The AIA Pittsburgh Committee on the Environment (COTE) Fall-Spring COTE Seminar Series

PA Act 129 Programs

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www.WattChoices.com
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  • Duquesne Light Company
  • Industrial Coordinator - Energy Efficiency Programs

Deanna Weaver
  • Nexant, Inc. (Founded Jan 1, 2000, 500+ Employees)
  • Conservation Service Provider - Large Industrial Segment
• Duquesne Light Company is required by PA Act 129 of 2008 to run programs to achieve energy savings (with 100,000 customers or more)
  – Goal of 440,916 MWh
  – Goal of 42 MW (DR Program)
• Qualified measures must be installed after June 1, 2016 at facilities served by Duquesne Light (Five-year program ends **May 31, 2021**).
• Documentation must be submitted within **180 days** of project completion
• Rebates are available on a first-come, first-serve basis
C/I Energy Efficiency Programs

Rebate Process:

1. Prescriptive Rebates
   - Rebate Catalog fixed amount for exact purchases

2. A Custom Rebate project is any measure not prescriptive
   - If the proposed project saves electric energy (kWh)
   - Not kW or Power Factor Correction Savings
   - Passes a TRC (Total Resource Cost Test)
   - Paid based upon per KWH saved (over a year)
Watt Choices Program Parameters

- Facility must have an active Duquesne Light customer account
- Qualified measures must be installed at facilities served by Duquesne Light
- If you are receiving tax credits, state funding or federal funding for the same project, you are *still eligible* to apply for the Duquesne Light rebate
- All LEDs must be Energy Star or DesignLights Consortium Qualified
• Changes with Current Phase III (started 06/2016)
  – Launch of the Nonresidential Upstream Lighting Program
  – Inclusion of additional LED prescriptive rebates

• Additional Changes
  – Addition of LED troffer rebates
  – Replacement of fluorescent high bay T5 rebates with LED T5HO/T8HO lamp + fixture package rebates
  – Addition of LED Interior “strip” fixture rebate
  – Increased Catalog hp limit to 200 hp for VFD Rebates
Duquesne Light Energy Efficiency Programs:

- Nonresidential Upstream Lighting Program
- Commercial Energy Efficiency Program
- Industrial Energy Efficiency Program
- Express Efficiency (C/I <300 KW Billing)
- Public Agency Partnership Program (Non Profit / Education / Government / Healthcare)
- Multifamily Housing Retrofit Program (Low Income)
Large Industrial Efficiency Program

>300 kW billing demand
Michael McCarthy  
  - Program Manager

Deanna L. Weaver, PE  
  - Energy Manager  
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    - dweaver@nexant.com

Fola Odeniyi  
  - Project Engineer

Jon Vesta  
  - Sr. Engineer

https://dlcindustrialefficiency.com
Areas to take advantage of Act 129

• Lighting
• Variable Speed Drives
• Compressed Air
• Refrigeration Systems Controls
• Process Cooling
• New Construction
• Any Project Saving Electrical Energy
• **Lighting**
  – New Construction- Local company saved over 4,000,000 kWh/yr. by going above and beyond code requirements.

• **Variable Speed Drives**
  – Manufacturing Company is installing a VFD on a blower which will save 65% of the energy that process consumes.

• **Compressed Air**
  – Large Industrial modified their compressed air system to save 2,000,000 kWh/year.

• **Process Cooling**
  – Large Industrial just upgraded their process cooling system to include VFD’s and free cooling. Estimated savings more than 2,000,000 kWh/year.
Other Efficiency Rebate Programs
## Nonresidential Upstream Lighting Program

### Lamps as low as $1

<table>
<thead>
<tr>
<th>Type</th>
<th>Rebate</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED Retrofit Kit</td>
<td>$15.00</td>
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<tr>
<td>BR30</td>
<td>$10.00</td>
</tr>
<tr>
<td>Decorative</td>
<td>$4.00</td>
</tr>
<tr>
<td>Globe</td>
<td>$6.00</td>
</tr>
<tr>
<td>A-Lines</td>
<td>&lt;11W: $4.00 ≥11W: $6.00</td>
</tr>
</tbody>
</table>

- **LED Retrofit Kit**: $15.00 rebate
- **BR30**: $10.00 rebate
- **Decorative**: $4.00 rebate
- **Globe**: $6.00 rebate
- **A-Lines**: <11W: $4.00 rebate, ≥11W: $6.00 rebate
LED Bulb Applications

- Recurring monthly purchases
  - Replace burnouts as-needed
- Phased projects
  - Ex. floor by floor
- One-time projects
- ~98,000 lamps replaced to date!
Types of Rebates:

- **Prescriptive**
- **Custom**
  - Incentivized at $0.06/kWh
  - Examples:
    - Lighting controls
    - Energy Management Systems
    - New construction *(must exceed code)*
    - Data centers
    - VFD’s on water features
## California Wins LPD Limbo

### Building Area Method (W/SqFt)

<table>
<thead>
<tr>
<th>BUILDING TYPE</th>
<th>‘09 IECC ‘07 ASHRAE</th>
<th>‘15 IECC ‘13 ASHRAE</th>
<th>‘18 IECC ‘16 ASHRAE</th>
<th>PROPOSED ‘21 IECC ‘19 ASHRAE</th>
<th>‘19 CA Title 24</th>
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</thead>
<tbody>
<tr>
<td>Office</td>
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<td>0.82</td>
<td>0.79</td>
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<tr>
<td>Retail</td>
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<td>1.26</td>
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<td>School</td>
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<td>0.87</td>
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<tr>
<td>Warehouse</td>
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<td>0.66</td>
<td>0.48</td>
<td>0.46</td>
<td>0.40</td>
</tr>
<tr>
<td>Parking Garage</td>
<td>0.3</td>
<td>0.21</td>
<td>0.15</td>
<td>0.15</td>
<td>0.13</td>
</tr>
</tbody>
</table>
Questions?

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Nonresidential Upstream Lighting Program
(Energy Star LED Bulbs)
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Large Commercial Efficiency Program
(>300 kW billing demand)
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