



March 7th, 2023

ComEd Lighting Controls

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Agenda

1. Introduction
2. ComEd EE Plan 6 Lighting Control Goals
3. ComEd EE Program Design
 - Lighting Controls Measures
 - Historical Participation & Progress to Goal
 - Tactics/Initiatives
 - Market Feedback
4. Future Plan/Outlook

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Introduction

Introduction

Lighting Controls Presentation Team

1. Rebecca McNish (ComEd)
2. Laura Pettersen (Resource Innovations)

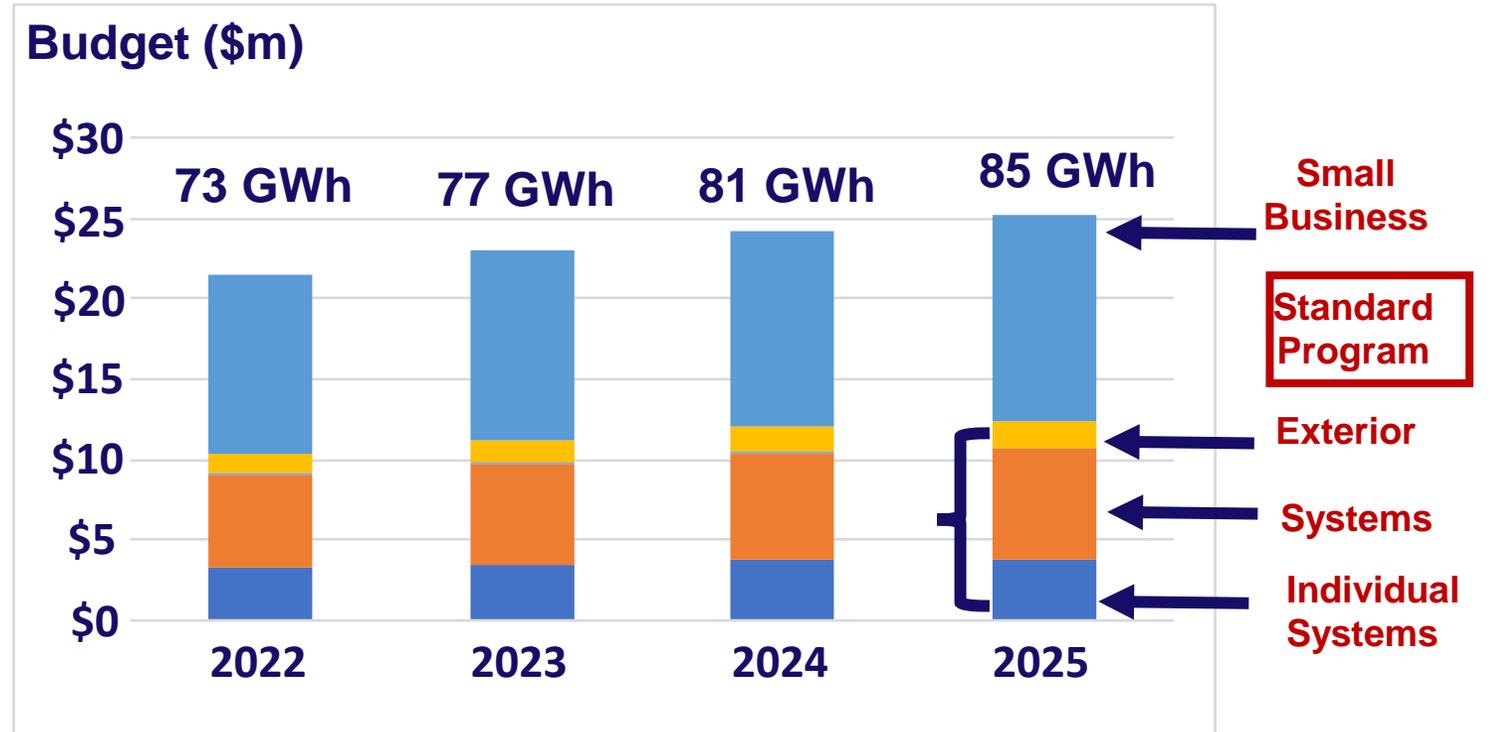


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ComEd EE Plan 6 Lighting Control Goals

