



## Exhibit 1, Supplement 5

2020-2021  
Savings Revision  
Program Summaries





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## I. SAVINGS REVISIONS OVERVIEW

PSE provides Exhibit 1, Supplement 5: *2020-2021 Savings and Budget Revisions* as an addendum to its 2020-2021 Commission petition to revise its 2020-2021 conservation savings targets, consistent with condition (1)(b) in Order 01, Dockets UE-190905. The Supplement provides summaries of savings revisions that Energy Efficiency program staff made in applicable programs as a result of updated avoided costs indicated in PSE's 2019 Integrated Resource Plan (IRP) preliminary, non-vetted analyses.<sup>1</sup>

The Supplement consists of applicable individual program discussions, in their Exhibit 1: *Savings and Budgets* sequence. Each program discussion will be a separate page in the Supplement for more straightforward reference.

### A. Total Utility Conservation Goal Summary

PSE summarizes the overall impact of the program revisions in Table I-1. It is notable that impacted savings programs comprise the Residential Energy Management (REM), and the Business Energy Management (BEM) Sectors. Pilots with Uncertain Savings and NEEA savings, as originally stated in the 2020-2021 BCP, are unchanged. The indicated totals represent PSE's Total Utility Conservation Goals. It is notable that some programs' electric savings revision also resulted in incidental natural gas savings. Because PSE's original 2020-2021 natural gas savings target already exceeded the draft 2019 IRP analysis results, PSE will not file a revised natural gas Target. PSE discusses the revised sub-totals that comprise the overall Portfolio of savings in the Petition.

**Table I-1: 2020-2021 Total Utility Conservation Goal Summary**

2020-2021 Conservation Target Revisions				
	Original Value	Revised Value	Difference	Percent
Electric Savings Target	476,468 MWh	526,044 MWh	49,576 MWh	10.4%
Electric Budget	\$ 176,471,707	\$ 193,876,789	\$ 17,405,082	9.9%
Total Resource Cost B/C Ratio, Electric	1.26	2.10	0.84	66.7%
Utility Cost B/C Ratio, Electric	1.54	2.64	1.10	71.4%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

<sup>1</sup> PSE discusses the methodology and results of the revised 2019 IRP analyses in the Petition to Revise PSE's 2020-2021 Savings Targets and Thresholds (Petition).



## II. PROGRAM SUMMARIES

The following program pages will summarize the changes in the program’s electric savings and budgets from the originally-filed 2020-2021 BCP to the current values, updated to reflect the revisions made possible by the inclusion of the social cost of carbon, and resultant updated cost-effectiveness. Certain programs have the potential to add incidental natural gas savings as a result of their increased electric targets.<sup>2</sup> In some cases, increased therm savings may have an impact on the anticipated spends of these programs. PSE notes these cases in the applicable discussions.

Please note that PSE did not sequentially number the tables included with each program discussion. As each page is program-specific, and could be considered a stand-alone, it was not necessary to number each table, as is PSE’s standard tenet in its Plans and Reports.

The summaries will also include a discussion on the key drivers of the changes, which could include, but are not limited to: adding measures that were previously cost-ineffective; adjusting incentives; adjusting the number of measures acquired (for example, instead of projecting 100 “widgets”, the program may now be able to acquire 500 “widgets”); incorporation of the updated avoided costs into custom grant calculators; etc.

PSE organizes the program summaries into chapters that align with the REM and BEM Sectors. PSE provides detailed program information, including budgets, and measure lists and counts in its revised Exhibit 1: *Savings and Budgets*, attached as an amendment to the Petition. PSE provides updated program cost-effectiveness in its Exhibit 2: *Cost-Effectiveness Calculations*.

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<sup>2</sup> Where applicable. Not all programs serve both fuel types: Residential Lighting and Custom Lighting Grants, for example. Only programs that impact natural gas savings on an incidental basis will have natural gas savings notations.

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### III. RESIDENTIAL ENERGY MANAGEMENT SAVINGS REVISIONS

In the following pages, PSE will provide summaries of the applicable program revisions in the Residential Energy Management (REM) Sector. Those are:

- Single Family Space Heat
- Single Family Water Heat
- Home Appliances

PSE provides program descriptions in its Exhibit 3, included with the originally-filed 2020-2021 BCP.

