	F	
SJD School	Cooling_DX	Electric Stock	Existing	1.51 Duct Repair and Sealing		50.0%	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.015	1.34	0.00	0.01	\$0.28	\$0.32	F	F	
SJD School	Cooling_DX	Electric Stock	Existing	1.51 Installation of Air Side Economizers		50.0%	15.0%	\$ 0.59	10	100.0%	41.1%	41.1%	0.227	1.34	0.08	0.20	\$0.41	\$0.47	F	F	
SJD School	Cooling_DX	Electric Stock	Existing	1.51 DX Tune-Up / Diagnostics		50.0%	10.0%	\$ 0.17	3	100.0%	90.0%	90.0%	0.151	1.25	0.11	0.13	\$0.49	\$0.59	F	F	
SJD School	Cooling_DX	Electric Stock	Existing	1.51 Ceiling R-0 to R-19 Insulation		50.0%	2.1%	\$ 0.23	20	50.0%	23.4%	11.7%	0.032	1.14	0.00	0.02	\$0.78	\$1.03	F	F	
SJD School	Cooling_DX	Electric Stock	Existing	1.51 Ceiling R-19 to R-38 Insulation		50.0%	0.9%	\$ 0.23	20	50.0%	23.4%	11.7%	0.014	1.14	0.00	0.01	\$1.83	\$2.42	F	F	
SJD School	Cooling_HeatPump	Electric Stock	Existing	1.51 Duct Insulation		50.0%	3.0%	\$ 0.01	20	25.0%	25.0%	6.3%	0.045	1.51	0.00	0.05	\$0.02	\$0.02	A	A	
SJD School	Cooling_HeatPump	Electric Stock	Existing	1.51 Clock / Programmable Thermostat		50.0%	10.0%	\$ 0.05	10	100.0%	41.1%	41.1%	0.151	1.51	0.06	0.15	\$0.05	\$0.05	C	C	
SJD School	Cooling_HeatPump	Electric Stock	Existing	1.51 High Efficiency Windows, Low-e; U=0.35		50.0%	5.0%	\$ 0.04	30	75.0%	66.0%	49.5%	0.076	1.45	0.04	0.07	\$0.05	\$0.05	C	C	
SJD School	Cooling_HeatPump	Electric Stock	Existing	1.51 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		50.0%	10.0%	\$ 0.22	10	50.0%	100.0%	50.0%	0.151	1.41	0.07	0.14	\$0.23	\$0.25	F	F	
SJD School	Cooling_HeatPump	Electric Stock	Existing	1.51 Duct Repair and Sealing		50.0%	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.015	1.34	0.00	0.01	\$0.28	\$0.32	F	F	
SJD School	Cooling_HeatPump	Electric Stock	Existing	1.51 Installation of Air Side Economizers		50.0%	15.0%	\$ 0.59	10	100.0%	41.1%	41.1%	0.227	1.34	0.08	0.20	\$0.41	\$0.47	F	F	
SJD School	Cooling_HeatPump	Electric Stock	Existing	1.51 DX Tune-Up / Diagnostics		50.0%	10.0%	\$ 0.18	3	100.0%	90.0%	90.0%	0.151	1.25	0.11	0.13	\$0.49	\$0.59	F	F	
SJD School	Cooling_HeatPump	Electric Stock	Existing	1.51 Ceiling R-0 to R-19 Insulation		50.0%	2.1%	\$ 0.23	20	50.0%	23.4%	11.7%	0.032	1.14	0.00	0.02	\$0.78	\$1.03	F	F	
SJD School	Cooling_HeatPump	Electric Stock	Existing	1.51 Ceiling R-19 to R-38 Insulation		50.0%	0.9%	\$ 0.23	20	50.0%	23.4%	11.7%	0.014	1.14	0.00	0.01	\$1.83	\$2.42	F	F	
SJD School	Lighting_2L4T12	Electric Stock	Existing	2.68 Occupancy Sensor, 8-4' Fluorescent Fixtures		50.0%	30.0%	\$ 0.40	20	50.0%	94.7%	47.4%	0.804	2.68	0.38	0.80	\$0.05	\$0.05	C	C	
SJD School	Lighting_2L4T12	Electric Stock	Existing	2.68 4' 1L T8 Premium, EB, reflector		50.0%	61.1%	\$ 1.40	34	33.3%	100.0%	33.3%	1.638	2.68	0.55	1.64	\$0.08	\$0.08	E	E	
SJD School	Lighting_2L4T12	Electric Stock	Existing	2.68 4' 2L T8 Premium, EB		50.0%	25.0%	\$ 0.69	34	33.3%	100.0%	33.3%	0.670	2.68	0.22	0.67	\$0.09	\$0.09	E	E	
SJD School	Lighting_2L4T12	Electric Stock	Existing	2.68 4' 1L T5HO, EB		50.0%	13.9%	\$ 0.52	34	33.3%	100.0%	33.3%	0.373	2.68	0.12	0.37	\$0.12	\$0.12	F	F	
SJD School	Lighting_2L4T12	Electric Stock	Existing	2.68 Continuous Dimming, 10-4' Fluorescent Fixtures		50.0%	75.0%	\$ 0.38	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.17	\$0.17	F	F	
SJD School	Lighting_2L4T8	Electric Stock	Existing	2.14 Occupancy Sensor, 4-4' Fluorescent Fixtures		50.0%	30.0%	\$ 0.40	20	50.0%	94.7%	47.4%	0.642	2.14	0.30	0.64	\$0.07	\$0.07	D	D	
SJD School	Lighting_2L4T8	Electric Stock	Existing	2.14 4' 2L T8 Premium, EB		50.0%	8.5%	\$ 0.24	34	100.0%	100.0%	100.0%	0.182	2.14	0.18	0.18	\$0.11	\$0.11	F	F	
SJD School	Lighting_2L8T12	Electric Stock	Existing	2.68 8' 2L T8, EB		50.0%	52.8%	\$ 0.36	34	50.0%	100.0%	50.0%	1.415	2.68	0.71	1.42	\$0.02	\$0.02	A	A	
SJD School	Lighting_2L8T12	Electric Stock	Existing	2.68 8' 1L T12, 60W, EB, reflector		50.0%	55.3%	\$ 0.79	34	25.0%	100.0%	25.0%	1.482	2.68	0.37	1.48	\$0.05	\$0.05	C	C	
SJD School	Lighting_2L8T12	Electric Stock	Existing	2.68 8' 2L T12, 60W, EB		50.0%	10.6%	\$ 0.17	34	25.0%	32.0%	8.2%	0.268	2.68	0.02	0.28	\$0.06	\$0.06	C	C	
SJD School	Lighting_2L8T12	Electric Stock	Existing	2.68 Occupancy Sensor, 4-8' Fluorescent Fixtures		50.0%	30.0%	\$ 0.55	20	50.0%	94.7%	47.4%	0.804	2.68	0.38	0.80	\$0.07	\$0.07	D	D	
SJD School	Lighting_2L8T12	Electric Stock	Existing	2.68 Continuous Dimming, 5-8' Fluorescent Fixtures		50.0%	75.0%	\$ 0.12	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.20	\$0.20	F	F	
SJD School	Lighting_3L4T12	Electric Stock	Existing	2.68 4' 1L T5HO, EB		50.0%	46.1%	\$ 0.04	34	75.0%	100.0%	75.0%	1.235	2.68	0.93	1.24	\$0.00	\$0.00	A	A	
SJD School	Lighting_3L4T12	Electric Stock	Existing	2.68 4' 3L T8, EB		50.0%	22.6%	\$ 0.04	34	75.0%	100.0%	75.0%	0.606	2.68	0.45	0.61	\$0.01	\$0.01	A	A	
SJD School	Lighting_3L4T12	Electric Stock	Existing	2.68 4' 2L T8 Premium, EB, reflector		50.0%	53.0%	\$ 0.23	34	40.0%	100.0%	40.0%	1.422	2.68	0.57	1.42	\$0.01	\$0.01	A	A	
SJD School	Lighting_3L4T12	Electric Stock	Existing	2.68 4' 3L T8 Premium, EB		50.0%	22.6%	\$ 0.10	34	75.0%	100.0%	75.0%	0.606	2.68	0.45	0.61	\$0.02	\$0.02	A	A	
SJD School	Lighting_3L4T8	Electric Stock	Existing	2.14 4' 3L T8 Premium, EB		50.0%	6.7%	\$ 0.38	34	100.0%	100.0%	100.0%	0.143	2.14	0.14	0.14	\$0.23	\$0.23	F	F	
SJD School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 3L T8, EB		50.0%	38.2%	\$ 0.09	34	16.7%	100.0%	16.7%	1.024	2.68	0.17	1.02	\$0.01	\$0.01	A	A	
SJD School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 3L T8 Premium, EB		50.0%	42.4%	\$ 0.28	34	16.7%	100.0%	16.7%	0.268	2.68	0.19	0.27	\$0.02	\$0.02	A	A	
SJD School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 4L T8, EB		50.0%	22.2%	\$ 0.18	34	16.7%	100.0%	16.7%	0.596	2.68	0.60	0.60	\$0.03	\$0.03	A	A	
SJD School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 2L T8 Premium, EB, reflector		50.0%	62.5%	\$ 0.66	34	16.7%	100.0%	16.7%	1.675	2.68	0.28	1.68	\$0.04	\$0.04	B	B	
SJD School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 2L T5HO, EB		50.0%	18.8%	\$ 0.26	34	16.7%	100.0%	16.7%	0.503	2.68	0.08	0.50	\$0.05	\$0.05	C	C	
SJD School	Lighting_4L4T12	Electric Stock	Existing	2.68 4' 4L T8 Premium, EB		50.0%	25.0%	\$ 0.44	34	16.7%	100.0%	16.7%	0.670	2.68	0.11	0.67	\$0.06	\$0.06	C	C	
SJD School	Lighting_4L4T12	Electric Stock	Existing	2.68 Occupancy Sensor, 4-4' Fluorescent Fixtures		50.0%	30.0%	\$ 0.47	20	50.0%	94.7%	47.4%	0.804	2.68	0.38	0.80	\$0.06	\$0.06	D	D	
SJD School	Lighting_4L4T12	Electric Stock	Existing	2.68 Continuous Dimming, 5-4' Fluorescent Fixtures		50.0%	75.0%	\$ 0.32	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.17	\$0.17	F	F	
SJD School	Lighting_4L4T8	Electric Stock	Existing	2.14 Occupancy Sensor, 4-																	

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-Alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Small_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.20	10	33.0%	50.0%	16.5%	0.210	2.76	0.02	0.14	\$0.15	\$0.23	F	F
SJD	Small_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.16	20	50.0%	8.7%	4.4%	0.088	2.74	0.00	0.06	\$0.20	\$0.30	F	F
SJD	Small_Office	Cooling_Chillers	Electric	Stock	Existing	4.19	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.16	20	50.0%	8.7%	4.4%	0.038	2.74	0.00	0.02	\$0.46	\$0.70	F	F
SJD	Small_Office	Cooling_DX	Electric	Stock	Existing	4.19	Duct Insulation	3.0%	\$ 0.02	20	25.0%	25.0%	6.3%	0.126	4.19	0.01	0.13	\$0.02	\$0.02	A	A
SJD	Small_Office	Cooling_DX	Electric	Stock	Existing	4.19	Clock / Programmable Thermostat	10.0%	\$ 0.06	10	100.0%	58.4%	58.4%	0.419	4.18	0.24	0.42	\$0.02	\$0.02	A	A
SJD	Small_Office	Cooling_DX	Electric	Stock	Existing	4.19	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.15	30	75.0%	99.4%	74.6%	0.210	3.94	0.15	0.20	\$0.06	\$0.07	D	D
SJD	Small_Office	Cooling_DX	Electric	Stock	Existing	4.19	Duct Repair and Sealing	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.042	3.79	0.00	0.04	\$0.10	\$0.11	F	F
SJD	Small_Office	Cooling_DX	Electric	Stock	Existing	4.19	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.29	10	50.0%	100.0%	50.0%	0.419	3.79	0.19	0.38	\$0.11	\$0.12	F	F
SJD	Small_Office	Cooling_DX	Electric	Stock	Existing	4.19	Installation of Air Side Economizers	15.0%	\$ 0.59	10	50.0%	30.4%	30.4%	0.629	3.60	0.16	0.54	\$0.15	\$0.17	F	F
SJD	Small_Office	Cooling_DX	Electric	Stock	Existing	4.19	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.16	20	50.0%	8.7%	4.4%	0.088	3.43	0.00	0.07	\$0.20	\$0.24	F	F
SJD	Small_Office	Cooling_DX	Electric	Stock	Existing	4.19	DX Tune-Up / Diagnostics	10.0%	\$ 0.23	3	100.0%	90.0%	90.0%	0.419	3.43	0.31	0.34	\$0.24	\$0.29	F	F
SJD	Small_Office	Cooling_DX	Electric	Stock	Existing	4.19	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.16	20	50.0%	8.7%	4.4%	0.038	3.12	0.00	0.03	\$0.46	\$0.62	F	F
SJD	Small_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Duct Insulation	3.0%	\$ 0.02	20	25.0%	25.0%	6.3%	0.126	4.19	0.01	0.13	\$0.02	\$0.02	A	A
SJD	Small_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Clock / Programmable Thermostat	10.0%	\$ 0.06	10	100.0%	58.4%	58.4%	0.419	4.18	0.24	0.42	\$0.02	\$0.02	A	A
SJD	Small_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.15	30	75.0%	99.4%	74.6%	0.210	3.94	0.15	0.20	\$0.06	\$0.07	D	D
SJD	Small_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Duct Repair and Sealing	1.0%	\$ 0.04	20	25.0%	50.0%	12.5%	0.042	3.79	0.00	0.04	\$0.10	\$0.11	F	F
SJD	Small_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.29	10	50.0%	100.0%	50.0%	0.419	3.79	0.19	0.38	\$0.11	\$0.12	F	F
SJD	Small_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Installation of Air Side Economizers	15.0%	\$ 0.59	10	100.0%	30.4%	30.4%	0.629	3.60	0.16	0.54	\$0.15	\$0.17	F	F
SJD	Small_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.16	20	50.0%	8.7%	4.4%	0.088	3.43	0.00	0.07	\$0.20	\$0.24	F	F
SJD	Small_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	DX Tune-Up / Diagnostics	10.0%	\$ 0.23	3	100.0%	90.0%	90.0%	0.419	3.43	0.31	0.34	\$0.24	\$0.29	F	F
SJD	Small_Office	Cooling_HeatPump	Electric	Stock	Existing	4.19	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.16	20	50.0%	8.7%	4.4%	0.038	3.12	0.00	0.03	\$0.46	\$0.62	F	F
SJD	Small_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	Occupancy Sensor, 8-4' Fluorescent Fixtures	30.0%	\$ 0.45	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.05	\$0.05	C	C
SJD	Small_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	4' 1L T8 Premium, EB, reflector	61.1%	\$ 1.58	16	33.3%	100.0%	33.3%	3.233	5.29	1.08	3.23	\$0.06	\$0.06	C	C
SJD	Small_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	4' 2L T8 Premium, EB	25.0%	\$ 0.77	16	33.3%	100.0%	33.3%	1.323	5.29	0.44	1.32	\$0.07	\$0.07	D	D
SJD	Small_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	4' 1L T5HO, EB	13.9%	\$ 0.59	16	33.3%	100.0%	33.3%	0.735	5.29	0.25	0.74	\$0.09	\$0.09	E	E
SJD	Small_Office	Lighting_2L4T12	Electric	Stock	Existing	5.29	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	\$ 3.82	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.14	\$0.14	F	F
SJD	Small_Office	Lighting_2L4T8	Electric	Stock	Existing	4.24	Occupancy Sensor, 8-4' Fluorescent Fixtures	30.0%	\$ 0.45	9	40.0%	79.6%	31.8%	1.272	4.24	0.40	1.27	\$0.06	\$0.06	D	D
SJD	Small_Office	Lighting_2L4T8	Electric	Stock	Existing	4.24	4' 2L T8 Premium, EB	8.8%	\$ 0.27	16	100.0%	100.0%	100.0%	0.360	4.24	0.36	0.36	\$0.09	\$0.09	E	E
SJD	Small_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	8' 2L T8, EB	52.8%	\$ 0.36	16	50.0%	100.0%	50.0%	2.793	5.29	1.40	2.79	\$0.02	\$0.02	A	A
SJD	Small_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	8' 1L T12, 60W, EB, reflector	65.0%	\$ 0.79	16	25.0%	100.0%	25.0%	2.925	5.29	0.73	2.93	\$0.03	\$0.03	B	B
SJD	Small_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	8' 2L T12, 60W, EB	10.6%	\$ 0.17	16	25.0%	26.6%	6.6%	0.559	5.29	0.04	0.56	\$0.04	\$0.04	B	B
SJD	Small_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	Occupancy Sensor, 4-8' Fluorescent Fixtures	30.0%	\$ 0.54	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.06	\$0.06	C	C
SJD	Small_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	\$ 4.09	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F
SJD	Small_Office	Lighting_2L8T12	Electric	Stock	Existing	5.29	4' 1L T5HO, EB	46.1%	\$ 0.05	16	75.0%	100.0%	75.0%	2.438	5.29	1.83	2.44	\$0.00	\$0.00	A	A
SJD	Small_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4' 3L T8, EB	22.6%	\$ 0.05	16	75.0%	100.0%	75.0%	1.196	5.29	0.90	1.20	\$0.00	\$0.00	A	A
SJD	Small_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4' 2L T8 Premium, EB, reflector	53.0%	\$ 0.28	16	40.0%	100.0%	40.0%	2.806	5.29	1.12	2.81	\$0.01	\$0.01	A	A
SJD	Small_Office	Lighting_3L4T12	Electric	Stock	Existing	5.29	4' 3L T8 Premium, EB	22.6%	\$ 0.13	16	75.0%	100.0%	75.0%	1.196	5.29	0.90	1.20	\$0.01	\$0.01	A	A
SJD	Small_Office	Lighting_3L4T12	Electric	Stock	Existing	4.24	4' 3L T8 Premium, EB	6.7%	\$ 0.43	16	100.0%	100.0%	100.0%	0.284	4.24	0.28	0.28	\$0.18	\$0.18	F	F
SJD	Small_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4' 3L T8, EB	38.2%	\$ 0.10	16	16.7%	100.0%	16.7%	2.021	5.29	0.31	2.02	\$0.01	\$0.01	A	A
SJD	Small_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4' 3L T8 Premium, EB	62.4%	\$ 0.32	16	16.7%	100.0%	16.7%	2.241	5.29	0.37	2.24	\$0.02	\$0.02	A	A
SJD	Small_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4' 4L T8, EB	22.2%	\$ 0.21	16	16.7%	100.0%	16.7%	1.176	5.29	0.20	1.18	\$0.02	\$0.02	A	A
SJD	Small_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4' 2L T8 Premium, EB, reflector	62.5%	\$ 0.74	16	16.7%	100.0%	16.7%	3.306	5.29	0.55	3.31	\$0.03	\$0.03	A	A
SJD	Small_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4' 2L T5HO, EB	18.8%	\$ 0.29	16	16.7%	100.0%	16.7%	0.992	5.29	0.17	0.99	\$0.03	\$0.03	B	B
SJD	Small_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	4' 4L T8 Premium, EB	25.0%	\$ 0.50	16	16.7%	100.0%	16.7%	1.323	5.29	0.22	1.32	\$0.04	\$0.04	B	B
SJD	Small_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	Occupancy Sensor, 4-4' Fluorescent Fixtures	30.0%	\$ 0.52	9	40.0%	79.6%	31.8%	1.587	5.29	0.51	1.59	\$0.06	\$0.06	C	C
SJD	Small_Office	Lighting_4L4T12	Electric	Stock	Existing	5.29	Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	\$ 3.93	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F
SJD	Small_Office	Lighting_4L4T8	Electric	Stock	Existing	4.24	Occupancy Sensor, 4-4' Fluorescent Fixtures	30.0%	\$ 0.52	9	40.0%	79.6%	31.8%	1.272	4.24	0.40	1.27	\$0.07	\$0.07	D	D
SJD	Small_Office	Lighting_4L4T8	Electric	Stock	Existing	4.24	4' 4L T8 Premium, EB	3.8%	\$ 0.30	16	100.0%	100.0%	100.0%	0.153	4.24	0.15	0.15	\$0.24	\$0.24	F	F
SJD	Small_Office	Lighting_INC150W	Electric	Stock	Existing	5.29	Halogen PAR Flood, 90W	40.0%	\$ 0.19	1	10.0%	100.0%	10.0%	2.116	5.29	0.21	2.12	\$0.10	\$0.10	E	F
SJD	Small_Office	Lighting_INC150W	Electric	Stock	Existing	5.29	HPS, 50W	56.0%	\$ 4.80	6	45.0%	93.9%	42.2%	2.962	5.29	1.54	2.96	\$0.08	\$0.38	F	F
SJD	Small_Office	Lighting_INC150W	Electric	Stock	Existing	5.29	Metal Halide, 50W	52.0%	\$ 9.40	6	45.0%	93.9%	42.2%	2.751	5.29	1.16	2.75	\$0.80	\$0.80	F	F
SJD	Small_Office	Lighting_INC40W	Electric	Stock	Existing	5.29	LED Exit Signs	80.0%	\$ 0.05	20	90.0%	90.0%	81.0%	4.232	5.29	3.43	4.23	\$0.00	\$0.00	A	A
SJD	Small_Office	Lighting_INC75W	Electric	Stock	Existing	5.29	CFL Screw-in, Modular 18W	65.3%	\$ 2.25	5	90.0%	72.5%	65.2%	3.454	5.29	2.25	3.45	\$0.18	\$0.18	F	F
SJD	Small_Office	Plug_Load	Electric	Stock	Existing	1.59	Smart Networks	9.1%	\$ 0.01	4	90.0%	40.0%	36.0%	0.145	1.59	0.05	0.15	\$0.02	\$0.02	A	A
SJD	Small_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Monitors	21.9%	\$ 0.09	4	100.0%	71.0%	71.0%	0.349	1.54	0.24	0.34	\$0.09	\$0.09	E	E
SJD	Small_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Copiers	4.8%	\$ 0.03	4	100.0%	65.0%	65.0%	0.077	1.30	0.04	0.06	\$0.14	\$0.18	F	F
SJD	Small_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Computer	24.7%	\$ 0.18	4	100.0%	65.0%	65.0%	0.393	1.26	0.20	0.31	\$0.15	\$0.19	F	F
SJD	Small_Office	Plug_Load	Electric	Stock	Existing	1.59	ENERGY STAR or Better Office Equipment: Printers	8.0%	\$ 0.10	4	100.0%	65.0%	65.0%	0.127	1.06	0.05	0.08	\$0.26	\$0.40	F	F
SJD	Small_Office	Space_Heat	Electric	Stock	Existing	6.18	Duct Repair and Sealing	2.0%	\$ 0.01	20	25.0%	50.0%	12.5%	0.124	6.18	0.02	0.12	\$0.01	\$0.01	A	A
SJD	Small_Office	Space_Heat	Electric	Stock	Existing	6.18	Clock / Programmable Thermostat	30.0%	\$ 0.15	10	100.0%	58.5%	58.5%	1.854	6.18	1.08	1.85	\$0.01	\$0.01	A	A
SJD	Small_Office	Space_Heat	Electric	Stock	Existing	6.18	Duct Insulation	2.0%	\$ 0.02	20	25.0%	25.0%	14.6%	0.124	5.08	0.01	0.10	\$0.02	\$0.02	A	A
SJD	Small_Office	Space_Heat	Electric	Stock	Existing	6.18	Ceiling R-0 to R-19 Insulation	7.0%	\$ 0.16	20	50.0%	12.9%	6.5%	0.433	5.07	0.02	0.35	\$0.04	\$0.05	B	C
SJD	Small_Office	Space_Heat	Electric	Stock	Existing	6.18	Ceiling R-19 to R-38 Insulation	3.0%	\$ 0.16	20	50.0%	12.9%	6.5%	0.185	5.05	0.01	0.15	\$0.09	\$0.11	E	F
SJD	Small_Office	Space_Heat	Electric	Stock	Existing	6.18	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.309	5.04	0.13	0.25	\$0.11	\$0.14	F	F

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD Warehouse	Cooling_HeatPump	Electric	Stock	Existing	1.66 Ceiling R-0 to R-19 Insulation	2.1%	\$ 0.23	20	50.0%	20.0%	50.0%	20.0%	10.0%	0.035	1.21	0.00	0.03	\$0.69	\$0.95	F	F
SJD Warehouse	Cooling_HeatPump	Electric	Stock	Existing	1.66 Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.23	20	50.0%	20.0%	50.0%	20.0%	10.0%	0.015	1.21	0.00	0.01	\$1.61	\$2.22	F	F
SJD Warehouse	Lighting_2L4T12	Electric	Stock	Existing	2.94 Occupancy Sensor, 8-4' Fluorescent Fixtures	30.0%	\$ 0.23	12	20.0%	98.0%	19.6%	0.882	2.94	0.17	0.88	\$0.04	\$0.05	C	C		
SJD Warehouse	Lighting_2L4T12	Electric	Stock	Existing	2.94 4' 1L T8 Premium, EB, reflector	61.1%	\$ 0.80	22	33.3%	100.0%	33.3%	1.797	2.94	0.60	1.80	\$0.05	\$0.05	C	C		
SJD Warehouse	Lighting_2L4T12	Electric	Stock	Existing	2.94 4' 2L T8 Premium, EB	25.0%	\$ 0.39	22	33.3%	100.0%	33.3%	0.735	2.94	0.25	0.74	\$0.05	\$0.05	C	C		
SJD Warehouse	Lighting_2L4T12	Electric	Stock	Existing	2.94 4' 1L T5HO, EB	13.9%	\$ 0.30	22	33.3%	100.0%	33.3%	0.409	2.94	0.14	0.41	\$0.07	\$0.07	D	D		
SJD Warehouse	Lighting_2L4T12	Electric	Stock	Existing	2.94 Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	\$ 1.93	16	40.0%	100.0%	40.0%	2.205	2.94	0.88	2.21	\$0.10	\$0.10	F	F		
SJD Warehouse	Lighting_2L4T8	Electric	Stock	Existing	2.38 Occupancy Sensor, 8-4' Fluorescent Fixtures	30.0%	\$ 0.23	12	20.0%	98.0%	19.6%	0.708	2.38	0.14	0.71	\$0.05	\$0.05	C	C		
SJD Warehouse	Lighting_2L8T12	Electric	Stock	Existing	2.36 4' 2L T8 Premium, EB	8.5%	\$ 0.13	22	50.0%	100.0%	50.0%	0.201	2.36	0.20	0.20	\$0.07	\$0.07	D	D		
SJD Warehouse	Lighting_2L8T12	Electric	Stock	Existing	2.94 8' 2L T8, EB	52.8%	\$ 0.21	22	25.0%	100.0%	25.0%	1.552	2.94	0.19	1.55	\$0.01	\$0.01	A	A		
SJD Warehouse	Lighting_2L8T12	Electric	Stock	Existing	2.94 8' 1L T12, 60W, EB, reflector	55.3%	\$ 0.46	22	25.0%	100.0%	25.0%	1.626	2.94	0.41	1.63	\$0.03	\$0.03	A	A		
SJD Warehouse	Lighting_2L8T12	Electric	Stock	Existing	2.94 8' 2L T12, 60W, EB	10.6%	\$ 0.10	22	25.0%	84.7%	21.2%	0.311	2.94	0.07	0.31	\$0.03	\$0.03	B	B		
SJD Warehouse	Lighting_2L8T12	Electric	Stock	Existing	2.94 Occupancy Sensor, 4-8' Fluorescent Fixtures	30.0%	\$ 0.32	12	20.0%	98.0%	19.6%	0.882	2.94	0.17	0.88	\$0.05	\$0.05	C	C		
SJD Warehouse	Lighting_2L8T12	Electric	Stock	Existing	2.94 Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	\$ 2.39	16	40.0%	100.0%	40.0%	2.205	2.94	0.88	2.21	\$0.13	\$0.13	F	F		
SJD Warehouse	Lighting_3L4T12	Electric	Stock	Existing	2.94 4' 1L T5HO, EB	46.1%	\$ 0.01	22	75.0%	100.0%	75.0%	1.355	2.94	1.02	1.35	\$0.00	\$0.00	A	A		
SJD Warehouse	Lighting_3L4T12	Electric	Stock	Existing	2.94 4' 3L T8, EB	22.6%	\$ 0.01	22	75.0%	100.0%	75.0%	0.665	2.94	0.50	0.66	\$0.00	\$0.00	A	A		
SJD Warehouse	Lighting_3L4T12	Electric	Stock	Existing	2.94 4' 2L T8 Premium, EB, reflector	53.0%	\$ 0.04	22	40.0%	100.0%	40.0%	1.559	2.94	0.62	1.56	\$0.00	\$0.00	A	A		
SJD Warehouse	Lighting_3L4T12	Electric	Stock	Existing	2.94 4' 3L T8 Premium, EB	22.6%	\$ 0.02	22	75.0%	100.0%	75.0%	0.665	2.94	0.50	0.66	\$0.00	\$0.00	A	A		
SJD Warehouse	Lighting_4L4T12	Electric	Stock	Existing	2.94 4' 2L T8 Premium, EB	6.7%	\$ 0.22	22	100.0%	100.0%	100.0%	0.158	2.36	0.16	0.16	\$0.14	\$0.14	F	F		
SJD Warehouse	Lighting_4L4T12	Electric	Stock	Existing	2.94 4' 3L T8 Premium, EB	16.7%	\$ 0.05	22	16.7%	100.0%	16.7%	1.123	2.94	0.19	1.12	\$0.00	\$0.00	F	F		
SJD Warehouse	Lighting_4L4T12	Electric	Stock	Existing	2.94 4' 3L T8 Premium, EB	42.4%	\$ 0.16	22	16.7%	100.0%	16.7%	1.245	2.94	0.21	1.25	\$0.01	\$0.01	A	A		
SJD Warehouse	Lighting_4L4T12	Electric	Stock	Existing	2.94 4' 4L T8, EB	22.2%	\$ 0.10	22	16.7%	100.0%	16.7%	0.653	2.94	0.11	0.65	\$0.02	\$0.02	A	A		
SJD Warehouse	Lighting_4L4T12	Electric	Stock	Existing	2.94 4' 2L T8 Premium, EB, reflector	62.5%	\$ 0.37	22	16.7%	100.0%	16.7%	1.838	2.94	0.31	1.84	\$0.02	\$0.02	A	A		
SJD Warehouse	Lighting_4L4T12	Electric	Stock	Existing	2.94 4' 2L T5HO, EB	18.8%	\$ 0.14	22	16.7%	100.0%	16.7%	0.551	2.94	0.09	0.55	\$0.03	\$0.03	A	A		
SJD Warehouse	Lighting_4L4T12	Electric	Stock	Existing	2.94 4' 4L T8 Premium, EB	25.0%	\$ 0.25	22	16.7%	100.0%	16.7%	0.735	2.94	0.12	0.74	\$0.03	\$0.03	B	B		
SJD Warehouse	Lighting_4L4T12	Electric	Stock	Existing	2.94 Occupancy Sensor, 4-4' Fluorescent Fixtures	30.0%	\$ 0.26	12	20.0%	98.0%	19.6%	0.882	2.94	0.17	0.88	\$0.04	\$0.04	B	B		
SJD Warehouse	Lighting_4L4T12	Electric	Stock	Existing	2.94 Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	\$ 1.95	16	40.0%	100.0%	40.0%	2.205	2.94	0.88	2.21	\$0.11	\$0.11	F	F		
SJD Warehouse	Lighting_4L4T8	Electric	Stock	Existing	2.38 Occupancy Sensor, 4-4' Fluorescent Fixtures	30.0%	\$ 0.26	12	20.0%	98.0%	19.6%	0.708	2.38	0.14	0.71	\$0.05	\$0.05	C	C		
SJD Warehouse	Lighting_4L4T8	Electric	Stock	Existing	2.36 4' 4L T8 Premium, EB	3.8%	\$ 0.15	22	100.0%	100.0%	100.0%	0.085	2.36	0.08	0.08	\$0.18	\$0.18	F	F		
SJD Warehouse	Lighting_INC150W	Electric	Stock	Existing	2.94 Halogen PAR Flood, 90W	40.0%	\$ 0.10	1	10.0%	100.0%	10.0%	1.176	2.94	0.12	1.18	\$0.10	\$0.10	E	E		
SJD Warehouse	Lighting_INC150W	Electric	Stock	Existing	2.94 HPS, 50W	56.0%	\$ 2.69	7	45.0%	90.2%	40.6%	1.646	2.94	0.67	1.65	\$0.34	\$0.34	F	F		
SJD Warehouse	Lighting_INC150W	Electric	Stock	Existing	2.94 Metal Halide, 50W	52.0%	\$ 5.28	7	45.0%	90.2%	40.6%	1.529	2.94	0.62	1.53	\$0.71	\$0.71	F	F		
SJD Warehouse	Lighting_INC40W	Electric	Stock	Existing	2.94 LED Exit Signs	80.0%	\$ 0.06	20	90.0%	90.0%	81.0%	2.352	2.94	1.91	2.35	\$0.00	\$0.00	A	A		
SJD Warehouse	Lighting_INC75W	Electric	Stock	Existing	2.94 CFL Screw-in, Modular 18W	65.3%	\$ 1.34	6	90.0%	88.7%	79.8%	1.920	2.94	1.53	1.92	\$0.16	\$0.16	F	F		
SJD Warehouse	Plug_Load	Electric	Stock	Existing	0.15 Smart Networks	7.8%	\$ 0.00	4	90.0%	40.0%	36.0%	0.012	0.15	0.00	0.01	\$0.11	\$0.11	F	F		
SJD Warehouse	Plug_Load	Electric	Stock	Existing	0.15 ENERGY STAR or Better Office Equipment: Monitors	18.6%	\$ 0.05	4	100.0%	71.0%	71.0%	0.028	0.15	0.02	0.03	\$0.58	\$0.59	F	F		
SJD Warehouse	Plug_Load	Electric	Stock	Existing	0.15 ENERGY STAR or Better Office Equipment: Copiers	7.1%	\$ 0.02	4	100.0%	65.0%	65.0%	0.011	0.13	0.01	0.01	\$0.66	\$0.78	F	F		
SJD Warehouse	Plug_Load	Electric	Stock	Existing	0.15 ENERGY STAR or Better Office Equipment: Computer	21.0%	\$ 0.10	4	100.0%	65.0%	65.0%	0.031	0.12	0.02	0.03	\$1.02	\$1.27	F	F		
SJD Warehouse	Plug_Load	Electric	Stock	Existing	0.15 ENERGY STAR or Better Office Equipment: Printers	11.4%	\$ 0.06	4	100.0%	65.0%	65.0%	0.017	0.10	0.01	0.01	\$1.20	\$1.43	F	F		
SJD Warehouse	Space_Heat	Electric	Stock	Existing	4.02 Duct Repair and Sealing	2.0%	\$ 0.00	20	25.0%	60.0%	25.0%	0.080	4.02	0.01	0.08	\$0.00	\$0.00	A	A		
SJD Warehouse	Space_Heat	Electric	Stock	Existing	4.02 Duct Insulation	2.0%	\$ 0.01	20	25.0%	62.3%	15.6%	0.080	4.01	0.01	0.08	\$0.01	\$0.01	A	A		
SJD Warehouse	Space_Heat	Electric	Stock	Existing	4.02 Clock / Programmable Thermostat	30.0%	\$ 0.15	10	100.0%	41.8%	41.8%	1.206	4.00	0.50	1.20	\$0.02	\$0.02	A	A		
SJD Warehouse	Space_Heat	Electric	Stock	Existing	4.02 Ceiling R-0 to R-19 Insulation	7.0%	\$ 0.23	20	50.0%	33.7%	16.8%	0.281	3.50	0.04	0.24	\$0.09	\$0.10	E	E		
SJD Warehouse	Space_Heat	Electric	Stock	Existing	4.02 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.201	3.45	0.09	0.17	\$0.17	\$0.20	F	F		
SJD Warehouse	Space_Heat	Electric	Stock	Existing	4.02 Ceiling R-19 to R-38 Insulation	3.0%	\$ 0.23	20	50.0%	33.7%	16.8%	0.121	3.37	0.02	0.10	\$0.20	\$0.24	F	F		
SJD Warehouse	Water_Heat	Electric	Stock	Existing	0.42 Hot Water (SHW) Pipe Insulation	5.0%	\$ 0.00	15	50.0%	95.2%	47.6%	0.021	0.42	0.01	0.02	\$0.01	\$0.01	A	A		
SJD Warehouse	Water_Heat	Electric	Stock	Existing	0.42 Heat Pump Water Heater	30.0%	\$ 0.11	15	75.0%	100.0%	75.0%	0.126	0.41	0.09	0.12	\$0.10	\$0.11	F	F		
SJD Warehouse	Water_Heat	Electric	Stock	Existing	0.42 Demand controlled circulating systems	5.0%	\$ 0.17	15	50.0%	100.0%	50.0%	0.021	0.32	0.01	0.02	\$0.98	\$1.29	F	F		
MPS Grocery	Cooling_Chillers	Electric	Stock	New	4.1 EMS Optimization	1.0%	\$ 0.15	5	100.0%	50.0%	50.0%	0.041	4.10	0.02	0.04	\$0.00	\$0.00	A	A		
MPS Grocery	Cooling_Chillers	Electric	Stock	New	4.1 High Efficiency Windows, Low-e; U=0.35	4.1%	\$ 0.03	30	75.0%	100.0%	75.0%	0.221	4.08	0.17	0.22	\$0.01	\$0.01	A	A		
MPS Grocery	Cooling_Chillers	Electric	Stock	New	4.1 Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	\$ 0.11	15	67.0%	90.0%	60.3%	0.308	3.91	0.18	0.29	\$0.05	\$0.05	C	C		
MPS Grocery	Cooling_Chillers	Electric	Stock	New	4.1 Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.49	15	50.0%	80.0%	40.0%	0.492	3.74	0.18	0.45	\$0.12	\$0.13	F	F		
MPS Grocery	Cooling_Chillers	Electric	Stock	New	4.1 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.56	0.18	0.36	\$0.12	\$0.14	F	F		
MPS Grocery	Cooling_Chillers	Electric	Stock	New	4.1 Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.21	10	33.0%	50.0%	16.5%	0.205	3.38	0.03	0.17	\$0.17	\$0.20	F	F		
MPS Grocery	Cooling_Chillers	Electric	Stock	New	4.1 Cool Roofs (Reflective and Spray Evaporative)	4.3%	\$ 0.47	10	90.0%	100.0%	90.0%	0.176	3.35	0.13	0.14	\$0.42	\$0.52	F	F		
MPS Grocery	Cooling_Chillers	Electric	Stock	New	4.1 Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.24	20	50.0%	20.0%	10.0%	0.037	3.22	0.00	0.03	\$0.69	\$0.88	F	F		
MPS Grocery	Cooling_Chillers	Electric	Stock	New	4.1 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.108	3.22	0.04	0.08	\$1.29	\$1.64	F	F		
MPS Grocery	Cooling_DX	Electric	Stock	New	4.1 High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.07	30	75.0%	100.0%	75.0%	0.205	4.10	0.15	0.21	\$0.03	\$0.03	B	B		
MPS Grocery	Cooling_DX	Electric	Stock	New	4.1 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.95	0.20	0.39	\$0.12	\$0.13	F	F		
MPS Grocery	Cooling_DX	Electric	Stock	New	4.1 DX Tune-Up / Diagnostics	10.0%	\$ 0.25	3	100.0%	10.0%	10.0%	0.410	3.75	0.04	0.37	\$0.26	\$0.29	F	F		
MPS Grocery	Cooling_DX	Electric	Stock	New	4.1 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	\$ 0.94	10	25.0%	95.0%	23.8%	0.410	3.71	0.09	0.37	\$0.37	\$0.40	F	F		
MPS Grocery	Cooling_DX	Electric	Stock	New	4.1 Cool Roofs (Reflective and Spray Evaporative)	4.3%	\$ 0.47	10	50.0%	100.0%	50.0%	0.176	3.62	0.08	0.16	\$0.42	\$0.48	F	F		
MPS Grocery	Cooling_DX	Electric	Stock	New	4.1 Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.24	20	50.0%	20.0%	10.0%	0.037	3.55	0.00	0.03	\$0.69	\$0.80	F	F		
MPS Grocery	Cooling_DX	Electric	Stock	New	4.1 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.108	3.54	0.04	0.09	\$1.29	\$1.49	F	F		
MPS Grocery	Cooling_HeatPump	Electric	Stock	New	4.1 High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.07	30	75.0%	100.0%	75.0%	0.205	4.10	0.15	0.21	\$0.03	\$0.03	B	B		
MPS Grocery	Cooling_HeatPump	Electric	Stock	New	4.1 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.95	0.20	0.39	\$0.12	\$0.13	F	F		
MPS Grocery	Cooling_HeatPump	Electric	Stock	New	4.1 DX Tune-Up / Diagnostics	10.0%	\$ 0.25	3	100.0%	10.0%	10.0%	0.410	3.75	0.04	0.37	\$0.26	\$0.29	F	F		
MPS Grocery	Cooling_HeatPump	Electric	Stock	New	4.1 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	\$ 0.94	10	25.0%	95.0%	23.8%	0.410	3.71								