ComEd EE Plan 6 Lighting Control Goals

- ComEd's current lighting controls program draws from the industry's best
- Portfolio Commercial Lighting Controls Grows to nearly 7% of Portfolio Spend
- This is optimistic, but achievable given the significant barriers to adoption of fully integrated lighting controls



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Lighting Controls Measures

- ComEd provides lighting control incentives through two main programs:
 - Standard Offering – Geared towards mid-size and large customers
 - Small Business Offering – Increased incentives for customers with peak demand below 400 kW (private and public)
 - Note: For 2023, SBO customer eligibility was increased from 200 kW to 400 kW (private)
- Lighting Control Measures
 - Networked Lighting Controls, baseline with controls
 - Network Lighting Controls, baseline without controls
 - Remote/Fixture mounted Occupancy Sensors and Vacancy Sensors
 - Daylighting Controls
 - Occupancy Sensors + Daylighting Controls
 - Dimming Controls
 - Photocells
 - Timeclocks
 - Photocells + Timeclocks

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Lighting Controls Measures - Continued

- Standard Offering (STA) 2023 Measure Incentives

- Networked Lighting Controls

- Baseline Without Controls: \$1.00/Watt Controlled
- Baseline With Controls: \$0.75/Watt Controlled
- Additional \$0.20/Watt Reduced if new lighting

- Occupancy Sensors, Vacancy Sensors, Daylighting Controls

- \$0.15 - \$0.25/Watt Controlled

- Occupancy Sensors plus Daylighting Controls

- \$0.30/Watt Controlled

- Time Clocks for Lighting

- \$0.03/Watt Controlled

- Photocells

- \$0.08/Watt Controlled

- Photocells plus Time Clock

- \$0.09/Watt Controlled

- Small Business Offering (SBO) 2023 Measure Incentives

- Networked Lighting Controls

- Baseline Without Controls: \$1.25/Watt Controlled
- Baseline With Controls: \$1.00/Watt Controlled

- Occupancy Sensors, Daylighting Controls, Dimming Controls

- \$20 - \$35/Unit

- Occupancy Sensors plus Daylighting Controls, Occupancy Sensors with Dimming Controls

- \$20 - \$25/Unit

- Time Clocks for Lighting

- \$0.25/Watt Controlled

- Photocells

- \$0.20/Watt Controlled

- Photocells plus Time Clock

- \$0.35/Watt Controlled

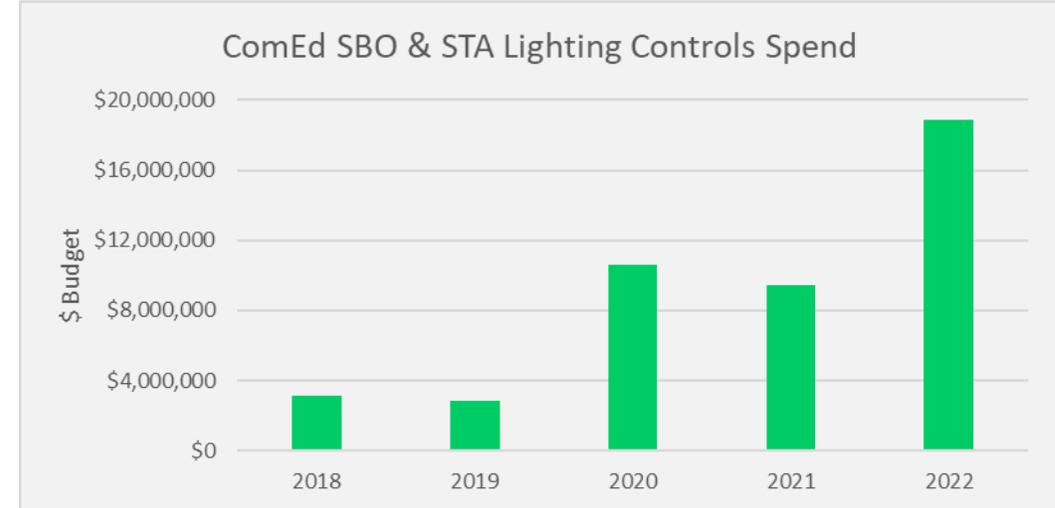
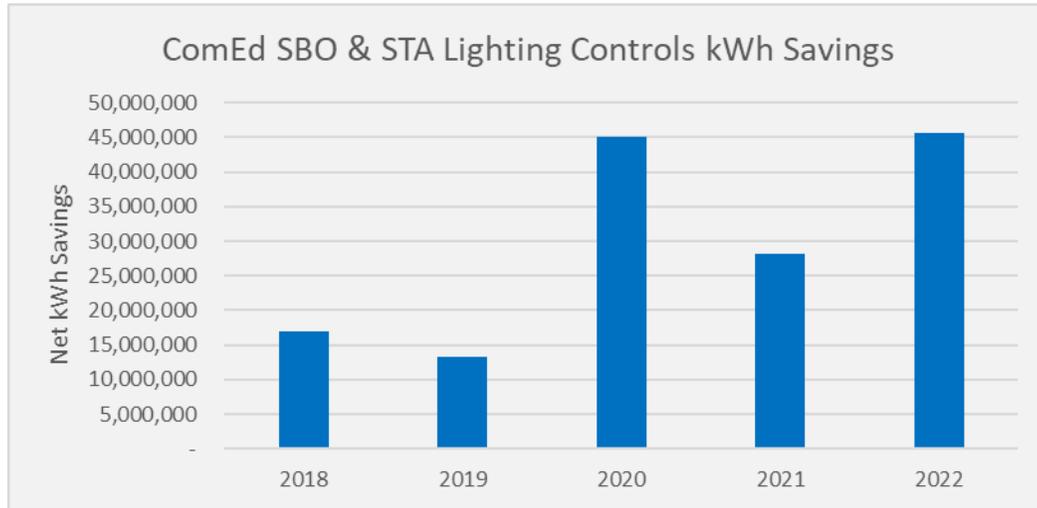
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Lighting Controls Measures - Continued

