

**Market Research & Evaluation  
Request for Proposals:  
RFP #51622  
Luminaire Level Lighting Controls (LLLC)  
Market Progress Evaluation Report (MPER) #1**

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## 1 Introduction

### **About the Northwest Energy Efficiency Alliance**

The Northwest Energy Efficiency Alliance (NEEA) is an alliance of more than 140 utilities and energy efficiency organizations in working on behalf of more than 13 million energy consumers in Idaho, Montana, Oregon, and Washington. NEEA is dedicated to accelerating both electric and natural gas energy efficiency, and leveraging its regional partnerships to advance the adoption of energy-efficient products, services and practices.

Since 1997, NEEA and its partners have saved enough energy to power more than 900,000 homes each year. As the second-largest resource in the Northwest, energy efficiency can offset most of our new demand for energy, saving money and keeping the Northwest a healthy and vibrant place to live. [www.neea.org](http://www.neea.org)

## 2 Background

### **About this Request for Proposals (RFP)**

This RFP is for conducting the first “Market Progress Evaluation Report” (MPER #1) for NEEA’s Luminaire Level Lighting Controls (LLLC) Program. The primary purpose of the MPER is to identify and describe evidence that the Program interventions are driving market changes that will result in market adoption of LLLC.

Bidders will also note the RFP includes research whose purpose is to capture if and how NEEA is influencing the broader lighting controls market, including adoption of other Networked Lighting Controls (NLC) besides LLLC.

### **Luminaire Level Lighting Controls**

LLLC are a type of Networked Lighting Control (NLC) product<sup>1</sup> in which each luminaire (fixture) has a built-in sensor and controller that enable luminaire-level adjustments in response to daylight and occupancy, and wireless communication among luminaires. By contrast, the sensors and controllers in other types of NLC systems are installed externally and usually control a group of fixtures. The luminaire-level functionality of LLLC saves more energy and offers unique benefits compared to other types of lighting controls.

As described above, having a built-in sensor and controller in each luminaire enables LLLC to save more energy relative to other types of lighting control systems and provide other valuable benefits. Advocates of LLLC posit that compared to other lighting control systems, LLLC are simpler to install and program, create a better occupant experience, can be quickly and easily re-programmed to accommodate

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<sup>1</sup> LLLC are a subset of the Design Lights Consortium (DLC) Networked Lighting Controls (NLC) Qualified Product List (QPL), available at [www.designlights.org/lighting-controls](http://www.designlights.org/lighting-controls). Qualified LLLC products are listed with a positive answer “Yes” in the LLLC column of the NLC QPL. Note that NEEA’s LLLC Program is focused only on qualified LLLC products designated for Interior application (not Exterior). The QPL allows for filtering by Exterior and Interior so users can view the latter as the program subset.

reconfiguration of spaces, can track assets, and can be integrated with other building systems.<sup>2</sup>

### **The LLLC Program**

In 2011, NEEA identified LLLC as an emerging technology of interest. NEEA has conducted several studies of LLLC and the lighting controls market<sup>3</sup> that identified market barriers and opportunities. NEEA formed an LLLC Program team whose early activities included preparing two foundational documents to guide Program development – the “Market Transformation (MT) Theory” (see Appendix A) and “Logic Model” (see Appendix B). The Program team also began to work with a key lighting industry group, the Design Lights Consortium (DLC), to develop an LLLC specification, and to support NEEA’s partner utilities in offering LLLC incentive programs. In mid-2019 the Program moved into full implementation.

The MT Theory describes the Program’s planned activities to overcome barriers and drive market changes – referred to as “outcomes” – that will result in increased LLLC adoption. The Logic Model presents the MT Theory in the form of a detailed diagram.

The market barriers to LLLC described in the Logic Model are the higher first cost of LLLC compared to other controls, a need for installers and designers with LLLC-specific skills, a lack of market actor<sup>4</sup> awareness of LLLC’s benefits, and product readiness. Opportunities include the strong market trend toward solid state lighting (LEDs) and the possibility of including LLLC in building energy codes.

