Menasha

Memorandum

Date: August 12, 2009

To: Common Council

From: Adam Alix, Asst. Superintendent of Buildings & Parks AA

Re: Lighting Proposals

Attached is a summary of the lighting proposals received in response to our request looking to take advantage of the financial incentives currently available to upgrade the existing lighting within the City's buildings. You will notice that I have made adjustments to the proposals in an attempt to provide an apples to apples format for comparison. The adjustments are to either equate the same number of fixtures or for type of fixtures to provide the same level of lighting that currently exists. Likewise, adjustments were made to the proposed annual energy savings as well to account for the differences in the proposals.

In the end the two proposals that took into account most all the lighting in the City's buildings, came out fairly close. The adjusted cost difference is approximately $1700, based on conservative cost estimates, and the projected annual savings are only about $300 apart. When factoring in the warranty information and assigning some value, to it I feel that it only brings the overall costs even closer. As for Beck Electric's proposal, they only provided a quote for replacing the Metal Halide fixtures at the Public Works Facility which obviously affords us the greatest energy savings to be realized with the least amount of cost. This does raise the concern as to what type of payback warrants incurring the expense. For example, both proposals that addressed the Pool show an annual energy savings of $85 at a cost of somewhere around $650 after incentives for a simple payback of around 8 years. Does it pay to incur this cost now at a building that is only open for roughly 3 months out of the year or do we look to upgrade when the lights require maintenance?

In discussions with vendors and others, there doesn't seem to be a hard fast rule of thumb as to what kind of payback is most desirable. Some have upgraded with a projected 8 year payback because they felt it was the right thing to do being Green. I'm of the opinion that with the bonus incentives currently available, it may make sense to stretch the paybacks out a bit and complete the work. A point to be made here too is that in calculating the paybacks assumptions have been made regarding the burn hours of the lighting and there is the possibility that the real energy savings may not reach those that have been proposed. However, I am certain that, outside of the Public Works Facility, we have no plans to move out of any of the other buildings and that real savings will be realized over time making this a worth while project.

In addition, the Beck Electric proposal suggests the use of controls to further save energy and has it listed as an option. I believe that at this time we concentrate on base load reduction and continue to research the addition of controls to further reduce energy consumption and bring that forward at a later date. I would like to think there will still be some incentives available in the future, maybe not quite to the extent of this fall.

Having had time to review all of this information I recommend the following:

- The City purchase the Orion six bulb fixture directly and install them ourselves with DPW staff as they require no wiring, hang and plug them in. The modular design of these fixtures will allow us to easily look at adding controls to the lighting system and can be moved to a new facility when that happens.

- Contract with Faith Technologies to retrofit the existing light fixtures for the rest of the Public Works Facility, the Public Protection Facility, the Senior Center and City Hall.

Cost Summary of Recommendation

	Costs	Incentives	Net Cost	Projected Annual Savings	Payback
Public Works Facility					
Metal Halides	$ 7,916.56	$ 6,550.00	$ 1,366.56	$ 3,246.00	0.42 yrs
T12's	$ 5,625.00	$ 2,095.00	$ 3,530.00	$ 1,113.00	3.17 yrs
PPF	$11,287.00	$ 3,754.00	$ 7,533.00	$ 2,585.00	2.91 yrs
Senior Center	$ 3,306.00	$ 1,066.00	$ 2,240.00	$ 587.00	3.82 yrs
City Hall	$ 9,622.00	$ 3,288.00	$ 6,334.00	$ 1,548.00	4.09 yrs
Totals	$37,756.56	$16,753.00	$21,003.56	$ 9,079.00	2.31 yrs

S:\Adam Alix\August 12, 2009 lighting upgrade.doc

2009 Lighting Proposal Summaries

Faith Technologies

Costs

Proposal	$50,684.00	
less:Station 36 Deduct	$ 3,109.00	
Net Proposed Cost		$47,575.00
less: CFL costs		$ 330.00 -a
Adjusted Proposed Cost		$47,245.00

Incentives

Focus on Energy	$14,643.00	
less: St. 36 deduct	$ (800.00)	
MU Incentive	$ 5,070.00	
less: St. 36 deduct	$ (311.00)	
Proposed Incentives	$18,602.00	
Adjusted Proposed Incentives		$18,602.00
Net Project Cost		$28,643.00

Warranty-Includes labor for full 5 years on ballasts, others are manufacturers warranty

Annual Savings

Energy Savings		$ 9,805.00
less:St. 36 deduct	$ (406.00)	
less:City Hall T8s	$ (805.32)	
Less:CFL not list in other proposal	$ (676.38)	
		$ (1,887.70)
Total Proposed Annual Savings		$ 7,917.30
Simple Payback		3.62 yrs

Orion/Cummings

Costs

Proposal	$32,002.00	
plus:Contingency	$ 1,139.00	
Net Proposed Cost		$33,141.00
Plus: PWF fixtures		$ 975.00 -b
City Hall 147 fixtures @ $45		$ 6,615.00 -c
PPF 15 fixtures @ $45		$ 675.00 -c
Senior Center 8 fixtures @ $45		$ 360.00 -c
Adjusted Proposed Cost		$41,766.00

Incentives

Focus on Energy	$11,622.00	
MU Incentive	$ 3,200.00	
Proposed Incentives	$14,822.00	
Adjusted Proposed Incentives		$14,822.00
Net Project Cost		$26,944.00

Warranty-Manufacturer's warranty with labor included as long as contingency money is available

Annual Savings

Energy Savings		$ 9,923.00
Less:PWF fixtures 14056kwh	$ 1,265.00	
Adj. existing kwh 4769	$ 429.00	$ 1,694.00
Total Proposed Annual Savings		$ 8,229.00
Simple Payback		3.27 yrs

Beck Electric

Costs

Proposal	$14,577.00 -*	
plus:4 fixtures	$ 911.00	
Total Cost		$15,488.00

*64 MH fixtures only

Incentives

Focus on Energy	$ 5,760.00	
plus: 4 fixtures	$ 360.00	
MU Incentive	$ 1,549.00	
Total Incentives		$ 7,669.00
Net Project Cost		$ 7,819.00

Annual Savings

Energy Savings	$ 3,115.00
plus: 4 fixtures	$ 179.00
Total Proposed Annual Savings	$ 3,294.00
Simple Payback	2.37 yrs

a- 66 CFL's at $5.00
b- 30fixtures @$30 15 @ $5
c- estimated T8 retro $21.28 / kit & $23.60/labor/kit

Energy Savings Summary — Total Scope

Annual Usage & Savings (kWh)		Annual Costs & Savings		
Existing Lighting System	227,072	Existing Lighting System	$20,437	
Proposed Lighting System	119,473	Proposed Lighting System	$10,752	
Lighting Energy Saved	107,598			
Total Energy Savings	**47%**	**Total Annual Savings**	**$9,685**	
		***Assumes charges of 0.09*	*per KWh*	
		ROI (return on investment)		**31%**
		Cost of Components & Installation		**$50,684**
		- WFOE Incentive		$14,643
		- Menasha Utilities Incentive		$5,070
		Net Cost		**$30,971**
		Simple Payback (years)		3.12

Energy Savings Summary — City Garage

Annual Usage & Savings (kWh)		Annual Costs & Savings		
Existing Lighting System	96,888	Existing Lighting System	$8,720	
Proposed Lighting System	47,528	Proposed Lighting System	$4,277	
Lighting Energy Saved	49,360			
Total Energy Savings	**51%**	**Total Annual Savings**	**$4,442**	
		***Assumes charges of 0.09*	*per KWh*	
		ROI (return on investment)		**39%**
		Cost of Components & Installation		**$21,047**
		- WFOE Incentive		$7,652
		- Menasha Utilities Incentive		$2,105
		Net Cost		**$11,290**
		Simple Payback (years)		2.54

Energy Savings Summary — Memorial Building

Annual Usage & Savings (kWh)		Annual Costs & Savings		
Existing Lighting System	3,254	Existing Lighting System	$293	
Proposed Lighting System	1,583	Proposed Lighting System	$142	
Lighting Energy Saved	1,671			
Total Energy Savings	**51%**	**Total Annual Savings**	**$150**	
		***Assumes charges of 0.09*	*per KWh*	
		ROI (return on investment)		**17%**
		Cost of Components & Installation		**$1,256**
		- WFOE Incentive		$241
		- Menasha Utilities Incentive		$126
		Net Cost		**$889**
		Simple Payback (years)		5.91

Energy Savings Summary — Police and Fire

Annual Usage & Savings (kWh)		Annual Costs & Savings		
Existing Lighting System	58,823	Existing Lighting System	$5,294	
Proposed Lighting System	30,097	Proposed Lighting System	$2,709	
Lighting Energy Saved	28,725			
Total Energy Savings	**49%**	**Total Annual Savings**	**$2,585**	
		***Assumes charges of 0.09*	*per KWh*	
		ROI (return on investment)		**34%**
		Cost of Components & Installation		**$11,287**
		- WFOE Incentive		$2,625
		- Menasha Utilities Incentive		$1,129
		Net Cost		**$7,533**
		Simple Payback (years)		2.91

Energy Savings Summary — Pool

Annual Usage & Savings (kWh)		Annual Costs & Savings		
Existing Lighting System	1,841	Existing Lighting System	$166	
Proposed Lighting System	887	Proposed Lighting System	$80	
Lighting Energy Saved	954			
Total Energy Savings	**52%**	**Total Annual Savings**	**$86**	
		***Assumes charges of 0.09*	*per KWh*	
		ROI (return on investment)		**12%**
		Cost of Components & Installation		**$1,057**
		- WFOE Incentive		$264
		- Menasha Utilities Incentive		$106
		Net Cost		**$687**
		Simple Payback (years)		8.00

Energy Savings Summary — Senior Center

Annual Usage & Savings (kWh)		Annual Costs & Savings		
Existing Lighting System	13,291	Existing Lighting System	$1,196	
Proposed Lighting System	6,767	Proposed Lighting System	$609	
Lighting Energy Saved	6,524			
Total Energy Savings	**49%**	**Total Annual Savings**	**$587**	
		***Assumes charges of 0.09*	*per KWh*	
		ROI (return on investment)		**26%**
		Cost of Components & Installation		**$3,306**
		-WFOE Incentive		$735
		- Menasha Utilities Incentive		$331
		Net Cost		**$2,241**
		Simple Payback (years)		3.82

Energy Savings Summary — City Hall

Annual Usage & Savings (kWh)		Annual Costs & Savings		
Existing Lighting System	40,193	Existing Lighting System	$3,617	
Proposed Lighting System	22,996	Proposed Lighting System	$2,070	
Lighting Energy Saved	17,197			
Total Energy Savings	**43%**	**Total Annual Savings**	**$1,548**	
		***Assumes charges of 0.09*	*per KWh*	
		ROI (return on investment)		**24%**
		Cost of Components & Installation		**$9,622**
		- WFOE Incentive		$2,326
		- Menasha Utilities Incentive		$962
		Net Cost		**$6,334**
		Simple Payback (years)		4.09

Energy Savings Summary — Fire Station

Annual Usage & Savings (kWh)		Annual Costs & Savings		
Existing Lighting System	14,579	Existing Lighting System	$1,312	
Proposed Lighting System	10,064	Proposed Lighting System	$906	
Lighting Energy Saved	4,515			
Total Energy Savings	**31%**	**Total Annual Savings**	**$406**	
		***Assumes charges of 0.09*	*per KWh*	
		ROI (return on investment)		**20%**
		Cost of Components & Installation		**$3,109**
		-WFOE Incentive		$800
		- Menasha Utilities Incentive		$311
		Net Cost		**$1,998**
		Simple Payback (years)		4.92

Energy Saving Summary

Annual Usage & Savings (kWh)		Annual Costs & Savings	
Existing Lighting System	70,444	Existing Lighting System	$6,340
Proposed Lighting System	33,458	Proposed Lighting System	$3,011
Lighting Energy Saved	36,987		
Estimated Cooling Load Savings	0	Estimated Cooling Savings	$0
Total Energy Savings	**53%**	**Total Annual Savings**	**$3,329**

***Assumes charges of 0.09 per KWh*

ROI (return on investment)	**43%**
Cost of Components & Installation	**$15,422**
- WFOE Incentive	$6,120
- Menasha Utilities Incentive	$1,542
Net Cost	**$7,760**
Simple Payback (years)	2.33

Cooling Calculation		
Geographic Location	0	None
Fraction of year of Cooling Season	0.00	
Lighting load met by Cooling	0.90	
System coefficient of performance	2.7	
kWh of air cooling energy saved per kWh of lighting savings	0.00	

Calculation derived from research conducted for the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE,) and validated by DOE-2 computer runs.

LONG TERM PROJECTION OF SAVINGS

1 Year	$	3,329
3 Years	$	9,986
5 Years	$	16,644
10 Years	$	33,288

None	0
Milwaukee	20.9
Green Bay	17.5
Madison	20.2

City of Menasha • Office of the Mayor
Donald Merkes, Mayor
dmerkes@ci.menasha.wi.us

Menasha

Memorandum

TO: Common Council

FROM: Mayor Merkes DM

SUBJECT: Lighting Proposal

DATE: 13 August 2009

WPPI is offering 0% interest loans to member communities up to $500,000 per community to finance energy efficiency projects. The lighting upgrade proposal attached meets the criteria for this program and I would recommend that we fund it over 10 years.

Annual cost to the city through debt service is estimated at $2,100 with annual energy savings estimated at $9,079 for a net budgetary savings of $6,979 annually.

140 Main Street • Menasha, Wisconsin 54952-3151 • (920) 967-3600 • Fax (920) 967-5273
www.cityofmenasha-wi.gov

WPPI energy
The way energy should be

Member Energy Efficiency and Renewable Energy Loan Application

This Member Energy Efficiency and Renewable Energy Loan Program is offered by WPPI Energy to encourage investment by its members in energy efficiency improvements. The program is designed to help members overcome the "first-cost" barriers associated with implementing energy efficiency and renewable energy projects, and to encourage members to lead by example within their communities.

To participate, submit to WPPI Energy a completed Loan Application with all required documentation. Additional terms and conditions are listed on the next page.

APPLICANT INFORMATION

Name of Member Organization

Member Utility

Utility Account Number

Name and Title of Contact Person

Date

PROPOSED PROJECT INFORMATION

Summarize the estimated project impacts in the table below, and attach to this Loan Application the following:

1. Written description detailing each of the proposed energy efficiency or renewable energy projects.
2. Identify any providers of technical assistance, including engineers, energy auditors, contractors, trade allies, or vendors. Include proposals listing equipment descriptions, technical details and project costs, payback, and ROI.
3. Estimates of savings showing all equations and assumptions used to determine the estimated project impacts below.
4. Project timelines stating all milestone dates such as budget approvals, design, equipment purchase, installation, etc.

		Estimated Project Impacts				
Description of Project	Total Project Cost [$]	Peak Demand Reduction [kW]	On-Peak Energy Reduction [kWh/year]	Off-Peak Energy Reduction [kWh/year]	Other Energy Reduction [Btu/year]	Annual Cost Savings [$/year]

Proposed Start Date

Proposed Completion Date

X

Signature of Utility Manager or WPPI Energy Board Director

FOR OFFICIAL USE ONLY

Total incentive amount for projects:

Requested Loan Amount:

Total Loan Amount (Requested Loan Amount - Incentives):

Origination Fee:

Monthly Loan Repayment Amount:

Loan Repayment Start Date:

Loan Repayment Method:

☐ Member will be invoiced monthly.

☐ Payment will be included on member's monthly wholesale power bill.

TERMS AND CONDITIONS

Eligibility

- All Proposed Projects must be planned for property owned by a WPPI Energy member utility or member municipality.
- Only energy efficiency (electric and natural gas) and renewable energy projects are eligible for funding under this program. It is possible that some distribution efficiency projects could qualify as energy efficiency projects.
- Distribution system efficiency projects will only qualify if the primary reason for the project is to achieve energy efficiency and the project has a payback based on energy savings of 10 years or less.
- Each WPPI Energy member is eligible for multiple 0% interest loans up to a total of $500,000. Each loan issued must be for a minimum of $5,000. Eligibility is subject to availability of loan funds.
- Energy efficiency projects must meet all minimum efficiency requirements and any other eligibility criteria as defined under the Efficiency Improvement Incentive Program (for electric efficiency) or by Focus on Energy (for natural gas efficiency).

Application Process

- Applicants must complete the Loan Application form and submit all requested documentation to be considered for funding through the Member Energy Efficiency and Renewable Energy Loan Program. The application materials should be submitted in hard copy format directly to a WPPI Energy Services Representative, or sent to:

  By U.S. Mail: WPPI Energy
  Member Energy Efficiency and Renewable Energy Loan Program
  1425 Corporate Center Drive
  Sun Prairie, WI 53590-9109

  Fax or electronic submittals are acceptable.
- Projects may not be started until an acceptance letter from WPPI Energy has been issued and all necessary loan documents (loan agreement and note) have been fully executed.
- To maintain eligibility for an incentive award, Proposed Project(s) may not be started and equipment may not be purchased until written approval is received in the form of an acceptance letter from WPPI Energy.
- Members may be asked to provide additional financial information as part of the review and approval process.
- Each loan will have a term of 10 years, with members making 120 equal payments over the 10-year term.
- All financing approved will include an origination fee equal to one percent of the loan amount.
- Loan payments for member utilities receiving loans will be included on the member's monthly wholesale power bill. Member municipal departments other than the utility will be invoiced by WPPI Energy on a monthly basis.
- If an application is approved for a loan, the member will have the lesser of 90 days or until the completion of the project to begin repayment.
- Depending on the scope and cost of the proposed project(s), WPPI Energy may conduct an inspection of the facility after the project completion date.
- Once a project is completed, the participating member must prepare and submit a one-page Certificate of Completion form documenting all invoicing and receipts.

Disclaimers

- WPPI Energy does not endorse any particular manufacturer, product or system design within this program.
- WPPI Energy does not expressly or implicitly warrant the performance of equipment purchased and/or installed for this program.
- WPPI Energy is not responsible for the proper disposal or recycling of any waste generated as a result of a Proposed Project.
- WPPI Energy is not liable for any damage caused by the installation of proposed equipment, nor for any damage caused by the malfunction of such equipment.
- WPPI Energy staff and the WPPI Energy Executive Committee reserve the right to modify or withdraw this loan program or to reject any application for any reason in their sole discretion.

BECK ELECTRIC INC.
500-C APPLETON STREET
MENASHA, WISCONSIN 54952
PHONE 920-886-7513
FAX 920-886-7514

CITY OF MENASHA
BUILDING AND SERVICES
ADAM ALIX
140 MAIN STREET
MENASHA, WISCONSIN 54952

RE: PROPOSAL FOR REPLACEMENT OF 400 WATT METAL HALIDE FIXTURES IN CITY GARAGE WITH 6 LIGHT 4 FOOT T-8 FLUORESCENT FIXTURES.

REPLACE 64 FIXTURES IN CITY GARAGE
THIS INCLUDES MAIN TRUCK BUILDING, MECHANICS SHOP, AND PARK DEPARTMENT AREAS.
THIS PRICE INCLUDES MATERIALS AND LABOR. $14,576.90

FOCUS REBATES $90.00 PER FIXTURE X 64 = $5760.00

$8816.90 NET COST AFTER REBATES

OPTION #1 MOTION SENSORS INSTALLED ON OUTSIDE ROWS OF FIXTURES IN TRUCK BAY AREA.
THIS PRICE INCLUDES MATERIALS AND LABOR $2388.80

FOCUS REBATES $40.00 PER FIXTURES X 30 = $1200.00

$1188.80 NET COST AFTER REBATES

SUBMITTED BY

MICHAEL C. BECK

BECK ELECTRIC INC.
500-C APPLETON STREET
MENASHA, WISCONSIN 54952
PHONE 920-886-7513
FAX 920-886-7514

CITY OF MENASHA
BUILDING AND SERVICES
ADAM ALIX
140 MAIN STREET
MENASHA, WISCONSIN 54952

RE: PROPOSAL FOR INSTALLING OF ENERGY EFFICIENT LIGHTING IN CITY OF MENASHA BUILDINGS.

ALL CALCULATIONS OF ENGRY SAVINGS AND PAYBACK TIMES ARE BASED SOLEY ON FOCUS ON ENGRY.

REBATE PROGRAMS USING THEIR BASIC REPLACEMENT STANDARDS.
DUE TO THE LIMITED TIME IN WHICH TO PREPARE AND ESTIMATE, NO CUSTOMER PROGRAMS WERE CALCULATED.
GIVEN LIMITED INFORMATION FROM MENASHA UTILITIES WHEN INQUIRING ABOUT INCENTIVES OR REBATES, NONE WAS FIGURED INTO ANY OF OUR CALCUTATIONS.
AFTER TOURING OF FACILITIES WITH A GRAYBAR REP. AND ADAM ALIX OF THE CITY OF MENASHA, WE CAME UP WITH A NUMBER OF DIFFERENT IDEAS AND OPTIONS FOR REWORKING THE OLDER FACILITIES, SUCH AS THE POLICE AND FIRE BUILDING, NONE OF WHICH FALL INTO THE STANDARD PLANS FOR FOCUS. DUE TO A QUICK DUE DATE WE DID NOT LOOK INTO THESE OPTIONS HOWEVER, FEEL THAT THEY SHOULD AT LEAST BE STUDIED BECAUSE THE BALLAST AND LAMP REPLACEMENT METHOD WHILE GIVING SOME ENERGY SAVINGS HAS A 7-10 YEAR PAYBACK.
IN CONVERSTAION WITH ADAM HE COMMENTED THAT THE CONDITION OF SOME OF THE EXISTING FIXTURES IS QUESTIONABLE ALSO WHICH WOULD ADD MORE COST INTO THE LAMP-BALLAST METHOD.

