



The PSE Building  
10885 N.E. Fourth Street, Suite 700  
Bellevue, WA 98004-5579  
PHONE: 425-635-1400  
FAX: 425-635-2400  
www.perkinscoie.com

Jason T. Kuzma  
PHONE: (425) 635-1416  
FAX: (425) 635-2416  
EMAIL: JKuzma@perkinscoie.com

January 12, 2010

**VIA OVERNIGHT COURIER**

Mr. David W. Danner  
Executive Director and Secretary  
Washington Utilities and Transportation Commission  
1300 S. Evergreen Park Drive SW  
Olympia, WA 98504-7250

**Re: *In the Matter of Puget Sound Energy, Inc.'s Proposed Request for Proposals,*  
Docket No. UE-091618  
Request for Proposals for All Generation Sources  
Request for Proposals for Electric and Gas Demand-Side Resources**

Dear Mr. Danner:

Consistent with the Commission's Order No. 01 Approving Requests for Proposals in Docket No. UE-091618, enclosed for the Commission's records are thirteen (13) copies of Puget Sound Energy, Inc.'s ("PSE") Request for Proposals for All Generation Sources (the "All-Source RFP") and the Request for Proposals for Electric and Gas Demand Side Resources (the "Demand-Side Resources RFP"). Also enclosed is an electronic copy of this filing on the enclosed CD-ROM.

PSE is submitting as Attachment A to this letter a number of minor revisions made by PSE to the proposed All-Source RFP. These revisions are tracked to show the revisions that PSE has made to the proposed All-Source RFP filed in Docket No. UE-091618 on October 12, 2009. Several of the proposed changes resulted from PSE's consideration of requests for clarification provided in response to the proposed All-Source RFP. Other revisions represent "clean up" revisions that PSE discovered after the filing on October 12, 2009.

PSE is submitting as Attachment B to this letter a number of minor revisions made by PSE to the proposed Demand-Side Resources RFP. These revisions are tracked to show the revisions that PSE has made to the proposed Demand-Side Resources RFP filed in Docket No. UE-091618 on October 12, 2009. Several of the proposed changes resulted from PSE's

Mr. David W. Danner  
January 12, 2010  
Page 2

consideration of requests for clarification provided in response to the proposed Demand-Side Resources RFP. Other revisions represent “clean up” revisions that PSE discovered after the filing on October 12, 2009.

PSE’s Integrated Resource Plan (“IRP”), filed in 2009, estimates that the utility will need the equivalent of about 1,600 megawatts (MW) of new electricity supply by winter 2016-17 to meet customers’ needs. In part, the IRP examined the treatment of operating reserve obligations and whether such operating reserves should be accounted for as part of the planning reserve margin or in addition to the planning reserve margin. The 2009 IRP identified this uncertainty could make a difference of approximately +/- 250 MW of resource need by 2012. (See Figure 5-2 in Chapter 5, page 5-4, of the IRP.) The IRP was based on the lower resource need to avoid risk of overstating PSE’s need for resources. Since the 2009 IRP was filed, PSE has refined its resource need analysis and concluded its resource need is more consistent with the higher end of that range. PSE plans to file an addendum to the IRP by the end of January 2010 and will present the updated resource need at the proposal conference scheduled for January 28, 2010.

The Demand-Side Resources RFP invites qualified firms to offer services in 2010 and 2011 that complement or improve upon PSE’s existing energy-saving programs for residential, commercial and industrial customers. Consistent with the IRP and the updated estimated needs of the utility discussed above, the All-Source RFP for new power supplies invites outside power producers, marketers, and power-plant developers to help PSE procure approximately 1,250 MW of new electric-resource capacity by 2016.

PSE has provided notice of its filing to more than 300 power marketing companies, utilities, energy efficiency companies and other entities involved in development or provision of electric energy resources, including representatives of stakeholders who participated in PSE’s 2009 IRP process. Each of the All-Source RFP and the Demand-Side Resources RFP issued today can be viewed on PSE’s Web site ([www.pse.com](http://www.pse.com)) by clicking on the “Energy & Environment” tab, then “Energy Supply” and “Resource Acquisition.” PSE will also be providing notice of the filing to a variety of trade publications.

Candidates must submit their proposals to PSE by the first week of March 2009. PSE plans to review the power-supply proposals and develop a final short list of candidate projects by July 2010, then commence contract negotiations with the selected finalists. Short-listing and evaluation of the energy-efficiency proposals is expected by May 2010.

PSE will host a proposal conference for both the All-Source RFP and the Demand-Side Resources RFP on January 28, 2010 at 10:00 a.m. at PSE’s Bellevue campus.

Mr. David W. Danner  
January 12, 2010  
Page 3

Questions regarding the All-Source RFP should be addressed to Chris Bevil, Manager, Resource Acquisition, at 425-456-2757, and questions regarding the Demand-Side Resources RFP should be addressed to Rich Hazzard, Energy Efficiency Services, at 425-456-2317.

Thank you for your assistance.

