

April 11, 2018

LED STREET LIGHTS: KEY DECISIONS TOWARD CONVERSION

MID-HUDSON STREET LIGHT CONSORTIUM

- Funded by NYSERDA Cleaner Greener Communities
- Survey and Consortium formation
- Assessment: 'LED Street Light Conversion in New York – A Common Sense Guide for Local Governments in the Mid-Hudson Region' (A/K/A 'Options Report')
- Procurement Aggregation – Turnkey/Community Managed
- www.nystreetlights.org as resource

LED STREET LIGHTS = MANY BENEFITS

- Energy savings of 65 percent – and sometimes more
- GHG reductions
- Dramatically lower maintenance costs
- Improved lighting uniformity
- Enhanced pedestrian and vehicle safety
- Reduced light pollution
- Opportunity to demonstrate environmental leadership
- Capitalize on SmartCities/IOT technologies

QUESTIONS TO BE ADDRESSED TODAY

- What are the advantages of LED street lights?
- What is the conversion process?
- What is the NYPA Smart Street Lighting Program?
- What is most advantageous for my community?

STATUS OF RFP LED BY T/RED HOOK

- 18 municipalities participated
- 3 bids received by Jan. 11
- All were deemed partially non-responsive
- Bids were set aside by Red Hook Feb. 28
- Discussions commenced with NYPA re new opportunities under Smart Street Lighting Program

WHAT YOU CAN DO TO PREPARE

MUNICIPAL OWNERSHIP

- Should be synced with LED conversion
- Request an estimated purchase price from utility
- Request a Billing Audit from 3rd party providers
- Conduct Field Audit
- Develop an LED replacement plan
- Enter into aggregated purchase or pursue solo approach

TIMELINE FOR MUNICIPAL PURCHASE OF STREET LIGHTS

NYS Public Service Commission sets forth guidelines:

- Request in writing estimated price to purchase street lights from the utility.
- Utility has 90 days to respond.
- Let utility know municipal decision to proceed.
- Utility sends municipality draft agreement; negotiation process begins.
- Once agreement on price, terms, and conditions is reached and signed, utility has up to 60 days to file sale with PSC for approval (a 4-6 month process.).
- Municipality moves to electricity delivery-only service; no more monthly fixture charges (which was most of your bill).
- Pole rental fee will be assessed if municipality does not own poles.

LED REPLACEMENT WATTAGES FOR COMMON STREET LIGHT TYPES

Assumes an efficacy for the LEDs of at least 100 lumens per watt. The recently approved utility replacements for the 70-watt HPS (the most common fixture) range from 21-25 watts. **Please note that replacements should be based on lumen levels.**

Existing fixtures (watts)	Optimal LED replacement range (watts)
50w HPS	20-28w
70w HPS	20-28w
70w MH	20-28w
100w HPS	35-42w
100w MH	20-28w
100w MV	15-28w
150w HPS	48-54w
175w MV	20-28w
175w MH	48-54w

Existing fixtures (watts)	Optimal LED replacement range (watts)
250w MV	25-54w
250w MH	90-100w
250w HPS	85-100w
400w MV	35-80w
400w MH	90-120w
400w HPS	85-120w
1000w HPS	85-120w
1000w MV	85-100w

LED REPLACEMENTS FOR COMMON STREET LIGHT TYPES

Existing fixtures	Optimal LED replacement range (watts)	Recommended LED lumens (at 25-30 ft. mounting height)
50w HPS	20-28w	1900-2200
70w HPS	20-28w	2500-2800
70w MH	20-28w	2500-2800
100w HPS	35-42w	3800-4200
100w MH	20-28w	3800-4200
100w MV	15-28w	1900-2200
150w HPS	48-54w	5800-6400
175w MV	20-28w	2000-2400
175w MH	48-54w	5800-6400

Existing fixtures	Optimal LED replacement range (watts)	Recommended LED lumens (at 25-30 ft. mounting height)
250w MV	25-54w	3500-3800
250w MH	90-100w	11000-12000
250w HPS	85-100w	11000-12000
400w MV	35-80w	11000-12000
400w MH	90-120w	11000-12000
400w HPS	85-120w	11000-12000
1000w HPS	85-120w	11000-12000
1000w MV	85-100w	11000-12000

MHSC ONGOING SERVICES

- Training re Field Inventory
- Street light system design guidance

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