## A. Single Family Space Heat

The Single Family Space Heat program plans to adjust its 2020-2021 electric savings by 14 percent over the originally-filed values indicated in PSE's 2020-2021 BCP, with a 28 percent increase in the corresponding anticipated spend. This table provides the key savings and corresponding budget revision figures.

2020-2021 Conservation Target Revisions <i>Single Family Space Heat</i>				
	Original Value	Revised Value	Difference	Percent
Electric Savings Goal	24,918 MWh	28,464 MWh	3,546 MWh	14.2%
Electric Budget	\$ 10,049,839	\$ 12,915,839	\$ 2,866,000	28.5%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

### 1) Key Revision Drivers

Avoided costs increased cost effectiveness of the program, which allowed PSE to add the measures in this program as part of its Moderate Income initiative. PSE expects higher unit numbers because of the targeted marketing to this hard-to-reach customer segment.

## ***B. Single Family Water Heat***

The Single Family Water Heat program plans to increase its 2020-2021 electric savings by 122 percent, with a corresponding increase in the anticipated spend of 124 percent over the originally-filed values indicated in PSE's 2020-2021 BCP. This table provides the key savings and corresponding budget revision figures.

<b>2020-2021 Conservation Target Revisions</b>				
<b><i>Single Family Water Heat</i></b>				
	<b>Original Value</b>	<b>Revised Value</b>	<b>Difference</b>	<b>Percent</b>
Electric Savings Goal	2,000 MWh	4,450 MWh	2,450 MWh	122.5%
Electric Budget	\$ 884,920	\$ 1,984,920	\$ 1,100,000	124.3%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

### **1) Key Revision Drivers**

The increase in avoided costs allows PSE to provide an instant rebate on efficient water heaters through retailers, which will drive up volume. The RTF savings value for this measure is lower, however, given savings adjustment to account for out-of-territory sales. Cost-effectiveness is expected to remain positive, however.

### C. Home Appliances

The Home Appliances program plans to adjust its 2020-2021 electric savings by 42 percent, over the originally-filed values indicated in PSE's 2020-2021 BCP. Incidental natural gas savings are anticipated to yield an additional 2,300 therms of savings. This table provides the key savings and corresponding budget revision figures.

2020-2021 Conservation Target Revisions <i>Home Appliances</i>				
	Original Value	Revised Value	Difference	Percent
Electric Savings Goal	3,598 MWh	5,104 MWh	1,506 MWh	41.9%
Electric Budget	\$ 1,899,915	\$ 2,591,725	\$ 691,810	36.4%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

#### 1) Key Revision Drivers

In order to achieve deeper electric savings, PSE will dedicate marketing funds and efforts to its Appliance Decommissioning program instead of relying on organic promotion—or word of mouth—and continue the program into 2021. New avoided costs have opened up the opportunity to bring CEE Tier 1 top-loading clothes washers back into the program and offer an additional rebate option to customers.

#### 2) Incidental Natural Gas Potential Impacts

As a result of the strategies employed to increase electric savings in this program, program staff anticipate that there is a potential that natural gas savings may be increased by approximately 2,300 therms. No impact on the anticipated spend is forecast.

## IV. BUSINESS ENERGY MANAGEMENT

In the following pages, PSE will provide summaries of the applicable program revisions in the Business Energy Management (BEM) Sector. Those are:

PSE provides program descriptions in its Exhibit 3, included with the originally-filed 2020-2021 BCP.

- Commercial/Industrial (C/I) Retrofit
- Industrial Energy Management
- Custom Lighting Grants
- Commercial Strategic Energy Management (CSEM)
- Lighting to Go
- Commercial Kitchen & Laundry
- Commercial HVAC
- Small Business Direct Install (SBDI)

## A. Commercial/Industrial Retrofit

The C/I Retrofit program plans to adjust its 2020-2021 electric savings by slightly over 5 percent, with a commensurate increase in the anticipated spend of approximately 4 percent over the originally-filed values indicated in PSE's 2020-2021 BCP. This table provides the key savings and corresponding budget revision figures.

2020-2021 Conservation Target Revisions Commercial/Industrial Retrofit				
	Original Value	Revised Value	Difference	Percent
Electric Savings Goal	27,000 MWh	28,500 MWh	1,500 MWh	5.6%
Electric Budget	\$ 10,785,305	\$ 11,235,305	\$ 450,000	4.2%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

### 1) Key Revision Drivers

Incorporation of new avoided cost values have been plugged into the custom project calculation tool, and are expected to allow incentivizing an increased quantity of projects, including commissioning. Increased marketing/outreach efforts are expected to increase program participation.