IN GOING THROUGH CITY HALL, THE ONLY AREAS WHERE ANY REBATES COULD BE OBTAINED WERE IN THE THIRD FLOOR HALLWAYS AND BASEMENT AREAS.
THE REST OF THE BUILDING HAS ELECTRONIC BALLASTS AND STANDARD T8 LAMPS WHICH IS FOCUSES REBATED LAMP AND BALLAST.

THE MEMORIAL BUILDING AND HISTORICAL SOCIETY WE RECOMMEND TO REPLACE IN A "AS NEEDED" BASIS. THE LACK OF BURN HOURS AND THE AGE AND STYLE OF THE FIXTURES, WHICH LEANS TOWARDS COMPLETE REPLACEMENT OF THE FIXTURES, GIVES A MIMINAL ENERGY SAVINGS, WHILE INCREASING PAY BACK TO 10-12 YEARS.

THE SENIOR CENTER HAS POTENTIAL FOR ENERGY SAVINGS BUT WITH THE WAY THE LIGHTING IS CURRENTLY CONTROLED THE BALLAST – LAMP REPLACEMENT METHOD DOES NOT GIVE THE BEST REBATES THROUGH FOCUS AND A CUSTOM PLAN SHOULD BE LOOKED INTO BEFORE MAKING ANY DECISIONS.

IN OUR INSPECTION OF THE CITY GARAGE AND PAINT SHOP AREA, WE FOUND THE MOST SAVINGS IN ENGRY USAGE TO BE OBTAINED WITH THE REPLACEMENT OF METAL HALIDE FIXTURES THROUGH OUT THE MAIN GARAGE FACILITY.
GIVEN THE AGE OF FLUORESCENT FIXTURES AND LIMITED OPTIONS THROUGH FOCUS ON ENGRY RE BALLASTING AND RE LAMPING OF THESE FIXTURES WE FOUND NOT TO BE COST EFFICIENT.
WE RECOMMEND THE REPLACEMENT OF BALLASTS AND LAMPS AT THE END OF LIFE OF EXISTING EQUIPMENT.

SIGN SHOP AND UN HEATED STORAGE SHOP OF THAT BUILDING, WE FOUND MANY DIFFERENT TYPES OF FIXTURES AND WOULD REQUIRE MORE TIME TO RESEARCH RETRO FITTING OF EXISTING FIXTURES TO MORE ENGRY EFFICIENT TYPES OF LAMPS AND BALLASTS.

I AM NOT COMFORTABLE WITH INSTALLING OF T8 LAMPS IN AN UNHEATED AREA OF SIGN SHOP. WOULD RATHER LOOK INTO THE OPTION OF USING MOTION SENSORS TO OPERATE EXISTING LIGHTING, WITH THE LITTLE AMOUNT OF TRAFFIC IN THIS BUILDING THIS WOULD BE MORE LIKELY TO BE THE MOST COST EFFICIENT.

SUBMITTED BY

MICHAEL C. BECK

GRAYBAR LIGHTING AUDIT

Company Name	City of Menasha - City Garage
Contact Name	Mike Beck
Address	
City, State, ZIP	
Phone	

Rep Name	Tim Olson
Auditor Name	
Project #	

Audit Date	7/16/2009
Proposal Date	7/24/2009
Blended kWh Rate	$0.095

(Derived from Monthly Elec. Bill $ Total / Total kWh purchased)

Hours of Operation	2080

System Voltage	
Total Sq. Footage	

Incentive Amount	$ 5,760.00

Show as a negative (-) number

Buildings Surveyed:	Yes	No	N/A
Main Buildings			
Storage / Out Buildings			
Fleet / Garage Buildings			
Other			

Confirm type of drawing(s) used to perform survey and attach			
CAD			
Evacuation			
Hand Drawing			
Regrid Drawing Worksheet			

Installer construction work space and storage requirements	
Size of space available	
Type & location of storage area	

Incumbent Electrical Contractor Information	
Company	Beck Electric
Contact	Mike Beck
Phone#	
Safety Training Requiremen	

Project Comments

The savings in the Garage could be much greater if occupancy sensors were installed on each fixture.
The fixtures quoted have the ability to have the occupancy sensors plugged in after or during install.
Occupancy sensors currently have a $30 rebate with a $10 incentive for installs completed by
September 30, 2009. Appropriate forms would need to be filed before ordering material.

2 lamp F40T12 fixtures. The burn hours do not allow adequate savings for
me to suggest moving forward with T8 lamp and T8 Electronic ballast replacements.
However, as product fails I would highly recommend updating at that time.

In the past I've seen average to huge savings when replacing ballasts and lamps for the
2 lamp F96T12 HO and F96T12 SL product. However, due to the timeline requested I will not
be quoting at this time.

FIXTURES: 1000-400-360-250-175-150-100 watt MH & HPS. 1x4x1, 1x4x2, 2x4x2, 2x4x3, 2x4x4, 2x2-U, 1x8x1-1x8x2PG, 1x8x2PT, 1x8x4, 1x8x4HO, 1x8x4VHO

POWER SUPPLY:15SB, 15TL, 20TL, HW-Cord, HW to Box, Relock/OCS, Proprietary. EXISTING HANGING:Hook, Eyelet, Chain, SH Pend., LG Pend., Surface Mount, From J-BOX.

EXISTING DETAIL INFORMATION

Area	Existing Fixture	Wattage	Existing Power Supply	Existing Hanging	Quantity	Total Wattage	Voltage	Notes
Garage	400w MH	460			45	20,700		
Park Maintenance	400w MH	460			3	1,380		
Maintenance Shop	400w MH	460			15	6,900		
Lock up Area	400w MH	460			1	460		

PROPOSED DETAIL INFORMATION

Area	Proposed Fixture	Wattage	Proposed Power Supply	Proposed Hanging	Lamp Type	Quantity	Total Wattage	Accessory	Quanti
Garage	2HB-632-MP	221				45	9945		
Park Maintenance	2HB-632-MP	221				3	663		
Maintenance Shop	2HB-632-MP	221				15	3315		
Lock up Area	2HB-632-MP	221				1	221		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		
							0		

Proposed Total Wattage	(14,144)
Proposed Wattage Savings	15,296
Proposed Energy Savings	-148%

Proposed Count	128

Faith Technologies
P.O. Box 627
Appleton, WI 54912-0627

Phone 920-738-1500
Fax 920-738-8987
www.faith-technologies.com

City Of Menasha
Menasha, WI
July 30, 2009

Submitted by: Mike Herbst – Superintendent (920)225-6607
Josh Hounsell – Business Development (920)915-4075
Dave Wiertzema – Project Manager (920)225-6533

General
Area

Lighting Proposal - Q# 80977

Objective: Upgrade Existing Lighting System

Executive Summary

This proposal is formulated to provide appropriate light levels & reduce energy consumption at various City of Menasha facilities located in Menasha, WI.

We are proposing multiple upgrades including the following:

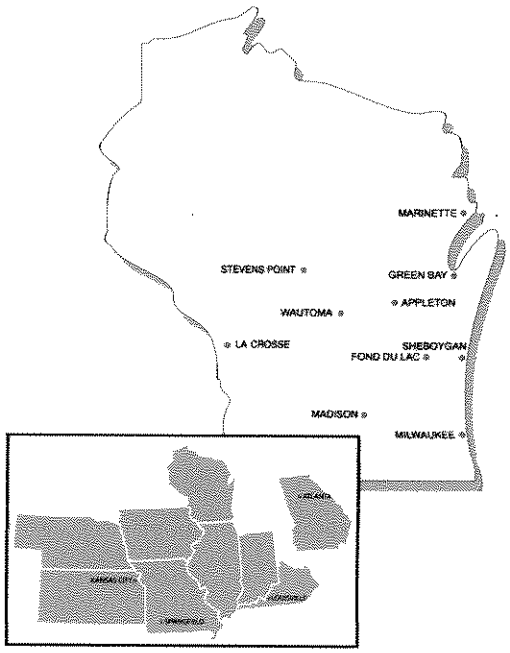
- **Retrofit of existing** 4' fluorescent fixtures in specified areas to 25 watt F32T8 fluorescent lamps and ballasts.
  - Retrofit existing fluorescent fixtures in the Garage and Fire Station areas to 32 watt F32T8 lamps and ballasts.
- **Relighting areas**
  - Replacing existing metal halide fixtures with F32T8 fixtures.
  - Replacing incandescent bulbs with compact fluorescent lamps.
  - Replacing existing fluorescent exit signs with LED exit fixtures.

This upgrade provides several advantages including:

- **Reducing the variety of lamps to stock for maintenance** – various 2', 4' & 8' T12 fluorescents & metal halide lamps will no longer need to be stocked for the areas listed in this proposal.
- **Less energy consumption**
  - T8 fluorescent up to **60%** less than HID & T12 fluorescent.
  - Compact fluorescent lamps over 7**0%** less than comparable incandescent.
  - Instant start capability allows proposed fixtures to be switched without delays associated with HID.
- **Longer lamp life with less depreciation**
  - 25 watt T8 lamps included in this proposal have a rated life of 40,000 hours, which is twice the rated life of existing lamps.
  - Compact fluorescent lamps are rated to last 6 times longer than incandescent.
  - Existing metal halide lamps lose 40% of their initial output after 8000 hours. T8 lamps maintain 93% of their initial output for the rated life of the lamp.
  - Less frequent lamp changes equate to reduced maintenance cost.
- **Better quality & quantity of light**
  - Improved color rendering. 85 CRI versus existing 65 CRI
  - Improved visibility generates additional benefits.

Why a lighting upgrade with Faith Technologies is a good idea?

- We are an established company with over 35 years of electrical service.
- We have a division dedicated to lighting projects, with over 15 years of experience.
- Our relationships with multiple manufacturers and familiarity with their products allow us to choose materials which perform best in our customer's specific application.
- We identify project incentive opportunities and prepare any necessary documents for rebates.
- Our customer service after project completion. Assistance with manufacturer's warranty claims.
- Strong emphasis on safety – current .55 EMR among industry best.



- We provide low cost lamp & ballast replacements when warranties have expired.
- Our locations throughout the state to provide prompt service.

Energy Savings Summary

Annual Usage & Savings (kWh)		Annual Costs & Savings	
Existing Lighting System	227,072	Existing Lighting System	$20,437
Proposed Lighting System	119,473	Proposed Lighting System	$10,752
Lighting Energy Saved	107,598		
Total Energy Savings	**47%**	**Total Annual Savings**	**$9,685**

***Assumes charges of 0.09 per KWh*

ROI (return on investment)	**31%**
Cost of Components & Installation	**$50,684**
- WFOE Incentive	$14,643
- Menasha Utilities Incentive	$5,070
Net Cost	**$30,971**
Simple Payback (years)	3.12

Customer Survey Report — City Garage

	Existing				New					
Area Description	Fixture Type	Qty	Watts	Annual Hrs	Fixture Type	Qty	Watts	Annual Hrs	Kwh Saved	Annual Savings
Garage	400 w MH	45	460	2340	HI 63296 w	45	220	2340	25,272	$2,274.48
Meeting Room	2 F40T12	12	62	2080	2 F32T8 LW T	12	48	2080	349	$31.45
Meeting Room	2 F40T12	4	62	2080	2 F32T8 LW	4	48	2080	116	$10.48
Men	2 F40T12	1	62	1080	2 F32T8 LW	1	48	1080	15	$1.36
Entrance	2 F40T12	1	62	2080	2 F32T8 LW	1	48	2080	29	$2.62
Women	2 F40T12	1	62	1080	2 F32T8 LW	1	48	1080	15	$1.36

Customer Survey Report — City Garage

Area Description	Existing Fixture Type	Existing Qty	Existing Watts	Existing Annual Hrs	New Fixture Type	New Qty	New Watts	New Annual Hrs	Kwh Saved	Annual Savings
Public Works Office	3 F40T12	9	117	2080	3 F32T8 LW	9	73	2080	824	$74.13
Public Works conf	3 F40T12 DS	4	117	2080	3 F32T8 LW DS	4	73	2080	366	$32.95
Back Hall	2 F40T12	2	74	2080	2 F32T8 LW	2	48	2080	108	$9.73
Office	3 F40T12 DS	2	117	2080	3 F32T8 LW DS	2	73	2080	183	$16.47
Kitchen	2 F96T12 HO	2	237	2080	4 F32T8 SK	2	108	2080	537	$48.30
Workshop	400 w MH	3	460	2080	HI 63296 w	3	220	2080	1,498	$134.78
Workshop	2 F96T12 HO	1	237	2080	Elim	1	0	2080	493	$44.37
Workshop	2 F20T12	1	44	2080	2 F17T8 LW	1	27	2080	35	$3.18
Workshop Mezz	400 w MH	1	460	2080	CS 43296	1	108	2080	732	$65.89
Workshop Mezz	2 F96T12 HO	2	237	2080	4 F32T8 SK	2	108	2080	537	$48.30
Park Maintenance	2 F40T12	6	74	2080	2 F32T8 LW T	6	48	2080	324	$29.20
Park Maintenance	2 F96T12 HO	1	237	2080	4 F32T8 SK	1	108	2080	268	$24.15
Park Maintenance	400 w MH	3	460	2080	HI 63296 w	3	220	2080	1,498	$134.78
Maintenance Shop	400 w MH	15	460	2080	HI 63296 w	15	220	2080	7,488	$673.92
Maintenance Office	2 F40T12	4	74	2080	2 F32T8 LW T	4	48	2080	216	$19.47
Maintenance Men	2 F40T12	1	74	500	2 F32T8 LW	1	48	500	13	$1.17
Maintenance Parts Room	Inc-Sealed	3		2080	NC	3		2080		
Maintenance Shop	2 F96T12 HO	2	237	2080	4 F32T8 SK	2	108	2080	537	$48.30
Maintenance Shop Mezz	2 F96T12 HO	2	237	2080	4 F32T8 SK	2	108	2080	537	$48.30
Maintenance Shop Mezz	2 F40T12	1	74	2080	2 F32T8 LW	1	48	2080	54	$4.87
Lock-up Area	400 w MH	1	460	2080	HI 63296 w	1	220	2080	499	$44.93
Lock-up Area Mezz	1 F40T12	2	43	2080	1 F32T8 LW T	2	24	2080	79	$7.11
Locked Area	90 w R40 Inc	1	90	2080	23 w Par 38	1	23	2080	139	$12.54
Sign Shop	2 F96T12 HO	22	237	2080	4 F32T8 RKw	22	108	2080	5,903	$531.27
Sign Shop	2 F96T12 SL	6	132	2080	4 F32T8 LW RKw	6	96	2080	449	$40.44
Sign Shop	4 F96T12 SL	1	264	2080	CS 43296 HI	1	146	2080	245	$22.09
Men	Inc				No Change					

Customer Survey Report — Memorial Building

Area Description	Existing Fixture Type	Existing Qty	Existing Watts	Existing Annual Hrs	New Fixture Type	New Qty	New Watts	New Annual Hrs	Kwh Saved	Annual Savings
All Areas	4F40T12	7	148	1040	4 F32T8 LW	7	77	1040	517	$46.52
All Areas	2 F40T12	3	74	1040	2 F32T8 LW	3	38	1040	112	$10.11
All Areas	2 F20T12	1	44	1040	2 F17T8 LW	1	27	1040	18	$1.59
All Areas	1 F40T12	1	43	1040	1 F32T8 LW	1	21	1040	23	$2.06
Upper Level	2 F40T12	10	74	1560	2 F32T8 LW	10	48	1560	406	$36.50
All Areas	Fluorescent Exits	4	20	8760	LED Exits	4	3	8760	596	$53.61

Customer Survey Report — Police & Fire

Area Description	Existing Fixture Type	Existing Qty	Existing Watts	Existing Annual Hrs	New Fixture Type	New Qty	New Watts	New Annual Hrs	Kwh Saved	Annual Savings
Entrance	72 w INC recessed	4	72	4368	18w CC CFL	4	18	4368	943	$84.91
Women	2 F40T12	1	74	2184	2 F32T8 LW	1	38	2184	79	$7.08
Men	2 F40T12	1	74	2184	2 F32T8 LW	1	38	2184	79	$7.08
Hall	2 F40T12	16	74	2184	2 F32T8 LW T	16	38	2184	1,258	$113.22
Hall	2 F40T12 U6	21	74	2184	2 F17T8 R	21	31	2184	1,972	$177.49
Operations Lieut.	4 F40T12 DS	4	148	4368	4 F32T8 LW DS	4	76	4368	1,258	$113.22
Men	60 w G30 INC	3	60	2184	8w G30 CC CFL	3	8	2184	341	$30.66
Women	CFL				No Change					
Interview A	4 F40T12	1	148	2184	4 F32T8 LW	1	77	2184	155	$13.96
Interview A	72 w INC	1	74	2184	18w CC CFL	1	18	2184	122	$11.01
Chief Office	4 F40T12	4	148	2912	4 F32T8 LW	4	77	2912	827	$74.43
Interview Control	INC-DIMMABLE	1								

Customer Survey Report — Police & Fire

Area Description	Existing Fixture Type	Existing Qty	Existing Watts	Existing Annual Hrs	New Fixture Type	New Qty	New Watts	New Annual Hrs	Kwh Saved	Annual Savings
Crime Prevention Area	4 F40T12	6	148	2912	4 F32T8 LW	6	77	2912	1,241	$111.65
Crime Prevention Conf.	4 F40T12 DS	2	148	2912	4 F32T8 LW DS	2	76	2912	419	$37.74
Crime Prevention St	2 F40T12	1	74	2912	2 F32T8 LW	1	38	2912	105	$9.43
Crime Prevention Office	2 F40T12	1	74	2912	2 F32T8 LW	1	38	2912	105	$9.43
Complaint Clerk	2 F40T12	2	74	2912	2 F32T8 LW T	2	38	2912	210	$18.87
Complaint Clerk	2 F30T12	4	68	2912	2 F25T8 LW T	4	39	2912	338	$30.40
Copy Rm	4 F40T12	2	148	2912	4 F32T8 LW	2	77	2912	414	$37.22
Records	4 F40T12	6	148	2912	4 F32T8 LW	6	77	2912	1,241	$111.65
Shift Commander	4 F40T12	2	148	2912	4 F32T8 LW	2	77	2912	414	$37.22
Investigative Serv	4 F40T12	11	148	2912	4 F32T8 LW	11	77	2912	2,274	$204.68
Investigative Office	4 F40T12 DS	2	148	2912	4 F32T8 LW DS	2	76	2912	419	$37.74
Investigative Interviews	2 F40T12	2	74	2912	2 F32T8 LW	2	38	2912	210	$18.87
Toilet	60 w G30 INC	2	60	500	No Change - Low Hours	2	0	500	60	$5.40
Patrol Rm	4 F40T12	6	148	2912	4 F32T8 LW	6	77	2912	1,241	$111.65
Patrol Rm	2 F40T12	1	74	2912	2 F32T8 LW	1	38	2912	105	$9.43
Patrol Interview	2 F40T12	1	74	2184	2 F32T8 LW	1	38	2184	79	$7.08
Restricted Area	4 F40T12	2	148	2184	4 F32T8 LW	2	77	2184	310	$27.91
Restricted Area										
Restricted Area										
Hall	4 F40T12	2	148	2184	4 F32T8 LW	2	77	2184	310	$27.91
Garage	2 F40T12	10	74	1456	2 F32T8 LW T	10	48	1456	379	$34.07
Garage	2 F40T12	3	74	1456	2 F32T8 LW	3	48	1456	114	$10.22
Garage	2 F96T12 SL	2	132	1456	4 F32T8 LW SK	2	96	1456	105	$9.43
Storage	2 F40T12	6	74	500	2 F32T8 LW T	6	38	500	108	$9.72
Stairs	2 F40T12	1	74	8760	2 F32T8 LW	1	38	8760	315	$28.38
B-Auxiliary Police	2 F40T12	4	74	2184	2 F32T8 LW T	4	38	2184	314	$28.30