Program activities to overcome these barriers include supporting development of utility incentive programs; training installers and designers; helping manufacturers train and support their reps to sell LLLC; conducting marketing and media outreach; working with industry to develop a technical specification and qualified products list (QPL); and influencing the adoption of LLLC in building codes. The Program targets any market segment where LLLC can be applied including offices, warehouses, K-12 schools, universities, hospitals, and retail.

The long-term LLLC Program goals are that LLLC become standard practice for commercial new construction, renovation, and retrofit projects when technically applicable, and that codes in all four Northwest states require LLLC.

### **NEEA’s Market Progress Evaluation Approach**

As noted earlier, the LLLC Logic Model describes initiative “outcomes” – changes in the market from Program activities. Outcomes may be “short-term” (occurring during the

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<sup>2</sup> An example of asset tracking is tracking the location of physical objects of value/interest such as a piece of equipment. The wireless sensors in LLLC luminaires read an indicator on the asset (e.g. a bar code) and makes the location available via the Internet. Another example is having coupons appear on retail customers’ Smartphone as they approach products.

<sup>3</sup> Two key documents are the [2016 Market Characterization and Baseline Report](#) and the *2019-20 LLLC Market Assessment* which built on the 2016 report. The latter report is not yet published. A draft final copy can be requested by bidding firms who email their intent to respond to this RFP by the date in the RFP schedule (see section 7.1).

<sup>4</sup> Market actors include commercial lighting installers, designers/specifiers, as well as end-use customers.

first three Program years), “medium-term” (occurring from three to five years), or “long-term” (from five to ten years).

To systematically identify and track evidence over time that (1) the Program’s activities are resulting in the expected market outcomes, and (2) the outcomes are driving increased LLLC adoption, NEEA developed “Market Progress Indicators” (MPIs). As shown in the Logic Model (see Appendix B), almost every Program outcome has a numbered MPI associated with it. Appendix C (“RO2 MPI’s and Additional Research Elements”) provides a detailed table listing each outcome and describing the MPI for tracking that outcome. Note that Appendix C only reflects the specific MPI’s that will be tracked as part of this MPER #1. The full list of MPIs will be provided to the awarded contractor but is also available upon request by bidders for proposal preparation.

### 3 LLLC MPER Research Objectives

The three research objectives (RO) for this work are listed below and then described in detail in the subsequent sections:

1. **RO1** – Review the LLLC MT Theory, Program Logic Model, and MPIs to assess their clarity and alignment in conveying (1) the Program’s strategy and planned activities to overcome market barriers and drive market changes that will increase LLLC adoption; (2) NEEA’s proposed approach for evaluating LLLC market progress.
2. **RO2** – Conduct the first year of tracking MPIs (see Appendix C) to lay the groundwork for year-over-year evaluation, and report progress on several near-term outcomes. In addition, conduct limited additional research on market change related to other NLC and whether NEEA is having influence.
3. **RO3** – Identify commercial and industrial (C&I) building types and circumstances are best suited for LLLC and/or non-LLLC NLC systems, and why.

Goals of these research objectives include:

- Identifying potential refinements in the MT Theory and Logic Model to make them more valuable “go-to” program documents to guide program strategy and activities to further accelerate LLLC adoption.
- Ensuring that the MPIs form a solid foundation for transparent, consistent, and robust tracking of market progress.
- Assessing if there is tangible evidence that NEEA is influencing market adoption of other NLCs such that those additional savings might be captured for the region.
- Helping NEEA further improve its ability to target specific end-use customers with tailored messaging to increase LLLC and other NLC adoption.

#### 3.1 RO1 - Review LLLC MT Theory, Program Logic Model, and MPIs

RO1 involves review of the LLLC Program MT Theory (Appendix A), Program Logic Model (Appendix B), and the MPIs (Appendix C) for clarity, logic, alignment, and evaluability. This review will include:

- Assessing whether the MT Theory is a clear and convincing narrative of how the Program’s activities will overcome market barriers to drive outcomes that will result in increased LLLC adoption.