### 2) Incidental Natural Gas Potential Impacts

As a result of the strategies employed to increase electric savings in this program, program staff anticipate that there is a potential that natural gas savings may be increased by approximately 20,000 therms. Potential impact on the anticipated spend is forecast to be approximately \$70,000.

## ***B. Industrial Energy Management***

The Industrial Energy Management program plans to adjust its 2020-2021 electric savings by slightly over 55 percent, with a corresponding increase in the anticipated spend of approximately 49 percent over the originally-filed values indicated in PSE's 2020-2021 BCP. This table provides the key savings and corresponding budget revision figures.

<b>2020-2021 Conservation Target Revisions</b> <i>Industrial Energy Management</i>				
	<b>Original Value</b>	<b>Revised Value</b>	<b>Difference</b>	<b>Percent</b>
Electric Savings Goal	9,000 MWh	14,000 MWh	5,000 MWh	55.6%
Electric Budget	\$ 3,064,911	\$ 4,568,907	\$ 1,503,996	49.1%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

### **1) Key Revision Drivers**

Incorporation of new avoided cost values have been plugged into the custom project calculation tool, and are expected to allow incentivizing an increased quantity of projects. Increased marketing/outreach efforts are expected to increase program participation.

### C. Custom Lighting Grants

The Custom Lighting Grants program plans to adjust its 2020-2021 electric savings and the resultant anticipated spend by 10 percent each over the originally-filed values indicated in PSE's 2020-2021 BCP. This table provides the key savings and corresponding budget revision figures.

2020-2021 Conservation Target Revisions Custom Lighting Grants				
	Original Value	Revised Value	Difference	Percent
Electric Savings Goal	96,000 MWh	106,000 MWh	10,000 MWh	10.4%
Electric Budget	\$ 22,199,847	\$ 24,438,700	\$ 2,238,853	10.1%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

#### 1) Key Revision Drivers

The Business Lighting grant program is planning on an increase in electric savings by incorporating the updated avoided costs into the Lighting Workbook, which will result in more potential cost-effective savings. Additionally, the program is leveraging contractors, service providers and CSEM customers to implement individual lamp / fixture upgrades during fixture maintenance. Lastly, the program will work with the Targeted DSM initiative, and the program will increase marketing to property managers.



### ***D. Commercial Strategic Energy Management***

The CSEM program plans to adjust its 2020-2021 electric savings by 7 percent, and an approximate 19 percent increase in the anticipated spend over the originally-filed values indicated in PSE's 2020-2021 BCP. This table provides the key savings and corresponding budget revision figures.

<b>2020-2021 Conservation Target Revisions Commercial Strategic Energy Management</b>				
	<b>Original Value</b>	<b>Revised Value</b>	<b>Difference</b>	<b>Percent</b>
Electric Savings Goal	28,000 MWh	30,000 MWh	2,000 MWh	7.1%
Electric Budget	\$ 3,001,687	\$ 3,569,336	\$ 567,649	18.9%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

#### **1) Key Revision Drivers**

As a result of loading new avoided costs into the CSEM incentive model, the CSEM grant program is planning on an increase in electric savings. The program will leverage marketing and outreach teams to recruit new customers. It will also leverage engineering service providers to develop custom savings analysis models and provide advanced technical assistance to struggling customers so as to yield deeper performance savings from these customers. Finally, it will increase core staff to do the engineering management work generated by the enlarged portfolio of CSEM customers.

## E. Lighting to Go

The Lighting to Go program plans to adjust its 2020-2021 electric savings by 45 percent, and the associated anticipated spend by 42 percent over the originally-filed values indicated in PSE's 2020-2021 BCP. This table provides the key savings and corresponding budget revision figures.

2020-2021 Conservation Target Revisions <i>Lighting to Go</i>				
	Original Value	Revised Value	Difference	Percent
Electric Savings Goal	20,752 MWh	30,109 MWh	9,357 MWh	45.1%
Electric Budget	\$ 3,559,108	\$ 5,059,108	\$ 1,500,000	42.1%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

### 1) Key Revision Drivers

Additional savings of 9.3 million kWh are forecasted based on the inclusion of expanded marketing tactics that will focus on encouraging customers to purchase high-savings and high-quality products. This includes but is not limited to, targeted marketing tactics to reach small businesses and non-native English speaking-owned businesses, and sales incentives to encourage staff to promote high-quality and high-savings products over value products. The increased avoided costs allow for this additional outreach without critically impacting the cost effectiveness of the program.