Customer Survey Report — Police & Fire

Area Description	Existing Fixture Type	Existing Qty	Existing Watts	Existing Annual Hrs	New Fixture Type	New Qty	New Watts	New Annual Hrs	Kwh Saved	Annual Savings
Auxiliry Police	2 F40T12	1	74	2184	2 F32T8 LW	1	38	2184	79	$7.08
Boiler Room	2 F40T12	9	74	500	2 F32T8 LW	9	38	500	162	$14.58
Hall	2 F40T12	12	74	2184	2 F32T8 LW	12	38	2184	943	$84.91
Training Range	2 F40T12	2	74	2184	2 F32T8 LW	2	38	2184	157	$14.15
Training Range	2 F40T12	2	74	2184	2 F32T8 LW T	2	38	2184	157	$14.15
Training Range	Dimmable INC				NC					
Women Locker	2 F32T8	6	58	1820	2 F32T8 LW	6	38	1820	218	$19.66
Exercise Room	2 F40T12	4	74	1820	2 F32T8 LW T	4	38	1820	262	$23.59
Training Room	2 F40T12	12	74	1820	2 F32T8 LW T	12	38	1820	786	$70.76
Men Locker	2 F40T12	8	74	1820	2 F32T8 LW T	8	38	1820	524	$47.17
Men Locker	2 F40T12	3	74	1820	2 F32T8 LW	3	38	1820	197	$17.69
Men Locker	2 F40T12 U6	1	74	1820	2 F17T8 R	1	31	1820	78	$7.04
Server Room	2 F40T12	1	74	500	2 F32T8 LW	1	38	500	18	$1.62
Equipment Room	4 F40T12	1	148	500	4 F32T8 LW	1	77	500	36	$3.20
Equipment Room	4 F32T8	1	114	500	4 F32T8 LW	1	77	500	19	$1.67
Breakroom	4 F40T12	8	148	2912	4 F32T8 LW	8	77	2912	1,654	$148.86
Breakroom Closet	2 F40T12	1	74	500	2 F32T8 LW	1	38	500	18	$1.62
Stairs	2 F40T12	2	74	2912	2 F32T8 LW	2	38	2912	210	$18.87
Stairs	4 F40T12	1	74	8760	2 F32T8 LW	1	38	8760	315	$28.38
Fire Dept Hall	2 F40T12 U6	10	74	2184	2 F32T8 LW	10	38	2184	786	$70.76
RR	2 F40T12	2	74	1456	2 F32T8 LW T	2	38	1456	105	$9.43
RR	2 F40T12	1	74	1456	2 F32T8 LW	1	38	1456	52	$4.72
Printer Room	72 w INC	2	72	2184	18w CC CFL	2	18	2184	236	$21.23
Conf Room	4 F40T12	2	148	1820	4 F32T8 LW	2	77	1820	258	$23.26
Office	4 F40T12	2	148	2080	4 F32T8 LW	2	77	2080	295	$26.58
Dorms	4 F40T12	8	148	1456	4 F32T8 LW	8	77	1456	827	$74.43
Women	72 w INC	2			No Change - Low Hours	2				

Customer Survey Report — Police & Fire

Area Description	Existing Fixture Type	Existing Qty	Existing Watts	Existing Annual Hrs	New Fixture Type	New Qty	New Watts	New Annual Hrs	Kwh Saved	Annual Savings
Men	72 w INC	2			No Change - Low Hours	2				
Captain	3 F32T8	2	85	2080	3 F32T8 LW	2	58	2080	112	$10.11
Day Room	4 F40T12	1	148	1456	4 F32T8 LW	1	77	1456	103	$9.30
Day Room	DIMMABLE INC				No Change					
Kitchen	4 F40T12	6	148	1820	4 F32T8 LW	6	77	1820	775	$69.78
Fitness Room	4 F32T8	6	114	1820	4 F32T8 LW	6	77	1820	404	$36.36
Locker Room	4 F40T12	3	148	1820	4 F32T8 LW	3	77	1820	388	$34.89
Locker RR	2 F40T12	3	74	1820	2 F32T8 LW	3	38	1820	197	$17.69
Apparatus Rm	2 F40T12	3	74	1820	2 F32T8 LW	3	38	1820	197	$17.69
Apparatus Rm	4 F32T8	27			No Change	27				
Apparatus Rm	2 F32T8	2			No Change	2				
Maintenance Office	4 F40T12	2	148	2080	4 F32T8 LW	2	77	2080	295	$26.58

Customer Survey Report — Pool

Area Description	Existing Fixture Type	Existing Qty	Existing Watts	Existing Annual Hrs	New Fixture Type	New Qty	New Watts	New Annual Hrs	Kwh Saved	Annual Savings
All Areas	2 F96T12 HO	8	237	840	4 F32T8 SK	8	108	840	867	$78.02
All Areas	2 F40T12	4	74	840	2 F32T8 LW	4	48	840	87	$7.86
All Areas	CFL				NC					
All Areas	INC				NC					

Customer Survey Report — Senior Center

Area Description	Existing Fixture Type	Existing Qty	Existing Watts	Existing Annual Hrs	New Fixture Type	New Qty	New Watts	New Annual Hrs	Kwh Saved	Annual Savings
Stairs/Landing	2 F40T12	2	74	2080	2 F32T8 LW	2	38	2080	150	$13.48
Men	2 F40T12	2	74	2080	2 F32T8 LW T	2	38	1560	189	$17.04
Men	2 F40T12	1	74	2080	2 F32T8 LW	1	38	1560	95	$8.52
Men					CM-9	1				
Rec Room	4 F40T12	20	148	2080	4 F32T8 LW	20	77	2080	2,954	$265.82
8	3 F40T12 DS	6	117	2080	3 F32T8 LW DS	6	59	2080	724	$65.15
9	3 F40T12 DS	6	117	2080	3 F32T8 LW DS	6	59	2080	724	$65.15
4	2 F40T12	1	74	2080	2 F32T8 LW	1	38	2080	75	$6.74
Women	2 F32T8	2	58	2080	2 F32T8 LW T	2	38	2080	83	$7.49
Women	2 F32T8	2	58	2080	2 F32T8 LW	2	38	2080	83	$7.49
Entrance	2 F32T8 U6	4	58	2080	2 F17T8 R	4	31	2080	225	$20.22
Entrance	2 F40T12 U6	1	74	2080	2 F17T8 R	1	31	2080	89	$8.05
15	4 F40T12	2	148	2080	4 F32T8 LW	2	77	2080	295	$26.58
15	4 F40T12 DS	2	148	2080	4 F32T8 LW DS	2	76	2080	300	$26.96
Kitchen	4 F40T12	2	148	2080	4 F32T8 LW	2	77	2080	295	$26.58
Basement	72 w INC	9	72	500	18w CFL	9	18	500	243	$21.87

Customer Survey Report — City Hall

Area Description	Existing Fixture Type	Existing Qty	Existing Watts	Existing Annual Hrs	New Fixture Type	New Qty	New Watts	New Annual Hrs	Kwh Saved	Annual Savings
Conference Room	4 F40T12	3	148	1560	4 F32T8 LW	3	77	1560	332	$29.91
Finance Dept. Lobby	3 F32T8	4	85	2080	3 F32T8 LW	4	58	2080	225	$20.22
Assessor	3 F32T8	6	85	2080	3 F32T8 LW	6	58	2080	337	$30.33
Finance Dept.	3 F32T8	10	85	2080	3 F32T8 LW	10	58	2080	562	$50.54
Finance Dept. Office A	3 F32T8 DS	4	88	2080	3 F32T8 LW DS	4	59	2080	241	$21.72
Finance Dept. Office B	3 F32T8 DS	4	88	2080	3 F32T8 LW DS	4	59	2080	241	$21.72
Small Conf. Rm	3 F32T8 DS	2	88	1560	3 F32T8 LW DS	2	59	1560	90	$8.14

Customer Survey Report — City Hall

Area Description	Existing				New					
	Fixture Type	Qty	Watts	Annual Hrs	Fixture Type	Qty	Watts	Annual Hrs	Kwh Saved	Annual Savings
Back Stairs	2 F40T12	1	74	3120	2 F32T8 LW	1	38	3120	112	$10.11
Closet	72 w INC	1		50	No Change - low hours	1		50		
File Rm	3 F32T8	1	85	2080	3 F32T8 LW	1	58	2080	56	$5.05
Assesor Office	3 F32T8	4	85	2080	3 F32T8 LW	4	58	2080	225	$20.22
Assesor small office	3 F32T8	2	85	2080	3 F32T8 LW	2	58	2080	112	$10.11
Basement	72 w surface	9	72	2080	30w CFL Drum	9	30	2080	786	$70.76
Breakroom	72 w recessed	6	72	2080	18w CC CFL	6	18	2080	674	$60.65
Kitchen	72 w recessed	2	72	1560	18w CC CFL	2	18	1560	168	$15.16
Women	72 w recessed	2	72		No Change	2				
Men	72 w recessed	1	72		No Change	1				
Men	CFL	1	0		No Change	1				
Basement	2 F40T12	2	74	2080	2 F32T8 LW	2	38	2080	150	$13.48
Basement	2 F40T12	2	74	2080	2 F32T8 LW T	2	38	2080	150	$13.48
Mailroom	4 F40T12	2	148	2080	4 F32T8 LW	2	77	2080	295	$26.58
Basement	72 w INC	8	72	2080	15 w CFL	8	15	2080	948	$85.36
Stairs	2 F40T12	10	74	3120	2 F32T8 LW	10	38	3120	1,123	$101.09
Elevator	1 F40T12	2	43	8760	1 F32T8 LW	2	21	8760	385	$34.69
Elevator	1 F20T12	2	27	8760	1 F17T8 LW	2	15	8760	210	$18.92
3rd Floor										
Men	72 w INC recessed	1			No Change	1				
Hallway	72 w INC recessed	8	72	3120	18w CC CFL	8	18	3120	1348	$121.31
Women	72 w INC recessed	2			No Change	2				
Hallway	2 F32T8 U6	3	58	3120	3 F17T8 LW R	3	40	3120	168	$15.16
Council Chambers	3 F32T8	18	85	1560	3 F32T8 LW	18	58	1560	758	$68.23
Waiting Rm	3 F32T8	2	85	2080	3 F32T8 LW	2	58	2080	112	$10.11
Copy Rm	3 F32T8	2	85	2080	3 F32T8 LW	2	58	2080	112	$10.11
Deputy Clerk	3 F32T8	4	85	2080	3 F32T8 LW	4	58	2080	225	$20.22

Customer Survey Report — City Hall

Area Description	Existing				New					
	Fixture Type	Qty	Watts	Annual Hrs	Fixture Type	Qty	Watts	Annual Hrs	Kwh Saved	Annual Savings
Office Area Hall	3 F32T8	4	85	3120	3 F32T8 LW	4	58	3120	337	$30.33
Mayor	3 F32T8	4	85	2080	3 F32T8 LW	4	58	2080	225	$20.22
HR Specialist	3 F32T8	3	85	2080	3 F32T8 LW	3	58	2080	168	$15.16
City Clerk	3 F32T8	3	85	2080	3 F32T8 LW	3	58	2080	168	$15.16
Conf. Rm	3 F32T8	4	85	1456	3 F32T8 LW	4	58	1456	157	$14.15
Personel Office	3 F32T8	2	85	2080	3 F32T8 LW	2	58	2080	112	$10.11
City Attorney	3 F32T8	3	85	2080	3 F32T8 LW	3	58	2080	168	$15.16
File Rm	3 F32T8	2	85	2080	3 F32T8 LW	2	58	2080	112	$10.11
RR	3 F32T8	1	85	1456	3 F32T8 LW	1	58	1456	39	$3.54
Closet	150w INC	1	150	50	No Change - low hours	1		50	8	$0.68
Penthouse	72 w INC	6	72	200	20w CFL	6	20	200	62	$5.62
2nd Floor										
Staff Area	2 F40T5 BIAX	5	78	2080	3 F17T8 LW R	5	40	2080	395	$35.57
Staff Area	3 F32T8	14	85	2080	3 F32T8 LW	14	58	2080	786	$70.76
File Rm	3 F32T8	2	85	2080	3 F32T8 LW	2	58	2080	112	$10.11
Computer Rm	3 F32T8	2	85	2080	3 F32T8 LW	2	58	2080	112	$10.11
Private Office	3 F32T8	2	85	2080	3 F32T8 LW	2	58	2080	112	$10.11
Records Office	3 F32T8	2	85	2080	3 F32T8 LW	2	58	2080	112	$10.11
Director of Public Works	3 F32T8	3	85	2080	3 F32T8 LW	3	58	2080	168	$15.16
Plotter Rm	3 F32T8	4	85	2080	3 F32T8 LW	4	58	2080	225	$20.22
Conf rm	3 F32T8	2	85	1456	3 F32T8 LW	2	58	1456	79	$7.08
Inspectors Area	3 F32T8	5	85	2080	3 F32T8 LW	5	58	2080	281	$25.27
Inspectors Area Waiting Rm	3 F32T8	3	85	2080	3 F32T8 LW	3	58	2080	168	$15.16
Community Dev	3 F32T8	4	85	2080	3 F32T8 LW	4	58	2080	225	$20.22
Community Director	3 F32T8	3	85	2080	3 F32T8 LW	3	58	2080	168	$15.16
Park/Rec Director	3 F32T8	3	85	2080	3 F32T8 LW	3	58	2080	168	$15.16

Customer Survey Report City Hall

	Existing				New					
Area Description	Fixture Type	Qty	Watts	Annual Hrs	Fixture Type	Qty	Watts	Annual Hrs	Kwh Saved	Annual Savings
Hall	2 F32T8 U6	5	58	3120	3 F17T8 LW R	5	40	3120	281	$25.27
Men	72 w INC	1	72		No Change	1				
RR	2 F32T8	2	58		No Change - low hours	2				
1st Floor Hall	2 F40T5 BIAX	5	78	3120	3 F17T8 LW R	5	40	3120	593	$53.35
Entrance	75 w R30 INC	7	75	3640	16w R30 CFL	7	16	3640	1,503	$135.30
Men	72 w INC	1	72		No Change	1				
Women	72 w INC	2	72		No Change	2				
RR	2 F32T8	1	58		No Change	1				

Cost of Lighting System & Installation: $50,684.00

Energy Savings Summary — Alt. 1 Airport Rd Fire Station

Annual Usage & Savings (kWh)		Annual Costs & Savings		
Existing Lighting System	14,579	Existing Lighting System	$1,312	
Proposed Lighting System	10,064	Proposed Lighting System	$906	
Lighting Energy Saved	4,515			
Total Energy Savings	**31%**	**Total Annual Savings**	**$406**	
		***Assumes charges of 0.09 per KWh*		
		ROI (return on investment)		**20%**
		Cost of Components & Installation		**$3,109**
		-WFOE Incentive		$800
		- Menasha Utilities Incentive		$311
		Net Cost		**$1,998**
		Simple Payback (years)		4.92

Customer Survey Report — Alt. 1 Airport Rd Fire Station

	Existing				New					
Area Description	Fixture Type	Qty	Watts	Annual Hrs	Fixture Type	Qty	Watts	Annual Hrs	Kwh Saved	Annual Savings
Garage	2 F40T12	22	74	3276	2 F32T8 T	22	54	3276	1,441	$129.73
Garage	2 F40T12	14	74	3276	2 F32T8	14	55	3276	871	$78.43
Office	2 F40T12	4	74	2912	2 F32T8 LW	4	48	2912	303	$27.26
Entrance	72 w INC	1	72	3276	30 w DRUM	1	30	3276	138	$12.38
Stairs	3 F32T8	1	85	2184	2 F32T8	1	55	2184	66	$5.90
Locker Rm	2 F40T12	8	74	1820	2 F32T8 LW T	8	48	1820	379	$34.07
Locker Rm	2 F40T12	2	74	1820	2 F32T8 LW	2	48	1820	95	$8.52
RR	2 F40T12	2	74	1820	2 F32T8 LW	2	48	1820	95	$8.52
Hall	72 w INC	3	72	1820	30 w DRUM	3	30	1820	229	$20.64
Lounge	2 F40T12	5	74	1820	2 F32T8 LW	5	48	1820	237	$21.29
Kitchen	2 F40T12	2	74	1820	2 F32T8 LW	2	48	1820	95	$8.52
Cube Area	2 F40T12	12	74	1820	2 F32T8 LW T	12	48	1820	568	$51.11
Basement					NC					

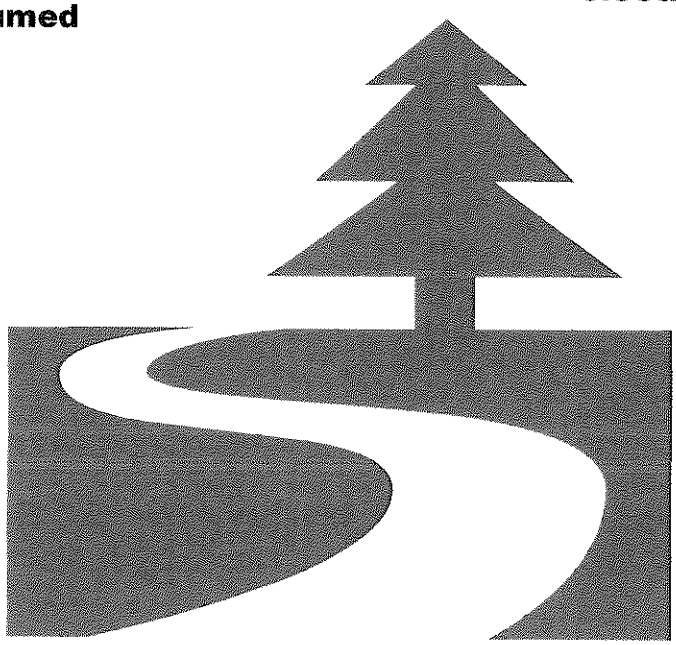
Cost of Lighting System & Installation: $ 3109.00

Environmental Impact

Greenhouse Gas Equivalents

*** 77.3 metric tons of carbon dioxide**

- **CO2 emissions from 8,771 gallons of gasoline consumed**
- **107,598 kilowatt hours of electricity**



- **CO2 emissions from the electricity use of 10.7 homes for one year**
- **Annual greenhouse gas emissions from 14.2 passenger vehicles**

**** Derived from EPA Clean Energy Calculator***

Terms & Conditions

Terms and conditions of this proposal include the following items:

1) Removal and recycling of existing lamps, ballasts, and fixtures
2) Material, labor & equipment

The proposal does not include:

1) Premium Time (overtime)
2) Prevailing wage rates
3) Bringing any existing condition up to NEC standards.
4) Permit (if required)

The proposed system is estimated to reduce energy consumption, with all conditions as estimated.

*** A detailed project breakout is available upon request.**

**** Pricing is valid for 60 days.**

*****Payment terms are Net 30 days**

******Approximate incentive amount valid until September 30, 2009**

Warranty Information:

25 watt T8 lamp warranty is 4 years, 32 watt T8 lamp warranty is 3 years *(by manufacturer)*
Ballast warranty is 5 years *(parts & labor by Faith Technologies)*
Fixture warranty is 1 year *(by manufacturer)*
Reflectors warranty is 25 years *(by manufacturer)*
For more information please see product specification pages included

This document contains proprietary information, and is generated by Faith Technologies Inc, of Appleton, Wisconsin, strictly for the use of the recipient. Contents may not be copied or used for any purpose other than for evaluation by the recipient. Any other use than described above is prohibited unless authorized in writing by Faith Technologies Inc.

July 30, 2009

Don Merkus
City of Menasha
140 Main Street
Menasha, WI 54952

RE: Retrofit Lighting Quote # 80977 Revised

Faith Technologies, Inc. is please to quote a price of **$50,684** to furnish materials and labor necessary to install energy efficient lighting in your City of Menasha facilities as outlined in the attached quote

We propose hereby to furnish material and labor - complete in accordance with above specifications, for the sum of
Fifty Thousand Six Hundred Eighty Four Dollars

The above prices, specifications, and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature of Acceptance: _____

This proposal may be withdrawn by us if not accepted within 30 days.

If you have any questions, please feel free to contact me.

Sincerely,

Mike Herbst
Superintendent
Faith Technologies, Inc

Dave Wiertzema
Project Manager
Faith Technologies, Inc

Concept Proposal

27-Jul-09

Submitted in Partnership with Cummings Electric

FOR FEASIBILITY DISCUSSION ONLY, NOT FOR ORDERING

Scenario: T8 with Controls

SUMMARY

For:

City Of Menasha
140 Main Street
920-967-5272
Menasha, WI 54952

Adam Alix
920-967-5102
aalix@ci.menash.wi.us

Financial		
Total Material Cost	$	20,392
Total Labor Cost	$	11,610
Total Services	$	-
Total Project Cost	**$**	**32,002**
Add: Contingency	$	1,139
Add: Tax	$	-
Less: Rebate	$	11,622
Net Cost	**$**	**21,519**
ROI		**46%**
Payback (Years)		**2.2**

Savings		
Lighting Savings	$	9,923
Cooling Savings	$	-
Total Savings	**$**	**9,923**

Orion Throughput Agreement		
Monthly Savings	$	827
Less: Monthly OTA Pmt	$	479
Guaranteed Mo. Cash Flow	**$**	**348**

Electrical	
Existing kWh	177,387
Proposed kWh	61,735
kWh Saved	**115,652**

The figures presented herein are for feasibility only. Under no conditions shall these figures be relied upon or used for budgeting or placing orders with Orion.

This Proposal is for purchases through contractors only. No direct sales from Orion permited under this proposal. Any applicable taxes are to be added to the above costs. Additional Terms may apply.

Concept Proposal

27-Jul-09

Submitted in Partnership with Cummings Electric

FOR FEASIBILITY DISCUSSION ONLY, NOT FOR ORDERING

Scenario: T8 without Controls

SUMMARY

For:

City of Menasha
City Garage & Historical Society
920-967-5272
Menasha, WI 54952

Adam Alix
920-967-5102
aalix@ci.menasha.wi.us

Financial		
Total Material Cost	$	11,163
Total Labor Cost	$	11,610
Total Services	$	-
Total Project Cost	**$**	**22,773**
Add: Contingency	$	1,139
Add: Tax	$	-
Less: Rebate	$	7,672
Net Cost	**$**	**16,239**
ROI		**40%**
Payback (Years)		**2.5**

Savings			
Lighting Savings	$	6,536	
Cooling Savings	$	-	
Total Savings	**$**	**6,536**	**71%**

Orion Throughput Agreement		
Monthly Savings	$	545
Less: Monthly OTA Pmt	$	361
Guaranteed Mo. Cash Flow	**$**	**183**

Electrical		
Existing kWh	97,840	
Proposed kWh	28,751	
kWh Saved	**69,088**	**71%**

The figures presented herein are for feasibility only. Under no conditions shall these figures be relied upon or used for budgeting or placing orders with Orion.