- Assessing whether the Logic Model is well-structured in its flow and connections; articulates outcomes that reflect market change; uses understandable language; aligns with the Program’s field activities; has content that supports effective evaluation, and; describes strategies and outcomes that will result in continued market diffusion when NEEA exits the market.
- Exploring if and how the Program resource allocations reflect differences in the relative importance of various market barriers.
- Determining whether the MPIs will capture information indicative of each LLLC Program outcome (as identified in Appendix C).
- Making recommendations, where applicable, of possible improvements to the Logic Model and MPIs.

The goal of RO1 is to suggest refinements to the MT Theory, Logic Model, and MPIs:

- So NEEA, its partner utilities, and other stakeholders can easily understand and tell the LLLC MT story.
- So NEEA staff will use the Logic Model to guide LLLC Program implementation.
- So that the MPIs are more evaluable.

### **3.2 RO2 - Evaluate the Market Progress of the LLLC Program and Gauge NEEA Influence on the Broader Lighting Controls Market**

The primary objective of RO2 is to evaluate selected MPIs and begin systematic longitudinal tracking of market progress for LLLC. A secondary objective is to leverage these tracking activities to conduct limited additional research on market change related to other NLC systems and determine whether NEEA is having influence, and if it may be feasible to capture regional savings from additional types of NLC.

Considerations for RO2:

- For the initial year of measurement for an MPI it is particularly important to establish an approach, methodology, and sampling plan that can be repeated cost-effectively, reliably, and accurately year-over-year. Bidders should consider the sample frames they recommend in their proposed methodologies in relation to NEEA’s need to measure change *in the Northwest market as a whole*. For example, when conducting surveys of commercial lighting installers for awareness of LLLC, if the sample frame is limited to installers who are part of Northwest utility trade ally networks, the results will not be representative of the general population of installers. However, obtaining a general population list can be difficult and costly. NEEA encourages bidders to suggest varying approaches for creating a sample frame, and the trade-offs of various options.
- Potential recruitment resources are shown for each MPI listed in Appendix C. NEEA will work closely with the awarded contractor and help coordinate with NEEA’s utility partners to facilitate obtaining permissions and access to utility trade ally contact lists for recruitment purposes. Bidders may propose other sources and/or approaches to obtaining contact lists (such as using recruiting firms, purchasing lists, etc.).

### 3.3 RO3 – Fill Priority Gaps in Lighting Controls Market Knowledge

The primary objective of RO3 is to deepen and broaden NEEA’s understanding of the commercial lighting controls market – including both LLLC and other non-LLLC NLC systems. Key components of this include determining which C&I building types (e.g. office buildings, schools, hospitals, retail, etc.) in combination with building circumstance (e.g. new construction vs. retrofit, whole building versus partial projects, owned v. leased, single-building property management vs. large multi-property manager) are best-suited for 1) LLLC system installations, or 2) other NLC systems. Additionally –RO3 seeks to utilize these identified best-suited building cases in order to refine the target audience of C&I lighting purchase decision makers and messaging in order to most effectively reach and influence those decision makers.

The goals of RO3 are to help NEEA make more informed decisions in order to optimize the impact of LLLC Program activities on overall LLLC MT, LLLC market share, and energy savings.

Examples of C&I building types/circumstances may include:

- Particular types or attributes of commercial and industrial buildings, and spaces within buildings
- Projects in new construction versus retrofit
- Owner-occupied buildings versus leased/rented
- Ownership and/or management of multiple buildings versus single buildings
- Participation in utility incentive programs or building certification
- Access to internet and/or building personnel IT capabilities
- Particular organizational needs, or opportunities, such as asset tracking
- Need/desire for remote system control, configuration, or operation.