Very truly yours,

A handwritten signature in black ink that reads "Jason T. Kuzma". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Jason T. Kuzma

# **Attachment A**

Figure 1. Capacity Need<sup>5</sup>

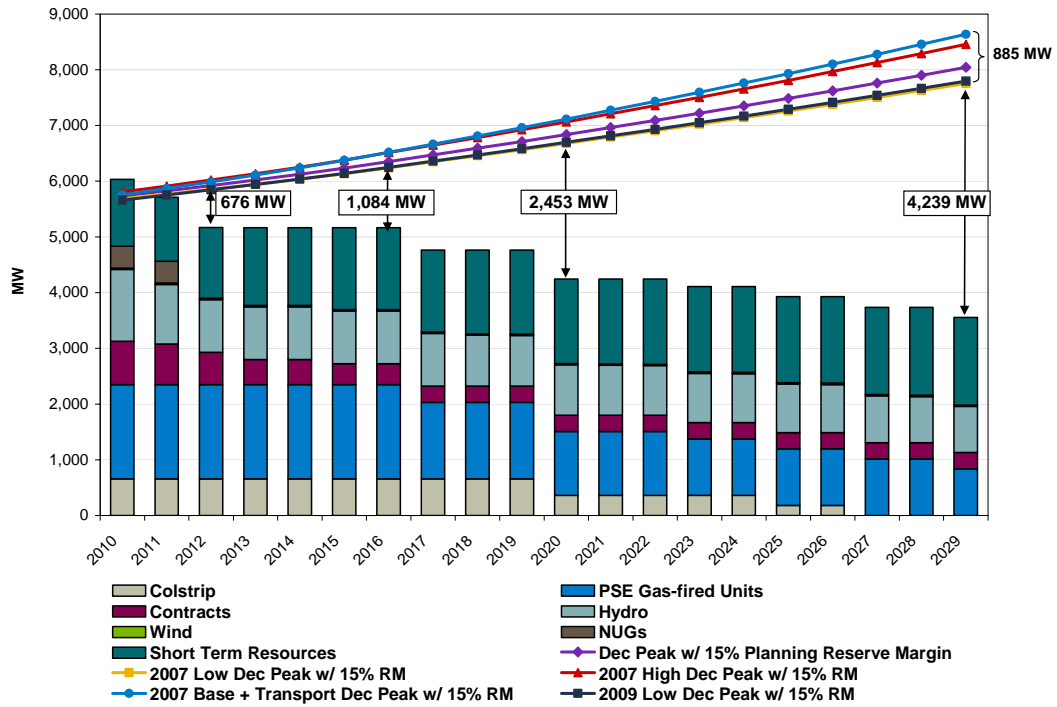


Table 1. Capacity Need (MW) 2010-2016<sup>6</sup>

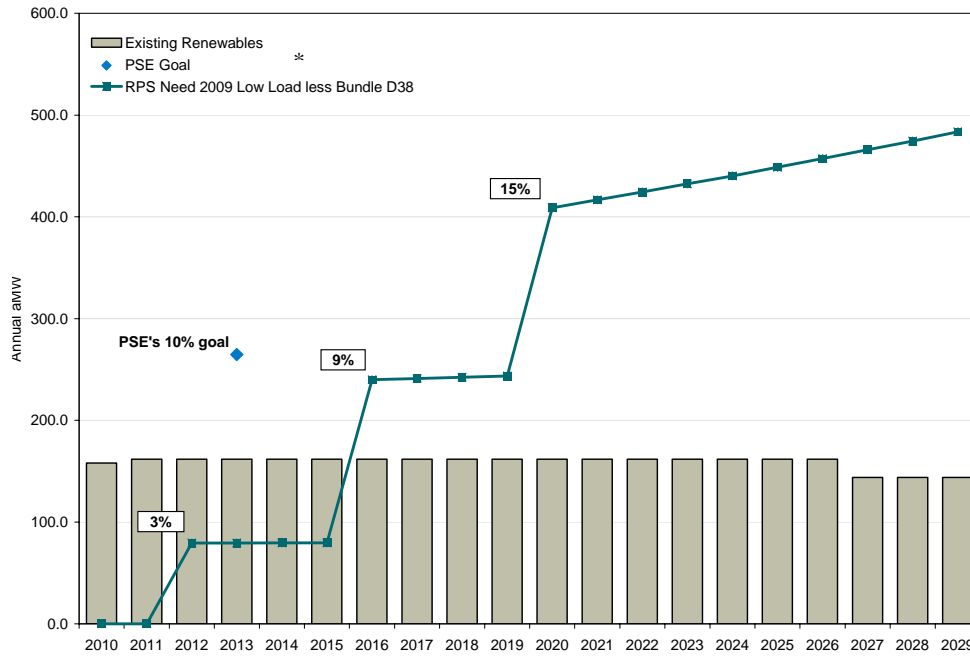
2010	2011	2012	2013	2014	2015	2016
0	42	676	776	874	976	1084

The following figure depicts the Company's renewable energy need for 2012 through 2029. These values are based on PSE's July 2009 Integrated Resource Plan.

<sup>5</sup> January capacity need as defined in the 2009 Integrated Resource Plan ([conservation not included before accounting for the effect of conservation](#)).

<sup>6</sup> Table numbers are based on the 2009 Low Load December Peak demand forecast with 15% reserve margin from the 2009 Integrated Resource Plan, as depicted in Figure 1.

**Figure 2. Renewable Energy Need (MW) 2012-2029\***



\* Includes all PSE-owned or contracted renewable resources including facilities from which RECs have been sold.

