



# THE TIME IS NOW FOR LED LIGHTING

March 9<sup>th</sup>, 2016

# WHAT GIVES ME THE NERVE TO STAND UP HERE TODAY?

SOME BACKGROUND

It started in 2008.....

# EXAMPLE OF RATE OF RETURN BY CUSTOMER CLASS RESULTING FROM RATES

- Total Company – 4.43%
- Residential (811) – 3.14%
- Small Commercial (822) – 8.77%
- Large Commercial (824) – 7.56%
- Traffic Lighting – 24.52%
- Street Lighting -8.53%
- Total Retail -4.37%

Source: Northern Indiana Public Service Company, Cause No. 41746, Respondent's Exhibit  
RDG-2

# PAYMENTS BE A MUNICIPALITY FOR STREET LIGHTING

The municipality shall make to the utility operating the lighting system all payments required to be made to the utility for its service, in strict accordance with the terms of the contract or order under which the utility is operating. **The municipality shall make the payments from its general fund or from a fund set aside for street lighting purposes, and shall be reimbursed for payments made in behalf of property owners by the collection of the assessments as provided in this chapter.**

*As added by Acts 1981, P.L. 309, SEC. 82. - See more at: <http://codes.lp.findlaw.com/incode/36/9/9/36-9-9-7#sthash.NRTD2JnR.dpuf>*

# Cause No. 41746

## Other Matters of Interest

There were 9 interveners:

1. Citizens Action Coalition
2. United Senior Action, Ispat Inland Steel, Inc.
3. LTV Steel Company, Inc.
4. Unilever Home and Personal Care USA
5. Central Soya Company
6. Praxair
7. U.S. Steel Corporation
8. Bethlehem Steel Corporation
9. Kroger Company

# INDIANA MUNICIPAL UTILITY GROUP

- TOWN OF WINFIELD
- TOWN OF SCHERERVILLE
- TOWN OF HIGHLAND
  - TOWN OF DYER
  - TOWN OF GRIFFITH
- TOWN OF MUNSTER
- CITY OF EAST CHICAGO
- CITY OF VALPORAISO

# Doctor Robert Kramer

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[https://myweb.in.gov/IURC/eds/Modules/Ecms/Cases/Docketed\\_Cases/ViewDocument.aspx?  
DocID=0900b631801d2d53](https://myweb.in.gov/IURC/eds/Modules/Ecms/Cases/Docketed_Cases/ViewDocument.aspx?DocID=0900b631801d2d53)

[https://myweb.in.gov/IURC/eds/Modules/Ecms/Cases/Docketed\\_Cases/ViewDocument.aspx?  
DocID=0900b631801d3085](https://myweb.in.gov/IURC/eds/Modules/Ecms/Cases/Docketed_Cases/ViewDocument.aspx?DocID=0900b631801d3085)

# THE TIME IS NOW FOR SEVERAL REASONS

## • THE TECHNOLOGY

- LED'S HAVE A 10 YEAR WARRANTY
- LED'S ARE LIGHTER THAN OLDER FIXTURES
- LED'S ARE MORE DIRECTIONAL THAN COMPETING LIGHT SOURCES
- EXCELLENT LIGHT COLOR CHARACTERISTICS
- FULL DIMMING CAPABILITY
- RELIABILITY

## • TARIFF RECOGNITION

- LED TARIFFS ARE BEGINNING TO BE RECOGNIZED WITHIN TARIFFS
- RATES FOR STREET LIGHTS ARE BECOMING MORE TRANSPARENT
- LED LIGHTING WILL BE AVAILABLE IN AREAS OF THE STATE OF INDIANA BY YEAR END
- INVESTOR OWNED UTILITIES WITHOUT SPECIFIC TARIFFS ARE BEGINNING TO CONSIDER OFFERING LED TARIFFS



# THE TIME IS NOW FOR SEVERAL REASONS

- **COST CONSIDERATIONS**

- LED'S ARE GETTING LESS EXPENSIVE WHILE HPS LUMINAIRES MORE EXPENSIVE
- USES UP TO 60% LESS ENERGY THAN HPS
- STUDIES HAVE FOUND THAT MAINTENANCE COSTS CAN BE HALF OF THAT OF OLDER TECHNOLOGY
- LED'S HAVE LESS LUMEN DEPRECIATION THAN HPS