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS Grocery	Plug_Load	Electric	Stock	New	0.41 ENERGY STAR or Better Office Equipment: Computer	17.9%	\$ 0.01	4	100.0%	65.0%	0.073	0.36	0.04	0.06	\$0.05	\$0.06	C	D			
MPS Grocery	Plug_Load	Electric	Stock	New	0.41 ENERGY STAR or Better Office Equipment: Printers	13.0%	\$ 0.01	4	100.0%	99.0%	0.053	0.31	0.04	0.04	\$0.07	\$0.10	D	E			
MPS Grocery	Plug_Load	Electric	Stock	New	0.41 ENERGY STAR or Better Office Equipment: Copiers	9.7%	\$ 0.01	4	100.0%	33.0%	0.040	0.27	0.01	0.03	\$0.10	\$0.15	F	F			
MPS Grocery	Refrigeration	Electric	Stock	New	28.13 Night Covers for Display Cases	5.8%	\$ 0.01	5	50.0%	95.0%	1.631	28.13	0.77	1.63	\$0.00	\$0.00	A	A			
MPS Grocery	Refrigeration	Electric	Stock	New	28.13 Anti-Sweat (Humidistat) Controls	5.0%	\$ 0.02	12	100.0%	48.0%	1.404	27.36	0.66	1.37	\$0.00	\$0.00	A	A			
MPS Grocery	Refrigeration	Electric	Stock	New	28.13 Demand Control Defrost - Electric	7.8%	\$ 0.04	10	100.0%	48.0%	2.184	26.70	0.99	2.07	\$0.00	\$0.00	A	A			
MPS Grocery	Refrigeration	Electric	Stock	New	28.13 Installation of Floating Condenser Head Pressure Controls	6.8%	\$ 0.12	14	100.0%	44.4%	1.921	25.71	0.78	1.76	\$0.01	\$0.01	A	A			
MPS Grocery	Refrigeration	Electric	Stock	New	28.13 Strip Curtains for Walk-Ins	4.0%	\$ 0.05	4	100.0%	30.0%	1.132	24.93	0.30	1.00	\$0.01	\$0.02	A	A			
MPS Grocery	Refrigeration	Electric	Stock	New	28.13 Demand Control Defrost - Hot Gas	2.5%	\$ 0.07	10	100.0%	69.6%	0.705	24.63	0.43	0.62	\$0.02	\$0.02	A	A			
MPS Grocery	Refrigeration	Electric	Stock	New	28.13 Refrigeration Commissioning	5.0%	\$ 0.06	3	100.0%	60.0%	1.407	24.20	0.60	1.21	\$0.02	\$0.02	A	A			
MPS Grocery	Refrigeration	Electric	Stock	New	28.13 Compressor VSD retrofit	6.2%	\$ 0.41	10	50.0%	95.0%	1.745	23.59	0.69	1.46	\$0.04	\$0.04	B	B			
MPS Grocery	Refrigeration	Electric	Stock	New	28.13 High Efficiency Case Fans	12.0%	\$ 1.16	16	100.0%	95.0%	3.370	22.90	2.61	2.74	\$0.04	\$0.05	B	C			
MPS Grocery	Refrigeration	Electric	Stock	New	28.13 Reduced Speed or Cycling of Evaporator Fans	0.6%	\$ 0.09	5	100.0%	80.0%	0.155	20.29	0.09	0.11	\$0.16	\$0.22	F	F			
MPS Grocery	Space_Heat	Electric	Stock	New	5.42 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	0.271	5.42	0.14	0.27	\$0.13	\$0.13	F	F			
MPS Grocery	Space_Heat	Electric	Stock	New	5.42 Ceiling R-19 to R-38 Insulation	3.0%	\$ 0.24	20	50.0%	85.0%	0.163	5.28	0.07	0.16	\$0.16	\$0.16	F	F			
MPS Grocery	Space_Heat	Electric	Stock	New	5.42 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	0.143	5.22	0.06	0.14	\$0.98	\$1.01	F	F			
MPS Grocery	Water_Heat	Electric	Stock	New	2.4 Heat Pump Water Heater	30.0%	\$ 0.84	15	75.0%	100.0%	0.750	2.40	0.54	0.72	\$0.14	\$0.14	F	F			
MPS Grocery	Water_Heat	Electric	Stock	New	2.4 Demand controlled circulating systems	5.0%	\$ 1.32	15	50.0%	100.0%	0.120	1.86	0.05	0.09	\$1.35	\$1.75	F	F			
MPS Health	Cooling_Chillers	Electric	Stock	New	3.36 EMS Optimization	1.0%	\$ -	5	100.0%	50.0%	0.034	3.36	0.02	0.03	\$0.03	\$0.03	A	A			
MPS Health	Cooling_Chillers	Electric	Stock	New	3.36 High Efficiency Windows, Low-e; U=0.35	1.2%	\$ 0.01	30	75.0%	99.0%	0.039	3.34	0.02	0.04	\$0.03	\$0.03	B	B			
MPS Health	Cooling_Chillers	Electric	Stock	New	3.36 Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	\$ 0.16	15	67.0%	90.0%	0.252	3.32	0.15	0.25	\$0.08	\$0.08	E	E			
MPS Health	Cooling_Chillers	Electric	Stock	New	3.36 Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.68	15	50.0%	80.0%	0.403	3.17	0.15	0.38	\$0.21	\$0.22	F	F			
MPS Health	Cooling_Chillers	Electric	Stock	New	3.36 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.44	10	50.0%	100.0%	0.336	3.02	0.15	0.30	\$0.21	\$0.23	F	F			
MPS Health	Cooling_Chillers	Electric	Stock	New	3.36 Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.30	10	33.0%	50.0%	0.168	2.87	0.02	0.14	\$0.28	\$0.33	F	F			
MPS Health	Cooling_Chillers	Electric	Stock	New	3.36 Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.21	20	50.0%	20.0%	0.030	2.85	0.00	0.03	\$0.75	\$0.89	F	F			
MPS Health	Cooling_Chillers	Electric	Stock	New	3.36 Cool Roofs (Reflective and Spray Evaporative)	0.6%	\$ 0.16	10	90.0%	100.0%	0.021	2.84	0.02	0.02	\$1.17	\$1.38	F	F			
MPS Health	Cooling_Chillers	Electric	Stock	New	3.36 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	0.088	2.83	0.03	0.07	\$1.57	\$1.87	F	F			
MPS Health	Cooling_DX	Electric	Stock	New	3.36 High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.03	30	75.0%	66.0%	0.168	3.36	0.08	0.17	\$0.02	\$0.02	A	A			
MPS Health	Cooling_DX	Electric	Stock	New	3.36 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.44	10	50.0%	100.0%	0.336	3.28	0.16	0.33	\$0.21	\$0.21	F	F			
MPS Health	Cooling_DX	Electric	Stock	New	3.36 DX Tune-Up / Diagnostics	10.0%	\$ 0.35	3	100.0%	10.0%	0.336	3.11	0.03	0.31	\$0.44	\$0.48	F	F			
MPS Health	Cooling_DX	Electric	Stock	New	3.36 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	\$ 1.31	10	25.0%	95.0%	0.336	3.08	0.07	0.31	\$0.62	\$0.67	F	F			
MPS Health	Cooling_DX	Electric	Stock	New	3.36 Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.21	20	50.0%	20.0%	0.030	3.01	0.00	0.03	\$0.75	\$0.84	F	F			
MPS Health	Cooling_DX	Electric	Stock	New	3.36 Cool Roofs (Reflective and Spray Evaporative)	0.6%	\$ 0.16	10	50.0%	100.0%	0.021	3.01	0.01	0.02	\$1.17	\$1.30	F	F			
MPS Health	Cooling_DX	Electric	Stock	New	3.36 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	0.088	3.00	0.04	0.08	\$1.57	\$1.76	F	F			
MPS Health	Cooling_HeatPump	Electric	Stock	New	3.36 High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.03	30	75.0%	66.0%	0.168	3.36	0.08	0.17	\$0.02	\$0.02	A	A			
MPS Health	Cooling_HeatPump	Electric	Stock	New	3.36 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.44	10	50.0%	100.0%	0.336	3.28	0.16	0.33	\$0.21	\$0.21	F	F			
MPS Health	Cooling_HeatPump	Electric	Stock	New	3.36 DX Tune-Up / Diagnostics	10.0%	\$ 0.35	3	100.0%	10.0%	0.336	3.11	0.03	0.31	\$0.44	\$0.48	F	F			
MPS Health	Cooling_HeatPump	Electric	Stock	New	3.36 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	\$ 1.31	10	25.0%	95.0%	0.336	3.08	0.07	0.31	\$0.62	\$0.67	F	F			
MPS Health	Cooling_HeatPump	Electric	Stock	New	3.36 Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.21	20	50.0%	20.0%	0.030	3.01	0.00	0.03	\$0.75	\$0.84	F	F			
MPS Health	Cooling_HeatPump	Electric	Stock	New	3.36 Cool Roofs (Reflective and Spray Evaporative)	0.6%	\$ 0.16	10	50.0%	100.0%	0.021	3.01	0.01	0.02	\$1.17	\$1.30	F	F			
MPS Health	Cooling_HeatPump	Electric	Stock	New	3.36 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	0.088	3.00	0.04	0.08	\$1.57	\$1.76	F	F			
MPS Health	Lighting_2L4T12	Electric	Stock	New	10.77 4' 1L T8 Premium, EB, reflector	61.1%	\$ 1.54	12	33.3%	100.0%	6.582	10.77	2.19	6.58	\$0.03	\$0.03	B	B			
MPS Health	Lighting_2L4T12	Electric	Stock	New	10.77 4' 2L T8 Premium, EB	25.0%	\$ 0.76	12	33.3%	100.0%	2.693	10.77	0.90	2.69	\$0.04	\$0.04	B	B			
MPS Health	Lighting_2L4T12	Electric	Stock	New	10.77 4' 1L T5HO, EB	13.9%	\$ 0.58	12	33.3%	100.0%	1.497	10.77	0.50	1.50	\$0.05	\$0.05	C	C			
MPS Health	Lighting_2L4T12	Electric	Stock	New	10.77 Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	\$ 3.74	8	10.0%	100.0%	8.078	10.77	0.81	8.08	\$0.09	\$0.09	E	E			
MPS Health	Lighting_2L4T8	Electric	Stock	New	8.62 4' 2L T8 Premium, EB	8.5%	\$ 0.26	12	100.0%	100.0%	0.733	8.62	0.73	0.73	\$0.05	\$0.05	C	C			
MPS Health	Lighting_2L8T12	Electric	Stock	New	10.77 8' 2L T8, EB	52.8%	\$ 0.35	12	50.0%	100.0%	5.687	10.77	2.84	5.69	\$0.01	\$0.01	A	A			
MPS Health	Lighting_2L8T12	Electric	Stock	New	10.77 8' 1L T12, 60W, EB, reflector	55.3%	\$ 0.77	12	25.0%	100.0%	2.556	10.77	1.49	5.96	\$0.02	\$0.02	A	A			
MPS Health	Lighting_2L8T12	Electric	Stock	New	10.77 8' 2L T12, 60W, EB	10.6%	\$ 0.17	12	25.0%	100.0%	1.138	10.77	0.14	1.14	\$0.02	\$0.02	A	A			
MPS Health	Lighting_2L8T12	Electric	Stock	New	10.77 Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	\$ 3.99	8	10.0%	100.0%	8.078	10.77	0.81	8.08	\$0.09	\$0.09	E	E			
MPS Health	Lighting_3L4T12	Electric	Stock	New	10.77 4' 1L T5HO, EB	46.1%	\$ 0.01	12	25.0%	100.0%	4.964	10.77	1.24	4.96	\$0.00	\$0.00	A	A			
MPS Health	Lighting_3L4T12	Electric	Stock	New	10.77 4' 3L T8, EB	22.6%	\$ 0.01	12	25.0%	100.0%	2.435	10.77	0.61	2.43	\$0.00	\$0.00	A	A			
MPS Health	Lighting_3L4T12	Electric	Stock	New	10.77 4' 2L T8 Premium, EB, reflector	53.0%	\$ 0.07	12	25.0%	100.0%	5.713	10.77	1.43	5.71	\$0.00	\$0.00	A	A			
MPS Health	Lighting_3L4T12	Electric	Stock	New	10.77 4' 3L T8 Premium, EB	22.6%	\$ 0.03	12	25.0%	100.0%	2.435	10.77	0.61	2.43	\$0.00	\$0.00	A	A			
MPS Health	Lighting_3L4T8	Electric	Stock	New	8.62 4' 3L T8 Premium, EB	6.7%	\$ 0.42	12	100.0%	100.0%	0.578	8.62	0.58	0.58	\$0.10	\$0.10	F	F			
MPS Health	Lighting_4L4T12	Electric	Stock	New	10.77 4' 3L T8, EB	38.2%	\$ 0.09	12	16.7%	100.0%	4.114	10.77	0.69	4.11	\$0.00	\$0.00	A	A			
MPS Health	Lighting_4L4T12	Electric	Stock	New	10.77 4' 3L T8 Premium, EB	42.4%	\$ 0.31	12	16.7%	100.0%	16.7%	4.562	10.77	0.76	4.56	\$0.01	\$0.01	A	A		
MPS Health	Lighting_4L4T12	Electric	Stock	New	10.77 4' 4L T8, EB	22.2%	\$ 0.20	12	16.7%	100.0%	16.7%	2.963	10.77	0.40	2.39	\$0.01	\$0.01	A	A		
MPS Health	Lighting_4L4T12	Electric	Stock	New	10.77 4' 2L T8 Premium, EB, reflector	62.5%	\$ 0.72	12	16.7%	100.0%	16.7%	2.919	10.77	0.42	6.73	\$0.02	\$0.02	A	A		
MPS Health	Lighting_4L4T12	Electric	Stock	New	10.77 4' 2L T5HO, EB	18.8%	\$ 0.28	12	16.7%	100.0%	16.7%	2.019	10.77	0.34	2.02	\$0.02	\$0.02	A	A		
MPS Health	Lighting_4L4T12	Electric	Stock	New	10.77 4' 4L T8 Premium, EB	25.0%	\$ 0.48	12	16.7%	100.0%	16.7%	2.693	10.77	0.45	2.69	\$0.03	\$0.03	A	A		
MPS Health	Lighting_4L4T12	Electric	Stock	New	10.77 Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	\$ 3.84	8	10.0%	100.0%	10.0%	8.078	10.77	0.81	8.08	\$0.09	\$0.09	E	E		
MPS Health	Lighting_4L4T8	Electric	Stock	New	8.62 4' 4L T8 Premium, EB	3.6%	\$ 0.30	12	100.0%	100.0%	0.310	8.62	0.31	0.31	\$0.13	\$0.13	F	F			
MPS Health	Lighting_INC150W	Electric	Stock	New	10.77 HPS, 50W	56.0%	\$ 2.85	4	45.0%	90.0%	6.031	10.77	2.44	6.03	\$0.15	\$0.15	F	F			
MPS Health	Plug_Load	Electric	Stock	New	0.52 Smart Networks	6.4%	\$ 0.00	4	90.0%	40.0%	0.033	0.52	0.01	0.03	\$0.04	\$0.04	B	B			
MPS Health	Plug_Load	Electric	Stock	New	0.52 ENERGY STAR or Better Office Equipment: Monitors	15.4%	\$ 0.06	4	100.0%	71.0%	0.080	0.51	0.06	0.08	\$0.23	\$0.23	F	F			
MPS Health	Plug_Load	Electric	Stock	New	0.52 ENERGY STAR or Better Office Equipment: Copiers	10.2%	\$ 0.04	4	100.0%	33.0%	0.053	0.45	0.02	0.05	\$0.24	\$0.28	F	F			
MPS Health	Plug_Load	Electric	Stock	New	0.52 ENERGY STAR or Better Office Equipment: Computer	17.4%	\$ 0.11	4	100.0%	65.0%	0.090	0.44	0.05	0.08	\$0.40	\$0.48	F	F			
MPS Health	Plug_Load	Electric	Stock	New	0.52 ENERGY STAR or Better Office Equipment: Printers	13.2%	\$ 0.11	4	100.0%	99.0%	0.059	0.39	0.05	0.05	\$0.53	\$0.71	F	F			
MPS Health	Space_Heat	Electric	Stock	New	4.96 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	0.248	4.96	0.12	0.25	\$0.14	\$0.14	F	F			
MPS Health	Space_Heat	Electric	Stock	New	4.96 Ceiling R-19 to R-38 Insulation	3.0%	\$ 0.21	20	50.0%	40.0%	0.149	4.84	0.03	0.15	\$0.15	\$0.16	F				

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS	Large_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.110	3.67	0.04	0.10	\$1.26	\$1.44	F	F
MPS	Large_Office	Lighting_2L4T12	Electric	Stock	New	5.29	4' 1L T8 Premium, EB, reflector	61.1%	1.58	16	33.3%	100.0%	33.3%	3.233	5.29	1.08	3.23	\$0.06	\$0.06	C	C
MPS	Large_Office	Lighting_2L4T12	Electric	Stock	New	5.29	4' 2L T8 Premium, EB	25.0%	0.77	16	33.3%	100.0%	33.3%	1.323	5.29	0.44	1.32	\$0.07	\$0.07	D	D
MPS	Large_Office	Lighting_2L4T12	Electric	Stock	New	5.29	4' 1L T5HO, EB	13.9%	0.59	16	33.3%	100.0%	33.3%	0.735	5.29	0.25	0.74	\$0.09	\$0.09	E	E
MPS	Large_Office	Lighting_2L4T12	Electric	Stock	New	5.29	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	3.82	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.14	\$0.14	F	F
MPS	Large_Office	Lighting_2L4T8	Electric	Stock	New	4.24	4' 2L T8 Premium, EB	8.5%	0.27	16	100.0%	100.0%	100.0%	0.360	4.24	0.36	0.36	\$0.09	\$0.09	E	E
MPS	Large_Office	Lighting_2L8T12	Electric	Stock	New	5.29	8' 2L T8, EB	52.8%	0.36	16	50.0%	100.0%	50.0%	2.793	5.29	1.40	2.79	\$0.02	\$0.02	A	A
MPS	Large_Office	Lighting_2L8T12	Electric	Stock	New	5.29	8' 1L T12, 60W, EB, reflector	55.3%	0.79	16	25.0%	100.0%	25.0%	2.925	5.29	0.73	2.93	\$0.03	\$0.03	B	B
MPS	Large_Office	Lighting_2L8T12	Electric	Stock	New	5.29	8' 2L T12, 60W, EB	10.6%	0.17	16	25.0%	100.0%	25.0%	0.559	5.29	0.66	0.56	\$0.04	\$0.04	B	B
MPS	Large_Office	Lighting_2L8T12	Electric	Stock	New	5.29	Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	4.09	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F
MPS	Large_Office	Lighting_3L4T12	Electric	Stock	New	5.29	4' 1L T5HO, EB	46.1%	0.05	16	25.0%	100.0%	25.0%	2.438	5.29	0.61	2.44	\$0.00	\$0.00	A	A
MPS	Large_Office	Lighting_3L4T12	Electric	Stock	New	5.29	4' 3L T8, EB	22.6%	0.05	16	25.0%	100.0%	25.0%	1.196	5.29	0.30	1.20	\$0.00	\$0.00	A	A
MPS	Large_Office	Lighting_3L4T12	Electric	Stock	New	5.29	4' 2L T8 Premium, EB, reflector	53.0%	0.28	16	25.0%	100.0%	25.0%	2.806	5.29	0.70	2.81	\$0.01	\$0.01	A	A
MPS	Large_Office	Lighting_3L4T12	Electric	Stock	New	5.29	4' 3L T8 Premium, EB	22.6%	0.13	16	25.0%	100.0%	25.0%	1.196	5.29	0.30	1.20	\$0.01	\$0.01	A	A
MPS	Large_Office	Lighting_3L4T8	Electric	Stock	New	4.24	4' 3L T8 Premium, EB	6.7%	0.43	16	100.0%	100.0%	100.0%	0.284	4.24	0.28	0.28	\$0.18	\$0.18	F	F
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 3L T8, EB	38.2%	0.10	16	16.7%	100.0%	16.7%	2.021	5.29	0.34	2.02	\$0.01	\$0.01	A	A
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 3L T8 Premium, EB	42.4%	0.32	16	16.7%	100.0%	16.7%	2.241	5.29	0.37	2.24	\$0.02	\$0.02	A	A
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 4L T8, EB	22.2%	0.21	16	16.7%	100.0%	16.7%	1.176	5.29	0.20	1.18	\$0.02	\$0.02	A	A
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 2L T8 Premium, EB, reflector	62.5%	0.17	16	16.7%	100.0%	16.7%	3.306	5.29	0.55	3.31	\$0.03	\$0.03	A	A
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 2L T5HO, EB	18.8%	0.29	16	16.7%	100.0%	16.7%	0.992	5.29	0.17	0.99	\$0.03	\$0.03	B	B
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 4L T8 Premium, EB	25.0%	0.50	16	16.7%	100.0%	16.7%	1.323	5.29	0.22	1.32	\$0.04	\$0.04	B	B
MPS	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	3.93	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F
MPS	Large_Office	Lighting_4L4T8	Electric	Stock	New	4.24	4' 4L T8 Premium, EB	3.6%	0.30	16	100.0%	100.0%	100.0%	0.153	4.24	0.15	0.15	\$0.24	\$0.24	F	F
MPS	Large_Office	Lighting_INC150W	Electric	Stock	New	5.29	HPS, 50W	56.0%	4.80	6	45.0%	93.9%	42.2%	2.962	5.29	1.25	2.96	\$0.38	\$0.38	F	F
MPS	Large_Office	Plug_Load	Electric	Stock	New	1.59	Smart Networks	9.1%	0.01	4	90.0%	40.0%	36.0%	0.145	1.59	0.05	0.15	\$0.02	\$0.02	A	A
MPS	Large_Office	Plug_Load	Electric	Stock	New	1.59	ENERGY STAR or Better Office Equipment: Monitors	21.9%	0.09	4	100.0%	71.0%	71.0%	0.349	1.54	0.24	0.34	\$0.09	\$0.09	E	E
MPS	Large_Office	Plug_Load	Electric	Stock	New	1.59	ENERGY STAR or Better Office Equipment: Copiers	4.8%	0.03	4	100.0%	33.0%	33.0%	0.077	1.30	0.02	0.06	\$0.14	\$0.18	F	F
MPS	Large_Office	Plug_Load	Electric	Stock	New	1.59	ENERGY STAR or Better Office Equipment: Computer	24.7%	0.18	4	100.0%	65.0%	65.0%	0.393	1.28	0.21	0.32	\$0.15	\$0.19	F	F
MPS	Large_Office	Plug_Load	Electric	Stock	New	1.59	ENERGY STAR or Better Office Equipment: Printers	8.0%	0.10	4	100.0%	99.0%	99.0%	0.127	1.07	0.09	0.09	\$0.39	\$0.26	F	F
MPS	Large_Office	Space_Heat	Electric	Stock	New	6.18	Ceiling R-19 to R-38 Insulation	3.0%	0.16	20	50.0%	12.9%	6.5%	0.185	6.18	0.01	0.19	\$0.09	\$0.09	E	E
MPS	Large_Office	Space_Heat	Electric	Stock	New	6.18	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	0.28	15	50.0%	100.0%	50.0%	0.309	6.17	0.15	0.31	\$0.11	\$0.11	F	F
MPS	Large_Office	Space_Heat	Electric	Stock	New	6.18	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.163	6.01	0.07	0.16	\$0.86	\$0.88	F	F
MPS	Large_Office	Water_Heat	Electric	Stock	New	0.95	Heat Pump Water Heater	30.0%	0.58	15	75.0%	100.0%	75.0%	0.285	0.95	0.21	0.29	\$0.25	\$0.25	F	F
MPS	Large_Office	Water_Heat	Electric	Stock	New	0.95	Demand controlled circulating systems	5.0%	0.91	15	50.0%	93.2%	46.6%	0.048	0.74	0.02	0.04	\$2.35	\$3.03	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	EMS Optimization	1.0%	-	5	100.0%	50.0%	50.0%	0.028	2.83	0.01	0.03	\$0.00	\$0.00	A	A
MPS	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	High Efficiency Windows, Low-e; U=0.35	7.0%	0.06	30	75.0%	92.9%	69.7%	0.199	2.82	0.14	0.20	\$0.03	\$0.03	A	A
MPS	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	0.17	15	67.0%	90.0%	60.3%	0.212	2.68	0.12	0.20	\$0.10	\$0.10	E	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Primary/Secondary De-coupled Chilled Water System	12.0%	0.71	15	50.0%	80.0%	40.0%	0.340	2.56	0.12	0.31	\$0.26	\$0.29	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.48	10	50.0%	100.0%	50.0%	0.283	2.43	0.12	0.24	\$0.26	\$0.26	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Optimize Chilled Water and Condenser Water Settings	5.0%	0.31	10	33.0%	60.0%	30.0%	0.142	2.31	0.05	0.35	\$0.43	\$0.43	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Ceiling R-19 to R-38 Insulation	0.9%	0.11	20	50.0%	34.6%	17.3%	0.025	2.29	0.00	0.02	\$0.44	\$0.54	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Cool Roofs (Reflective and Spray Evaporative)	0.4%	0.04	10	90.0%	100.0%	90.0%	0.011	2.29	0.01	0.01	\$0.56	\$0.69	F	F
MPS	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.074	2.28	0.03	0.06	\$1.87	\$2.32	F	F
MPS	Lodging	Cooling_DX	Electric	Stock	New	2.83	Occupancy Sensor for room HVAC units	35.0%	0.30	15	51.0%	100.0%	51.0%	0.991	2.83	0.51	0.99	\$0.04	\$0.04	B	B
MPS	Lodging	Cooling_DX	Electric	Stock	New	2.83	High Efficiency Windows, Low-e; U=0.35	5.0%	0.16	30	75.0%	92.9%	69.7%	0.142	2.32	0.08	0.12	\$0.10	\$0.12	F	F
MPS	Lodging	Cooling_DX	Electric	Stock	New	2.83	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.46	10	50.0%	100.0%	50.0%	0.283	2.24	0.11	0.22	\$0.26	\$0.33	F	F
MPS	Lodging	Cooling_DX	Electric	Stock	New	2.83	Ceiling R-19 to R-38 Insulation	0.9%	0.11	20	50.0%	34.6%	17.3%	0.025	2.13	0.00	0.02	\$0.44	\$0.58	F	F
MPS	Lodging	Cooling_DX	Electric	Stock	New	2.83	DX Tune-Up / Diagnostics	10.0%	0.37	3	100.0%	10.0%	10.0%	0.283	2.13	0.02	0.21	\$0.55	\$0.73	F	F
MPS	Lodging	Cooling_DX	Electric	Stock	New	2.83	Cool Roofs (Reflective and Spray Evaporative)	0.4%	0.04	10	50.0%	100.0%	50.0%	0.011	2.11	0.00	0.01	\$0.56	\$0.75	F	F
MPS	Lodging	Cooling_DX	Electric	Stock	New	2.83	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	1.38	10	25.0%	95.0%	23.8%	0.283	2.10	0.05	0.21	\$0.77	\$1.04	F	F
MPS	Lodging	Cooling_DX	Electric	Stock	New	2.83	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.074	2.05	0.02	0.05	\$1.87	\$2.57	F	F
MPS	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	High Efficiency Windows, Low-e; U=0.35	5.0%	0.16	30	75.0%	92.9%	69.7%	0.142	2.83	0.10	0.14	\$0.10	\$0.10	F	F
MPS	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.46	10	50.0%	100.0%	50.0%	0.283	2.73	0.14	0.27	\$0.26	\$0.27	F	F
MPS	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	Ceiling R-19 to R-38 Insulation	0.9%	0.11	20	50.0%	34.6%	17.3%	0.025	2.59	0.00	0.02	\$0.44	\$0.48	F	F
MPS	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	DX Tune-Up / Diagnostics	10.0%	0.37	3	100.0%	10.0%	10.0%	0.283	2.59	0.03	0.26	\$0.55	\$0.60	F	F
MPS	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	Cool Roofs (Reflective and Spray Evaporative)	0.4%	0.04	10	50.0%	100.0%	50.0%	0.011	2.56	0.01	0.01	\$0.56	\$0.62	F	F
MPS	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	1.38	10	25.0%	95.0%	23.8%	0.283	2.56	0.06	0.26	\$0.77	\$0.85	F	F
MPS	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.074	2.56	0.03	0.07	\$1.87	\$2.12	F	F
MPS	Lodging	Lighting_2L4T12	Electric	Stock	New	3.01	4' 1L T8 Premium, EB, reflector	61.1%	0.78	26	33.3%	100.0%	33.3%	3.01	3.01	0.61	3.01	\$0.04	\$0.04	A	A
MPS	Lodging	Lighting_2L4T12	Electric	Stock	New	3.01	4' 2L T8 Premium, EB	25.0%	0.38	26	33.3%	100.0%	33.3%	1.753	3.01	0.25	0.75	\$0.05	\$0.05	C	C
MPS	Lodging	Lighting_2L4T12	Electric	Stock	New	3.01	4' 1L T5HO, EB	13.9%	0.29	26	33.3%	100.0%	33.3%	0.418	3.01	0.14	0.42	\$0.07	\$0.07	D	D
MPS	Lodging	Lighting_2L4T12	Electric	Stock	New	3.01	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	1.89	19	30.0%	100.0%	30.0%	2.258	3.01	0.68	2.26	\$0.09	\$0.09	E	E
MPS	Lodging	Lighting_2L4T8	Electric	Stock	New	2.41	4' 2L T8 Premium, EB	8.5%	0.13	26	100.0%	100.0%	100.0%	0.205	2.41	0.20	0.20	\$0.06	\$0.06	D	D
MPS	Lodging	Lighting_2L8T12	Electric	Stock	New	3.01	8' 2L T8, EB	52.8%	0.18	26	50.0%	100.0%	50.0%	1.589	3.01	0.79	1.59	\$0.01	\$0.01	A	A
MPS																					

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.19	10	50.0%	100.0%	50.0%	0.239	2.13	0.11	0.21	\$0.13	\$0.14	F	F
MPS	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Optimize Chilled Water and Condenser Water Settings	5.0%	0.13	10	33.0%	50.0%	16.5%	0.120	2.02	0.02	0.10	\$0.18	\$0.21	F	F
MPS	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Cool Roofs (Reflective and Spray Evaporative)	13.0%	0.47	10	90.0%	100.0%	90.0%	0.310	2.01	0.23	0.26	\$0.24	\$0.29	F	F
MPS	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Ceiling R-19 to R-38 Insulation	0.9%	0.22	20	50.0%	40.2%	20.1%	0.022	1.77	0.00	0.02	\$1.09	\$1.47	F	F
MPS	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.063	1.77	0.02	0.05	\$2.21	\$2.99	F	F
MPS	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	High Efficiency Windows, Low-e, U=0.35	5.0%	0.05	30	75.0%	76.3%	57.2%	0.120	2.39	0.07	0.12	\$0.04	\$0.04	B	B
MPS	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.19	10	50.0%	100.0%	50.0%	0.239	2.32	0.12	0.23	\$0.13	\$0.13	F	F
MPS	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	Cool Roofs (Reflective and Spray Evaporative)	13.0%	0.42	10	50.0%	100.0%	50.0%	0.310	2.21	0.14	0.29	\$0.22	\$0.24	F	F
MPS	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	DX Tune-Up / Diagnostics	10.0%	0.15	3	100.0%	10.0%	10.0%	0.239	2.06	0.02	0.21	\$0.28	\$0.32	F	F
MPS	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	0.58	10	25.0%	95.0%	23.8%	0.239	2.04	0.05	0.20	\$0.10	\$0.10	F	F
MPS	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	Ceiling R-19 to R-38 Insulation	0.9%	0.22	20	50.0%	40.2%	20.1%	0.022	1.99	0.00	0.02	\$1.09	\$1.31	F	F
MPS	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.063	1.99	0.02	0.05	\$2.21	\$2.66	F	F
MPS	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	High Efficiency Windows, Low-e, U=0.35	5.0%	0.05	30	75.0%	76.3%	57.2%	0.120	2.39	0.07	0.12	\$0.04	\$0.04	B	B
MPS	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.19	10	50.0%	100.0%	50.0%	0.239	2.32	0.12	0.23	\$0.13	\$0.13	F	F
MPS	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Cool Roofs (Reflective and Spray Evaporative)	13.0%	0.42	10	50.0%	100.0%	50.0%	0.310	2.21	0.14	0.29	\$0.22	\$0.24	F	F
MPS	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	DX Tune-Up / Diagnostics	10.0%	0.16	3	100.0%	10.0%	10.0%	0.239	2.06	0.02	0.21	\$0.28	\$0.32	F	F
MPS	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	0.58	10	25.0%	95.0%	23.8%	0.239	2.04	0.05	0.20	\$0.39	\$0.45	F	F
MPS	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Ceiling R-19 to R-38 Insulation	0.9%	0.22	20	50.0%	40.2%	20.1%	0.022	1.99	0.00	0.02	\$1.09	\$1.31	F	F
MPS	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.063	1.99	0.02	0.05	\$2.21	\$2.66	F	F
MPS	Miscellaneous	Lighting_2L4T12	Electric	Stock	New	2.12	4' 1L T8 Premium, EB, reflector	61.1%	1.49	36	33.3%	100.0%	33.3%	1.068	2.12	0.43	1.30	\$0.10	\$0.10	F	F
MPS	Miscellaneous	Lighting_2L4T12	Electric	Stock	New	2.12	4' 2L T8 Premium, EB	25.0%	0.73	36	33.3%	100.0%	33.3%	0.530	2.12	0.18	0.53	\$0.12	\$0.12	F	F
MPS	Miscellaneous	Lighting_2L4T12	Electric	Stock	New	2.12	4' 1L T5HO, EB	13.9%	0.56	36	33.3%	100.0%	33.3%	0.295	2.12	0.10	0.29	\$0.16	\$0.16	F	F
MPS	Miscellaneous	Lighting_2L4T12	Electric	Stock	New	2.12	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	0.32	26	30.0%	100.0%	30.0%	1.590	2.12	0.48	1.59	\$0.22	\$0.22	F	F
MPS	Miscellaneous	Lighting_2L4T8	Electric	Stock	New	1.7	4' 2L T8 Premium, EB	8.5%	0.25	36	100.0%	100.0%	100.0%	0.145	1.70	0.14	0.14	\$0.15	\$0.15	F	F
MPS	Miscellaneous	Lighting_2L8T12	Electric	Stock	New	2.12	8' 2L T8, EB	52.8%	0.35	36	50.0%	100.0%	50.0%	1.119	2.12	0.56	1.12	\$0.03	\$0.03	A	A
MPS	Miscellaneous	Lighting_2L8T12	Electric	Stock	New	2.12	8' 1L T12, 60W, EB, reflector	55.3%	0.77	36	25.0%	100.0%	25.0%	1.172	2.12	0.29	1.17	\$0.06	\$0.06	C	C
MPS	Miscellaneous	Lighting_2L8T12	Electric	Stock	New	2.12	8' 2L T12, 60W, EB	10.6%	0.17	36	25.0%	46.2%	11.5%	0.224	2.12	0.03	0.22	\$0.07	\$0.07	D	D
MPS	Miscellaneous	Lighting_2L8T12	Electric	Stock	New	2.12	Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	0.43	26	30.0%	100.0%	30.0%	1.590	2.12	0.48	1.59	\$0.24	\$0.24	F	F
MPS	Miscellaneous	Lighting_3L4T12	Electric	Stock	New	2.12	4' 1L T5HO, EB	46.1%	0.03	36	25.0%	100.0%	25.0%	0.977	2.12	0.24	0.48	\$0.00	\$0.00	A	A
MPS	Miscellaneous	Lighting_3L4T12	Electric	Stock	New	2.12	4' 3L T8, EB	22.6%	0.03	36	25.0%	100.0%	25.0%	0.479	2.12	0.12	0.48	\$0.01	\$0.01	A	A
MPS	Miscellaneous	Lighting_3L4T12	Electric	Stock	New	2.12	4' 2L T8 Premium, EB, reflector	53.0%	0.19	36	25.0%	100.0%	25.0%	1.125	2.12	0.28	1.12	\$0.01	\$0.01	A	A
MPS	Miscellaneous	Lighting_3L4T12	Electric	Stock	New	2.12	4' 3L T8 Premium, EB	22.6%	0.08	36	25.0%	100.0%	25.0%	0.479	2.12	0.12	0.48	\$0.02	\$0.02	A	A
MPS	Miscellaneous	Lighting_3L4T8	Electric	Stock	New	1.7	4' 3L T8 Premium, EB	6.7%	0.41	36	100.0%	100.0%	100.0%	0.114	1.70	0.11	0.11	\$0.31	\$0.31	F	F
MPS	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 3L T8, EB	38.2%	0.09	36	16.7%	100.0%	16.7%	0.810	2.12	0.13	0.81	\$0.01	\$0.01	A	A
MPS	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 3L T8 Premium, EB	42.4%	0.30	36	16.7%	100.0%	16.7%	0.898	2.12	0.15	0.90	\$0.03	\$0.03	A	A
MPS	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 4L T8, EB	22.2%	0.19	36	16.7%	100.0%	16.7%	0.471	2.12	0.08	0.47	\$0.04	\$0.04	B	B
MPS	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 2L T8 Premium, EB, reflector	62.5%	0.70	36	16.7%	100.0%	16.7%	1.325	2.12	0.22	1.33	\$0.05	\$0.05	C	C
MPS	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 2L T5HO, EB	18.8%	0.27	36	16.7%	100.0%	16.7%	0.398	2.12	0.07	0.40	\$0.06	\$0.06	C	C
MPS	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 4L T8 Premium, EB	25.0%	0.43	36	16.7%	100.0%	16.7%	0.530	2.12	0.09	0.60	\$0.08	\$0.08	E	E
MPS	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	0.69	26	30.0%	100.0%	30.0%	1.590	2.12	0.48	1.59	\$0.22	\$0.22	F	F
MPS	Miscellaneous	Lighting_4L4T8	Electric	Stock	New	1.7	4' 4L T8 Premium, EB	3.6%	0.28	36	100.0%	100.0%	100.0%	0.061	1.70	0.06	0.06	\$0.40	\$0.40	F	F
MPS	Miscellaneous	Lighting_INC150W	Electric	Stock	New	2.12	HPS, 50W	56.0%	5.25	12	45.0%	98.0%	44.1%	1.187	2.12	0.52	1.19	\$0.62	\$0.62	F	F
MPS	Miscellaneous	Plug_Load	Electric	Stock	New	1	Smart Networks	6.9%	0.01	4	90.0%	40.0%	36.0%	0.069	1.00	0.02	0.07	\$0.03	\$0.03	A	A
MPS	Miscellaneous	Plug_Load	Electric	Stock	New	1	ENERGY STAR or Better Office Equipment: Copiers	11.4%	0.04	4	100.0%	33.0%	33.0%	0.114	0.98	0.04	0.11	\$0.12	\$0.13	F	F
MPS	Miscellaneous	Plug_Load	Electric	Stock	New	1	ENERGY STAR or Better Office Equipment: Monitors	16.5%	0.07	4	100.0%	71.0%	71.0%	0.165	0.94	0.11	0.16	\$0.14	\$0.15	F	F
MPS	Miscellaneous	Plug_Load	Electric	Stock	New	1	ENERGY STAR or Better Office Equipment: Computer	18.6%	0.15	4	100.0%	65.0%	65.0%	0.186	0.83	0.10	0.15	\$0.26	\$0.31	F	F
MPS	Miscellaneous	Plug_Load	Electric	Stock	New	1	ENERGY STAR or Better Office Equipment: Printers	9.2%	0.11	4	100.0%	99.0%	99.0%	0.092	0.73	0.07	0.07	\$0.38	\$0.52	F	F
MPS	Miscellaneous	Space_Heat	Electric	Stock	New	2.76	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	0.28	15	50.0%	100.0%	50.0%	0.138	2.76	0.07	0.14	\$0.25	\$0.25	F	F
MPS	Miscellaneous	Space_Heat	Electric	Stock	New	2.76	Ceiling R-19 to R-38 Insulation	3.0%	0.22	20	50.0%	33.4%	6.7%	0.083	2.69	0.01	0.08	\$0.28	\$0.28	F	F
MPS	Miscellaneous	Space_Heat	Electric	Stock	New	2.76	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.073	2.69	0.03	0.07	\$1.32	\$1.97	F	F
MPS	Miscellaneous	Water_Heat	Electric	Stock	New	1.65	Heat Pump Water Heater	30.0%	3.39	15	75.0%	100.0%	75.0%	0.495	1.65	0.37	0.50	\$0.84	\$0.84	F	F
MPS	Miscellaneous	Water_Heat	Electric	Stock	New	1.65	Demand controlled circulation systems	5.0%	0.52	15	50.0%	100.0%	50.0%	0.083	1.28	0.03	0.06	\$7.94	\$10.25	F	F
MPS	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	EMS Optimization	1.0%	0.05	5	100.0%	50.0%	50.0%	0.045	4.49	0.02	0.04	\$0.00	\$0.00	A	A
MPS	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	High Efficiency Windows, Low-e; U=0.35	5.4%	0.02	30	50.0%	100.0%	50.0%	0.242	4.47	0.12	0.24	\$0.01	\$0.01	A	A
MPS	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	0.07	15	67.0%	90.0%	60.3%	0.337	4.35	0.20	0.33	\$0.02	\$0.03	A	A
MPS	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Primary/Secondary De-coupled Chilled Water System	12.0%	0.29	15	50.0%	80.0%	40.0%	0.539	4.15	0.20	0.50	\$0.07	\$0.07	D	D
MPS	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.18	10	50.0%	100.0%	50.0%	0.449	3.95	0.20	0.40	\$0.07	\$0.07	D	D
MPS	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Optimize Chilled Water and Condenser Water Settings	5.0%	0.13	10	33.0%	50.0%	16.5%	0.225	3.75	0.03	0.19	\$0.09	\$0.11	E	F
MPS	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Cool Roofs (Reflective and Spray Evaporative)	4.3%	0.47	10	50.0%	100.0%	50.0%	0.372	3.72	0.14	0.19	\$0.39	\$0.47	F	F
MPS	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Ceiling R-19 to R-38 Insulation	0.9%	0.22	20	50.0%	40.2%	20.1%	0.040	3.58	0.02	0.03	\$0.59	\$0.74	F	F
MPS	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.118	3.56	0.04	0.09	\$1.18	\$1.48	F	F
MPS	Restaurant	Cooling_DX	Electric	Stock	New	4.49	High Efficiency Windows, Low-e; U=0.35	5.0%	0.05	30	50.0%	100.0%	50.0%	0.225	4.49	0.11	0.22	\$0.02	\$0.02	A	A
MPS	Restaurant	Cooling_DX	Electric	Stock	New	4.49	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.18	10	50.0%	100.0%	50.0%	0.449	4.38	0.22	0.44	\$0.07	\$0.07	D	D
MPS	Restaurant	Cooling_DX	Electric	Stock	New	4.49	DX Tune-Up / Diagnostics	10.0%	0.15	3	100.0%	10.0%	10.0%	0.449	4.16	0.04	0.42	\$0.14	\$0.15	F	F
MPS	Restaurant	Cooling_DX	Electric	Stock	New	4.49	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	1													



Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor * Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS Restaurant	Lighting_4L4T8	Electric	Stock	New	6.99 4' 4L T8 Premium, EB	3.6%	0.31	22	100.0%	100.0%	100.0%	0.252	6.99	0.25	0.25	\$0.13	\$0.13	F	F		
MPS Restaurant	Lighting_INC150W	Electric	Stock	New	8.74 HPS, 50W	56.0%	5.10	8	45.0%	90.4%	40.7%	4.894	8.74	1.99	4.89	\$0.19	\$0.19	F	F		
MPS Restaurant	Plug_Load	Electric	Stock	New	0.23 Smart Networks	6.8%	0.00	4	90.0%	40.0%	36.0%	0.016	0.23	0.01	0.02	\$0.03	\$0.03	A	A		
MPS Restaurant	Plug_Load	Electric	Stock	New	0.23 ENERGY STAR or Better Office Equipment: Monitors	16.3%	0.02	4	100.0%	71.0%	71.0%	0.038	0.22	0.03	0.04	\$0.13	\$0.14	F	F		
MPS Restaurant	Plug_Load	Electric	Stock	New	0.23 ENERGY STAR or Better Office Equipment: Copiers	7.8%	0.01	4	100.0%	33.0%	33.0%	0.018	0.20	0.01	0.02	\$0.21	\$0.24	F	F		
MPS Restaurant	Plug_Load	Electric	Stock	New	0.23 ENERGY STAR or Better Office Equipment: Computer	18.4%	0.03	4	100.0%	65.0%	65.0%	0.042	0.19	0.02	0.04	\$0.24	\$0.28	F	F		
MPS Restaurant	Plug_Load	Electric	Stock	New	0.23 ENERGY STAR or Better Office Equipment: Printers	15.0%	0.04	4	100.0%	99.0%	99.0%	0.034	0.17	0.03	0.03	\$0.34	\$0.45	F	F		
MPS Restaurant	Refrigeration	Electric	Stock	New	7.67 Night Covers for Display Cases	5.8%	0.01	5	50.0%	95.0%	47.5%	0.445	7.67	0.21	0.44	\$0.01	\$0.01	A	A		
MPS Restaurant	Refrigeration	Electric	Stock	New	7.67 Anti-Sweat (Humidistat) Controls	5.0%	0.02	12	100.0%	48.0%	48.0%	0.383	7.46	0.18	0.37	\$0.01	\$0.01	A	A		
MPS Restaurant	Refrigeration	Electric	Stock	New	7.67 Demand Control Defrost - Electric	7.8%	0.04	10	100.0%	48.0%	48.0%	0.595	7.28	0.27	0.57	\$0.01	\$0.01	A	A		
MPS Restaurant	Refrigeration	Electric	Stock	New	7.67 Installation of Floating Condenser Head Pressure Controls	6.8%	0.12	14	100.0%	44.4%	44.4%	0.524	7.01	0.21	0.48	\$0.03	\$0.03	B	B		
MPS Restaurant	Refrigeration	Electric	Stock	New	7.67 Strip Curtains for Walk-Ins	4.0%	0.05	4	100.0%	30.0%	30.0%	0.309	6.80	0.08	0.27	\$0.05	\$0.06	C	C		
MPS Restaurant	Refrigeration	Electric	Stock	New	7.67 Demand Control Defrost - Hot Gas	2.5%	0.07	10	100.0%	69.6%	69.6%	0.192	6.71	0.12	0.17	\$0.05	\$0.06	C	D		
MPS Restaurant	Refrigeration	Electric	Stock	New	7.67 Refrigeration Commissioning	5.0%	0.06	3	100.0%	50.0%	50.0%	0.384	6.60	0.16	0.33	\$0.07	\$0.08	D	E		
MPS Restaurant	Refrigeration	Electric	Stock	New	7.67 Compressor VSD retrofit	6.2%	0.41	10	50.0%	95.0%	47.5%	0.476	6.43	0.19	0.40	\$0.14	\$0.16	F	F		
MPS Restaurant	Refrigeration	Electric	Stock	New	7.67 High Efficiency Case Fans	12.0%	1.16	16	100.0%	95.0%	95.0%	0.919	6.24	0.71	0.75	\$0.15	\$0.18	F	F		
MPS Restaurant	Refrigeration	Electric	Stock	New	7.67 Reduced Speed or Cycling of Evaporator Fans	0.6%	0.09	5	100.0%	80.0%	80.0%	0.042	5.53	0.02	0.03	\$0.05	\$0.08	F	F		
MPS Restaurant	Space_Heat	Electric	Stock	New	3.76 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	0.28	15	50.0%	100.0%	50.0%	0.188	3.76	0.09	0.19	\$0.18	\$0.18	F	F		
MPS Restaurant	Space_Heat	Electric	Stock	New	3.76 Ceiling R-19 to R-38 Insulation	3.0%	0.22	20	50.0%	67.0%	33.5%	0.113	3.67	0.04	0.37	\$0.11	\$0.21	F	F		
MPS Restaurant	Space_Heat	Electric	Stock	New	3.76 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	0.13	20	50.0%	90.0%	45.0%	0.069	3.63	0.04	0.10	\$1.41	\$1.46	F	F		
MPS Restaurant	Water_Heat	Electric	Stock	New	9.19 Heat Pump Water Heater	30.0%	1.80	15	75.0%	100.0%	75.0%	2.757	9.19	2.07	2.76	\$0.08	\$0.08	E	E		
MPS Restaurant	Water_Heat	Electric	Stock	New	9.19 Demand controlled circulating systems	5.0%	2.83	15	50.0%	100.0%	50.0%	0.460	7.12	0.18	0.36	\$0.76	\$0.98	F	F		
MPS Retail	Cooling_Chillers	Electric	Stock	New	3.14 EMS Optimization	1.0%	-	5	100.0%	50.0%	50.0%	0.031	3.14	0.02	0.03	\$0.00	\$0.00	A	A		
MPS Retail	Cooling_Chillers	Electric	Stock	New	3.14 High Efficiency Windows, Low-e; U=0.35	10.3%	0.03	30	75.0%	100.0%	75.0%	0.324	3.12	0.24	0.32	\$0.01	\$0.01	A	A		
MPS Retail	Cooling_Chillers	Electric	Stock	New	3.14 Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	0.09	15	67.0%	90.0%	60.3%	0.236	2.88	0.13	0.22	\$0.05	\$0.05	C	C		
MPS Retail	Cooling_Chillers	Electric	Stock	New	3.14 Primary/Secondary De-coupled Chilled Water System	12.0%	0.38	15	50.0%	80.0%	40.0%	0.377	2.75	0.13	0.33	\$0.12	\$0.14	F	F		
MPS Retail	Cooling_Chillers	Electric	Stock	New	3.14 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.24	10	50.0%	100.0%	50.0%	0.314	2.62	0.13	0.26	\$0.12	\$0.15	F	F		
MPS Retail	Cooling_Chillers	Electric	Stock	New	3.14 Optimize Chilled Water and Condenser Water Settings	5.0%	0.17	10	33.0%	50.0%	16.5%	0.157	2.49	0.02	0.12	\$0.17	\$0.21	F	F		
MPS Retail	Cooling_Chillers	Electric	Stock	New	3.14 Cool Roofs (Reflective and Spray Evaporative)	6.9%	0.47	10	50.0%	100.0%	90.0%	0.217	2.47	0.15	0.37	\$0.14	\$0.44	F	F		
MPS Retail	Cooling_Chillers	Electric	Stock	New	3.14 Ceiling R-19 to R-38 Insulation	0.9%	0.24	20	50.0%	100.0%	50.0%	0.028	2.31	0.01	0.02	\$0.89	\$1.20	F	F		
MPS Retail	Cooling_Chillers	Electric	Stock	New	3.14 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	0.13	20	50.0%	90.0%	45.0%	0.083	2.30	0.03	0.06	\$1.68	\$2.29	F	F		
MPS Retail	Cooling_DX	Electric	Stock	New	3.14 Ceiling R-19 to R-38 Insulation	0.9%	-	20	50.0%	100.0%	50.0%	0.028	3.14	0.01	0.03	\$0.00	\$0.00	A	A		
MPS Retail	Cooling_DX	Electric	Stock	New	3.14 High Efficiency Windows, Low-e; U=0.35	5.0%	0.08	30	75.0%	100.0%	75.0%	0.157	3.13	0.12	0.16	\$0.05	\$0.05	B	C		
MPS Retail	Cooling_DX	Electric	Stock	New	3.14 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.24	10	50.0%	100.0%	50.0%	0.314	3.01	0.15	0.30	\$0.12	\$0.13	F	F		
MPS Retail	Cooling_DX	Electric	Stock	New	3.14 DX Tune-Up / Diagnostics	10.0%	0.20	3	100.0%	10.0%	10.0%	0.314	2.86	0.03	0.29	\$0.26	\$0.29	F	F		
MPS Retail	Cooling_DX	Electric	Stock	New	3.14 Cool Roofs (Reflective and Spray Evaporative)	6.9%	0.47	10	50.0%	100.0%	50.0%	0.217	2.83	0.10	0.20	\$0.34	\$0.38	F	F		
MPS Retail	Cooling_DX	Electric	Stock	New	3.14 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	0.73	10	25.0%	95.0%	23.8%	0.314	2.73	0.06	0.27	\$0.37	\$0.42	F	F		
MPS Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.083	2.67	0.03	0.07	\$1.68	\$1.98	F	F		
MPS Retail	Cooling_HeatPump	Electric	Stock	New	3.14 High Efficiency Windows, Low-e; U=0.35	5.0%	0.08	30	75.0%	100.0%	75.0%	0.157	3.14	0.12	0.30	\$0.12	\$0.13	F	F		
MPS Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.24	10	50.0%	100.0%	50.0%	0.314	3.02	0.15	0.30	\$0.12	\$0.13	F	F		
MPS Retail	Cooling_HeatPump	Electric	Stock	New	3.14 DX Tune-Up / Diagnostics	10.0%	0.20	3	100.0%	10.0%	10.0%	0.314	2.87	0.03	0.29	\$0.26	\$0.29	F	F		
MPS Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Cool Roofs (Reflective and Spray Evaporative)	6.9%	0.47	10	50.0%	100.0%	50.0%	0.217	2.84	0.10	0.20	\$0.34	\$0.38	F	F		
MPS Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	0.73	10	25.0%	95.0%	23.8%	0.314	2.74	0.07	0.27	\$0.37	\$0.42	F	F		
MPS Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Ceiling R-19 to R-38 Insulation	0.9%	0.24	20	50.0%	100.0%	50.0%	0.028	2.68	0.01	0.02	\$0.89	\$1.04	F	F		
MPS Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.083	2.67	0.03	0.07	\$1.68	\$1.98	F	F		
MPS Retail	Lighting_2L4T12	Electric	Stock	New	5.89 4' 1L T8 Premium, EB, reflector	61.1%	1.80	25	33.3%	100.0%	33.3%	3.599	5.89	1.20	3.60	\$0.05	\$0.05	C	C		
MPS Retail	Lighting_2L4T12	Electric	Stock	New	5.89 4' 2L T8 Premium, EB	25.0%	0.88	25	33.3%	100.0%	33.3%	1.473	5.89	0.49	1.47	\$0.06	\$0.06	C	C		
MPS Retail	Lighting_2L4T12	Electric	Stock	New	5.89 4' 1L T5HO, EB	13.9%	0.67	25	33.3%	100.0%	33.3%	0.819	5.89	0.27	0.82	\$0.08	\$0.08	E	E		
MPS Retail	Lighting_2L4T12	Electric	Stock	New	5.89 Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	5.02	18	20.0%	100.0%	20.0%	4.418	5.89	2.21	4.42	\$0.13	\$0.15	F	F		
MPS Retail	Lighting_2L8T12	Electric	Stock	New	4.71 4' 2L T8 Premium, EB	4.71%	0.30	25	100.0%	100.0%	0.400	4.71	0.40	0.40	\$0.07	\$0.07	D	D			
MPS Retail	Lighting_2L8T12	Electric	Stock	New	5.89 8' 2L T8, EB	52.8%	0.44	25	50.0%	100.0%	50.0%	3.110	5.89	1.55	3.11	\$0.01	\$0.01	A	A		
MPS Retail	Lighting_2L8T12	Electric	Stock	New	5.89 8' 1L T12, 60W, EB, reflector	55.3%	0.96	25	25.0%	100.0%	25.0%	3.257	5.89	0.81	3.26	\$0.03	\$0.03	A	A		
MPS Retail	Lighting_2L8T12	Electric	Stock	New	5.89 8' 2L T12, 60W, EB	10.6%	0.21	25	25.0%	95.4%	23.9%	0.623	5.89	0.15	0.62	\$0.03	\$0.03	B	B		
MPS Retail	Lighting_2L8T12	Electric	Stock	New	5.89 Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	5.02	18	20.0%	100.0%	20.0%	4.418	5.89	0.88	4.42	\$0.13	\$0.13	F	F		
MPS Retail	Lighting_3L4T12	Electric	Stock	New	5.89 4' 1L T5HO, EB	46.1%	0.12	25	25.0%	100.0%	25.0%	2.715	5.89	0.68	2.71	\$0.00	\$0.00	A	A		
MPS Retail	Lighting_3L4T12	Electric	Stock	New	5.89 4' 3L T8, EB	22.6%	0.11	25	25.0%	100.0%	25.0%	1.332	5.89	0.33	1.33	\$0.01	\$0.01	A	A		
MPS Retail	Lighting_3L4T12	Electric	Stock	New	5.89 4' 2L T8 Premium, EB, reflector	53.0%	0.70	25	25.0%	100.0%	25.0%	3.124	5.89	0.78	3.12	\$0.02	\$0.02	A	A		
MPS Retail	Lighting_3L4T12	Electric	Stock	New	5.89 4' 3L T8 Premium, EB	22.6%	0.31	25	25.0%	100.0%	25.0%	1.332	5.89	0.33	1.33	\$0.02	\$0.02	A	A		
MPS Retail	Lighting_3L4T12	Electric	Stock	New	4.71 4' 3L T8 Premium, EB	8.7%	0.49	25	100.0%	100.0%	0.400	4.71	0.32	0.40	\$0.32	\$0.15	F	F			
MPS Retail	Lighting_4L4T12	Electric	Stock	New	5.89 4' 3L T8, EB	16.8%	0.11	25	16.7%	100.0%	16.7%	2.250	5.89	0.27	2.25	\$0.00	\$0.00	A	A		
MPS Retail	Lighting_4L4T12	Electric	Stock	New	5.89 4' 3L T8 Premium, EB	42.4%	0.35	25	16.7%	100.0%	16.7%	2.495	5.89	0.42	2.50	\$0.01	\$0.01	A	A		
MPS Retail	Lighting_4L4T12	Electric	Stock	New	5.89 4' 4L T8, EB	22.2%	0.23	25	16.7%	100.0%	16.7%	1.309	5.89	0.22	1.31	\$0.02	\$0.02	A	A		
MPS Retail	Lighting_4L4T12	Electric	Stock	New	5.89 4' 2L T8 Premium, EB, reflector	62.5%	0.83	25	16.7%	100.0%	16.7%	3.681	5.89	0.61	3.68	\$0.02	\$0.02	A	A		
MPS Retail	Lighting_4L4T12	Electric	Stock	New	5.89 4' 2L T5HO, EB	18.8%	0.32	25	16.7%	100.0%	16.7%	1.104	5.89	0.18	1.10	\$0.03	\$0.03	A	A		
MPS Retail	Lighting_4L4T12	Electric	Stock	New	5.89 4' 4L T8 Premium, EB	25.0%	0.55	25	16.7%	100.0%	16.7%	1.473	5.89	0.25	1.47	\$0.04	\$0.04	B	B		
MPS Retail	Lighting_4L4T12	Electric	Stock	New	5.89 Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	4.37	18	50.0%	100.0%	50.0%	4.418	5.89	2.21	4.42	\$0.11	\$0.11	F	F		
MPS Retail	Lighting_4L4T8	Electric	Stock	New	4.71 4' 4L T8 Premium, EB	3.8%	0.34	25	100.0%	100.0%	0.170	4.71	0.17	0.17	\$0.19	\$0.19	F	F			
MPS Retail	Lighting_INC150W	Electric	Stock	New	5.89 HPS, 50W	56.0%	5.13	8	45.0%	91.6%	41.2%	3.298	5.89	1.36	3.30	\$0.29	\$0.29	F	F		
MPS Retail	Plug_Load	Electric	Stock	New	0.15 Smart Networks	6.4%	0.00	4	90.0%	40.0%	36.0%	0.010	0.15	0.00	0.01	\$0.02</					

