

CPUC Energy Division Strategic Lighting Plan Workshop

SMUD, 6031 S. Street, Sacramento, CA

Monday, April 5, 2010 9:30am-4:00pm

Meeting Objectives

- Updates re: Strategic Lighting Plan (SLP)
- Launch action plan development
- Identify actions/activities, timelines and leads to achieve near-term (2010-2012) milestones

9:30a-9:45a INTRODUCTION, BACKGROUND, AND MEETING OBJECTIVES

▪ Brief introduction of ED staff and consultants (Kristina)

Pamela Wellner, Sr. Regulatory Analyst, CPUC, pamela.wellner@cpuc.ca.gov, Tel: (415) 730-0105.

Kristina Skierka: CPUC, Senior Advisor, Energy Efficiency Strategic Plan

Michael Siminovitch: CLTC

Jenna Canseco: KEMA

Karl Johnson: UC-CIEE

▪ Brief introduction of workshop participants

(see attached list of attendees)

Host: SMUD (Jim Parks, Connie Samla)

▪ Review of meeting objectives, scope, process (Karl)

- Strategic Lighting Plan (SLP) draft completed after series of meetings and working groups last year
- Second series of 3 meetings this year to draft Action Plan to carry out goals and strategies of the Strategic Lighting Plan
 - Identify action items needed to achieve near term milestones.

▪ Review ranking exercise for SLP strategies (Karl)

- Worksheet was handed out to meeting participants with list of goals/milestones
Workshop participants must rank each goal in order of priority
- The ranking exercise (prioritization of SLP strategies) along with today's workshop will help determine priorities within the action plan

9:45a-10:15a REVIEW FINAL SLP DRAFT AND ACTION PLAN PROCESS

▪ Feedback highlights, Key edits, Next steps (Jenna)

- Strategic Lighting Plan (SLP) process began in December 2008

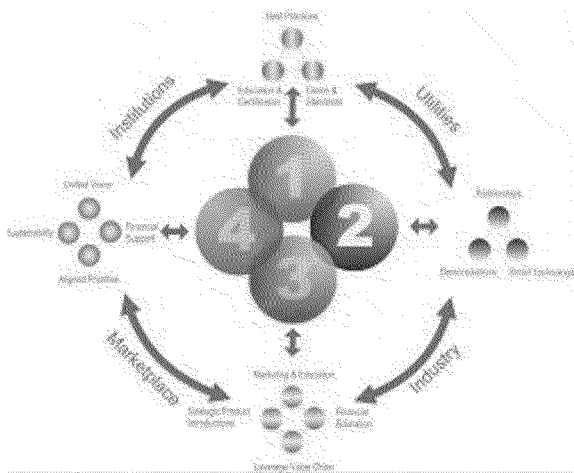
- 5 public workshops and numerous conference calls in 2009
 - 4 goal groups (Best Practices, RD&D, Marketing, and Policy), created language for the plan and devised specific strategies and tasks to accompany broad goals)
 - Included more than 100 stakeholders
 - THANK YOU!
- Re-ordered goals in SLP to shift focus toward Best Practices
 - Goals 1 and 2 have been reversed, Best Practices is now the first goal and RD&D is the second goal).
- Prepared draft SLP
 - Presented to Energy Division staff
 - Incorporated comments
 - Prepared revised draft SLP
 - Currently undergoing final review at Energy Division
 - “Goal Grid” (handed out at meeting) is the core of the SLP
 - Final version of plan to be available soon
- Energy Division assigned new staff person to lighting
 - Pamela Wellner, Senior Regulatory Analyst

▪ **Review SLP goals, charts, discuss strategies**

SLP vision:

By 2020, advanced products and best practices will transform the California lighting market to deliver improved quality, zero net energy (ZNE) buildings and a 60-80 percent reduction in statewide electrical lighting energy consumption.

Graphical representation of vision and goals shows the SLP’s goals as an integral set of processes that all have to work together to create the lighting market transformation needed to achieve the SLP’s vision.



Goal 1: *Design and advance best practices for design, installation and operation and maintenance of integrated systems to achieve sustainable lighting solutions for all spaces.*

- *1-1: Identify best practices in coordination with RD&D and lighting market transformation programs to ensure use of high-performance lighting systems.*
- *1-2: Elevate the level of professional practice and performance for designers, architectural consultants, electrical contractors and other lighting professionals.*
- *1-3: Continuously promote lighting-system design improvements to codes and standards based on the best available field data and studies.*

Discussion (Karl):

- Last year's big accomplishment: joining the industry together to discuss lighting goals!
- We need to the industry to align on what best practices are, and provide support for that.
- All lighting stakeholders must be educated to make the fundamental shift to best practices with the optimal energy efficiency. If we continue to use standard practices will risk trapping 50% of the potential savings
- Need RD&D, IOU ET, public and private sectors to align with the development, annual update and use of best practices

Goal 2: Develop research, development and demonstration (RD&D) networks to create, test, and deliver the lighting solutions needed to transform the California market and achieve zero net energy goals.