This Proposal is for purchases through contractors only. No direct sales from Orion permited under this proposal. Any applicable taxes are to be added to the above costs. Additional Terms may apply.

Orion Energy Systems

Assumptions and Miscellaneous Items

COMPANY INFORMATION		ASSUMPTIONS	
Date:	27-Jul-09	Scenario:	T8 without Controls
Company:	City of Menasha	Rate:	0.0946
Address 1:	City Garage & Historical Sc	Rebate:	$ 7,672.00
Address 2:	140 Main Street	Rebate Type:	Prescriptive
City:	Menasha	Incumbent EC:	Cummings Electric
State:	WI	ED:	
Zip:	54952	Roofer:	
Contact:	Adam Alix	Proposal Partner:	Cummings Electric
Phone:	920-967-5102	Utility:	
Fax:	920-967-5272	Sales Rep:	Taylor Kapp
		Proposal Type:	Wholesale
Email:	aalix@ci.menasha.wi.us	Tax Rate:	0.00%

Miscellaneous Materials

Description	Qty	Price	Total
LED Exit Sign	4	$ 62.50	$ 250.00
42556 T8 850 HL Ca	10	$ 82.44	$ 824.40
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ 1,074.40

Miscellaneous Labor

Description	Qty	Price	Total
Commissioning	1	$ 11,260.00	$ 11,260
Lift	1	$ 350.00	$ 350
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ 11,610

Labor Calculator

Base Labor	$	-
☐ Union Labor	$	-
☐ Manufacturing	$	-
☐ Freezer	$	-
☐ Regrid	$	-
☐ Hardwire	$	-
☐ Limited Accessability	$	-
☐ No Deck Penetrations	$	-
Miscellaneous Labor	$	11,610
Total Labor	**$**	**11,610**

Services

☐ Survey Fee	$	-
☐ Project Management	$	-
☐ Rebate Management	$	-
☐ Recycling	$	-
☐ EPAct05	$	-
Total Services	**$**	**-**

Contingency Fee	5%	$	1,139

Concept Proposal

Signature to accept fixture counts:_____ **Date:**_____

Summary

Project Cost	$	16,239
Savings	$	6,536
Payback (Yrs)		2.5
ROI		40%

Orion Energy Systems

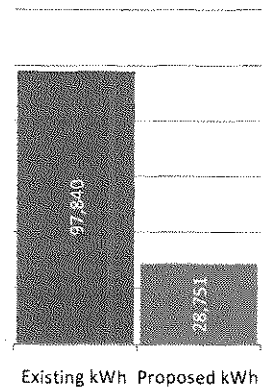
Summary Data Sheet

DATA SHEET			EXISTING					PROPOSED									ANALYSIS	
Line #	Area	Include	Existing Quantity	Existing Equipment	Existing Watts	Existing Hours	Existing Cooling Hours	Proposed Quantity	Proposed Equipment	Proposed Wattage	Proposed Control Device	Demand Control Factor	Proposed Hours	Proposed Daylight Hours	Per Unit Cost "All-in"	Estimated BASE Labor Cost	Line Payback	Total Cost
Totals			**58**					**49**							**$ 91.67**		**1.5**	**$ 4,492**
1	Back Hall	Yes	2	1x4x2	82	2080	0	2	RK2L850	49		100%	2080		$ 21.65		3.3	$ 43
2	Entrance	Yes	1	1x4x2	82	2080	0	1	RK2L850	49		100%	2080	0	$ 21.65	$ -	3.3	$ 22
3	Garage-Center Ro	Yes	15	400w MH	460	2340	0	15	CM4HP	147		100%	2340	0	$ 114.57	$ -	1.7	$ 1,719
4	Garage-Outer Rov	Yes	30	400w MH	460	2340	0	30	CM2HP	74		100%	2340	0	$ 89.55	$ -	1.0	$ 2,687
5	Historical Society	Yes	10	1x4x2	82	1560		1	RK2L850	49		100%	1560		$ 21.65		0.2	$ 22
6	Kitchen	Yes	2	1x8x2 CW/HO	220	2080	0	2	8CK2LIW	49		100%	2080		$ 47.13		1.4	$ 94
7	Lock up Area	Yes	1	400w MH	465	2080		1	CM6E	221	OESC200	25%	520		$ 191.40	$ -	2.4	$ 191
8	Lock up Mezz	Yes	2	1x4x2	82	2080		2	RK1L850	25			0		$ 19.31		1.2	$ 39
9	Locked Area	No	1		#N/A	2080				#N/A			0		#DIV/0!		-	$ -
10	Maint Men	Yes	1	1x4x2	82	500	0	1	RK2L850	49		100%	500		$ 21.65		13.9	$ 22
11	Maint Office	Yes	4	1x4x2	82	2080	0	4	RK2L850	49		100%	2080		$ 21.65		3.3	$ 87
12	Maint Parts	No	3		#N/A	2080				#N/A			0		#DIV/0!		-	$ -
13	Maint Shop	Yes	15	400w MH	465	2080	0	15	CM6E	221		100%	2080		$ 116.42		2.4	$ 1,746
14	Maint Shop Mezz	Yes	2	1x8x2 CW/HO	220	2080		2	8CK2LIW	49		100%	2080		$ 47.13		1.4	$ 94
15	Maint Shop Mezz	Yes	1	1x4x2	82	2080		1	RK2L850	49		100%	2080		$ 21.65		3.3	$ 22
16	Maint Shop T12	Yes	2	1x8x2 CW/HO	220	2080		2	8CK2LIW	49		100%	2080		$ 47.13		1.4	$ 94
17	Meeting Room	Yes	16	1x4x2	62	2080	0	16	RK2L850	49		100%	2080	0	$ 21.65		8.5	$ 346
18	Men	Yes	1	1x4x2	82	1080	0	1	RK2L850	49		100%	1080	0	$ 21.65		6.4	$ 22
19	Office	Yes	2	4' 3Lx34w	122	2080	0	2	RK2L850	49		100%	2080		$ 21.65		1.5	$ 43
20	Park Maint-1	Yes	6	1x4x2	82	2080	0	6	RK2L850	49		100%	2080		$ 21.65		3.3	$ 130
21	Park Maint-2	Yes	1	1x8x2 CW/HO	220	2080	0	1	8CK2LIW	49		100%	2080		$ 47.13		1.4	$ 47
22	Park Maint-3	Yes	3	400w MH	465	2080	0	3	CM6E	221		100%	2080		$ 116.42		2.4	$ 349
23	Public Works Cont	Yes	4	4' 3Lx34w	122	2080	0	4	RK2L850	49		100%	2080		$ 21.65		1.5	$ 87
24	Public Works Offic	Yes	9	4' 3Lx34w	122	2080	0	9	RK1L850	25		100%	2080	0	$ 19.31		1.0	$ 174
25	Sign Shop-1	Yes	22	1x8x2 CW/HO	220	2080		22	8CK2LIW	49		100%	2080		$ 47.13		1.4	$ 1,037
26	Sign Shop-2	Yes	6	1x8x2 CW/SS	144	2080		6	8CK2LIW	49		100%	2080		$ 47.13		2.5	$ 283
27	Sign Shop-3	Yes	1	1x8x3 CW/SS	216	2080		1	8CK4LIWSEP	99		100%	2080		$ 63.36		2.8	$ 63
28	Women	Yes	1	1x4x2	82	1080	0	1	RK2L850	49		100%	1080	0	$ 21.65		6.4	$ 22
29	Workshop Mezz1	Yes	1	400w MH	465	2080	0	1	CMP2LB	74		100%	2080		$ 95.21		1.2	$ 95
30	Workshop Mezz2	Yes	2	1x8x2 CW/HO	220	2080	0	2	8CK2LIW	49		100%	2080		$ 47.13		1.4	$ 94
31	Workshop-1	Yes	3	400w MH	465	2080	0	3	CM6E	221		100%	2080		$ 116.42		2.4	$ 349
32	Workshop-2	Yes	1	1x8x2 CW/HO	220	2080	0	1	8CK2LIW	49		100%	2080		$ 47.13		1.4	$ 47
33	Workshp-3	Yes	1	1x4x2	82	2080	0	1	RK1L850	25		100%	2080		$ 18.94		1.7	$ 19

Savings Calculations

kiloWatt hours (kWh) reduction		
Existing kWh	97,840	
Proposed kWh	28,751	
Variance	**69,088**	71%
kWh Rate	$ 0.09	
Savings	**$ 6,536**	

Refridgeration (BTU) reduction	
kWh Cooled	-
BTU Factor	0.342
kWh Rate	$ 0.09
Cooling Savings	**$ -**
Total Savings	**$ 6,536**



kiloWatt (kW) reduction		
Existing kW	44.797	
Proposed kW	13.582	
Variance	**31.215**	70%

Amperage	
Existing Amp draw	0
Proposed Amp draw	0
Variance	0

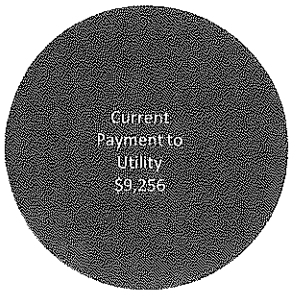
Equipment	
Existing Quantity	168
Proposed Quantity	159
Variance	**9**

		EXISTING					PROPOSED						SAVINGS	
Area	Included	Qty	Exist KW	Total KW Existing	Existing Hours	Total kWh Existing	Qty	Proposed KW	Total KW Proposed	Proposed Hours (Net)	Total kWh Proposed		kWh Saved	$ Saved
Back Hall	✓	2	0.082	0.2	2,080	341	2	RK2L850	0.1	2,080	204		137	13
Entrance	✓	1	0.082	0.1	2,080	171	1	RK2L850	0.0	2,080	102		69	6
Garage-Center Row	✓	15	0.460	6.9	2,340	16,146	15	CM4HP	2.2	2,340	5,160		10,986	1,039
Garage-Outer Rows	✓	30	0.460	13.8	2,340	32,292	30	CM2HP	2.2	2,340	5,195		27,097	2,563
Historical Society	✓	10	0.082	0.8	1,560	1,279	1	RK2L850	0.0	1,560	76		1,203	114
Kitchen	✓	2	0.220	0.4	2,080	915	2	8CK2LIW	0.1	2,080	204		711	67
Lock up Area	✓	1	0.465	0.5	2,080	967	1	CM6E	0.2	520	115		852	81
Lock up Mezz	✓	2	0.082	0.2	2,080	341	2	RK1L850	0.1	-	-		341	32
Locked Area	✗	-	-	-	2,080	-	-	-	-	-	-		-	-
Maint Men	✓	1	0.082	0.1	500	41	1	RK2L850	0.0	500	25		17	2
Maint Office	✓	4	0.082	0.3	2,080	682	4	RK2L850	0.2	2,080	408		275	26
Maint Parts	✗	-	-	-	2,080	-	-	-	-	-	-		-	-
Maint Shop	✓	15	0.465	7.0	2,080	14,508	15	CM6E	3.3	2,080	6,895		7,613	720
Maint Shop Mezz 1	✓	2	0.220	0.4	2,080	915	2	8CK2LIW	0.1	2,080	204		711	67
Maint Shop Mezz 2	✓	1	0.082	0.1	2,080	171	1	RK2L850	0.0	2,080	102		69	6
Maint Shop T12	✓	2	0.220	0.4	2,080	915	2	8CK2LIW	0.1	2,080	204		711	67
Meeting Room	✓	16	0.062	1.0	2,080	2,063	16	RK2L850	0.8	2,080	1,631		433	41
Men	✓	1	0.082	0.1	1,080	89	1	RK2L850	0.0	1,080	53		36	3
Office	✓	2	0.122	0.2	2,080	508	2	RK2L850	0.1	2,080	204		304	29
Park Maint-1	✓	6	0.082	0.5	2,080	1,023	6	RK2L850	0.3	2,080	612		412	39

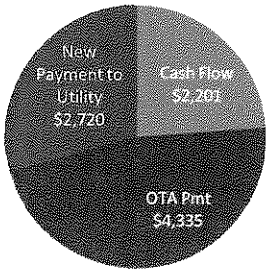
Park Maint-2		1	0.220	0.2	2,080	458	1	8CK2LIW	0.0	2,080	102	356	34
Park Maint-3		3	0.465	1.4	2,080	2,902	3	CM6E	0.7	2,080	1,379	1,523	144
Public Works Conf		4	0.122	0.5	2,080	1,015	4	RK2L850	0.2	2,080	408	607	57
Public Works Office		9	0.122	1.1	2,080	2,284	9	RK1L850	0.2	2,080	468	1,816	172
Sign Shop-1		22	0.220	4.8	2,080	10,067	22	8CK2LIW	1.1	2,080	2,242	7,825	740
Sign Shop-2		6	0.144	0.9	2,080	1,797	6	8CK2LIW	0.3	2,080	612	1,186	112
Sign Shop-3		1	0.216	0.2	2,080	449	1	8CK4LIWSEF	0.1	2,080	206	243	23
Women		1	0.082	0.1	1,080	89	1	RK2L850	0.0	1,080	53	36	3
Workshop Mezz1		1	0.465	0.5	2,080	967	1	CMP2LB	0.1	2,080	154	813	77
Workshop Mezz2		2	0.220	0.4	2,080	915	2	8CK2LIW	0.1	2,080	204	711	67

Orion Throughput Agreement (OTA)

Current Payment to Utility



Proposed System



OTA Cash Flow Analysis

Current	kwh purchased or displaced	Rate		Total Cost
Utility	97,840	$ 0.09	$	9,256
			$	**9,256**
Proposed				
Utility	28,751	$ 0.09	$	2,720
Orion	69,088	$ 0.06	$	4,335
	97,840	$ 0.07	**$**	**7,055**
Cash Flow			**$**	**2,201**

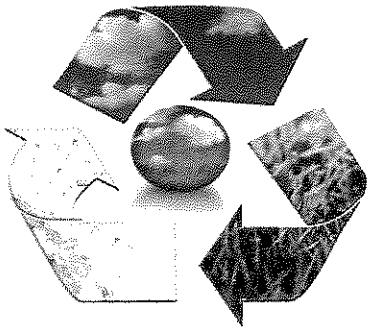
The OTA allows you to replace a portion of your electricity at higher rates with displaced electricity (savings) at lower rates. The combined total is less than your current.

Delay Costs

Delays cost YOU money!

	% of Purchase	Cash Purchase	OTA
1 Month	#VALUE!	*$0,545*	*$ 183*
2 Months	7%	*$1,089*	*$ 367*
3 Months	10%	*$1,634*	*$ 550*
4 Months	13%	*$2,179*	*$ 734*
5 Months	17%	*$2,723*	*$ 917*
6 Months	20%	*$3,268*	*$ 1,100*

ENVIRONMENTAL IMPACT



How Can Lighting Damage the Environment?

Although it appears innocuous, lighting causes air pollution. Here's how: Each day, your local power plant will commonly burn coal, oil, and gas to generate electricity for your lighting system as well as for your other electrical needs. While burning, these fossil fuels produces a readily available and instantaneous supply of electricity, it also generates air pollutants.

Air Pollution Causes Global Warming, Acid Rain and Smog

Each of these pollutants causes environmental damage. Carbon dioxide (CO2) causes global warming, sulfur dioxide (SO2) causes acid rain, and nitrogen oxides (NOx) cause both acid rain and smog.

Your Lighting Project will help to decrease air pollution and environmental damage by the following amounts each year:

Polutant*	1 year	20 years
CO2 Removed	45.4 Tons	907.5 Tons
SO2 Removed	0.2 Tons	3.6 Tons
NOX Removed	0.07 Tons	1.34 Tons
Mercury Removed	0.85 gm	17.05 gm

Environmental Equivelant **	1 year	20 years
Acres of Trees Planted	13	254
Cars Removed from the Road	11	223
Gallons of Gas Saved	5,703	114,066
Barrels of Oil Saved	136	2,716

* calculated using emission factors per the EPA's eGRID database, as recognized protocol by the World Resource Institute/World Business Council for Sustainable Development (WRI/WBCSD).

** Based on PA Gov't Services for Focus projects

Terms and Conditions

Building and Electrical Code

This proposal assumes that the facility for which the proposed system is to be installed meets all national, state, and local electric and building codes. If upgrades are required due to code requirements, costs for such upgrades are the sole responsibility of the customer.

Voltages

All voltages at the facility for which the proposed system is to be installed are to be assumed to be between 120 volts and 277 volts, unless specifically noted here in as 347 volts of 480 volts. If facility voltages vary from that of the fixtures as described in this proposal, customer is responsible for all the costs associated with correcting the voltage of the facility or fixture.

NEMA Power Supplies

Unless specifically documented herein, Orion will provide standard NEMA power supplies. Other power supplies required by customer will have an added cost.

NEC Compliance and UL Approved Products

The portable luminaire status is a UL approved designation, which Orion achieved for the Mate-N-Loc series. Orion's fixtures with this status are manufactured according to UL protocol. Fixtures manufactured with a portable luminaire designation are tested 100% after the final assembly. The installation of a luminaire, both standard and portable, is subject to compliance with the electrical code, as established by the NEC (National Electric Code). This set of codes which electricians use as guidelines in their work. The interpretation of the NEC is up to the discretion of the electrician or electrical inspector. It is the position of Orion Energy Services that all recommendations for installing luminaires and portable luminaires must be NEC compliant, as approved by an electrician or electrical inspector. Orion's products are to be installed according to the NEC.

Electrical Power Quality

The customers electrical system that supplies power to Orion fixtures and products must meet Power Quality specifications as outlined in IEEE 1159 (Institute of Electrical Engineers). If it is determined that any deviation from these specifications exists, it may void the warranty of Orion's products, or the warranty of other manufacturers' products used within Orion's products. If a correction is required to bring the customer's system within the specifications of the IEEE 1159, any such costs will be the responsibility of the customer.

Controls

All controls such as occupancy, ambient light, peak demand, or otherwise generally require post-installation calibration. Unless costs for calibration are specifically detailed in this proposal, additional charges will apply for on-site calibration. Customer may assume responsibility for calibration to avoid such charges. **Orion does not recommend the use of controls in conditions where shortened lamp/ballast life may occur.** See warranty for details.

Change/Add-on Orders

As part of the pre-sale inspection of customer's facilities, Orion or its agent has conducted a thorough survey and have documented its findings as listed herein. However, due to hidden situations, oversights or changes since the survey, 100% accuracy is not always achievable. Therefore, if it is necessary to add, change or delete material or labor to deliver the result desired by the customer, change orders may be required. If a situation arises where it is necessary to add, change, or delete any material or labor, customer will be presentedwith such situation and costs for any prior approval. Charges or credits for approved changes will be issued to customer under the original purchase order at the completion of the project.

Freight Terms; Special Handling and Storage

Standard freight terms are FOB Orion factory (Manitowoc, WI), prepaid and added to the invoice. Unless specifically documented herein, Orion assumes that the customer will accept complete shipment of material as listed in this proposal. If the shipment is refused or redirected in any manner, customer is responsible for any associated costs. Orion must be notified by customer of any delivery/receiving limitations prior to accepting this proposal. Storage or other special handling costs are the sole responsibility of the customer.

Rebates

Utility rebate figure is an estimate only and is subject to applicable guidelines and requirements. Actual rebate amount received by customer from utility may vary. In no event shall the utility rebate affect Customer's obligation to pay Orion the total proposal amount indicated within the stated payment terms.

Safekeeping

Customer is responsible for receiving in, counting, and inspecting for damage of all deliveries from Orion. If there is a discrepancy in count, notify Orion within 24 business hours of receipt. If product arrives damaged, note the extent of damage on carrier's paperwork, photograph the damage, and report it to Orion immediately. Orion will not assume responsibility for missing product after receipt by Customer. Customer should take the necessary safekeeping precautions during installation to protect product from theft or damage.

Electrical Savings Guarantee and Emissions Credits -

If customer elects the electrical savings guarantee, and if at any time during the 5-year period from the date of installation the customer does not realize such guaranteed electrical savings over any annual period, customer should notify Orion in writing of such fact. Orion shall, within 90 days of receipt of such written notice and detailed information from customer setting forth the computations supporting such failure to realize the electrical savings that were guaranteed and after having had sufficient opportunity to review all appropriate information relating to an analysis of the savings and the conditions at customer's facility, at Orion's sole option and expense, either (i) install such additional control measures or equipment as reasonably necessary to achieve the guaranteed electrical savings or (ii) remit to customer 100% of the difference between the guaranteed electrical savings and the actual electrical savings realized by customer over the applicable annual period.

If customer elects the electrical savings guarantee, and in consideration for such guarantee, customer agrees with Orion as follows: In the event customer qualifies for emissions reduction credits under applicable federal and/or state law due to the beneficial environmental impact arising from the installation of Orion's energy-efficient lighting and controls technology, it is understood and agreed that customer and Orion shall, for a period of twenty (20) years from the date of installation, share in the net proceeds of the value stream created by such emissions credits on a 50/50 basis. Orion shall, on behalf of the customer, take or cause to be taken all reasonable measures to try to obtain and secure the value arising from the emissions credits, and customer shall cooperate with Orion in such efforts and shall execute and deliver to Orion such documents of instruments and take such further actions as Orion may reasonably request in order to secure and perfect the right to such emissions credits and to share in the net proceeds of such credits as provided herein.