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-Alone Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS School	Cooling_HeatPump	Electric	Stock	New	1.51	Cool Roofs (Reflective and Spray Evaporative)	6.1%	0.24	10	50.0%	100.0%	100.0%	50.0%	0.093	1.40	0.04	0.09	\$0.40	\$0.43	F	F
MPS School	Cooling_HeatPump	Electric	Stock	New	1.51	DX Tune-Up / Diagnostics	10.0%	0.18	3	100.0%	10.0%	10.0%	10.0%	0.151	1.36	0.01	0.14	\$0.49	\$0.55	F	F
MPS School	Cooling_HeatPump	Electric	Stock	New	1.51	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	0.65	10	25.0%	95.0%	23.8%	0.151	1.34	0.03	0.13	\$0.69	\$0.77	F	F	
MPS School	Cooling_HeatPump	Electric	Stock	New	1.51	Ceiling R-19 to R-38 Insulation	0.9%	0.23	20	50.0%	23.4%	11.7%	0.014	1.31	0.00	0.01	\$1.83	\$2.10	F	F	
MPS School	Cooling_HeatPump	Electric	Stock	New	1.51	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	0.13	20	50.0%	90.0%	45.0%	0.040	1.31	0.02	0.03	\$3.50	\$4.04	F	F	
MPS School	Lighting_2L4T12	Electric	Stock	New	2.68	4" 1L T8 Premium, EB, reflector	61.1%	1.40	34	33.3%	100.0%	33.3%	1.638	2.68	0.55	1.64	\$0.08	\$0.08	E	E	
MPS School	Lighting_2L4T12	Electric	Stock	New	2.68	4" 2L T8 Premium, EB	25.0%	0.69	34	33.3%	100.0%	33.3%	0.670	2.68	0.22	0.67	\$0.09	\$0.09	E	E	
MPS School	Lighting_2L4T12	Electric	Stock	New	2.68	4" 1L T5HO, EB	13.9%	0.52	34	33.3%	100.0%	33.3%	0.373	2.68	0.12	0.37	\$0.12	\$0.12	F	F	
MPS School	Lighting_2L4T12	Electric	Stock	New	2.68	Continuous Dimming, 10-4" Fluorescent Fixtures	75.0%	0.39	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.17	\$0.17	F	F	
MPS School	Lighting_2L4T12	Electric	Stock	New	2.14	4" 2L T8 Premium, EB	8.5%	0.24	34	100.0%	100.0%	1.182	2.14	0.18	1.02	\$0.11	\$0.11	F	F		
MPS School	Lighting_2L8T12	Electric	Stock	New	2.68	8" 2L T8, EB	52.8%	0.36	34	50.0%	100.0%	50.0%	1.415	2.68	0.71	1.42	\$0.02	\$0.02	A	A	
MPS School	Lighting_2L8T12	Electric	Stock	New	2.68	8" 1L T12, 60W, EB, reflector	55.3%	0.79	34	25.0%	100.0%	25.0%	1.482	2.68	0.37	1.48	\$0.05	\$0.05	C	C	
MPS School	Lighting_2L8T12	Electric	Stock	New	2.68	8" 2L T12, 60W, EB	10.6%	0.17	34	25.0%	32.9%	8.2%	0.283	2.68	0.02	0.28	\$0.05	\$0.05	C	C	
MPS School	Lighting_2L8T12	Electric	Stock	New	2.68	Continuous Dimming, 5-8" Fluorescent Fixtures	75.0%	0.12	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.20	\$0.20	F	F	
MPS School	Lighting_3L4T12	Electric	Stock	New	2.68	4" 1L T5HO, EB	46.1%	0.04	34	25.0%	100.0%	25.0%	1.235	2.68	0.31	1.24	\$0.00	\$0.00	A	A	
MPS School	Lighting_3L4T12	Electric	Stock	New	2.68	4" 3L T8, EB	22.6%	0.04	34	25.0%	100.0%	25.0%	0.606	2.68	0.15	0.61	\$0.01	\$0.01	A	A	
MPS School	Lighting_3L4T12	Electric	Stock	New	2.68	4" 2L T8 Premium, EB, reflector	53.0%	0.23	34	25.0%	100.0%	25.0%	1.422	2.68	0.36	1.42	\$0.01	\$0.01	A	A	
MPS School	Lighting_3L4T12	Electric	Stock	New	2.68	4" 3L T8 Premium, EB	22.6%	0.10	34	25.0%	100.0%	25.0%	0.606	2.68	0.15	0.61	\$0.02	\$0.02	A	A	
MPS School	Lighting_3L4T8	Electric	Stock	New	2.14	4" 3L T8 Premium, EB	6.7%	0.38	34	100.0%	100.0%	1.143	2.14	0.14	1.04	\$0.23	\$0.23	F	F		
MPS School	Lighting_4L4T12	Electric	Stock	New	2.68	4" 3L T8 Premium, EB	36.7%	0.09	34	16.7%	100.0%	16.7%	1.024	2.68	0.17	1.02	\$0.01	\$0.01	A	A	
MPS School	Lighting_4L4T12	Electric	Stock	New	2.68	4" 3L T8 Premium, EB	42.4%	0.28	34	16.7%	100.0%	16.7%	1.135	2.68	0.19	1.14	\$0.02	\$0.02	A	A	
MPS School	Lighting_4L4T12	Electric	Stock	New	2.68	4" 4L T8, EB	22.2%	0.18	34	16.7%	100.0%	16.7%	0.596	2.68	0.10	0.60	\$0.03	\$0.03	A	A	
MPS School	Lighting_4L4T12	Electric	Stock	New	2.68	4" 2L T8 Premium, EB, reflector	62.5%	0.66	34	16.7%	100.0%	16.7%	1.675	2.68	0.28	1.68	\$0.04	\$0.04	B	B	
MPS School	Lighting_4L4T12	Electric	Stock	New	2.68	4" 2L T5HO, EB	18.8%	0.26	34	16.7%	100.0%	16.7%	0.503	2.68	0.08	0.50	\$0.05	\$0.05	C	C	
MPS School	Lighting_4L4T12	Electric	Stock	New	2.68	4" 4L T8 Premium, EB	25.0%	0.44	34	16.7%	100.0%	16.7%	0.670	2.68	0.11	0.67	\$0.06	\$0.06	C	C	
MPS School	Lighting_4L4T12	Electric	Stock	New	2.68	Continuous Dimming, 5-4" Fluorescent Fixtures	75.0%	0.32	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.17	\$0.17	F	F	
MPS School	Lighting_4L4T8	Electric	Stock	New	2.14	4" 4L T8 Premium, EB	3.6%	0.27	34	100.0%	100.0%	1.000	0.077	2.14	0.08	0.08	\$0.31	\$0.31	F	F	
MPS School	Lighting_INC150W	Electric	Stock	New	2.68	HPS, 50W	56.0%	2.09	12	45.0%	85.5%	38.5%	1.501	2.68	0.58	1.50	\$0.20	\$0.20	F	F	
MPS School	Plug_Load	Electric	Stock	New	0.11	Smart Networks	7.2%	0.00	4	90.0%	40.0%	36.0%	0.008	0.11	0.00	0.01	\$0.19	\$0.19	F	F	
MPS School	Plug_Load	Electric	Stock	New	0.11	ENERGY STAR or Better Office Equipment: Copiers	9.0%	0.01	4	100.0%	33.0%	33.0%	0.010	0.11	0.00	0.01	\$0.48	\$0.48	F	F	
MPS School	Plug_Load	Electric	Stock	New	0.11	ENERGY STAR or Better Office Equipment: Monitors	17.3%	0.06	4	100.0%	71.0%	71.0%	0.019	0.10	0.01	0.02	\$0.99	\$1.05	F	F	
MPS School	Plug_Load	Electric	Stock	New	0.11	ENERGY STAR or Better Office Equipment: Printers	11.2%	0.06	4	100.0%	99.0%	99.0%	0.012	0.09	0.01	0.01	\$1.69	\$2.04	F	F	
MPS School	Plug_Load	Electric	Stock	New	0.11	ENERGY STAR or Better Office Equipment: Computer	19.5%	0.12	4	100.0%	65.0%	65.0%	0.021	0.08	0.01	0.02	\$1.77	\$2.40	F	F	
MPS School	Space_Heat	Electric	Stock	New	2.77	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	0.28	15	50.0%	100.0%	50.0%	0.139	2.77	0.07	0.14	\$0.25	\$0.25	F	F	
MPS School	Space_Heat	Electric	Stock	New	2.77	Ceiling R-19 to R-38 Insulation	3.0%	0.23	20	50.0%	44.9%	22.5%	0.083	2.70	0.02	0.08	\$0.30	\$0.31	F	F	
MPS School	Space_Heat	Electric	Stock	New	2.77	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	0.13	20	50.0%	90.0%	45.0%	0.073	2.68	0.03	0.07	\$1.91	\$1.97	F	F	
MPS School	Water_Heat	Electric	Stock	New	0.9	Heat Pump Water Heater	30.0%	2.53	15	75.0%	87.2%	65.4%	0.270	0.90	0.18	0.27	\$1.15	\$1.15	F	F	
MPS School	Water_Heat	Electric	Stock	New	0.9	Demand controlled circulating systems	5.0%	0.37	15	50.0%	100.0%	50.0%	0.045	0.72	0.02	0.04	\$10.86	\$13.52	F	F	
MPS Small_Office	Cooling_Chillers	Electric	Stock	New	4.19	EMS Optimization	1.0%	0.57	5	100.0%	50.0%	50.0%	0.042	4.19	0.02	0.04	\$0.04	\$0.04	A	A	
MPS Small_Office	Cooling_Chillers	Electric	Stock	New	4.19	High Efficiency Windows, Low-e; U=0.35	9.2%	0.06	30	75.0%	99.4%	74.6%	0.388	4.17	0.39	0.01	\$0.01	\$0.01	A	A	
MPS Small_Office	Cooling_Chillers	Electric	Stock	New	4.19	Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	0.11	15	67.0%	90.0%	60.3%	0.314	3.88	0.18	0.29	\$0.04	\$0.04	B	B	
MPS Small_Office	Cooling_Chillers	Electric	Stock	New	4.19	Primary/Secondary De-coupled Chilled Water System	12.0%	0.45	15	50.0%	80.0%	40.0%	0.503	3.71	0.18	0.44	\$0.11	\$0.12	F	F	
MPS Small_Office	Cooling_Chillers	Electric	Stock	New	4.19	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.29	10	50.0%	100.0%	50.0%	0.419	3.53	0.18	0.35	\$0.11	\$0.13	F	F	
MPS Small_Office	Cooling_Chillers	Electric	Stock	New	4.19	Optimize Chilled Water and Condenser Water Settings	5.0%	0.20	10	33.0%	50.0%	16.5%	0.210	3.35	0.03	0.17	\$0.15	\$0.19	F	F	
MPS Small_Office	Cooling_Chillers	Electric	Stock	New	4.19	Ceiling R-19 to R-38 Insulation	0.9%	0.16	20	50.0%	8.7%	4.4%	0.038	3.32	0.00	0.03	\$0.46	\$0.58	F	F	
MPS Small_Office	Cooling_Chillers	Electric	Stock	New	4.19	Cool Roofs (Reflective and Spray Evaporative)	1.8%	0.24	10	90.0%	100.0%	90.0%	0.076	3.32	0.05	0.06	\$0.49	\$0.62	F	F	
MPS Small_Office	Cooling_Chillers	Electric	Stock	New	4.19	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	0.13	20	50.0%	90.0%	45.0%	0.110	3.27	0.04	0.09	\$1.26	\$1.62	F	F	
MPS Small_Office	Cooling_DX	Electric	Stock	New	4.19	Ceiling R-19 to R-38 Insulation	0.9%	0.15	20	50.0%	8.7%	4.4%	0.038	4.19	0.00	0.04	\$0.00	\$0.00	A	A	
MPS Small_Office	Cooling_DX	Electric	Stock	New	4.19	High Efficiency Windows, Low-e; U=0.35	5.0%	0.16	30	75.0%	99.4%	74.6%	0.210	4.19	0.16	0.21	\$0.06	\$0.06	D	D	
MPS Small_Office	Cooling_DX	Electric	Stock	New	4.19	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.29	10	50.0%	100.0%	50.0%	0.419	4.03	0.20	0.40	\$0.11	\$0.11	F	F	
MPS Small_Office	Cooling_DX	Electric	Stock	New	4.19	DX Tune-Up / Diagnostics	10.0%	0.23	3	100.0%	10.0%	10.0%	0.419	3.83	0.04	0.38	\$0.24	\$0.26	F	F	
MPS Small_Office	Cooling_DX	Electric	Stock	New	4.19	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	0.87	10	25.0%	95.0%	23.8%	0.419	3.79	0.09	0.38	\$0.33	\$0.36	F	F	
MPS Small_Office	Cooling_DX	Electric	Stock	New	4.19	Cool Roofs (Reflective and Spray Evaporative)	1.8%	0.24	10	50.0%	100.0%	50.0%	0.076	3.70	0.03	0.07	\$0.49	\$0.56	F	F	
MPS Small_Office	Cooling_DX	Electric	Stock	New	4.19	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	0.13	20	50.0%	90.0%	45.0%	0.110	3.67	0.04	0.10	\$1.26	\$1.44	F	F	
MPS Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19	High Efficiency Windows, Low-e; U=0.35	5.0%	0.15	30	75.0%	99.4%	74.6%	0.210	4.19	0.16	0.21	\$0.06	\$0.06	D	D	
MPS Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.29	10	50.0%	100.0%	50.0%	0.419	4.03	0.20	0.40	\$0.11	\$0.11	F	F	
MPS Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19	DX Tune-Up / Diagnostics	10.0%	0.23	3	100.0%	10.0%	10.0%	0.419	3.83	0.04	0.38	\$0.24	\$0.26	F	F	
MPS Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	0.87	10	25.0%	95.0%	23.8%	0.419	3.79	0.09	0.38	\$0.33	\$0.36	F	F	
MPS Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Ceiling R-19 to R-38 Insulation	0.9%	0.16	20	50.0%	8.7%	4.4%	0.038	3.70	0.00	0.03	\$0.46	\$0.52	F	F	
MPS Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Cool Roofs (Reflective and Spray Evaporative)	1.8%	0.24	10	50.0%	100.0%	50.0%	0.076	3.70	0.03	0.07	\$0.49	\$0.56	F	F	
MPS Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	0.13	20	50.0%	90.0%	45.0%	0.110	3.67	0.04	0.10	\$1.26	\$1.44	F	F	
MPS Small_Office	Lighting_2L4T12	Electric	Stock	New	5.29	4" 1L T8 Premium, EB, reflector	61.1%	1.58	16	33.3%	100.0%	33.3%	3.233	5.29	1.08	3.23	\$0.06	\$0.06	C	C	
MPS Small_Office	Lighting_2L4T12	Electric	Stock	New	5.29	4" 2L T8 Premium, EB	25.0%	0.77	16	33.3%	100.0%	33.3%	1.323	5.29	0.44	1.32	\$0.07	\$0.07	D	D	
MPS Small_Office	Lighting_2L4T12	Electric	Stock	New	5.29	4" 1L T5HO, EB	13.9%	0.59	16	33.3%	100.0%	33.3%	0.735	5.29	0.25	0.74	\$0.09	\$0.09	E	E	
MPS Small_Office	Lighting_2L4T12	Electric	Stock	New	5.29	Continuous Dimming, 10-4" Fluorescent Fixtures	75.0%	0.32	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.14	\$0.14	F	F	
MPS Small_Office	Lighting_2L4T8	Electric	Stock	New	4.24	4" 2L T8 Premium, EB	8.5%	0.27	16	100.0%	100.0%	100.0%	0.360	4.24	0.36	0.36	\$0.09	\$0.09	E		

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
MPS Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	\$ 0.03	15	67.0%	90.0%	60.3%	0.125	1.58	0.07	0.12	\$0.03	\$0.03	B	B	
MPS Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.14	15	50.0%	80.0%	40.0%	0.199	1.51	0.07	0.18	\$0.08	\$0.09	E	E	
MPS Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.09	10	50.0%	100.0%	50.0%	0.166	1.44	0.07	0.14	\$0.08	\$0.10	E	E	
MPS Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.06	10	33.0%	50.0%	16.5%	0.083	1.37	0.01	0.07	\$0.11	\$0.14	F	F	
MPS Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Cool Roofs (Reflective and Spray Evaporative)	4.3%	\$ 0.47	10	90.0%	100.0%	90.0%	0.071	1.36	0.05	0.06	\$1.05	\$1.28	F	F	
MPS Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.23	20	50.0%	20.0%	10.0%	0.015	1.30	0.00	0.01	\$1.61	\$2.05	F	F	
MPS Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.044	1.30	0.02	0.03	\$3.18	\$4.06	F	F	
MPS Warehouse	Cooling_DX	Electric	Stock	New	1.66	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.23	20	50.0%	20.0%	10.0%	0.015	1.68	0.00	0.01	\$0.00	\$0.00	A	A	
MPS Warehouse	Cooling_DX	Electric	Stock	New	1.66	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.03	30	75.0%	100.0%	75.0%	0.083	1.66	0.06	0.08	\$0.03	\$0.03	B	B	
MPS Warehouse	Cooling_DX	Electric	Stock	New	1.66	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.09	10	50.0%	100.0%	50.0%	0.166	1.60	0.08	0.16	\$0.08	\$0.09	E	E	
MPS Warehouse	Cooling_DX	Electric	Stock	New	1.66	DX Tune-Up / Diagnostics	10.0%	\$ 0.07	3	100.0%	10.0%	10.0%	0.166	1.52	0.02	0.15	\$0.18	\$0.20	F	F	
MPS Warehouse	Cooling_DX	Electric	Stock	New	1.66	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	\$ 0.26	10	25.0%	95.0%	23.8%	0.166	1.50	0.04	0.15	\$0.25	\$0.28	F	F	
MPS Warehouse	Cooling_DX	Electric	Stock	New	1.66	Cool Roofs (Reflective and Spray Evaporative)	4.3%	\$ 0.47	10	50.0%	100.0%	50.0%	0.071	1.47	0.03	0.06	\$1.05	\$1.18	F	F	
MPS Warehouse	Cooling_DX	Electric	Stock	New	1.66	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.044	1.43	0.02	0.04	\$3.18	\$3.69	F	F	
MPS Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.03	30	75.0%	100.0%	75.0%	0.083	1.66	0.06	0.08	\$0.03	\$0.03	B	B	
MPS Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.09	10	50.0%	100.0%	50.0%	0.166	1.60	0.08	0.16	\$0.08	\$0.09	E	E	
MPS Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	DX Tune-Up / Diagnostics	10.0%	\$ 0.07	3	100.0%	10.0%	10.0%	0.166	1.52	0.02	0.15	\$0.18	\$0.19	F	F	
MPS Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	\$ 0.26	10	25.0%	95.0%	23.8%	0.166	1.50	0.04	0.15	\$0.25	\$0.28	F	F	
MPS Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	Cool Roofs (Reflective and Spray Evaporative)	4.3%	\$ 0.47	10	50.0%	100.0%	50.0%	0.071	1.47	0.03	0.06	\$1.05	\$1.18	F	F	
MPS Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.23	20	50.0%	20.0%	10.0%	0.015	1.44	0.00	0.01	\$1.61	\$1.86	F	F	
MPS Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.044	1.43	0.02	0.04	\$3.18	\$3.69	F	F	
MPS Warehouse	Lighting_2L4T12	Electric	Stock	New	2.94	4' 1L T8 Premium, EB, reflector	61.1%	\$ 0.80	22	33.3%	100.0%	33.3%	1.797	2.94	0.60	1.80	\$0.05	\$0.05	C	C	
MPS Warehouse	Lighting_2L4T12	Electric	Stock	New	2.94	4' 2L T8 Premium, EB	25.0%	\$ 0.39	22	33.3%	100.0%	33.3%	0.735	2.94	0.25	0.74	\$0.05	\$0.05	C	C	
MPS Warehouse	Lighting_2L4T12	Electric	Stock	New	2.94	4' 1L T5HO, EB	13.9%	\$ 0.30	22	33.3%	100.0%	33.3%	0.409	2.94	0.14	0.41	\$0.07	\$0.07	D	D	
MPS Warehouse	Lighting_2L4T12	Electric	Stock	New	2.94	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	\$ 1.93	16	40.0%	100.0%	40.0%	2.205	2.94	0.88	2.21	\$0.10	\$0.10	F	F	
MPS Warehouse	Lighting_2L4T8	Electric	Stock	New	2.36	4' 2L T8 Premium, EB	8.5%	\$ 0.13	22	100.0%	100.0%	100.0%	0.201	2.36	0.20	0.20	\$0.07	\$0.07	D	D	
MPS Warehouse	Lighting_2L8T12	Electric	Stock	New	2.94	8' 2L T8, EB	52.8%	\$ 0.21	22	50.0%	100.0%	50.0%	1.552	2.94	0.78	1.55	\$0.01	\$0.01	A	A	
MPS Warehouse	Lighting_2L8T12	Electric	Stock	New	2.94	8' 1L T12, 60W, EB, reflector	55.3%	\$ 0.46	22	25.0%	100.0%	25.0%	1.626	2.94	0.41	1.63	\$0.03	\$0.03	A	A	
MPS Warehouse	Lighting_2L8T12	Electric	Stock	New	2.94	8' 2L T12, 60W, EB	10.6%	\$ 0.24	22	50.0%	64.7%	21.2%	0.311	2.94	0.07	0.31	\$0.03	\$0.03	B	B	
MPS Warehouse	Lighting_3L4T12	Electric	Stock	New	2.94	Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	\$ 2.39	16	40.0%	100.0%	40.0%	2.205	2.94	0.88	2.21	\$0.13	\$0.13	F	F	
MPS Warehouse	Lighting_3L4T12	Electric	Stock	New	2.94	4' 1L T5HO, EB	46.1%	\$ 0.01	22	25.0%	100.0%	25.0%	1.355	2.94	0.34	1.35	\$0.00	\$0.00	A	A	
MPS Warehouse	Lighting_3L4T12	Electric	Stock	New	2.94	4' 3L T8, EB	22.6%	\$ 0.01	22	25.0%	100.0%	25.0%	0.665	2.94	0.17	0.66	\$0.00	\$0.00	A	A	
MPS Warehouse	Lighting_3L4T12	Electric	Stock	New	2.94	4' 2L T8 Premium, EB, reflector	53.0%	\$ 0.04	22	25.0%	100.0%	25.0%	1.559	2.94	0.39	1.56	\$0.00	\$0.00	A	A	
MPS Warehouse	Lighting_3L4T12	Electric	Stock	New	2.94	4' 3L T8 Premium, EB	22.6%	\$ 0.02	22	25.0%	100.0%	25.0%	0.665	2.94	0.17	0.66	\$0.00	\$0.00	A	A	
MPS Warehouse	Lighting_3L4T8	Electric	Stock	New	2.36	4' 3L T8 Premium, EB	6.7%	\$ 0.22	22	100.0%	100.0%	100.0%	0.158	2.36	0.16	0.16	\$0.14	\$0.14	F	F	
MPS Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 3L T8, EB	38.2%	\$ 0.05	22	16.7%	100.0%	16.7%	1.123	2.94	0.19	1.12	\$0.00	\$0.00	A	A	
MPS Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 3L T8 Premium, EB	42.4%	\$ 0.16	22	16.7%	100.0%	16.7%	1.245	2.94	0.21	1.25	\$0.01	\$0.01	A	A	
MPS Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 4L T8, EB	22.2%	\$ 0.10	22	16.7%	100.0%	16.7%	0.853	2.94	0.11	0.85	\$0.02	\$0.02	A	A	
MPS Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 2L T8 Premium, EB, reflector	62.5%	\$ 0.04	22	16.7%	100.0%	16.7%	1.838	2.94	0.31	1.84	\$0.02	\$0.02	A	A	
MPS Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 2L T5HO, EB	18.8%	\$ 0.14	22	16.7%	100.0%	16.7%	0.551	2.94	0.09	0.55	\$0.03	\$0.03	C	C	
MPS Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 4L T8 Premium, EB	25.0%	\$ 0.25	22	16.7%	100.0%	16.7%	0.735	2.94	0.12	0.74	\$0.03	\$0.03	B	B	
MPS Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	\$ 1.95	16	40.0%	100.0%	40.0%	2.205	2.94	0.88	2.21	\$0.11	\$0.11	F	F	
MPS Warehouse	Lighting_4L4T8	Electric	Stock	New	2.36	4' 4L T8 Premium, EB	3.6%	\$ 0.15	22	100.0%	100.0%	100.0%	0.085	2.36	0.08	0.08	\$0.18	\$0.18	F	F	
MPS Warehouse	Lighting_INC150W	Electric	Stock	New	2.94	HPS, 50W	56.0%	\$ 2.69	7	45.0%	90.2%	40.6%	1.646	2.94	0.67	1.65	\$0.34	\$0.34	F	F	
MPS Warehouse	Plug_Load	Electric	Stock	New	0.15	Smart Networks	7.8%	\$ 0.00	4	90.0%	40.0%	36.0%	0.012	0.15	0.00	0.01	\$0.11	\$0.11	F	F	
MPS Warehouse	Plug_Load	Electric	Stock	New	0.15	ENERGY STAR or Better Office Equipment: Monitors	18.6%	\$ 0.05	4	100.0%	71.0%	71.0%	0.028	0.15	0.02	0.03	\$0.58	\$0.59	F	F	
MPS Warehouse	Plug_Load	Electric	Stock	New	0.15	ENERGY STAR or Better Office Equipment: Copiers	7.1%	\$ 0.02	4	100.0%	33.0%	33.0%	0.011	0.13	0.00	0.01	\$0.66	\$0.78	F	F	
MPS Warehouse	Plug_Load	Electric	Stock	New	0.15	ENERGY STAR or Better Office Equipment: Computer	21.0%	\$ 0.10	4	100.0%	65.0%	65.0%	0.031	0.12	0.02	0.03	\$1.02	\$1.24	F	F	
MPS Warehouse	Plug_Load	Electric	Stock	New	0.15	ENERGY STAR or Better Office Equipment: Printers	11.4%	\$ 0.06	4	100.0%	59.0%	59.0%	0.017	0.11	0.01	0.01	\$1.69	\$1.89	F	F	
MPS Warehouse	Space_Heat	Electric	Stock	New	4.02	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.201	4.02	0.10	0.20	\$0.17	\$0.17	F	F	
MPS Warehouse	Space_Heat	Electric	Stock	New	4.02	Ceiling R-19 to R-38 Insulation	3.0%	\$ 0.23	20	50.0%	33.7%	16.8%	0.121	3.92	0.02	0.12	\$0.20	\$0.20	F	F	
MPS Warehouse	Space_Heat	Electric	Stock	New	4.02	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.106	3.90	0.05	0.10	\$1.31	\$1.36	F	F	
MPS Warehouse	Water_Heat	Electric	Stock	New	0.42	Heat Pump Water Heater	30.0%	\$ 0.11	15	75.0%	100.0%	75.0%	0.126	0.42	0.09	0.13	\$0.10	\$0.10	F	F	
MPS Warehouse	Water_Heat	Electric	Stock	New	0.42	Demand controlled circulating systems	5.0%	\$ 0.17	15	50.0%	100.0%	50.0%	0.021	0.33	0.01	0.02	\$0.98	\$1.26	F	F	
SJD Grocery	Cooling_Chillers	Electric	Stock	New	4.1	EMS Optimization	1.0%	\$ -	5	100.0%	50.0%	50.0%	0.041	4.10	0.02	0.04	\$0.00	\$0.00	A	A	
SJD Grocery	Cooling_Chillers	Electric	Stock	New	4.1	High Efficiency Windows, Low-e; U=0.35	5.4%	\$ 0.03	30	75.0%	100.0%	75.0%	0.221	4.08	0.17	0.22	\$0.01	\$0.01	A	A	
SJD Grocery	Cooling_Chillers	Electric	Stock	New	4.1	Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	\$ 0.11	15	67.0%	90.0%	60.3%	0.308	3.91	0.18	0.29	\$0.05	\$0.05	C	C	
SJD Grocery	Cooling_Chillers	Electric	Stock	New	4.1	Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.49	15	50.0%	80.0%	40.0%	0.492	3.74	0.18	0.45	\$0.12	\$0.13	F	F	
SJD Grocery	Cooling_Chillers	Electric	Stock	New	4.1	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.58	0.18	0.36	\$0.14	\$0.12	F	F	
SJD Grocery	Cooling_Chillers	Electric	Stock	New	4.1	Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.21	10	33.0%	50.0%	16.5%	0.205	3.38	0.01	0.17	\$0.20	\$0.20	F	F	
SJD Grocery	Cooling_Chillers	Electric	Stock	New	4.1	Cool Roofs (Reflective and Spray Evaporative)	4.3%	\$ 0.47	10	90.0%	100.0%	90.0%	0.176	3.35	0.13	0.14	\$0.42	\$0.52	F	F	
SJD Grocery	Cooling_Chillers	Electric	Stock	New	4.1	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.24	20	50.0%	20.0%	10.0%	0.037	3.22	0.00	0.03	\$0.69	\$0.88	F	F	
SJD Grocery	Cooling_Chillers	Electric	Stock	New	4.1	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.108	3.22	0.04	0.08	\$1.29	\$1.64	F	F	
SJD Grocery	Cooling_DX	Electric	Stock	New	4.1	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.07	30	75.0%	100.0%	75.0%	0.205	4.10	0.15	0.21	\$0.03	\$0.03	B	B	
SJD Grocery	Cooling_DX	Electric	Stock	New	4.1	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.32	10	50.0%	100.0%	50.0%	0.410	3.95	0.20	0.39	\$0.12	\$0.13	F	F	
SJD Grocery	Cooling_DX	Electric	Stock	New	4.1	DX Tune-Up / Diagnostics	10.0%	\$ 0.25	3	100.0%	10.0%	10.0%	0.410	3.75	0.04	0.37	\$0.26	\$0.29	F	F	
SJD Grocery	Cooling_DX																				

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor * Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Grocery	Lighting_4L4T12	Electric	Stock	New	12.76 4' 4L T8 Premium, EB		25.0%	\$ 0.49	12	16.7%	100.0%	16.7%	3.190	12.76	0.53	3.19	\$0.02	\$0.02	A	A
SJD	Grocery	Lighting_4L4T12	Electric	Stock	New	12.76 Continuous Dimming, 5-4' Fluorescent Fixtures		75.0%	\$ 3.90	8	26.0%	100.0%	26.0%	9.570	12.76	2.49	9.57	\$0.08	\$0.08	E	E
SJD	Grocery	Lighting_4L4T8	Electric	Stock	New	10.21 4' 4L T8 Premium, EB		3.6%	\$ 0.30	12	100.0%	100.0%	100.0%	0.368	10.21	0.37	0.37	\$0.11	\$0.11	F	F
SJD	Grocery	Lighting_INC150W	Electric	Stock	New	12.76 HPS, 50W		56.0%	\$ 8.99	4	45.0%	94.3%	42.4%	7.146	12.76	3.03	7.15	\$0.41	\$0.41	F	F
SJD	Grocery	Plug_Load	Electric	Stock	New	0.41 Smart Networks		6.6%	\$ 0.00	4	90.0%	40.0%	36.0%	0.027	0.41	0.01	0.03	\$0.01	\$0.01	A	A
SJD	Grocery	Plug_Load	Electric	Stock	New	0.41 ENERGY STAR or Better Office Equipment: Monitors		15.9%	\$ 0.01	4	100.0%	71.0%	71.0%	0.065	0.40	0.05	0.06	\$0.03	\$0.03	A	B
SJD	Grocery	Plug_Load	Electric	Stock	New	0.41 ENERGY STAR or Better Office Equipment: Computer		17.9%	\$ 0.01	4	100.0%	65.0%	65.0%	0.073	0.36	0.04	0.06	\$0.05	\$0.06	C	D
SJD	Grocery	Plug_Load	Electric	Stock	New	0.41 ENERGY STAR or Better Office Equipment: Printers		13.0%	\$ 0.01	4	100.0%	99.0%	99.0%	0.053	0.31	0.04	0.04	\$0.07	\$0.10	D	E
SJD	Grocery	Plug_Load	Electric	Stock	New	0.41 ENERGY STAR or Better Office Equipment: Copiers		9.7%	\$ 0.01	4	100.0%	33.0%	33.0%	0.040	0.27	0.01	0.03	\$0.10	\$0.15	F	F
SJD	Grocery	Refrigeration	Electric	Stock	New	28.13 Night Covers for Display Cases		5.3%	\$ 0.01	5	50.0%	95.0%	47.5%	1.631	28.13	0.77	0.63	\$0.00	\$0.00	A	A
SJD	Grocery	Refrigeration	Electric	Stock	New	28.13 Anti-Sweat (Humidistat) Controls		5.0%	\$ 0.02	12	100.0%	48.0%	48.0%	1.404	27.36	0.66	1.37	\$0.00	\$0.00	A	A
SJD	Grocery	Refrigeration	Electric	Stock	New	28.13 Demand Control Defrost - Electric		7.8%	\$ 0.04	10	100.0%	48.0%	48.0%	2.184	26.70	0.99	2.07	\$0.00	\$0.00	A	A
SJD	Grocery	Refrigeration	Electric	Stock	New	28.13 Installation of Floating Condenser Head Pressure Controls		6.8%	\$ 0.12	14	100.0%	44.4%	44.4%	1.921	25.71	0.78	1.76	\$0.01	\$0.01	A	A
SJD	Grocery	Refrigeration	Electric	Stock	New	28.13 Strip Curtains for Walk-Ins		4.0%	\$ 0.05	4	100.0%	30.0%	30.0%	1.132	24.93	0.30	1.00	\$0.01	\$0.02	A	A
SJD	Grocery	Refrigeration	Electric	Stock	New	28.13 Demand Control Defrost - Hot Gas		2.5%	\$ 0.07	10	100.0%	69.6%	69.6%	0.705	24.63	0.43	0.62	\$0.01	\$0.02	A	A
SJD	Grocery	Refrigeration	Electric	Stock	New	28.13 Refrigeration Commissioning		5.0%	\$ 0.06	3	100.0%	50.0%	50.0%	1.407	24.20	0.60	1.21	\$0.02	\$0.02	A	A
SJD	Grocery	Refrigeration	Electric	Stock	New	28.13 Compressor VSD retrofit		6.2%	\$ 0.41	10	50.0%	95.0%	47.5%	1.745	23.59	0.69	1.46	\$0.04	\$0.04	B	B
SJD	Grocery	Refrigeration	Electric	Stock	New	28.13 High Efficiency Case Fans		12.0%	\$ 1.16	16	100.0%	95.0%	95.0%	3.370	22.90	2.61	2.74	\$0.04	\$0.05	B	C
SJD	Grocery	Refrigeration	Electric	Stock	New	28.13 Reduced Speed or Cycling of Evaporator Fans		0.6%	\$ 0.08	5	100.0%	90.0%	90.0%	0.155	20.29	0.09	0.11	\$0.22	\$0.16	F	F
SJD	Grocery	Space_Heat	Electric	Stock	New	5.42 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.44	15	50.0%	100.0%	50.0%	0.771	5.42	0.14	0.27	\$0.13	\$0.13	F	F
SJD	Grocery	Space_Heat	Electric	Stock	New	5.42 Ceiling R-19 to R-38 Insulation		3.0%	\$ 0.24	20	50.0%	85.0%	42.5%	0.163	5.28	0.07	0.16	\$0.16	\$0.16	F	F
SJD	Grocery	Space_Heat	Electric	Stock	New	5.42 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation		2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.143	5.22	0.06	0.14	\$0.98	\$1.01	F	F
SJD	Grocery	Water_Heat	Electric	Stock	New	2.4 Heat Pump Water Heater		30.0%	\$ 0.84	15	75.0%	100.0%	75.0%	0.720	2.40	0.54	0.72	\$0.14	\$0.14	F	F
SJD	Grocery	Water_Heat	Electric	Stock	New	2.4 Demand controlled circulating systems		5.0%	\$ 1.32	15	50.0%	100.0%	50.0%	0.120	1.86	0.05	0.09	\$1.35	\$1.75	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	New	3.36 EMS Optimization		1.0%	\$ -	5	100.0%	50.0%	50.0%	0.034	3.36	0.02	0.03	\$0.00	\$0.00	A	A
SJD	Health	Cooling_Chillers	Electric	Stock	New	3.36 High Efficiency Windows, Low-e; U=0.35		1.2%	\$ 0.01	30	75.0%	66.0%	49.5%	0.039	3.34	0.02	0.04	\$0.03	\$0.03	B	B
SJD	Health	Cooling_Chillers	Electric	Stock	New	3.36 Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F		7.5%	\$ 0.16	15	67.0%	90.0%	60.3%	0.252	3.32	0.15	0.25	\$0.08	\$0.08	E	E
SJD	Health	Cooling_Chillers	Electric	Stock	New	3.36 Primary/Secondary De-coupled Chilled Water System		12.0%	\$ 0.68	15	50.0%	80.0%	40.0%	0.403	3.17	0.15	0.38	\$0.21	\$0.22	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	New	3.36 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.44	10	50.0%	100.0%	50.0%	0.336	3.02	0.15	0.33	\$0.23	\$0.24	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	New	3.36 Optimize Chilled Water and Condenser Water Settings		5.0%	\$ 0.30	10	33.0%	50.0%	16.5%	0.168	3.07	0.02	0.14	\$0.28	\$0.33	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	New	3.36 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.21	20	50.0%	20.0%	10.0%	0.030	2.85	0.00	0.03	\$0.75	\$0.89	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	New	3.36 Cool Roofs (Reflective and Spray Evaporative)		0.6%	\$ 0.16	10	90.0%	100.0%	90.0%	0.021	2.84	0.02	0.02	\$1.17	\$1.38	F	F
SJD	Health	Cooling_Chillers	Electric	Stock	New	3.36 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation		2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.088	2.83	0.03	0.07	\$1.57	\$1.87	F	F
SJD	Health	Cooling_DX	Electric	Stock	New	3.36 High Efficiency Windows, Low-e; U=0.35		5.0%	\$ 0.03	30	75.0%	66.0%	49.5%	0.168	3.36	0.08	0.17	\$0.02	\$0.02	A	A
SJD	Health	Cooling_DX	Electric	Stock	New	3.36 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.44	10	50.0%	100.0%	50.0%	0.336	3.28	0.16	0.33	\$0.21	\$0.21	F	F
SJD	Health	Cooling_DX	Electric	Stock	New	3.36 DX Tune-Up / Diagnostics		10.0%	\$ 0.35	3	100.0%	10.0%	10.0%	0.336	3.11	0.03	0.31	\$0.44	\$0.48	F	F
SJD	Health	Cooling_DX	Electric	Stock	New	3.36 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling		10.0%	\$ 1.31	10	25.0%	95.0%	23.8%	0.336	3.08	0.07	0.31	\$0.62	\$0.67	F	F
SJD	Health	Cooling_DX	Electric	Stock	New	3.36 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.21	20	50.0%	20.0%	10.0%	0.030	3.01	0.00	0.03	\$0.75	\$0.84	F	F
SJD	Health	Cooling_DX	Electric	Stock	New	3.36 Cool Roofs (Reflective and Spray Evaporative)		0.6%	\$ 0.16	10	90.0%	100.0%	90.0%	0.021	3.01	0.01	0.02	\$1.30	\$1.57	F	F
SJD	Health	Cooling_DX	Electric	Stock	New	3.36 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation		2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.088	3.00	0.04	0.08	\$1.57	\$1.76	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	New	3.36 High Efficiency Windows, Low-e; U=0.35		5.0%	\$ 0.03	30	75.0%	66.0%	49.5%	0.168	3.36	0.08	0.17	\$0.02	\$0.02	A	A
SJD	Health	Cooling_HeatPump	Electric	Stock	New	3.36 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.44	10	50.0%	100.0%	50.0%	0.336	3.28	0.16	0.33	\$0.21	\$0.21	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	New	3.36 DX Tune-Up / Diagnostics		10.0%	\$ 0.35	3	100.0%	10.0%	10.0%	0.336	3.11	0.03	0.31	\$0.44	\$0.48	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	New	3.36 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling		10.0%	\$ 1.31	10	25.0%	95.0%	23.8%	0.336	3.08	0.07	0.31	\$0.62	\$0.67	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	New	3.36 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.21	20	50.0%	20.0%	10.0%	0.030	3.01	0.00	0.03	\$0.75	\$0.84	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	New	3.36 Cool Roofs (Reflective and Spray Evaporative)		0.6%	\$ 0.16	10	50.0%	100.0%	50.0%	0.021	3.01	0.01	0.02	\$1.17	\$1.30	F	F
SJD	Health	Cooling_HeatPump	Electric	Stock	New	3.36 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation		2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.088	3.00	0.04	0.08	\$1.57	\$1.76	F	F
SJD	Health	Lighting_2L4T12	Electric	Stock	New	10.77 4' 1L T8 Premium, EB, reflector		61.1%	\$ 1.54	12	33.3%	100.0%	33.3%	6.582	10.77	2.19	6.58	\$0.03	\$0.03	B	B
SJD	Health	Lighting_2L4T12	Electric	Stock	New	10.77 4' 2L T8 Premium, EB		25.0%	\$ 0.75	12	33.3%	100.0%	33.3%	2.893	10.77	0.90	2.89	\$0.04	\$0.04	B	B
SJD	Health	Lighting_2L4T12	Electric	Stock	New	10.77 4' 1L T5HO, EB		33.3%	\$ 0.58	12	33.3%	100.0%	33.3%	1.497	10.77	0.50	1.50	\$0.05	\$0.05	C	C
SJD	Health	Lighting_2L4T12	Electric	Stock	New	10.77 Continuous Dimming, 10-4' Fluorescent Fixtures		75.0%	\$ 3.74	8	10.0%	100.0%	10.0%	8.078	10.77	0.81	8.08	\$0.09	\$0.09	E	E
SJD	Health	Lighting_2L4T8	Electric	Stock	New	8.62 4' 2L T8 Premium, EB		8.5%	\$ 0.26	12	100.0%	100.0%	100.0%	0.733	8.62	0.73	0.73	\$0.05	\$0.05	C	C
SJD	Health	Lighting_2L8T12	Electric	Stock	New	10.77 8' 2L T8, EB		52.8%	\$ 0.35	12	50.0%	100.0%	50.0%	5.687	10.77	2.84	5.69	\$0.01	\$0.01	A	A
SJD	Health	Lighting_2L8T12	Electric	Stock	New	10.77 8' 1L T12, 60W, EB, reflector		55.3%	\$ 0.77	12	25.0%	100.0%	25.0%	5.956	10.77	1.49	5.96	\$0.02	\$0.02	A	A
SJD	Health	Lighting_2L8T12	Electric	Stock	New	10.77 8' 2L T12, 60W, EB		10.6%	\$ 0.17	12	25.0%	50.0%	12.5%	1.138	10.77	0.14	1.14	\$0.02	\$0.02	A	A
SJD	Health	Lighting_2L8T12	Electric	Stock	New	10.77 Continuous Dimming, 5-8' Fluorescent Fixtures		75.0%	\$ 3.99	8	10.0%	100.0%	10.0%	8.078	10.77	0.81	8.08	\$0.09	\$0.09	E	E
SJD	Health	Lighting_3L4T12	Electric	Stock	New	10.77 4' 1L T5HO, EB		46.1%	\$ 0.01	12	25.0%	100.0%	25.0%	4.964	10.77	1.24	4.96	\$0.00	\$0.00	A	A
SJD	Health	Lighting_3L4T12	Electric	Stock	New	10.77 4' 3L T8, EB		22.8%	\$ 0.01	12	25.0%	100.0%	25.0%	2.435	10.77	0.61	2.43	\$0.00	\$0.00	A	A
SJD	Health	Lighting_3L4T12	Electric	Stock	New	10.77 4' 2L T8 Premium, EB, reflector		53.0%	\$ 0.07	12	25.0%	100.0%	25.0%	5.713	10.77	1.43	5.71	\$0.00	\$0.00	A	A
SJD	Health	Lighting_3L4T12	Electric	Stock	New	10.77 4' 3L T8 Premium, EB		22.8%	\$ 0.03	12	25.0%	100.0%	25.0%	2.435	10.77	0.61	2.43	\$0.00	\$0.00	A	A
SJD	Health	Lighting_3L4T8	Electric	Stock	New	8.62 4' 3L T8 Premium, EB		6.7%	\$ 0.42	12	100.0%	100.0%	100.0%	0.578	8.62	0.58	0.58	\$0.10	\$0.10	F	F
SJD	Health	Lighting_4L4T12	Electric	Stock	New	10.77 4' 3L T8, EB		38.2%	\$ 0.09	12	16.7%	100.0%	16.7%	4.114	10.77	0.69	4.11	\$0.00	\$0.00	A	A
SJD	Health	Lighting_4L4T12	Electric	Stock	New	10.77 4' 3L T8 Premium, EB		42.4%	\$ 0.31	12	16.7%	100.0%	16.7%	4.562	10.77	0.76	4.56	\$0.01	\$0.01	A	A
SJD	Health	Lighting_4L4T12	Electric	Stock	New	10.77 4' 4L T8, EB		22.2%	\$ 0.20	12	16.7%	100.0%	16.7%	2.393	10.77	0.40	2.39	\$0.01	\$0.01	A	A
SJD	Health	Lighting_4L4T12	Electric	Stock	New	10.77 4' 2L T8 Premium, EB, reflector		62.5%	\$ 0.72	12	16.7%	100.0%									