Table 2 identifies the cumulative nameplate resource additions and timing of such additions from the 2009 IRP. While the IRP recommends this resource acquisition strategy, decisions to acquire resources and the timing, quantity of capacity of such additions will be made based on actual resource availability and cost in the marketplace, and on PSE's ongoing need.

**Table 2. 2009 IRP, Cumulative Nameplate Resource Additions (MW)**

	2012	2016	2020	2029
<b>Demand-Side Resources<sup>7</sup></b>	205	597	917	1064
<b>Wind<sup>8</sup></b>	300	600	1000	1100
<b>Biomass</b>	0	0	20	40
<b>CCCT w/ Duct Firing</b>	275	275	825	1100
<b>Peakers</b>	160	160	480	1760

### 3. RFP Schedule

<sup>7</sup> PSE is issuing an eEnergy eEfficiency RFP concurrent with the release of this All Generation Sources RFP. [The energy efficiency RFP is available for review online at http://www.pse.com/energyEnvironment/energysupply/Pages/pse2010RFP.aspx.](http://www.pse.com/energyEnvironment/energysupply/Pages/pse2010RFP.aspx)

<sup>8</sup> To meet PSE's capacity need in the 2009 IRP, PSE is using 5% of plant nameplate capacity for wind capacity credit when evaluating wind resources.

## *5. Post-Proposal Negotiations and Contracts*

PSE may elect to negotiate both price and non-price factors during post-proposal negotiations with any respondent whose proposal has been selected to the [final](#) short list for further discussions. During this process, PSE will update its economic and risk evaluation on an ongoing basis until such time as PSE and the respondent might execute Definitive Agreements. Such updates will include any additional factors that may impact the total cost of a project.

PSE has no obligation to enter into Definitive Agreements with any respondent to this RFP and may terminate or modify the RFP at any time without liability or obligation to any respondent. This RFP shall not be construed as preventing PSE from entering into any agreement that it deems appropriate at any time before, during, or after the RFP process is complete. PSE reserves the right to negotiate only with those respondents and other parties who propose transactions that PSE believes, in its sole opinion, to have a reasonable likelihood of being executed substantially as proposed.

# Evaluation Criteria

## *1 Compatibility with Resource Need*

Evaluation Criteria	Description
<b>1. Timing</b>	<p>PSE prefers proposals that offer:</p> <ul style="list-style-type: none"> <li>• energy and/or capacity in a time frame consistent with PSE's needs</li> </ul> <div style="background-color: #f0f0f0; height: 15px; width: 100%; margin: 5px 0;"></div> <ul style="list-style-type: none"> <li>• substantial assurance of being commercially available according to the schedule proposed</li> <li>• flexibility in development schedule to accommodate PSE's timing needs</li> </ul>
<b>2. Match to need through ownership</b>	<p>Proposals that offer generation from an underlying asset that closely matches PSE's annual capacity requirements, or that offer output which can be controlled by PSE are preferred <a href="#">over</a> <a href="#">to</a> those that rely on shaping through short- or long-term arrangements.</p>
<b>3. Match to need through contract</b>	<p>PSE prefers proposals that provide a fixed annual price and closely match PSE's annual capacity requirements.</p> <p>PSE also prefers proposals that provide fixed transmission capacity from BPA's system to PSE's system and closely match PSE's annual capacity requirements.</p>
<b>4. RPS requirement</b>	<p>Proposals in which qualified renewable generation or RECs are closely aligned with PSE's renewable need as mandated by the Energy Independence Act, Chapter 19.285 RCW.</p>



Evaluation Criteria	Description
<p><b>8. Environmental and permitting risk</b></p>	<p>PSE's evaluation process will include an assessment of the following criteria:</p> <ul style="list-style-type: none"> <li>• status in acquiring needed permits;</li> <li>• risk associated with future environmental regulation and taxes, including greenhouse gas emissions</li> <li>• compliance with regional RPS</li> <li>• compliance with regional generator performance standards and import standards</li> </ul>
<p><b>9. Respondent risk</b></p>	<p>PSE will consider information received in response to Part II of the RFP document and Exhibit B, sections 4, 5 and 6 in determining risk associated with the financial condition and performance of a respondent and any third parties relied upon by the respondent. Lower-risk respondents are preferred.</p>
<p><b>10. Ability to deliver as proposed</b></p>	<p>An important consideration in judging a respondent's ability to provide a commercially operable project in the time frame proposed is the experience and qualifications of the entire project team. PSE will use the information provided in response to Exhibit B, Section 8 to evaluate the respondent team for this criterion. PSE prefers providers with proven track records.</p> <p>Information submitted in response to Exhibit B, Section 9, which addresses project development status and schedule, will also be used to evaluate the respondent's ability to meet the proposed commercial operation date.</p>