RO3 goals are to:

- Ensure NEEA can focus its MT investment to optimize adoption of LLLC.
- Support NEEA in developing tailored and resonant messaging for C&I lighting purchase decision makers to drive adoption of LLLC and other non-LLLC NLC systems.
- Support supply-side market actors in adopting messaging that optimizes their LLLC and non-LLC NLC product sales

## 4 Scope of Work

### 4.1 Deliverables

For this MPER, deliverables will consist of the following:

1. Project management and planning documents including:
  - a. Draft and final work plan including sample frame plan, sample design, and recruiting plan for each research objective
  - b. Monthly status reporting of activities conducted, submitted with the monthly invoice
2. Research resources and tools including:

- a. Recruiting scripts and screener questions
  - b. Recruiting lists (any lists purchased for recruitment purposes shall be purchased or licensed on behalf of NEEA)
  - c. Draft and final research instruments (such as survey tools)
3. Raw data including:
- a. Anonymized survey data
  - b. Anonymized interview transcripts
4. Reports such as:
- a. Summary PowerPoint (PPT) presentations of findings for each research objective, to be used for three synthesis sessions with NEEA staff
  - b. Draft and final report describing the methodology, results, conclusions and recommendations from across the entire study

NEEA expects to work collaboratively with the awarded contractor or contracting team to develop and review research instruments, discussion guides, and other deliverables. Achieving an acceptable final report may take up to three iterations of comments from NEEA staff and other parties. The effective use of data visualization, graphics, and attractive design in reporting is an expectation for NEEA's market research and evaluation reports. Proposals should demonstrate the bidding team's approach to delivering visually appealing and well-organized reports. NEEA's style guide for market research and evaluation reports is available on our website at: <https://neea.org/img/documents/NEEA-Style-Guide-for-Public-Research-Reports.pdf>

## 4.2 Budget

NEEA estimates the budget for this work will be between \$100,000 to \$120,000. However, budget should not be considered a limiting factor. Well-written proposals that present thoughtful and cost-effective strategies to meet the research objectives will be considered without respect to budget. NEEA's MRE Project Manager will work with finalists to negotiate the specifics of their proposed research activities to meet resource constraints.

Proposal cost estimates should be provided on a time and materials basis and should reflect that the bidder is responsible and accountable for the following:

- All logistics associated with executing the research tasks such as, including but not limited to survey recruitment, and interview scheduling
- Preparing and delivering all project deliverables
- Managing and providing itemized expense reporting for all subcontractors used on this project
- Contractors' allocation of resources to tasks
- Invoicing and expense reporting
- Payment of any honorariums/incentives for research participation

## 4.3 Timeframe

NEEA anticipates this work beginning in December 2020 and being completed no later than August 2021.

## 5 Proposal Requirements

Proposals should not be more than 10 pages (not including proposal appendices). Proposals should at a minimum include the following:

### 5.1 Proposal Format

#### 5.1.1 Executive Summary of Research Design

Include a brief 1-2 paragraph summary of the key components of your proposal, including your approaches to achieving the research objectives, the advantages your team offers over other proposers, and your estimated budget for the project.

#### 5.1.2 Approach and Methodology

Provide a detailed description of the specific methodologies and approach to be undertaken to complete each research objective, including project management activities. Please include a detailed description of your strategies for creating sample frames and conducting research. What recruitment sources or lists will you rely on to develop the sample? How much time will you schedule for recruiting? Identify all major phases and milestones for the project and the associated deliverables.

#### 5.1.3 Project Timeline & Cost Estimate

Provide the proposed timeline for all major phases and milestones of the project broken out by proposed task and associated deliverables. Include the cost estimate for each proposed task. A breakout of any direct costs and an hourly rate sheet for the project period should be provided in the Proposal Appendix section.

#### 5.1.4 Proposal Appendix

- Hourly Rate Sheet – Provide hourly rates for all proposed project team members with estimated hours by task
- Company background & qualifications relevant to this project
- Project Team & Team Bios – Include information about program team members and team structure, past team efforts on similar work, years of experience and other relevant qualifications.
- Relevant Experience - Briefly describe past research efforts and/or provide links to reports that convey team experience relevant to this project. You may also want to share particular company or team expertise, knowledge, examples of innovative thinking, and/or methodologies relevant to market transformation, measurement of market change, or other pertinent content areas.
- In Good Standing – Provide documentation reflecting your organization's good financial standing, such a Dun & Bradstreet report (\*\*required for new vendors)

## 6 Proposal Submission

Bidder shall submit (1) electronic copy of the proposal by the end of business day listed in the RFP schedule below.