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	New	4.19	High Efficiency Windows, Low-e; U=0.35	5.0%	0.15	30	75.0%	99.4%	74.6%	0.210	4.19	0.16	0.21	\$0.06	\$0.06	D	D
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.29	10	50.0%	100.0%	50.0%	0.419	4.03	0.20	0.40	\$0.11	\$0.11	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	New	4.19	DX Tune-Up / Diagnostics	10.0%	0.23	3	100.0%	10.0%	10.0%	0.419	3.83	0.04	0.38	\$0.24	\$0.26	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	0.87	10	25.0%	95.0%	23.8%	0.419	3.79	0.09	0.38	\$0.33	\$0.36	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Ceiling R-19 to R-38 Insulation	0.9%	0.16	20	50.0%	8.7%	4.4%	0.038	3.70	0.00	0.03	\$0.46	\$0.52	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Cool Roofs (Reflective and Spray Evaporative)	1.8%	0.24	10	50.0%	100.0%	50.0%	0.076	3.70	0.03	0.07	\$0.49	\$0.56	F	F
SJD	Large_Office	Cooling_HeatPump	Electric	Stock	New	4.19	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	0.13	20	50.0%	90.0%	45.0%	0.110	3.67	0.04	0.10	\$1.26	\$1.44	F	F
SJD	Large_Office	Lighting_2L4T12	Electric	Stock	New	5.29	4' 1L T8 Premium, EB, reflector	61.1%	1.58	16	33.3%	100.0%	33.3%	3.233	5.29	1.08	3.23	\$0.06	\$0.06	C	C
SJD	Large_Office	Lighting_2L4T12	Electric	Stock	New	5.29	4' 2L T8 Premium, EB	25.0%	0.77	16	33.3%	100.0%	33.3%	1.323	5.29	0.44	1.32	\$0.07	\$0.07	D	D
SJD	Large_Office	Lighting_2L4T12	Electric	Stock	New	5.29	4' 1L T5HO, EB	13.9%	0.59	16	33.3%	100.0%	0.735	5.29	0.25	0.74	\$0.09	\$0.09	F	F	
SJD	Large_Office	Lighting_2L4T12	Electric	Stock	New	5.29	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	3.82	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.14	\$0.14	F	F
SJD	Large_Office	Lighting_2L4T8	Electric	Stock	New	4.24	4' 2L T8 Premium, EB	8.5%	0.27	16	100.0%	100.0%	100.0%	0.360	4.24	0.36	0.36	\$0.09	\$0.09	E	E
SJD	Large_Office	Lighting_2L8T12	Electric	Stock	New	5.29	8' 2L T8, EB	52.8%	0.36	16	50.0%	100.0%	50.0%	2.793	5.29	1.40	2.79	\$0.02	\$0.02	A	A
SJD	Large_Office	Lighting_2L8T12	Electric	Stock	New	5.29	8' 1L T12, 60W, EB, reflector	55.3%	0.79	16	25.0%	100.0%	25.0%	2.925	5.29	0.73	2.93	\$0.03	\$0.03	B	B
SJD	Large_Office	Lighting_2L8T12	Electric	Stock	New	5.29	8' 2L T12, 60W, EB	10.6%	0.17	16	25.0%	26.6%	6.6%	0.559	5.29	0.04	0.56	\$0.04	\$0.04	B	B
SJD	Large_Office	Lighting_2L8T12	Electric	Stock	New	5.29	Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	4.09	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F
SJD	Large_Office	Lighting_3L4T12	Electric	Stock	New	5.29	4' 1L T5HO, EB	46.1%	0.05	16	25.0%	100.0%	25.0%	2.438	5.29	0.61	2.44	\$0.00	\$0.00	A	A
SJD	Large_Office	Lighting_3L4T12	Electric	Stock	New	5.29	4' 3L T8, EB	22.6%	0.05	16	25.0%	100.0%	25.0%	1.196	5.29	0.30	1.20	\$0.00	\$0.00	A	A
SJD	Large_Office	Lighting_3L4T12	Electric	Stock	New	5.29	4' 2L T8 Premium, EB, reflector	53.0%	0.28	16	25.0%	100.0%	25.0%	2.806	5.29	0.70	2.81	\$0.01	\$0.01	A	A
SJD	Large_Office	Lighting_3L4T12	Electric	Stock	New	5.29	4' 3L T8 Premium, EB	22.6%	0.13	16	25.0%	100.0%	25.0%	1.196	5.29	0.30	1.20	\$0.01	\$0.01	A	A
SJD	Large_Office	Lighting_3L4T8	Electric	Stock	New	4.24	4' 3L T8 Premium, EB	6.7%	0.43	16	100.0%	100.0%	100.0%	0.284	4.24	0.28	0.28	\$0.18	\$0.18	F	F
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 3L T8, EB	38.2%	0.10	16	16.7%	100.0%	16.7%	2.021	5.29	0.34	2.02	\$0.01	\$0.01	A	A
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 3L T8 Premium, EB	42.4%	0.32	16	16.7%	100.0%	16.7%	2.241	5.29	0.37	2.24	\$0.02	\$0.02	A	A
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 4L T8, EB	22.2%	0.21	16	16.7%	100.0%	16.7%	1.176	5.29	0.20	1.18	\$0.02	\$0.02	A	A
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 2L T8 Premium, EB, reflector	62.5%	0.74	16	16.7%	100.0%	16.7%	3.306	5.29	0.55	3.31	\$0.03	\$0.03	A	A
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 2L T5HO, EB	18.8%	0.29	16	16.7%	100.0%	16.7%	0.992	5.29	0.17	0.99	\$0.03	\$0.03	B	B
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	4' 4L T8 Premium, EB	25.0%	0.50	16	16.7%	100.0%	16.7%	1.323	5.29	0.22	1.32	\$0.04	\$0.04	B	B
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	New	5.29	Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	3.93	11	40.0%	100.0%	40.0%	3.968	5.29	1.59	3.97	\$0.15	\$0.15	F	F
SJD	Large_Office	Lighting_4L4T12	Electric	Stock	New	4.24	4' 4L T8 Premium, EB	3.6%	0.30	16	100.0%	100.0%	100.0%	0.153	4.24	0.15	0.15	\$0.24	\$0.24	F	F
SJD	Large_Office	Lighting_INC150W	Electric	Stock	New	5.29	HPS, 50W	56.0%	1.80	6	45.0%	93.9%	42.2%	2.962	5.29	1.25	2.96	\$0.38	\$0.38	F	F
SJD	Large_Office	Plug_Load	Electric	Stock	New	1.59	Smart Networks	9.1%	0.01	4	90.0%	40.0%	36.0%	0.145	1.59	0.05	0.15	\$0.02	\$0.02	A	A
SJD	Large_Office	Plug_Load	Electric	Stock	New	1.59	ENERGY STAR or Better Office Equipment: Monitors	21.9%	0.09	4	100.0%	71.0%	71.0%	0.349	1.54	0.24	0.34	\$0.09	\$0.09	E	E
SJD	Large_Office	Plug_Load	Electric	Stock	New	1.59	ENERGY STAR or Better Office Equipment: Copiers	4.8%	0.03	4	100.0%	33.0%	33.0%	0.077	1.30	0.02	0.06	\$0.14	\$0.18	F	F
SJD	Large_Office	Plug_Load	Electric	Stock	New	1.59	ENERGY STAR or Better Office Equipment: Computer	24.7%	0.18	4	100.0%	65.0%	65.0%	0.393	1.28	0.21	0.32	\$0.15	\$0.19	F	F
SJD	Large_Office	Plug_Load	Electric	Stock	New	1.59	ENERGY STAR or Better Office Equipment: Printers	8.0%	0.10	4	100.0%	99.0%	99.0%	0.127	1.07	0.09	0.09	\$0.26	\$0.39	F	F
SJD	Large_Office	Space_Heat	Electric	Stock	New	6.18	Ceiling R-19 to R-38 Insulation	3.0%	0.16	20	50.0%	12.9%	6.5%	0.185	6.18	0.01	0.19	\$0.09	\$0.09	E	E
SJD	Large_Office	Space_Heat	Electric	Stock	New	6.18	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	0.28	15	50.0%	100.0%	50.0%	0.309	6.17	0.15	0.31	\$0.11	\$0.11	F	F
SJD	Large_Office	Space_Heat	Electric	Stock	New	6.18	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.163	6.01	0.07	0.16	\$0.86	\$0.88	F	F
SJD	Large_Office	Water_Heat	Electric	Stock	New	0.05	Heat Pump Water Heater	35.0%	0.58	15	75.0%	100.0%	75.0%	0.281	0.95	0.21	0.29	\$0.25	\$0.25	F	F
SJD	Large_Office	Water_Heat	Electric	Stock	New	0.95	Demand controlled circulating systems	5.0%	0.91	15	50.0%	93.2%	0.048	5.74	0.02	0.04	\$0.05	\$0.05	F	F	
SJD	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	EMS Optimization	1.0%	-	5	100.0%	50.0%	50.0%	0.028	2.83	0.01	0.03	\$0.00	\$0.00	A	A
SJD	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	High Efficiency Windows, Low-e; U=0.35	7.0%	0.06	30	75.0%	92.9%	69.7%	0.199	2.82	0.14	0.20	\$0.03	\$0.03	A	A
SJD	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	0.17	15	67.0%	90.0%	60.3%	0.212	2.88	0.12	0.20	\$0.10	\$0.10	E	F
SJD	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Primary/Secondary De-coupled Chilled Water System	12.0%	0.71	15	50.0%	80.0%	40.0%	0.340	2.56	0.12	0.31	\$0.26	\$0.29	F	F
SJD	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.46	10	50.0%	100.0%	50.0%	0.283	2.43	0.12	0.24	\$0.26	\$0.30	F	F
SJD	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Optimize Chilled Water and Condenser Water Settings	5.0%	0.31	10	33.0%	50.0%	16.5%	0.142	2.31	0.02	0.12	\$0.35	\$0.43	F	F
SJD	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Ceiling R-19 to R-38 Insulation	0.9%	0.11	20	50.0%	34.6%	17.3%	0.025	2.29	0.00	0.02	\$0.44	\$0.54	F	F
SJD	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Cool Roofs (Reflective and Spray Evaporative)	0.4%	0.04	10	90.0%	100.0%	90.0%	0.011	2.29	0.01	0.01	\$0.56	\$0.69	F	F
SJD	Lodging	Cooling_Chillers	Electric	Stock	New	2.83	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	0.13	20	50.0%	90.0%	45.0%	0.074	2.28	0.03	0.06	\$1.87	\$2.32	F	F
SJD	Lodging	Cooling_DX	Electric	Stock	New	2.83	Occupancy Sensor for room HVAC units	35.0%	0.30	15	51.0%	100.0%	51.0%	0.991	2.83	0.51	0.99	\$0.04	\$0.04	B	B
SJD	Lodging	Cooling_DX	Electric	Stock	New	2.83	High Efficiency Windows, Low-e; U=0.35	5.0%	0.16	30	75.0%	92.9%	69.7%	0.142	2.32	0.08	0.12	\$0.10	\$0.12	F	F
SJD	Lodging	Cooling_DX	Electric	Stock	New	2.83	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.46	10	50.0%	100.0%	50.0%	0.283	2.24	0.11	0.22	\$0.26	\$0.33	F	F
SJD	Lodging	Cooling_DX	Electric	Stock	New	2.83	Ceiling R-19 to R-38 Insulation	0.9%	0.11	20	50.0%	34.6%	17.3%	0.025	2.13	0.00	0.02	\$0.44	\$0.58	F	F
SJD	Lodging	Cooling_DX	Electric	Stock	New	2.83	DX Tune-Up / Diagnostics	10.0%	0.37	3	100.0%	10.0%	10.0%	0.283	2.13	0.02	0.21	\$0.55	\$0.73	F	F
SJD	Lodging	Cooling_DX	Electric	Stock	New	2.83	Cool Roofs (Reflective and Spray Evaporative)	0.4%	0.04	10	50.0%	100.0%	50.0%	0.011	2.11	0.00	0.01	\$0.56	\$0.75	F	F
SJD	Lodging	Cooling_DX	Electric	Stock	New	2.83	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	0.38	10	25.0%	95.0%	23.8%	0.283	2.10	0.05	0.21	\$0.77	\$1.04	F	F
SJD	Lodging	Cooling_DX	Electric	Stock	New	2.83	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.074	2.05	0.02	0.05	\$1.87	\$2.57	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	High Efficiency Windows, Low-e; U=0.35	5.0%	0.16	30	75.0%	92.9%	69.7%	0.142	2.83	0.10	0.14	\$0.10	\$0.10	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	0.46	10	50.0%	100.0%	50.0%	0.283	2.73	0.14	0.27	\$0.26	\$0.32	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	Ceiling R-19 to R-38 Insulation	0.9%	0.11	20	50.0%	34.6%	17.3%	0.025	2.59	0.01	0.02	\$0.44	\$0.48	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	DX Tune-Up / Diagnostics	10.0%	0.37	3	100.0%	10.0%	10.0%	0.283	2.59	0.03	0.26	\$0.55	\$0.60	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	Cool Roofs (Reflective and Spray Evaporative)	0.4%	0.04	10	50.0%	100.0%	50.0%	0.011	2.56	0.01	0.01	\$0.56	\$0.62	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	0.38	10	25.0%	95.0%	23.8%	0.283	2.56	0.06	0.26	\$0.77	\$0.85	F	F
SJD	Lodging	Cooling_HeatPump	Electric	Stock	New	2.83	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	1.31	20	50.0%	90.0%	45.0%	0.074	2.50	0.03	0.07	\$1.87	\$2.12	F	F
SJD	Lodging	Lighting_2L4T1																			

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Lodging	Water_Heat	Electric	Stock	New	2.79	Heat Pump Water Heater	30.0%	\$ 3.47	15	75.0%	100.0%	75.0%	0.837	2.79	0.63	0.84	\$0.51	\$0.51	F	F
SJD	Lodging	Water_Heat	Electric	Stock	New	2.79	Demand controlled circulating systems	5.0%	\$ 5.45	15	50.0%	100.0%	50.0%	0.140	2.16	0.05	0.11	\$4.81	\$6.20	F	F
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	EMS Optimization	1.0%	\$ -	5	100.0%	50.0%	50.0%	0.024	2.39	0.01	0.02	\$0.00	\$0.00	A	A
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	High Efficiency Windows, Low-e; U=0.35	2.5%	\$ 0.02	30	75.0%	76.3%	57.2%	0.059	2.38	0.03	0.06	\$0.03	\$0.03	A	B
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	\$ 0.07	15	67.0%	90.0%	60.3%	0.179	2.34	0.11	0.18	\$0.05	\$0.05	C	C
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.30	15	50.0%	80.0%	40.0%	0.287	2.24	0.11	0.27	\$0.13	\$0.14	F	F
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.19	10	50.0%	100.0%	50.0%	0.239	2.13	0.11	0.21	\$0.13	\$0.14	F	F
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.13	10	33.0%	50.0%	16.5%	0.120	2.02	0.02	0.10	\$0.18	\$0.21	F	F
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Cool Roofs (Reflective and Spray Evaporative)	13.0%	\$ 0.27	10	30.0%	100.0%	90.0%	0.310	2.01	0.23	0.26	\$0.04	\$0.29	F	F
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.19	20	50.0%	100.0%	50.0%	0.239	2.32	0.12	0.23	\$0.13	\$0.13	F	F
SJD	Miscellaneous	Cooling_Chillers	Electric	Stock	New	2.39	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.063	1.77	0.02	0.05	\$2.21	\$2.99	F	F
SJD	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.05	30	75.0%	76.3%	57.2%	0.120	2.39	0.07	0.12	\$0.04	\$0.04	B	B
SJD	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.19	10	50.0%	100.0%	50.0%	0.239	2.32	0.12	0.23	\$0.13	\$0.13	F	F
SJD	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	Cool Roofs (Reflective and Spray Evaporative)	13.0%	\$ 0.42	10	50.0%	100.0%	50.0%	0.310	2.21	0.14	0.29	\$0.22	\$0.24	F	F
SJD	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	DX Tune-Up / Diagnostics	10.0%	\$ 0.16	3	100.0%	10.0%	10.0%	0.239	2.06	0.02	0.21	\$0.28	\$0.32	F	F
SJD	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	\$ 0.58	10	25.0%	95.0%	23.8%	0.239	2.04	0.05	0.20	\$0.39	\$0.45	F	F
SJD	Miscellaneous	Cooling_DX	Electric	Stock	New	2.39	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.22	20	50.0%	40.2%	20.1%	0.022	1.99	0.00	0.02	\$1.09	\$1.31	F	F
SJD	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.063	1.99	0.02	0.05	\$2.21	\$2.66	F	F
SJD	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.05	30	75.0%	76.3%	57.2%	0.120	2.39	0.07	0.12	\$0.04	\$0.04	B	B
SJD	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.19	10	50.0%	100.0%	50.0%	0.239	2.32	0.12	0.23	\$0.13	\$0.13	F	F
SJD	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Cool Roofs (Reflective and Spray Evaporative)	13.0%	\$ 0.42	10	50.0%	100.0%	50.0%	0.310	2.21	0.14	0.29	\$0.22	\$0.24	F	F
SJD	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	DX Tune-Up / Diagnostics	10.0%	\$ 0.16	3	100.0%	10.0%	10.0%	0.239	2.06	0.02	0.21	\$0.28	\$0.32	F	F
SJD	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	\$ 0.58	10	25.0%	95.0%	23.8%	0.239	2.04	0.05	0.20	\$0.39	\$0.45	F	F
SJD	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.22	20	50.0%	40.2%	20.1%	0.022	1.99	0.00	0.02	\$1.09	\$1.31	F	F
SJD	Miscellaneous	Cooling_HeatPump	Electric	Stock	New	2.39	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.063	1.99	0.02	0.05	\$2.21	\$2.66	F	F
SJD	Miscellaneous	Lighting_2L4T12	Electric	Stock	New	2.12	4' 1L T8 Premium, EB, reflector	61.1%	\$ 1.49	36	33.3%	100.0%	33.3%	1.296	2.12	0.43	1.30	\$0.10	\$0.10	F	F
SJD	Miscellaneous	Lighting_2L4T12	Electric	Stock	New	2.12	4' 2L T8 Premium, EB	25.0%	\$ 0.73	36	33.3%	100.0%	33.3%	0.530	2.12	0.18	0.53	\$0.12	\$0.12	F	F
SJD	Miscellaneous	Lighting_2L4T12	Electric	Stock	New	2.12	4' 1L T5HO, EB	13.9%	\$ 0.56	36	33.3%	100.0%	33.3%	0.295	2.12	0.10	0.29	\$0.16	\$0.16	F	F
SJD	Miscellaneous	Lighting_2L8T12	Electric	Stock	New	2.12	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	\$ 3.62	26	30.0%	100.0%	30.0%	1.590	2.12	0.48	1.59	\$0.22	\$0.22	F	F
SJD	Miscellaneous	Lighting_2L8T12	Electric	Stock	New	2.12	4' 2L T8 Premium, EB	8.5%	\$ 0.25	36	100.0%	100.0%	100.0%	0.145	1.70	0.14	0.14	\$0.15	\$0.15	F	F
SJD	Miscellaneous	Lighting_2L8T12	Electric	Stock	New	2.12	8' 2L T8, EB	52.8%	\$ 0.35	36	50.0%	100.0%	50.0%	1.119	2.12	0.56	1.12	\$0.03	\$0.03	A	A
SJD	Miscellaneous	Lighting_2L8T12	Electric	Stock	New	2.12	8' 1L T12, 60W, EB, reflector	55.3%	\$ 0.77	36	25.0%	100.0%	25.0%	1.172	2.12	0.29	1.17	\$0.06	\$0.06	C	C
SJD	Miscellaneous	Lighting_2L8T12	Electric	Stock	New	2.12	8' 2L T12, 60W, EB	10.6%	\$ 0.17	36	25.0%	46.2%	11.5%	0.224	2.12	0.03	0.22	\$0.07	\$0.07	D	D
SJD	Miscellaneous	Lighting_2L8T12	Electric	Stock	New	2.12	Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	\$ 4.03	26	30.0%	100.0%	30.0%	1.590	2.12	0.48	1.59	\$0.24	\$0.24	F	F
SJD	Miscellaneous	Lighting_3L4T12	Electric	Stock	New	2.12	4' 1L T5HO, EB	46.1%	\$ 0.03	36	25.0%	100.0%	25.0%	0.977	2.12	0.24	0.98	\$0.00	\$0.00	A	A
SJD	Miscellaneous	Lighting_3L4T12	Electric	Stock	New	2.12	4' 3L T8, EB	22.6%	\$ 0.03	36	25.0%	100.0%	25.0%	0.479	2.12	0.12	0.48	\$0.01	\$0.01	A	A
SJD	Miscellaneous	Lighting_3L4T12	Electric	Stock	New	2.12	4' 2L T8 Premium, EB, reflector	53.0%	\$ 0.19	36	25.0%	100.0%	25.0%	1.125	2.12	0.28	1.12	\$0.01	\$0.01	A	A
SJD	Miscellaneous	Lighting_3L4T12	Electric	Stock	New	2.12	4' 3L T8 Premium, EB	22.6%	\$ 0.08	36	25.0%	100.0%	25.0%	0.479	2.12	0.12	0.48	\$0.02	\$0.02	A	A
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 3L T8 Premium, EB	6.7%	\$ 0.41	36	100.0%	50.0%	100.0%	0.114	1.70	0.11	0.11	\$0.31	\$0.31	F	F
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 3L T8 Premium, EB	36.2%	\$ 0.09	36	16.7%	100.0%	16.7%	0.810	2.12	0.17	0.81	\$0.01	\$0.01	A	A
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 3L T8 Premium, EB	42.4%	\$ 0.30	36	16.7%	100.0%	16.7%	0.898	2.12	0.15	0.90	\$0.03	\$0.03	A	A
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 4L T8, EB	22.2%	\$ 0.19	36	16.7%	100.0%	16.7%	0.471	2.12	0.08	0.47	\$0.04	\$0.04	B	B
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 2L T8 Premium, EB, reflector	62.5%	\$ 0.70	36	16.7%	100.0%	16.7%	1.325	2.12	0.22	1.33	\$0.05	\$0.05	C	C
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 2L T5HO, EB	18.8%	\$ 0.27	36	16.7%	100.0%	16.7%	0.398	2.12	0.07	0.40	\$0.06	\$0.06	C	C
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 4L T8 Premium, EB	25.0%	\$ 0.46	36	16.7%	100.0%	16.7%	0.530	2.12	0.09	0.53	\$0.08	\$0.08	E	E
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	\$ 3.69	26	30.0%	100.0%	30.0%	1.590	2.12	0.48	1.59	\$0.22	\$0.22	F	F
SJD	Miscellaneous	Lighting_4L4T12	Electric	Stock	New	2.12	4' 4L T8 Premium, EB	3.6%	\$ 0.28	36	100.0%	100.0%	100.0%	0.061	1.70	0.06	0.06	\$0.40	\$0.40	F	F
SJD	Miscellaneous	Lighting_INC150W	Electric	Stock	New	2.12	HPS, 50W	56.0%	\$ 5.25	12	45.0%	98.0%	44.1%	1.187	2.12	0.52	1.19	\$0.62	\$0.62	F	F
SJD	Miscellaneous	Plug_Load	Electric	Stock	New	1	Smart Networks	6.9%	\$ 0.01	4	90.0%	40.0%	36.0%	0.069	1.00	0.02	0.07	\$0.03	\$0.03	A	A
SJD	Miscellaneous	Plug_Load	Electric	Stock	New	1	ENERGY STAR or Better Office Equipment: Copiers	11.4%	\$ 0.04	4	100.0%	33.0%	0.114	0.98	0.44	0.11	0.11	\$0.12	\$0.13	F	F
SJD	Miscellaneous	Plug_Load	Electric	Stock	New	1	ENERGY STAR or Better Office Equipment: Monitors	16.5%	\$ 0.07	4	100.0%	71.0%	71.0%	0.165	0.94	0.11	0.16	\$0.14	\$0.15	F	F
SJD	Miscellaneous	Plug_Load	Electric	Stock	New	1	ENERGY STAR or Better Office Equipment: Computer	18.6%	\$ 0.15	4	100.0%	65.0%	65.0%	0.186	0.83	0.10	0.15	\$0.26	\$0.31	F	F
SJD	Miscellaneous	Plug_Load	Electric	Stock	New	1	ENERGY STAR or Better Office Equipment: Printers	9.2%	\$ 0.11	4	100.0%	99.0%	99.0%	0.092	0.73	0.07	0.07	\$0.38	\$0.52	F	F
SJD	Miscellaneous	Space_Heat	Electric	Stock	New	2.76	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.138	2.76	0.07	0.14	\$0.25	\$0.25	F	F
SJD	Miscellaneous	Space_Heat	Electric	Stock	New	2.76	Ceiling R-19 to R-38 Insulation	3.0%	\$ 0.22	20	50.0%	13.4%	6.7%	0.083	2.69	0.01	0.08	\$0.28	\$0.29	F	F
SJD	Miscellaneous	Space_Heat	Electric	Stock	New	2.76	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.073	2.69	0.03	0.07	\$1.92	\$1.97	F	F
SJD	Miscellaneous	Water_Heat	Electric	Stock	New	1.65	Heat Pump Water Heater	30.0%	\$ 3.39	15	75.0%	100.0%	75.0%	0.495	1.65	0.37	0.50	\$0.84	\$0.84	F	F
SJD	Miscellaneous	Water_Heat	Electric	Stock	New	1.65	Demand controlled circulating systems	5.0%	\$ 5.32	15	50.0%	100.0%	50.0%	0.083	1.28	0.03	0.06	\$7.94	\$10.25	F	F
SJD	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	EMS Optimization	1.0%	\$ 0.01	5	100.0%	50.0%	50.0%	0.025	4.49	0.02	0.03	\$0.04	\$0.04	A	A
SJD	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	High Efficiency Windows, Low-e; U=0.35	5.4%	\$ 0.02	30	50.0%	100.0%	50.0%	0.242	4.47	0.12	0.24	\$0.01	\$0.01	A	A
SJD	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	\$ 0.07	15	67.0%	90.0%	60.3%	0.337	4.35	0.20	0.33	\$0.02	\$0.03	A	A
SJD	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.29	15	50.0%	80.0%	40.0%	0.539	4.15	0.20	0.50	\$0.07	\$0.07	D	D
SJD	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.18	10	50.0%	100.0%	50.0%	0.449	3.95	0.20	0.40	\$0.07	\$0.07	D	D
SJD	Restaurant	Cooling_Chillers	Electric	Stock	New	4.49	Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.13	10	33.0%	50.0%	16.5%	0.225	3.75	0.03	0.19	\$0.09	\$0.11	E	F
SJD	Restaurant	Cooling_Chillers	Electric	Stock																	

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor * Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Restaurant	Lighting_4L4T12	Electric	Stock	New	8.74 4' 3L T8 Premium, EB		42.4%	\$ 0.32	22	16.7%	100.0%	16.7%	3.702	8.74	0.62	3.70	\$0.01	\$0.01	A	A
SJD	Restaurant	Lighting_4L4T12	Electric	Stock	New	8.74 4' 4L T8, EB		22.2%	\$ 0.21	22	16.7%	100.0%	16.7%	1.942	8.74	0.32	1.94	\$0.01	\$0.01	A	A
SJD	Restaurant	Lighting_4L4T12	Electric	Stock	New	8.74 4' 2L T8 Premium, EB, reflector		62.5%	\$ 0.76	22	16.7%	100.0%	16.7%	5.463	8.74	0.91	5.46	\$0.01	\$0.01	A	A
SJD	Restaurant	Lighting_4L4T12	Electric	Stock	New	8.74 4' 2L T5HO, EB		18.8%	\$ 0.29	22	16.7%	100.0%	16.7%	1.639	8.74	0.27	1.64	\$0.02	\$0.02	A	A
SJD	Restaurant	Lighting_4L4T12	Electric	Stock	New	8.74 4' 4L T8 Premium, EB		25.0%	\$ 0.51	22	16.7%	100.0%	16.7%	2.185	8.74	0.36	2.19	\$0.02	\$0.02	A	A
SJD	Restaurant	Lighting_4L4T12	Electric	Stock	New	8.74 Continuous Dimming, 5-4' Fluorescent Fixtures		75.0%	\$ 4.01	16	12.0%	100.0%	12.0%	6.555	8.74	0.79	6.56	\$0.07	\$0.07	D	D
SJD	Restaurant	Lighting_4L4T8	Electric	Stock	New	6.99 4' 4L T8 Premium, EB		3.6%	\$ 0.31	22	100.0%	100.0%	100.0%	0.252	6.99	0.25	0.25	\$0.13	\$0.13	F	F
SJD	Restaurant	Lighting_INC150W	Electric	Stock	New	8.74 HPS, 50W		56.0%	\$ 5.10	8	45.0%	90.4%	40.7%	4.894	8.74	1.99	4.89	\$0.19	\$0.19	F	F
SJD	Restaurant	Plug_Load	Electric	Stock	New	0.23 Smart Networks		6.8%	\$ 0.00	4	90.0%	40.0%	36.0%	0.036	0.23	0.03	0.04	\$0.03	\$0.03	A	A
SJD	Restaurant	Plug_Load	Electric	Stock	New	0.23 ENERGY STAR or Better Office Equipment: Monitors		16.3%	\$ 0.02	4	100.0%	71.0%	0.038	0.022	0.03	0.04	0.03	\$0.13	\$0.14	F	F
SJD	Restaurant	Plug_Load	Electric	Stock	New	0.23 ENERGY STAR or Better Office Equipment: Copiers		7.8%	\$ 0.01	4	100.0%	33.0%	33.0%	0.018	0.20	0.01	0.02	\$0.21	\$0.24	F	F
SJD	Restaurant	Plug_Load	Electric	Stock	New	0.23 ENERGY STAR or Better Office Equipment: Computer		18.4%	\$ 0.03	4	100.0%	65.0%	65.0%	0.042	0.19	0.02	0.04	\$0.24	\$0.28	F	F
SJD	Restaurant	Plug_Load	Electric	Stock	New	0.23 ENERGY STAR or Better Office Equipment: Printers		15.0%	\$ 0.04	4	100.0%	99.0%	99.0%	0.034	0.17	0.03	0.03	\$0.34	\$0.45	F	F
SJD	Restaurant	Refrigeration	Electric	Stock	New	7.67 Night Covers for Display Cases		5.8%	\$ 0.01	5	50.0%	95.0%	47.5%	0.445	7.67	0.21	0.44	\$0.01	\$0.01	A	A
SJD	Restaurant	Refrigeration	Electric	Stock	New	7.67 Anti-Sweat (Humidistat) Controls		5.0%	\$ 0.02	12	100.0%	48.0%	48.0%	0.383	7.46	0.18	0.37	\$0.01	\$0.01	A	A
SJD	Restaurant	Refrigeration	Electric	Stock	New	7.67 Demand Control Defrost - Electric		7.8%	\$ 0.04	10	100.0%	48.0%	48.0%	0.595	7.28	0.27	0.57	\$0.01	\$0.01	A	A
SJD	Restaurant	Refrigeration	Electric	Stock	New	7.67 Installation of Floating Condenser Head Pressure Controls		6.8%	\$ 0.12	14	100.0%	44.4%	44.4%	0.524	7.01	0.21	0.48	\$0.03	\$0.03	B	B
SJD	Restaurant	Refrigeration	Electric	Stock	New	7.67 Strip Curtains for Walk-Ins		4.0%	\$ 0.05	4	100.0%	30.0%	30.0%	0.309	6.80	0.08	0.27	\$0.05	\$0.06	C	C
SJD	Restaurant	Refrigeration	Electric	Stock	New	7.67 Demand Control Defrost - Hot Gas		2.5%	\$ 0.07	10	100.0%	68.6%	68.6%	0.192	6.71	0.12	0.17	\$0.05	\$0.06	C	C
SJD	Restaurant	Refrigeration	Electric	Stock	New	7.67 Refrigeration Commissioning		5.0%	\$ 0.06	3	100.0%	50.0%	50.0%	0.384	6.60	0.16	0.33	\$0.07	\$0.08	D	E
SJD	Restaurant	Refrigeration	Electric	Stock	New	7.67 Compressor VSD retrofit		6.2%	\$ 0.41	10	50.0%	95.0%	47.5%	0.476	6.43	0.19	0.40	\$0.14	\$0.16	F	F
SJD	Restaurant	Refrigeration	Electric	Stock	New	7.67 High Efficiency Case Fans		12.0%	\$ 1.16	16	100.0%	95.0%	95.0%	0.919	6.24	0.71	0.75	\$0.15	\$0.18	F	F
SJD	Restaurant	Refrigeration	Electric	Stock	New	7.67 Reduced Speed or Cycling of Evaporator Fans		0.6%	\$ 0.09	5	100.0%	80.0%	80.0%	0.042	5.53	0.02	0.03	\$0.58	\$0.80	F	F
SJD	Restaurant	Space_Heat	Electric	Stock	New	3.76 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.188	3.76	0.09	0.19	\$0.18	\$0.18	F	F
SJD	Restaurant	Space_Heat	Electric	Stock	New	3.76 Ceiling R-19 to R-38 Insulation		3.0%	\$ 0.22	20	50.0%	67.0%	33.5%	0.113	3.67	0.04	0.11	\$0.21	\$0.22	F	F
SJD	Restaurant	Space_Heat	Electric	Stock	New	3.76 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation		2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.099	3.63	0.04	0.10	\$1.41	\$1.46	F	F
SJD	Restaurant	Water_Heat	Electric	Stock	New	9.19 Heat Pump Water Heater		30.0%	\$ 1.80	15	75.0%	100.0%	75.0%	2.757	9.19	2.07	2.76	\$0.08	\$0.08	E	E
SJD	Restaurant	Water_Heat	Electric	Stock	New	9.19 Demand controlled circulating systems		5.0%	\$ 2.83	15	50.0%	100.0%	50.0%	0.480	7.12	0.18	0.36	\$0.76	\$0.98	F	F
SJD	Retail	Cooling_Chillers	Electric	Stock	New	3.14 EMS Optimization		1.0%	\$ 0.01	5	100.0%	50.0%	50.0%	0.031	3.14	0.02	0.03	\$0.00	\$0.00	A	A
SJD	Retail	Cooling_Chillers	Electric	Stock	New	3.14 High Efficiency Windows, Low-e; U=0.35		10.3%	\$ 0.03	30	75.0%	100.0%	75.0%	0.324	3.12	0.24	0.32	\$0.01	\$0.01	A	A
SJD	Retail	Cooling_Chillers	Electric	Stock	New	3.14 Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F		7.5%	\$ 0.09	15	67.0%	90.0%	60.3%	0.236	2.88	0.13	0.22	\$0.05	\$0.05	C	C
SJD	Retail	Cooling_Chillers	Electric	Stock	New	3.14 Primary/Secondary De-coupled Chilled Water System		12.0%	\$ 0.38	15	50.0%	80.0%	40.0%	0.377	2.75	0.13	0.33	\$0.12	\$0.14	F	F
SJD	Retail	Cooling_Chillers	Electric	Stock	New	3.14 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.24	10	50.0%	100.0%	50.0%	0.314	2.62	0.13	0.26	\$0.12	\$0.15	F	F
SJD	Retail	Cooling_Chillers	Electric	Stock	New	3.14 Optimize Chilled Water and Condenser Water Settings		5.0%	\$ 0.17	10	33.0%	50.0%	16.5%	0.157	2.49	0.02	0.12	\$0.17	\$0.21	F	F
SJD	Retail	Cooling_Chillers	Electric	Stock	New	3.14 Cool Roofs (Reflective and Spray Evaporative)		6.9%	\$ 0.47	10	90.0%	100.0%	90.0%	0.217	2.47	0.15	0.17	\$0.34	\$0.44	F	F
SJD	Retail	Cooling_Chillers	Electric	Stock	New	3.14 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.24	20	50.0%	100.0%	50.0%	0.028	2.31	0.01	0.02	\$0.89	\$1.20	F	F
SJD	Retail	Cooling_Chillers	Electric	Stock	New	3.14 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation		2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.083	2.30	0.03	0.06	\$1.68	\$2.29	F	F
SJD	Retail	Cooling_DX	Electric	Stock	New	3.14 High Efficiency Windows, Low-e; U=0.35		5.0%	\$ 0.08	30	75.0%	100.0%	75.0%	0.157	3.14	0.12	0.16	\$0.05	\$0.05	B	B
SJD	Retail	Cooling_DX	Electric	Stock	New	3.14 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.24	10	50.0%	100.0%	50.0%	0.314	3.02	0.15	0.30	\$0.12	\$0.12	F	F
SJD	Retail	Cooling_DX	Electric	Stock	New	3.14 DX Tune-Up / Diagnostics		10.0%	\$ 0.20	3	100.0%	10.0%	10.0%	0.314	2.87	0.03	0.29	\$0.26	\$0.29	F	F
SJD	Retail	Cooling_DX	Electric	Stock	New	3.14 Cool Roofs (Reflective and Spray Evaporative)		6.9%	\$ 0.47	10	50.0%	100.0%	50.0%	0.217	2.84	0.10	0.20	\$0.34	\$0.38	F	F
SJD	Retail	Cooling_DX	Electric	Stock	New	3.14 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling		10.0%	\$ 0.73	10	25.0%	95.0%	23.8%	0.314	2.74	0.07	0.27	\$0.37	\$0.42	F	F
SJD	Retail	Cooling_DX	Electric	Stock	New	3.14 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.24	20	50.0%	100.0%	50.0%	0.028	2.68	0.01	0.02	\$0.89	\$1.04	F	F
SJD	Retail	Cooling_DX	Electric	Stock	New	3.14 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation		2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.083	2.67	0.03	0.07	\$1.68	\$1.98	F	F
SJD	Retail	Cooling_HeatPump	Electric	Stock	New	3.14 High Efficiency Windows, Low-e; U=0.35		5.0%	\$ 0.08	30	75.0%	100.0%	75.0%	0.157	3.14	0.12	0.16	\$0.05	\$0.05	B	B
SJD	Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)		10.0%	\$ 0.24	10	50.0%	100.0%	50.0%	0.314	3.02	0.15	0.30	\$0.12	\$0.13	F	F
SJD	Retail	Cooling_HeatPump	Electric	Stock	New	3.14 DX Tune-Up / Diagnostics		10.0%	\$ 0.20	3	100.0%	10.0%	10.0%	0.314	2.87	0.03	0.29	\$0.26	\$0.29	F	F
SJD	Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Cool Roofs (Reflective and Spray Evaporative)		6.9%	\$ 0.47	10	50.0%	100.0%	50.0%	0.217	2.84	0.10	0.20	\$0.34	\$0.38	F	F
SJD	Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling		10.0%	\$ 0.73	10	25.0%	95.0%	23.8%	0.314	2.74	0.07	0.27	\$0.37	\$0.42	F	F
SJD	Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Ceiling R-19 to R-38 Insulation		0.9%	\$ 0.24	20	50.0%	100.0%	50.0%	0.028	2.68	0.01	0.02	\$0.89	\$1.04	F	F
SJD	Retail	Cooling_HeatPump	Electric	Stock	New	3.14 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation		2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.083	2.67	0.03	0.07	\$1.68	\$1.98	F	F
SJD	Retail	Lighting_2L4T12	Electric	Stock	New	5.89 4' 1L T8 Premium, EB, reflector		61.1%	\$ 1.80	25	33.3%	100.0%	33.3%	3.599	5.89	1.20	3.60	\$0.05	\$0.05	C	C
SJD	Retail	Lighting_2L4T12	Electric	Stock	New	5.89 4' 2L T8 Premium, EB		25.0%	\$ 0.88	25	33.3%	100.0%	33.3%	1.473	5.89	0.49	1.47	\$0.06	\$0.06	C	C
SJD	Retail	Lighting_2L4T12	Electric	Stock	New	5.89 4' 1L T5HO, EB		13.9%	\$ 0.67	25	33.3%	100.0%	33.3%	0.819	5.89	0.27	0.82	\$0.08	\$0.08	E	E
SJD	Retail	Lighting_2L4T12	Electric	Stock	New	5.89 Continuous Dimming, 10-4' Fluorescent Fixtures		75.0%	\$ 4.35	18	50.0%	100.0%	50.0%	4.418	5.89	2.21	4.42	\$0.11	\$0.11	F	F
SJD	Retail	Lighting_2L4T8	Electric	Stock	New	4.71 4' 2L T8 Premium, EB		8.5%	\$ 0.30	25	100.0%	100.0%	100.0%	0.400	4.71	0.40	0.40	\$0.07	\$0.07	D	D
SJD	Retail	Lighting_2L8T12	Electric	Stock	New	5.89 8' 2L T8, EB		52.8%	\$ 0.44	25	50.0%	100.0%	50.0%	3.110	5.89	1.55	3.11	\$0.01	\$0.01	A	A
SJD	Retail	Lighting_2L8T12	Electric	Stock	New	5.89 8' 1L T12, 60W, EB, reflector		55.3%	\$ 0.96	25	25.0%	100.0%	25.0%	3.257	5.89	0.81	3.26	\$0.03	\$0.03	A	A
SJD	Retail	Lighting_2L8T12	Electric	Stock	New	5.89 8' 2L T12, 60W, EB		10.8%	\$ 0.21	25	25.0%	95.4%	23.5%	0.823	5.89	0.15	0.62	\$0.03	\$0.03	B	B
SJD	Retail	Lighting_3L4T12	Electric	Stock	New	5.89 Continuous Dimming, 5-8' Fluorescent Fixtures		5.0%	\$ 0.28	18	20.0%	100.0%	40.0%	4.418	5.89	0.42	4.42	\$0.13	\$0.13	F	F
SJD	Retail	Lighting_3L4T12	Electric	Stock	New	5.89 4' 1L T5HO, EB		46.1%	\$ 0.12	25	25.0%	100.0%	25.0%	2.715	5.89	0.68	2.71	\$0.00	\$0.00	A	A
SJD	Retail	Lighting_3L4T12	Electric	Stock	New	5.89 4' 3L T8, EB		22.6%	\$ 0.11	25	25.0%	100.0%	25.0%	1.332	5.89	0.33	1.33	\$0.01	\$0.01	A	A
SJD	Retail	Lighting_3L4T12	Electric	Stock	New	5.89 4' 2L T8 Premium, EB, reflector		53.0%	\$ 0.70	25	25.0%	100.0%	25.0%	3.124	5.89	0.78	3.12	\$0.02	\$0.02	A	A
SJD	Retail	Lighting_3L4T12	Electric	Stock	New	5.89 4' 3L T8 Premium, EB		22.6%	\$ 0.31	25	25.0%	100.0%	25.0%	1.332	5.89	0.33	1.33	\$0.02	\$0.02	A	A
SJD	Retail	Lighting_3L4T8	Electric	Stock	New	4.71 4' 3L T8 Premium, EB		6.7%	\$ 0.49	25	100.0%	100.0%	100.0%	0.316	4.71	0.32	0.32	\$0.15	\$0.15	F</	