## F. Commercial Kitchen & Laundry

The Commercial Kitchen & Laundry program plans to adjust its 2020-2021 electric savings by 62 percent over the originally-filed values indicated in PSE's 2020-2021 BCP. Incidental natural gas savings are expected to increase by 66 percent. This table provides the key savings and corresponding budget revision figures.

2020-2021 Conservation Target Revisions Commercial Kitchens				
	Original Value	Revised Value	Difference	Percent
Electric Savings Goal	1,600 MWh	2,600 MWh	1,000 MWh	62.5%
Electric Budget	\$ 387,942	\$ 1,137,942	\$ 750,000	193.3%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

### 1) Key Revision Drivers

In order to achieve deeper electric savings with this very cost-effective program, the potential to bring on an RFP-approved third-party implementer is present. Economies of scale are also present due to this implementer currently delivering multiple programs across the department already, so "startup" costs would be saved on as well as room to negotiate the performance payment based on "rewarding them the contract" for this specific program which they very much would like to deliver for PSE.

Energy savings will be found through new midstream sales channels that PSE currently does not have access to. In doing this work, it is expected that the natural gas side of the program will increase in both savings and cost as a part of doing business.

### 2) Incidental Natural Gas Potential Impacts

As a result of the strategies employed to increase electric savings in this program, program staff anticipate that there is a potential that natural gas savings may be increased by approximately 200,000 therms. Potential impact on the anticipated spend is forecast to be approximately \$750,000.

## G. Commercial HVAC

The Commercial HVAC program plans to adjust its 2020-2021 electric savings by 61 percent, with a commensurate increase of 22 percent in the anticipated spend over the originally-filed values indicated in PSE's 2020-2021 BCP. This table provides the key savings and corresponding budget revision figures.

2020-2021 Conservation Target Revisions Commercial HVAC				
	Original Value	Revised Value	Difference	Percent
Electric Savings Goal	1,651 MWh	2,667 MWh	1,016 MWh	61.5%
Electric Budget	\$ 683,313	\$ 836,313	\$ 153,000	22.4%
Natural Gas Savings Goal	14,464 Therms	20,886 Therms	6,422 Therms	44.4%
Natural Gas Budget	\$ 16,000	\$ 24,000	\$ 8,000	50.0%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

### 1) Key Revision Drivers

Additional cost-effectiveness of smart thermostats is allowing PSE to increase the program offerings to a broader base of customers. The increase in avoided costs also allowed PSE to change its incentive for Advanced Rooftop Controllers (ACR) from a per-ton incentive to a per-unit incentive. This much simpler approach will accelerate program uptake.

### 2) Incidental Natural Gas Potential Impacts

As a result of the strategies employed to increase electric savings in this program, program staff anticipate that there is a potential that natural gas savings may be increased by approximately 6,400 therms. Potential impact on the anticipated spend is forecast to be approximately \$8,000.

## H. Small Business Direct Install

The Small Business Direct Install program plans to adjust its 2020-2021 electric savings by 51 percent, and an associated 25 percent increase in the anticipated spend over the originally-filed values indicated in PSE's 2020-2021 BCP. This table provides the key savings and corresponding budget revision figures.

2020-2021 Conservation Target Revisions Small Business Direct Install				
	Original Value	Revised Value	Difference	Percent
Electric Savings Goal	23,800 MWh	36,000 MWh	12,200 MWh	51.3%
Electric Budget	\$ 13,692,441	\$ 17,131,038	\$ 3,438,597	25.1%

"Original Value" as noted in PSE's November 1, 2019 BCP filing.

### 1) Key Revision Drivers

The change in the avoided costs for the program provide additional opportunity to deploy a variety of marketing tactics to increase participation. This updated plan also increases the participation of trade allies to complete projects, expands the focus on multicultural outreach, and adds measures such as web-enabled thermostats and advanced rooftop controls to provide more comprehensive project savings. PSE expects that these tactics will increase savings from 23,800,000 kWh to 36,000,000 kWh.