Returns: Non-Defective

After completion of the project, no products may be returned by the buyer without prior written authorization in the form of a Return Goods Authorization or similar form **(RGA)** which has been issued by Orion expressly for the products to be returned. The RGA will be issued at the sole discretion of Orion and must be requested by the buyer within 30 days of the original shipment date. Returned products must be in their original sealed containers. No non-stocking special products, custom-made products, or outdated or modified versions of factory stocking items may be returned by the buyer. The minimum value for which an RGA will be issued is $500.00, except for products considered by Orion to be defective in workmanship or materials. All returns will be subject to a minimum 15% handling and restocking charge, and a charge back will be made for the freight expense of the original shipment. Products accepted for return must be shipped prepaid to the factory. All products returned to Orion must be clearly marked and identified with the RGA number on the bill of lading/packing list. Any/all products that are attempted to be delivered to Orion without proper RGA authorization will be refused at our dock.

Returns: Defective/Damaged

If products are defective or damaged, they may not be returned by the buyer without an RGA which has been issued by Orion expressly for the products to be returned. This RGA will be issued by Orion with explicit instructions regarding the course of action to be followed. Any products damaged during shipment from Orion must be identified as such and noted on the bill of lading immediately upon receipt. All products returned to Orion must be clearly marked and identified with the RGA number on the bill of lading/packing list. Any/all products that are attempted to be delivered to Orion without proper RGA authorization will be refused at our dock.

Limitation of Liability - In no event shall Orion be liable to customer under any legal of equitable theory of liability for any indirect, incidental, consequential or special losses or damages whatsoever arising from or relating to this proposal.

***Warranty:** Orion warrants its products in accordance with the terms, conditions and limitations of its limited warranty policy. Please refer to the attached warranty, which may be modified from time to time by Orion.

Order and Survey Information Price Level: Concept

Area2	Quantity2	Proposed Fixture2	Voltage	Proposed Control	Ballast	Control Wiring	Proposed Lamps	Proposed Cord	Proposed Brackets	Proposed Accessory 1	Proposed Accessory 2	Proposed Accessory 3	Building Height	Light Levels (H/L/A)	Comments
Back Hall	2	RK2L850	120	-	Low BF		42556 HL850								
Entrance	1	RK2L850	120	-	Low BF		42556 HL850								
Garage-Center Row	15	CM4HP	120	-	High BF		42556 HL850								
Garage-Outer Rows	30	CM2HP	120	-	High BF		42556 HL850								
Historical Society	10	RK2L850	120	-	Low BF		42556 HL850								
Kitchen	2	BCK2LIW	120	-	High BF		42556 HL850								
Lock up Area	1	CM6E	120	OESC300	Low BF		42556 HL850								
Lock up Mezz	2	RK1L850	120	-			42556 HL850								
Locked Area	1	0	120	-	Low BF		42556 HL850								
Maint Men	1	RK2L850	120	-	Low BF		42556 HL850								
Maint Office	4	RK2L850	120	-			42556 HL850								
Maint Parts	3	0	120	-			42556 HL850								
Maint Shop	15	CM6E	120	-	Low BF		42556 HL850								
Maint Shop Mezz 1	2	BCK2LIW	120	-	Low BF		42556 HL850								
Maint Shop Mezz 2	1	RK2L850	120	-	Low BF		42556 HL850								
Maint Shop T12	2	BCK2LIW	120	-	Low BF		42556 HL850								
Meeting Room	16	RK2L850	120	-	Low BF		42556 HL850								
Men	1	RK2L850	120	-	Low BF		42556 HL850								
Office	2	RK2L850	120	-	Low BF		42556 HL850								
Park Maint 1	6	RK2L850	120	-	Low BF		42556 HL850								
Park Maint-2	1	BCK2LIW	120	-	High BF		42556 HL850								
Park Maint 3	3	CM6E	120	-	Low BF		42556 HL850								
Public Works Conf	4	RK2L850	120	-	Low BF		42556 HL850								
Public Works Office	9	RK1L850	120	-	Low BF		42556 HL850								
Sign Shop-1	22	BCK2LIW	120	-	Low BF		42556 HL850								
Sign Shop-2	6	BCK2LIW	120	-	Low BF		42556 HL850								
Sign Shop-3	1	BCK4LIWSEP	120	-	Low BF		42556 HL850								
Women	1	RK2L850	120	-	High BF		42556 HL850								
Workshop Mezz1	1	CMP2LB	120	-	Low BF		42556 HL850								
Workshop Mezz2	2	BCK2LIW	120	-	High BF		42556 HL850								
Workshop-1	3	CM6E	120	-	Low BF		42556 HL850								
Workshop-2	1	BCK2LIW	120	-	Low BF		42556 HL850								
Workshop-3	1	RK1L850		-											

Proposal Department Only

		Type	Notes
Base Price Level:	Concept	2	Concept price allows for Cord and Cables in Fixture Price
Proposal Type:	Concept		
Markup over Base:	0%		

Edit workbook Password:

	Existing										Proposed									Savings					Costs														
Area	Include	Qty	Fixture	kW	Total kW	Amps	Hours	Cooling Hours	kWh	Cool kWh Saved	Voltage	Qty Proposed	Fixture Proposed	Amps	kW Proposed	Total kW Proposed	Hours Proposed	kWh Proposed	kWh Saved	kWh Cooling Savings	%	$	Amps Saved	Control Cost	Lamp Adder	Cord Cost	Hanging Bracket Cost	Accessory 1 cost	Accessory 2 cost	Accessory 3 cost	Fixture Cost	Total Material	Labor Cost	Total Labor	Total Project Cost	ROI	Payback	Order Part Number
Totals		134			#N/A	0.0			92,842			159		0.0		11.6		18,753	67,348	$	71%	$ 4,556	#N/A									$ 10,886		$ -	$ 10,886			
Back Hall	Yes	2	1x4x2	0.082	0.2	0.0	2080	0	341	-	120	2	8421850	0.0	0.049	0.1	2080	204	137	$ -	40%	$ 13	1.37	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	41.40	-	-	$ 43	30%	3.3	
Breakroom	Yes	2	1x4x2	0.082	0.1	0.0	2080	0	171	-	120	1	8421850	0.0	0.049	0.0	2080	102	69	$ -	40%	$ 6	0.68	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	21.65	-	-	$ 22	30%	3.3	
Garage Center Row	Yes	15	400w MH	0.465	6.9	0.0	2340	0	16,141	-	120	15	LHK4F	0.0	0.247	3.7	2340	5,100	10,036	$ -	66%	$ 1,035	57.50	0.00	0.37	0.00	0.00	0.00	0.00	0.00	114.20	1,716.55	-	-	$ 1,719	60%	1.7	
Garage Outer Rows	Yes	30	400w MH	0.46	13.9	0.0	2340	0	32,292	-	120	30	CMLRP	0.0	0.074	2.2	2340	5,195	27,097	$ -	84%	$ 2,565	115.00	0.00	0.37	0.00	0.00	0.00	0.00	0.00	88.18	2,646.39	-	-	$ 2,647	97%	1.0	
Mezzanine Secrets	Yes	10	1x4x2	0.082	0.8	0.0	1560	0	1,279	-	120	1	8421850	0.0	0.049	0.0	1560	76	1,203	$ -	94%	$ 114	0.87	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	21.65	-	-	$ 22	526%	0.2	
Kitchen	Yes	2	2x4x2 CW	0.22	0.4	0.0	2080	0	915	-	120	2	8CK2UW	0.0	0.049	0.1	2080	204	711	$ -	78%	$ 67	3.67	0.00	0.37	0.00	0.00	0.00	0.00	0.00	46.76	94.26	-	-	$ 94	71%	1.4	
Locker Area	Yes	1	400w MH	0.465	0.5	0.0	2080	0	967	-	120	1	LSM4	0.0	0.221	0.2	520	115	852	$ -	88%	$ 81	3.84	74.96	0.37	0.00	0.00	0.00	0.00	0.00	116.03	191.40	-	-	$ 191	42%	2.4	
Locker Mezz	Yes	2	1x4x2	0.082	0.2	0.0	2080	0	341	-	120	2	8421850	0.0	0.025	0.1	0	-	341	$ -	100%	$ 32	1.37	0.00	0.13	0.00	0.00	0.00	0.00	0.00	18.54	18.62			$ 19	93%	1.7	
Locker Area	No	1	0	#N/A	#N/A	0.0	2080	0	-	-	120	0	0	0.0	#N/A	0.0	0	-	-	$ -	0%	$ -	#N/A	0.00	0.37	0.00	0.00	0.00	0.00	0.00		-	-	-	$ -	0%	-	
Main Aisle	Yes	1	1x4x2	0.082	0.1	0.0	500	0	41	-	120	1	8421850	0.0	0.049	0.0	500	25	17	$ -	40%	$ 2	0.68	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	21.65			$ 22	7%	13.9	
Main Office	Yes	4	1x4x2	0.082	0.3	0.0	2080	0	682	-	120	4	8421850	0.0	0.049	0.2	2080	408	275	$ -	40%	$ 25	2.74	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	86.60	-	-	$ 87	30%	3.3	
Main Rolls	No	1	0	#N/A	#N/A	0.0	2080	0	-		120	0	0	0.0	#N/A	0.0	0	-	-	$ -	0%	$ -	#N/A	0.00	0.37	0.00	0.00	0.00	0.00	0.00		-			$ -	0%	-	
Main Shop	Yes	15	400w MH	0.465	7.0	0.0	2080	0	14,508	-	120	15	LSM4	0.0	0.221	3.3	2080	6,895	7,613	$ -	52%	$ 720	56.16	0.00	0.37	0.00	0.00	0.00	0.00	0.00	116.05	1,746.90	-	-	$ 1,746	41%	2.4	
Main Shop Mezz 1	Yes	2	1x4x2 CW	0.22	0.4	0.0	2080	0	915	-	120	2	8CK2UW	0.0	0.049	0.1	2080	204	711	$ -	78%	$ 67	3.67	0.00	0.37	0.00	0.00	0.00	0.00	0.00	46.76	94.26			$ 94	71%	1.4	
Main Shop Mezz 2	Yes	1	1x4x2	0.082	0.1	0.0	2080	0	171	-	120	1	8421850	0.0	0.049	0.0	2080	102	69	$ -	40%	$ 6	0.68	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	21.65	-	-	$ 22	30%	3.3	
Main Shop 512	Yes	2	1x4x2 CW	0.22	0.4	0.0	2080	0	915	-	120	2	8CK2UW	0.0	0.049	0.1	2080	204	711	$ -	78%	$ 67	3.67	0.00	0.37	0.00	0.00	0.00	0.00	0.00	46.76	94.26			$ 94	71%	1.4	
Meeting Room	Yes	16	1x4x2	0.082	1.3	0.0	2080	0	2,083	-	120	16	8421850	0.0	0.049	0.8	2080	1,631	453	$ -	21%	$ 41	6.27	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	346.40	-	-	$ 346	12%	8.3	
Men	Yes	1	1x4x2	0.082	0.1	0.0	1000	0	82	-	120	1	8421850	0.0	0.049	0.0	1000	57	36	$ -	40%	$ 3	0.68	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	21.65			$ 22	16%	6.4	
Office	Yes	2	4' 32w T8	0.122	0.2	0.0	2080	0	508	-	120	2	8421850	0.0	0.049	0.1	2080	204	304	$ -	60%	$ 29	2.03	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	66%	1.5	
Park Maint 1	Yes	6	1x4x2	0.082	0.5	0.0	2080	0	1,024	-	120	6	8421850	0.0	0.049	0.3	2080	612	412	$ -	40%	$ 39	4.10	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	127.68			$ 128	30%	3.3	
Park Maint 2	Yes	1	1x4x2 CW	0.22	0.2	0.0	2080	0	458	-	120	1	8CK2UW	0.0	0.049	0.0	2080	102	356	$ -	78%	$ 34	1.83	0.00	0.37	0.00	0.00	0.00	0.00	0.00	46.76	47.13	-	-	$ 47	71%	1.4	
Park Maint 3	Yes	3	400w MH	0.465	1.4	0.0	2080	0	2,902	-	120	3	CM4E	0.0	0.221	0.7	2080	1,378	1,523	$ -	52%	$ 144	11.65	0.00	0.37	0.00	0.00	0.00	0.00	0.00	116.05	348.16			$ 349	41%	2.4	
Public Works Conf	Yes	4	4' 32w T8	0.122	0.5	0.0	2080	0	1,015	-	120	4	8421850	0.0	0.049	0.2	2080	408	607	$ -	60%	$ 57	4.07	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.29	86.50	-	-	$ 87	66%	1.5	
Public Works Office	Yes	9	4' T8	0.122	1.1	0.0	2080	0	2,284	-	120	9	8421850	0.0	0.049	0.4	2080	918	1,838	$ -	80%	$ 173	6.15	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	171.79			$ 174	99%	1.0	
Sign Shop 1	Yes	22	1x4x2 CW	0.22	4.8	0.0	2080	0	10,067	-	120	22	8CK2UW	0.0	0.049	1.1	2080	2,242	7,825	$ -	78%	$ 740	40.33	0.00	0.37	0.00	0.00	0.00	0.00	0.00	46.76	1,036.50	-	-	$ 1,037	71%	1.4	
Sign Shop 2	Yes	6	1x4x2 CW	0.144	0.9	0.0	2080	0	1,797	-	120	6	8CK2UW	0.0	0.049	0.3	2080	612	1,186	$ -	66%	$ 112	7.10	0.00	0.47	0.00	0.00	0.00	0.00	0.00	46.76	281.76			$ 282	40%	2.5	
Sign Shop 3	Yes	1	2x2x2 CW	0.216	0.2	0.0	2080	0	449	-	120	1	2x2 LED WSEP	0.0	0.099	0.1	2080	206	243	$ -	54%	$ 23	1.56	0.00	0.37	0.00	0.00	0.00	0.00	0.00	61.59	63.46	-	-	$ 64	36%	2.8	
Women	Yes	1	1x4x2	0.082	0.1	0.0	1000	0	82	-	120	1	8421850	0.0	0.049	0.0	1000	33	49	$ -	60%	$ 1	0.83	0.00	0.37	0.00	0.00	0.00	0.00	0.00	21.28	21.65			$ 22	16%	6.4	
Workshop Mezz 1	Yes	1	400w MH	0.465	0.5	0.0	2080	0	967	-	120	1	CMP228	0.0	0.274	0.3	2080	554	413	$ -	44%	$ 39	1.89	0.00	0.37	0.00	0.00	0.00	0.00	0.00	94.84	95.21	-	-	$ 95	41%	2.2	
Workshop Mezz 2	Yes	2	1x4x2 CW	0.22	0.4	0.0	2080	0	915	-	120	2	8CK2UW	0.0	0.049	0.1	2080	204	711	$ -	78%	$ 67	3.67	0.00	0.37	0.00	0.00	0.00	0.00	0.00	46.76	94.26			$ 94	71%	1.4	
Warehouse 1	Yes	3	400w MH	0.465	1.4	0.0	2080	0	2,902	-	120	3	CM4E	0.0	0.221	0.7	2080	1,379	1,523	$ -	52%	$ 144	11.63	0.00	0.37	0.00	0.00	0.00	0.00	0.00	116.05	349.26	-	-	$ 349	41%	2.4	
Warehouse 2	Yes	1	1x4x2 CW	0.22	0.2	0.0	2080	0	458	-	120	1	8CK2UW	0.0	0.049	0.0	2080	102	356	$ -	78%	$ 34	1.83	0.00	0.37	0.00	0.00	0.00	0.00	0.00	46.76	47.13			$ 47	71%	1.4	
Warehouse 3	Yes	2	1x4x2	0.082	0.1	0.0	2080	0	171	-	-	1	7RX1850	0.0	0.025	0.0	2080	52	119	$ -	70%	$ 11	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.54	18.94	-	-	$ 19	59%	1.7	

Concept Proposal

27-Jul-09

Submitted in Partnership with Cummings Electric

FOR FEASIBILITY DISCUSSION ONLY, NOT FOR ORDERING

Scenario: T8 with out Controls

SUMMARY

For:

City of Menasha
Police & Fire
920-967-5272
Menasha, WI 54952

Adam Alix
920-967-5102
aalix@ci.menasha.wi.us

Financial		
Total Material Cost	$	6,497
Total Labor Cost	$	-
Total Services	$	-
Total Project Cost	**$**	**6,497**
Add: Contingency	$	-
Add: Tax	$	-
Less: Rebate	$	2,720
Net Cost	**$**	**3,777**
ROI		**60%**
Payback (Years)		**1.7**

Savings			
Lighting Savings	$	2,252	
Cooling Savings	$	-	
Total Savings	**$**	**2,252**	**57%**

Orion Throughput Agreement		
Monthly Savings	$	188
Less: Monthly OTA Pmt	$	84
Guaranteed Mo. Cash Flow	**$**	**104**

Electrical		
Existing kWh	58,630	
Proposed kWh	25,075	
kWh Saved	**33,555**	**57%**

The figures presented herein are for feasibility only. Under no conditions shall these figures be relied upon or used for budgeting or placing orders with Orion.

This Proposal is for purchases through contractors only. No direct sales from Orion permited under this proposal. Any applicable taxes are to be added to the above costs. Additional Terms may apply.

Orion Energy Systems

Assumptions and Miscellaneous Items

COMPANY INFORMATION		ASSUMPTIONS	
Date:	27-Jul-09	Scenario:	T8 with out Controls
Company:	City of Menasha	Rate:	0.0671
Address 1:	Police & Fire	Rebate:	$ 2,720.00
Address 2:	140 Main Street	Rebate Type:	Prescriptive
City:	Menasha	Incumbent EC:	Cummings Electric
State:	WI	ED:	
Zip:	54952	Roofer:	
Contact:	Adam Alix	Proposal Partner:	Cummings Electric
Phone:	920-967-5102	Utility:	
Fax:	920-967-5272	Sales Rep:	Taylor Kapp
		Proposal Type:	Wholesale
Email:	aalix@ci.menasha.wi.us	Tax Rate:	0.00%

Miscellaneous Materials

Description	Qty	Price	Total
42556 T8 850 HL Ca:	14	$ 82.44	$ 1,154.16
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ 1,154.16

Miscellaneous Labor

Description	Qty	Price	Total
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ -

Labor Calculator

Base Labor	$ -
☐ Union Labor	$ -
☐ Manufacturing	$ -
☐ Freezer	$ -
☐ Regrid	$ -
☐ Hardwire	$ -
☐ Limited Accessability	$ -
☐ No Deck Penetrations	$ -
Miscellaneous Labor	$ -
Total Labor	$ -

Services

☐ Survey Fee	$ -
☐ Project Management	$ -
☐ Rebate Management	$ -
☐ Recycling	$ -
☐ EPAct05	$ -
Total Services	$ -