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD School	Cooling_DX	Electric	Stock	New	1.51 DX Tune-Up / Diagnostics			10.0%	0.18	3	100.0%	10.0%	10.0%	0.151	1.36	0.01	0.14	\$0.49	\$0.55	F	F
SJD School	Cooling_DX	Electric	Stock	New	1.51 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling			10.0%	0.65	10	25.0%	95.0%	23.8%	0.151	1.34	0.03	0.13	\$0.69	\$0.77	F	F
SJD School	Cooling_DX	Electric	Stock	New	1.51 Ceiling R-19 to R-38 Insulation			0.9%	0.23	20	50.0%	23.4%	11.7%	0.014	1.31	0.00	0.01	\$1.83	\$2.10	F	F
SJD School	Cooling_DX	Electric	Stock	New	1.51 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation			2.6%	1.31	20	50.0%	90.0%	45.0%	0.040	1.31	0.02	0.03	\$3.50	\$4.04	F	F
SJD School	Cooling_HeatPump	Electric	Stock	New	1.51 High Efficiency Windows, Low-e; U=0.35			5.0%	0.04	30	75.0%	66.0%	49.5%	0.076	1.51	0.04	0.08	\$0.05	\$0.05	C	C
SJD School	Cooling_HeatPump	Electric	Stock	New	1.51 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)			10.0%	0.22	10	50.0%	100.0%	50.0%	0.151	1.47	0.07	0.15	\$0.23	\$0.24	F	F
SJD School	Cooling_HeatPump	Electric	Stock	New	1.51 Cool Roofs (Reflective and Spray Evaporative)			6.1%	0.24	10	50.0%	100.0%	50.0%	0.093	1.40	0.04	0.09	\$0.40	\$0.43	F	F
SJD School	Cooling_HeatPump	Electric	Stock	New	1.51 DX Tune-Up / Diagnostics			10.0%	0.18	3	100.0%	10.0%	10.0%	0.151	1.36	0.01	0.14	\$0.49	\$0.55	F	F
SJD School	Cooling_HeatPump	Electric	Stock	New	1.51 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling			10.0%	0.65	10	25.0%	95.0%	23.8%	0.151	1.34	0.03	0.13	\$0.69	\$0.77	F	F
SJD School	Cooling_HeatPump	Electric	Stock	New	1.51 Ceiling R-19 to R-38 Insulation			0.9%	0.23	20	50.0%	23.4%	11.7%	0.014	1.31	0.00	0.01	\$1.83	\$2.10	F	F
SJD School	Cooling_HeatPump	Electric	Stock	New	1.51 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation			2.6%	1.31	20	50.0%	90.0%	45.0%	0.040	1.31	0.02	0.03	\$3.50	\$4.04	F	F
SJD School	Lighting_2L4T12	Electric	Stock	New	2.68 4' 1L T8 Premium, EB, reflector			61.1%	1.40	34	33.3%	100.0%	33.3%	1.638	2.68	0.55	1.64	\$0.08	\$0.08	E	E
SJD School	Lighting_2L4T12	Electric	Stock	New	2.68 4' 2L T8 Premium, EB			25.0%	0.69	34	33.3%	100.0%	33.3%	0.670	2.68	0.22	0.67	\$0.09	\$0.09	E	E
SJD School	Lighting_2L4T12	Electric	Stock	New	2.68 4' 1L T5HO, EB			13.9%	0.52	34	33.3%	100.0%	33.3%	0.373	2.68	0.12	0.37	\$0.12	\$0.12	F	F
SJD School	Lighting_2L4T12	Electric	Stock	New	2.68 Continuous Dimming, 10-4' Fluorescent Fixtures			75.0%	0.38	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.17	\$0.17	F	F
SJD School	Lighting_2L4T8	Electric	Stock	New	2.14 4' 2L T8 Premium, EB			8.5%	0.24	34	100.0%	100.0%	100.0%	0.182	2.14	0.18	0.18	\$0.11	\$0.11	F	F
SJD School	Lighting_2L8T12	Electric	Stock	New	2.68 8' 2L T8, EB			52.8%	0.36	34	50.0%	100.0%	50.0%	1.415	2.68	0.71	1.42	\$0.02	\$0.02	A	A
SJD School	Lighting_2L8T12	Electric	Stock	New	2.68 8' 1L T12, 60W, EB, reflector			55.3%	0.79	34	25.0%	100.0%	25.0%	1.482	2.68	0.37	1.48	\$0.05	\$0.05	C	C
SJD School	Lighting_2L8T12	Electric	Stock	New	2.68 8' 2L T12, 60W, EB			10.6%	0.17	34	25.0%	32.9%	8.2%	0.281	2.68	0.02	0.28	\$0.05	\$0.05	C	C
SJD School	Lighting_3L4T12	Electric	Stock	New	2.68 Continuous Dimming, 5-8' Fluorescent Fixtures			75.0%	0.42	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.20	\$0.20	F	F
SJD School	Lighting_3L4T12	Electric	Stock	New	2.68 4' 1L T5HO, EB			46.1%	0.04	34	25.0%	100.0%	25.0%	1.235	2.68	0.31	1.24	\$0.00	\$0.00	A	A
SJD School	Lighting_3L4T12	Electric	Stock	New	2.68 4' 3L T8, EB			22.6%	0.04	34	25.0%	100.0%	25.0%	0.606	2.68	0.15	0.61	\$0.01	\$0.01	A	A
SJD School	Lighting_3L4T12	Electric	Stock	New	2.68 4' 2L T8 Premium, EB, reflector			53.0%	0.23	34	25.0%	100.0%	25.0%	1.422	2.68	0.36	1.42	\$0.01	\$0.01	A	A
SJD School	Lighting_3L4T12	Electric	Stock	New	2.68 4' 3L T8 Premium, EB			22.6%	0.10	34	25.0%	100.0%	25.0%	0.606	2.68	0.15	0.61	\$0.02	\$0.02	A	A
SJD School	Lighting_3L4T8	Electric	Stock	New	2.14 4' 3L T8 Premium, EB			6.7%	0.38	34	100.0%	100.0%	100.0%	0.143	2.14	0.14	0.14	\$0.23	\$0.23	F	F
SJD School	Lighting_4L4T12	Electric	Stock	New	2.68 4' 3L T8, EB			38.2%	0.09	34	16.7%	100.0%	16.7%	1.024	2.68	0.17	1.02	\$0.01	\$0.01	A	A
SJD School	Lighting_4L4T12	Electric	Stock	New	2.68 4' 3L T8 Premium, EB			42.4%	0.28	34	16.7%	100.0%	16.7%	1.135	2.68	0.19	1.14	\$0.02	\$0.02	A	A
SJD School	Lighting_4L4T12	Electric	Stock	New	2.68 4' 4L T8, EB			22.2%	0.18	34	16.7%	100.0%	16.7%	0.596	2.68	0.10	0.60	\$0.03	\$0.03	A	A
SJD School	Lighting_4L4T12	Electric	Stock	New	2.68 4' 2L T8 Premium, EB, reflector			62.5%	0.34	34	16.7%	100.0%	16.7%	1.675	2.68	0.28	1.68	\$0.04	\$0.04	A	A
SJD School	Lighting_4L4T12	Electric	Stock	New	2.68 4' 2L T5HO, EB			18.8%	0.26	34	16.7%	100.0%	16.7%	0.503	2.68	0.08	0.50	\$0.05	\$0.05	C	C
SJD School	Lighting_4L4T12	Electric	Stock	New	2.68 4' 4L T8 Premium, EB			25.0%	0.44	34	16.7%	100.0%	16.7%	0.670	2.68	0.11	0.67	\$0.06	\$0.06	C	C
SJD School	Lighting_4L4T12	Electric	Stock	New	2.68 Continuous Dimming, 5-4' Fluorescent Fixtures			75.0%	0.35	24	30.0%	100.0%	30.0%	2.010	2.68	0.60	2.01	\$0.17	\$0.17	F	F
SJD School	Lighting_4L4T8	Electric	Stock	New	2.14 4' 4L T8 Premium, EB			3.6%	0.27	34	100.0%	100.0%	100.0%	0.077	2.14	0.08	0.08	\$0.31	\$0.31	F	F
SJD School	Lighting_INC150W	Electric	Stock	New	2.68 HPS, 50W			56.0%	2.09	12	45.0%	85.5%	38.5%	1.501	2.68	0.58	1.50	\$0.20	\$0.20	F	F
SJD School	Plug_Load	Electric	Stock	New	0.11 Smart Networks			7.2%	0.00	4	90.0%	40.0%	36.0%	0.008	0.11	0.00	0.01	\$0.19	\$0.19	F	F
SJD School	Plug_Load	Electric	Stock	New	0.11 ENERGY STAR or Better Office Equipment: Copiers			9.0%	0.01	4	100.0%	33.0%	33.0%	0.010	0.11	0.00	0.01	\$0.48	\$0.49	F	F
SJD School	Plug_Load	Electric	Stock	New	0.11 ENERGY STAR or Better Office Equipment: Monitors			17.3%	0.06	4	100.0%	71.0%	71.0%	0.019	0.10	0.01	0.02	\$0.99	\$1.05	F	F
SJD School	Plug_Load	Electric	Stock	New	0.11 ENERGY STAR or Better Office Equipment: Printers			11.2%	0.06	4	100.0%	99.0%	99.0%	0.012	0.09	0.01	0.01	\$1.69	\$2.04	F	F
SJD School	Plug_Load	Electric	Stock	New	0.11 ENERGY STAR or Better Office Equipment: Computer			19.5%	0.12	4	100.0%	65.0%	65.0%	0.008	0.01	0.02	0.02	\$1.77	\$2.40	F	F
SJD School	Space_Heat	Electric	Stock	New	2.77 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)			5.0%	0.23	15	50.0%	100.0%	50.0%	0.139	2.77	0.07	0.14	\$0.25	\$0.25	F	F
SJD School	Space_Heat	Electric	Stock	New	2.77 Ceiling R-19 to R-38 Insulation			3.0%	0.23	20	50.0%	44.9%	22.5%	0.083	2.70	0.02	0.08	\$0.30	\$0.31	F	F
SJD School	Space_Heat	Electric	Stock	New	2.77 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation			2.6%	1.31	20	50.0%	90.0%	45.0%	0.073	2.68	0.03	0.07	\$1.91	\$1.97	F	F
SJD School	Water_Heat	Electric	Stock	New	0.9 Heat Pump Water Heater			30.0%	2.53	15	75.0%	87.2%	65.4%	0.270	0.90	0.18	0.27	\$1.15	\$1.15	F	F
SJD School	Water_Heat	Electric	Stock	New	0.9 Demand controlled circulating systems			5.0%	3.97	15	50.0%	100.0%	50.0%	0.045	0.72	0.02	0.04	\$10.86	\$13.52	F	F
SJD Small_Office	Cooling_Chillers	Electric	Stock	New	4.19 EMS Optimization			1.0%	-	5	100.0%	50.0%	50.0%	0.042	4.19	0.02	0.04	\$0.00	\$0.00	A	A
SJD Small_Office	Cooling_Chillers	Electric	Stock	New	4.19 High Efficiency Windows, Low-e; U=0.35			9.3%	0.06	30	75.0%	99.4%	74.6%	0.388	4.17	0.29	0.39	\$0.01	\$0.01	A	A
SJD Small_Office	Cooling_Chillers	Electric	Stock	New	4.19 Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F			7.5%	0.11	15	67.0%	90.0%	60.3%	0.314	3.88	0.18	0.29	\$0.04	\$0.04	B	B
SJD Small_Office	Cooling_Chillers	Electric	Stock	New	4.19 Primary/Secondary De-coupled Chilled Water System			12.0%	0.45	15	50.0%	80.0%	40.0%	0.503	3.71	0.18	0.44	\$0.11	\$0.12	F	F
SJD Small_Office	Cooling_Chillers	Electric	Stock	New	4.19 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)			19.0%	0.29	10	50.0%	50.0%	50.0%	0.419	3.53	0.18	0.35	\$0.01	\$0.13	F	F
SJD Small_Office	Cooling_Chillers	Electric	Stock	New	4.19 Optimize Chilled Water and Condenser Water Settings			4.9%	0.20	10	33.0%	50.0%	16.5%	0.210	3.65	0.03	0.20	\$0.15	\$0.19	F	F
SJD Small_Office	Cooling_Chillers	Electric	Stock	New	4.19 Ceiling R-19 to R-38 Insulation			0.9%	0.16	20	50.0%	8.7%	4.4%	0.038	3.32	0.00	0.03	\$0.46	\$0.58	F	F
SJD Small_Office	Cooling_Chillers	Electric	Stock	New	4.19 Cool Roofs (Reflective and Spray Evaporative)			1.8%	0.24	10	90.0%	100.0%	90.0%	0.076	3.32	0.05	0.06	\$0.49	\$0.62	F	F
SJD Small_Office	Cooling_Chillers	Electric	Stock	New	4.19 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation			2.6%	1.31	20	50.0%	90.0%	45.0%	0.110	3.27	0.04	0.09	\$1.26	\$1.62	F	F
SJD Small_Office	Cooling_DX	Electric	Stock	New	4.19 High Efficiency Windows, Low-e; U=0.35			5.0%	0.15	30	75.0%	99.4%	74.6%	0.210	4.19	0.16	0.21	\$0.06	\$0.06	D	D
SJD Small_Office	Cooling_DX	Electric	Stock	New	4.19 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)			10.0%	0.29	10	50.0%	100.0%	50.0%	0.419	4.03	0.20	0.40	\$0.11	\$0.11	F	F
SJD Small_Office	Cooling_DX	Electric	Stock	New	4.19 DX Tune-Up / Diagnostics			10.0%	0.23	3	100.0%	10.0%	10.0%	0.151	3.83	0.04	0.38	\$0.24	\$0.26	F	F
SJD Small_Office	Cooling_DX	Electric	Stock	New	4.19 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling			10.0%	0.87	10	25.0%	95.0%	23.8%	0.151	3.79	0.09	0.38	\$0.33	\$0.36	F	F
SJD Small_Office	Cooling_DX	Electric	Stock	New	4.19 Ceiling R-19 to R-38 Insulation			0.9%	0.16	20	50.0%	8.7%	4.4%	0.038	3.70	0.00	0.03	\$0.46	\$0.52	F	F
SJD Small_Office	Cooling_DX	Electric	Stock	New	4.19 Cool Roofs (Reflective and Spray Evaporative)			1.8%	0.24	10	90.0%	100.0%	90.0%	0.076	3.70	0.03	0.07	\$0.58	\$0.69	F	F
SJD Small_Office	Cooling_DX	Electric	Stock	New	4.19 Wall 2x4 R-13 to 2x6 R-19 Batt Insulation			2.6%	1.31	20	50.0%	90.0%	45.0%	0.110	3.67	0.04	0.10	\$1.26	\$1.44	F	F
SJD Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19 High Efficiency Windows, Low-e; U=0.35			5.0%	0.15	30	75.0%	99.4%	74.6%	0.210	4.19	0.16	0.21	\$0.06	\$0.06	D	D
SJD Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19 Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)			10.0%	0.29	10	50.0%	100.0%	50.0%	0.419	4.03	0.20	0.40	\$0.11	\$0.11	F	F
SJD Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19 DX Tune-Up / Diagnostics			10.0%	0.23	3	100.0%	10.0%	10.0%	0.151	3.83	0.04	0.38	\$0.24	\$0.26	F	F
SJD Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19 Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling			10.0%	0.87	10	25.0%	95.0%	23.8%	0.151	3.79	0.09	0.38	\$0.33	\$0.36	F	F
SJD Small_Office	Cooling_HeatPump	Electric	Stock	New	4.19 Ceiling R-19 to R-38 Insulation			0.9%	0.16	20	50.0%	8.7%	4.4%	0.038	3.70	0.00	0.03	\$0.46	\$0.52	F	F



Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Group	Stacked Cost Group
SJD	Small_Office	Space_Heat	Electric	Stock	New	6.18	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.309	6.17	0.15	0.31	\$0.11	\$0.11	F	F
SJD	Small_Office	Space_Heat	Electric	Stock	New	6.18	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.163	6.01	0.07	0.16	\$0.86	\$0.88	F	F
SJD	Small_Office	Water_Heat	Electric	Stock	New	0.95	Heat Pump Water Heater	30.0%	\$ 0.58	15	75.0%	100.0%	75.0%	0.285	0.95	0.21	0.29	\$0.25	\$0.25	F	F
SJD	Small_Office	Water_Heat	Electric	Stock	New	0.95	Demand controlled circulating systems	5.0%	\$ 0.91	15	50.0%	93.2%	46.6%	0.048	0.74	0.02	0.04	\$2.35	\$3.03	F	F
SJD	Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	EMS Optimization	1.0%	\$ -	5	100.0%	50.0%	50.0%	0.017	1.66	0.01	0.02	\$0.00	\$0.00	A	A
SJD	Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	High Efficiency Windows, Low-e; U=0.35	5.4%	\$ 0.01	30	75.0%	100.0%	75.0%	0.090	1.65	0.07	0.09	\$0.01	\$0.01	A	A
SJD	Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Decrease Cooling Tower Approach Temperature, 300 Tons, 6 Deg F	7.5%	\$ 0.03	15	67.0%	90.0%	60.3%	0.125	1.58	0.07	0.12	\$0.03	\$0.03	B	B
SJD	Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Primary/Secondary De-coupled Chilled Water System	12.0%	\$ 0.14	15	50.0%	80.0%	40.0%	0.199	1.51	0.07	0.18	\$0.08	\$0.09	E	E
SJD	Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.08	10	50.0%	100.0%	50.0%	0.166	1.44	0.07	0.14	\$0.08	\$0.10	E	E
SJD	Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Optimize Chilled Water and Condenser Water Settings	5.0%	\$ 0.06	10	33.0%	50.0%	50.0%	0.083	1.37	0.01	0.07	\$0.01	\$0.11	E	F
SJD	Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Cool Roofs (Reflective and Spray Evaporative)	4.3%	\$ 0.47	10	90.0%	100.0%	90.0%	0.071	1.36	0.05	0.06	\$1.05	\$1.28	F	F
SJD	Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.23	20	50.0%	20.0%	10.0%	0.015	1.30	0.00	0.01	\$1.61	\$2.05	F	F
SJD	Warehouse	Cooling_Chillers	Electric	Stock	New	1.66	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.044	1.30	0.02	0.03	\$3.18	\$4.06	F	F
SJD	Warehouse	Cooling_DX	Electric	Stock	New	1.66	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.03	30	75.0%	100.0%	75.0%	0.083	1.66	0.06	0.08	\$0.03	\$0.03	B	B
SJD	Warehouse	Cooling_DX	Electric	Stock	New	1.66	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.09	10	50.0%	100.0%	50.0%	0.166	1.60	0.08	0.16	\$0.08	\$0.09	E	E
SJD	Warehouse	Cooling_DX	Electric	Stock	New	1.66	DX Tune-Up / Diagnostics	10.0%	\$ 0.07	3	100.0%	10.0%	10.0%	0.166	1.52	0.02	0.15	\$0.18	\$0.19	F	F
SJD	Warehouse	Cooling_DX	Electric	Stock	New	1.66	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	\$ 0.26	10	25.0%	95.0%	23.8%	0.166	1.50	0.04	0.15	\$0.25	\$0.28	F	F
SJD	Warehouse	Cooling_DX	Electric	Stock	New	1.66	Cool Roofs (Reflective and Spray Evaporative)	4.3%	\$ 0.47	10	50.0%	100.0%	50.0%	0.071	1.47	0.03	0.06	\$1.05	\$1.18	F	F
SJD	Warehouse	Cooling_DX	Electric	Stock	New	1.66	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.23	20	33.0%	100.0%	10.0%	0.015	1.44	0.00	0.01	\$1.61	\$1.86	F	F
SJD	Warehouse	Cooling_DX	Electric	Stock	New	1.66	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.044	1.43	0.02	0.04	\$3.18	\$3.69	F	F
SJD	Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	High Efficiency Windows, Low-e; U=0.35	5.0%	\$ 0.03	30	75.0%	100.0%	75.0%	0.083	1.66	0.06	0.08	\$0.03	\$0.03	B	B
SJD	Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	10.0%	\$ 0.09	10	50.0%	100.0%	50.0%	0.166	1.60	0.08	0.16	\$0.08	\$0.09	E	E
SJD	Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	DX Tune-Up / Diagnostics	10.0%	\$ 0.07	3	100.0%	10.0%	10.0%	0.166	1.52	0.02	0.15	\$0.18	\$0.19	F	F
SJD	Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	Installation of Direct of Indirect Evaporative Cooling, Evaporative Pre-Cooling, and Absorption Cooling	10.0%	\$ 0.26	10	25.0%	95.0%	23.8%	0.166	1.50	0.04	0.15	\$0.25	\$0.28	F	F
SJD	Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	Cool Roofs (Reflective and Spray Evaporative)	4.3%	\$ 0.47	10	50.0%	100.0%	50.0%	0.071	1.47	0.03	0.06	\$1.05	\$1.18	F	F
SJD	Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	Ceiling R-19 to R-38 Insulation	0.9%	\$ 0.23	20	50.0%	20.0%	10.0%	0.015	1.44	0.00	0.01	\$1.61	\$1.86	F	F
SJD	Warehouse	Cooling_HeatPump	Electric	Stock	New	1.66	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.044	1.43	0.02	0.04	\$3.18	\$3.69	F	F
SJD	Warehouse	Lighting_2L4T12	Electric	Stock	New	2.94	4' 1L T8 Premium, EB, reflector	61.1%	\$ 0.80	22	33.0%	100.0%	33.3%	1.797	2.94	0.60	1.80	\$0.05	\$0.05	C	C
SJD	Warehouse	Lighting_2L4T12	Electric	Stock	New	2.94	4' 2L T8 Premium, EB	25.0%	\$ 0.39	22	33.0%	100.0%	33.3%	0.735	2.94	0.25	0.74	\$0.05	\$0.05	C	C
SJD	Warehouse	Lighting_2L4T12	Electric	Stock	New	2.94	4' 1L T5HO, EB	13.9%	\$ 2.30	22	33.0%	100.0%	33.3%	0.409	2.94	0.14	0.41	\$0.07	\$0.07	D	D
SJD	Warehouse	Lighting_2L4T12	Electric	Stock	New	2.94	Continuous Dimming, 10-4' Fluorescent Fixtures	75.0%	\$ 1.93	16	40.0%	100.0%	40.0%	2.205	2.94	0.88	2.21	\$0.10	\$0.10	F	F
SJD	Warehouse	Lighting_2L4T12	Electric	Stock	New	2.36	4' 2L T8 Premium, EB	8.5%	\$ 0.13	22	100.0%	100.0%	100.0%	0.201	2.36	0.20	0.20	\$0.07	\$0.07	D	D
SJD	Warehouse	Lighting_2L8T12	Electric	Stock	New	2.94	8' 2L T8, EB	52.8%	\$ 0.21	22	50.0%	100.0%	50.0%	1.552	2.94	0.78	1.55	\$0.01	\$0.01	A	A
SJD	Warehouse	Lighting_2L8T12	Electric	Stock	New	2.94	8' 1L T12, 60W, EB, reflector	55.3%	\$ 0.46	22	25.0%	100.0%	25.0%	1.626	2.94	0.41	1.63	\$0.03	\$0.03	A	A
SJD	Warehouse	Lighting_2L8T12	Electric	Stock	New	2.94	8' 2L T12, 60W, EB	10.6%	\$ 0.10	22	25.0%	84.7%	21.2%	0.311	2.94	0.07	0.31	\$0.03	\$0.03	B	B
SJD	Warehouse	Lighting_2L8T12	Electric	Stock	New	2.94	Continuous Dimming, 5-8' Fluorescent Fixtures	75.0%	\$ 2.39	16	40.0%	100.0%	40.0%	2.205	2.94	0.88	2.21	\$0.13	\$0.13	F	F
SJD	Warehouse	Lighting_3L4T12	Electric	Stock	New	2.94	4' 1L T5HO, EB	46.1%	\$ 0.01	22	25.0%	100.0%	25.0%	1.355	2.94	0.34	1.35	\$0.00	\$0.00	A	A
SJD	Warehouse	Lighting_3L4T12	Electric	Stock	New	2.94	4' 3L T8, EB	22.8%	\$ 0.01	22	25.0%	100.0%	25.0%	0.665	2.94	0.17	0.66	\$0.00	\$0.00	A	A
SJD	Warehouse	Lighting_3L4T12	Electric	Stock	New	2.94	4' 2L T8 Premium, EB, reflector	53.0%	\$ 0.14	22	25.0%	100.0%	25.0%	0.885	2.94	0.39	0.64	\$0.00	\$0.00	A	A
SJD	Warehouse	Lighting_3L4T12	Electric	Stock	New	2.94	4' 3L T8 Premium, EB	22.8%	\$ 0.02	22	25.0%	100.0%	25.0%	0.665	2.94	0.17	0.66	\$0.00	\$0.00	A	A
SJD	Warehouse	Lighting_3L4T8	Electric	Stock	New	2.36	4' 3L T8 Premium, EB	6.7%	\$ 0.22	22	100.0%	100.0%	100.0%	0.158	2.36	0.16	0.16	\$0.14	\$0.14	F	F
SJD	Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 3L T8, EB	38.2%	\$ 0.05	22	16.7%	100.0%	16.7%	1.123	2.94	0.19	1.12	\$0.00	\$0.00	A	A
SJD	Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 3L T8 Premium, EB	42.4%	\$ 0.16	22	16.7%	100.0%	16.7%	1.245	2.94	0.21	1.25	\$0.01	\$0.01	A	A
SJD	Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 4L T8, EB	22.2%	\$ 0.10	22	16.7%	100.0%	16.7%	0.653	2.94	0.11	0.65	\$0.02	\$0.02	A	A
SJD	Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 2L T8 Premium, EB, reflector	62.5%	\$ 0.37	22	16.7%	100.0%	16.7%	1.838	2.94	0.31	1.84	\$0.02	\$0.02	A	A
SJD	Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 2L T5HO, EB	18.8%	\$ 0.14	22	16.7%	100.0%	16.7%	0.551	2.94	0.09	0.55	\$0.03	\$0.03	A	A
SJD	Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	4' 4L T8 Premium, EB	25.0%	\$ 0.25	22	16.7%	100.0%	16.7%	0.735	2.94	0.12	0.74	\$0.03	\$0.03	B	B
SJD	Warehouse	Lighting_4L4T12	Electric	Stock	New	2.94	Continuous Dimming, 5-4' Fluorescent Fixtures	75.0%	\$ 1.95	16	40.0%	100.0%	40.0%	2.205	2.94	0.88	2.21	\$0.11	\$0.11	F	F
SJD	Warehouse	Lighting_4L4T8	Electric	Stock	New	2.36	4' 4L T8 Premium, EB	3.6%	\$ 0.15	22	100.0%	100.0%	100.0%	0.085	2.36	0.08	0.08	\$0.18	\$0.18	F	F
SJD	Warehouse	Lighting_INC150W	Electric	Stock	New	2.94	HPS, 80W	56.0%	\$ 2.69	7	45.0%	90.0%	40.6%	1.646	2.94	0.67	1.65	\$0.34	\$0.34	F	F
SJD	Warehouse	Plug_Load	Electric	Stock	New	0.15	Smart Networks	7.8%	\$ 0.00	4	90.0%	40.0%	36.0%	0.012	0.15	0.00	0.01	\$0.11	\$0.11	F	F
SJD	Warehouse	Plug_Load	Electric	Stock	New	0.15	ENERGY STAR or Better Office Equipment: Monitors	18.6%	\$ 0.05	4	100.0%	71.0%	0.028	0.15	0.02	0.03	\$0.58	\$0.59	F	F	
SJD	Warehouse	Plug_Load	Electric	Stock	New	0.15	ENERGY STAR or Better Office Equipment: Copiers	7.1%	\$ 0.02	4	100.0%	33.0%	33.0%	0.011	0.13	0.00	0.01	\$0.66	\$0.78	F	F
SJD	Warehouse	Plug_Load	Electric	Stock	New	0.15	ENERGY STAR or Better Office Equipment: Computer	21.0%	\$ 0.10	4	100.0%	65.0%	65.0%	0.031	0.12	0.02	0.03	\$1.02	\$1.24	F	F
SJD	Warehouse	Plug_Load	Electric	Stock	New	0.15	ENERGY STAR or Better Office Equipment: Printers	11.4%	\$ 0.06	4	100.0%	99.0%	99.0%	0.017	0.11	0.01	0.01	\$1.20	\$1.69	F	F
SJD	Warehouse	Space_Heat	Electric	Stock	New	4.02	Installation of Automated Building Ventilation Control ( Via Occupancy Sensors, CO2 Sensors, Etc.)	5.0%	\$ 0.28	15	50.0%	100.0%	50.0%	0.201	4.02	0.10	0.20	\$0.17	\$0.17	F	F
SJD	Warehouse	Space_Heat	Electric	Stock	New	4.02	Ceiling R-19 to R-38 Insulation	3.0%	\$ 0.23	20	50.0%	33.7%	16.8%	0.121	3.92	0.02	0.12	\$0.20	\$0.20	F	F
SJD	Warehouse	Space_Heat	Electric	Stock	New	4.02	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 1.31	20	50.0%	90.0%	45.0%	0.106	3.90	0.05	0.10	\$1.31	\$1.36	F	F
SJD	Warehouse	Water_Heat	Electric	Stock	New	0.42	Heat Pump Water Heater	30.0%	\$ 0.11	15	75.0%	100.0%	75.0%	0.285	0.42	0.09	0.13	\$0.21	\$0.21	F	F
SJD	Warehouse	Water_Heat	Electric	Stock	New	0.42	Demand controlled circulating systems	5.0%	\$ 0.17	15	50.0%	100.0%	50.0%	0.021	0.33	0.01	0.02	\$0.89	\$1.26	F	F
MPS	Multi Family	Central AC	Electric	Stock	Existing	1144.18	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 100.00	12	80.0%	89.4%	71.5%	68.65094	1144.1824	49.0772	68.6509424	\$0.21	\$0.21	F	F
MPS	Multi Family	Central AC	Electric	Stock	Existing	1144.18	Ceiling R-0 to R-19 Insulation	14.2%	\$ 447.20	30	67.0%	59.8%	40.1%	162.4738	1095.1052	62.3348	155.504937	\$0.25	\$0.27	F	F
MPS	Multi Family	Central AC	Electric	Stock	Existing	1144.18	Floor R-0 to R-11 Insulation-Batts	5.5%	\$ 240.84	30	67.0%	59.9%	40.1%	62.70119	1032.7704	22.7189	56.595816	\$0.35	\$0.39	F	F
MPS	Multi Family	Central AC	Electric	Stock	Existing	1144.18	High Efficiency Windows, Low-e; U=0.35	26.8%	\$ 1,370.00	30	75.0%	95.1%	71.3%	306.6409	1010.0515	193.011	270.693791	\$0.41	\$0.4		

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Group	Stacked Cost Group
MPS	Multi Family	Refrigerator	Electric	Stock	Existing	817.181	Removal of Secondary Refrigerator (or rep of ineff unit)	110.0%	\$ 200.00	7	15.0%	100.0%	15.0%	898.8991	817.18103	134.835	898.899133	\$0.05	\$0.05	C	C
MPS	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	Ceiling R-0 to R-19 Insulation	14.2%	\$ 447.20	30	67.0%	59.8%	40.1%	1087.402	7657.7612	435.89	1087.40209	\$0.04	\$0.04	B	B
MPS	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	Floor R-0 to R-11 Insulation-Batts	5.5%	\$ 204.84	30	67.0%	59.9%	40.1%	419.6453	7221.8714	158.867	395.758554	\$0.05	\$0.06	C	C
MPS	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	High Efficiency Windows, Low-e; U=0.35	26.8%	\$ 1,370.00	30	75.0%	95.1%	71.3%	2052.28	7063.0045	1349.67	1892.88521	\$0.06	\$0.07	D	D
MPS	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	Duct Insulation (R-3 to R-8)	6.8%	\$ 376.00	30	50.0%	40.0%	20.0%	50.7278	5713.33	77.6819	388.506443	\$0.07	\$0.09	D	E
MPS	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	Comprehensive Shell Air Sealing - Inf. Reduction	14.4%	\$ 650.00	10	90.0%	20.0%	18.0%	1102.718	5635.6482	146.076	811.533338	\$0.09	\$0.13	E	F
MPS	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	Ceiling R-19 to R-38 Insulation	2.2%	\$ 447.20	30	33.0%	59.8%	19.7%	168.4707	5489.5722	23.8444	120.770588	\$0.24	\$0.34	F	F
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Water Heater Tank Blanket/Insulation	10.0%	\$ 17.00	15	90.0%	53.1%	47.8%	316.6281	3166.281	151.322	316.628101	\$0.01	\$0.01	A	A
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Faucet Aerators	1.9%	\$ 4.82	15	73.4%	66.1%	61.42583	304.958	38.6386	58.4901985	\$0.04	\$0.04	A	A	
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Water Heater Thermostat Setback	4.3%	\$ 15.00	15	50.0%	83.7%	41.9%	134.7354	2976.3201	53.0121	126.65192	\$0.01	\$0.01	A	A
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Hot Water Pipe Insulation	1.2%	\$ 5.80	15	75.0%	62.6%	46.9%	39.21009	2923.3081	16.9886	36.2012044	\$0.02	\$0.02	A	A
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Low-Flow Showerheads	5.1%	\$ 20.00	10	95.0%	27.2%	25.9%	161.797	2906.3195	38.4322	148.512924	\$0.02	\$0.02	A	A
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Energy Star Dish Washer (EF=0.58)	4.0%	\$ 70.00	13	100.0%	96.4%	96.4%	127.4328	2867.8873	111.314	115.423404	\$0.07	\$0.08	D	E
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Drain Water Heat Recovery (GFX)	24.7%	\$ 550.00	15	25.0%	100.0%	25.0%	782.0714	2756.573	170.218	680.87352	\$0.09	\$0.10	E	F
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Horizontal-Axis Clothes Washer: Energy Star CW (EF=2.5)	9.9%	\$ 280.00	14	50.0%	97.0%	48.5%	313.6808	2586.3546	124.271	256.227942	\$0.12	\$0.14	F	F
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Energy Star Vertical-Axis Clothes Washer: SEHA CW Tier 2 (EF=3.25)	12.1%	\$ 350.00	14	50.0%	91.8%	45.9%	382.2984	2462.084	136.393	297.273313	\$0.12	\$0.15	F	F
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Heat Pump Water Heater (EF=2.9)	50.0%	\$ 1,750.00	15	40.0%	99.9%	40.0%	1583.141	2325.6906	464.673	1162.84528	\$0.14	\$0.19	F	F
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Tankless Water Heater (EF=0.98)	13.1%	\$ 1,200.00	15	10.0%	100.0%	10.0%	414.7628	1861.0176	24.3793	243.793305	\$0.36	\$0.61	F	F
MPS	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Solar Water Heater	55.0%	\$ 5,500.00	15	10.0%	99.0%	9.9%	1583.141	1836.6389	90.9136	198.319131	\$0.74	\$1.54	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	2370.5	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 100.00	12	80.0%	47.3%	37.8%	142.229	2370.4983	53.8084	142.229897	\$0.10	\$0.10	E	E
MPS	Single Family	Central AC	Electric	Stock	Existing	2370.5	Ceiling R-0 to R-19 Insulation	24.3%	\$ 812.70	30	67.0%	53.0%	35.5%	575.8828	2316.6899	199.777	562.810486	\$0.13	\$0.13	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	2370.5	Duct Insulation (R-3 to R-8)	9.0%	\$ 376.00	30	50.0%	21.6%	10.8%	213.5819	2116.9132	20.6374	190.733877	\$0.16	\$0.18	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	2370.5	HVAC Diagnostic Testing, Repair and Maintenance	4.0%	\$ 123.00	10	100.0%	48.4%	48.4%	94.81993	2096.2758	40.6091	83.8510308	\$0.21	\$0.23	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	2370.5	Floor R-0 to R-11 Insulation-Batts	7.9%	\$ 625.26	30	67.0%	54.5%	36.5%	187.5064	2055.6667	59.3735	162.603327	\$0.31	\$0.35	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	2370.5	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	33.0%	53.0%	17.5%	199.0161	1996.2932	29.3018	167.599597	\$0.38	\$0.45	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	2370.5	PTCS Duct Sealing & O&M	8.0%	\$ 750.00	20	50.0%	72.0%	36.0%	189.6399	1966.9914	56.6494	157.359312	\$0.42	\$0.51	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	2370.5	High Efficiency Windows, Low-e; U=0.35	16.9%	\$ 2,800.00	30	16.9%	85.0%	14.4%	400.642	1910.342	46.3726	322.870219	\$0.64	\$0.80	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	2370.5	Comprehensive Shell Air Sealing - Inf. Reduction	6.3%	\$ 650.00	10	90.0%	40.0%	36.0%	150.1804	1863.9694	42.5123	118.089831	\$0.09	\$0.88	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	2370.5	Floor R-11 to R-19 Insulation-Batts	1.7%	\$ 454.74	30	33.0%	54.5%	18.0%	35.5747	2471.4571	4.91375	27.3219584	\$1.18	\$1.54	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 100.00	12	80.0%	47.3%	37.8%	881.6223	14693.705	333.535	881.622305	\$0.02	\$0.02	A	A
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	Ceiling R-0 to R-19 Insulation	24.3%	\$ 812.70	30	67.0%	53.0%	35.5%	3569.65	14360.17	1238.33	3488.6215	\$0.02	\$0.02	A	A
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	Duct Insulation (R-3 to R-8)	9.0%	\$ 376.00	30	50.0%	21.6%	10.8%	1323.903	13121.839	127.922	1182.27773	\$0.03	\$0.03	A	A
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	Wall 2x4 R-0 to Blow-In R-13 Insulation	17.6%	\$ 745.00	30	50.0%	54.5%	27.2%	2590.5	12993.917	624.239	2290.82756	\$0.03	\$0.03	A	A
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	HVAC Diagnostic Testing, Repair and Maintenance	4.0%	\$ 123.00	10	100.0%	48.4%	48.4%	587.7482	12369.678	239.625	494.787116	\$0.03	\$0.04	B	B
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	ENERGY STAR or better Air Source Heat Pump, SEER=18; HSPF=9.4	58.0%	\$ 3,645.00	18	10.0%	100.0%	10.0%	8525.944	12130.052	703.84	7038.39844	\$0.05	\$0.06	C	C
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	Floor R-0 to R-11 Insulation-Batts	7.9%	\$ 625.26	30	67.0%	54.5%	36.5%	1162.272	11426.213	330.021	903.813421	\$0.05	\$0.06	C	D
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	ENERGY STAR or better Air Source Heat Pump, SEER=14; HSPF=8.5	48.5%	\$ 3,220.00	18	90.0%	100.0%	90.0%	7119.1	11096.191	4838.49	5376.10465	\$0.05	\$0.07	C	D
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	33.0%	53.0%	17.5%	1233.616	6257.6897	91.8512	526.36746	\$0.06	\$0.14	D	F
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	PTCS Duct Sealing & O&M	8.0%	\$ 750.00	20	50.0%	72.0%	36.0%	1175.498	6195.8434	177.576	493.267966	\$0.07	\$0.10	D	F
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	High Efficiency Windows, Low-e; U=0.35	16.9%	\$ 2,800.00	30	16.9%	85.0%	14.4%	2483.409	9988.2895	45.3691	1013.108779	\$0.10	\$0.26	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	Comprehensive Shell Air Sealing - Inf. Reduction	6.3%	\$ 650.00	10	90.0%	40.0%	36.0%	930.9043	5842.9072	132.262	370.171263	\$0.11	\$0.28	F	F
MPS	Single Family	Central AC	Electric	Stock	Existing	14693.7	Floor R-11 to R-19 Insulation-Batts	1.5%	\$ 454.74	30	33.0%	54.5%	18.0%	220.4056	5709.6455	15.4029	85.6446827	\$0.19	\$0.49	F	F
MPS	Single Family	Freezer	Electric	Stock	Existing	643.037	Removal of Secondary Freezer (or rep of ineff unit)	110.0%	\$ 200.00	7	15.0%	100.0%	15.0%	707.3412	643.03741	106.101	707.341156	\$0.06	\$0.06	C	C
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	Ceiling R-0 to R-19 Insulation	24.3%	\$ 812.70	30	67.0%	53.0%	35.5%	2484.123	10225.364	881.771	2484.12272	\$0.03	\$0.03	B	B
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	PTCS Duct Sealing & O&M	25.3%	\$ 750.00	20	50.0%	72.0%	36.0%	2588.729	9343.593	851.578	2365.49323	\$0.03	\$0.03	B	B
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 150.00	12	80.0%	47.3%	37.8%	613.5218	8492.0154	192.762	509.520926	\$0.03	\$0.04	B	B
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	Duct Insulation (R-3 to R-8)	9.0%	\$ 376.00	30	50.0%	21.6%	10.8%	921.3053	8299.2535	80.9079	747.762738	\$0.04	\$0.05	B	B
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	Wall 2x4 R-0 to Blow-In R-13 Insulation	17.6%	\$ 745.00	30	50.0%	54.5%	27.2%	1802.732	8218.3455	394.816	1448.89432	\$0.04	\$0.05	B	C
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	HVAC Diagnostic Testing, Repair and Maintenance	4.0%	\$ 123.00	10	100.0%	48.4%	48.4%	409.0146	7823.59191	151.557	132.941163	\$0.05	\$0.06	C	C
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	Floor R-0 to R-11 Insulation-Batts	7.9%	\$ 625.26	30	67.0%	54.5%	36.5%	808.8263	7671.9791	151.557	808.8263	\$0.07	\$0.10	D	D
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	33.0%	53.0%	17.5%	858.4745	7450.3834	109.358	625.499919	\$0.09	\$0.12	E	F
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	High Efficiency Windows, Low-e; U=0.35	16.9%	\$ 2,800.00	30	16.9%	85.0%	14.4%	1728.206	7341.0258	178.2	1240.71948	\$0.15	\$0.21	F	F
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	Comprehensive Shell Air Sealing - Inf. Reduction	6.3%	\$ 650.00	10	90.0%	40.0%	36.0%	647.8172	7162.826	163.366	453.793336	\$0.16	\$0.23	F	F
MPS	Single Family	Heat Pump	Electric	Stock	Existing	10225.4	Floor R-11 to R-19 Insulation-Batts	1.5%	\$ 454.74	30	33.0%	54.5%	18.0%	153.3805	6999.4604	18.8824	104.991906	\$0.27	\$0.40	F	F
MPS	Single Family	Lighting Bulbs	Electric	Stock	Existing	2004	CFL, 6.0 hr/day	21.3%	\$ 4.50	5	100.0%	69.3%	69.3%	426.9786	2004	295.802	426.97838	\$0.01	\$0.01	A	A
MPS	Single Family	Lighting Bulbs	Electric	Stock	Existing	2004	CFL, 2.5 hr/day	39.3%	\$ 4.50	7	100.0%	89.0%	89.0%	787.005	2004	700.733	787.004977	\$0.02	\$0.02	A	A
MPS	Single Family	Lighting Bulbs	Electric	Stock	Existing	2004	CFL, 0.5 hr/day	4.4%	\$ 4.50	7	100.0%	93.8%	93.8%	88.56007	2004	83.0392	88.5600728	\$0.12	\$0.12	F	F
MPS	Single Family	Lighting Fixtures	Electric	Stock	Existing	2004	CFL Fixtures, 6.0 hr/day	21.3%	\$ 23.33	8	100.0%	69.3%	69.3%	426.9786	2004	295.802	426.97838	\$0.02	\$0.02	A	A
MPS	Single Family	Lighting Fixtures	Electric	Stock	Existing	2004	CFL Fixtures, 2.5 hr/day	39.3%	\$ 23.33	10	100.0%	89.0%	89.0%	787.005	2004	700.733	787.00				