- Recommendations/Updates for IL TRM v12:
 - Network Lighting Controls Updates
 - Additional Energy Savings Factor (ESF) options for exterior controls
 - Expanding scope/requirements from DLC listed systems
 - Clarification on peak coincidence factor to allow for baseline control upgrades to NLC
 - Add the following measures to the TRM
 - Time Clocks for Lighting
 - Photocells

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Historical Participation – All Lighting Controls

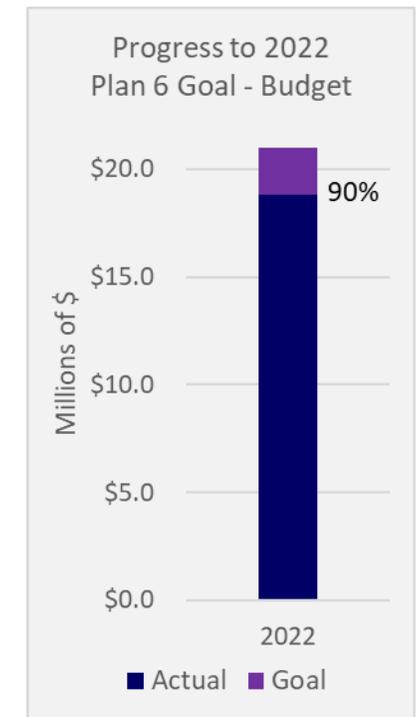
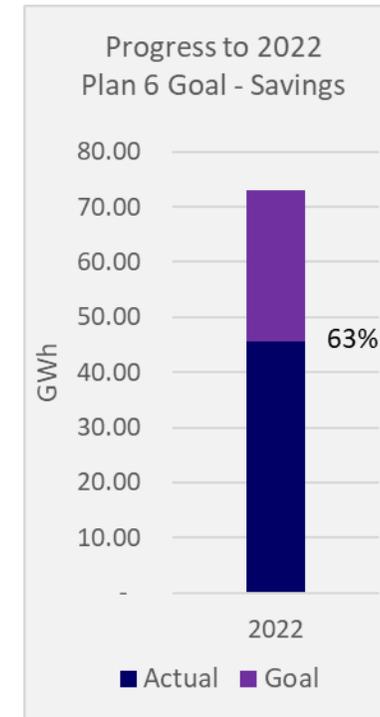
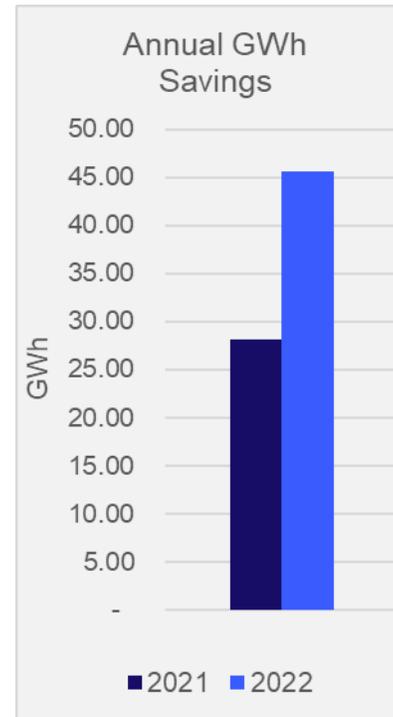