Contingency Fee 0% $ -

Concept Proposal

Signature to accept fixture counts:_____ **Date:**_____

Summary

Project Cost	$ 3,777
Savings	$ 2,252
Payback (Yrs)	1.7
ROI	60%

Orion Energy Systems

Summary Data Sheet

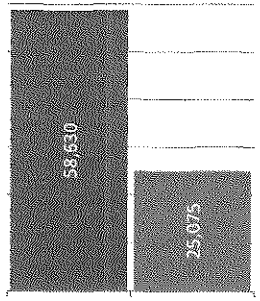
DATA SHEET			EXISTING					PROPOSED									ANALYSIS	
Line #	Area	Include	Existing Quantity	Existing Equipment	Existing Watts	Existing Hours	Existing Cooling Hours	Proposed Quantity	Proposed Equipment	Proposed Wattage	Proposed Control Device	Demand Control Factor	Proposed Hours	Proposed Daylight Hours	Per Unit Cost "All-in"	Estimated BASE Labor Cost	Line Payback	Total Cost
Totals			**26**					**26**							**$ 21.28**		**2.4**	**$ 553**
1	ApparatusRm	Yes	3	1x4x2	82	1820		3	RK2L850	49		100%	1820		$ 21.28		5.3	$ 64
2	Aux Police	Yes	5	1x4x2	82	2184		5	RK2L850	49		100%	2184		$ 21.28		4.4	$ 106
3	Boiler Room	Yes	9	1x4x2	82	500		9	RK2L850	49		100%	500		$ 21.28		19.2	$ 192
4	Breakroom	Yes	8	2x4x4	164	2912		8	RK2L850	49		100%	2912		$ 21.28		0.9	$ 170
5	Breakroom Closet	Yes	1	1x4x2	82	500		1	RK2L850	49		100%	500		$ 21.28		19.2	$ 21
6	Captain	No			#N/A					#N/A			0		#DIV/0!		-	$ -
7	Chief Office	Yes	4	2x4x4	164	2912		4	RK2L850	49		100%	2912		$ 21.28		0.9	$ 85
8	Complaint Clerk	Yes	6	1x4x2	82	2912		6	RK2L850	49		100%	2912		$ 21.28		3.3	$ 128
9	Conf Room	Yes	2	1x4x2	82	1820		2	RK2L850	49		100%	1820		$ 21.28		5.3	$ 43
10	Copy Room	Yes	2	2x4x4	164	2912		2	RK2L850	49		100%	2912		$ 21.28		0.9	$ 43
11	Crime Prev Area	Yes	6	2x4x4	164	2912		6	RK2L850	49		100%	2912		$ 21.28		0.9	$ 128
12	Crime Prev Conf	Yes	2	2x4x4	164	2912		2	RK2L850	49		100%	2912		$ 21.28		0.9	$ 43
13	Crime Prev Office	Yes	1	1x4x2	82	2912		1	RK2L850	49		100%	2912		$ 21.28		3.3	$ 21
14	Crime Prev ST	Yes	1	1x4x2	82	2912		1	RK2L850	49		100%	2912		$ 21.28		3.3	$ 21
15	Day Room	Yes	1	2x4x4	164	1456		1	RK2L850	49		100%	1456		$ 21.28		1.9	$ 21
16	Dorms	Yes	8	2x4x4	164	1456		8	RK2L850	49		100%	1456		$ 21.28		1.9	$ 170
17	Equipment Room	Yes	1	2x4x4	164	500		1	RK2L850	49		100%	500		$ 21.28		5.5	$ 21
18	Exercise Room	Yes	4	1x4x2	82	1820		4	RK2L850	49		100%	1820		$ 21.28		5.3	$ 85
19	Fire Dept Hall	Yes	10	2x2-U	82	2184		10	RK2L850	49		100%	2184		$ 21.28		4.4	$ 213
20	Fitness Room	No			#N/A					#N/A			0		#DIV/0!		-	$ -
21	Garage-1	Yes	13	1x4x2	82	1456		13	RK2L850	49		100%	1456		$ 21.28		6.6	$ 277
22	Garage-2	Yes	2	1x8x2 CW/SS	144	1456		2	8CK2LIW	49		100%	1456	0	$ 46.76		5.0	$ 94
23	Hall-1	Yes	28	1x4x2	82	2184		28	RK2L850	49		100%	2184		$ 21.28		4.4	$ 596
24	Hall-2	Yes	21	2x2-U	82	2184		21	RK2L850U	49		100%	2184		$ 35.50		7.3	$ 746
25	Hall-3	Yes	2	2x4x4	164	2184		2	RK2L850	49		100%	2184		$ 21.28		1.3	$ 43
26	Interview A	Yes	1	2x4x4	164	2184		1	RK2L850	49		100%	2184		$ 21.28		1.3	$ 21
27	Invest Office	Yes	2	2x4x4	164	2912		2	RK2L850	49		100%	2912		$ 21.28		0.9	$ 43
28	Invest Serv	Yes	11	2x4x4	164	2912		11	RK2L850	49		100%	2912		$ 21.28		0.9	$ 234
29	Invest Serv Inter	Yes	2	1x4x2	82	2912		2	RK2L850	49		100%	2912		$ 21.28		3.3	$ 43
30	Kitchen	Yes	6	2x4x4	164	1820		6	RK2L850	49		100%	1820		$ 21.28		1.5	$ 128
31	Locker Room	Yes	3	2x4x4	164	1820		3	RK2L850	49		100%	1820		$ 21.28		1.5	$ 64
32	Locker RR	Yes	3	1x4x2	82	1820		3	RK2L850	49		100%	1820		$ 21.28		5.3	$ 64
33	Maintenance Office		2	2x4x4	164	2080		2	RK2L850	49		100%	2080		$ -		-	$ -
34	Men	Yes	1	1x4x2	82	2184		1	RK2L850	49		100%	2184		$ 21.28		4.4	$ 21
35	Men Locker-1	Yes	11	1x4x2	82	1820		11	RK2L850	49		100%	1820		$ 21.28		5.3	$ 234
36	Men Locker-2	Yes	1	2x2-U	82	1820		1	RK2L850U	49		100%	1820		$ 35.50		8.8	$ 36
37	Office		2	2x4x4	164	2080		2	RK2L850	49		100%	2080		$ -		-	$ -
38	Operations Lieut	Yes	4	2x4x4	164	4368		4	RK2L850	49		100%	4368		$ 21.28		0.6	$ 85
39	Patrol Interview	Yes	1	1x4x2	82	2184		1	RK2L850	49		100%	2184		$ 21.28		4.4	$ 21
40	Patrol Room	Yes	6	2x4x4	164	2912		6	RK2L850	49		100%	2912		$ 21.28		0.9	$ 128
41	Patrol Room-2	Yes	1	1x4x2	82	2912		1	RK2L850	49		100%	2912		$ 21.28		3.3	$ 21
42	Records	Yes	6	2x4x4	164	2912		6	RK2L850	49		100%	2912		$ 21.28		0.9	$ 128
43	Restricted	Yes	2	2x4x4	164	2184		2	RK2L850	49		100%	2184		$ 21.28		1.3	$ 43
44	RR	Yes	3	1x4x2	82	1456		3	RK2L850	49		100%	1456		$ 21.28		6.6	$ 64
45	Server Room	Yes	1	1x4x2	82	500		1	RK2L850	49		100%	500		$ 21.28		19.2	$ 21
46	Shift Command	Yes	2	2x4x4	164	2912		2	RK2L850	49		100%	2912		$ 21.28		0.9	$ 43

47	Stairs 24-7	Yes	2	1x4x2	82	8760	2	RK2L850	49	100%	8760	0	$ 21.28	1.1	$	43
48	Stairs 2912	Yes	2	1x4x2	82	2912	2	RK2L850	49	100%	2912		$ 21.28	3.3	$	43
49	Storage	Yes	6	1x4x2	82	500	6	RK2L850	49	100%	500		$ 21.28	19.2	$	128
50	Toilet	No			#N/A				#N/A		0		#DIV/0!	-	$	-
51	Training Range	Yes	4	1x4x2	82	2184	4	RK2L850	49	100%	2184		$ 21.28	4.4	$	85
52	Training Room	Yes	12	1x4x2	82	1820	12	RK2L850	49	100%	1820		$ 21.28	5.3	$	255
53	Women	Yes	1	1x4x2	82	2184	1	RK2L850	49	100%	2184		$ 21.28	4.4	$	21
54	Women Locker	No			#N/A	1820			#N/A	100%	1820		#DIV/0!	-	$	-

Savings Calculations

kiloWatt hours (kWh) reduction		
Existing kWh	58,630	
Proposed kWh	25,075	
Variance	**33,555**	57%
kWh Rate	$ 0.07	
Savings	**$ 2,252**	

Refridgeration (BTU) reduction	
kWh Cooled	-
BTU Factor	0.342
kWh Rate	$ 0.07
Cooling Savings	**$ -**
Total Savings	**$ 2,252**



Existing kWh Proposed kWh

kiloWatt (kW) reduction		
Existing kW	25.626	
Proposed kW	11.466	
Variance	**14.16**	55%

Amperage	
Existing Amp draw	0
Proposed Amp draw	0
Variance	0

Equipment	
Existing Quantity	234
Proposed Quantity	234
Variance	-

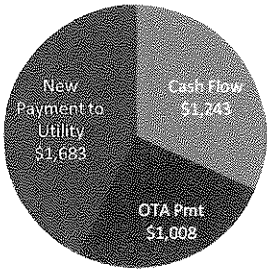
		EXISTING					PROPOSED						SAVINGS	
Area	Included	Qty	Exist KW	Total KW Existing	Existing Hours	Total kWh Existing	Qty	Proposed KW	Total KW Proposed	Proposed Hours (Net)	Total kWh Proposed		kWh Saved	$ Saved
ApparatusRm	✓	3	0.082	0.2	1,820	448	3	RK2L850	0.1	1,820	268		180	12
Aux Police	✓	5	0.082	0.4	2,184	895	5	RK2L850	0.2	2,184	535		360	24
Boiler Room	✓	9	0.082	0.7	500	369	9	RK2L850	0.4	500	221		149	10
Breakroom	✓	8	0.164	1.3	2,912	3,821	8	RK2L850	0.4	2,912	1,142		2,679	180
Breakroom Closet	✓	1	0.082	0.1	500	41	1	RK2L850	0.0	500	25		17	1
Captain	✗	-	-	-	-	-	-	-	-	-	-		-	-
Chief Office	✓	4	0.164	0.7	2,912	1,910	4	RK2L850	0.2	2,912	571		1,340	90
Complaint Clerk	✓	6	0.082	0.5	2,912	1,433	6	RK2L850	0.3	2,912	856		577	39
Conf Room	✓	2	0.082	0.2	1,820	298	2	RK2L850	0.1	1,820	178		120	8
Copy Room	✓	2	0.164	0.3	2,912	955	2	RK2L850	0.1	2,912	285		670	45
Crime Prev Area	✓	6	0.164	1.0	2,912	2,865	6	RK2L850	0.3	2,912	856		2,009	135
Crime Prev Conf	✓	2	0.164	0.3	2,912	955	2	RK2L850	0.1	2,912	285		670	45
Crime Prev Office	✓	1	0.082	0.1	2,912	239	1	RK2L850	0.0	2,912	143		96	6
Crime Prev ST	✓	1	0.082	0.1	2,912	239	1	RK2L850	0.0	2,912	143		96	6
Day Room	✓	1	0.164	0.2	1,456	239	1	RK2L850	0.0	1,456	71		167	11
Dorms	✓	8	0.164	1.3	1,456	1,910	8	RK2L850	0.4	1,456	571		1,340	90
Equipment Room	✓	1	0.164	0.2	500	82	1	RK2L850	0.0	500	25		58	4
Exercise Room	✓	4	0.082	0.3	1,820	597	4	RK2L850	0.2	1,820	357		240	16
Fire Dept Hall	✓	10	0.082	0.8	2,184	1,791	10	RK2L850	0.5	2,184	1,070		721	48
Fitness Room	✗	-	-	-	-	-	-	-	-	-	-		-	-

Garage-1		13	0.082	1.1	1,456	1,552	13	RK2L850	0.6	1,456	927	625	42
Garage-2		2	0.144	0.3	1,456	419	2	8CK2LIW	0.1	1,456	143	277	19
Hall-1		28	0.082	2.3	2,184	5,014	28	RK2L850	1.4	2,184	2,996	2,018	135
Hall-2		21	0.082	1.7	2,184	3,761	21	RK2L850U	1.0	2,184	2,247	1,514	102
Hall-3		2	0.164	0.3	2,184	716	2	RK2L850	0.1	2,184	214	502	34
Interview A		1	0.164	0.2	2,184	358	1	RK2L850	0.0	2,184	107	251	17
Invest Office		2	0.164	0.3	2,912	955	2	RK2L850	0.1	2,912	285	670	45
Invest Serv		11	0.164	1.8	2,912	5,253	11	RK2L850	0.5	2,912	1,570	3,684	247
Invest Serv Inter		2	0.082	0.2	2,912	478	2	RK2L850	0.1	2,912	285	192	13
Kitchen		6	0.164	1.0	1,820	1,791	6	RK2L850	0.3	1,820	535	1,256	84

Orion Throughput Agreement (OTA)

Current Payment to Utility

Proposed System



OTA Cash Flow Analysis

Current	kwh purchased or displaced	Rate		Total Cost
Utility	58,630	$ 0.07	$	3,934
			$	**3,934**
Proposed				
Utility	25,075	$ 0.07	$	1,683
Orion	33,555	$ 0.03	$	1,008
	58,630	$ 0.05	**$**	**2,691**
Cash Flow			**$**	**1,243**

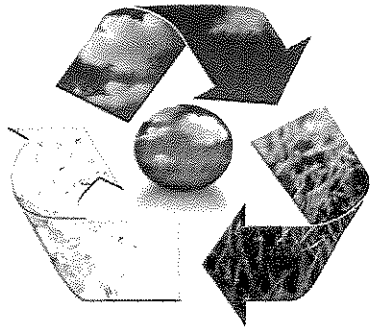
The OTA allows you to replace a portion of your electricity at higher rates with displaced electricity (savings) at lower rates. The combined total is less than your current.

Delay Costs

Delays cost YOU money!

	% of Purchase	Cash Purchase	OTA
1 Month	#VALUE!	*$0,188*	*$ 104*
2 Months	#VALUE!	*$0,375*	*$ 207*
3 Months	#VALUE!	*$0,563*	*$ 311*
4 Months	#VALUE!	*$0,751*	*$ 414*
5 Months	#VALUE!	*$0,938*	*$ 518*
6 Months	30%	*$1,126*	*$ 622*

ENVIRONMENTAL IMPACT



How Can Lighting Damage the Environment?

Although it appears innocuous, lighting causes air pollution. Here's how: Each day, your local power plant will commonly burn coal, oil, and gas to generate electricity for your lighting system as well as for your other electrical needs. While burning, these fossil fuels produces a readily available and instantaneous supply of electricity, it also generates air pollutants.

Air Pollution Causes Global Warming, Acid Rain and Smog

Each of these pollutants causes environmental damage. Carbon dioxide (CO2) causes global warming, sulfur dioxide (SO2) causes acid rain, and nitrogen oxides (NOx) cause both acid rain and smog.

Your Lighting Project will help to decrease air pollution and environmental damage by the following amounts each year:

Polutant*	1 year	20 years
CO2 Removed	22.0 Tons	440.7 Tons
SO2 Removed	0.1 Tons	1.8 Tons
NOX Removed	0.03 Tons	0.65 Tons
Mercury Removed	0.41 gm	8.28 gm

Environmental Equivelant **	1 year	20 years
Acres of Trees Planted	6	123
Cars Removed from the Road	5	108
Gallons of Gas Saved	2,770	55,400
Barrels of Oil Saved	66	1,319

* calculated using emission factors per the EPA's eGRID database, as recognized protocol by the World Resource Institute/World Business Council for Sustainable Development (WRI/WBCSD).

** Based on PA Gov't Services for Focus projects

Terms and Conditions

Building and Electrical Code

This proposal assumes that the facility for which the proposed system is to be installed meets all national, state, and local electric and building codes. If upgrades are required due to code requirements, costs for such upgrades are the sole responsibility of the customer.

Voltages

All voltages at the facility for which the proposed system is to be installed are to be assumed to be between 120 volts and 277 volts, unless specifically noted here in as 347 volts of 480 volts. If facility voltages vary from that of the fixtures as described in this proposal, customer is responsible for all the costs associated with correcting the voltage of the facility or fixture.

NEMA Power Supplies

Unless specifically documented herein, Orion will provide standard NEMA power supplies. Other power supplies required by customer will have an added cost.

NEC Compliance and UL Approved Products

The portable luminaire status is a UL approved designation, which Orion achieved for the Mate-N-Loc series. Orion's fixtures with this status are manufactured according to UL protocol. Fixtures manufactured with a portable luminaire designation are tested 100% after the final assembly. The installation of a luminaire, both standard and portable, is subject to compliance with the electrical code, as established by the NEC (National Electric Code). This set of codes which electricians use as guidelines in their work. The interpretation of the NEC is up to the discretion of the electrician or electrical inspector. It is the position of Orion Energy Services that all recommendations for installing luminaires and portable luminaires must be NEC compliant, as approved by an electrician or electrical inspector. Orion's products are to be installed according to the NEC.

Electrical Power Quality

The customers electrical system that supplies power to Orion fixtures and products must meet Power Quality specifications as outlined in IEEE 1159 (Institute of Electrical Engineers). If it is determined that any deviation from these specifications exists, it may void the warranty of Orion's products, or the warranty of other manufacturers' products used within Orion's products. If a correction is required to bring the customer's system within the specifications of the IEEE 1159, any such costs will be the responsibility of the customer.

Controls

All controls such as occupancy, ambient light, peak demand, or otherwise generally require post-installation calibration. Unless costs for calibration are specifically detailed in this proposal, additional charges will apply for on-site calibration. Customer may assume responsibility for calibration to avoid such charges. **Orion does not recommend the use of controls in conditions where shortened lamp/ballast life may occur.** See warranty for details.

Change/Add-on Orders

As part of the pre-sale inspection of customer's facilities, Orion or its agent has conducted a thorough survey and have documented its findings as listed herein. However, due to hidden situations, oversights or changes since the survey, 100% accuracy is not always achievable. Therefore, if it is necessary to add, change or delete material or labor to deliver the result desired by the customer, change orders may be required. If a situation arises where it is necessary to add, change, or delete any material or labor, customer will be presentedwith such situation and costs for any prior approval. Charges or credits for approved changes will be issued to customer under the original purchase order at the completion of the project.

Freight Terms; Special Handling and Storage

Standard freight terms are FOB Orion factory (Manitowoc, WI), prepaid and added to the invoice. Unless specifically documented herein, Orion assumes that the customer will accept complete shipment of material as listed in this proposal. If the shipment is refused or redirected in any manner, customer is responsible for any associated costs. Orion must be notified by customer of any delivery/receiving limitations prior to accepting this proposal. Storage or other special handling costs are the sole responsibility of the customer.

Rebates

Utility rebate figure is an estimate only and is subject to applicable guidelines and requirements. Actual rebate amount received by customer from utility may vary. In no event shall the utility rebate affect Customer's obligation to pay Orion the total proposal amount indicated within the stated payment terms.

Safekeeping

Customer is responsible for receiving in, counting, and inspecting for damage of all deliveries from Orion. If there is a discrepancy in count, notify Orion within 24 business hours of receipt. If product arrives damaged, note the extent of damage on carrier's paperwork, photograph the damage, and report it to Orion immediately. Orion will not assume responsibility for missing product after receipt by Customer. Customer should take the necessary safekeeping precautions during installation to protect product from theft or damage.

Electrical Savings Guarantee and Emissions Credits -

If customer elects the electrical savings guarantee, and if at any time during the 5-year period from the date of installation the customer does not realize such guaranteed electrical savings over any annual period, customer should notify Orion in writing of such fact. Orion shall, within 90 days of receipt of such written notice and detailed information from customer setting forth the computations supporting such failure to realize the electrical savings that were guaranteed and after having had sufficient opportunity to review all appropriate information relating to an analysis of the savings and the conditions at customer's facility, at Orion's sole option and expense, either (i) install such additional control measures or equipment as reasonably necessary to achieve the guaranteed electrical savings or (ii) remit to customer 100% of the difference between the guaranteed electrical savings and the actual electrical savings realized by customer over the applicable annual period.

If customer elects the electrical savings guarantee, and in consideration for such guarantee, customer agrees with Orion as follows: In the event customer qualifies for emissions reduction credits under applicable federal and/or state law due to the beneficial environmental impact arising from the installation of Orion's energy-efficient lighting and controls technology, it is understood and agreed that customer and Orion shall, for a period of twenty (20) years from the date of installation, share in the net proceeds of the value stream created by such emissions credits on a 50/50 basis. Orion shall, on behalf of the customer, take or cause to be taken all reasonable measures to try to obtain and secure the value arising from the emissions credits, and customer shall cooperate with Orion in such efforts and shall execute and deliver to Orion such documents of instruments and take such further actions as Orion may reasonably request in order to secure and perfect the right to such emissions credits and to share in the net proceeds of such credits as provided herein.

Returns: Non-Defective

After completion of the project, no products may be returned by the buyer without prior written authorization in the form of a Return Goods Authorization or similar form **(RGA)** which has been issued by Orion expressly for the products to be returned. The RGA will be issued at the sole discretion of Orion and must be requested by the buyer within 30 days of the original shipment date. Returned products must be in their original sealed containers. No non-stocking special products, custom-made products, or outdated or modified versions of factory stocking items may be returned by the buyer. The minimum value for which an RGA will be issued is $500.00, except for products considered by Orion to be defective in workmanship or materials. All returns will be subject to a minimum 15% handling and restocking charge, and a charge back will be made for the freight expense of the original shipment. Products accepted for return must be shipped prepaid to the factory. All products returned to Orion must be clearly marked and identified with the RGA number on the bill of lading/packing list. Any/all products that are attempted to be delivered to Orion without proper RGA authorization will be refused at our dock.

Returns: Defective/Damaged

If products are defective or damaged, they may not be returned by the buyer without an RGA which has been issued by Orion expressly for the products to be returned. This RGA will be issued by Orion with explicit instructions regarding the course of action to be followed. Any products damaged during shipment from Orion must be identified as such and noted on the bill of lading immediately upon receipt. All products returned to Orion must be clearly marked and identified with the RGA number on the bill of lading/packing list. Any/all products that are attempted to be delivered to Orion without proper RGA authorization will be refused at our dock.

Limitation of Liability - In no event shall Orion be liable to customer under any legal of equitable theory of liability for any indirect, incidental, consequential or special losses or damages whatsoever arising from or relating to this proposal.

***Warranty:** Orion warrants its products in accordance with the terms, conditions and limitations of its limited warranty policy. Please refer to the attached warranty, which may be modified from time to time by Orion.