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Multi Family	Central Heat	Electric	Stock	Existing	7413.47	Comprehensive Shell Air Sealing - Inf. Reduction	14.4%	\$ 650.00	10	90.0%	20.0%	18.0%	1067.54	4578.4641	118.674	659.298825	\$0.10	\$0.16	E	F
SJD	Multi Family	Central Heat	Electric	Stock	Existing	7413.47	ENERGY STAR or better Air Source Heat Pump, SEER=14; HSPF=8.5	48.5%	\$ 3,220.00	18	90.0%	100.0%	90.0%	3591.826	4459.7903	194.619	2160.76839	\$0.10	\$0.17	F	F
SJD	Multi Family	Central Heat	Electric	Stock	Existing	7413.47	PTCS Duct Sealing &O&M	6.0%	\$ 630.00	20	50.0%	60.0%	18.0%	444.8082	2515.0987	27.1631	150.905923	\$0.15	\$0.45	F	F
SJD	Multi Family	Central Heat	Electric	Stock	Existing	7413.47	Ceiling R-19 to R-38 Insulation	2.2%	\$ 447.20	30	33.0%	59.8%	19.7%	163.0963	2487.9357	10.8066	54.7345845	\$0.25	\$0.75	F	F
SJD	Multi Family	Freezer	Electric	Stock	Existing	631.158	Removal of Secondary Freezer (or rep of ineff unit)	110.0%	\$ 200.00	7	15.0%	100.0%	15.0%	694.2742	631.15833	104.141	694.274158	\$0.06	\$0.06	C	C
SJD	Multi Family	Heat Pump	Electric	Stock	Existing	4929.15	Wall 2x4 R-0 to Blow-In R-13 Insulation	23.1%	\$ 435.00	30	50.0%	59.9%	30.0%	1138.633	4929.147	341.1	1138.63295	\$0.04	\$0.04	B	B
SJD	Multi Family	Heat Pump	Electric	Stock	Existing	4929.15	Ceiling R-0 to R-19 Insulation	14.2%	\$ 447.20	30	67.0%	59.8%	40.1%	699.9389	4588.0467	261.158	651.502631	\$0.06	\$0.06	C	D
SJD	Multi Family	Heat Pump	Electric	Stock	Existing	4929.15	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 150.00	12	80.0%	89.4%	71.5%	295.7488	4326.8891	185.592	259.613344	\$0.07	\$0.08	D	E
SJD	Multi Family	Heat Pump	Electric	Stock	Existing	4929.15	PTCS Duct Sealing &O&M	17.3%	\$ 630.00	20	50.0%	39.0%	18.0%	851.2834	4441.2987	328.736	175.201712	\$0.08	\$0.09	A	A
SJD	Multi Family	Heat Pump	Electric	Stock	Existing	4929.15	Floor R-0 to R-11 Insulation-Batts	5.5%	\$ 240.84	30	67.0%	59.9%	40.1%	270.1173	4012.5604	68.2684	219.889308	\$0.08	\$0.10	F	F
SJD	Multi Family	Heat Pump	Electric	Stock	Existing	4929.15	High Efficiency Windows, Low-e, U=0.35	26.8%	\$ 1,370.00	30	75.0%	95.1%	71.3%	1321.011	3924.292	749.896	1051.71025	\$0.10	\$0.12	E	F
SJD	Multi Family	Heat Pump	Electric	Stock	Existing	4929.15	Duct Insulation (R-3 to R-8)	6.8%	\$ 376.00	30	50.0%	40.0%	20.0%	335.182	3174.3963	43.161	215.85947	\$0.10	\$0.16	F	F
SJD	Multi Family	Heat Pump	Electric	Stock	Existing	4929.15	Comprehensive Shell Air Sealing - Inf. Reduction	14.4%	\$ 650.00	10	90.0%	20.0%	18.0%	709.7972	3131.2353	81.1616	450.89788	\$0.15	\$0.23	F	F
SJD	Multi Family	Heat Pump	Electric	Stock	Existing	4929.15	Ceiling R-19 to R-38 Insulation	2.2%	\$ 447.20	30	33.0%	59.8%	19.7%	108.4412	3050.0737	13.2483	67.1016205	\$0.38	\$0.61	F	F
SJD	Multi Family	Lighting Bulbs	Electric	Stock	Existing	1088	CFL, 6.0 hr/day	21.3%	\$ 4.50	5	100.0%	72.7%	72.7%	231.8128	1088	168.479	231.812753	\$0.01	\$0.01	A	A
SJD	Multi Family	Lighting Bulbs	Electric	Stock	Existing	1088	CFL, 2.5 hr/day	39.3%	\$ 4.50	7	100.0%	86.2%	86.2%	427.2762	1088	368.282	427.276155	\$0.02	\$0.02	A	A
SJD	Multi Family	Lighting Bulbs	Electric	Stock	Existing	1088	CFL, 0.5 hr/day	4.4%	\$ 4.50	7	100.0%	96.5%	96.5%	48.08052	1088	46.3967	48.0805186	\$0.10	\$0.10	F	F
SJD	Multi Family	Lighting Fixtures	Electric	Stock	Existing	1088	CFL Fixtures, 6.0 hr/day	21.3%	\$ 23.33	8	100.0%	72.7%	72.7%	231.8128	1088	168.479	231.812753	\$0.02	\$0.02	A	A
SJD	Multi Family	Lighting Fixtures	Electric	Stock	Existing	1088	CFL Fixtures, 2.5 hr/day	39.3%	\$ 23.33	10	100.0%	86.2%	86.2%	427.2762	1088	368.282	427.276155	\$0.04	\$0.04	B	B
SJD	Multi Family	Lighting Fixtures	Electric	Stock	Existing	1088	CFL Fixtures, 0.5 hr/day	4.4%	\$ 23.33	10	100.0%	96.5%	96.5%	48.08052	1088	46.3967	48.0805186	\$0.21	\$0.21	F	F
SJD	Multi Family	Plug Load	Electric	Stock	Existing	2000	Powerstrip with Occupancy Sensor	1.8%	\$ 90.00	20	100.0%	100.0%	100.0%	35.67371	2000	35.6737	35.6737122	\$0.27	\$0.27	F	F
SJD	Multi Family	Refrigerator	Electric	Stock	Existing	817.181	Removal of Secondary Refrigerator (or rep of ineff unit)	110.0%	\$ 200.00	7	15.0%	100.0%	15.0%	898.8991	817.18103	134.835	898.899133	\$0.05	\$0.05	C	C
SJD	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	Ceiling R-0 to R-19 Insulation	14.2%	\$ 447.20	30	67.0%	59.8%	40.1%	1087.402	7657.7612	435.89	1087.40209	\$0.04	\$0.04	B	B
SJD	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	Floor R-0 to R-11 Insulation-Batts	5.5%	\$ 240.84	30	67.0%	59.9%	40.1%	419.6453	7221.8714	158.867	395.758554	\$0.05	\$0.06	C	C
SJD	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	High Efficiency Windows, Low-e, U=0.35	26.8%	\$ 1,370.00	30	75.0%	95.1%	71.3%	2052.28	7063.0045	1349.67	1892.88521	\$0.06	\$0.07	D	D
SJD	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	Duct Insulation (R-3 to R-8)	6.8%	\$ 376.00	30	50.0%	40.0%	20.0%	520.7278	5713.33	77.6819	388.506443	\$0.07	\$0.09	D	E
SJD	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	Comprehensive Shell Air Sealing - Inf. Reduction	14.4%	\$ 650.00	10	90.0%	20.0%	18.0%	1102.718	5635.6482	146.076	811.533338	\$0.09	\$0.13	E	F
SJD	Multi Family	Room Heat	Electric	Stock	Existing	7657.76	Ceiling R-19 to R-38 Insulation	2.2%	\$ 447.20	30	33.0%	59.8%	19.7%	168.4707	5489.5722	23.8444	120.770588	\$0.24	\$0.34	F	F
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Water Heater Tank Blanket/Insulation	11.0%	\$ 17.00	15	90.0%	53.1%	47.8%	316.6281	3166.281	51.322	316.628101	\$0.01	\$0.01	A	A
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Faucet Aerator	1.9%	\$ 4.82	15	90.0%	73.4%	66.1%	61.42585	3014.9587	38.6386	58.4901995	\$0.01	\$0.01	A	A
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Water Heater Thermostat Setback	4.3%	\$ 15.00	15	50.0%	83.7%	41.9%	134.7354	2976.3201	53.0121	126.65192	\$0.01	\$0.01	A	A
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Hot Water Pipe Insulation	1.2%	\$ 5.80	15	75.0%	62.6%	46.9%	39.21009	2923.3081	16.9886	36.2012044	\$0.02	\$0.02	A	A
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Low-Flow Showerheads	5.1%	\$ 20.00	10	95.0%	27.2%	25.9%	161.797	2906.3195	38.4322	148.512924	\$0.02	\$0.02	A	A
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Energy Star Dish Washer (EF=0.58)	4.0%	\$ 70.00	13	100.0%	96.4%	96.4%	127.4328	2867.8873	111.314	115.423404	\$0.07	\$0.08	D	E
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Drain Water Heat Recovery (GFX)	24.7%	\$ 550.00	15	25.0%	100.0%	25.0%	782.0714	2756.573	170.218	680.87352	\$0.09	\$0.10	E	F
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Horizontal-Axis Clothes Washer: Energy Star CW (EF=2.5)	9.9%	\$ 280.00	14	50.0%	97.0%	48.5%	313.6808	2586.3546	124.271	256.227942	\$0.12	\$0.14	F	F
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Energy Star Vertical-Axis Clothes Washer: SEHA CW Tier 2 (EF=3.25)	12.1%	\$ 350.00	14	50.0%	91.8%	45.9%	382.2984	2462.084	136.393	297.273313	\$0.12	\$0.15	F	F
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Heat Pump Water Heater (EF=2.9)	50.0%	\$ 1,750.00	15	40.0%	99.8%	40.0%	1583.141	2325.6906	464.673	1162.84528	\$0.14	\$0.19	F	F
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Waterless Water Heater (EF=0.98)	13.1%	\$ 1,200.00	15	40.0%	99.8%	10.0%	147.828	1861.0176	24.3793	243.793305	\$0.66	\$0.66	F	F
SJD	Multi Family	Water Heat	Electric	Stock	Existing	3166.28	Solar Water Heater	50.0%	\$ 5,500.00	15	10.0%	90.0%	9.0%	1583.141	1836.6383	40.9136	918.319131	\$0.43	\$0.74	F	F
SJD	Single Family	Central AC	Electric	Stock	Existing	2370.5	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 100.00	12	80.0%	47.3%	37.8%	142.2299	2370.4983	53.8094	142.229897	\$0.10	\$0.10	E	E
SJD	Single Family	Central AC	Electric	Stock	Existing	2370.5	Ceiling R-0 to R-19 Insulation	24.3%	\$ 812.70	30	67.0%	53.0%	35.5%	575.8826	2316.6899	199.777	562.810486	\$0.13	\$0.13	F	F
SJD	Single Family	Central AC	Electric	Stock	Existing	2370.5	Duct Insulation (R-3 to R-8)	9.0%	\$ 376.00	30	50.0%	21.6%	10.8%	213.5819	2116.9132	20.6374	190.733877	\$0.16	\$0.18	F	F
SJD	Single Family	Central AC	Electric	Stock	Existing	2370.5	HVAC Diagnostic Testing, Repair and Maintenance	4.0%	\$ 123.00	10	100.0%	48.4%	48.4%	94.81993	2096.2758	40.6091	83.8510308	\$0.21	\$0.23	F	F
SJD	Single Family	Central AC	Electric	Stock	Existing	2370.5	Floor R-0 to R-11 Insulation-Batts	7.9%	\$ 625.26	30	67.0%	54.5%	36.5%	187.5064	2055.6667	59.3735	162.603237	\$0.31	\$0.35	F	F
SJD	Single Family	Central AC	Electric	Stock	Existing	2370.5	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	33.0%	53.0%	17.5%	199.0161	1996.2932	29.3018	167.599597	\$0.38	\$0.45	F	F
SJD	Single Family	Central AC	Electric	Stock	Existing	2370.5	PTCS Duct Sealing &O&M	8.0%	\$ 750.00	20	50.0%	72.0%	36.0%	189.6399	1966.9914	56.6494	157.359312	\$0.42	\$0.51	F	F
SJD	Single Family	Central AC	Electric	Stock	Existing	2370.5	High Efficiency Windows, Low-e, U=0.35	16.9%	\$ 2,800.00	30	16.9%	85.0%	14.4%	400.642	1910.342	46.3726	322.870219	\$0.64	\$0.80	F	F
SJD	Single Family	Central AC	Electric	Stock	Existing	2370.5	Comprehensive Shell Air Sealing - Inf. Reduction	6.3%	\$ 650.00	10	90.0%	40.0%	36.0%	150.1804	8651.9694	42.5123	118.089831	\$0.89	\$0.89	F	F
SJD	Single Family	Central AC	Electric	Stock	Existing	2370.5	Floor R-11 to R-19 Insulation-Batts	3.0%	\$ 454.74	30	33.0%	54.5%	18.0%	35.5747	1921.4571	4.91375	27.3218595	\$0.18	\$0.18	F	F
SJD	Single Family	Central Heat	Electric	Stock	Existing	14693.7	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 100.00	12	80.0%	47.3%	37.8%	881.6223	14693.705	333.535	881.622305	\$0.02	\$0.02	A	A
SJD	Single Family	Central Heat	Electric	Stock	Existing	14693.7	Ceiling R-0 to R-19 Insulation	24.3%	\$ 812.70	30	67.0%	53.0%	35.5%	3569.65	14360.17	1238.33	3488.6215	\$0.02	\$0.02	A	A
SJD	Single Family	Central Heat	Electric	Stock	Existing	14693.7	Duct Insulation (R-3 to R-8)	9.0%	\$ 376.00	30	50.0%	21.6%	10.8%	1323.903	13121.839	127.922	1182.27773	\$0.03	\$0.03	A	A
SJD	Single Family	Central Heat	Electric	Stock	Existing	14693.7	Wall 2x4 R-0 to Blow-In R-13 Insulation	17.6%	\$ 745.00	30	50.0%	54.5%	27.2%	2590.5	12993.917	624.239	2290.82756	\$0.03	\$0.03	A	A
SJD	Single Family	Central Heat	Electric	Stock	Existing	14693.7	HVAC Diagnostic Testing, Repair and Maintenance	4.0%	\$ 123.00	10	100.0%	48.4%	48.4%	587.7482	12369.678	239.625	494.787116	\$0.03	\$0.04	B	B
SJD	Single Family	Central Heat	Electric	Stock	Existing	14693.7	ENERGY STAR or better Air Source Heat Pump, SEER=18; HSPF=9.4	58.0%	\$ 3,645.00	18	10.0%	100.0%	10.0%	8525.944	12130.052	703.84	7038.39844	\$0.05	\$0.06	C	C
SJD	Single Family	Central Heat	Electric	Stock	Existing	14693.7	Floor R-0 to R-11 Insulation-Batts	7.9%	\$ 625.26	30	67.0%	54.5%	36.5%	1162.272	11426.213	330.021	903.813421	\$0.05	\$0.06	C	D
SJD	Single Family	Central Heat	Electric	Stock	Existing	14693.7	ENERGY STAR or better Air Source Heat Pump, SEER=14; HSPF=8.5	48.5%	\$ 3,220.00	18	90.0%	100.0%	90.0%	711.91	11096.191	4838.49	5376.10465	\$0.05	\$0.07	C	D
SJD	Single Family	Central Heat	Electric	Stock	Existing	14693.7	Ceiling R-0 to R-38 Insulation	8.4%	\$ 812.70	30	33.0%	53.0%	17.5%	122.9128	91.8152	627.37	627.36				

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Single Family	Water Heat	Electric	Stock	Existing	3447.75	Horizontal-Axis Clothes Washer: Energy Star CW (EF=2.5)	12.4%	\$ 280.00	14	50.0%	97.0%	48.5%	426.654	2848.4812	170.96	352.495446	\$0.08	\$0.10	E	F
SJD	Single Family	Water Heat	Electric	Stock	Existing	3447.75	Energy Star Vertical-Axis Clothes Washer: SEHA CW Tier 2 (EF=3.25)	15.0%	\$ 350.00	14	50.0%	79.0%	39.5%	517.4314	2677.5209	158.671	401.873092	\$0.09	\$0.11	E	F
SJD	Single Family	Water Heat	Electric	Stock	Existing	3447.75	Heat Pump Water Heater (EF=2.9)	50.0%	\$ 1,750.00	15	40.0%	99.9%	40.0%	1723.875	2518.8495	503.266	1259.42475	\$0.13	\$0.17	F	F
SJD	Single Family	Water Heat	Electric	Stock	Existing	3447.75	Tankless Water Heater (EF=0.98)	13.1%	\$ 1,200.00	15	10.0%	100.0%	10.0%	451.6551	2015.5834	26.4041	264.041421	\$0.33	\$0.56	F	F
SJD	Single Family	Water Heat	Electric	Stock	Existing	3447.75	Low-Flow Showerheads	0.8%	\$ 90.00	20	100.0%	100.0%	100.0%	27.5257	1989.1792	15.881	15.8809539	\$0.35	\$0.61	F	F
SJD	Single Family	Water Heat	Electric	Stock	Existing	3447.75	Solar Water Heater	50.0%	\$ 5,500.00	15	10.0%	99.0%	9.9%	1723.875	1973.2983	97.6783	986.649134	\$0.40	\$0.69	F	F
MPS	Multi Family	Central AC	Electric	Stock	New	1144.18	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 66.00	12	80.0%	89.4%	71.5%	68.65094	1144.1824	49.0772	68.6509424	\$0.14	\$0.14	F	F
MPS	Multi Family	Central AC	Electric	Stock	New	1144.18	High Efficiency Windows, Low-e; U=0.35	1.3%	\$ 80.00	30	100.0%	95.0%	95.0%	14.87437	1095.1052	13.5245	14.2363674	\$0.50	\$0.52	F	F
MPS	Multi Family	Central AC	Electric	Stock	New	1144.18	Ceiling R-19 to R-38 Insulation	2.2%	\$ 447.20	30	50.0%	95.0%	47.5%	25.17201	1081.5806	11.3025	29.794774	\$1.64	\$1.73	F	F
MPS	Multi Family	Central AC	Electric	Stock	New	7413.47	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 66.00	12	80.0%	89.4%	71.5%	444.8082	7413.4692	317.984	444.808154	\$0.02	\$0.02	A	F
MPS	Multi Family	Central AC	Electric	Stock	New	7413.47	High Efficiency Windows, Low-e; U=0.35	1.3%	\$ 80.00	30	100.0%	95.0%	95.0%	96.3751	7095.4848	87.6292	92.2413022	\$0.08	\$0.08	E	E
MPS	Multi Family	Central AC	Electric	Stock	New	7413.47	ENERGY STAR or better Air Source Heat Pump, SEER=18; HSPF=9.4	58.0%	\$ 3,645.00	18	10.0%	50.0%	5.0%	4301.626	7007.8555	203.314	4066.27091	\$0.10	\$0.10	E	F
MPS	Multi Family	Central AC	Electric	Stock	New	7413.47	ENERGY STAR or better Air Source Heat Pump, SEER=14; HSPF=8.5	48.5%	\$ 3,220.00	18	90.0%	50.0%	45.0%	3591.826	6804.542	1483.56	3296.8006	\$0.10	\$0.11	F	F
MPS	Multi Family	Central AC	Electric	Stock	New	7413.47	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	1.4%	\$ 189.00	30	50.0%	95.0%	47.5%	107.2672	5320.9817	36.5705	76.9905126	\$0.16	\$0.23	F	F
MPS	Multi Family	Central AC	Electric	Stock	New	7413.47	Ceiling R-19 to R-38 Insulation	2.2%	\$ 447.20	30	50.0%	95.0%	47.5%	163.0963	5284.412	55.2221	116.257047	\$0.25	\$0.35	F	F
MPS	Multi Family	Heat Pump	Electric	Stock	New	4929.15	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 66.00	12	80.0%	89.4%	71.5%	295.7488	4929.147	211.425	295.748818	\$0.03	\$0.03	B	B
MPS	Multi Family	Heat Pump	Electric	Stock	New	4929.15	High Efficiency Windows, Low-e; U=0.35	1.3%	\$ 80.00	30	100.0%	95.0%	95.0%	64.07891	4717.7221	58.2639	61.3303888	\$0.12	\$0.12	F	F
MPS	Multi Family	Heat Pump	Electric	Stock	New	4929.15	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	1.4%	\$ 189.00	30	50.0%	95.0%	47.5%	71.32097	4659.4582	32.0239	67.4187758	\$0.24	\$0.26	F	F
MPS	Multi Family	Heat Pump	Electric	Stock	New	4929.15	Ceiling R-19 to R-38 Insulation	2.2%	\$ 447.20	30	50.0%	95.0%	47.5%	108.4412	4627.4343	48.3567	101.803554	\$0.38	\$0.41	F	F
MPS	Multi Family	Lighting Bulbs	Electric	Stock	New	1088	CFL, 6.0 hr/day	21.3%	\$ 4.50	5	100.0%	72.7%	72.7%	231.8128	1088	168.479	231.812753	\$0.01	\$0.01	A	A
MPS	Multi Family	Lighting Bulbs	Electric	Stock	New	1088	CFL, 2.5 hr/day	39.3%	\$ 4.50	7	100.0%	86.2%	86.2%	427.2762	1088	368.282	427.276155	\$0.02	\$0.02	A	A
MPS	Multi Family	Lighting Bulbs	Electric	Stock	New	1088	CFL, 0.5 hr/day	4.4%	\$ 4.50	7	100.0%	96.5%	96.5%	48.08052	1088	46.3967	48.0805186	\$0.10	\$0.10	F	F
MPS	Multi Family	Lighting Fixtures	Electric	Stock	New	1088	CFL Fixtures, 6.0 hr/day	21.3%	\$ 23.33	8	100.0%	72.7%	72.7%	231.8128	1088	168.479	231.812753	\$0.02	\$0.02	A	A
MPS	Multi Family	Lighting Fixtures	Electric	Stock	New	1088	CFL Fixtures, 2.5 hr/day	39.3%	\$ 23.33	10	100.0%	86.2%	86.2%	427.2762	1088	368.282	427.276155	\$0.04	\$0.04	B	B
MPS	Multi Family	Lighting Fixtures	Electric	Stock	New	1088	CFL Fixtures, 0.5 hr/day	4.4%	\$ 23.33	10	100.0%	96.5%	96.5%	48.08052	1088	46.3967	48.0805186	\$0.21	\$0.21	F	F
MPS	Multi Family	Plug Load	Electric	Stock	New	2000	Powerstrip with Occupancy Sensor	2.0%	\$ 90.00	20	100.0%	100.0%	100.0%	39.63746	2000	39.6375	39.637458	\$0.24	\$0.24	F	F
MPS	Multi Family	Room Heat	Electric	Stock	New	7657.76	High Efficiency Windows, Low-e; U=0.35	1.3%	\$ 80.00	30	100.0%	95.0%	95.0%	99.5509	7657.7612	94.5734	99.550896	\$0.07	\$0.07	D	D
MPS	Multi Family	Room Heat	Electric	Stock	New	7657.76	Ceiling R-19 to R-38 Insulation	2.2%	\$ 447.20	30	50.0%	95.0%	47.5%	168.4707	7563.1879	79.0353	166.390133	\$0.24	\$0.25	F	F
MPS	Multi Family	Water Heat	Electric	Stock	New	3166.28	Faucet Aerators	1.9%	\$ 4.82	15	90.0%	73.4%	66.1%	61.42585	3166.281	40.5779	61.4258515	\$0.01	\$0.01	A	A
MPS	Multi Family	Water Heat	Electric	Stock	New	3166.28	Drain Water Heat Recovery (GFX)	28.7%	\$ 400.00	15	25.0%	100.0%	25.0%	908.7226	3125.7031	224.269	897.076786	\$0.05	\$0.06	C	C
MPS	Multi Family	Water Heat	Electric	Stock	New	3166.28	Energy Star Dish Washer (EF=0.58)	4.3%	\$ 70.00	13	100.0%	96.4%	96.4%	137.2745	2901.4339	121.314	125.792012	\$0.07	\$0.07	D	D
MPS	Multi Family	Water Heat	Electric	Stock	New	3166.28	Horizontal-Axis Clothes Washer: Energy Star CW (EF=2.5)	10.7%	\$ 280.00	14	50.0%	97.0%	48.5%	337.9064	2780.1201	143.897	296.695229	\$0.11	\$0.12	F	F
MPS	Multi Family	Water Heat	Electric	Stock	New	3166.28	Energy Star Vertical-Axis Clothes Washer: SEHA CW Tier 2 (EF=3.25)	13.0%	\$ 350.00	14	50.0%	91.8%	45.9%	41.8235	2636.2229	157.319	342.881271	\$0.11	\$0.13	F	F
MPS	Multi Family	Water Heat	Electric	Stock	New	3166.28	Heat Pump Water Heater (EF=2.9)	50.0%	\$ 1,750.00	15	40.0%	99.9%	40.0%	1583.141	2478.9038	495.285	1239.45191	\$0.14	\$0.17	F	F
MPS	Multi Family	Water Heat	Electric	Stock	New	3166.28	Tankless Water Heater (EF=0.98)	13.1%	\$ 903.00	15	10.0%	100.0%	10.0%	414.7828	1983.6188	25.9854	259.854068	\$0.27	\$0.43	F	F
MPS	Multi Family	Water Heat	Electric	Stock	New	3166.28	Solar Water Heater	50.0%	\$ 5,500.00	15	10.0%	99.0%	9.9%	1583.141	1957.6334	96.9029	978.816715	\$0.43	\$0.70	F	F
MPS	Single Family	Central AC	Electric	Stock	New	2370.5	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 66.00	12	80.0%	47.3%	37.8%	142.2299	2370.4943	53.8084	142.229897	\$0.07	\$0.07	D	D
MPS	Single Family	Central AC	Electric	Stock	New	2370.5	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	50.0%	95.0%	47.5%	199.0161	2316.6899	92.3688	194.498626	\$0.38	\$0.39	F	F
MPS	Single Family	Central AC	Electric	Stock	New	10370.5	High Efficiency Windows, Low-e; U=0.35	1.7%	\$ 170.00	30	100.0%	95.0%	95.0%	40.29847	2234.393	35.9225	37.8131515	\$0.09	\$0.09	E	E
MPS	Single Family	Central AC	Electric	Stock	New	2370.5	Floor R-11 to R-19 Insulation-Batts	1.5%	\$ 454.74	30	50.0%	95.0%	95.0%	35.5747	2186.3805	15.6927	32.825708	\$1.18	\$1.28	F	F
MPS	Single Family	Central AC	Electric	Stock	New	14693.7	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 66.00	12	80.0%	47.3%	37.8%	881.6223	14693.705	333.535	881.622305	\$0.01	\$0.01	A	A
MPS	Single Family	Central AC	Electric	Stock	New	14693.7	ENERGY STAR or better Air Source Heat Pump, SEER=18; HSPF=9.4	58.0%	\$ 3,645.00	18	10.0%	50.0%	5.0%	8525.944	14360.17	416.621	8332.4121	\$0.05	\$0.05	C	C
MPS	Single Family	Central AC	Electric	Stock	New	14693.7	ENERGY STAR or better Air Source Heat Pump, SEER=14; HSPF=8.5	48.5%	\$ 3,220.00	18	90.0%	50.0%	45.0%	7119.1	13943.549	3040.04	6755.64955	\$0.05	\$0.05	C	C
MPS	Single Family	Central AC	Electric	Stock	New	14693.7	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	50.0%	95.0%	47.5%	1233.616	10903.507	434.819	915.408279	\$0.06	\$0.08	D	E
MPS	Single Family	Central AC	Electric	Stock	New	14693.7	High Efficiency Windows, Low-e; U=0.35	1.7%	\$ 170.00	30	100.0%	95.0%	95.0%	249.793	10468.688	169.069	177.967694	\$0.06	\$0.09	D	E
MPS	Single Family	Central AC	Electric	Stock	New	14693.7	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 318.00	30	50.0%	95.0%	47.5%	386.6705	10299.619	128.743	271.038424	\$0.08	\$0.11	E	F
MPS	Single Family	Central AC	Electric	Stock	New	14693.7	Floor R-11 to R-19 Insulation-Batts	1.5%	\$ 454.74	30	50.0%	95.0%	47.5%	220.4056	10170.875	72.4675	152.56313	\$0.19	\$0.27	F	F
MPS	Single Family	Heat Pump	Electric	Stock	New	10225.4	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 66.00	12	80.0%	47.3%	37.8%	613.5218	10225.364	232.108	613.521826	\$0.02	\$0.02	A	A
MPS	Single Family	Heat Pump	Electric	Stock	New	10225.4	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	50.0%	95.0%	47.5%	858.4745	9893.2552	398.519	838.987623	\$0.09	\$0.09	E	E
MPS	Single Family	Heat Pump	Electric	Stock	New	10225.4	High Efficiency Windows, Low-e; U=0.35	1.7%	\$ 170.00	30	100.0%	95.0%	95.0%	173.8312	9594.737	154.955	68.110529	\$0.09	\$0.10	E	F
MPS	Single Family	Heat Pump	Electric	Stock	New	10225.4	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 318.00	30	50.0%	95.0%	47.5%	269.0844	9439.782	117.995	248.411493	\$0.11	\$0.12	F	F
MPS	Single Family	Heat Pump	Electric	Stock	New	10225.4	Floor R-11 to R-19 Insulation-Batts	1.5%	\$ 454.74	30	50.0%	95.0%	47.5%	153.3805	9321.7865	66.4177	139.826798	\$0.27	\$0.30	F	F
MPS	Single Family	Heat Pump	Electric	Stock	New	10225.4	Geothermal Heat Pump (4 Ton, w/ water heating)	51.9%	\$ 15,000.00	18	25.0%	99.0%	24.8%	5310.565	9255.3688	1189.68	4806.79587	\$0.32	\$0.35	F	F
MPS	Single Family	Lighting Bulbs	Electric	Stock	New	2004	CFL, 6.0 hr/day	21.3%	\$ 4.50	5	100.0%	69.3%	69.3%	426.9786	2004	295.802	426.978638	\$0.01	\$0.01	A	A
MPS	Single Family	Lighting Bulbs	Electric	Stock	New	2004	CFL, 2.5 hr/day	39.3%	\$ 4.50	7	100.0%	89.0%	89.0%	787.005	2004	700.733	787.004977	\$0.02	\$0.02	A	A
MPS	Single Family	Lighting Bulbs	Electric	Stock	New	2004	CFL, 0.5 hr/day	4.4%	\$ 4.50	7	100.0%	93.8%	93.8%	88.56007	2004	83.0392	88.5600728	\$0.12	\$0.12	F	F
MPS	Single Family	Lighting Fixtures	Electric	Stock	New	2004	CFL Fixtures, 6.0 hr/day	21.3%	\$ 23.33	8	100.0%	69.3%	69.3%	426.9786	2004	295.802	426.978638	\$0.02	\$0.02	A	A
MPS	Single Family	Lighting Fixtures	Electric	Stock	New	2004	CFL Fixtures, 2.5 hr/day	39.3%	\$ 23.33	10	100.0%	89.0%	89.0%	787.005	2004	700.733	787.004977	\$0.05	\$0.05	C	C
MPS	Single Family	Lighting Fixtures	Electric	Stock	New	2004	CFL Fixtures, 0.5 hr/day	4.4%	\$ 23.33	10	100.0%	93.8%	93.8%	88.56007	2004	83.0392	88.5600728	\$0.24	\$0.24	F	

Area	Building Type	End-Use	Fuel	Efficiency	Vintage	EUI	Measure Names	Energy Savings	Full Per Unit Cost	Measure Life	Feasibility Factor	Incomplete Factor	Measure Applicability (Feas Factor + Incomp Factor)	Stand Alone Savings	Adjusted Base	Stacked Savings	Stacked Savings Full App	Stand-alone Marginal Energy Cost	Stacked Marginal Energy Cost	Stand Alone Cost Group	Stacked Cost Group
SJD	Multi Family	Water Heat	Electric	Stock	New	3166.28	Horizontal-Axis Clothes Washer: Energy Star CW (EF=2.5)	10.7%	\$ 280.00	14	50.0%	97.0%	48.5%	337.9064	2780.1201	143.897	296.696229	\$0.11	\$0.12	F	F
SJD	Multi Family	Water Heat	Electric	Stock	New	3166.28	Energy Star Vertical-Axis Clothes Washer: SEHA CW Tier 2 (EF=3.25)	13.0%	\$ 350.00	14	50.0%	91.8%	45.9%	411.8235	2636.2229	157.319	342.881271	\$0.11	\$0.13	F	F
SJD	Multi Family	Water Heat	Electric	Stock	New	3166.28	Heat Pump Water Heater (EF=2.9)	50.0%	\$ 1,750.00	15	40.0%	99.9%	40.0%	1583.141	2478.9038	495.285	1239.45191	\$0.14	\$0.17	F	F
SJD	Multi Family	Water Heat	Electric	Stock	New	3166.28	Tankless Water Heater (EF=0.98)	13.1%	\$ 903.00	15	10.0%	100.0%	10.0%	414.7828	1983.6188	25.9854	259.854068	\$0.27	\$0.43	F	F
SJD	Multi Family	Water Heat	Electric	Stock	New	3166.28	Solar Water Heater	50.0%	\$ 5,500.00	15	10.0%	99.0%	9.9%	1583.141	1957.6334	96.9029	978.816715	\$0.43	\$0.70	F	F
SJD	Single Family	Central AC	Electric	Stock	New	2370.5	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 66.00	12	80.0%	47.3%	37.8%	142.2299	2370.4993	53.8084	142.229897	\$0.07	\$0.07	D	D
SJD	Single Family	Central AC	Electric	Stock	New	2370.5	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	50.0%	95.0%	47.5%	199.0161	2316.6899	92.3868	194.498626	\$0.38	\$0.39	F	F
SJD	Single Family	Central AC	Electric	Stock	New	2370.5	High Efficiency Windows, Low-e; U=0.35	1.7%	\$ 170.00	30	100.0%	95.0%	95.0%	40.29847	2224.303	35.9225	37.8131515	\$0.39	\$0.41	F	F
SJD	Single Family	Central AC	Electric	Stock	New	2370.5	Floor R-11 to R-19 Insulation-Batts	1.5%	\$ 454.74	30	50.0%	95.0%	47.5%	35.55747	2188.3805	15.5922	32.825708	\$1.18	\$1.28	F	F
SJD	Single Family	Central Heat	Electric	Stock	New	14693.7	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 66.00	12	80.0%	47.3%	37.8%	881.6223	14693.705	333.535	881.622305	\$0.01	\$0.01	A	A
SJD	Single Family	Central Heat	Electric	Stock	New	14693.7	ENERGY STAR or better Air Source Heat Pump, SEER=18; HSPF=9.4	58.0%	\$ 3,645.00	18	10.0%	50.0%	5.0%	8525.944	14360.17	416.621	8332.4121	\$0.05	\$0.05	C	C
SJD	Single Family	Central Heat	Electric	Stock	New	14693.7	ENERGY STAR or better Air Source Heat Pump, SEER=14; HSPF=8.5	48.5%	\$ 3,220.00	18	90.0%	50.0%	45.0%	7119.1	13943.549	3040.04	6755.64955	\$0.05	\$0.05	C	C
SJD	Single Family	Central Heat	Electric	Stock	New	14693.7	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	50.0%	95.0%	47.5%	1233.616	10903.507	434.819	915.408279	\$0.06	\$0.08	D	E
SJD	Single Family	Central Heat	Electric	Stock	New	14693.7	High Efficiency Windows, Low-e; U=0.35	1.7%	\$ 170.00	30	100.0%	95.0%	95.0%	249.793	10468.688	169.069	177.967694	\$0.06	\$0.09	D	E
SJD	Single Family	Central Heat	Electric	Stock	New	14693.7	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 318.00	30	50.0%	95.0%	47.5%	386.6705	10299.619	128.743	271.038424	\$0.08	\$0.11	E	F
SJD	Single Family	Central Heat	Electric	Stock	New	14693.7	Floor R-11 to R-19 Insulation-Batts	1.5%	\$ 454.74	30	50.0%	95.0%	47.5%	220.4056	10170.875	72.4675	152.56313	\$0.19	\$0.27	F	F
SJD	Single Family	Heat Pump	Electric	Stock	New	10225.4	ENERGY STAR Programmable Thermostat (Electronic w/ Adaptive Recovery)	6.0%	\$ 66.00	12	80.0%	47.3%	37.8%	613.5218	10225.364	232.108	613.521826	\$0.02	\$0.02	A	A
SJD	Single Family	Heat Pump	Electric	Stock	New	10225.4	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	50.0%	95.0%	47.5%	858.4745	9993.2562	398.519	838.987823	\$0.09	\$0.09	E	E
SJD	Single Family	Heat Pump	Electric	Stock	New	10225.4	High Efficiency Windows, Low-e; U=0.35	1.7%	\$ 170.00	30	100.0%	95.0%	95.0%	173.8312	8594.737	154.955	163.110529	\$0.09	\$0.10	E	E
SJD	Single Family	Heat Pump	Electric	Stock	New	10225.4	Wall 2x4 R-13 to 2x6 R-19 Batt Insulation	2.6%	\$ 318.00	30	50.0%	95.0%	47.5%	269.0844	9439.782	117.995	248.411483	\$0.11	\$0.12	F	F
SJD	Single Family	Heat Pump	Electric	Stock	New	10225.4	Floor R-11 to R-19 Insulation-Batts	1.5%	\$ 454.74	30	50.0%	95.0%	47.5%	153.3805	9321.7865	66.4177	139.826798	\$0.27	\$0.30	F	F
SJD	Single Family	Heat Pump	Electric	Stock	New	10225.4	Geothermal Heat Pump (4 Ton, w/ water heating)	51.9%	\$15,000.00	18	25.0%	99.0%	24.8%	5310.565	9255.3688	1189.68	4806.79587	\$0.32	\$0.35	F	F
SJD	Single Family	Lighting Bulbs	Electric	Stock	New	2004	CFL, 6.0 hr/day	21.3%	\$ 4.50	5	100.0%	69.3%	69.3%	426.9786	2004	295.802	426.978638	\$0.01	\$0.01	A	A
SJD	Single Family	Lighting Bulbs	Electric	Stock	New	2004	CFL, 2.5 hr/day	39.3%	\$ 4.50	7	100.0%	89.0%	89.0%	787.005	2004	700.733	787.004977	\$0.02	\$0.02	A	A
SJD	Single Family	Lighting Bulbs	Electric	Stock	New	2004	CFL, 0.5 hr/day	4.4%	\$ 4.50	7	100.0%	93.8%	93.8%	88.56007	2004	83.0392	88.5600728	\$0.12	\$0.12	F	F
SJD	Single Family	Lighting Fixtures	Electric	Stock	New	2004	CFL Fixtures, 6.0 hr/day	21.3%	\$ 23.33	8	100.0%	69.3%	69.3%	426.9786	2004	295.802	426.978638	\$0.02	\$0.02	A	A
SJD	Single Family	Lighting Fixtures	Electric	Stock	New	2004	CFL Fixtures, 2.5 hr/day	39.3%	\$ 23.33	10	100.0%	89.0%	89.0%	787.005	2004	700.733	787.004977	\$0.05	\$0.05	C	C
SJD	Single Family	Lighting Fixtures	Electric	Stock	New	2004	CFL Fixtures, 0.5 hr/day	4.4%	\$ 23.33	10	100.0%	93.8%	93.8%	88.56007	2004	83.0392	88.5600728	\$0.24	\$0.24	F	F
SJD	Single Family	Plug Load	Electric	Stock	New	3500	Powerstrip with Occupancy Sensor	0.4%	\$ 90.00	20	100.0%	100.0%	100.0%	13.57224	3500	13.5722	13.5722419	\$0.71	\$0.71	F	F
SJD	Single Family	Room Heat	Electric	Stock	New	14594.7	Ceiling R-19 to R-38 Insulation	8.4%	\$ 812.70	30	50.0%	95.0%	47.5%	1225.308	14594.748	582.021	1225.30791	\$0.06	\$0.06	D	D
SJD	Single Family	Room Heat	Electric	Stock	New	14594.7	High Efficiency Windows, Low-e; U=0.35	1.7%	\$ 170.00	30	100.0%	95.0%	95.0%	248.1107	14012.727	226.306	238.216355	\$0.06	\$0.07	D	D
SJD	Single Family	Room Heat	Electric	Stock	New	14594.7	Floor R-11 to R-19 Insulation-Batts	1.5%	\$ 454.74	30	50.0%	95.0%	47.5%	218.9212	13786.421	98.2283	206.796319	\$0.19	\$0.20	F	F
SJD	Single Family	Water Heat	Electric	Stock	New	3447.75	Faucet Aerators	1.7%	\$ 4.82	15	90.0%	73.4%	66.1%	56.88786	3447.749	37.5801	56.8878589	\$0.01	\$0.01	A	A
SJD	Single Family	Water Heat	Electric	Stock	New	3447.75	Energy Star Dish Washer (EF=0.58)	5.0%	\$ 70.00	13	100.0%	82.4%	82.4%	172.4771	3410.1689	140.606	170.597157	\$0.05	\$0.06	C	C
SJD	Single Family	Water Heat	Electric	Stock	New	3447.75	Drain Water Heat Recovery (GFX)	25.0%	\$ 400.00	15	35.0%	100.0%	35.0%	861.9373	3269.5627	286.087	817.390682	\$0.06	\$0.06	C	D
SJD	Single Family	Water Heat	Electric	Stock	New	3447.75	Horizontal-Axis Clothes Washer: Energy Star CW (EF=2.5)	13.3%	\$ 280.00	14	50.0%	95.0%	47.5%	459.5014	2983.476	188.872	397.62504	\$0.08	\$0.09	E	E
SJD	Single Family	Water Heat	Electric	Stock	New	3447.75	Energy Star Vertical-Axis Clothes Washer: SEHA CW Tier 2 (EF=3.25)	16.2%	\$ 350.00	14	50.0%	79.0%	39.5%	557.2676	2794.6041	178.36	451.698312	\$0.08	\$0.10	E	E
SJD	Single Family	Water Heat	Electric	Stock	New	3447.75	Heat Pump Water Heater (EF=2.9)	50.0%	\$ 1,750.00	15	40.0%	99.9%	40.0%	1723.875	2616.2442	522.726	1308.12212	\$0.13	\$0.17	F	F
SJD	Single Family	Water Heat	Electric	Stock	New	3447.75	Tankless Water Heater (EF=0.98)	13.1%	\$ 903.00	15	10.0%	100.0%	10.0%	451.6551	2093.5186	27.4251	274.250942	\$0.25	\$0.41	F	F
SJD	Single Family	Water Heat	Electric	Stock	New	3447.75	Solar Water Heater	50.0%	\$ 5,500.00	15	10.0%	99.0%	9.9%	1723.875	2066.0935	102.272	1033.04677	\$0.40	\$0.66	F	F

## ***Appendix C. Industrial Top-Down Potential Results***

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<b>2003 Annual Consumption</b>			
<b>SIC</b>	<b>Business Category</b>	<b>MWh</b>	<b>%</b>
<b>20</b>	Food/Kindred Products	68,490	5.1%
<b>23</b>	Apparel & other textile products	14,415	1.1%
<b>24</b>	Lumber/Wood Products	27,001	2.0%
<b>26</b>	Paper/Allied Products	90,653	6.8%
<b>27</b>	Printing/Publishing	137,355	10.3%
<b>28</b>	Chemical/Allied Products	32,204	2.4%
<b>29</b>	Petroleum Related	1,459	0.1%
<b>30</b>	Rubber/Misc. Plastics Products	96,474	7.2%
<b>32</b>	Stone/Clay/Glass/Concrete Prod.	70,215	5.3%
<b>33</b>	Primary Metal Industries	148,364	11.1%
<b>34</b>	Fabricated Metal Products	48,639	3.6%
<b>35</b>	Machinery, except Electrical	27,315	2.0%
<b>36</b>	Electric/Electronic Equip.	244,515	18.3%
<b>37</b>	Transportation Equipment	118,237	8.9%
<b>38</b>	Instruments/Related Products	12,973	1.0%
<b>39</b>	Miscellaneous	196,022	14.7%
<b>Total</b>		<b>1,334,334</b>	

Source data: Aquila COMMEND

### Industrial Technical Electric Conservation Potential by End-Use

		Achievable	50%	admin adder	10%							
Electric End-Use		2003 Firm Consumption Total (MWh)	Measure Life (Years)	Savings as % Load	Savings as % End Use	Savings (MWh)	First Year MWh	Measure Cost \$/kWh Saved	Total Cost (\$)	Simple Payback @ \$0.05/kWh	Cumm. Savings (MWh)	Leveled CCE (\$/kWh)
Total Load		1,334,332	15.8	10.1%	N/A	67,442	15.4	\$0.216	\$29,137,550	4.3	2,130,583	0.024
Uncoded/Miscoded/Invalid		-										
1	HVAC	189,339	15.0	1.6%	11.1%	20,923	2.4	\$0.450	\$9,415,232	9.0	313,841	0.051
2	Indirect Boiler	10,054										
3	Lighting	154,428	10.0	1.3%	11.5%	17,723	2.0	\$0.250	\$4,430,756	5.0	177,230	0.036
4	Other - Not Reported	117,139										
5	Process Electro Chemical	22,589										
6	Process Heat	177,393										
7	Process Other	8,581										
8	Motors	584,889	17.2	6.7%	15.2%	88,883	10.1	\$0.130	\$11,539,435	2.6	1,529,186	0.014
9	Refrigeration/Process Cooling	69,920	15.0	0.6%	10.5%	7,355	0.8	\$0.150	\$1,103,259	3.0	110,326	0.017
8.1	Motors	-	20.0	5.6%	12.8%	75,079	8.6	\$0.148	\$11,125,295	3.0	1,501,577	0.015
8.2	Compressed Air O&M	-	2.0	1.0%	2.4%	13,805	1.6	\$0.030	\$414,139	0.6	27,609	0.017

### Industrial Electric Technical Conservation Potential by Sector

Electric Market Segments		2003 Firm Consumption Total (MWh)	Savings as of Sector Loads	Savings (MWh)	First Year MWh	Measure Cost \$/kWh Saved	Total Cost (\$)	Measure Life (Years)	Simple Payback @ \$0.05/kWh	Cummulative Savings (MWh)	Leveled CCE (\$/kWh)
Total Load		1,334,332	10.1%	134,884	15.4	\$0.216	\$29,137,550	15.8	4.3	2,130,583	0.024
Uncoded/Miscoded/Invalid		-									
20	Food/Kindred Products	68,490	23.2%	15,896	1.8	\$0.165	\$2,618,606	17.1	3.3	272,108	0.017
23	Apparel & other textile products	14,413	6.6%	954	0.1	\$0.276	\$263,256	12.7	5.5	12,118	0.034
24	Lumber/Wood Products	27,001	13.3%	3,579	0.4	\$0.160	\$571,275	18.3	3.2	65,552	0.016
26	Paper/Allied Products	90,653	17.9%	16,214	1.9	\$0.168	\$2,727,362	18.8	3.4	304,651	0.017
27	Printing/Publishing	137,355	5.2%	7,185	0.8	\$0.279	\$2,003,736	14.2	5.6	101,872	0.033
28	Chemical/Allied Products	32,204	20.5%	6,617	0.8	\$0.143	\$947,836	16.8	2.9	111,006	0.015
29	Petroleum Related	1,459	23.4%	341	0.0	\$0.144	\$49,204	18.2	2.9	6,210	0.015
30	Rubber/Misc. Plastics Products	96,474	7.9%	7,646	0.9	\$0.180	\$1,376,039	15.2	3.6	116,439	0.020
32	Stone/Clay/Glass/Concrete Prod.	70,215	11.4%	7,975	0.9	\$0.140	\$1,115,933	14.3	2.8	114,299	0.016
33	Primary Metal Industries	148,364	15.4%	22,919	2.6	\$0.153	\$3,496,666	18.2	3.1	417,747	0.016
34	Fabricated Metal Products	48,639	6.2%	3,001	0.3	\$0.187	\$559,810	11.7	3.7	35,106	0.025
35	Machinery, except Electrical	27,315	10.2%	2,783	0.3	\$0.230	\$638,819	14.2	4.6	39,542	0.027
36	Electric/Electronic Equip.	244,515	10.5%	25,586	2.9	\$0.234	\$5,981,540	13.8	4.7	354,151	0.028
37	Transportation Equipment	118,237	7.3%	8,646	1.0	\$0.257	\$2,223,686	12.8	5.1	110,767	0.032
38	Instruments/Related Products	12,973	7.0%	912	0.1	\$0.293	\$267,020	13.5	5.9	12,329	0.035
39	Miscellaneous	196,022	2.9%	5,588	0.6	\$0.342	\$1,911,150	12.3	6.8	68,805	0.044