- **Insights:**
 - Lighting controls participation has continued to increase
 - 2021 savings decrease was largely due to changes in measure savings calculations
 - 2021 also saw a decrease in non-NLC lighting control participation
 - Various tactics and initiatives have been employed to further promote controls measures

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Progress to Goal – All Lighting Controls

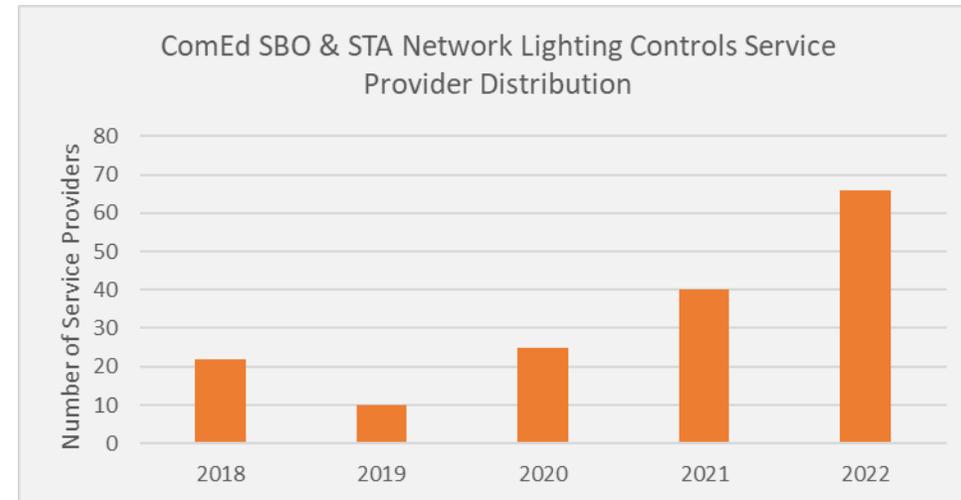
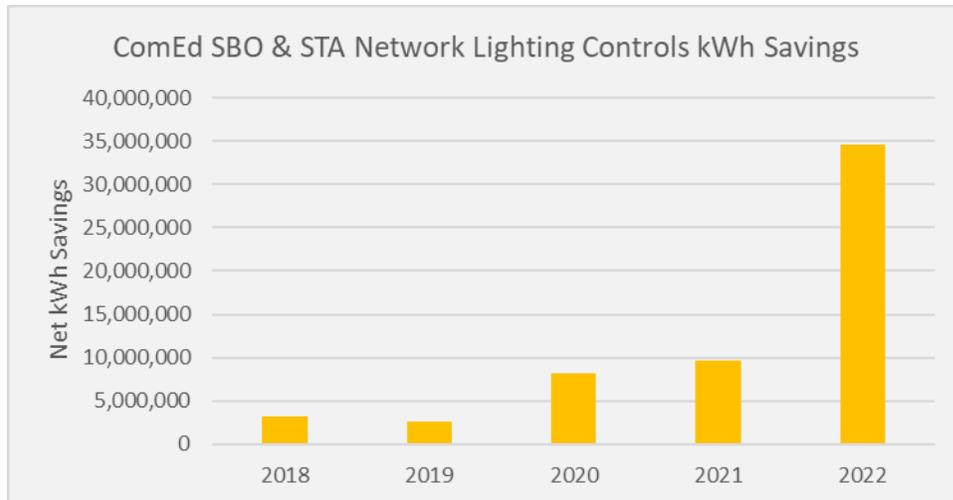
- 62% increase in savings from 2021 to 2022
- 2022 Plan 6 Goals:
 - 73 GWh
 - ~\$21 Million
- 2022 Results:
 - 46 GWh
 - \$18.8 Million
- Insights:
 - Closer to the budget goal than the savings goal
 - 2022 Levers
 - Shift to NLCs
 - Increased Incentives
 - Campaigns and Promotions



