



# City of Cleveland Streetlight Service Update



March 10, 2010



# Agenda

1. Purchase Summary
2. Streetlight Infrastructure
3. Pre-purchase CPP Streetlight Services
4. CPP Enhanced Streetlight Services
5. Opportunities
6. New Street Lighting Technology



# 1. CEI Streetlight Agreement Terms

## Summary

- **September 2008, Cleveland and CEI agreed on a purchase price for CEI streetlight facilities in Cleveland at \$4 million.**
- **CPP to provide enhanced services giving Cleveland direct control over all streetlights in the City.**
- **CPP to use CEI's municipal owned and maintained streetlight tariff to serve power to the former CEI streetlights. (That rate is lower than CPP's own cost).**



## Summary of Benefits to General Fund

- **The General Fund to pay its streetlight bill to CPP. CPP to pay CEI for the power to serve CEI's former streetlights. CPP will continue to use its own tariff for CPP's streetlights**
- **The plan was that CPP would not increase cost to the General fund but would continue to charge the City what CEI charged**
- **CPP's purchase helped the City avoid CEI's new fees and charges that would have applied with every CEI visit to inspect, maintain and/or repair *their* streetlights**



## 2. Streetlight Infrastructure

- Both Cleveland Public Power and CEI maintained street lighting within the City of Cleveland Corporate limits.

CPP	45,858 units
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CEI	18,170 units
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- Cleveland Public Power maintained street lighting in Ward 1-21 with higher concentration in Wards 1-16.
- CEI had street lights in Wards 1-21 also with its highest concentration in Wards 17-21.



## CPP & CEI Streetlights located in the City of Cleveland

Class	FE/CEI	CPP	Combined
175W Mercury Vapor	4,837	5,858	10,695
250W Mercury Vapor	535	1,360	1,895
400W Mercury Vapor	1,044	8,168	9,212
700W Mercury Vapor	0	154	154
1000W Mercury Vapor	0	714	714
100W High Pressure Sodium	1,516	2,923	4,439
150W High Pressure Sodium	6,428	17,239	23,667
250W High Pressure Sodium	2,555	4,655	7,210
400W High Pressure Sodium	<u>1,255</u>	<u>4,787</u>	<u>6,042</u>
<b>Total</b>	<b>18,170</b>	<b>45,858</b>	<b>64,028</b>



### 3. Pre Purchase CPP Streetlight Services

- **Pre- Streetlight Purchase Staffing**
  - Bureau of Streetlights
    - Administration: 3 including Bureau Chief, and T&D Inspector (one person retired in July)
  - Operations
    - Two, 2 man night bulbing crews
    - Two/three 3 man streetlight crews, “multipurpose” typically on ECTP, or Battery Park
    - (CPP trouble crews, “multipurpose”)
- **Pre- Streetlight Purchase Vehicles**
  - 2 bucket trucks



## Pre Purchase Process

- **CPP Streetlight Hotline 621-LITE (5483)**
  - Callers left messages on the Hotline
  - Messages were to be checked daily
  - Info retrieved and entered into Excel Spreadsheet
  - Excel spreadsheet (recorded time of call, name, phone number, address on the streetlight complaint)
  - Process lacked tracking and call back features
- **CPP Dispatch also received streetlight complaints**
- **Maintenance Process**
  - Night Bulb Crews- make repairs as needed
  - (Trouble crews respond to Hotline calls and also respond to Dispatch calls)