## 6.1 RFP Schedule

All deadlines below are by **5 p.m. PST**.

September 10, 2020	RFP released
September 21, 2020	Emailed notice of intent to bid submitted by Email questions for clarification submitted by
September 24, 2020	Answers to questions e-mailed back by
October 21, 2020	Proposals due by
November 4, 2020	Anticipated contract award date

## 6.2 RFP Point of Contact

All correspondence, included but not limited to, questions and submissions shall be directed to:

Jennifer Stout  
Project Manager, Market Research and Evaluation  
E-mail: [jstout@neea.org](mailto:jstout@neea.org)

## 6.3 Intent to Respond

All parties who intend to submit a proposal must submit an email to the RFP Point of Contact above indicating their intent to respond, no later than September 21, 2020. Please include the name of your organization and contact information.

Only those parties who email the RFP Point of Content communicating their intent to respond will be provided with updates to the RFP, have questions responded to and have their proposals considered.

## 7 Selection and Insurance Requirements

Bidding firms will be rated among others in terms of the overall responsiveness to the RFP – how well all RFP requests have been addressed including, but not limited to:

- 1) Demonstrated understanding project objectives, nuisances and potential roadblocks to meeting objectives
- 2) Thoughtfulness and appropriateness of the proposed research design used to accomplish the desired results of the project.
- 3) Reasonableness of work plan – timing, tasks and deliverables
- 4) How well deliverable examples and descriptions meet the stated needs and intended use
- 5) Overall value for expenditure
- 6) Evidence of flexibility throughout the project lifecycle
- 7) Ability to communicate complex ideas/concepts in a clear and succinct fashion

In addition, the following factors will play a key role in the selection process:

- 1) The experience and qualifications of the individuals specifically proposed to execute and manage the project.
- 2) The experience of the firm or team of firms making the proposal.
- 3) The capability to execute the plan, including past experience and aptitude for collaboration.

Proposals may be evaluated by the NEEA Project Manager and other NEEA staff that we believe have the perspective needed to make this important decision. NEEA is under no obligation to provide work to any vendors responding to this solicitation, nor is there any obligation or intent implied to reimburse any party for the cost of preparing a proposal in response to this RFP.

### **7.1 Preferred Insurance**

Firms interested in working with NEEA should be aware of the following insurance requirements for all NEEA vendors.

Vendors must maintain adequate and reasonable insurance covering their performance under any offered contract, including, but not limited to Commercial General Liability insurance of at least \$1,000,000/occurrence, Business Automobile Liability insurance, and any workers' compensation and unemployment insurance required by law. Professional Liability and Cyber Liability insurance may also be required. NEEA may request a copy of such insurance policies prior to awarding work.

See sample terms and conditions for additional information about minimum insurance requirements: <https://neea.org/img/documents/sample-neea-contract-terms-and-conditions.pdf>.

## Appendix A: LLLC Market Transformation Theory

The long-term LLLC Program goals are that LLLC become standard practice for commercial new construction, renovation, and retrofit projects when technically applicable, and that codes in all four Northwest states require LLLC. The Program uses a multi-faceted approach incorporating specification development, market awareness building, training, utility program support, supply chain interventions, and integration with energy codes to transform the market.

NEEA is intervening to overcome the following interrelated market barriers: (1) Incremental cost of LLLC compared to non-controlled fixtures; (2) Lack of sales chain and end-use customer awareness of the distinct advantages and value proposition of LLLC; (3) Lack of a broad selection of LLLC products to meet market actors' design, installation, and operational needs; (4) Lack of installers/contractors and designers/ specifiers with the knowledge and skills needed for this new generation of Internet-enabled control technologies; (5) Lack of sales data to track market progress.