- *2-1: Establish and maintain a research-based collaborative, multi-institutional statewide lighting RD&D infrastructure.*
- *2-2: Develop smart lighting technologies, systems and solutions that are optimized for energy savings, demand response, renewable energy and human performance.*
- *2-3: Design creative, high-profile demonstrations of advanced lighting technologies* that are scalable, targeted and leverage regional, statewide and national projects.*

Discussion (Michael):

- This RD&D task is informed by elements in Goal 1 (information task).
 - Best practices strategies identify challenges, then RD&D network identifies solutions. Best practices and RD&D groups should work collaboratively
- Idea of an efficient pipeline structure that actively develops solutions to demonstrations. Structure, results, and demonstration of those results.

Q: Was human performance always a part of this goal and strategies?

A: Not explicitly, but there was a call for human performance to be a large part of the success of this goal. One research task is to understand what is desirable, what people want to see in this technology (included in Goal 3).

Q: Is there something from CPUC addressing performance issues or human-centric drivers?

A: Yes, tried to address both.

Goal 3: *Create widespread end user desire for, purchase of and use of energy efficient, responsive and environmentally sound lighting systems.*

- *3-1: Educate Californians to equate quality of light with quality of life.*
- *3-2: Leverage key market stakeholders along the entire lighting value chain to promote advanced lighting technologies, systems and best practices.*
- *3-3: Educate decision makers about creative financial mechanisms that enable purchase of advanced lighting technologies, systems and use best practices.*
- *3-4: Introduce advanced lighting technologies, systems and best practices into the marketplace with progressive goals.*

Discussion (Kristina):

- Getting into elements related to people's awareness of lighting
- Goal designed to address market intelligence issues. We don't know enough about how customers respond to lighting, need to learn how to design and successfully market leap-frog technologies.
- Working with market stakeholders, designing marketing strategies.
- Designing financing guides, information. Dealing with end users ultimately.
- Goal by 2020 that consumers preferences 80% decrease in perceived barriers and 50% increase in market share
- Role in barriers play in advancing most efficient technologies.

Goal 4: *Develop coordinated policies and procedures that accelerate lighting market transformation in California and provide incentives for best practice lighting technologies and systems.*

- *4-1: Match public policy and utility energy efficiency program priorities with statewide ZNE goals.*
- *4-2: Build a common vision for advancing lighting market transformation among key state agencies.*
- *4-3: Create financial incentives and supportive policies to avoid trapped energy savings opportunities and make best practice lighting solutions affordable.*
- *4-4: Minimize environmental impacts of each lighting technology throughout its lifecycle (production, use and disposal).*

Discussion (Jenna):

- Concern that policies in state might prohibit or not support some of the activities in goals 1-3.
- Goal to develop set of coordinate set of policies to help accelerate market transformation.
- New policy and rework of existing policy.
- Engaging with state agencies, get them into agreement on how to shift current policies (e.g. cost benefit methodologies to which IOUs are beholden).
- Removing barriers and creating new financial mechanisms to finance new techs.

- Keep in mind environmental impacts of all the techs we are implementing. Will talk about what IOUs are doing in terms of spent fluorescent lamps.
- **Review action planning process (Jenna)**

Question to the group: Past experiences with developing an Action Plan?

- Recognizing the difference between establishing framework (SLP) and identifying steps to achieve initiatives (action plan)
- Learn who are key stakeholders - how do we motivate to move them.
- Prioritizing, creating a list of things that need to happen using a timeline
 - For instance, to influence Title 24, need recommendations by 2011.
- Group understanding of what has already been done. Improve chances of success at achieving these goals over the next 10 years.

10:15a–10:30p BREAK-OUT GROUP PROCESS

- **Review breakout group objectives**
 - **One group for each of the 4 SLP Goals**
- Today, groups will focus on actions/tasks, timeline, and assigning milestones to specific groups or people → will be writing on large pieces of paper

Q: Can we switch to another goal/workshop if we like?

A: Of course, and this is encouraged as we can all contribute to more than one goal.

Q: Are we allowed to break outside of existing CPUC regulatory framework?

A: Yes! Strategies plan is not just about utilities or CPUC. Seeks to be far-ranging and engages entire community.

A: There are 4 broad goals designed to work together. Each goal has strategies designed to meet goal. Think about whatever kind of activities the entire state can do (including engineers, environmental groups, etc.) to make those strategies successful.