## 4 Public Benefits

Evaluation Criteria	Description
<p><b>1. Environmental impacts</b></p>	<p>Proposals with lower environmental impacts are preferred. Environmental impacts refer to the full range of issues evaluated in an environmental impact statement (EIS) or environmental assessment (EA).</p> <p>PSE will consider information supplied in response to Exhibit B, sections 2 and 7 in its evaluation of the environmental impacts of a proposed acquisition.</p>
<p><b>2. Resource location</b></p>	<p><del>Proposals-Proposed resources that are</del> located such that they provide benefits to the regional and PSE transmission systems, or require minimal or no transmission upgrades are preferred.</p> <p>Proposals that are not dependent upon constrained transmission or fuel transportation paths are preferred.</p> <p><del>Proposals-Proposed resources that are</del> located <del>such that they are</del> within PSE's service territory are preferred.</p>
<p><b>3. Community impacts</b></p>	<p>Proposals that demonstrate support from public, local, state and federal government entities and Native American nations, if applicable, as well as other stakeholders, are preferred.</p>

## 5 Strategic and Financial

Evaluation Criteria	Description
<p><b>1. Capital structure impacts</b></p>	<p>PSE’s quantitative analysis will impute the anticipated equity cost needed to offset any adverse effects on its capital structure associated with accounting requirements (e.g., FASB ASC 810) that may require PSE to consolidate the respondent’s balance sheet.</p> <p>All else being equal, PSE prefers proposals that avoid risks associated with <del>the potential of PSE having to</del> <u>requirement to</u> consolidate <del>the</del> <u>a</u> respondent’s financials with PSE’s financials (e.g., pursuant to FASB ASC 810).</p> <p>All else being equal, proposals are preferred that would not increase PSE’s exposure to adverse impacts on its financial position (e.g., by requiring PSE to impute debt, to account for the transaction as a capital lease (e.g., under FASB ASC 840), to account for or report the transaction as a financial derivative transaction (e.g., pursuant to FASB ASC 815), by otherwise adversely affecting PSE’s financial leverage, operating leverage, credit rating, cash flow, income statement or balance sheet, or by imposing credit requirements or increasing liquidity risk).</p>
<p><b>2. Future exposure to environmental regulations and/or taxes</b></p>	<p>Proposals for resources with lower potential exposure to future environmental regulations and/or taxes are preferred.</p>

# **Attachment B**

# Conservation Cost Effectiveness Standard (CCES)

**Conservation Cost Effectiveness Standard (CCES)** shows the full “avoided cost” to PSE of the energy saved, for the Type of Savings (defined by end use load shape and customer class) and life of the energy savings, or Measure Life. The CCES is based on the market costs projected by a power costing model, which would otherwise be incurred to provide energy from a generation source either directly or by contract plus credits for transmission and distribution system benefits, environmental externalities, and line losses. This value is expressed as the levelized value per kWh saved of future energy savings over the life of the measure. The CCES is based on Aurora forecast power costs at Mid-Columbia, and adds 35% for a power planning adjustment, 10% for environmental credits, 7.6% Residential and 6.1% Commercial/Industrial for avoided transmission and distribution losses, a valuation for avoided peak capacity, and \$31.87/kW-year distribution benefit. Load factors from the analysis in PSE’s 2009 IRP are used for end-use load shapes that define Type of Savings. Each Type of Savings has a CCES, or a value per kWh or Therm per Measure Life, up to 30 years. The values for the natural gas and electric CCES [that will be used to evaluate PSE’s 2010-201108–2009](#) programs are shown in **Table F-1 and F-2**.

Cost effectiveness of projects will allow for PSE administrative costs. PSE’s costs are expected to vary, depending upon the proposal content. At a minimum, PSE costs include some project management activities, coordination with customer data, and conducting customer satisfaction surveys for the respondent’s program activity.

## **1. Description of Tests**

Puget Sound Energy will evaluate the cost effectiveness of proposals using a standard Utility Cost Test and a Total Resource Cost Test.

**Total Resource Cost Test (TRC Test)** measures the net value of energy efficiency programs to society as a whole. The TRC Test is a cost-effectiveness calculation which demonstrates if the total benefits, including electricity (defined by the **Conservation Cost Effectiveness Standard**) and other savings benefits, exceed total costs including those