To overcome these barriers, NEEA is implementing an array of strategies and activities, including

- Working with the Design Lights Consortium (DLC) to develop a specification and Qualified Products List (QPL) to improve technical rigor and stimulate market innovation and competition
- Working with manufacturers to advocate improvements to product functionality and out of box settings;
- Supporting utilities in establishing incentive programs to lower first cost
- Raising customer decision maker<sup>5</sup> and influencer<sup>6</sup> awareness of the technical features and value proposition of LLLC through the development and dissemination of informational materials (for example, articles, fact sheets, case studies, and videos);
- Supporting technical and sales training for supply-side market actors<sup>7</sup> to increase the number of skilled personnel and reduce over bidding<sup>8</sup>;
- Working with NEEA's Codes team on LLLC incorporation;
- Establishing "Action Plans"<sup>9</sup> with select manufacturers to increase mutually beneficial LLLC product visibility and support sales rep and distributor LLLC promotion;
- Seeking from manufacturers LLLC sales data vital to NEEA's program tracking and sales estimation. NEEA is also establishing agreements with distributors to provide sales data

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<sup>5</sup>"Decision maker" is the person who has funding authority for the project. For example: developer, building owner, facility manager, property manager.

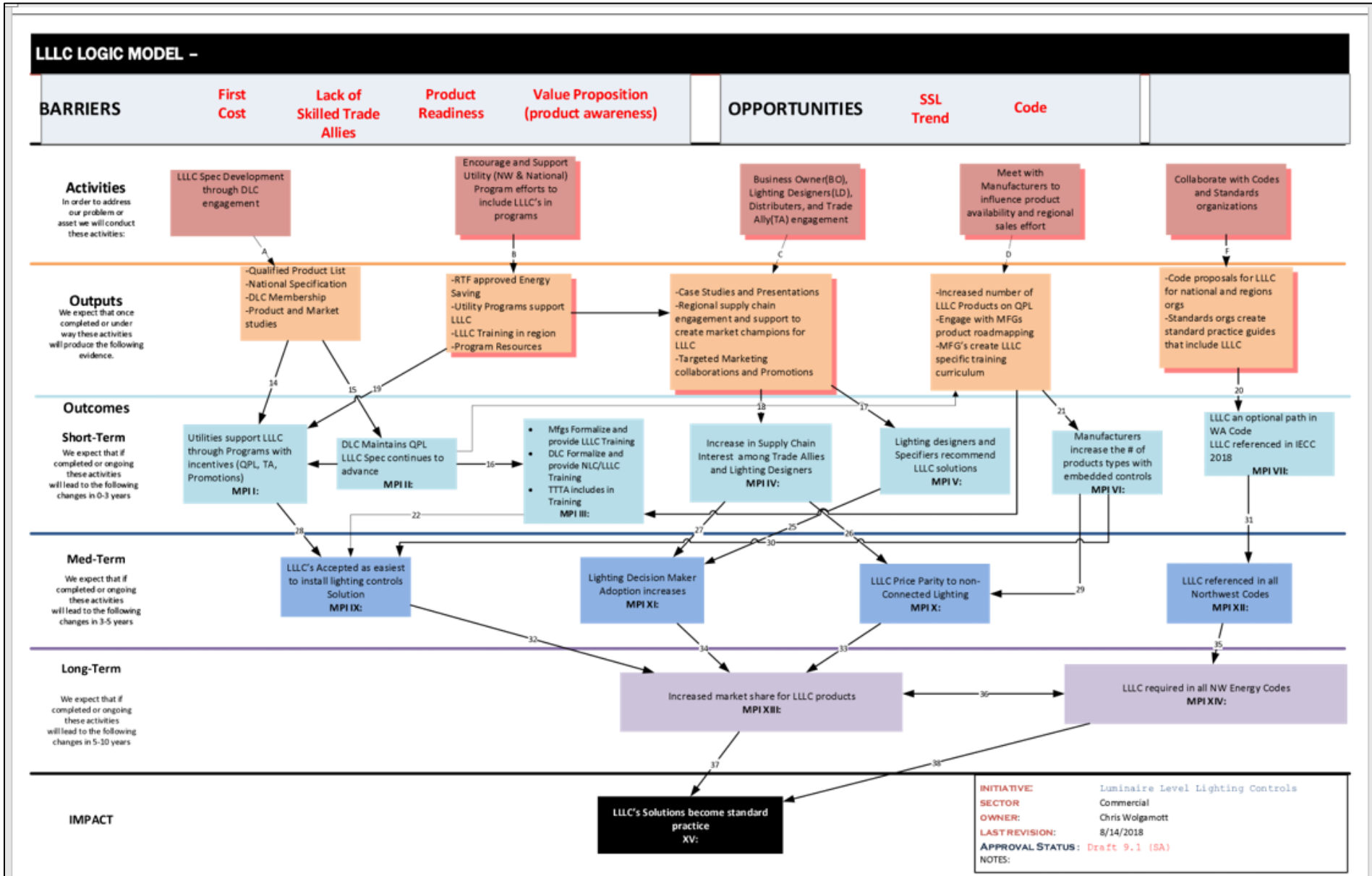
<sup>6</sup> An "influencer" could be anyone who influences the decision to select LLLC.

