National Lighting Partner Meeting
March 1-3, 2006

ENERGY STAR
Residential Light Fixtures Quality Assurance Testing
Why QA?

• Integrity of the ENERGY STAR brand
  – Benefits to partners

• Follow up to PEARL
Poor Quality Lighting

Example of Why QA Testing is Important
## What’s changing?

<table>
<thead>
<tr>
<th></th>
<th>PEARL</th>
<th>QA 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who pays</td>
<td>Utilities, EPA</td>
<td>Manufacturers</td>
</tr>
<tr>
<td>Who tests</td>
<td>Centralized testing</td>
<td>Arranged by manufacturers and NAVLAP labs</td>
</tr>
<tr>
<td>Consequences</td>
<td>Requests for additional tests, limited delisting</td>
<td>Removal of non-compliant products</td>
</tr>
</tbody>
</table>
What Will Be Tested?

- **Performance Parameters**
  - Efficacy
  - Lamp Start Time
  - CCT
  - CRI
  - Lamp Base Type
  - Lumen Maintenance 1,000, 4,000 hours (life proxy)
  - Maximum Ballast Operating Case Temperature

- **Consumer Informational Parameters**
  - Product Packaging
  - Lamp Labeling, Warranty
Testing Frequency

- Two Batches per year – approx. 20 fixtures per batch

<table>
<thead>
<tr>
<th>January</th>
<th>February</th>
<th>March</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>May</td>
<td>June</td>
</tr>
<tr>
<td>July</td>
<td>August</td>
<td>September</td>
</tr>
<tr>
<td>October</td>
<td>November</td>
<td>December</td>
</tr>
</tbody>
</table>
EPA Notifies Manufacturers

Manufacturer Selects Lab

Lab Conducts Testing

Lab Reports Results to Manufacturer & EPA

EPA Notifies Manufacturers of Next Steps & Utilities of Results
What’s it going to cost?

- No more than 2 lamp/ballast platforms per year per manufacturer
- Use any 3rd party NVLAP lab
- Expect cost in low $000s/model
Non-Compliant Product Delisting Protocol

EPA Notifies Stakeholders of Delisting

30 Days

Product(s) Removed From QP List for 6 months min.

Manufacturer to cease labeling Limited time sell through (existing stock)
* Incentive at EEPS Discretion

6 Months

Model Re-qualified;
OR

Not Re-qualified Retailer should cover the ENERGY STAR mark
# QA4 Timeline

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 1, 2005</td>
<td>RLF V.4.0 Effective</td>
</tr>
<tr>
<td>Feb 17, 2006</td>
<td>QA4 Guidelines and Procedures Manual released for comment</td>
</tr>
<tr>
<td>Mar 6, 2006</td>
<td>Comments due</td>
</tr>
<tr>
<td>Mar 31, 2006</td>
<td>QA4 Guidelines and Procedures Manual finalized &amp; distributed</td>
</tr>
<tr>
<td>April 3, 2006</td>
<td>Batch one letters are sent to partners</td>
</tr>
<tr>
<td>Oct 2, 2006</td>
<td>Batch two letters are sent to partners</td>
</tr>
<tr>
<td>Dec 29, 2006 - Aug 26, 2007</td>
<td>QA4, batch one completed (estimated)</td>
</tr>
</tbody>
</table>
Thank You