Measure Life	SF Space Heat	MF Space Heating	Residential Water Heat	Residential Lighting	Residential Heat Pump	Residential Plug Load	Commercial Cooking	Commercial Cooling	Commercial Heating	Commercial Lighting	Commercial Refrigeration	Flat
	SFSH	MFSH	WH	LIGHTING	HP	PLUG	CICOOK	CICOOOL	CIHEAT	CILTG	CIREF	FLAT
1	\$ 0.140	\$ 0.113	\$ 0.109	\$ 0.092	\$ 0.167	\$ 0.094	\$ 0.084	\$ 0.060	\$ 0.183	\$ 0.112	\$ 0.096	\$ 0.091
2	\$ 0.143	\$ 0.115	\$ 0.111	\$ 0.093	\$ 0.170	\$ 0.096	\$ 0.086	\$ 0.061	\$ 0.186	\$ 0.114	\$ 0.098	\$ 0.093
3	\$ 0.153	\$ 0.125	\$ 0.120	\$ 0.102	\$ 0.180	\$ 0.105	\$ 0.095	\$ 0.069	\$ 0.196	\$ 0.124	\$ 0.107	\$ 0.102
4	\$ 0.159	\$ 0.130	\$ 0.125	\$ 0.107	\$ 0.185	\$ 0.110	\$ 0.100	\$ 0.074	\$ 0.202	\$ 0.129	\$ 0.113	\$ 0.107
5	\$ 0.164	\$ 0.134	\$ 0.129	\$ 0.110	\$ 0.189	\$ 0.114	\$ 0.103	\$ 0.077	\$ 0.206	\$ 0.133	\$ 0.116	\$ 0.111
6	\$ 0.168	\$ 0.137	\$ 0.132	\$ 0.113	\$ 0.193	\$ 0.116	\$ 0.106	\$ 0.079	\$ 0.210	\$ 0.136	\$ 0.119	\$ 0.114
7	\$ 0.172	\$ 0.140	\$ 0.134	\$ 0.115	\$ 0.196	\$ 0.119	\$ 0.108	\$ 0.080	\$ 0.213	\$ 0.138	\$ 0.121	\$ 0.116
8	\$ 0.175	\$ 0.142	\$ 0.136	\$ 0.117	\$ 0.199	\$ 0.120	\$ 0.109	\$ 0.082	\$ 0.216	\$ 0.140	\$ 0.123	\$ 0.117
9	\$ 0.178	\$ 0.144	\$ 0.138	\$ 0.118	\$ 0.201	\$ 0.122	\$ 0.111	\$ 0.083	\$ 0.219	\$ 0.142	\$ 0.125	\$ 0.119
10	\$ 0.181	\$ 0.146	\$ 0.140	\$ 0.120	\$ 0.204	\$ 0.124	\$ 0.112	\$ 0.084	\$ 0.222	\$ 0.144	\$ 0.126	\$ 0.121
11	\$ 0.184	\$ 0.148	\$ 0.141	\$ 0.121	\$ 0.206	\$ 0.125	\$ 0.114	\$ 0.085	\$ 0.224	\$ 0.145	\$ 0.128	\$ 0.122
12	\$ 0.186	\$ 0.149	\$ 0.143	\$ 0.123	\$ 0.208	\$ 0.127	\$ 0.115	\$ 0.086	\$ 0.227	\$ 0.147	\$ 0.129	\$ 0.124
13	\$ 0.189	\$ 0.151	\$ 0.144	\$ 0.124	\$ 0.210	\$ 0.128	\$ 0.116	\$ 0.087	\$ 0.229	\$ 0.149	\$ 0.130	\$ 0.125
14	\$ 0.191	\$ 0.152	\$ 0.146	\$ 0.125	\$ 0.212	\$ 0.129	\$ 0.118	\$ 0.087	\$ 0.231	\$ 0.150	\$ 0.132	\$ 0.126
15	\$ 0.194	\$ 0.154	\$ 0.147	\$ 0.126	\$ 0.214	\$ 0.131	\$ 0.119	\$ 0.088	\$ 0.234	\$ 0.151	\$ 0.133	\$ 0.128
16	\$ 0.197	\$ 0.155	\$ 0.149	\$ 0.128	\$ 0.216	\$ 0.132	\$ 0.120	\$ 0.089	\$ 0.236	\$ 0.153	\$ 0.134	\$ 0.129
17	\$ 0.199	\$ 0.157	\$ 0.150	\$ 0.129	\$ 0.218	\$ 0.133	\$ 0.121	\$ 0.090	\$ 0.238	\$ 0.154	\$ 0.135	\$ 0.130
18	\$ 0.201	\$ 0.158	\$ 0.151	\$ 0.130	\$ 0.220	\$ 0.134	\$ 0.122	\$ 0.091	\$ 0.240	\$ 0.155	\$ 0.137	\$ 0.131
19	\$ 0.203	\$ 0.159	\$ 0.152	\$ 0.131	\$ 0.221	\$ 0.135	\$ 0.123	\$ 0.091	\$ 0.242	\$ 0.157	\$ 0.138	\$ 0.132
20	\$ 0.206	\$ 0.161	\$ 0.154	\$ 0.132	\$ 0.223	\$ 0.136	\$ 0.124	\$ 0.092	\$ 0.244	\$ 0.158	\$ 0.139	\$ 0.133
21	\$ 0.208	\$ 0.162	\$ 0.155	\$ 0.133	\$ 0.225	\$ 0.137	\$ 0.125	\$ 0.093	\$ 0.245	\$ 0.159	\$ 0.140	\$ 0.134
22	\$ 0.210	\$ 0.163	\$ 0.156	\$ 0.133	\$ 0.226	\$ 0.138	\$ 0.125	\$ 0.093	\$ 0.247	\$ 0.160	\$ 0.141	\$ 0.135
23	\$ 0.212	\$ 0.164	\$ 0.157	\$ 0.134	\$ 0.228	\$ 0.139	\$ 0.126	\$ 0.094	\$ 0.249	\$ 0.161	\$ 0.142	\$ 0.136
24	\$ 0.214	\$ 0.165	\$ 0.158	\$ 0.135	\$ 0.229	\$ 0.140	\$ 0.127	\$ 0.094	\$ 0.250	\$ 0.162	\$ 0.143	\$ 0.136
25	\$ 0.215	\$ 0.166	\$ 0.158	\$ 0.136	\$ 0.230	\$ 0.140	\$ 0.127	\$ 0.095	\$ 0.252	\$ 0.163	\$ 0.143	\$ 0.137
26	\$ 0.217	\$ 0.167	\$ 0.159	\$ 0.136	\$ 0.232	\$ 0.141	\$ 0.128	\$ 0.095	\$ 0.253	\$ 0.164	\$ 0.144	\$ 0.138
27	\$ 0.219	\$ 0.168	\$ 0.160	\$ 0.137	\$ 0.233	\$ 0.142	\$ 0.129	\$ 0.095	\$ 0.254	\$ 0.165	\$ 0.145	\$ 0.138
28	\$ 0.220	\$ 0.168	\$ 0.161	\$ 0.138	\$ 0.234	\$ 0.142	\$ 0.129	\$ 0.096	\$ 0.256	\$ 0.165	\$ 0.145	\$ 0.139
29	\$ 0.222	\$ 0.169	\$ 0.161	\$ 0.138	\$ 0.235	\$ 0.143	\$ 0.130	\$ 0.096	\$ 0.257	\$ 0.166	\$ 0.146	\$ 0.140
30	\$ 0.223	\$ 0.170	\$ 0.162	\$ 0.139	\$ 0.236	\$ 0.144	\$ 0.130	\$ 0.096	\$ 0.258	\$ 0.167	\$ 0.146	\$ 0.140