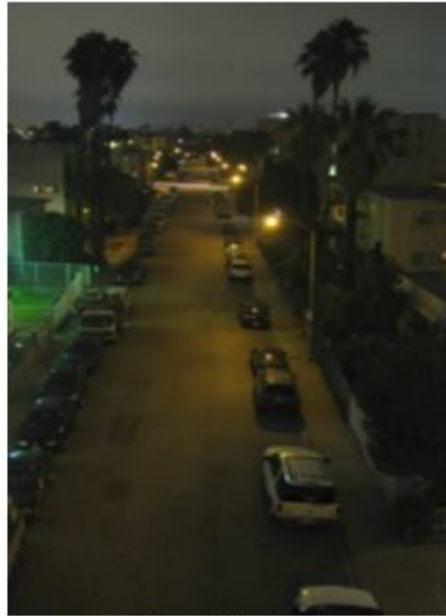
- **SAFETY CONSIDERATIONS**

- BETTER VISUAL CLARITY COMPARED TO OLDER TECHNOLOGY
- IMPROVED LIGHT FOCUSING
- LESS MAINTENANCE EQUATES WITH FEWER WORKER ACCIDENTS
- BETTER LIGHT PERCEPTION
- LIGHTING LEVELS CAN BE CORRELATED WITH REACTION TIME





