Generalized DLC Development Process

- DLC aggregates requests/suggestions for developments
  - Maintain "wish lists"
  - Specification Development (new categories)
  - Specification Revisions (new performance thresholds)
  - Policy Development (new or revised policies)
- Prioritize wish lists periodically
  - Program management judgement
  - Active review with Technical Committee
  - Surveys of Members
- Prioritized tasks undertaken for development
  - Any significant program changes to through Stakeholder Input Process (SIP)

Stakeholder Input Process

- Identify issue for input – new spec, update to existing spec, change to DLC procedure, etc.
- Provide clear request to stakeholders for input
  - Sent to entire distribution list (manufacturer, testing labs, lighting designers, specifiers, members)
  - Sent via email, posted on website
  - Includes firm response date
- Use ad-hoc respondent committee to review input
- Discuss critical issues via conference call and create a "statement of input"
- Deliver input to DLC Technical Committee

Concepts to Keep in Mind…

- Category development and revision are prioritized in response to DLC Member needs, and are informed by industry perspective

- Members have diverse interests, but all looking for energy savings and persistence

- Feedback that can help particular efforts get prioritized:
  – Specific market data (market share and saving potential)
  – Technical information
  – Suggested alternatives and solutions for challenges identified

DESIGNLIGHTS
CONSORTIUM

2016

STAKEHOLDER MEETING

Current Developments

V4.0 Transition Timeline

Finalized V4.0 TRT Announcement:

June 1, 2016

Cutoff for Submission under V3.0/V3.1:

August 31, 2016
- Allows submission of products currently in process

V4.0 Compliant Products Identified on QPL:

January 2017
- Allows programs to filter/sort/search as needed

Delisting of products not meeting V4.0:

April 1, 2017

Proposed Spec Changes (TRT 4.1)

- New General Application Category
  - **Very High Output Outdoor Lighting**, ≥25,000 lumens
- New Primary Use Designations
  - **U-Bend Replacement Lamps**
  - **G24q/GX24q Based Replacement Lamps**
- Definition Change
  - Allow **Refrigerator Case Luminaires** to employ pin-type connectors for the electrical connection only, but not for mechanical support
- Input Requested
  - "Hazardous" definition for future **Hazardous Environment Lighting** Category
- Additional Efforts Under Discussion For Development
  - Definition change to restrict **Linear Replacement Lamps** to G13 base
  - **T5 Linear Replacement Lamps**

Policy Proposals Overview

- Revision to Private Labeling Policy
  - Require Private Label Applicants to provide proof of safety certification under own organization
- Rated Data for Single and Family Grouping Applications
  - Require rated data to be representative of product's tested configuration
- Adoption of ANSI C78-377-2015
  - Updated color metrics standard
- Additional Proposals Requested Addressing:
  - DC/PoE Systems
  - White Color Tuning

Summarized Wish List

- Ambient Lighting
- Kits and Lamps
- Niche and Misc. Products
- Non-SSL Technologies
- Dimmable Lamps
- Definitional Clarifications
- Removable/Replaceable Lamps
- Warranty
- Pre-Set Drivers to Manage Lumen Depreciation Over Time

- Dimming Performance
- Remote Phosphor
- AC LEDs
- Testing Large Products
- Flicker
- Surge Protection
- Lab Accreditation
- Ambient Temperature Testing
- Multiple Sourcing of LEDs
- Color Tuning

- Expansion to Family Grouping
- Strict Worst Case Rules
- Rules on Aimable Products
- Thermal Fold-back
- Pre-Set Drivers to Manage Lumen Depreciation Over Time
- Multiple, Unknown LED Variations Within a Product
- Safety Certification

