

# Residential Fluorescent Fixtures



Presentation to the RTF  
December 12, 2005

# Contributors to Presentation



- ⌘ Utilities: Puget Sound Energy, Tacoma Power, Seattle City Light, Snohomish PUD, City of Ellensburg. Interest from: Clark County PUD, Clallam County PUD, Port Angeles City Light
- ⌘ Other resources: BPA, CEE, ECOS Consulting, Dolan Design/Seattle Lighting, North Coast Electric/Alexander Lighting, EPA/Energy Star®

# Today's Goals



- ⌘ Address the role of Residential Fluorescent Lighting Fixtures in meeting Regional Conservation Goals
  - ☑ 530 aMW identified in Power Plan
- ⌘ Clarify the need to include fixtures as part of the Region's lighting efficiency strategy
- ⌘ Request RTF reconsider post-2006 program values for dedicated, energy efficient residential lighting fixtures

# Utility Experience in Puget Sound Region



⌘ To date: 20,000 CF fixture rebates

## Progress

⌘ 2003: Introduce Retail coupon

☑ X participating retailers

☑ xx units

⌘ 2004: Showroom infrastructure developed

⌘ 2005: Energy Star<sup>®</sup> and Multifamily, Showroom displays

# Lighting Solutions



- ⌘ Utilities support a Least-Cost solution for Residential Lighting
- ⌘ Match applications with market segments
- ⌘ Today's solution involves bulbs and fixtures
  - ☑ Customer adoption and satisfaction
  - ☑ Design improvements
  - ☑ Technology improvement (color, dimming)
- ⌘ Additional opportunities: switching, controls, sensors, placement, design

# Current Programs/Rebates in Puget Sound Region

	<b>CF Bulbs</b>	<b>CF Fixtures</b> CF - Interior	<b>CF Fixtures</b> CF - Exterior	<b>Linear</b> <b>Fixtures</b>	<b>Portable</b> <b>CF Lamps</b>	<b>Multi Family</b>
<b>PSE</b>	\$2-\$4 retail. \$2 showroom/ distributor	\$20 retail and \$20 instant rebate thru showroom/ distributor	\$10 retail, \$20 instant rebate thru showroom/ distributor	<i>Under consideration</i>	<i>Under consideration</i>	\$10-\$30 fixture, plus \$3-\$45 for common area bulbs; T-8
<b>SCL</b>	Promotes BPA "Savings with a Twist" program	\$20 instant rebate thru showroom/ distributor	\$20 instant rebate thru showroom/ distributor	\$20 thru showroom distributor		\$15-\$25 for in-unit; \$15-\$70/fixture OR up to 70% for common areas
<b>Tacoma Power</b>	Lobby sale of specialty CFLs at cost: \$6-\$12	\$20 instant rebate thru showroom/ distributor	\$20 instant rebate thru showroom/ distributor	\$20 thru showroom/ distributor	Lobby sales: \$17-\$33	\$20 thru showroom/ distributor. \$150 ALP
<b>Snohomish PUD</b>	\$1-\$3 retail	\$20 instant rebate thru showroom/ distributor	\$20 instant rebate thru showroom/ distributor			Up to 70% for common areas
<b>City of Ellensburg</b>	\$2-\$4 thru showroom in 2006	\$20 instant rebate thru showroom/ distributor	\$20 instant rebate thru showroom/ distributor	<i>Under consideration</i>	<i>Under consideration</i>	\$20 rebate thru showroom/ distributor

# Response to CF Fixture Rebates



- ⌘ Customers- Retrofit and Remodel
- ⌘ Retailers - Large and Small
- ⌘ Builders-New Home construction Energy Star<sup>®</sup>
- ⌘ Lighting Suppliers
- ⌘ Showrooms and Distributors
- ⌘ Manufacturers - Dolan, Seagull, Kitchler, Maxlite, TCP, American Fluorescent, Progress, Good Earth

# Energy Star CF Fixture Applications



⌘ Recessed Cans

⌘ Decorative: "Families" of Fixture

⌘ Exterior

## Other

⌘ Under counter

⌘ T-12 to T-8 or better

⌘ Portables; higher light levels, 3-way, and dimming

# Markets Needs: SF Retrofit



- ☒ Longer Persistence/measure life
- ☒ Bulbs won't fit in all existing fixtures
- ☒ Inadequate light output from screw-in
- ☒ Avoid "snap-back" w/dedicated socket
- ☒ Linear & under counter halogen retrofits

# Market Needs: Multi Family



- ☒ Common areas have long burn time
- ☒ Avoids snapback by renters installing incandescent
- ☒ Low income housing agencies CF fixtures
  - ☒ Helps w/maintenance
  - ☒ More affordable housing for the tenant (lower energy bills)
  - ☒ High potential use of portables

# Market Needs: SF New Construction



- ☒ Rebates are essential to allow builders to adopt new products (lost opportunity)
- ☒ Long term ENERGY STAR<sup>®</sup> qualified home
- ☒ Focus the builder on lighting design
- ☒ Recessed cans in high use areas
  - ☒ Screw-in are very poor application
  - ☒ Hardwire are still not great, need improvement
- ☒ Builders avoiding high-use areas with bulbs

# Utility Programs Address Market Needs



## Example: New Construction Fixture Package

Incandescent Package\*: \$509

CF Fixture Package: \$859

**Difference: \$345**

\* Thirteen fixtures out of eighteen

## Rebates Level the Playing Field

(Table to be inserted here)

# Importance of Utility Role



- ⌘ Rebates help customer adopt new, more expensive lighting
- ⌘ Education of showroom reps/builders
- ⌘ Manufacturers have demonstrated willingness to produce better product

# Importance of Utility Role (cont'd.)



- ⌘ Rebates critical to give ENERGY STAR<sup>®</sup> leverage with manufacturers
  - ☒ Removable ballasts
  - ☒ Consistent pin configuration
- ⌘ Continued utility partnership with manufacturers and suppliers to:
  - ☒ Improve existing product
  - ☒ As new technologies develop (e.g. LED)

# Rep talk



⌘ Material from Lighting reps to insert here

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# Recommendations to RTF



- ⌘ Continue using 15-year measure life in establishing value for energy efficient fixtures
- ⌘ Additional value of fixtures based on longer life and better persistence than bulbs alone
- ⌘ Encourage 'Utility Sounding Board' process to recommend funding levels to meet market needs
- ⌘ Regional support to allow BPA to announce fixture incentives March 2006