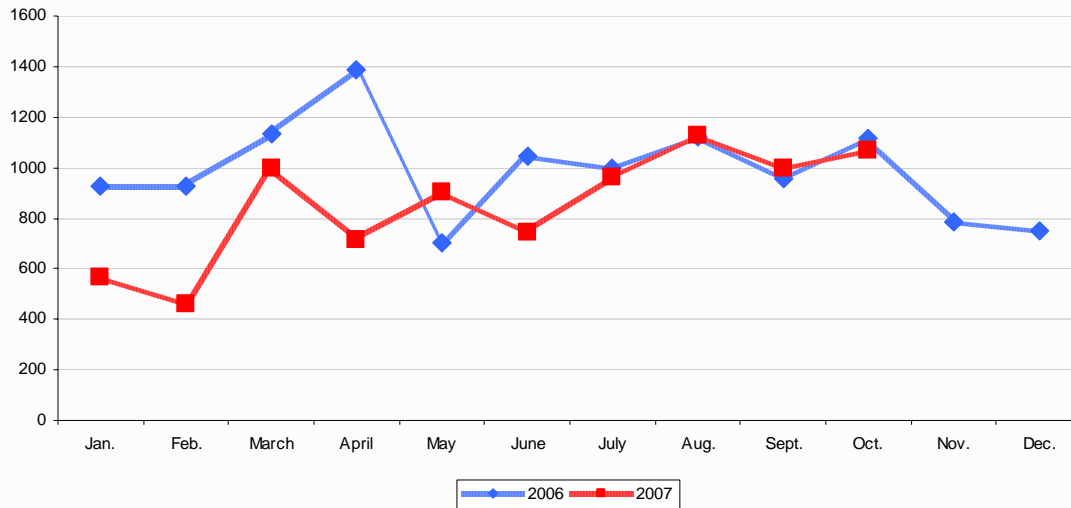




# Pre Streetlight Purchase Complaints

## Streetlight Calls to CPP Dispatch

CPP Streetlight Replacement Calls

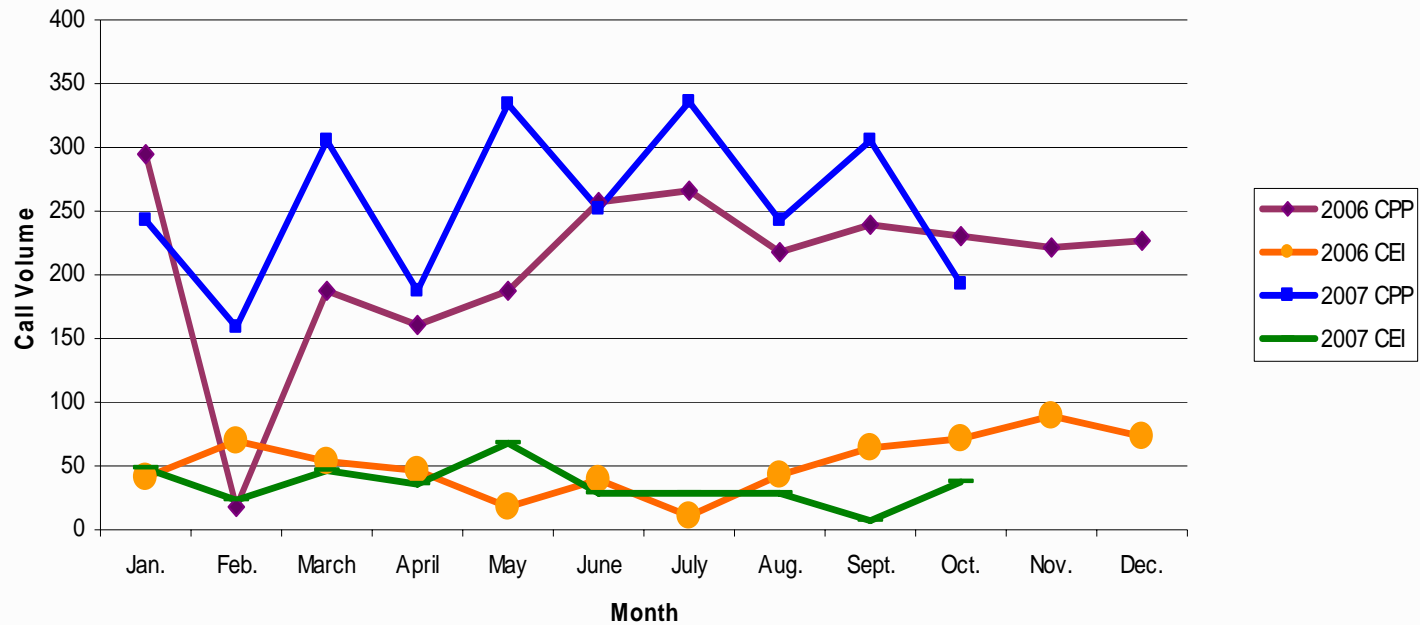


- Response time: prior to 2009 greater than 90 days



# Pre Streetlight Purchase Complaints

CPP Streetlight Hotline Calls





## 4. CPP Enhanced Streetlight Services

- **Post Streetlight Purchase Staff**
  - **Bureau of Streetlights**
    - Administration: 6 including Bureau Chief, and T&D Inspector, and Assistant Superintendent
  - **Operations**
    - CPP added low tension lineman to expanded streetlight service staff
    - Six additional Streetlight crew members
    - Four – two men Streetlight maintenance crews
    - Three Night bulber crews



# CPP Enhanced Streetlight Services

## Continued

### **Post Streetlight Purchase Vehicles**

- One bucket truck added in '08
- One bucket truck in '09
- One additional vehicle added in '09

### **Inventory**

- Procurement of additional fixtures, luminaries, poles, mast arms, wires and more
- Limited number of fixtures unique to CEI



# CPP Enhanced Streetlight Services

## Continued

### **Post Streetlight Purchase Process**

- CPP's customer Complaint And Tracking System ("CATS") went live February 2009
- City residents were encouraged to call the Hotline to report streetlight complaints
- Detailed information is requested during each call to enable transparency and a faster response.
- A call back feature was included to provide post repair information. If customers are not satisfied, they could call to report any follow-up action needed.



# CPP Enhanced Streetlight Services

Continued

- CATS statistics:
    - Number of Complaints to date: 21,884
    - Number of Complaints addressed: 20,760
    - Number of Complaints received 2010: 6,470
    - Number Complaint addressed 2010: 5,761  
(This is 38% of last year's total)
    - Number of repeat calls on the same complaint: <3%
    - 2009 Average response time: 17 days
    - 25% were service in less than 7 days
- Prior to 2009 average response time was greater than 90 days*



## Streetlight Outage Statistics

As of 3-09-10

Streetlight Complaints today in the queue **709**

Streetlights are on Downtown **97%**

Scattered lights out **3%**

Circuits out: **2**