Order and Survey Information Peak Team Concept

Area2	Quantity2	Proposed Fixture2	Voltage	Proposed Control	Ballast	Control Wiring	Proposed Lamps	Proposed Cord	Proposed Brackets	Proposed Accessory 1	Proposed Accessory 2	Proposed Accessory 3	Building Height	Light Levels (H/L/A)	Comments
Apparatus Rm	3	RK2LB50													
Aux Police	5	RK2LB50													
Boiler Room	9	RK2LB50													
Breakroom	8	RK2LB50		-											
Breakroom Closet	1	RK2LB50													
Captain	-		0:	-											
Chief Office	4	RK2LB50													
Complaint Clerk	6	RK2LB50													
Conf Room	2	RK2LB50													
Copy Room	2	RK2LB50		-											
Crime Prev Area	6	RK2LB50													
Crime Prev Conf	2	RK2LB50		-											
Crime Prev Office	1	RK2LB50													
Crime Prev ST	1	RK2LB50													
Day Room	1	RK2LB50													
Dorms	8	RK2LB50		-											
Equipment Room	1	RK2LB50													
Exercise Room	4	RK2LB50		-											
Fire Dept Hall	10	RK2LB50													
Fitness Room	-		0:	-											
Garage-1	13	RK2LB50													
Garage 2	2	RK2LBW		-											
Hall-1	78	RK2LB50													
Hall-2	21	RK2LB50													
Hall-3	2	RK2LB50													
Interview A	1	RK2LB50		-											
Invest Office	2	RK2LB50													
Invest Serv	11	RK2LB50		-											
Invest Serv Inter	2	RK2LB50													
Kitchen	6	RK2LB50		-											
Locker Room	3	RK2LB50													
Locker Rlt	9	RK2LB50		-											
Maintenance Office	2	RK2LB50													
Men	1	RK2LB50		-											
Men Locker-1	11	RK2LB50													
Men Locker-2	1	RK2LB50													
Office	2	RK2LB50													
Operations Lieut	4	RK2LB50		-											
Patrol Interview	1	RK2LB50													
Patrol Room	6	RK2LB50		-											
Patrol Room-2	1	RK2LB50													
Records	6	RK2LB50													
Restricted	2	RK2LB50													
RR	2	RK2LB50		-											
Server Room	1	RK2LB50													
Shift Command	2	RK2LB50		-											
Stairs 24-7	2	RK2LB50													
Stairs 2912	2	RK2LB50		-											
Storage	6	RK2LB50													
Toilet	-		0:	-											
Training Range	4	RK2LB50													
Training Room	12	RK2LB50		-											
Women	1	RK2LB50													
Women Locker	-		0:	-											

Proposal Department Only

		Type	Notes
Base Price Level:	Concept	2	Concept price allows for Cord and Cables in Fixture Price
Proposal Type:	Concept		
Markup over Base:	0%		

Edit workbook Password:

	Existing										
Area	Include	Qty	Fixture	kW	Total kW	Amps	Hours	Cooling Hours	kWh	Cool kWh Saved	Voltage
Totals		[illegible]			[illegible]	0.0			[illegible]		
[illegible]	Yes	2	1x4x2	0.082	0.2	0.0	1820	0	448	-	-
Box Police	Yes	5	1x4x2	0.082	0.4	0.0	2184	0	895	-	-
Boiler Room	Yes	9	1x4x2	0.082	0.7	0.0	500	0	369	-	-
Breakroom	Yes	8	2x4x4	0.164	1.3	0.0	2912	0	3,821	-	-
Breakroom Closet	Yes	1	1x4x2	0.082	0.1	0.0	500	0	41	-	-
Catwalk	No	0	0	N/A	N/A	0.0	0	0	-	-	-
Chief Office	Yes	4	2x4x4	0.164	0.7	0.0	2912	0	1,910	-	-
Community Clerk	Yes	6	1x4x2	0.082	0.5	0.0	2912	0	1,433	-	-
Cold Room	Yes	1	1x4x2	0.082	0.1	0.0	1820	0	298	-	-
Copy Room	Yes	2	2x4x4	0.164	0.3	0.0	2912	0	955	-	-
Crime Prev Area	Yes	6	2x4x4	0.164	1.0	0.0	2912	0	2,865	-	-
Crime Prev [illegible]	Yes	2	2x4x4	0.164	0.3	0.0	2912	0	955	-	-
Crime Prev Office	Yes	1	1x4x2	0.082	0.1	0.0	2912	0	239	-	-
Crime Prev ST	Yes	1	1x4x2	0.082	0.1	0.0	2912	0	238	-	-
Day Room	Yes	1	2x4x4	0.164	0.2	0.0	1456	0	239	-	-
Dorms	Yes	8	2x4x4	0.164	1.3	0.0	1456	0	1,910	-	-
Equipment Room	Yes	1	2x4x4	0.164	0.2	0.0	500	0	82	-	-
Exercise Room	Yes	4	1x4x2	0.082	0.3	0.0	1820	0	597	-	-
Fire Dept Hall	Yes	10	2x2 U	0.082	0.8	0.0	2184	0	1,791	-	-
Fitness Room	No	0	0	N/A	N/A	0.0	0	0	-	-	-
Garage-1	Yes	13	1x4x2	0.082	1.1	0.0	1456	0	1,552	-	-
Garage-2	Yes	2	[illegible]	0.142	0.3	0.0	1456	0	414	-	-
Hall-1	Yes	28	1x4x2	0.082	2.3	0.0	2184	0	5,014	-	-
Hall-2	Yes	33	[illegible]	[illegible]	1.7	0.0	2184	0	3,761	-	-
Hall-3	Yes	2	2x4x4	0.164	0.3	0.0	2184	0	716	-	-
Interview A	Yes	1	2x4x4	0.164	0.2	0.0	[illegible]	0	[illegible]	-	-
Invest Office	Yes	2	2x4x4	0.164	0.3	0.0	2912	0	955	-	-
[illegible]	Yes	11	2x4x4	0.164	1.8	0.0	2912	0	5,254	-	-
[illegible]	Yes	2	1x4x2	0.082	0.2	0.0	2912	0	478	-	-
Kitchen	Yes	6	2x4x4	0.164	1.0	0.0	1820	0	1,791	-	-
Locker Room	Yes	3	2x4x4	0.164	0.5	0.0	1820	0	895	-	-
Locker RR	Yes	3	1x4x2	0.082	0.2	0.0	1820	0	448	-	-
Maintenance Office		0	2x4x4	0.164	0.2	0.0	2080	0	-	-	-
Men	Yes	1	1x4x2	0.082	0.1	0.0	2184	0	179	-	-
Men Locker-1	Yes	11	1x4x2	0.082	0.9	0.0	1820	0	1,642	-	-
Men Locker-2	Yes	1	2x2 U	0.082	0.1	0.0	1820	0	149	-	-
Office		0	2x4x4	0.164	0.3	0.0	2080	0	-	-	-
Operations Desk	Yes	4	2x4x4	0.164	0.7	0.0	4368	0	2,865	-	-
Patrol Interview	Yes	1	1x4x2	0.082	0.1	0.0	2184	0	179	-	-
Patrol Room	Yes	6	2x4x4	0.164	1.0	0.0	2912	0	2,865	-	-
Patrol Room-2	Yes	1	1x4x2	0.082	0.1	0.0	2912	0	239	-	-
Records	Yes	6	2x4x4	0.164	1.0	0.0	2912	0	2,865	-	-
Restrooms	Yes	2	2x4x4	0.164	0.3	0.0	2184	0	716	-	-
RR	Yes	3	1x4x2	0.082	0.2	0.0	1456	0	358	-	-
Server Room	Yes	1	1x4x2	0.082	0.1	0.0	500	0	41	-	-
Shift Commander	Yes	2	2x4x4	0.164	0.3	0.0	2912	0	955	-	-
Stairs 24-7	Yes	2	1x4x2	0.082	0.2	0.0	8760	0	1,437	-	-
Stairs [illegible]	Yes	2	1x4x2	0.082	0.2	0.0	2912	0	478	-	-
Storage	Yes	6	1x4x2	0.082	0.5	0.0	500	0	246	-	-
Toilet	No	0	0	N/A	N/A	0.0	0	0	-	-	-
Training Range	Yes	4	1x4x2	0.082	0.3	0.0	2184	0	716	-	-
Training Room	Yes	12	1x4x2	0.082	1.0	0.0	1820	0	1,791	-	-
Women	Yes	1	1x4x2	0.082	0.1	0.0	2184	0	179	-	-
Women Locker	No	0	0	N/A	N/A	0.0	1820	0	-	-	-

	Proposed							Savings			
Area	Qty Proposed	Fixture Proposed	Amps	kW Proposed	Total kW Proposed	Hours Proposed	kWh Proposed	kWh Saved	kWh Cooling Savings	%	$	Amps Saved
Totals	[illegible]		0.0		[illegible]		[illegible]	[illegible]	$	57%	$ 2,254	
[illegible]	2	8821650	0.0	0.049	0.1	1820	268	180	$ -	40%	$ 12	-
Box Police	5	8821650	0.0	0.049	0.2	2184	533	362	$ -	40%	$ 24	-
Boiler Room	9	8821650	0.0	0.049	0.4	500	221	148	$ -	40%	$ 10	-
Breakroom	8	8821650	0.0	0.049	0.4	2912	1,142	2,679	$ -	70%	$ 126	-
Breakroom Closet	1	8821650	0.0	0.049	0.0	500	25	17	$ -	40%	$ 1	-
Catwalk	0	0	0.0	N/A	0.0	0	-	-	$ -	0%	$ -	-
Chief Office	4	8821650	0.0	0.049	0.2	2912	571	1,340	$ -	70%	$ 90	-
Community Clerk	6	8821650	0.0	0.049	0.3	2912	856	577	$ -	40%	$ 39	-
Cold Room	2	8821650	0.0	0.049	0.1	1820	175	120	$ -	40%	$ 8	-
Copy Room	2	8821650	0.0	0.049	0.1	2912	285	670	$ -	70%	$ 45	-
Crime Prev Area	6	8821650	0.0	0.049	0.3	2912	856	2,009	$ -	70%	$ 135	-
Crime Prev [illegible]	2	8821650	0.0	0.049	0.1	2912	285	670	$ -	70%	$ 45	-
Crime Prev Office	1	8821650	0.0	0.049	0.0	2912	143	96	$ -	40%	$ 6	-
Crime Prev ST	1	8821650	0.0	0.049	0.0	2912	143	96	$ -	40%	$ 5	-
Day Room	1	8821650	0.0	0.049	0.0	1456	71	167	$ -	70%	$ 11	-
Dorms	8	8821650	0.0	0.049	0.4	1456	571	1,340	$ -	70%	$ 90	-
Equipment Room	1	8821650	0.0	0.049	0.0	500	25	58	$ -	70%	$ 4	-
Exercise Room	4	8821650	0.0	0.049	0.2	1820	357	240	$ -	40%	$ 16	-
Fire Dept Hall	10	8821650	0.0	0.049	0.5	2184	1,070	721	$ -	40%	$ 48	-
Fitness Room	0	0	0.0	N/A	0.0	0	-	-	$ -	0%	$ -	-
Garage-1	13	8821650	0.0	0.049	0.6	1456	927	625	$ -	40%	$ 42	-
Garage-2	2	[illegible]	0.0	0.049	0.1	1456	[illegible]	277	$ -	66%	$ 18	-
Hall-1	28	8821650	0.0	0.049	1.4	2184	2,996	2,018	$ -	40%	$ 135	-
Hall-2	33	[illegible]	0.0	0.049	1.6	2184	1,247	2,514	$ -	40%	$ [illegible]	-
Hall-3	2	8821650	0.0	0.049	0.1	2184	214	502	$ -	70%	$ 34	-
Interview A	1	8821650	0.0	0.049	0.0	2184	107	251	$ -	70%	$ 17	-
Invest Office	2	8821650	0.0	0.049	0.1	2912	285	670	$ -	70%	$ 45	-
[illegible]	11	8821650	0.0	0.049	0.5	2912	1,570	3,684	$ -	70%	$ 247	-
[illegible]	2	8821650	0.0	0.049	0.1	2912	285	192	$ -	40%	$ 13	-
Kitchen	6	8821650	0.0	0.049	0.3	1820	535	1,256	$ -	70%	$ 84	-
Locker Room	3	8821650	0.0	0.049	0.1	1820	266	626	$ -	70%	$ 42	-
Locker RR	3	8821650	0.0	0.049	0.1	1820	268	180	$ -	40%	$ 12	-
Maintenance Office	0	8821650	0.0	0.049	0.0	2080	-	-	$ -	0%	$ -	-
Men	1	8821650	0.0	0.049	0.0	2184	107	72	$ -	40%	$ 5	-
Men Locker-1	11	8821650	0.0	0.049	0.5	1820	983	660	$ -	40%	$ 44	-
Men Locker-2	1	[illegible]	0.0	0.049	0.0	1820	89	60	$ -	40%	$ 4	-
Office	0	8821650	0.0	0.049	0.0	2080	-	-	$ -	0%	$ -	-
Operations Desk	4	8821650	0.0	0.049	0.2	4368	856	2,009	$ -	70%	$ 135	-
Patrol Interview	1	8821650	0.0	0.049	0.0	2184	107	72	$ -	40%	$ 5	-
Patrol Room	6	8821650	0.0	0.049	0.3	2912	856	2,009	$ -	70%	$ 135	-
Patrol Room-2	1	8821650	0.0	0.049	0.0	2912	143	96	$ -	40%	$ 6	-
Records	6	8821650	0.0	0.049	0.3	2912	856	2,009	$ -	70%	$ 135	-
Restrooms	2	8821650	0.0	0.049	0.1	2184	214	502	$ -	70%	$ 34	-
RR	3	8821650	0.0	0.049	0.1	1456	214	144	$ -	40%	$ 10	-
Server Room	1	8821650	0.0	0.049	0.0	500	25	17	$ -	40%	$ 1	-
Shift Commander	2	8821650	0.0	0.049	0.1	2912	285	670	$ -	70%	$ 45	-
Stairs 24-7	2	8821650	0.0	0.049	0.1	8760	858	578	$ -	40%	$ 39	-
Stairs [illegible]	2	8821650	0.0	0.049	0.1	2912	285	192	$ -	40%	$ 13	-
Storage	6	8821650	0.0	0.049	0.3	500	147	99	$ -	40%	$ 7	-
Toilet	0	0	0.0	N/A	0.0	0	-	-	$ -	0%	$ -	-
Training Range	4	8821650	0.0	0.049	0.2	2184	428	288	$ -	40%	$ 19	-
Training Room	12	8821650	0.0	0.049	0.6	1820	1,070	721	$ -	40%	$ 48	-
Women	1	8821650	0.0	0.049	0.0	2184	107	72	$ -	40%	$ 5	-
Women Locker	0	0	0.0	N/A	0.0	1820	-	-	$ -	0%	$ -	-

	Costs														
Area	Control Cost	Lamp Adder	Cord Cost	Hanging Bracket Cost	Accessory 1 Cost	Accessory 2 Cost	Accessory 3 Cost	Fixture Cost	Total Material	Labor Each	Total Labor	Total Project Cost	ROI	Payback	Order Part Number
Totals									$ 5,343		$ -	$ 5,343	[illegible]	[illegible]	
[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	29%	3.4	
Box Police	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	106.40	-	-	$ 106	23%	4.4	
Boiler Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	191.52	-	-	$ 192	5%	19.2	
Breakroom	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	170.24	-	-	$ 170	106%	0.9	
Breakroom Closet	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	5%	19.2	
Catwalk	0.00	0.00	0.00	0.00	0.00	0.00	0.00		-	-	-	$ -	0%	-	
Chief Office	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	85.12	-	-	$ 85	106%	0.9	
Community Clerk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	127.68	-	-	$ 128	30%	3.3	
Cold Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	19%	5.3	
Copy Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	106%	0.9	
Crime Prev Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	127.68	-	-	$ 128	106%	0.9	
Crime Prev [illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	106%	0.9	
Crime Prev Office	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	30%	3.3	
Crime Prev ST	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	30%	3.3	
Day Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	53%	1.9	
Dorms	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	170.24	-	-	$ 170	53%	1.9	
Equipment Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	18%	5.5	
Exercise Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	85.12	-	-	$ 85	19%	5.3	
Fire Dept Hall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	212.80	-	-	$ 213	23%	4.4	
Fitness Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00		-	-	-	$ -	0%	-	
Garage-1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	276.64	-	-	$ 277	15%	6.6	
Garage-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.76	91.52	-	-	$ 92	20%	5.0	
Hall-1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	595.84	-	-	$ 596	23%	4.4	
Hall-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	[illegible]	[illegible]	-	-	$ [illegible]	14%	7.1	
Hall-3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	79%	1.3	
Interview A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	79%	1.3	
Invest Office	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	106%	0.9	
[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	234.08	-	-	$ 234	106%	0.9	
[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	30%	3.3	
Kitchen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	127.68	-	-	$ 128	66%	1.5	
Locker Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	63.84	-	-	$ 64	66%	1.5	
Locker RR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	63.84	-	-	$ 64	19%	5.3	
Maintenance Office	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	-	-	-	$ -	0%	-	
Men	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	23%	4.4	
Men Locker-1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	234.08	-	-	$ 234	19%	5.3	
Men Locker-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	[illegible]	[illegible]	-	-	$ [illegible]	[illegible]	[illegible]	
Office	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	-	-	-	$ -	0%	-	
Operations Desk	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	85.12	-	-	$ 85	159%	0.6	
Patrol Interview	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	23%	4.4	
Patrol Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	127.68	-	-	$ 128	106%	0.9	
Patrol Room-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	30%	3.3	
Records	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	127.68	-	-	$ 128	106%	0.9	
Restrooms	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	79%	1.3	
RR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	63.84	-	-	$ 64	15%	6.6	
Server Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	5%	19.2	
Shift Commander	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	106%	0.9	
Stairs 24-7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	91%	1.1	
Stairs [illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56	-	-	$ 43	30%	3.3	
Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	127.68	-	-	$ 128	5%	19.2	
Toilet	0.00	0.00	0.00	0.00	0.00	0.00	0.00		-	-	-	$ -	0%	-	
Training Range	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	85.12	-	-	$ 85	23%	4.4	
Training Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	255.36	-	-	$ 255	19%	5.3	
Women	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28	-	-	$ 21	23%	4.4	
Women Locker	0.00	0.00	0.00	0.00	0.00	0.00	0.00		-	-	-	$ -	0%	-	

Concept Proposal

27-Jul-09

Submitted in Partnership with Cummings Electric

FOR FEASIBILITY DISCUSSION ONLY, NOT FOR ORDERING

Scenario: T8 with out Controls

SUMMARY

For:

City of Menasha
Senior Center
920-967-5272
Menasha, WI 54952

Adam Alix
920-967-5102
aalix@ci.menasha.wi.us

Financial		
Total Material Cost	$	1,219
Total Labor Cost	$	-
Total Services	$	-
Total Project Cost	**$**	**1,219**
Add: Contingency	$	-
Add: Tax	$	-
Less: Rebate	$	592
Net Cost	**$**	**627**
ROI		**129%**
Payback (Years)		**0.8**

Savings			
Lighting Savings	$	806	
Cooling Savings	$	-	
Total Savings	**$**	**806**	**65%**

Orion Throughput Agreement		
Monthly Savings	$	67
Less: Monthly OTA Pmt	$	14
Guaranteed Mo. Cash Flow	**$**	**53**

Electrical		
Existing kWh	13,108	
Proposed kWh	4,586	
kWh Saved	**8,522**	**65%**

The figures presented herein are for feasibility only. Under no conditions shall these figures be relied upon or used for budgeting or placing orders with Orion.

This Proposal is for purchases through contractors only. No direct sales from Orion permited under this proposal. Any applicable taxes are to be added to the above costs. Additional Terms may apply.