**Table F-1. Electric Conservation Cost Effectiveness Standard – 2009-2010-20110**  
 (Levelized \$/kWh) (Includes avoided energy and avoided capacity)

Measure Life	SF Space Heat	MF Space Heating	Residential Water Heat	Residential Lighting	Residential Heat Pump	Residential Plug Load	Commercial Cooking	Commercial Cooling	Commercial Heating	Commercial Lighting	Commercial Refrigeration	Flat
	SFSH	MFSH	WH	LIGHTING	HP	PLUG	CICOOK	CICOOL	CIHEAT	CILTG	CIREF	FLAT
1	\$ 0.139	\$ 0.114	\$ 0.110	\$ 0.092	\$ 0.168	\$ 0.095	\$ 0.085	\$ 0.061	\$ 0.184	\$ 0.113	\$ 0.097	\$ 0.092
2	\$ 0.142	\$ 0.116	\$ 0.112	\$ 0.095	\$ 0.171	\$ 0.097	\$ 0.087	\$ 0.062	\$ 0.187	\$ 0.116	\$ 0.099	\$ 0.094
3	\$ 0.153	\$ 0.127	\$ 0.122	\$ 0.104	\$ 0.182	\$ 0.107	\$ 0.097	\$ 0.072	\$ 0.198	\$ 0.126	\$ 0.109	\$ 0.104
4	\$ 0.159	\$ 0.133	\$ 0.128	\$ 0.110	\$ 0.188	\$ 0.113	\$ 0.103	\$ 0.077	\$ 0.204	\$ 0.132	\$ 0.115	\$ 0.110
5	\$ 0.164	\$ 0.138	\$ 0.133	\$ 0.114	\$ 0.193	\$ 0.117	\$ 0.107	\$ 0.081	\$ 0.210	\$ 0.136	\$ 0.119	\$ 0.114
6	\$ 0.168	\$ 0.141	\$ 0.136	\$ 0.117	\$ 0.197	\$ 0.121	\$ 0.110	\$ 0.083	\$ 0.214	\$ 0.140	\$ 0.123	\$ 0.118
7	\$ 0.171	\$ 0.145	\$ 0.139	\$ 0.120	\$ 0.201	\$ 0.123	\$ 0.112	\$ 0.085	\$ 0.218	\$ 0.143	\$ 0.126	\$ 0.120
8	\$ 0.175	\$ 0.148	\$ 0.142	\$ 0.122	\$ 0.204	\$ 0.126	\$ 0.115	\$ 0.087	\$ 0.222	\$ 0.145	\$ 0.128	\$ 0.123
9	\$ 0.178	\$ 0.150	\$ 0.144	\$ 0.125	\$ 0.208	\$ 0.128	\$ 0.117	\$ 0.089	\$ 0.226	\$ 0.148	\$ 0.131	\$ 0.125
10	\$ 0.181	\$ 0.153	\$ 0.147	\$ 0.127	\$ 0.211	\$ 0.131	\$ 0.119	\$ 0.091	\$ 0.229	\$ 0.150	\$ 0.133	\$ 0.127
11	\$ 0.184	\$ 0.155	\$ 0.149	\$ 0.129	\$ 0.214	\$ 0.133	\$ 0.121	\$ 0.092	\$ 0.232	\$ 0.153	\$ 0.135	\$ 0.130
12	\$ 0.186	\$ 0.158	\$ 0.151	\$ 0.131	\$ 0.216	\$ 0.135	\$ 0.123	\$ 0.094	\$ 0.235	\$ 0.155	\$ 0.137	\$ 0.131
13	\$ 0.189	\$ 0.160	\$ 0.153	\$ 0.133	\$ 0.219	\$ 0.137	\$ 0.125	\$ 0.095	\$ 0.238	\$ 0.157	\$ 0.139	\$ 0.133