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Technical Potential												Simple			
Actual Forecast & Consumption	End-Use Shares	Firm MWh	Load Breakdown	Measure Life	% Savings Potential	Market Saturation	% Industrial Load	% End Use	Savings Potential MWh	First-Year CCE \$/kWh	Total Cost (\$)	Total Cost (\$)	Payback @ \$0.05/kWh	Cumm. Savings (MWh)	CCE (\$/kWh)
kWh Forecast Ratio (Year/2003)		1,334,334	1,334,334	15.77			10.2%		135,839	\$0.197	26,751,938	26,751,938	4.7	2,142,701	\$0.012
Sum Total of Predicted Forecast & Consumption		1,334,334	1,334,332												
Retail Average Cost per kWh	\$ 0.0418		2												

## 20 Food/Kindred Products

1	HVAC	8.1%	5,556												
2	Indirect Boiler	1.7%	1,170												
3	Lighting	7.4%	5,061												
4	Other - Not Reported	8.5%	5,819												
5	Process Electro Chemical	0.2%	136												
6	Process Heat	4.9%	3,345												
7	Process Other	0.3%	176												
9	Process Cool	25.0%	17,145												
8	Process Motors	43.9%	30,081												
	(Process Motors & Cooling Breakout)	69.0%	47,226												
	Fan System	5.2%	3,559												
	Pump System	11.3%	7,769												
	Air Comp. Sys.	5.3%	3,621												
	Other Systems (Mostly Refer)	47.1%	32,278												
	<b>Total Consumption (MWh)</b>	<b>100.0%</b>	<b>68,490</b>												
	Conservation Technical Potential														
	HVAC			15	15.0%	25.0%	0.9%	11.3%	625.1	\$0.45	\$281,280		10.8	9,376	\$0.030
	Lighting			10			1.8%	24.4%	1,232.8	\$0.25	\$308,205		6.0	12,328	\$0.025
	Motors Technical Potential w/o Compr. Air O&M			20			13.7%	19.9%	9,379.8	\$0.15	\$1,395,609		3.6	187,596	\$0.007
	Motor Efficiency Upgrade			20			6.3%	9.1%	4,311.5	\$0.15	\$646,718		3.6	86,229	\$0.008
	Rewind Improvements			20			0.8%	1.2%	548.6	\$0.15	\$82,291		3.6	10,972	\$0.008
	Motor Downsizing			20			1.6%	2.3%	1,102.7	\$0.15	\$165,404		3.6	22,054	\$0.008
	Pump System Improvements			20			3.5%	30.5%	2,367.7	\$0.15	\$355,155		3.6	47,354	\$0.008
	Fan System Improvements			20			0.4%	8.4%	299.3	\$0.15	\$44,895		3.6	5,986	\$0.008
	Air Compressor Improvements		1.3%	20			0.6%	10.5%	378.7	\$0.12	\$45,450		2.9	7,575	\$0.006
	Other System Improvements		6.6%	20			0.5%	1.2%	371.3	\$0.15	\$55,697		3.6	7,426	\$0.008
	Refrigeration/Process Cooling Technical Potential			15	30.0%	20.0%	6.0%	24.0%	4,114.8	\$0.15	\$617,218		3.6	61,722	\$0.010
	Compressed Air O&M Technical Potential	Use 15% of the total end use as savable		2			0.8%	15.0%	543.1	\$0.03	\$16,294		0.7	1,086	\$0.015
	<b>Total Conservation Technical Potential</b>			<b>17.1</b>			<b>23.2%</b>	<b>N/A</b>	<b>15,896</b>		<b>2,618,606</b>			<b>272,108</b>	<b>\$0.010</b>

## 24 Lumber/Wood Products

1	HVAC	6.6%	1,777												
2	Indirect Boiler	1.4%	367												
3	Lighting	9.0%	2,429												
4	Other - Not Reported	13.5%	3,637												
5	Process Electro Chemical	0.0%	12												
6	Process Heat	3.8%	1,036												
7	Process Other	0.1%	39												
9	Process Cool	0.9%	238												
8	Process Motors	64.7%	17,467												
	(Process Motors & Cooling Breakout)	65.6%	17,704												
	Fan System	8.0%	2,150												
	Pump System	3.5%	933												
	Air Comp. Sys.	5.4%	1,467												
	Other Systems	48.7%	13,154												
	<b>Total Consumption (MWh)</b>	<b>100.0%</b>	<b>27,001</b>												
	Conservation Technical Potential														
	HVAC			15	15.0%	25.0%	0.7%	11.3%	199.9	\$0.45	\$89,973			2,999	\$0.030
	Lighting			10			0.4%	4.2%	101.3	\$0.25	\$25,314			1,013	\$0.025
	Motors Technical Potential w/o Compr. Air O&M			20			11.3%	17.2%	3,047.9	\$0.15	\$447,961			60,957	\$0.007
	Motor Efficiency Upgrade			20			2.6%	4.0%	706.4	\$0.15	\$105,953			14,127	\$0.008
	Rewind Improvements			20			1.1%	1.7%	301.3	\$0.15	\$45,200			6,027	\$0.008
	Motor Downsizing			20			2.0%	3.1%	546.2	\$0.15	\$81,936			10,925	\$0.008
	Pump System Improvements			20			1.5%	42.4%	395.6	\$0.15	\$59,335			7,911	\$0.008
	Fan System Improvements			20			0.9%	11.4%	244.9	\$0.15	\$36,735			4,898	\$0.008
	Air Compressor Improvements		2.0%	20			1.1%	20.9%	307.3	\$0.12	\$36,873			6,146	\$0.006
	Other System Improvements		2.1%	20			2.0%	4.2%	546.2	\$0.15	\$81,928			10,924	\$0.008
	Refrigeration/Process Cooling Technical Potential			15	5.0%	20.0%	0.0%	4.0%	9.5	\$0.15	\$1,425			143	\$0.010
	Compressed Air O&M Technical Potential			2			0.8%	15.0%	220.1	\$0.03	\$6,602			440	\$0.015
	<b>Total Conservation Technical Potential</b>			<b>18.3</b>			<b>27.2%</b>	<b>N/A</b>	<b>3,578.6</b>		<b>571,275</b>			<b>65,552</b>	<b>\$0.009</b>

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	End-Use Shares	Firm MWh	Load Breakdown	Technical Potential					Savings Potential MWh	First-Year CCE \$/kWh	Total Cost (\$)	Simple Payback @\$0.05/kWh	Cumm. Savings (MWh)	CCE (\$/kWh)
				Measure Life	% Savings Potential	Market Saturation	% Industrial Load	% End Use						
(Process Motors & Cooling Breakout)	57.8%		55,757											
Fan System	3.3%		3,140											
Pump System	14.5%		14,028											
Air Comp. Sys.	7.5%		7,260											
Other Systems (Mostly Refer)	32.5%		31,330											
<b>Total Consumption (MWh)</b>	<b>100.0%</b>	<b>96,474</b>	<b>96,474</b>											
Conservation Technical Potential														
HVAC				15	15.0%	25.0%		11.3%	893.1	\$0.45	\$401,883		13,396	\$0.030
Lighting				10			1.0%	13.6%	959.9	\$0.25	\$239,980		9,599	\$0.025
Motors Technical Potential w/o Compr. Air O&M				20			4.3%	7.4%	4,140.1	\$0.15	\$616,880		82,803	\$0.007
Motor Efficiency Upgrade														
Rewind Improvements														
Motor Downsizing														
Pump System Improvements														
Fan System Improvements														
Air Compressor Improvements														
Other System Improvements														
Refrigeration/Process Cooling Technical Potential				15	10.0%	20.0%	0.6%	8.0%	564.2	\$0.15	\$84,627		8,463	\$0.010
Compressed Air O&M Technical Potential				2			1.1%	15.0%	1,089.0	\$0.03	\$32,669		2,178	\$0.015
<b>Total Conservation Technical Potential</b>				<b>15.2</b>			<b>7.9%</b>	<b>N/A</b>	<b>7,646.3</b>		<b>1,376,039</b>		<b>116,439</b>	<b>\$0.012</b>

### 32 Stone/Clay/Glass/Concrete Prod.

1 HVAC	3.2%		2,270											
2 Indirect Boiler	0.4%		264											
3 Lighting	3.9%		2,710											
4 Other - Not Reported	5.3%		3,732											
5 Process Electro Chemical	0.1%		78											
6 Process Heat	13.5%		9,479											
7 Process Other	0.0%		12											
9 Process Cool	1.1%		789											
8 Process Motors	72.5%		50,861											
(Process Motors & Cooling Breakout)	73.6%		51,669											
Fan System	18.9%		13,249											
Pump System	3.0%		2,074											
Air Comp. Sys.	18.7%		13,104											
Other Systems (Mostly Refer)	33.1%		23,243											
<b>Total Consumption (MWh)</b>	<b>100.0%</b>	<b>70,215</b>	<b>70,215</b>											
Conservation Technical Potential														
HVAC				15	15.0%	25.0%	0.4%	11.3%	255.4	\$0.45	\$114,924		3,831	\$0.030
Lighting				10			1.2%	30.9%	838.4	\$0.25	\$209,593		8,384	\$0.025
Motors Technical Potential w/o Compr. Air O&M				20			7.0%	9.5%	4,884.0	\$0.15	\$727,717		97,680	\$0.007
Motor Efficiency Upgrade														
Rewind Improvements														
Motor Downsizing														
Pump System Improvements														
Fan System Improvements														
Air Compressor Improvements														
Other System Improvements														
Refrigeration/Process Cooling Technical Potential				15	5.0%	20.0%	0.0%	4.0%	31.5	\$0.15	\$4,732		473	\$0.010
Compressed Air O&M Technical Potential				2			2.8%	15.0%	1,965.5	\$0.03	\$58,966		3,931	\$0.015
<b>Total Conservation Technical Potential</b>				<b>14.3</b>			<b>11.4%</b>	<b>N/A</b>	<b>7,974.9</b>		<b>1,115,933</b>		<b>114,299</b>	<b>\$0.010</b>

### 33 Primary Metal Industries

1 HVAC	4.2%		6,246
2 Indirect Boiler	0.5%		730
3 Lighting	5.2%		7,783
4 Other - Not Reported	3.9%		5,739
5 Process Electro Chemical	2.7%		4,039
6 Process Heat	35.1%		52,017
7 Process Other	0.9%		1,344
9 Process Cool	1.5%		2,285
8 Process Motors	46.0%		66,182
(Process Motors & Cooling Breakout)	47.5%		70,467
Fan System	7.3%		10,757
Pump System	4.1%		6,127
Air Comp. Sys.	6.8%		10,104

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	Technical Potential								Savings Potential MWh	First-Year CCE \$/kWh	Total Cost (\$)	Simple Payback @ \$0.05/kWh	Cumm. Savings (MWh)	CCE (\$/kWh)
	End-Use Shares	Firm MWh	Load Breakdown	Measure Life	% Savings Potential	Market Saturation	% Industrial Load	% End Use						
Other Systems (Mostly Refer)	29.3%		43,478											
<b>Total Consumption (MWh)</b>	<b>100.0%</b>	<b>148,364</b>	<b>148,364</b>											
Conservation Technical Potential														
HVAC				15	15.0%	25.0%	0.5%	11.3%	702.7	\$0.45	\$316,210		10,540	\$0.030
Lighting				10	0.6%		0.6%	12.0%	937.7	\$0.25	\$234,416		9,377	\$0.025
Motors Technical Potential w/o Compr. Air O&M				20			13.3%	27.9%	19,671.4	\$0.15	\$2,886,860		393,427	\$0.007
Motor Efficiency Upgrade				20			6.0%	12.7%	8,934.5	\$0.15	\$1,340,176		178,690	\$0.008
Rewind Improvements				20			0.9%	1.8%	1,293.7	\$0.15	\$194,061		25,875	\$0.008
Motor Downsizing				20			1.1%	2.3%	1,645.4	\$0.15	\$246,804		32,907	\$0.008
Pump System Improvements				20			1.7%	42.2%	2,586.0	\$0.15	\$387,899		51,720	\$0.008
Fan System Improvements				20			0.9%	12.0%	1,293.7	\$0.15	\$194,061		25,875	\$0.008
Air Compressor Improvements				20			1.4%	21.1%	2,128.2	\$0.12	\$255,379		42,563	\$0.006
Other System Improvements				20			1.2%	4.1%	1,789.9	\$0.15	\$268,479		35,797	\$0.008
Refrigeration/Process Cooling Technical Potential				15	5.0%	20.0%	0.1%	4.0%	91.4	\$0.15	\$13,710		1,371	\$0.010
Compressed Air O&M Technical Potential				2			1.0%	15.0%	1,515.7	\$0.03	\$45,470		3,031	\$0.015
<b>Total Conservation Technical Potential</b>				<b>18.2</b>			<b>15.4%</b>	<b>N/A</b>	<b>22,918.8</b>		<b>3,496,666</b>		<b>417,747</b>	<b>\$0.008</b>

#### 34 Fabricated Metal Products

1 HVAC	10.1%		4,915											
2 Indirect Boiler	1.1%		536											
3 Lighting	11.0%		5,340											
4 Other - Not Reported	8.5%		4,115											
5 Process Electro Chemical	4.5%		2,192											
6 Process Heat	12.5%		6,102											
7 Process Other	0.8%		393											
9 Process Cool	2.2%		1,067											
8 Process Motors	49.3%		23,979											
(Process Motors & Cooling Breakout)	51.5%		25,045											
Fan System	4.3%		2,098											
Pump System	6.4%		3,099											
Air Comp. Sys.	12.5%		6,099											
Other Systems (Mostly Refer)	28.3%		13,749											
<b>Total Consumption (MWh)</b>	<b>100.0%</b>	<b>48,639</b>	<b>48,639</b>											
Conservation Technical Potential														
HVAC				15	15.0%	25.0%	1.1%	11.3%	553.0	\$0.45	\$248,842		8,295	\$0.030
Lighting				10	1.1%		1.1%	10.2%	545.7	\$0.25	\$136,433		5,457	\$0.025
Motors Technical Potential w/o Compr. Air O&M				20			1.9%	3.8%	944.2	\$0.15	\$140,688		18,884	\$0.007
Motor Efficiency Upgrade														
Rewind Improvements														
Motor Downsizing														
Pump System Improvements														
Fan System Improvements														
Air Compressor Improvements														
Other System Improvements														
Refrigeration/Process Cooling Technical Potential				15	5.0%	20.0%	0.1%	4.0%	42.7	\$0.15	\$6,399		640	\$0.010
Compressed Air O&M Technical Potential				2			1.9%	15.0%	914.9	\$0.03	\$27,447		1,830	\$0.015
<b>Total Conservation Technical Potential</b>				<b>11.7</b>			<b>6.2%</b>	<b>N/A</b>	<b>3,000.5</b>		<b>559,810</b>		<b>35,106</b>	<b>\$0.016</b>

#### 35 Machinery, except Electrical

1 HVAC	19.4%		5,312											
2 Indirect Boiler	0.6%		156											
3 Lighting	14.9%		4,076											
4 Other - Not Reported	11.4%		3,127											
5 Process Electro Chemical	0.3%		92											
6 Process Heat	8.3%		2,277											
7 Process Other	0.8%		215											
9 Process Cool	3.3%		901											
8 Process Motors	40.8%		11,158											
(Process Motors & Cooling Breakout)	44.1%		12,059											
Fan System	3.1%		843											
Pump System	5.8%		1,583											
Air Comp. Sys.	7.0%		1,916											
Other Systems (Mostly Refer)	28.3%		7,718											
<b>Total Consumption (MWh)</b>	<b>100.0%</b>	<b>27,315</b>	<b>27,315</b>											
Conservation Technical Potential														
HVAC				15	15.0%	25.0%	2.2%	11.3%	597.6	\$0.45	\$268,907		8,964	\$0.030

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Technical Potential														
	End-Use	Firm MWh	Load Breakdown	Measure Life	% Savings Potential	Market Saturation	% Industrial Load	% End Use	Savings Potential MWh	First-YearCCE \$/kWh	Total Cost (\$)	Simple Payback @ \$0.05/kWh	Cumm. Savings (MWh)	CCE (\$/kWh)
Lighting				10			2.8%	19.1%	777.1	\$0.25	\$194,278		7,771	\$0.025
Motors Technical Potential w/o Compr. Air O&M				20			4.0%	9.0%	1,084.6	\$0.15	\$161,605		21,692	\$0.007
Motor Efficiency Upgrade														
Rewind Improvements														
Motor Downsizing														
Pump System Improvements														
Fan System Improvements														
Air Compressor Improvements														
Other System Improvements														
Refrigeration/Process Cooling Technical Potential				15	5.0%	20.0%	0.1%	4.0%	36.0	\$0.15	\$5,407		541	\$0.010
Compressed Air O&M Technical Potential				2			1.1%	15.0%	287.4	\$0.03	\$8,623		575	\$0.015
Total Conservation Technical Potential				14.2			10.2%	N/A	2,782.8		638,819		39,542	\$0.016
Equip.														
1 HVAC	21.9%		53,551											
2 Indirect Boiler	0.6%		1,575											
3 Lighting	13.3%		32,535											
4 Other - Not Reported	7.9%		19,212											
5 Process Electro Chemical	4.0%		9,893											
6 Process Heat	16.5%		40,448											
7 Process Other	0.8%		1,877											
9 Process Cool	5.8%		14,089											
8 Process Motors	29.2%		71,335											
(Process Motors & Cooling Breakout)	34.9%		85,424											
Fan System	0.9%		2,160											
Pump System	20.4%		49,875											
Air Comp. Sys.	7.9%		19,402											
Other Systems (Mostly Refer)	5.7%		13,987											
Total Consumption (MWh)	100.0%	244,515	244,515											
Conservation Technical Potential														
HVAC				15	15.0%	25.0%	2.5%	11.3%	6,024.5	\$0.45	\$2,711,005		90,367	\$0.030
Lighting				10			2.8%	21.3%	6,941.8	\$0.25	\$1,735,446		69,418	\$0.025
Motors Technical Potential w/o Compr. Air O&M				20			3.5%	10.0%	8,582.0	\$0.15	\$1,278,713		171,639	\$0.007
Motor Efficiency Upgrade														
Rewind Improvements														
Motor Downsizing														
Pump System Improvements														
Fan System Improvements														
Air Compressor Improvements														
Other System Improvements														
Refrigeration/Process Cooling Technical Potential				15	10.0%	20.0%	0.5%	8.0%	1,127.1	\$0.15	\$169,066		16,907	\$0.010
Compressed Air O&M Technical Potential				2			1.2%	15.0%	2,910.4	\$0.03	\$87,311		5,821	\$0.015
Total Conservation Technical Potential				13.8			10.5%	N/A	25,585.7		5,981,540		354,151	\$0.017
Equipment														
1 HVAC	20.6%		24,299											
2 Indirect Boiler	0.4%		496											
3 Lighting	20.6%		24,377											
4 Other - Not Reported	9.2%		10,894											
5 Process Electro Chemical	1.6%		1,886											
6 Process Heat	8.8%		10,451											
7 Process Other	1.8%		2,169											
9 Process Cool	3.8%		4,516											
8 Process Motors	33.1%		39,148											
(Process Motors & Cooling Breakout)	36.9%		43,664											
Fan System	8.0%		9,475											
Pump System	6.9%		8,152											
Air Comp. Sys.	6.9%		8,156											
Other Systems (Mostly Refer)	15.1%		17,882											
Total Consumption (MWh)	100.0%	118,237	118,237											
Conservation Technical Potential														
HVAC				15	15.0%	25.0%	2.3%	11.3%	2,733.7	\$0.45	\$1,230,159		41,005	\$0.030
Lighting				10			2.2%	10.5%	2,555.1	\$0.25	\$638,774		25,551	\$0.025
Motors Technical Potential w/o Compr. Air O&M				20			1.7%	4.5%	1,952.7	\$0.15	\$290,955		39,054	\$0.007
Motor Efficiency Upgrade														
Rewind Improvements														

		End-Use Shares	Firm MWh	Load Breakdown	Technical Potential					Savings Potential MWh	First-Year CCE \$/kWh	Total Cost (\$)	Simple Payback @\$0.05/kWh	Cumm. Savings (MWh)	CCE (\$/kWh)
					Measure Life	% Savings Potential	Market Saturation	% Industrial Load	% End Use						
From Opportun Industrial Motor Systems in the Northwest - 195 Xenergy & East Consultants	Motor Downsizing														
	Pump System Improvements														
	Fan System Improvements														
	Air Compressor Improvements														
	Other System Improvements														
	Refrigeration/Process Cooling Technical Potential				15	5.0%	20.0%	0.2%	4.0%	180.6	\$0.15	\$27,097		2,710	\$0.010
	Compressed Air O&M Technical Potential				2			1.0%	15.0%	1,223.4	\$0.03	\$36,701		2,447	\$0.015
	<b>Total Conservation Technical Potential</b>				<b>12.8</b>			<b>7.3%</b>	<b>N/A</b>	<b>8,645.5</b>		<b>2,223,686</b>		<b>110,767</b>	<b>\$0.020</b>

### 38 Instruments/Related Products

From Opportun Industrial Motor Systems in the Pacific Northwest - 1999 - Xenergy & Easton Consultants	1 HVAC	26.9%		3,492											
	2 Indirect Boiler	2.2%		290											
	3 Lighting	19.1%		2,473											
	4 Other - Not Reported	7.4%		961											
	5 Process Electro Chemical	0.8%		104											
	6 Process Heat	6.6%		862											
	7 Process Other	1.6%		202											
	9 Process Cool	7.6%		986											
	8 Process Motors	27.8%		3,604											
	(Process Motors & Cooling Breakout)	35.4%		4,589											
	Fan System	7.0%		913											
	Pump System	3.2%		420											
	Air Comp. Sys.	3.9%		510											
	Other Systems (Mostly Refer)	21.2%		2,746											
	<b>Total Consumption (MWh)</b>	<b>100.0%</b>	<b>12,973</b>	<b>12,973</b>											
	Conservation Technical Potential														
	HVAC				15	15.0%	25.0%	0.03	11.3%	392.9	\$0.45	\$176,788		5,893	\$0.030
	Lighting				10			1.7%	8.8%	217.2	\$0.25	\$54,294		2,172	\$0.025
	Motors Technical Potential w/o Compr. Air O&M				20			1.1%	3.2%	146.4	\$0.15	\$21,817		2,928	\$0.007
	Motor Efficiency Upgrade														
	Rewind Improvements														
	Motor Downsizing														
	Pump System Improvements														
	Fan System Improvements														
	Air Compressor Improvements														
	Other System Improvements														
	Refrigeration/Process Cooling Technical Potential				15	10.0%	20.0%	0.6%	8.0%	78.8	\$0.15	\$11,827		1,183	\$0.010
	Compressed Air O&M Technical Potential				2			0.6%	15.0%	76.5	\$0.03	\$2,295		153	\$0.015
	<b>Total Conservation Technical Potential</b>				<b>13.5</b>			<b>7.0%</b>	<b>N/A</b>	<b>911.8</b>		<b>267,020</b>		<b>12,329</b>	<b>\$0.022</b>

### 39 Miscellaneous

From Opportun Industrial Motor Systems in the Pacific Northwest - 1999 - Xenergy & Easton Consultants	1 HVAC	16.8%		32,940											
	2 Indirect Boiler	0.6%		1,195											
	3 Lighting	16.1%		31,498											
	4 Other - Not Reported	12.2%		24,011											
	5 Process Electro Chemical	0.8%		1,652											
	6 Process Heat	11.2%		22,007											
	7 Process Other	0.3%		562											
	9 Process Cool	5.0%		9,808											
	8 Process Motors	36.9%		72,348											
	(Process Motors & Cooling Breakout)	41.9%		82,156											
	Fan System	5.7%		11,240											
	Pump System	10.4%		20,372											
	Air Comp. Sys.	6.6%		12,999											
	Other Systems (Mostly Refer)	19.2%		37,544											
	<b>Total Consumption (MWh)</b>	<b>100.0%</b>	<b>196,022</b>	<b>196,022</b>											
	Conservation Technical Potential														
	HVAC				15	15.0%	25.0%	0.02	11.3%	3,705.7	\$0.45	\$1,667,577		55,586	\$0.030
	Lighting				10			0.4%	2.2%	705.7	\$0.25	\$176,419		7,057	\$0.025
	Motors Technical Potential w/o Compr. Air O&M				20			0.0%	0.1%	70.0	\$0.15	\$10,430		1,400	\$0.007
	Motor Efficiency Upgrade														
	Rewind Improvements														
	Motor Downsizing														
	Pump System Improvements														
	Fan System Improvements														
	Air Compressor Improvements														

Fic Inc Sy No Xe Co		End-Use Shares	Firm MWh	Load Breakdown	Technical Potential					Savings Potential MWh	First-Year CCE \$/kWh	Total Cost (\$)	Simple Payback @\$0.05/kWh	Cumm. Savings (MWh)	CCE (\$/kWh)
					Measure Life	% Savings Potential	Market Saturation	% Industrial Load	% End Use						
	<i>Other System Improvements</i>														
	Refrigeration/Process Cooling Technical Potential				15	2.5%	20.0%	0.1%	2.0%	196.2	\$0.15	\$29,424		2,942	\$0.010
	Compressed Air O&M Technical Potential				2			0.5%	7.0%	910.0	\$0.03	\$27,299		1,820	\$0.015
	<b>Total Conservation Technical Potential</b>				<b>12.3</b>			<b>2.9%</b>	<b>N/A</b>	<b>5,587.5</b>		<b>1,911,150</b>		<b>68,805</b>	<b>\$0.028</b>

## 23 Apparel & other textile products

1	HVAC	23.3%		3,359											
2	Indirect Boiler	0.6%		88											
3	Lighting	17.0%		2,451											
4	Other - Not Reported	12.2%		1,766											
5	Process Electro Chemical	0.8%		122											
6	Process Heat	3.0%		432											
7	Process Other	1.5%		214											
9	Process Cool	1.5%		216											
8	Process Motors	40.0%		5,766											
	<i>(Process Motors &amp; Cooling Breakout)</i>	41.9%		6,041											
	<i>Fan System</i>	5.7%		827											
	<i>Pump System</i>	10.4%		1,498											
	<i>Air Comp. Sys.</i>	6.6%		956											
	<i>Other Systems (Mostly Refer)</i>	19.2%		2,761											
	<b>Total Consumption (MWh)</b>	<b>100.0%</b>	<b>14,415</b>	<b>14,413</b>											
	Conservation Technical Potential														
	HVAC				15	15.0%	25.0%	0.03	11.3%	377.8	\$0.45	\$170,031		5,668	\$0.030
	Lighting				10			1.7%	9.8%	241.3	\$0.25	\$60,319		2,413	\$0.025
	Motors Technical Potential w/o Compr. Air O&M				20			1.2%	2.9%	174.6	\$0.15	\$26,010		3,491	\$0.007
	<i>Motor Efficiency Upgrade</i>														
	<i>Rewind Improvements</i>														
	<i>Motor Downsizing</i>														
	<i>Pump System Improvements</i>														
	<i>Fan System Improvements</i>														
	<i>Air Compressor Improvements</i>														
	<i>Other System Improvements</i>														
	Refrigeration/Process Cooling Technical Potential				15	10.0%	20.0%	0.1%	8.0%	17.3	\$0.15	\$2,595		259	\$0.010
	Compressed Air O&M Technical Potential				2			1.0%	15.0%	143.4	\$0.03	\$4,302		287	\$0.015
	<b>Total Conservation Technical Potential</b>				<b>12.7</b>			<b>6.6%</b>	<b>N/A</b>	<b>954.4</b>		<b>263,256</b>		<b>12,118</b>	<b>\$0.022</b>

## TERMS

**Motor Efficiency Upgrade** - The savings potential of moving from pre-EPA motor efficiencies to EPA levels and from EPA to CEE levels.

**Improved Rewind Practices** - The savings from better processing of the repair/rewind process such as closer control of the burnout stage of processing.

**Correct Motor Sizing** - The savings from selection of motors to operate in the range of 65% to 95% rated capacity to take advantage of the operating efficiencies range.

**Pump System Efficiency Improvements** - The savings from ASD control of the driving motor and/or the improved design of the system through such improvements as better pumps, more efficient piping, and eliminating unnecessary flows.

**Fan System Efficiency Improvements** - The savings from ASD control of the motor drive and/or the improved design of the system through such improvements as better fans and blowers, ducting, and flow design.

**Compressed Air Efficiency Improvements** - The savings from such improvements as better control of compressed air drives and/or the improvement in air delivery systems through surge tanks, leakage correction, and better components.

**Other Special System** - Other equipment savings have also been estimated.



## ***Appendix D. Demand Response Potential Results***

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	Aggregate "Gross" Potential				
Sector/Segment	Max of Average	Summer Off	Summer On	Winter Off	Winter On
Industrial Sector	173,501	160,402	173,501	145,383	159,313
Commercial: Education	37,160	13,599	37,160	6,568	30,857
Commercial: Food Stores	63,305	17,711	63,305	13,502	50,273
Commercial: Hospitals	83,553	49,503	83,553	51,607	71,380
Commercial: Hotels/Motels	13,634	9,297	13,634	9,293	10,911
Commercial: Misc	39,487	8,779	39,487	9,456	32,727
Commercial: Offices	92,561	27,469	92,561	22,067	66,451
Commercial: Restaurants	27,779	7,217	27,779	8,281	26,837
Commercial: Retail	59,195	12,996	59,195	16,215	48,172
Commercial: Warehouses	17,361	5,248	17,361	4,627	15,147
Residential	499,119	207,989	499,119	182,929	286,304

<b>Sum of End-Uses</b>	<b>520,212</b>	<b>1,106,655</b>	<b>469,927</b>	<b>798,372</b>
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<b>Sum of Max Average Hourly</b>	<b>1,427,111</b>	<b>955,369</b>	<b>1,427,111</b>	<b>794,947</b>	<b>990,215</b>
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<b>Class Peaks (Max of Averages)</b>					
Industrial	173,501			145,383	159,313
Commercial	434,035			141,615	352,755
Residential	499,119			182,929	286,304

	MAX	Total			
		Summer Off	Summer On	Winter Off	Winter On
	INDU	165,575	178,850	155,352	162,946
Commercial: Education	EDUC	38,720	40,262	15,636	33,398
Commercial: Food Stores	GROC	57,200	65,621	53,922	57,164
Commercial: Hospitals	HEAL	70,085	88,200	62,099	74,595
Commercial: Hotels/Motels	LODG	13,978	15,330	11,425	13,501
Commercial: Misc	MISC	25,712	28,479	27,723	30,475
Commercial: Offices	SOFF	50,312	63,652	45,788	51,853
Commercial: Restaurants	REST	86,285	103,035	31,528	75,741
Commercial: Retail	ARET	32,894	41,695	31,615	36,724
Commercial: Warehouses	WARE	16,275	17,760	15,593	16,483
	RESID	398,333	784,227	344,265	437,335

Gross Potential by Sector, End-Use, and Period (kW)													
Sector/Segment	Heating				Cooling				Water Heating				Summer 08-10
	Summer Off	Summer On	Winter Off	Winter On	Summer 08-10	Summer 17-21	Winter 08-10	Winter 17-21	Summer 08-10	Summer 17-21	Winter 08-10	Winter 17-21	
Industrial Sector	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial: Education	8	30	625	2,595	2,271	8,820	205	2,004	370	692	333	795	6,795
Commercial: Food Stores	10	-	134	183	642	7,732	13	1,336	59	832	33	811	3,524
Commercial: Hospitals	5	0	1,849	2,301	6,327	20,833	141	2,525	572	1,240	669	1,292	25,946
Commercial: Hotels/Motels	1	0	1,894	1,548	2,606	6,111	92	675	285	126	158	232	4,474
Commercial: Misc	-	-	887	853	1,834	9,464	103	2,250	280	3,926	159	3,847	3,051
Commercial: Offices	-	13	3,329	3,459	8,350	41,206	-	8,716	341	1,849	-	2,096	12,084
Commercial: Restaurants	0	-	688	872	582	2,017	175	844	127	1,778	72	1,734	1,899
Commercial: Retail	-	-	4,345	4,176	3,678	18,984	207	4,514	114	1,599	65	1,566	7,017
Commercial: Warehouses	42	-	590	802	107	1,294	2	224	13	192	8	187	1,349
Residential	-	-	45,179	36,350	49,750	234,261	346	14,594	16,460	21,214	13,321	28,037	32,569

\*\* All data are derived using Aquila sales by sector, COMMEND estimates of use by building type and ForecastPro estimates of use by end-use and end-use load shapes

Lighting			Other				Plug Load				Ventilation			
Summer 17-21	Winter 08-10	Winter 17-21	Summer 08-10	Summer 17-21	Winter 08-10	Winter 17-21	Summer 08-10	Summer 17-21	Winter 08-10	Winter 17-21	Summer 08-10	Summer 17-21	Winter 08-10	Winter 17-21
-	-	-	160,402	173,501	145,383	159,313	-	-	-	-	-	-	-	-
15,554	3,416	14,669	1,099	3,208	410	2,311	1,513	4,332	778	3,937	1,544	4,526	800	4,546
16,091	2,535	14,171	3,544	3,972	2,591	2,904	8,531	32,883	6,756	29,078	1,402	1,795	1,439	1,790
41,408	24,431	39,224	59	-	8,260	6,460	5,858	9,335	5,520	8,842	10,737	10,737	10,737	10,737
4,370	3,891	4,361	9	-	1,318	1,069	755	1,937	561	1,756	1,167	1,090	1,379	1,270
14,088	2,183	12,402	-	-	3,131	2,228	1,675	6,701	1,312	5,914	1,939	5,308	1,681	5,234
35,038	7,401	33,257	-	-	5,721	4,650	4,172	7,845	3,173	7,710	2,522	6,610	2,442	6,563
8,606	1,377	7,578	12	-	2,067	2,063	3,615	13,998	2,858	12,376	982	1,380	1,046	1,370
32,405	5,021	28,526	-	-	4,698	3,342	176	705	138	622	2,011	5,503	1,742	5,426
6,161	971	5,426	1,061	1,190	776	870	1,981	7,637	1,569	6,753	693	887	711	885
49,703	28,252	48,866	12,916	45,047	12,121	12,533	96,293	148,894	83,709	145,925	-	-	-	-

Technical Load Impact		Class 1: Firm: Direct Load Control							Participation	LOAD	EVENT
		0%	50%	25%	0%	0%	0%	0%		25%	100%
		% Achievable									
Sector/Segment	% Eligible Load									Technical Potential kW	Achievable Potential kW
		Heat	Cool	HW	Light	Other	Plug Load	Ventilation			
Industrial	0%	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Education	50%	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Food Stores	0%	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Hospitals	0%	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Hotels/Motels	0%	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Misc	0%	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Offices	0%	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Restaurants	0%	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Retail	0%	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Warehouses	0%	0%	0%	0%	0%	0%	0%	0%		-	-
Residential	100%	0%	39%	8%	0%	0%	0%	0%		93,605	23,401

RES Satura

78% 32%

\* PSE August 2003 IRP Update- assumes DLC only available for Residential end uses of water heating and space heating

\*\* PGE Load Control Pilots: Space Heating 28% reduction in evening, 31% reduction in morning. Fuel shares included in estimate of gross savings.

\*\*\* Dynamic Pricing: Residential A/C Pricing Programs save between 25-35%. We assume that DLC program in commercial sectors will save at least same amount as pricing program.

\*\* PGE Load Control Pilots: Water Heating 21% reduction in morning. Fuel shares included in estimate of gross savings.

\*\* PSE Home comfort Control Thermostat Study shows 54% DLC benefit for space heating

\*\* Duke Power Program shows drop of 0.5kw on base of 3.57 for water heating, 14% (PSE Aug. 2003)

\*\* Lighting savings from Xenergy Enhanced automation peak savings 0-20%

Class 2: Firm: Curtailment Contracts									LOAD	EVENT
Participation									25%	90%
25% 5% 25% 25% 0% 0%										
% Achievable										
% Eligible Load: kW>250									Technical Potential kW	Achievable Potential kW
	Heat	Cool	HW	Light	Other	Plug Load	Ventilati on			
Industrial	80%	20%	4%	20%	20%	0%	0%	0%	-	-
Commercial: Education	50%	13%	3%	13%	13%	0%	0%	0%	2,588	582
Commercial: Food Stores	70%	18%	4%	18%	18%	0%	0%	0%	3,264	734
Commercial: Hospitals	0%	0%	0%	0%	0%	0%	0%	0%	-	-
Commercial: Hotels/Motels	12%	3%	1%	3%	3%	0%	0%	0%	231	52
Commercial: Misc	0%	0%	0%	0%	0%	0%	0%	0%	-	-
Commercial: Offices	50%	13%	3%	13%	13%	0%	0%	0%	6,104	1,373
Commercial: Restaurants	0%	0%	0%	0%	0%	0%	0%	0%	-	-
Commercial: Retail	0%	0%	0%	0%	0%	0%	0%	0%	-	-
Commercial: Warehouses	40%	10%	2%	10%	10%	0%	0%	0%	741	167
Residential	0%	0%	0%	0%	0%	0%	0%	0%	-	-

Optimal start saves 5-10%, Variable capacity control saves 5-15% of total building energy, Demand-responsive  
 \*\*\* ventilation saves 2-7% of total building energy use, thermal storage saves 2%-10% of total building. Case studies in this

Class 3: Non-Firm: Two-Part (TOU) Tariffs			Participation	LOAD	EVENT	
		3%	6%	35%	100%	
		% Achievable				
	% Eligible Load	TOU Affects all End Uses, Therefore Impacts are at Aggregate Level Only		Overall Tech %	Technical Potential kW	Achievable Potential kW
Industrial	100%			3.00%	5,205	1,822
Commercial: Education	100%			3.00%	1,195	418
Commercial: Food Stores	0%			0.00%	-	-
Commercial: Hospitals	0%			0.00%	-	-
Commercial: Hotels/Motels	0%			0.00%	-	-
Commercial: Misc	0%			0.00%	-	-
Commercial: Offices	100%			3.00%	3,059	1,071
Commercial: Restaurants	0%			0.00%	-	-
Commercial: Retail	0%			0.00%	-	-
Commercial: Warehouses	0%			0.00%	-	-
Residential	100%			6.00%	33,067	11,574

\* Assumes that all sectors are available for TOU, if under 30 kW (based on eligibility requirements filed by utilities with OPUC)

\*\* Net is calculated as product of portion of sector load that is under 30kw and 20%

\*\* 20% savings for C&I: NWPPC Issues: Georgia Power C&I load of 5,000 MW saved a max of 1,000MW, but they expect 500MW (Dynamic Pricing). Duke Power program saves 200MW of 1,000 MW load at hourly prices above \$0.25

\*\* Gulf Power reduction of 2.37 kW cper customer on Critical Peak Pricing program (50%): PSE August 2003

\*\* PSE TOU Evaluation for Residential

Class 4: Non-Firm: DBB									LOAD	EVENT
25% 25% 25% 25% 0% 0%									100%	30%
% Eligible Load: kW>250	% Achievable								Technical Potential kW	Achievable Potential kW
	Heat	Cool	HW	Light	Other	Plug Load	Ventilation			
Industrial	80%	20%	20%	20%	0%	0%	0%		-	-
Commercial: Education	50%	13%	13%	13%	0%	0%	0%		3,470	1,041
Commercial: Food Stores	70%	18%	18%	18%	0%	0%	0%		4,347	1,304
Commercial: Hospitals	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Hotels/Motels	12%	3%	3%	3%	0%	0%	0%		374	112
Commercial: Misc	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Offices	50%	13%	13%	13%	0%	0%	0%		10,225	3,067
Commercial: Restaurants	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Retail	0%	0%	0%	0%	0%	0%	0%		-	-
Commercial: Warehouses	40%	10%	10%	10%	0%	0%	0%		845	253
Residential	0%	0%	0%	0%	0%	0%	0%		-	-

\*\* Figures are product of % of eligible load and maximum potential reduction

\*\* It is assumed that savings on average would be 10 percentage points (35%) above those assumed for curtailment contracts.



Class 5: Non-Firm: Critical Peak Pricing		Participation	LOAD	EVENT
12% RESD 10%			50%	75%
% Achievable				
% Eligible Load	CPP Theoretically can affect all End Uses, so Overall only	Overall	Technical Potential kW	Achievable Potential kW
Industrial	100%	12%	20,820	7,808
Commercial: Education	100%	12%	4,782	1,793
Commercial: Food Stores	100%	12%	7,619	2,857
Commercial: Hospitals	100%	12%	11,145	4,179
Commercial: Hotels/Motels	100%	12%	2,088	783
Commercial: Misc	100%	12%	5,221	1,958
Commercial: Offices	100%	12%	12,237	4,589
Commercial: Restaurants	100%	12%	3,686	1,382
Commercial: Retail	100%	12%	8,189	3,071
Commercial: Warehouses	100%	12%	2,180	817
Residential	0%	0%	-	-

### Technical Potential, By EndUse

Sector/Segment	Combined Technical Potential							Maximum	Maximum
	Heat	Cool	HW	Light	Other	Plug Load	Ventilation	Potential by Strategy	Potential by End-Use
Industrial	20%	20%	20%	20%	12%	12%	12%	20,820	20,820
Commercial: Education	13%	13%	13%	13%	12%	12%	12%	4,782	4,921
Commercial: Food Stores	18%	18%	18%	18%	12%	12%	12%	7,619	8,985
Commercial: Hospitals	12%	12%	12%	12%	12%	12%	12%	11,145	11,145
Commercial: Hotels/Motels	12%	12%	12%	12%	12%	12%	12%	2,088	2,088
Commercial: Misc	12%	12%	12%	12%	12%	12%	12%	5,221	5,221
Commercial: Offices	13%	13%	13%	13%	12%	12%	12%	12,237	12,646
Commercial: Restaurants	12%	12%	12%	12%	12%	12%	12%	3,686	3,686
Commercial: Retail	12%	12%	12%	12%	12%	12%	12%	8,189	8,189
Commercial: Warehouses	12%	12%	12%	12%	12%	12%	12%	2,180	2,180
Residential	3%	39%	8%	6%	6%	6%	6%	93,605	109,579
<b>Total</b>								<b>171,569</b>	<b>189,457</b>
<b>Percent of System Peak</b>								<b>12.0%</b>	<b>13.3%</b>

# Achievable Potential, By EndUse

Combined Achievable Potential							Achievable Potential by Strategy	Achievable Potential by End-Use
Heat	Cool	HW	Light	Refrig	Plug Load	Process		
6%	6%	6%	6%	5%	5%	5%	7,808	7,808
5%	5%	5%	5%	5%	5%	5%	1,793	1,589
5%	5%	5%	5%	5%	5%	5%	2,857	2,962
5%	5%	5%	5%	5%	5%	5%	4,179	3,696
5%	5%	5%	5%	5%	5%	5%	783	721
5%	5%	5%	5%	5%	5%	5%	1,958	1,719
5%	5%	5%	5%	5%	5%	5%	4,589	4,291
5%	5%	5%	5%	5%	5%	5%	1,382	1,320
5%	5%	5%	5%	5%	5%	5%	3,071	2,823
5%	5%	5%	5%	5%	5%	5%	817	777
2%	10%	2%	2%	2%	2%	2%	23,401	29,495
<b>Total</b>							<b>52,638</b>	<b>57,201</b>
<b>Percent of System Peak</b>							<b>3.7%</b>	<b>4.0%</b>

Technical Potential Summary (kW)					
Sector	Direct Load Control	Curtailment Contracts	TOU	Demand Buy Back	Critical Peak Pricing
<b>Industrial</b>					
Technical Potential		-	5,205	-	20,820
Percent of Class Peak		0.0%	3.0%	0.0%	12.0%
<b>Commercial</b>					
Technical Potential	-	12,929	4,255	19,261	57,145
Percent of Class Peak	0.0%	3.0%	1.0%	4.4%	13.2%
<b>Residential</b>					
Technical Potential	93,605		33,067		-
Percent of Class Peak	18.8%		6.6%		0.0%
<b>Total Potential*</b>	<b>93,605</b>	<b>12,929</b>	<b>42,527</b>	<b>19,261</b>	<b>77,965</b>
<b>Percent of System Peak</b>	<b>6.6%</b>	<b>0.9%</b>	<b>3.0%</b>	<b>1.3%</b>	<b>5.5%</b>

\* Note that not all strategies mutually exclusive, hence potentials are not additive.

Achievable Potential Summary (kW)					
Sector	Direct Load Control	Curtailment Contracts	TOU	Demand Buy-Back	Critical Peak Pricing
<b>Industrial</b>					
Market Potential			1,822		7,808
Percent of Class Peak			1.1%		4.5%
<b>Commercial</b>					
Market Potential		2,909	1,489	5,778	21,429
Percent of Class Peak		0.7%	0.3%	1.3%	4.9%
<b>Residential</b>					
Market Potential	23,401		11,574		
Percent of Class Peak	4.7%		2.3%		
<b>Total Potential*</b>	<b>23,401</b>	<b>2,909</b>	<b>14,884</b>	<b>5,778</b>	<b>29,237</b>
<b>Percent of System Peak</b>	<b>1.6%</b>	<b>0.2%</b>	<b>1.0%</b>	<b>0.4%</b>	<b>2.0%</b>

\* Note that not all strategies mutually exclusive, hence potentials are not additive.