<sup>7</sup> NEEA is funding the Lighting Design Lab (LDL) and the Top Tier Trade Ally (TTTA) NXT Level Training to develop LLLC trainings for designers/specifiers and installers/contractors. NEEA's partner utilities will be a primary host for these trainings. NEEA has also worked with the DLC on both in person and online training.

<sup>8</sup> The [Luminaire Level Lighting Controls \(LLLC\) Market Characterization and Baseline Report \(Research Into Action 2016\)](#) found that "many...installers over-bid jobs involving LLLCs to compensate for installation processes that they are uncertain of." p. v.

<sup>9</sup> Activities may include media engagements, in-person events, manufacturer product demonstrations, and various "sales channel activation" support from NEEA. The latter may include SPIFs and sales targets for the manufacturer's sales reps; support to form "Green Teams" for motivating distributors to sell LLLCs; and information and assistance for distributors and sales reps to tap utility partner incentives.

# Appendix B: LLLC Program Logic Model



## Appendix C: R02 MPI's and Additional Research Elements

LLLC Program Outcome	MPI	LLLC Program MPI Description	Additional Research Elements	Potential Recruitment Resources
<b>Outcome I (short term)</b> Utilities support LLLC through programs with incentives	<b>MPI 1</b>	<ul style="list-style-type: none"> <li>Utilities offer incentives for LLLC</li> <li>Year-over-year (YOY) increase in LLLC units incented by utilities</li> </ul>	<ul style="list-style-type: none"> <li>Track which utilities are offering incentives for non-LLLC NLC, LLLC, or both</li> <li>Track non-LLLC NLC units incented by utilities; for utilities offering both incentives for non-LLLC NLC and for LLLC, track the shares of each</li> </ul>	<ul style="list-style-type: none"> <li>NEEA to provide utility contact list</li> <li>NEEA's Planning Group to collect data on incented LLLC and non-LLLC NLC units from NEEA's utility partners</li> </ul>
<b>Outcome II (short term)</b> 1. Design Lights Consortium (DLC) maintains Qualified Products List (QPL) 2. Specification continues to advance	<b>MPI 2</b>	<ul style="list-style-type: none"> <li>DLC regularly reviews the LLLC QPL</li> <li>DLC regularly reviews LLLC specification and updates</li> </ul>	<ul style="list-style-type: none"> <li>Track if DLC regularly reviews the non-LLLC NLC QPL</li> <li>Track if DLC regularly reviews non-LLLC NLC specification and updates</li> </ul>	<ul style="list-style-type: none"> <li>NEEA to provide NEEA staff and DLC contact information</li> </ul>
<b>Outcome III (short term)</b> 1. Manufacturers formalize and provide LLLC training 2. LDL provides LLLC training 3 NEEA's NXT Level training includes LLLC	<b>MPI 3</b>	<ul style="list-style-type: none"> <li>Manufacturers with LLLC products on the DLC QPL offer LLLC training to at least one type of supply-side market actor (e.g. installers, manufacturer reps, or distributors)</li> <li>YOY increase in lighting installation companies<sup>10</sup> with staff trained in LLLC</li> <li>YOY increase in individual installers trained in LLLC</li> <li>YOY increase in trained installers' self-reported level of skill and confidence to sell, install, and program LLLC</li> <li>YOY, companies with at least one LLLC-trained installer become more evenly distributed across the region</li> </ul>	<ul style="list-style-type: none"> <li>Track if manufacturers with non-LLLC NLC also offer training for these products</li> <li>Track number of lighting installation companies with staff trained in non-LLLC NLC</li> <li>Track individual non-LLLC NLC trained installers</li> <li>Track trained installers self-reported level of skill and confidence to sell, install, and program non-LLLC NLC</li> <li>Track if companies with at least one non-LLLC NLC-trained installer become more evenly distributed across the region</li> </ul>	<ul style="list-style-type: none"> <li>NEEA has manufacturer contact lists</li> <li>Contractor and NEEA will work together to obtain lists of utility partner trade allies (installation companies)</li> <li>NEEA has lists of NXT Level-trained installers</li> <li>Contractor can use budget to purchase installer contact lists</li> </ul>