14	\$ 0.191	\$ 0.162	\$ 0.155	\$ 0.135	\$ 0.222	\$ 0.139	\$ 0.127	\$ 0.097	\$ 0.241	\$ 0.159	\$ 0.141	\$ 0.135
15	\$ 0.194	\$ 0.164	\$ 0.157	\$ 0.136	\$ 0.224	\$ 0.140	\$ 0.128	\$ 0.098	\$ 0.244	\$ 0.161	\$ 0.143	\$ 0.137
16	\$ 0.196	\$ 0.166	\$ 0.159	\$ 0.138	\$ 0.227	\$ 0.142	\$ 0.130	\$ 0.099	\$ 0.246	\$ 0.163	\$ 0.144	\$ 0.139
17	\$ 0.199	\$ 0.168	\$ 0.161	\$ 0.140	\$ 0.229	\$ 0.144	\$ 0.132	\$ 0.100	\$ 0.249	\$ 0.165	\$ 0.146	\$ 0.140
18	\$ 0.201	\$ 0.170	\$ 0.163	\$ 0.141	\$ 0.232	\$ 0.146	\$ 0.133	\$ 0.102	\$ 0.252	\$ 0.167	\$ 0.148	\$ 0.142
19	\$ 0.203	\$ 0.172	\$ 0.164	\$ 0.143	\$ 0.234	\$ 0.147	\$ 0.135	\$ 0.103	\$ 0.254	\$ 0.169	\$ 0.149	\$ 0.144
20	\$ 0.205	\$ 0.174	\$ 0.166	\$ 0.144	\$ 0.236	\$ 0.149	\$ 0.136	\$ 0.104	\$ 0.256	\$ 0.170	\$ 0.151	\$ 0.145
21	\$ 0.208	\$ 0.175	\$ 0.168	\$ 0.146	\$ 0.238	\$ 0.150	\$ 0.137	\$ 0.105	\$ 0.259	\$ 0.172	\$ 0.152	\$ 0.147
22	\$ 0.210	\$ 0.177	\$ 0.169	\$ 0.147	\$ 0.240	\$ 0.151	\$ 0.139	\$ 0.106	\$ 0.261	\$ 0.173	\$ 0.154	\$ 0.148
23	\$ 0.212	\$ 0.178	\$ 0.171	\$ 0.148	\$ 0.242	\$ 0.153	\$ 0.140	\$ 0.107	\$ 0.263	\$ 0.175	\$ 0.155	\$ 0.149
24	\$ 0.213	\$ 0.180	\$ 0.172	\$ 0.150	\$ 0.244	\$ 0.154	\$ 0.141	\$ 0.108	\$ 0.265	\$ 0.176	\$ 0.156	\$ 0.150
25	\$ 0.215	\$ 0.181	\$ 0.173	\$ 0.151	\$ 0.246	\$ 0.155	\$ 0.142	\$ 0.109	\$ 0.267	\$ 0.177	\$ 0.158	\$ 0.151
26	\$ 0.217	\$ 0.182	\$ 0.174	\$ 0.152	\$ 0.247	\$ 0.156	\$ 0.143	\$ 0.110	\$ 0.269	\$ 0.179	\$ 0.159	\$ 0.153
27	\$ 0.218	\$ 0.184	\$ 0.176	\$ 0.153	\$ 0.249	\$ 0.157	\$ 0.144	\$ 0.110	\$ 0.270	\$ 0.180	\$ 0.160	\$ 0.154
28	\$ 0.220	\$ 0.185	\$ 0.177	\$ 0.154	\$ 0.251	\$ 0.158	\$ 0.145	\$ 0.111	\$ 0.272	\$ 0.181	\$ 0.161	\$ 0.155
29	\$ 0.222	\$ 0.186	\$ 0.178	\$ 0.155	\$ 0.252	\$ 0.159	\$ 0.146	\$ 0.112	\$ 0.274	\$ 0.182	\$ 0.162	\$ 0.156
30	\$ 0.223	\$ 0.187	\$ 0.179	\$ 0.156	\$ 0.253	\$ 0.160	\$ 0.147	\$ 0.112	\$ 0.275	\$ 0.183	\$ 0.163	\$ 0.156