## ***Appendix E. Detailed Program Cost Effectiveness Results***

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Program Name:		Residential Lighting							
Key Program Inputs									
Program Year	Participants	Utility Costs	Participant Costs	Energy Impacts	Impacts (Avg. Max)				
2006	3,100	\$ 164,063	\$ 82,383	2,710,665	406				
2007	4,750	\$ 222,079	\$ 125,741	6,848,483	1,026				
2008	6,500	\$ 283,540	\$ 171,712	12,499,515	1,873				
2009	7,500	\$ 318,673	\$ 197,406	18,996,930	2,846				
2010	8,500	\$ 355,717	\$ 224,444	26,383,455	3,953				
2011	-	\$ -	\$ -	25,017,255	3,748				
2012	-	\$ -	\$ -	22,930,695	3,435				
2013	-	\$ -	\$ -	19,813,005	2,968				
2014	-	\$ -	\$ -	15,144,705	2,269				
2015	-	\$ -	\$ -	9,364,410	1,403				
2016	-	\$ -	\$ -	6,583,815	986				
2017	-	\$ -	\$ -	3,361,028	504				
2018	-	\$ -	\$ -	490,860	74				
2019	-	\$ -	\$ -	261,225	39				
2020	-	\$ -	\$ -	-	-				
2021	-	\$ -	\$ -	-	-				
2022	-	\$ -	\$ -	-	-				
2023	-	\$ -	\$ -	-	-				
2024	-	\$ -	\$ -	-	-				
2025	-	\$ -	\$ -	-	-				
Cost-Effectiveness Test Results									
Program	Total Resource Cost Test		Utility Cost Test (UCT)		Participant (PCT)		Rate Impact Measure (RIM)		
	Costs	Benefits	Costs	Benefits	Costs	Benefits	Costs	Benefits	
2006	\$ 246,445	\$ 89,478	\$ 164,063	\$ 89,478	\$ 82,383	\$ 190,407	\$ 354,470	\$ 89,478	
2007	\$ 347,819	\$ 190,992	\$ 222,079	\$ 190,992	\$ 125,741	\$ 495,495	\$ 717,574	\$ 190,992	
2008	\$ 455,252	\$ 384,011	\$ 283,540	\$ 384,011	\$ 171,712	\$ 931,484	\$ 1,215,024	\$ 384,011	
2009	\$ 516,079	\$ 793,614	\$ 318,673	\$ 793,614	\$ 197,406	\$ 1,458,152	\$ 1,776,825	\$ 793,614	
2010	\$ 580,160	\$ 987,406	\$ 355,717	\$ 987,406	\$ 224,444	\$ 2,085,875	\$ 2,441,591	\$ 987,406	
2011	-	\$ 1,147,508	-	\$ 1,147,508	-	\$ 2,037,199	\$ 2,037,199	\$ 1,147,508	
2012	-	\$ 1,083,354	-	\$ 1,083,354	-	\$ 1,923,305	\$ 1,923,305	\$ 1,083,354	
2013	-	\$ 964,141	-	\$ 964,141	-	\$ 1,711,664	\$ 1,711,664	\$ 964,141	
2014	-	\$ 759,082	-	\$ 759,082	-	\$ 1,347,616	\$ 1,347,616	\$ 759,082	
2015	-	\$ 483,443	-	\$ 483,443	-	\$ 858,268	\$ 858,268	\$ 483,443	
2016	-	\$ 350,090	-	\$ 350,090	-	\$ 621,523	\$ 621,523	\$ 350,090	
2017	-	\$ 184,082	-	\$ 184,082	-	\$ 326,805	\$ 326,805	\$ 184,082	
2018	-	\$ 27,691	-	\$ 27,691	-	\$ 49,160	\$ 49,160	\$ 27,691	
2019	-	\$ 15,178	-	\$ 15,178	-	\$ 26,947	\$ 26,947	\$ 15,178	
2020	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2021	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2022	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2023	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2024	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2025	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2026	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2027	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2028	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2029	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2030	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2031	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2032	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2033	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2034	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
2035	-	\$ -	-	\$ -	-	\$ -	\$ -	\$ -	
NPV	\$1,692,372	\$4,686,281	\$1,062,611	\$4,686,281	\$629,761	\$8,956,227	\$10,018,838	\$4,686,281	
0 Net Benefits		\$2,993,909	Net Benefits	\$3,623,670	Net Benefits	\$8,326,466	Net Benefits	(\$5,332,557)	
0 B/C Ratio		2.77	B/C Ratio	4.41	B/C Ratio	14.22	B/C Ratio	0.47	

Detailed Cost-Effectiveness Results

E-1

Program Name:		Residential Thermal Envelope Improvements						
Key Program Inputs								
Program Year	Participants	Utility Costs	Participant Costs	Energy Impacts	Impacts (Avg. Max)			
2006	482	\$ 376,992	\$ 292,183	1,613,338	300			
2007	613	\$ 501,161	\$ 411,078	3,881,482	718			
2008	748	\$ 627,643	\$ 532,044	6,826,062	1,292			
2009	760	\$ 642,920	\$ 543,270	9,927,814	1,891			
2010	773	\$ 660,535	\$ 556,244	13,231,311	2,521			
2011	-	\$ -	\$ -	13,020,171	2,489			
2012	-	\$ -	\$ -	12,703,461	2,442			
2013	-	\$ -	\$ -	12,233,661	2,372			
2014	-	\$ -	\$ -	11,476,176	2,259			
2015	-	\$ -	\$ -	10,516,731	2,117			
2016	-	\$ -	\$ -	9,908,040	2,023			
2017	-	\$ -	\$ -	9,194,666	1,911			
2018	-	\$ -	\$ -	8,480,882	1,797			
2019	-	\$ -	\$ -	8,318,866	1,765			
2020	-	\$ -	\$ -	8,147,790	1,731			
2021	-	\$ -	\$ -	8,147,790	1,731			
2022	-	\$ -	\$ -	8,147,790	1,731			
2023	-	\$ -	\$ -	8,147,790	1,731			
2024	-	\$ -	\$ -	8,147,790	1,731			
2025	-	\$ -	\$ -	8,147,790	1,731			
Cost-Effectiveness Test Results								
Program	Total Resource Cost Test		Utility Cost Test (UCT)		Participant (PCT)		Rate Impact Measure (RIM)	
	Costs	Benefits	Costs	Benefits	Costs	Benefits	Costs	Benefits
2006	\$ 669,175	\$ 56,381	\$ 376,992	\$ 56,381	\$ 292,183	\$ 113,327	\$ 490,319	\$ 56,381
2007	\$ 912,239	\$ 122,139	\$ 501,161	\$ 122,139	\$ 411,078	\$ 280,829	\$ 781,990	\$ 122,139
2008	\$ 1,159,687	\$ 239,814	\$ 627,643	\$ 239,814	\$ 532,044	\$ 508,689	\$ 1,136,332	\$ 239,814
2009	\$ 1,186,190	\$ 474,809	\$ 642,920	\$ 474,809	\$ 543,270	\$ 762,032	\$ 1,404,952	\$ 474,809
2010	\$ 1,216,779	\$ 563,151	\$ 660,535	\$ 563,151	\$ 556,244	\$ 1,046,067	\$ 1,706,602	\$ 563,151
2011	\$ -	\$ 658,146	\$ -	\$ 658,146	\$ -	\$ 1,060,255	\$ 1,060,255	\$ 658,146
2012	\$ -	\$ 662,928	\$ -	\$ 662,928	\$ -	\$ 1,065,499	\$ 1,065,499	\$ 662,928
2013	\$ -	\$ 659,954	\$ -	\$ 659,954	\$ -	\$ 1,056,878	\$ 1,056,878	\$ 659,954
2014	\$ -	\$ 641,786	\$ -	\$ 641,786	\$ -	\$ 1,021,181	\$ 1,021,181	\$ 641,786
2015	\$ -	\$ 611,508	\$ -	\$ 611,508	\$ -	\$ 963,881	\$ 963,881	\$ 611,508
2016	\$ -	\$ 597,036	\$ -	\$ 597,036	\$ -	\$ 935,336	\$ 935,336	\$ 597,036
2017	\$ -	\$ 575,138	\$ -	\$ 575,138	\$ -	\$ 894,032	\$ 894,032	\$ 575,138
2018	\$ -	\$ 551,083	\$ -	\$ 551,083	\$ -	\$ 849,367	\$ 849,367	\$ 551,083
2019	\$ -	\$ 557,114	\$ -	\$ 557,114	\$ -	\$ 858,135	\$ 858,135	\$ 557,114
2020	\$ -	\$ 562,455	\$ -	\$ 562,455	\$ -	\$ 865,702	\$ 865,702	\$ 562,455
2021	\$ -	\$ 579,329	\$ -	\$ 579,329	\$ -	\$ 891,674	\$ 891,674	\$ 579,329
2022	\$ -	\$ 596,709	\$ -	\$ 596,709	\$ -	\$ 918,424	\$ 918,424	\$ 596,709
2023	\$ -	\$ 614,610	\$ -	\$ 614,610	\$ -	\$ 945,976	\$ 945,976	\$ 614,610
2024	\$ -	\$ 633,048	\$ -	\$ 633,048	\$ -	\$ 974,356	\$ 974,356	\$ 633,048
2025	\$ -	\$ 652,040	\$ -	\$ 652,040	\$ -	\$ 1,003,586	\$ 1,003,586	\$ 652,040
2026	\$ -	\$ 657,855	\$ -	\$ 657,855	\$ -	\$ 1,012,050	\$ 1,012,050	\$ 657,855
2027	\$ -	\$ 657,918	\$ -	\$ 657,918	\$ -	\$ 1,011,987	\$ 1,011,987	\$ 657,918
2028	\$ -	\$ 651,625	\$ -	\$ 651,625	\$ -	\$ 1,002,484	\$ 1,002,484	\$ 651,625
2029	\$ -	\$ 643,972	\$ -	\$ 643,972	\$ -	\$ 990,892	\$ 990,892	\$ 643,972
2030	\$ -	\$ 634,851	\$ -	\$ 634,851	\$ -	\$ 977,038	\$ 977,038	\$ 634,851
2031	\$ -	\$ 653,896	\$ -	\$ 653,896	\$ -	\$ 1,006,349	\$ 1,006,349	\$ 653,896
2032	\$ -	\$ 673,513	\$ -	\$ 673,513	\$ -	\$ 1,036,539	\$ 1,036,539	\$ 673,513
2033	\$ -	\$ 693,719	\$ -	\$ 693,719	\$ -	\$ 1,067,635	\$ 1,067,635	\$ 693,719
2034	\$ -	\$ 714,530	\$ -	\$ 714,530	\$ -	\$ 1,099,664	\$ 1,099,664	\$ 714,530
2035	\$ -	\$ 735,966	\$ -	\$ 735,966	\$ -	\$ 1,132,654	\$ 1,132,654	\$ 735,966
NPV	\$4,093,084	\$6,030,779	\$2,237,597	\$6,030,779	\$1,855,487	\$9,770,625	\$12,008,222	\$6,030,779
0 Net Benefits		\$1,937,694		\$3,793,182		\$7,915,137		(\$5,977,443)
0 B/C Ratio		1.47		2.70		5.27		0.50

Detailed Cost-Effectiveness Results

E-2



Program Name:		Residential Space Heating & Cooling						
Key Program Inputs								
Program Year	Participants	Utility Costs	Participant Costs	Energy Impacts	Impacts (Avg. Max)			
2006	60	\$ 29,200	\$ 179,100	479,550	158			
2007	92	\$ 39,740	\$ 274,620	1,214,861	401			
2008	125	\$ 50,609	\$ 373,125	2,213,924	731			
2009	127	\$ 51,567	\$ 379,095	3,228,973	1,066			
2010	129	\$ 52,535	\$ 385,065	4,260,006	1,406			
2011	-	\$ -	\$ -	4,260,006	1,406			
2012	-	\$ -	\$ -	4,260,006	1,406			
2013	-	\$ -	\$ -	4,260,006	1,406			
2014	-	\$ -	\$ -	4,260,006	1,406			
2015	-	\$ -	\$ -	4,260,006	1,406			
2016	-	\$ -	\$ -	4,260,006	1,406			
2017	-	\$ -	\$ -	4,260,006	1,406			
2018	-	\$ -	\$ -	4,260,006	1,406			
2019	-	\$ -	\$ -	4,260,006	1,406			
2020	-	\$ -	\$ -	4,260,006	1,406			
2021	-	\$ -	\$ -	4,260,006	1,406			
2022	-	\$ -	\$ -	4,260,006	1,406			
2023	-	\$ -	\$ -	4,260,006	1,406			
2024	-	\$ -	\$ -	3,780,456	1,248			
2025	-	\$ -	\$ -	3,045,145	1,005			
Cost-Effectiveness Test Results								
Program	Total Resource Cost Test		Utility Cost Test (UCT)		Participant (PCT)		Rate Impact Measure (RIM)	
	Costs	Benefits	Costs	Benefits	Costs	Benefits	Costs	Benefits
2006	\$ 208,300	\$ 15,055	\$ 29,200	\$ 15,055	\$ 179,100	\$ 33,685	\$ 62,885	\$ 15,055
2007	\$ 314,360	\$ 25,729	\$ 39,740	\$ 25,729	\$ 274,620	\$ 87,896	\$ 127,636	\$ 25,729
2008	\$ 423,734	\$ 51,543	\$ 50,609	\$ 51,543	\$ 373,125	\$ 164,985	\$ 215,594	\$ 51,543
2009	\$ 430,662	\$ 128,547	\$ 51,567	\$ 128,547	\$ 379,095	\$ 247,847	\$ 299,414	\$ 128,547
2010	\$ 437,600	\$ 150,768	\$ 52,535	\$ 150,768	\$ 385,065	\$ 336,796	\$ 389,331	\$ 150,768
2011	\$ -	\$ 172,963	\$ -	\$ 172,963	\$ -	\$ 346,900	\$ 346,900	\$ 172,963
2012	\$ -	\$ 178,152	\$ -	\$ 178,152	\$ -	\$ 357,307	\$ 357,307	\$ 178,152
2013	\$ -	\$ 183,497	\$ -	\$ 183,497	\$ -	\$ 368,026	\$ 368,026	\$ 183,497
2014	\$ -	\$ 189,002	\$ -	\$ 189,002	\$ -	\$ 379,067	\$ 379,067	\$ 189,002
2015	\$ -	\$ 194,672	\$ -	\$ 194,672	\$ -	\$ 390,439	\$ 390,439	\$ 194,672
2016	\$ -	\$ 200,512	\$ -	\$ 200,512	\$ -	\$ 402,152	\$ 402,152	\$ 200,512
2017	\$ -	\$ 206,527	\$ -	\$ 206,527	\$ -	\$ 414,216	\$ 414,216	\$ 206,527
2018	\$ -	\$ 212,723	\$ -	\$ 212,723	\$ -	\$ 426,643	\$ 426,643	\$ 212,723
2019	\$ -	\$ 219,105	\$ -	\$ 219,105	\$ -	\$ 439,442	\$ 439,442	\$ 219,105
2020	\$ -	\$ 225,678	\$ -	\$ 225,678	\$ -	\$ 452,626	\$ 452,626	\$ 225,678
2021	\$ -	\$ 232,448	\$ -	\$ 232,448	\$ -	\$ 466,204	\$ 466,204	\$ 232,448
2022	\$ -	\$ 239,422	\$ -	\$ 239,422	\$ -	\$ 480,190	\$ 480,190	\$ 239,422
2023	\$ -	\$ 246,605	\$ -	\$ 246,605	\$ -	\$ 494,596	\$ 494,596	\$ 246,605
2024	\$ -	\$ 225,409	\$ -	\$ 225,409	\$ -	\$ 452,087	\$ 452,087	\$ 225,409
2025	\$ -	\$ 187,014	\$ -	\$ 187,014	\$ -	\$ 375,079	\$ 375,079	\$ 187,014
2026	\$ -	\$ 129,427	\$ -	\$ 129,427	\$ -	\$ 259,582	\$ 259,582	\$ 129,427
2027	\$ -	\$ 67,176	\$ -	\$ 67,176	\$ -	\$ 134,729	\$ 134,729	\$ 67,176
2028	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2029	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2031	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2032	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2034	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2035	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NPV	\$1,438,442	\$1,579,758	\$178,015	\$1,579,758	\$1,260,427	\$3,269,438	\$3,447,453	\$1,579,758
0 Net Benefits		\$141,316	Net Benefits	\$1,401,744	Net Benefits	\$2,009,011	Net Benefits	(\$1,867,694)
0 B/C Ratio		1.10	B/C Ratio	8.87	B/C Ratio	2.59	B/C Ratio	0.46

Detailed Cost-Effectiveness Results

E-3

Program Name:		Residential Programmable Thermostat & HVAC Maintenance							
Key Program Inputs									
Program Year	Participants	Utility Costs	Participant Costs	Energy Impacts	Impacts (Avg. Max)				
2006	502	\$ 85,172	\$ 50,100	423,189	114				
2007	764	\$ 108,964	\$ 76,247	1,067,246	287				
2008	1,035	\$ 133,555	\$ 103,281	1,939,677	522				
2009	1,050	\$ 136,195	\$ 104,790	2,824,833	761				
2010	1,067	\$ 139,046	\$ 106,499	3,724,401	1,003				
2011	-	\$ -	\$ -	3,724,401	1,003				
2012	-	\$ -	\$ -	3,724,401	1,003				
2013	-	\$ -	\$ -	3,724,401	1,003				
2014	-	\$ -	\$ -	3,724,401	1,003				
2015	-	\$ -	\$ -	3,724,401	1,003				
2016	-	\$ -	\$ -	3,557,138	954				
2017	-	\$ -	\$ -	3,302,580	880				
2018	-	\$ -	\$ -	2,701,800	715				
2019	-	\$ -	\$ -	1,962,450	514				
2020	-	\$ -	\$ -	1,079,357	276				
2021	-	\$ -	\$ -	544,052	139				
2022	-	\$ -	\$ -	-	-				
2023	-	\$ -	\$ -	-	-				
2024	-	\$ -	\$ -	-	-				
2025	-	\$ -	\$ -	-	-				
Cost-Effectiveness Test Results									
Program	Total Resource Cost Test		Utility Cost Test (UCT)		Participant (PCT)		Rate Impact Measure (RIM)		
	Costs	Benefits	Costs	Benefits	Costs	Benefits	Costs	Benefits	
2006	\$ 135,272	\$ 14,353	\$ 85,172	\$ 14,353	\$ 50,100	\$ 29,726	\$ 114,898	\$ 14,353	
2007	\$ 185,211	\$ 28,803	\$ 108,964	\$ 28,803	\$ 76,247	\$ 77,216	\$ 186,180	\$ 28,803	
2008	\$ 236,836	\$ 57,973	\$ 133,555	\$ 57,973	\$ 103,281	\$ 144,548	\$ 278,103	\$ 57,973	
2009	\$ 240,985	\$ 128,543	\$ 136,195	\$ 128,543	\$ 104,790	\$ 216,826	\$ 353,021	\$ 128,543	
2010	\$ 245,545	\$ 151,449	\$ 139,046	\$ 151,449	\$ 106,499	\$ 294,451	\$ 433,497	\$ 151,449	
2011	\$ -	\$ 173,498	\$ -	\$ 173,498	\$ -	\$ 303,284	\$ 303,284	\$ 173,498	
2012	\$ -	\$ 178,703	\$ -	\$ 178,703	\$ -	\$ 312,383	\$ 312,383	\$ 178,703	
2013	\$ -	\$ 184,064	\$ -	\$ 184,064	\$ -	\$ 321,755	\$ 321,755	\$ 184,064	
2014	\$ -	\$ 189,586	\$ -	\$ 189,586	\$ -	\$ 331,407	\$ 331,407	\$ 189,586	
2015	\$ -	\$ 195,273	\$ -	\$ 195,273	\$ -	\$ 341,349	\$ 341,349	\$ 195,273	
2016	\$ -	\$ 192,536	\$ -	\$ 192,536	\$ -	\$ 335,800	\$ 335,800	\$ 192,536	
2017	\$ -	\$ 184,837	\$ -	\$ 184,837	\$ -	\$ 321,122	\$ 321,122	\$ 184,837	
2018	\$ -	\$ 156,454	\$ -	\$ 156,454	\$ -	\$ 270,587	\$ 270,587	\$ 156,454	
2019	\$ -	\$ 117,789	\$ -	\$ 117,789	\$ -	\$ 202,437	\$ 202,437	\$ 117,789	
2020	\$ -	\$ 67,679	\$ -	\$ 67,679	\$ -	\$ 114,682	\$ 114,682	\$ 67,679	
2021	\$ -	\$ 35,137	\$ -	\$ 35,137	\$ -	\$ 59,540	\$ 59,540	\$ 35,137	
2022	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2023	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2024	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2025	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2026	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2028	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2029	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2031	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2032	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2034	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
2035	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
NPV	\$830,652	\$1,114,402	\$481,245	\$1,114,402	\$349,407	\$2,019,942	\$2,501,187	\$1,114,402	
0 Net Benefits		\$283,750	Net Benefits	\$633,157	Net Benefits	\$1,670,535	Net Benefits	(\$1,386,785)	
0 B/C Ratio		1.34	B/C Ratio	2.32	B/C Ratio	5.78	B/C Ratio	0.45	

Detailed Cost-Effectiveness Results

E-4

Program Name:		Residential New Construction						
Key Program Inputs								
Program Year	Participants	Utility Costs	Participant Costs	Energy Impacts	Impacts (Avg. Max)			
2006	90	\$ 134,680	\$ 124,558	739,536	138			
2007	120	\$ 172,900	\$ 166,077	1,725,585	323			
2008	150	\$ 211,140	\$ 207,596	2,958,146	553			
2009	150	\$ 211,840	\$ 207,596	4,190,706	783			
2010	150	\$ 212,561	\$ 207,596	5,423,267	1,014			
2011	-	\$ -	\$ -	5,311,487	997			
2012	-	\$ -	\$ -	5,162,447	975			
2013	-	\$ -	\$ -	4,967,399	945			
2014	-	\$ -	\$ -	4,501,163	876			
2015	-	\$ -	\$ -	3,942,587	792			
2016	-	\$ -	\$ -	3,463,391	720			
2017	-	\$ -	\$ -	2,978,363	647			
2018	-	\$ -	\$ -	2,502,083	576			
2019	-	\$ -	\$ -	2,425,981	567			
2020	-	\$ -	\$ -	2,334,233	556			
2021	-	\$ -	\$ -	2,249,718	547			
2022	-	\$ -	\$ -	2,163,110	537			
2023	-	\$ -	\$ -	2,074,409	528			
2024	-	\$ -	\$ -	2,007,195	512			
2025	-	\$ -	\$ -	1,921,065	491			
Cost-Effectiveness Test Results								
Program	Total Resource Cost Test		Utility Cost Test (UCT)		Participant (PCT)		Rate Impact Measure (RIM)	
	Costs	Benefits	Costs	Benefits	Costs	Benefits	Costs	Benefits
2006	\$ 259,238	\$ 24,956	\$ 134,680	\$ 24,956	\$ 124,558	\$ 51,948	\$ 186,628	\$ 24,956
2007	\$ 338,977	\$ 48,394	\$ 172,900	\$ 48,394	\$ 166,077	\$ 124,848	\$ 297,748	\$ 48,394
2008	\$ 418,736	\$ 91,589	\$ 211,140	\$ 91,589	\$ 207,596	\$ 220,446	\$ 431,586	\$ 91,589
2009	\$ 419,436	\$ 183,502	\$ 211,840	\$ 183,502	\$ 207,596	\$ 321,667	\$ 533,507	\$ 183,502
2010	\$ 420,157	\$ 212,500	\$ 212,561	\$ 212,500	\$ 207,596	\$ 428,763	\$ 641,324	\$ 212,500
2011	\$ -	\$ 247,953	\$ -	\$ 247,953	\$ -	\$ 432,524	\$ 432,524	\$ 247,953
2012	\$ -	\$ 248,350	\$ -	\$ 248,350	\$ -	\$ 432,999	\$ 432,999	\$ 248,350
2013	\$ -	\$ 246,309	\$ -	\$ 246,309	\$ -	\$ 429,138	\$ 429,138	\$ 246,309
2014	\$ -	\$ 230,330	\$ -	\$ 230,330	\$ -	\$ 400,526	\$ 400,526	\$ 230,330
2015	\$ -	\$ 208,403	\$ -	\$ 208,403	\$ -	\$ 361,347	\$ 361,347	\$ 208,403
2016	\$ -	\$ 189,174	\$ -	\$ 189,174	\$ -	\$ 326,950	\$ 326,950	\$ 189,174
2017	\$ -	\$ 168,284	\$ -	\$ 168,284	\$ -	\$ 289,597	\$ 289,597	\$ 168,284
2018	\$ -	\$ 146,465	\$ -	\$ 146,465	\$ -	\$ 250,586	\$ 250,586	\$ 146,465
2019	\$ -	\$ 146,465	\$ -	\$ 146,465	\$ -	\$ 250,253	\$ 250,253	\$ 146,465
2020	\$ -	\$ 145,407	\$ -	\$ 145,407	\$ -	\$ 248,012	\$ 248,012	\$ 145,407
2021	\$ -	\$ 144,610	\$ -	\$ 144,610	\$ -	\$ 246,203	\$ 246,203	\$ 144,610
2022	\$ -	\$ 143,503	\$ -	\$ 143,503	\$ -	\$ 243,827	\$ 243,827	\$ 143,503
2023	\$ -	\$ 142,062	\$ -	\$ 142,062	\$ -	\$ 240,843	\$ 240,843	\$ 142,062
2024	\$ -	\$ 141,617	\$ -	\$ 141,617	\$ -	\$ 240,031	\$ 240,031	\$ 141,617
2025	\$ -	\$ 139,642	\$ -	\$ 139,642	\$ -	\$ 236,623	\$ 236,623	\$ 139,642
2026	\$ -	\$ 131,098	\$ -	\$ 131,098	\$ -	\$ 222,146	\$ 222,146	\$ 131,098
2027	\$ -	\$ 119,976	\$ -	\$ 119,976	\$ -	\$ 203,299	\$ 203,299	\$ 119,976
2028	\$ -	\$ 106,069	\$ -	\$ 106,069	\$ -	\$ 179,734	\$ 179,734	\$ 106,069
2029	\$ -	\$ 98,958	\$ -	\$ 98,958	\$ -	\$ 167,684	\$ 167,684	\$ 98,958
2030	\$ -	\$ 91,325	\$ -	\$ 91,325	\$ -	\$ 154,750	\$ 154,750	\$ 91,325
2031	\$ -	\$ 94,065	\$ -	\$ 94,065	\$ -	\$ 159,393	\$ 159,393	\$ 94,065
2032	\$ -	\$ 96,887	\$ -	\$ 96,887	\$ -	\$ 164,174	\$ 164,174	\$ 96,887
2033	\$ -	\$ 99,793	\$ -	\$ 99,793	\$ -	\$ 169,100	\$ 169,100	\$ 99,793
2034	\$ -	\$ 102,787	\$ -	\$ 102,787	\$ -	\$ 174,172	\$ 174,172	\$ 102,787
2035	\$ -	\$ 105,871	\$ -	\$ 105,871	\$ -	\$ 179,398	\$ 179,398	\$ 105,871
NPV	\$1,482,533	\$1,793,380	\$753,699	\$1,793,380	\$728,834	\$3,232,987	\$3,986,686	\$1,793,380
0 Net Benefits		\$310,847	Net Benefits	\$1,039,681	Net Benefits	\$2,504,153	Net Benefits	(\$2,193,306)
0 B/C Ratio		1.21	B/C Ratio	2.38	B/C Ratio	4.435835422	B/C Ratio	0.45

Detailed Cost-Effectiveness Results

E-5

Program Name:		Residential Audit Program						
Key Program Inputs								
Program Year	Participants	Utility Costs	Participant Costs	Energy Impacts	Impacts (Avg. Max)			
2006	1,150	\$ 177,751	\$ -	711,526	96	-	-	-
2007	1,500	\$ 222,395	\$ -	1,644,876	222	-	-	-
2008	1,850	\$ 267,073	\$ -	2,800,047	378	-	-	-
2009	2,075	\$ 295,341	\$ -	4,089,160	552	-	-	-
2010	2,300	\$ 323,145	\$ -	5,512,212	745	-	-	-
2011	-	\$ -	\$ -	5,040,252	674	-	-	-
2012	-	\$ -	\$ -	4,419,252	581	-	-	-
2013	-	\$ -	\$ -	3,649,212	465	-	-	-
2014	-	\$ -	\$ -	2,792,232	337	-	-	-
2015	-	\$ -	\$ -	1,848,312	211	-	-	-
2016	-	\$ -	\$ -	1,827,344	209	-	-	-
2017	-	\$ -	\$ -	1,801,133	206	-	-	-
2018	-	\$ -	\$ -	1,769,679	202	-	-	-
2019	-	\$ -	\$ -	1,732,984	198	-	-	-
2020	-	\$ -	\$ -	1,691,046	193	-	-	-
2021	-	\$ -	\$ -	1,491,888	170	-	-	-
2022	-	\$ -	\$ -	1,231,670	141	-	-	-
2023	-	\$ -	\$ -	910,392	104	-	-	-
2024	-	\$ -	\$ -	550,595	63	-	-	-
2025	-	\$ -	\$ -	152,280	17	-	-	-
Cost-Effectiveness Test Results								
Program	Total Resource Cost Test		Utility Cost Test (UCT)		Participant (PCT)		Rate Impact Measure (RIM)	
	Costs	Benefits	Costs	Benefits	Costs	Benefits	Costs	Benefits
2006	\$ 177,751	\$ 24,017	\$ 177,751	\$ 24,017	\$ -	\$ 49,980	\$ 227,731	\$ 24,017
2007	\$ 222,395	\$ 45,631	\$ 222,395	\$ 45,631	\$ -	\$ 119,008	\$ 341,403	\$ 45,631
2008	\$ 267,073	\$ 85,375	\$ 267,073	\$ 85,375	\$ -	\$ 208,664	\$ 475,737	\$ 85,375
2009	\$ 295,341	\$ 171,971	\$ 295,341	\$ 171,971	\$ -	\$ 313,873	\$ 609,214	\$ 171,971
2010	\$ 323,145	\$ 206,809	\$ 323,145	\$ 206,809	\$ -	\$ 435,795	\$ 758,940	\$ 206,809
2011	\$ -	\$ 230,315	\$ -	\$ 230,315	\$ -	\$ 410,437	\$ 410,437	\$ 230,315
2012	\$ -	\$ 207,885	\$ -	\$ 207,885	\$ -	\$ 370,664	\$ 370,664	\$ 207,885
2013	\$ -	\$ 176,650	\$ -	\$ 176,650	\$ -	\$ 315,259	\$ 315,259	\$ 176,650
2014	\$ -	\$ 138,996	\$ -	\$ 138,996	\$ -	\$ 248,460	\$ 248,460	\$ 138,996
2015	\$ -	\$ 94,435	\$ -	\$ 94,435	\$ -	\$ 169,402	\$ 169,402	\$ 94,435
2016	\$ -	\$ 96,165	\$ -	\$ 96,165	\$ -	\$ 172,504	\$ 172,504	\$ 96,165
2017	\$ -	\$ 97,629	\$ -	\$ 97,629	\$ -	\$ 175,131	\$ 175,131	\$ 97,629
2018	\$ -	\$ 98,802	\$ -	\$ 98,802	\$ -	\$ 177,235	\$ 177,235	\$ 98,802
2019	\$ -	\$ 99,656	\$ -	\$ 99,656	\$ -	\$ 178,766	\$ 178,766	\$ 99,656
2020	\$ -	\$ 100,161	\$ -	\$ 100,161	\$ -	\$ 179,674	\$ 179,674	\$ 100,161
2021	\$ -	\$ 91,016	\$ -	\$ 91,016	\$ -	\$ 163,268	\$ 163,268	\$ 91,016
2022	\$ -	\$ 77,395	\$ -	\$ 77,395	\$ -	\$ 138,835	\$ 138,835	\$ 77,395
2023	\$ -	\$ 58,923	\$ -	\$ 58,923	\$ -	\$ 105,699	\$ 105,699	\$ 58,923
2024	\$ -	\$ 36,705	\$ -	\$ 36,705	\$ -	\$ 65,843	\$ 65,843	\$ 36,705
2025	\$ -	\$ 10,456	\$ -	\$ 10,456	\$ -	\$ 18,757	\$ 18,757	\$ 10,456
2026	\$ -	\$ 9,395	\$ -	\$ 9,395	\$ -	\$ 16,853	\$ 16,853	\$ 9,395
2027	\$ -	\$ 7,789	\$ -	\$ 7,789	\$ -	\$ 13,972	\$ 13,972	\$ 7,789
2028	\$ -	\$ 5,591	\$ -	\$ 5,591	\$ -	\$ 10,030	\$ 10,030	\$ 5,591
2029	\$ -	\$ 3,005	\$ -	\$ 3,005	\$ -	\$ 5,390	\$ 5,390	\$ 3,005
2030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2031	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2032	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2034	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2035	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NPV	\$1,022,007	\$1,181,163	\$1,022,007	\$1,181,163	\$0	\$2,247,158	\$3,269,165	\$1,181,163
0 Net Benefits		\$159,156	Net Benefits	\$159,156	Net Benefits	\$2,247,158	Net Benefits	(\$2,088,002)
0 B/C Ratio		1.16	B/C Ratio	1.16	B/C Ratio	#DIV/0!	B/C Ratio	0.36

Detailed Cost-Effectiveness Results

E-6

Program Name:		Comprehensive Commercial and Industrial						
Key Program Inputs								
Program Year	Participants	Utility Costs	Participant Costs	Energy Impacts	Impacts (Avg. Max)			
2006	100	\$ 970,194	\$ 377,718	4,696,086	832			
2007	125	\$ 1,194,920	\$ 604,349	12,209,828	2,164			
2008	150	\$ 1,638,372	\$ 1,164,676	24,148,793	4,080			
2009	175	\$ 1,802,130	\$ 1,369,732	37,338,784	6,122			
2010	200	\$ 1,966,084	\$ 1,574,352	51,785,528	8,291			
2011	-	\$ -	\$ -	51,730,053	8,290			
2012	-	\$ -	\$ -	51,674,548	8,290			
2013	-	\$ -	\$ -	51,576,016	8,289			
2014	-	\$ -	\$ -	51,511,476	8,289			
2015	-	\$ -	\$ -	51,362,946	8,281			
2016	-	\$ -	\$ -	50,270,829	7,908			
2017	-	\$ -	\$ -	48,558,429	7,316			
2018	-	\$ -	\$ -	45,875,408	6,577			
2019	-	\$ -	\$ -	42,904,460	5,837			
2020	-	\$ -	\$ -	39,702,276	5,297			
2021	-	\$ -	\$ -	39,544,399	5,271			
2022	-	\$ -	\$ -	39,184,511	5,215			
2023	-	\$ -	\$ -	37,436,997	4,974			
2024	-	\$ -	\$ -	34,864,783	4,625			
2025	-	\$ -	\$ -	31,916,346	4,225			
Cost-Effectiveness Test Results								
Program	Total Resource Cost Test		Utility Cost Test (UCT)		Participant (PCT)		Rate Impact Measure (RIM)	
	Costs	Benefits	Costs	Benefits	Costs	Benefits	Costs	Benefits
2006	\$ 1,347,912	\$ 155,305	\$ 970,194	\$ 155,305	\$ 377,718	\$ 266,339	\$ 1,236,533	\$ 155,305
2007	\$ 1,799,269	\$ 331,547	\$ 1,194,920	\$ 331,547	\$ 604,349	\$ 713,256	\$ 1,908,177	\$ 331,547
2008	\$ 2,803,048	\$ 732,997	\$ 1,638,372	\$ 732,997	\$ 1,164,676	\$ 1,453,010	\$ 3,091,382	\$ 732,997
2009	\$ 3,171,862	\$ 1,619,937	\$ 1,802,130	\$ 1,619,937	\$ 1,369,732	\$ 2,314,039	\$ 4,116,169	\$ 1,619,937
2010	\$ 3,540,436	\$ 2,027,545	\$ 1,966,084	\$ 2,027,545	\$ 1,574,352	\$ 3,305,645	\$ 5,271,729	\$ 2,027,545
2011	\$ -	\$ 2,423,851	\$ -	\$ 2,423,851	\$ -	\$ 3,401,167	\$ 3,401,167	\$ 2,423,851
2012	\$ -	\$ 2,493,338	\$ -	\$ 2,493,338	\$ -	\$ 3,499,443	\$ 3,499,443	\$ 2,493,338
2013	\$ -	\$ 2,562,115	\$ -	\$ 2,562,115	\$ -	\$ 3,597,553	\$ 3,597,553	\$ 2,562,115
2014	\$ -	\$ 2,634,810	\$ -	\$ 2,634,810	\$ -	\$ 3,700,843	\$ 3,700,843	\$ 2,634,810
2015	\$ -	\$ 2,704,893	\$ -	\$ 2,704,893	\$ -	\$ 3,800,877	\$ 3,800,877	\$ 2,704,893
2016	\$ -	\$ 2,733,906	\$ -	\$ 2,733,906	\$ -	\$ 3,831,662	\$ 3,831,662	\$ 2,733,906
2017	\$ -	\$ 2,731,932	\$ -	\$ 2,731,932	\$ -	\$ 3,812,176	\$ 3,812,176	\$ 2,731,932
2018	\$ -	\$ 2,665,818	\$ -	\$ 2,665,818	\$ -	\$ 3,709,586	\$ 3,709,586	\$ 2,665,818
2019	\$ -	\$ 2,571,748	\$ -	\$ 2,571,748	\$ -	\$ 3,573,430	\$ 3,573,430	\$ 2,571,748
2020	\$ -	\$ 2,450,677	\$ -	\$ 2,450,677	\$ -	\$ 3,405,928	\$ 3,405,928	\$ 2,450,677
2021	\$ -	\$ 2,513,583	\$ -	\$ 2,513,583	\$ -	\$ 3,494,155	\$ 3,494,155	\$ 2,513,583
2022	\$ -	\$ 2,564,768	\$ -	\$ 2,564,768	\$ -	\$ 3,566,226	\$ 3,566,226	\$ 2,564,768
2023	\$ -	\$ 2,525,503	\$ -	\$ 2,525,503	\$ -	\$ 3,509,399	\$ 3,509,399	\$ 2,525,503
2024	\$ -	\$ 2,425,843	\$ -	\$ 2,425,843	\$ -	\$ 3,366,324	\$ 3,366,324	\$ 2,425,843
2025	\$ -	\$ 2,292,189	\$ -	\$ 2,292,189	\$ -	\$ 3,174,090	\$ 3,174,090	\$ 2,292,189
2026	\$ -	\$ 2,122,933	\$ -	\$ 2,122,933	\$ -	\$ 2,930,538	\$ 2,930,538	\$ 2,122,933
2027	\$ -	\$ 1,940,397	\$ -	\$ 1,940,397	\$ -	\$ 2,668,642	\$ 2,668,642	\$ 1,940,397
2028	\$ -	\$ 1,920,757	\$ -	\$ 1,920,757	\$ -	\$ 2,639,767	\$ 2,639,767	\$ 1,920,757
2029	\$ -	\$ 1,898,140	\$ -	\$ 1,898,140	\$ -	\$ 2,606,683	\$ 2,606,683	\$ 1,898,140
2030	\$ -	\$ 1,712,011	\$ -	\$ 1,712,011	\$ -	\$ 2,349,597	\$ 2,349,597	\$ 1,712,011
2031	\$ -	\$ 1,391,361	\$ -	\$ 1,391,361	\$ -	\$ 1,910,859	\$ 1,910,859	\$ 1,391,361
2032	\$ -	\$ 888,107	\$ -	\$ 888,107	\$ -	\$ 1,222,187	\$ 1,222,187	\$ 888,107
2033	\$ -	\$ 651,327	\$ -	\$ 651,327	\$ -	\$ 898,402	\$ 898,402	\$ 651,327
2034	\$ -	\$ 399,407	\$ -	\$ 399,407	\$ -	\$ 553,907	\$ 553,907	\$ 399,407
2035	\$ -	\$ 131,785	\$ -	\$ 131,785	\$ -	\$ 187,933	\$ 187,933	\$ 131,785
NPV	\$9,939,131	\$21,973,926	\$5,992,137	\$21,973,926	\$3,946,994	\$31,634,458	\$37,626,595	\$21,973,926
0 Net Benefits		\$12,034,795	Net Benefits	\$15,981,789	Net Benefits	\$27,687,464	Net Benefits	(\$15,652,669)
0 B/C Ratio		2.21	B/C Ratio	3.67	B/C Ratio	8.014823117	B/C Ratio	0.58

Detailed Cost-Effectiveness Results

E-7

Program Name:		School Based Energy Education						
Key Program Inputs								
Program Year	Participants	Utility Costs	Participant Costs	Energy Impacts	Impacts (Avg. Max)			
2006	1,200	\$ 61,200	\$ -	547,479	67			
2007	1,800	\$ 91,800	\$ -	1,368,697	167			
2008	2,400	\$ 122,400	\$ -	2,463,654	301			
2009	2,400	\$ 122,400	\$ -	3,558,611	434			
2010	2,400	\$ 122,400	\$ -	4,653,569	568			
2011	-	\$ -	\$ -	4,511,009	546			
2012	-	\$ -	\$ -	4,297,169	514			
2013	-	\$ -	\$ -	3,953,729	463			
2014	-	\$ -	\$ -	3,581,129	407			
2015	-	\$ -	\$ -	3,179,369	355			
2016	-	\$ -	\$ -	3,062,729	346			
2017	-	\$ -	\$ -	2,946,089	336			
2018	-	\$ -	\$ -	2,946,089	336			
2019	-	\$ -	\$ -	2,946,089	336			
2020	-	\$ -	\$ -	2,946,089	336			
2021	-	\$ -	\$ -	2,635,163	301			
2022	-	\$ -	\$ -	2,168,775	248			
2023	-	\$ -	\$ -	1,546,925	177			
2024	-	\$ -	\$ -	925,074	106			
2025	-	\$ -	\$ -	303,223	35			
Cost-Effectiveness Test Results								
Program	Total Resource Cost Test		Utility Cost Test (UCT)		Participant (PCT)		Rate Impact Measure (RIM)	
	Costs	Benefits	Costs	Benefits	Costs	Benefits	Costs	Benefits
2006	\$ 61,200	\$ 18,839	\$ 61,200	\$ 18,839	\$ -	\$ 38,457	\$ 99,657	\$ 18,839
2007	\$ 91,800	\$ 37,791	\$ 91,800	\$ 37,791	\$ -	\$ 99,027	\$ 190,827	\$ 37,791
2008	\$ 122,400	\$ 74,609	\$ 122,400	\$ 74,609	\$ -	\$ 183,595	\$ 305,995	\$ 74,609
2009	\$ 122,400	\$ 150,545	\$ 122,400	\$ 150,545	\$ -	\$ 273,149	\$ 395,549	\$ 150,545
2010	\$ 122,400	\$ 174,978	\$ 122,400	\$ 174,978	\$ -	\$ 367,911	\$ 490,311	\$ 174,978
2011	\$ -	\$ 205,519	\$ -	\$ 205,519	\$ -	\$ 367,339	\$ 367,339	\$ 205,519
2012	\$ -	\$ 201,582	\$ -	\$ 201,582	\$ -	\$ 360,424	\$ 360,424	\$ 201,582
2013	\$ -	\$ 190,917	\$ -	\$ 190,917	\$ -	\$ 341,566	\$ 341,566	\$ 190,917
2014	\$ -	\$ 177,969	\$ -	\$ 177,969	\$ -	\$ 318,658	\$ 318,658	\$ 177,969
2015	\$ -	\$ 162,567	\$ -	\$ 162,567	\$ -	\$ 291,396	\$ 291,396	\$ 162,567
2016	\$ -	\$ 161,242	\$ -	\$ 161,242	\$ -	\$ 289,127	\$ 289,127	\$ 161,242
2017	\$ -	\$ 159,691	\$ -	\$ 159,691	\$ -	\$ 286,459	\$ 286,459	\$ 159,691
2018	\$ -	\$ 164,481	\$ -	\$ 164,481	\$ -	\$ 295,053	\$ 295,053	\$ 164,481
2019	\$ -	\$ 169,416	\$ -	\$ 169,416	\$ -	\$ 303,905	\$ 303,905	\$ 169,416
2020	\$ -	\$ 174,498	\$ -	\$ 174,498	\$ -	\$ 313,022	\$ 313,022	\$ 174,498
2021	\$ -	\$ 160,764	\$ -	\$ 160,764	\$ -	\$ 288,386	\$ 288,386	\$ 160,764
2022	\$ -	\$ 136,281	\$ -	\$ 136,281	\$ -	\$ 244,466	\$ 244,466	\$ 136,281
2023	\$ -	\$ 100,121	\$ -	\$ 100,121	\$ -	\$ 179,601	\$ 179,601	\$ 100,121
2024	\$ -	\$ 61,669	\$ -	\$ 61,669	\$ -	\$ 110,625	\$ 110,625	\$ 61,669
2025	\$ -	\$ 20,821	\$ -	\$ 20,821	\$ -	\$ 37,349	\$ 37,349	\$ 20,821
2026	\$ -	\$ 18,922	\$ -	\$ 18,922	\$ -	\$ 33,944	\$ 33,944	\$ 18,922
2027	\$ -	\$ 15,592	\$ -	\$ 15,592	\$ -	\$ 27,969	\$ 27,969	\$ 15,592
2028	\$ -	\$ 10,706	\$ -	\$ 10,706	\$ -	\$ 19,206	\$ 19,206	\$ 10,706
2029	\$ -	\$ 5,514	\$ -	\$ 5,514	\$ -	\$ 9,891	\$ 9,891	\$ 5,514
2030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2031	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2032	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2033	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2034	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2035	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
NPV	\$413,023	\$1,362,819	\$413,023	\$1,362,819	\$0	\$2,553,835	\$2,966,858	\$1,362,819
0 Net Benefits		\$949,797	Net Benefits	\$949,797	Net Benefits	\$2,553,835	Net Benefits	(\$1,604,039)
0 B/C Ratio		3.30	B/C Ratio	3.30	B/C Ratio	#DIV/0!	B/C Ratio	0.46

Detailed Cost-Effectiveness Results

E-8



**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

County of Jackson     )  
                                  )  
State of Missouri     )       ss

**AFFIDAVIT OF MATTHEW E. DAUNIS**

Matthew E. Daunis, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Surrebuttal Testimony of Matthew E. Daunis;" that said testimony was prepared by him and under his direction and supervision; that if inquiries were made as to the facts in said testimony and schedules, he would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of his knowledge, information, and belief.

Matthew E. Daunis  
Matthew E. Daunis

Subscribed and sworn to before me this 13th day of December, 2005.

Terry D. Lutes  
Notary Public  
Terry D. Lutes

My Commission expires:

8-20-2008



**TERRY D. LUTES**  
Jackson County  
My Commission Expires  
August 20, 2008