A: Lighting goals, similar to goals for the entire Strategic Plan, do not exist in a vacuum, outside commercial or industry goals.

Q: Near term we will engage with industry – what is the plan to get industry folks and building owners, in the room as part of this process of creating an action plan? There will be a lot of building retrofit projects near term.

A: Webcor is on the phone, have been engaged in process since last year. Karl and Michael are also working on some training programs. That is a point response, but one of the milestones that may come out of today's discussion is the need to get those people in the room.

Q: This process is reminiscent of the “Waterfall Development” process (all planning is done upfront, then implementation follows all at once). In the computer industry, that paradigm has been superseded by “agile” development – including feedback on progress of plan as it is going on.

A: On-going feedback is actually built-in to this process. Quarterly CPUC meetings will be an opportunity to report back on progress towards SLP goals. Also, the CPUC Energy Division will be conducting quarterly updates on progress of general strategic plan to be distributed continually.

Q: What is “trapped energy savings”?

A: Lost opportunities for best practices savings. For instance, doing a simple lighting upgrade in a building instead of a comprehensive analysis of lighting needs and installation of advanced technologies combined with daylighting.

- **Review room assignments for breakout groups**

10:30a– 3:15p BREAK-OUT GROUP DISCUSSIONS

- **Identify Actions/Tasks, Timeline/Target Date, Lead, Notes on Progress for each milestone**
 - **Complete draft action plan grids for each goal**

3:15p – 3:45p REPORT BACK FROM BREAKOUT GROUPS

- **Brief, high level reports from breakout groups**
- **Elicit feedback from workshop participants regarding additional existing efforts, key partners, etc.**

[Please see Goal Grids distributed at workshop for complete list of milestones, timelines, and responsible parties for each strategy].

Goal 1 Discussion (Dirk)

- Need to define and support best practices in 2010
- Create web based pattern books – 3rd quarter of this year. DOE, EPRI, LBNL and others have already developed some of what’s needed
- Savings by Design also has new structure
- Integrate lighting design programs
- Align with utility programs (cycles). Incentives from utilities still not sufficient to make ET incentive programs successful with this cycle barrier

Goal 2 Discussion (Michael)

- Infrastructure strategy

- Highlighting the idea of emphasizing RD&D group, identify subgroups that would be involved. 2 broad groups: advisory board (strategic folks), worker bee group (lighting center, CEC, etc.)
- Solutions strategy
 - Develop end use market intelligence. Best use practices and trends.
 - Launch assessment project – work with manufacturers, organizations to understand activities, elements going on to feed into structure (find out what has already been done, including other states)
- Demonstrations program – being with needs study to identify needs for these demonstrations – demos must mean something to everyone.
- Need to work closely with Goal 1

Goal 3 Discussion (Peter)

- Focused on the need for number of baseline studies, in terms of understanding both market players and where we are in various market segments. Current referenced studies are too old, and in general studies are not updated often enough,
- Need to identify lighting leaders (e.g. policy leaders, educators, etc.), and keep them involved throughout the process of carrying out the action plan
- Make sure decision-makers are educated. Don't limit type of education but make sure everyone gets latest and greatest knowledge.
- Various intervention points for market transformation must be identified (eg planning stage, installation stage, etc.)
- Establish and identify key partnerships, make partnerships more coordinated in terms of knowledge sharing and financing initiatives.

Q: Was “progress to date” discussed?

A: There are many tools “under the rug” at the utilities, CLTC, CPUC, Utility of the Future, etc. that should be revisited as a first step. Need to find newest programs and ideas and fold into current programs.

Goal 4 Discussion (Jenna)

- Consider revisions to current cost benefit mechanisms, implications to shareholder incentive mechanisms.
- Study the implications of IOU program cycles (length of cycles)
- Need for pilot programs, need to collect data before scaling up programs.
- CEC's IEPR reports should involve additional CPUC staff members to better coordinate with program cycles and with the overall strategic plan.

3:45p – 4:00p WRAP-UP AND NEXT STEPS (Kristina)

- Compiling information, making sure we are current on progress to date and establishing timelines. Will continually update “progress to date” to effectively track progress towards our goals.
- We will compile notes and action plan development discussed today and send to the group → plan for at least 3 additional in-person meetings this year to discuss action plan
 - This meeting will help us itemize next steps, and determine what milestones must be met this year.

- Announcement: ET Summit will be at convention center in Sacramento, 11/7-9.

Q: Coming out of this meeting, there are milestones that begin in Q2; will we table these milestones or move forward on them before our next meeting?

A: We will move forward with those items.

Q: Does the SLP chapter of the general Strategic Plan follow the same format as the strategic plan (report format rather than table format)?

A: Yes. In the SLP, we have translated what this group came up with in table format into report format.