- 1. 2010 Start Year
- 2. Discount rate: 8.25%

Measure Life	Res Space Heat Existing	Res Water Heat/ Appliances	Com Space Heat	Com Water Heat & Cooking	Industrial Flat
	SH	WH	CISH	CIWH	FLAT
1	\$ 0.953	\$ 0.862	\$ 0.978	\$ 0.865	\$ 0.862
2	\$ 1.021	\$ 0.926	\$ 1.047	\$ 0.928	\$ 0.925
3	\$ 1.097	\$ 1.003	\$ 1.123	\$ 1.006	\$ 1.003
4	\$ 1.150	\$ 1.056	\$ 1.176	\$ 1.059	\$ 1.056
5	\$ 1.189	\$ 1.092	\$ 1.215	\$ 1.095	\$ 1.092
6	\$ 1.216	\$ 1.117	\$ 1.242	\$ 1.120	\$ 1.117
7	\$ 1.242	\$ 1.140	\$ 1.270	\$ 1.143	\$ 1.140
8	\$ 1.268	\$ 1.162	\$ 1.296	\$ 1.165	\$ 1.162
9	\$ 1.291	\$ 1.183	\$ 1.319	\$ 1.186	\$ 1.183
10	\$ 1.313	\$ 1.204	\$ 1.342	\$ 1.207	\$ 1.204
11	\$ 1.333	\$ 1.223	\$ 1.362	\$ 1.226	\$ 1.223
12	\$ 1.352	\$ 1.241	\$ 1.382	\$ 1.245	\$ 1.241
13	\$ 1.372	\$ 1.260	\$ 1.401	\$ 1.264	\$ 1.260
14	\$ 1.389	\$ 1.278	\$ 1.419	\$ 1.282	\$ 1.278
15	\$ 1.408	\$ 1.296	\$ 1.438	\$ 1.299	\$ 1.296
16	\$ 1.426	\$ 1.312	\$ 1.456	\$ 1.316	\$ 1.312
17	\$ 1.442	\$ 1.328	\$ 1.473	\$ 1.332	\$ 1.328
18	\$ 1.461	\$ 1.346	\$ 1.494	\$ 1.350	\$ 1.346
19	\$ 1.477	\$ 1.362	\$ 1.513	\$ 1.366	\$ 1.362
20	\$ 1.492	\$ 1.377	\$ 1.532	\$ 1.381	\$ 1.377
21	\$ 1.508	\$ 1.392	\$ 1.549	\$ 1.396	\$ 1.392
22	\$ 1.522	\$ 1.406	\$ 1.566	\$ 1.410	\$ 1.406
23	\$ 1.536	\$ 1.420	\$ 1.582	\$ 1.424	\$ 1.420
24	\$ 1.549	\$ 1.433	\$ 1.597	\$ 1.437	\$ 1.433
25	\$ 1.562	\$ 1.445	\$ 1.611	\$ 1.449	\$ 1.445
26	\$ 1.574	\$ 1.457	\$ 1.625	\$ 1.461	\$ 1.457
27	\$ 1.586	\$ 1.468	\$ 1.639	\$ 1.472	\$ 1.468
28	\$ 1.597	\$ 1.479	\$ 1.651	\$ 1.483	\$ 1.479
29	\$ 1.608	\$ 1.489	\$ 1.664	\$ 1.494	\$ 1.489
30	\$ 1.618	\$ 1.499	\$ 1.675	\$ 1.504	\$ 1.499



Measure Life	Res Space Heat	Res Water Heat/ Appliances	Com Space Heat	Com Water Heat/ Cooking	Industrial Flat
	SH	WH	CISH	CIWH	FLAT
1	\$ 0.95	\$ 0.86	\$ 0.98	\$ 0.85	\$ 0.86
2	\$ 1.02	\$ 0.93	\$ 1.05	\$ 0.91	\$ 0.93
3	\$ 1.10	\$ 1.00	\$ 1.12	\$ 0.99	\$ 1.00
4	\$ 1.15	\$ 1.06	\$ 1.18	\$ 1.04	\$ 1.06
5	\$ 1.19	\$ 1.09	\$ 1.21	\$ 1.08	\$ 1.09
6	\$ 1.22	\$ 1.12	\$ 1.24	\$ 1.10	\$ 1.12
7	\$ 1.24	\$ 1.14	\$ 1.27	\$ 1.12	\$ 1.14
8	\$ 1.27	\$ 1.16	\$ 1.30	\$ 1.15	\$ 1.16
9	\$ 1.29	\$ 1.18	\$ 1.32	\$ 1.17	\$ 1.18
10	\$ 1.31	\$ 1.20	\$ 1.34	\$ 1.19	\$ 1.21
11	\$ 1.33	\$ 1.22	\$ 1.36	\$ 1.21	\$ 1.22
12	\$ 1.35	\$ 1.24	\$ 1.38	\$ 1.22	\$ 1.24
13	\$ 1.37	\$ 1.26	\$ 1.40	\$ 1.24	\$ 1.26
14	\$ 1.39	\$ 1.28	\$ 1.42	\$ 1.26	\$ 1.28
15	\$ 1.41	\$ 1.30	\$ 1.44	\$ 1.28	\$ 1.30
16	\$ 1.43	\$ 1.31	\$ 1.46	\$ 1.29	\$ 1.31
17	\$ 1.44	\$ 1.33	\$ 1.47	\$ 1.31	\$ 1.33
18	\$ 1.46	\$ 1.35	\$ 1.49	\$ 1.33	\$ 1.35
19	\$ 1.48	\$ 1.36	\$ 1.51	\$ 1.34	\$ 1.36
20	\$ 1.49	\$ 1.38	\$ 1.53	\$ 1.36	\$ 1.38
21	\$ 1.51	\$ 1.39	\$ 1.55	\$ 1.37	\$ 1.39
22	\$ 1.52	\$ 1.41	\$ 1.57	\$ 1.39	\$ 1.41
23	\$ 1.54	\$ 1.42	\$ 1.58	\$ 1.40	\$ 1.42
24	\$ 1.55	\$ 1.43	\$ 1.60	\$ 1.41	\$ 1.43
25	\$ 1.56	\$ 1.44	\$ 1.61	\$ 1.43	\$ 1.45
26	\$ 1.57	\$ 1.46	\$ 1.63	\$ 1.44	\$ 1.46
27	\$ 1.59	\$ 1.47	\$ 1.64	\$ 1.45	\$ 1.47
28	\$ 1.60	\$ 1.48	\$ 1.65	\$ 1.46	\$ 1.48
29	\$ 1.61	\$ 1.49	\$ 1.66	\$ 1.47	\$ 1.49
30	\$ 1.62	\$ 1.50	\$ 1.68	\$ 1.48	\$ 1.50

1. 2010 Start Year

2. Discount Rate 8.25%