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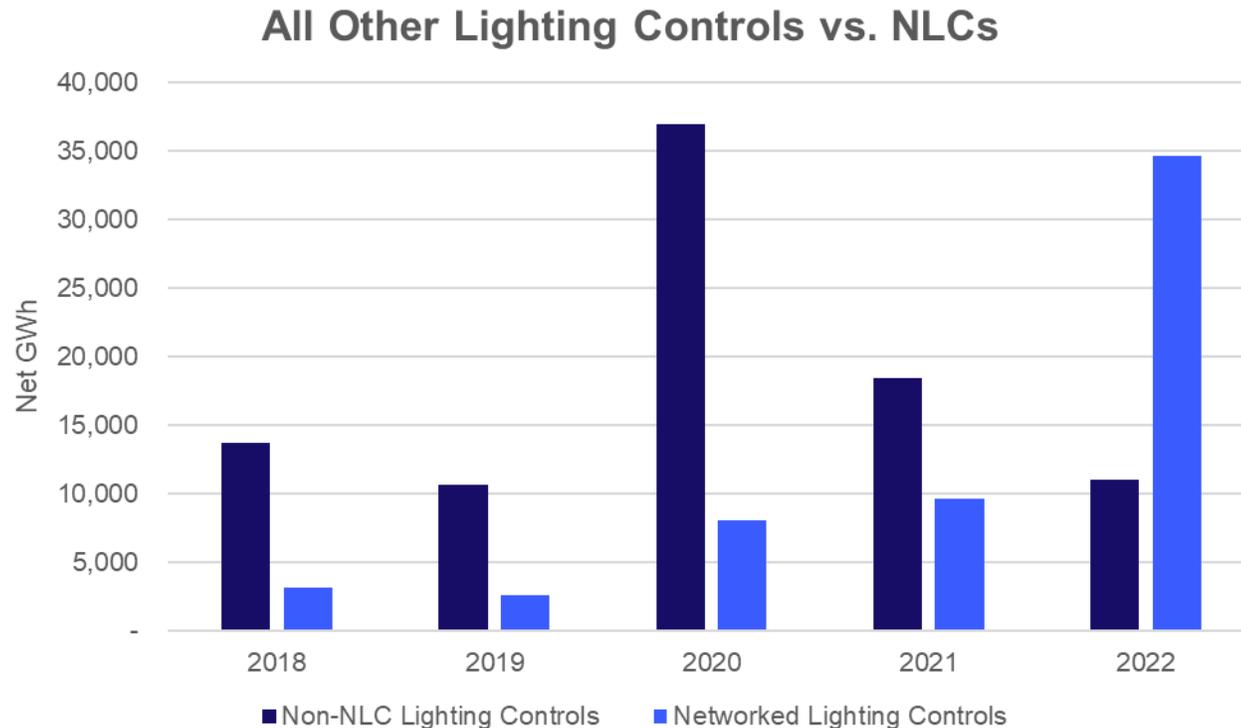
Historical Participation – NLC

Year	Net kWh Savings	Incentives	Projects	Energy Efficiency Service Providers (EESPs)
2018	3,183,698	\$662,109	49	22
2019	2,632,094	\$494,311	64	10
2020	8,101,466	\$1,583,516	74	25
2021	9,692,951	\$3,097,096	372	40
2022	34,629,883	\$16,461,334	1823	66



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Historical Participation – Lighting Control Type



- **Insights:**
 - Shift in market from non-NLC controls to NLCs
 - Steady increase in NLCs until 2022, where we saw a large increase

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Historical Participation – Projects