Balancing Needs

Pushing Efficacy

Increasing Flexibility

Additional Product Metrics

Informing Product Selection

Compromising Quality

Maintaining Rigor

Manufacturer Cost

Luminaire Level Requirements
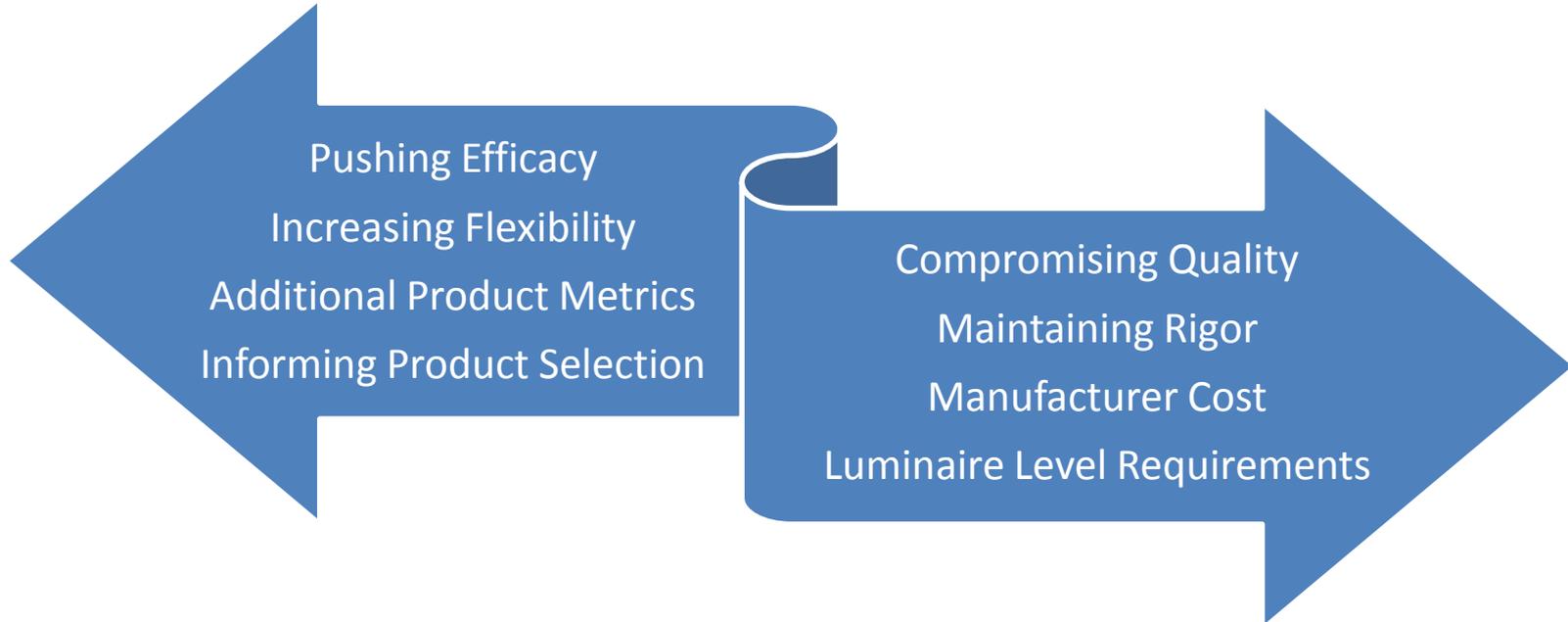
Establish Predictable Schedule for Spec Revisions

- Increase transparency
- Provide signal to market
- Increase opportunity for input

Up-To-Date Performance Data

- Critical to utility programs to inform development of incentive measures

- Concern: cost to industry

- Currently, no straightforward process to address new product generations

Maintain Up-To-Date Performance Data

- Listing accuracy
- Phase out discontinued products

Predictable Schedule for Major Revisions

- This is a brainstorm!
- What should the frequency be?
  - Keep in min typical 9-month grace period!
  - How does this align with product development cycles
- Example: Every x months, increase efficacy to eliminate bottom y% of any given general application category
  - Make additional adjustments as needed
- Minor revisions, redefinitions, new spec development would continue to operate independently of this schedule

Drive Efficacy
AND
Quality

- Ensure current metrics meet needs of market
- Define "quality" metrics
- Create system of Allowances for products with special features

Efficacy and Quality

- Utilities deeply interested in energy savings
    - Efficacious products
    - Products that stay installed
- Efficacy cannot come at the expense of performance

- Challenge: How to DEFINE quality?
    - How to EVALUATE quality

- Optical Control
- Glare
- Color Performance
- Long Term Performance

Enable Product Selection

- Translate luminaire level performance to the application setting
- Additional metrics?
- Design guidance?