Motor and Drive Efficiency

A. Description

Public Service’s Motor and Drive Efficiency product strives to assist customers with awareness and incentives to reduce the barriers associated with equipment purchases. Over time, the product offerings have adjusted to market and regulatory conditions, and incorporated input from completed product evaluations.

The Company offers prescriptive incentives for:

- Variable Frequency Drives (VFDs), which save energy consumed by motors when the demands on the motor allow for lower and varying speeds;
- Constant Speed Motor Controllers, which provide savings on devices that require constant speeds, like escalators, and under-loaded conveyors; and
- Motors that exceed the Department of Energy (DOE) efficiency standards by 1.0 efficiency point; and
- Clean Water Pumps, which help customers conserve electricity by purchasing a more energy efficient pump and/or pumping systems in the commercial, municipal, industrial, and agricultural sectors.

Custom rebates are available for motors or motor-related equipment that fall outside the prescriptive criteria. Custom rebates are targeted for equipment that allows customers to operate efficiently, and provides multiple benefits like longer equipment life span, and reduced maintenance costs.

B. Targets, Participants & Budgets

Targets and Participants
The product’s energy savings and participation targets are based on performance in recent years, and empirical research from primary and secondary research sources, including:

- Other utility programs
- Interactions with trade partners.

Budgets
The product budget was derived from rebate levels associated with the anticipated measure quantities that are forecasted to deliver energy savings in 2019 and 2020. Historical actual expenses also influence forecasted expenditures. The budget has been tightened by delivering efficiencies within labor and advertising cost categories.

C. Application Process

Customer awareness occurs through various marketing channels: the Company’s website, direct and email promotions, Public Service’s account management team, end-use
equipment trade allies, and occasional advertising or direct mail. Rebate applications are available to download on the Company’s website.\textsuperscript{1} Paper applications are also provided by the account management team or participating trade partners, as needed.

\textit{Prescriptive Rebate Applications}

The rebate application process for prescriptive motors and drives is similar to other prescriptive product rebates. Customers may apply for a rebate up to 12 months after the equipment has been purchased and installed. The equipment must be new and meet all qualifications detailed on the rebate application form. Once the paperwork is completed and submitted, the application package is reviewed for accuracy and entered into the Company’s customer relationship management system. Rebate checks are mailed to customers with qualifying applications within six to eight weeks.

\textit{Custom Rebate Applications}

For motors, drives, or related equipment that does not fit into the prescriptive offer, the customer may apply for a custom motors rebate using the application and information worksheet available within the Custom Efficiency product. Project analysis, engineering analysis and preapproval of custom projects is required prior to equipment purchase and installation.

\textbf{D. Marketing Objectives & Strategies}

The overall marketing objective is to drive qualifying energy savings by raising awareness, interest, and participation in the product.

The product is primarily promoted through Company account representatives, mechanical and electrical contractors, and via traditional marketing vehicles such as advertising, mailings, website content, email, and other sales promotions.

Account representatives include:

- \textit{Account Managers}, who work directly on projects with large commercial and industrial customers, where the majority of savings are realized; and
- \textit{Energy Efficiency Specialists at the Business Solutions Center} responding to inbound calls and initiating outbound telemarketing, specializing in marketing to small- and medium-sized businesses.

Significant market targets include (HVAC systems within) office buildings, schools, and retail establishments. Manufacturing sites are also potential participants. However, the Company’s service territory has few manufacturing sites, and prescriptive VFDs do not contribute prescriptive savings from most processing equipment.

As outreach to mechanical and electrical contractors, the Company’s channel and product managers actively engage in:

- Presentations at industry events and trade shows, such as the Company’s Energy Efficiency Expo held each year, for both customers and trade allies.
- Sponsorship and presence at industry events such as the conference of the Electrical Apparatus and Service Association.
- In-person trainings at the contractors’ offices.
- The *Energy Exchange*, a quarterly email that is sent to trade partners to share information on energy efficiency projects, case studies, product changes, and other pertinent topics.

E. **Product-Specific Policies**

All rebated equipment must be new and meet all product rules and requirements; and the rebate application must be submitted within 12 months of the purchase date. Additional product-component policies include:

- For prescriptive rebates, VFDs must automatically control the speed of existing or new motors.
- For HVAC in new construction, VFD rebates are available for a limited subset of horsepower levels.
- **For Clean Water pumps**, Customers will be required to purchase a pump with a Pump Energy Index (“PEI”) of 1.0 or less in order to qualify.
- Custom projects require either preapproval or other acceptable project documentation, prior to purchase. The customer has up to 24 months after preapproval to implement the project. Custom projects that exceed this timeframe, or have significant equipment deviations from the original plan, require reanalysis and approval.

F. **Stakeholder Involvement**

Public Service’s Motor and Drive Efficiency product has been successful because of external support from trade allies and other stakeholders that understand the product and assist in driving customer education and awareness. Customers benefit from hearing a consistent message from a variety of sources. Product inputs come from customers, account representatives, the quarterly DSM Roundtable Meetings, workgroups, primary and secondary research, and through discussions with other utilities. Comments are considered and implemented if and when appropriate.
G. Rebates & Incentives

Rebates are paid directly to customers unless the customer reassigns the rebate to their vendor as an alternate rebate recipient. The product offers rebates based on the information shown in the following table:

<table>
<thead>
<tr>
<th>Description</th>
<th>Horsepower (hp)</th>
<th>Rebate Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced efficiency motors (exceeds the DOE efficiency standards for motors by 1.0 efficiency point.)</td>
<td>1 hp – 200 hp</td>
<td>Tiered rebate offer depending on the horsepower, and on whether the motor is an efficiency upgrade or if it is for new or restored capacity.</td>
</tr>
<tr>
<td>VFDs controlling motors used on fans and pumps</td>
<td>1 hp – 200 hp</td>
<td>Tiered rebate offer depending on the controlled horsepower.</td>
</tr>
<tr>
<td>Constant Speed Motor Controllers</td>
<td>5 hp to 3,000 hp</td>
<td>Tiered rebate offer depending on the controlled horsepower.</td>
</tr>
<tr>
<td>Custom for larger and non-prescriptive motors, drives, or related measures</td>
<td>Outside the prescriptive parameters</td>
<td>Individual project rebates determined under the Custom Efficiency product guidelines.</td>
</tr>
<tr>
<td>Clean Water Pumps</td>
<td>1 hp – 200 hp</td>
<td>Tiered rebate offer depending on the horsepower and on the PEI rating.</td>
</tr>
</tbody>
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