- **Project volume quadrupled between 2021 and 2022, with the bulk of the increase from small and medium size businesses**
- **Disadvantaged Community Warehouse:**
 - \$1.43 million project to renovate a manufacturing/warehouse facility with new lighting and network lighting controls
 - 3,750,000 kWh of savings, 1,250,000 kWh from NLCs
- **Indoor Agriculture NLCs:**
 - \$940,000 project to upgrade lighting in an indoor agriculture facility in a disadvantaged community
 - 4,860,000 kWh of savings, 1,900,000 kWh from NLCs
 - Dimming, zone control and scheduling strategies implemented



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Tactics/Initiatives in 2023 for NLCs

- **Measure Updates**

- Updated both programs to allow for two different baseline options – with pre-existing controls and without
 - This is allowing the programs to increase eligibility for NLCs and provide higher incentives for no control baseline projects
- Aligned measures (names, specifications) between the two offerings STA/SBO to simplify and streamline

- **EESP Focused Updates**

- Incentive increase (STA)
 - Elevated incentives for NLCs by 66-120% to encourage further participation in NLCs
- Technical Trainings
- Program Support including Roundtables

ComEd EE Program Design Tactics/Initiatives - NLC

- **Measure Updates**
 - Simplifying Specifications
 - Increased Incentives
- **Marketing**
 - Newsletter Spotlight
 - Customer Webinars
 - Fact Sheets
 - Case Studies
 - Email Campaigns
 - Website Promo Boxes
- **EESP**
 - EESP Webinars
 - Technical Trainings
 - Program Support including Roundtables



comEd[™] | Energy Efficiency
AN EXELON COMPANY

Networked Lighting Controls

Networked Lighting Controls can reduce the energy consumed by illumination by up to 49%*.

The Basics <p>Save money and energy by taking control of your lighting system. After completing a FREE assessment of your facility, an authorized ComEd Energy Efficiency Program Service Provider will help you develop and implement a plan that will optimize your energy use. We'll work around your schedule to ensure convenient installation of the upgrades that you select. Plus, ComEd offers incentives that can cover as much as 75% of your project cost.</p>	Benefits <ul style="list-style-type: none">• Monitoring: Understand your facility's energy use, ensuring maximum efficiency and savings.• Daylight Harvesting: Make the most of natural light by controlling lighting system output and intensity.• Accessibility: Interact with your lighting system remotely to ensure you're always in control.• Improve Lamp Life: Reduce total hours that lights are on, thereby extending the life of your lighting equipment.
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*Wen, Y., Kehmeier, E., Kisch, T., Springfield, A., Lantz, B., and Frey, M. (2020, September 24) Energy Savings from Networked Lighting Control (NLC) Systems with and without LLLC. The Northwest Energy Efficiency Alliance and DesignLights Consortium. www.designlights.org/lighting-controls/reports-tools-resources/energy-savings-from-networked-lighting-controls-with-without-LLLC/report

Contact Us
Email BusinessEE@ComEd.com
Call 855-433-2700
Visit ComEd.com/SmallBiz

Terms and conditions apply. Offers are subject to change.
Actual savings will vary by customer's energy usage and rate.
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The ComEd Energy Efficiency Program is funded in compliance with state law.
SBMFS-NLC 101222-01

Networked Lighting Controls Fact Sheet
[Networked Lighting Controls | ComEd - An Exelon Company](#)

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EESP/Market Feedback

- There is a lack of customer knowledge on lighting controls
 - Customers may ask for occupancy sensors, but do not generally ask for NLCs
 - If they do ask for NLCs, it's because they have existing controls already
 - EESPs are selling NLCs because they are pushing them, not per customer request
- Network Lighting Controls allow EESPs to sell projects more easily, as the high incentives ultimately increase the customers ROI
- EESPs realize that the lighting incentives will see changes in coming years and expect to see a greater focus on controls

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Future Plan/Outlook

Future Plan/Outlook

Next Steps

- Continued Market Education
 - Customer Awareness
 - Promotion of NLC Measures
- Lessons Learned & Keys to Success
 - Continuous EESP Engagement
 - Trainings
 - Feedback



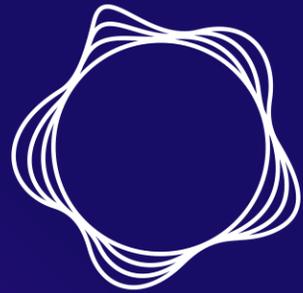


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Thank you





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