HPS

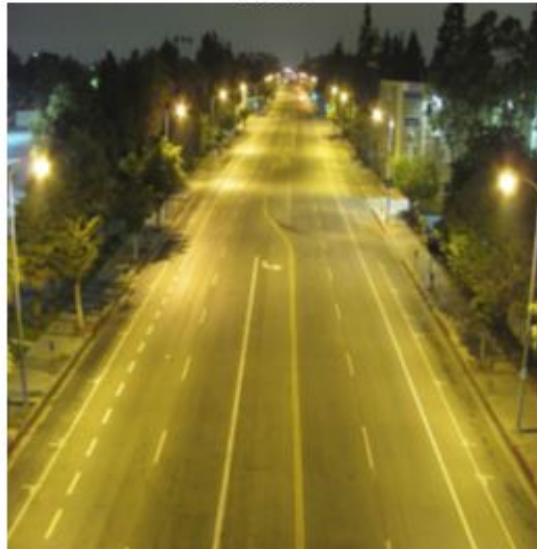


LED

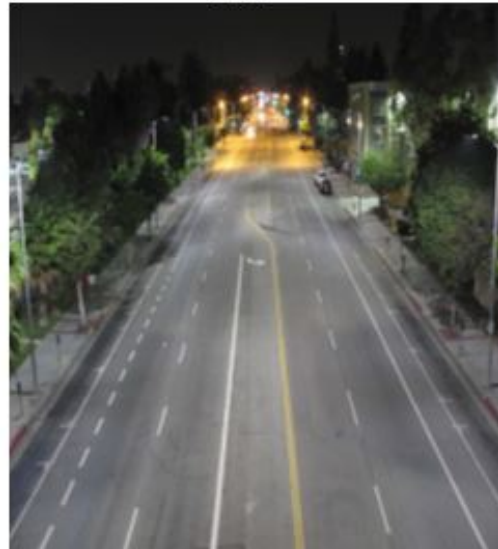


La Mirada Ave. – Seward St. to Wilcox Ave.  
Los Angeles, CA

HPS

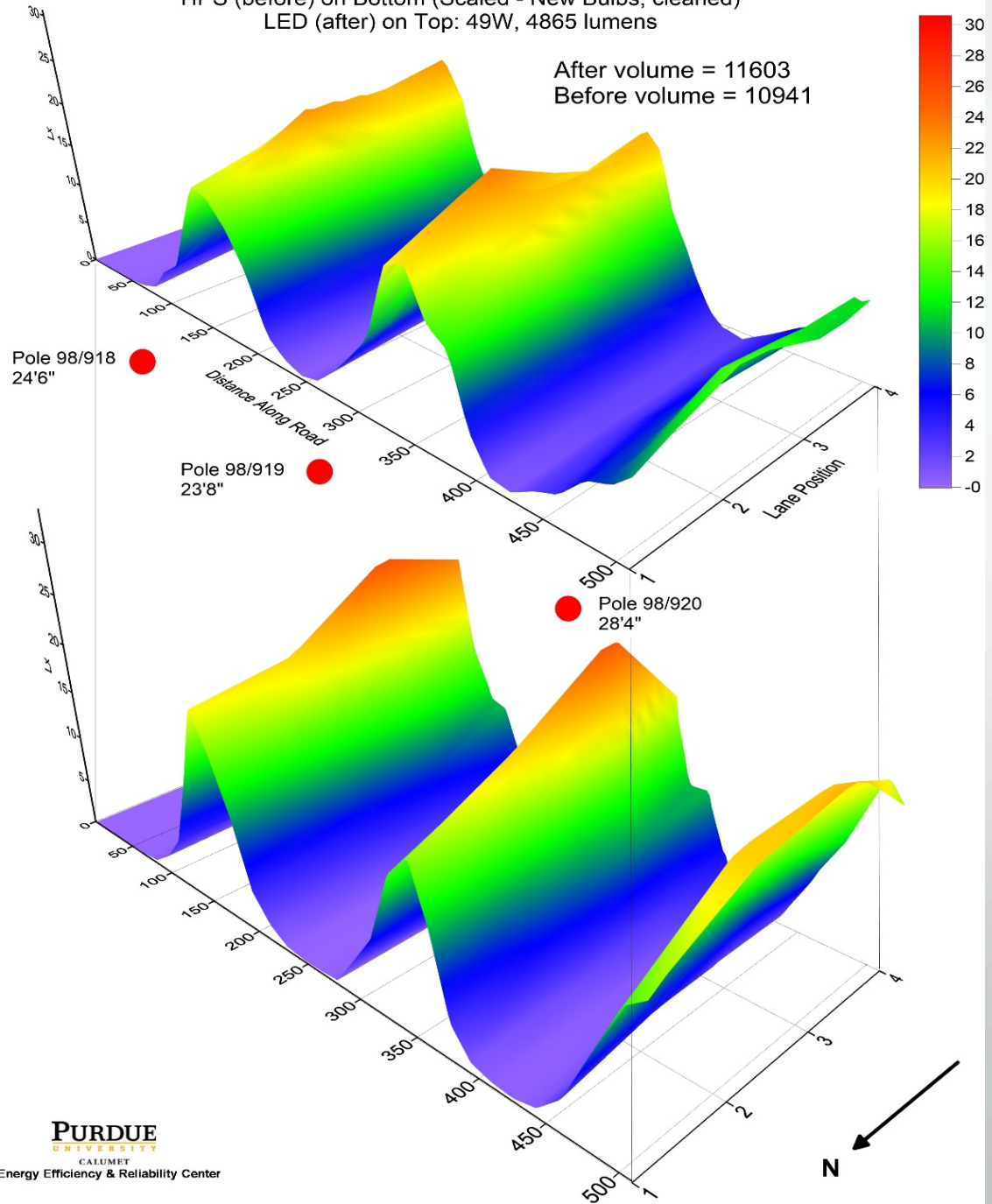


LED



Hoover St. – 32<sup>nd</sup> St. to 30<sup>th</sup> St.  
Los Angeles, CA

77th Ave., Dyer COMPARISON - 100W HPS Equivalent  
HPS (before) on Bottom (Scaled - New Bulbs, cleaned)  
LED (after) on Top: 49W, 4865 lumens



# CITIES WHERE ANALYSES WERE DONE

- CITY OF BOSTON
- CITY OF LAS VEGAS
- SEATTLE
- ANN ARBOR
- LOS ANGELES
- KANSAS CITY, MISSOURI
- NEW YORK CITY
- PHILADELPHIA
- SAN FRANCISCO

# THE TIME IS NOW FOR SEVERAL MORE REASONS

- Enhanced Economic Development
- Promotion of Urban Renewal
- Greater Reliability
- Aesthetics
- Street Light Systems are Mostly Completely Depreciated

# CURRENT AND PROSPECTIVE LED TARIFFS

- Indianapolis Power and Light has one applicable to 8 multi-light fixtures on the Circle. Put there at the specific request of the City of Indianapolis. However, LED tariffs are pending approval
- Duke Energy ceased charging for new lighting except through a contract  
<http://www.duke-energy.com/pdfs/Indiana-IURC-Agreement.pdf>
- Indian Michigan Power Tariff has also ceased charging for new lighting except under contract for lights it owns. Appears to be a one year auto-renew contract



# CURRENT AND PROSPECTIVE LED TARIFFS

- Vectren appears to own all of the street lights within its service territory, as there is no discussion of customer owned street lights. Nor a discussion of LED lights or costs associated with them.
- Northern Indiana Public Service Company is on the cusp of having its first LED tariff approved.
  - It is a onesy/twosey rate
  - Later this spring we hope to see a mass retrofit rate applicable to all of their street lights

# NIPSCO MASS RETROFIT PROGRAM

- Nipsco and municipalities will purchase luminaire's under separate but equal RFP's
- Nipsco will issue an RFP for installation of new fixtures
- At least some municipalities will issue an RFP for installation of new fixtures
  - Thought is to use an inter local agreement among the Cities and Towns
  - Cities and Towns to retrofit their fixtures at the same time as Nipsco changes out theirs

# Installation Costs

## Investor Owned

1. No incentive to minimize costs
2. Income Taxes
3. Return on Investment
4. Overhead Loadings

## Municipally Owned

- Every incentive to minimize costs
- No Income Taxes
- Alternative Cost to Installation
- Very few Overhead Loadings

Thank you!

Ted Sommer

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