<sup>10</sup> Installation companies (and installers) include those that are trade allies (TAs) of NEEA's utility partners (Trade Ally Network Northwest (TAN NW) affiliated with BPA and trade allies of other utilities), and installers that provide services in the territories of NEEA's utility partners but are not part of their trade ally networks (non-TAs). Accurately measuring the percentage of non-TAs will depend on NEEA's ability to assemble a stable list.

<p><b>Outcome IV (short term)</b> Increase in Supply Chain awareness among Trade Allies and Lighting Designers</p>	<p><b>MPI 4</b></p>	<ul style="list-style-type: none"> <li>• YOY increase in percentage of designers/ specifiers and installers who say they are aware and have knowledge<sup>11</sup> about LLLC</li> </ul>	<ul style="list-style-type: none"> <li>• Track percentage of designers/ specifiers and installers who say they are aware and have knowledge of non-LLLC NLC</li> </ul>	<ul style="list-style-type: none"> <li>• NEEA has some limited designer/specifier lists</li> <li>• Contractor and NEEA will work together to obtain lists of utility partner trade allies (installation companies)</li> <li>• Contractor can use budget to purchase installer contact lists</li> </ul>
<p><b>Outcome V (short term)</b> Lighting designers and specifiers recommend LLLC solutions</p>	<p><b>MPI 5</b></p>	<ul style="list-style-type: none"> <li>• YOY increase in percentage of designers/specifiers who say they have recommended LLLC to customer-side decision makers<sup>12</sup> for at least one project</li> <li>• YOY increase in percentage of designers/specifiers who say they have written LLLC into at least one project plan</li> </ul>	<ul style="list-style-type: none"> <li>• Track percentage of designers/specifiers who say they have recommended non-LLLC NLC</li> <li>• Track percentage of designers/specifiers who say they have written non-LLLC NLC into at least one project plan</li> </ul>	<ul style="list-style-type: none"> <li>• NEEA has some limited designer/specifier lists</li> <li>• Contractor can use budget to purchase installer contact lists</li> </ul>
<p><b>Outcome VII (short term)</b> 1. LLLC is an optional path in WA code; 2. LLLC referenced in IECC 2018</p>	<p><b>MPI 7</b></p>	<ul style="list-style-type: none"> <li>• LLLC is an Optional Compliance Path in WA code</li> <li>• LLLC is referenced in IECC 2018</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>
<p><b>Outcome XI (medium term)</b> Increase in decision maker selection of LLLC systems</p>	<p><b>MPI 11</b></p>	<ul style="list-style-type: none"> <li>• YOY increase in (1) LLLC luminaire sales (2) the percentage of total luminaire sales comprised by LLLC luminaires</li> </ul>	<ul style="list-style-type: none"> <li>• N/A</li> </ul>	<ul style="list-style-type: none"> <li>• NEEA collects sales data from manufacturers, distributors, or other sources</li> <li>• NEEA’s planning group collects utility and funder incentive data</li> </ul>

<sup>11</sup> “Aware and have knowledge” means the person says they have heard of LLLCs and is able to describe at least one distinct LLLC benefit.

<sup>12</sup> An “aware and knowledgeable customer-side decision maker” is a person who has heard of LLLCs, is able to describe at least one LLLC benefit, and has project funding authority. This person could be a developer, building owner, facility manager, property manager.