## 5. Opportunities

- **CATS – the system works**
  - Repeat call back problems addressed
  - Work incorrectly reported as complete is *infrequent*
  - Additional Q.C. measures are being implemented
  - After One Year of Use Most Common Problem With CATS: not everyone uses the system
    - We are often called about streetlights by those who have not entered their complaints into the CATS system
    - Such calls occur beyond CPP's normal operating procedures and are not tracked in CATS





## Short term Strategies

### **Implement Quality Control Measures**

- Identify and mark month and year registry of all bulbs and fixtures prior to installation

### **Upgrade specification for street lighting material.**

- Upgrade CATS
- Add an additional message rerouting callers who are calling for multiple lights out to a live Dispatcher in Trouble Dept.
- Add more customer service option

### **Redefine Roles and Responsibilities**

- Optimize resource allocation and work assignments



## 6. New Streetlighting Technology

**Cleveland's ownership of all streetlights in the City enables it to look at City-wide solutions to street lighting needs.**

- CPP has investigated a number of cutting edge technologies that address many of the common problems we hear today.

LED installations may include some additional infrastructure updates.



## Use of New Technology

### (A) Currently negotiating for LED streetlights

- LEDs require less maintenance
- LEDs have longer life spans and warranties
- LEDs offer a better quality of light
- LEDs use less electricity
- LEDs are environmentally friendly
  
- May include capital project for the downtown area

*Legislation soon to be introduced*



## Use of New Technology

### **(B) SMART Grid Streetlight Technology**

- CPP has reviewed technology that will enable it to proactively respond to outages in real time
- This technology will minimize dependence on the customer calling CATS to report an outage
- The technology may be used with LEDs or our existing streetlight infrastructure
- The application we reviewed will notify us when circuits and/or individual street lights go out and monitors consumption and more



## Questions

**CPP Streetlight Hotline  
621-LITE (5483)**

**For a series of  
streetlights out call  
664-3922 ext. 211**