Orion Energy Systems

Assumptions and Miscellaneous Items

COMPANY INFORMATION		ASSUMPTIONS	
Date:	27-Jul-09	Scenario:	T8 with out Controls
Company:	City of Menasha	Rate:	0.0946
Address 1:	Senior Center	Rebate:	$ 592.00
Address 2:	140 Main Street	Rebate Type:	Prescriptive
City:	Menasha	Incumbent EC:	Cummings Electric
State:	WI	ED:	
Zip:	54952	Roofer:	
Contact:	Adam Alix	Proposal Partner:	Cummings Electric
Phone:	920-967-5102	Utility:	
Fax:	920-967-5272	Sales Rep:	Taylor Kapp
		Proposal Type:	Wholesale
Email:	aalix@ci.menasha.wi.us	Tax Rate:	0.00%

Miscellaneous Materials

Description	Qty	Price	Total
42556 T8 850 HL Ca:	3	$ 82.44	$ 247.32
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ 247.32

Miscellaneous Labor

Description	Qty	Price	Total
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ -

Labor Calculator

Base Labor	$ -
☐ Union Labor	$ -
☐ Manufacturing	$ -
☐ Freezer	$ -
☐ Regrid	$ -
☐ Hardwire	$ -
☐ Limited Accessability	$ -
☐ No Deck Penetrations	$ -
Miscellaneous Labor	$ -
Total Labor	**$ -**

Services

☐ Survey Fee	$ -
☐ Project Management	$ -
☐ Rebate Management	$ -
☐ Recycling	$ -
☐ EPAct05	$ -
Total Services	**$ -**

Contingency Fee 0% $ -

Concept Proposal

Signature to accept fixture counts:_____ **Date:**_____

Summary

Project Cost	$ 627
Savings	$ 806
Payback (Yrs)	0.8
ROI	129%

Orion Energy Systems

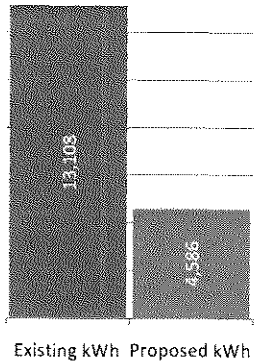
Summary Data Sheet

DATA SHEET			EXISTING					PROPOSED									ANALYSIS	
Line #	Area	Include	Existing Quantity	Existing Equipment	Existing Watts	Existing Hours	Existing Cooling Hours	Proposed Quantity	Proposed Equipment	Proposed Wattage	Proposed Control Device	Demand Control Factor	Proposed Hours	Proposed Daylight Hours	Per Unit Cost "All-in"	Estimated BASE Labor Cost	Line Payback	Total Cost
Totals			**19**					**19**							**$ 22.03**		**1.2**	**$ 419**
1	15 and Kitchen	Yes	6	2x4x4	164	2080		6	RK2L850	49		100%	2080		$ 21.28		0.9	$ 128
2	8 & 9	Yes	12	4' 3Lx34w	122	2080		12	RK2L850	49		100%	2080		$ 21.28		1.5	$ 255
3	Basement	No			#N/A					#N/A			0		#DIV/0!		-	$ -
4	Entrance 1	No			#N/A					#N/A		100%	0		#DIV/0!		-	$ -
5	Entrance 2	Yes	1	2x2-U	82	2080		1	RK2L850U	49		100%	2080		$ 35.50		5.5	$ 36
6	Men and 4	Yes	4	1x4x2	82	2080	0	4	RK2L850	49		100%	2080	0	$ 21.28		3.3	$ 85
7	Rec Room	Yes	20	2x4x4	164	2080		20	RK2L850	49		100%	2080		$ 21.28		0.9	$ 426
8	Stairs/Landing	Yes	2	1x4x2	82	2080	0	2	RK2L850	49		100%	2080	0	$ 21.28		3.3	$ 43
9	Women	No	4		#N/A					#N/A		100%	0		#DIV/0!		-	$ -

Savings Calculations

kiloWatt hours (kWh) reduction		
Existing kWh	13,108	
Proposed kWh	4,586	
Variance	**8,522**	65%
kWh Rate	$ 0.09	
Savings	**$ 806**	

Refridgeration (BTU) reduction	
kWh Cooled	-
BTU Factor	0.342
kWh Rate	$ 0.09
Cooling Savings	**$ -**
Total Savings	**$ 806**



kiloWatt (kW) reduction		
Existing kW	6.302	
Proposed kW	2.205	
Variance	**4.097**	65%

Amperage	
Existing Amp draw	0
Proposed Amp draw	0
Variance	0

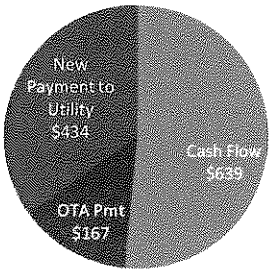
Equipment	
Existing Quantity	45
Proposed Quantity	45
Variance	-

		EXISTING					PROPOSED					SAVINGS	
Area	Included	Qty	Exist KW	Total KW Existing	Existing Hours	Total kWh Existing	Qty	Proposed KW	Total KW Proposed	Proposed Hours (Net)	Total kWh Proposed	kWh Saved	$ Saved
15 and Kitchen	✓	6	0.164	1.0	2,080	2,047	6	RK2L850	0.3	2,080	612	1,435	136
8 & 9	✓	12	0.122	1.5	2,080	3,045	12	RK2L850	0.6	2,080	1,223	1,822	172
Basement	✗	-	-	-	-	-	-	-	-	-	-	-	-
Entrance 1	✗	-	-	-	-	-	-	-	-	-	-	-	-
Entrance 2	✓	1	0.082	0.1	2,080	171	1	RK2L850U	0.0	2,080	102	69	6
Men and 4	✓	4	0.082	0.3	2,080	682	4	RK2L850	0.2	2,080	408	275	26
Rec Room	✓	20	0.164	3.3	2,080	6,822	20	RK2L850	1.0	2,080	2,038	4,784	453
Stairs/Landing	✓	2	0.082	0.2	2,080	341	2	RK2L850	0.1	2,080	204	137	13
Women	✗	-	-	-	-	-	-	-	-	-	-	-	-

Orion Throughput Agreement (OTA)

Current Payment to Utility

Proposed System



OTA Cash Flow Analysis

Current	kwh purchased or displaced	Rate		Total Cost
Utility	13,108	$ 0.09	$	1,240
			$	**1,240**
Proposed				
Utility	4,586	$ 0.09	$	434
Orion	8,522	$ 0.02	$	167
	13,108	$ 0.05	**$**	**601**
Cash Flow			**$**	**639**

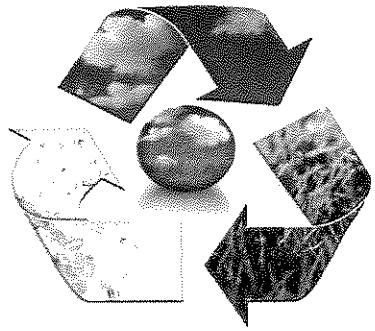
The OTA allows you to replace a portion of your electricity at higher rates with displaced electricity (savings) at lower rates. The combined total is less than your current.

Delay Costs

Delays cost YOU money!

	% of Purchase	Cash Purchase	OTA
1 Month	#VALUE!	*$0,067*	*$ 53*
2 Months	#VALUE!	*$0,134*	*$ 106*
3 Months	#VALUE!	*$0,202*	*$ 160*
4 Months	#VALUE!	*$0,269*	*$ 213*
5 Months	#VALUE!	*$0,336*	*$ 266*
6 Months	#VALUE!	*$0,403*	*$ 319*

ENVIRONMENTAL IMPACT



How Can Lighting Damage the Environment?

Although it appears innocuous, lighting causes air pollution. Here's how: Each day, your local power plant will commonly burn coal, oil, and gas to generate electricity for your lighting system as well as for your other electrical needs. While burning, these fossil fuels produces a readily available and instantaneous supply of electricity, it also generates air pollutants.

Air Pollution Causes Global Warming, Acid Rain and Smog

Each of these pollutants causes environmental damage. Carbon dioxide (CO2) causes global warming, sulfur dioxide (SO2) causes acid rain, and nitrogen oxides (NOx) cause both acid rain and smog.

Your Lighting Project will help to decrease air pollution and environmental damage by the following amounts each year:

Polutant*	1 year	20 years
CO2 Removed	5.6 Tons	111.9 Tons
SO2 Removed	0.0 Tons	0.4 Tons
NOX Removed	0.01 Tons	0.17 Tons
Mercury Removed	0.11 gm	2.10 gm

Environmental Equivelant **	1 year	20 years
Acres of Trees Planted	2	31
Cars Removed from the Road	1	28
Gallons of Gas Saved	703	14,070
Barrels of Oil Saved	17	335

* calculated using emission factors per the EPA's eGRID database, as recognized protocol by the World Resource Institute/World Business Council for Sustainable Development (WRI/WBCSD).

** Based on PA Gov't Services for Focus projects

Terms and Conditions

Building and Electrical Code

This proposal assumes that the facility for which the proposed system is to be installed meets all national, state, and local electric and building codes. If upgrades are required due to code requirements, costs for such upgrades are the sole responsibility of the customer.

Voltages

All voltages at the facility for which the proposed system is to be installed are to be assumed to be between 120 volts and 277 volts, unless specifically noted here in as 347 volts of 480 volts. If facility voltages vary from that of the fixtures as described in this proposal, customer is responsible for all the costs associated with correcting the voltage of the facility or fixture.

NEMA Power Supplies

Unless specifically documented herein, Orion will provide standard NEMA power supplies. Other power supplies required by customer will have an added cost.

NEC Compliance and UL Approved Products

The portable luminaire status is a UL approved designation, which Orion achieved for the Mate-N-Loc series. Orion's fixtures with this status are manufactured according to UL protocol. Fixtures manufactured with a portable luminaire designation are tested 100% after the final assembly. The installation of a luminaire, both standard and portable, is subject to compliance with the electrical code, as established by the NEC (National Electric Code). This set of codes which electricians use as guidelines in their work. The interpretation of the NEC is up to the discretion of the electrician or electrical inspector. It is the position of Orion Energy Services that all recommendations for installing luminaires and portable luminaires must be NEC compliant, as approved by an electrician or electrical inspector. Orion's products are to be installed according to the NEC.

Electrical Power Quality

The customers electrical system that supplies power to Orion fixtures and products must meet Power Quality specifications as outlined in IEEE 1159 (Institute of Electrical Engineers). If it is determined that any deviation from these specifications exists, it may void the warranty of Orion's products, or the warranty of other manufacturers' products used within Orion's products. If a correction is required to bring the customer's system within the specifications of the IEEE 1159, any such costs will be the responsibility of the customer.

Controls

All controls such as occupancy, ambient light, peak demand, or otherwise generally require post-installation calibration. Unless costs for calibration are specifically detailed in this proposal, additional charges will apply for on-site calibration. Customer may assume responsibility for calibration to avoid such charges. **Orion does not recommend the use of controls in conditions where shortened lamp/ballast life may occur.** See warranty for details.

Change/Add-on Orders

As part of the pre-sale inspection of customer's facilities, Orion or its agent has conducted a thorough survey and have documented its findings as listed herein. However, due to hidden situations, oversights or changes since the survey, 100% accuracy is not always achievable. Therefore, if it is necessary to add, change or delete material or labor to deliver the result desired by the customer, change orders may be required. If a situation arises where it is necessary to add, change, or delete any material or labor, customer will be presentedwith such situation and costs for any prior approval. Charges or credits for approved changes will be issued to customer under the original purchase order at the completion of the project.

Freight Terms; Special Handling and Storage

Standard freight terms are FOB Orion factory (Manitowoc, WI), prepaid and added to the invoice. Unless specifically documented herein, Orion assumes that the customer will accept complete shipment of material as listed in this proposal. If the shipment is refused or redirected in any manner, customer is responsible for any associated costs. Orion must be notified by customer of any delivery/receiving limitations prior to accepting this proposal. Storage or other special handling costs are the sole responsibility of the customer.

Rebates

Utility rebate figure is an estimate only and is subject to applicable guidelines and requirements. Actual rebate amount received by customer from utility may vary. In no event shall the utility rebate affect Customer's obligation to pay Orion the total proposal amount indicated within the stated payment terms.

Safekeeping

Customer is responsible for receiving in, counting, and inspecting for damage of all deliveries from Orion. If there is a discrepancy in count, notify Orion within 24 business hours of receipt. If product arrives damaged, note the extent of damage on carrier's paperwork, photograph the damage, and report it to Orion immediately. Orion will not assume responsibility for missing product after receipt by Customer. Customer should take the necessary safekeeping precautions during installation to protect product from theft or damage.

Electrical Savings Guarantee and Emissions Credits -

If customer elects the electrical savings guarantee, and if at any time during the 5-year period from the date of installation the customer does not realize such guaranteed electrical savings over any annual period, customer should notify Orion in writing of such fact. Orion shall, within 90 days of receipt of such written notice and detailed information from customer setting forth the computations supporting such failure to realize the electrical savings that were guaranteed and after having had sufficient opportunity to review all appropriate information relating to an analysis of the savings and the conditions at customer's facility, at Orion's sole option and expense, either (i) install such additional control measures or equipment as reasonably necessary to achieve the guaranteed electrical savings or (ii) remit to customer 100% of the difference between the guaranteed electrical savings and the actual electrical savings realized by customer over the applicable annual period.

If customer elects the electrical savings guarantee, and in consideration for such guarantee, customer agrees with Orion as follows: In the event customer qualifies for emissions reduction credits under applicable federal and/or state law due to the beneficial environmental impact arising from the installation of Orion's energy-efficient lighting and controls technology, it is understood and agreed that customer and Orion shall, for a period of twenty (20) years from the date of installation, share in the net proceeds of the value stream created by such emissions credits on a 50/50 basis. Orion shall, on behalf of the customer, take or cause to be taken all reasonable measures to try to obtain and secure the value arising from the emissions credits, and customer shall cooperate with Orion in such efforts and shall execute and deliver to Orion such documents of instruments and take such further actions as Orion may reasonably request in order to secure and perfect the right to such emissions credits and to share in the net proceeds of such credits as provided herein.

Returns: Non-Defective

After completion of the project, no products may be returned by the buyer without prior written authorization in the form of a Return Goods Authorization or similar form **(RGA)** which has been issued by Orion expressly for the products to be returned. The RGA will be issued at the sole discretion of Orion and must be requested by the buyer within 30 days of the original shipment date. Returned products must be in their original sealed containers. No non-stocking special products, custom-made products, or outdated or modified versions of factory stocking items may be returned by the buyer. The minimum value for which an RGA will be issued is $500.00, except for products considered by Orion to be defective in workmanship or materials. All returns will be subject to a minimum 15% handling and restocking charge, and a charge back will be made for the freight expense of the original shipment. Products accepted for return must be shipped prepaid to the factory. All products returned to Orion must be clearly marked and identified with the RGA number on the bill of lading/packing list. Any/all products that are attempted to be delivered to Orion without proper RGA authorization will be refused at our dock.

Returns: Defective/Damaged

If products are defective or damaged, they may not be returned by the buyer without an RGA which has been issued by Orion expressly for the products to be returned. This RGA will be issued by Orion with explicit instructions regarding the course of action to be followed. Any products damaged during shipment from Orion must be identified as such and noted on the bill of lading immediately upon receipt. All products returned to Orion must be clearly marked and identified with the RGA number on the bill of lading/packing list. Any/all products that are attempted to be delivered to Orion without proper RGA authorization will be refused at our dock.

Limitation of Liability - In no event shall Orion be liable to customer under any legal of equitable theory of liability for any indirect, incidental, consequential or special losses or damages whatsoever arising from or relating to this proposal.

***Warranty:** Orion warrants its products in accordance with the terms, conditions and limitations of its limited warranty policy. Please refer to the attached warranty, which may be modified from time to time by Orion.

Order and Survey Information Price Level: Concept

Area2	Quantity2	Proposed Fixture2	Voltage	Proposed Control	Ballast	Control Wiring	Proposed Lamps	Proposed Cord	Proposed Brackets	Proposed Accessory 1	Proposed Accessory 2	Proposed Accessory 3	Building Height	Light Levels (H/L/A)	Comments
16 and Kitchen	5	RK2L850													
8 & 9	17	RK2L850													
Basement															
Entrance 1	-			0											
Entrance 2	1	RK2L850U													
Men and 4	4	RK2L850		-											
Rec Room	28	RK2L850													
Stairs/Landing	2	RK2L850													
Women	4														

Proposal Department Only

		Type	Notes
Base Price Level:	Concept	2	Concept price allows for Cord and Cables in Fixture Price
Proposal Type:	Concept		
Markup over Base:	0%		

Edit workbook Password:

Existing										
Area	Include	Qty	Fixture	KW	Total KW	Amps	Hours	Cooling Hours	KWh	Cost KWh Cooled
Totals		45			#N/A	8.3			13,106	
[illegible]	Yes	6	2x4x4	0.161	1.0	0.0	2080	0	2,047	-
[illegible]	Yes	12	4' 1x4x2	0.122	1.5	0.0	2080	0	3,049	-
Basement	No	0	0	#N/A	#N/A	0.0	0	0	-	-
Entrance 1	No	0	0	#N/A	#N/A	0.0	0	0	-	-
Entrance 2	Yes	1	2x2-U	0.082	0.1	0.0	2080	0	172	-
[illegible] 4	Yes	4	1x4x2	0.082	0.3	0.0	2080	0	682	-
[illegible] Room	Yes	20	2x4x4	0.161	3.2	0.0	2080	0	6,822	-
Stairs/Landing	Yes	2	1x4x2	0.082	0.2	0.0	2080	0	341	-
[illegible]	No	0	0	#N/A	#N/A	0.0	0	0	-	-

Proposed									Savings				
Area	Voltage	Qty Proposed	Fixture Proposed	Amps	KW Proposed	Total KW Proposed	Hours Proposed	KWh Proposed	KWh Saved	KWh Cooling Savings	%	$	Amps Saved
Totals		45		0.0		2.2		4,585	8,521	$	65%	$ 806	
[illegible]	-	6	[illegible]	0.0	0.049	0.3	2080	612	1,435	$ -	70%	$ 138	-
[illegible]	-	12	[illegible]	0.0	0.049	0.6	2080	1,223	1,827	$ -	60%	$ 172	-
Basement	-	0	0	0.0	#N/A	0.0	0	-	-	$ -	0%	$ -	-
Entrance 1	-	0	0	0.0	#N/A	0.0	0	-	-	$ -	0%	$ -	-
Entrance 2	-	2	[illegible]	0.0	0.049	0.0	2080	107	65	$ -	40%	$ 6	-
[illegible] 4	-	4	[illegible]	0.0	0.049	0.2	2080	408	273	$ -	40%	$ 26	-
[illegible] Room	-	20	[illegible]	0.0	0.049	1.0	2080	2,038	4,784	$ -	70%	$ 451	-
Stairs/Landing	-	2	[illegible]	0.0	0.049	0.1	2080	204	137	$ -	40%	$ 13	-
[illegible]	-	0	0	0.0	#N/A	0.0	0	-	-	$ -	0%	$ -	-

Costs														
Area	Control Cost	Lamp Adder	Cord Cost	Hanging Bracket Cost	Accessory 1 Cost	Accessory 2 Cost	Accessory 3 Cost	Fixture Cost	Total Material	Labor Each	Total Labor	Total Project Cost	ROI	Payback	Order Part Number
Totals									$ 972		$ -	$ 972	[illegible]	[illegible]	
[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.26	127.56		-	$ 128	108%	0.9	
[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.26	255.16		-	$ 255	68%	1.5	
Basement	0.00	0.00	0.00	0.00	0.00	0.00	0.00		-	-	-	$ -	0%	-	
Entrance 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00		-	-	-	$ -	0%	-	
Entrance 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.90	35.50	-	-	$ 36	18%	5.5	
[illegible] 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.26	85.04	-	-	$ 85	31%	3.3	
[illegible] Room	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.21	425.00	-	-	$ 426	106%	0.9	
Stairs/Landing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.58	-	-	$ 43	31%	3.3	
[illegible]	0.00	0.00	0.00	0.00	0.00	0.00	0.00		-	-	-	$ -	0%	-	

Concept Proposal

27-Jul-09

Submitted in Partnership with Cummings Electric

FOR FEASIBILITY DISCUSSION ONLY, NOT FOR ORDERING

Scenario: T8 with out Controls

SUMMARY

For:

City of Menasha
City Hall
920-967-5272
Menasha, WI 54952

Adam Alix
920-967-5102
aalix@ci.menasha.wi.us

Financial		
Total Material Cost	$	633
Total Labor Cost	$	-
Total Services	$	-
Total Project Cost	**$**	**633**
Add: Contingency	$	-
Add: Tax	$	-
Less: Rebate	$	240
Net Cost	**$**	**393**
ROI		**38%**
Payback (Years)		**2.6**

Savings			
Lighting Savings	$	149	
Cooling Savings	$	-	
Total Savings	**$**	**149**	**50%**

Orion Throughput Agreement		
Monthly Savings	$	12
Less: Monthly OTA Pmt	$	9
Guaranteed Mo. Cash Flow	**$**	**4**

Electrical		
Existing kWh	4,435	
Proposed kWh	2,217	
kWh Saved	**2,218**	**50%**

The figures presented herein are for feasibility only. Under no conditions shall these figures be relied upon or used for budgeting or placing orders with Orion.

This Proposal is for purchases through contractors only. No direct sales from Orion permited under this proposal. Any applicable taxes are to be added to the above costs. Additional Terms may apply.

Orion Energy Systems

Assumptions and Miscellaneous Items

COMPANY INFORMATION		ASSUMPTIONS	
Date:	27-Jul-09	Scenario:	T8 with out Controls
Company:	City of Menasha	Rate:	0.0671
Address 1:	City Hall	Rebate:	$ 240.00
Address 2:	140 Main Street	Rebate Type:	Prescriptive
City:	Menasha	Incumbent EC:	Cummings Electric
State:	WI	ED:	
Zip:	54952	Roofer:	
Contact:	Adam Alix	Proposal Partner:	Cummings Electric
Phone:	920-967-5102	Utility:	
Fax:	920-967-5272	Sales Rep:	Taylor Kapp
		Proposal Type:	Wholesale
Email:	aalix@ci.menasha.wi.us	Tax Rate:	0.00%

Miscellaneous Materials

Description	Qty	Price	Total
42556 T8 850 HL Ca	2	$ 82.44	$ 164.88
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ 164.88

Miscellaneous Labor

Description	Qty	Price	Total
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ -

Labor Calculator

Base Labor	$	-
☐ Union Labor	$	-
☐ Manufacturing	$	-
☐ Freezer	$	-
☐ Regrid	$	-
☐ Hardwire	$	-
☐ Limited Accessability	$	-
☐ No Deck Penetrations	$	-
Miscellaneous Labor	$	-
Total Labor	$	-

Services

☐ Survey Fee	$	-
☐ Project Management	$	-
☐ Rebate Management	$	-
☐ Recycling	$	-
☐ EPAct05	$	-
Total Services	$	-

Contingency Fee 0% $ -

Concept Proposal

Signature to accept fixture counts:_____ **Date:**_____

Summary

Project Cost	$	393
Savings	$	149
Payback (Yrs)		2.6
ROI		38%

Orion Energy Systems

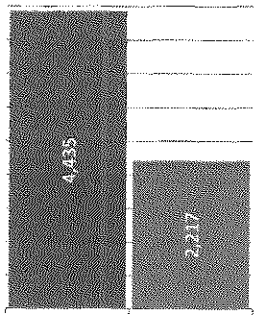
Summary Data Sheet

DATA SHEET			EXISTING					PROPOSED									ANALYSIS	
Line #	Area	Include	Existing Quantity	Existing Equipment	Existing Watts	Existing Hours	Existing Cooling Hours	Proposed Quantity	Proposed Equipment	Proposed Wattage	Proposed Control Device	Demand Control Factor	Proposed Hours	Proposed Daylight Hours	Per Unit Cost "All-in"	Estimated BASE Labor Cost	Line Payback	Total Cost
Totals			**12**					**12**							**$ 21.28**		**3.1**	**$ 255**
1	Back Stairs	Yes	1	1x4x2	82	3120		1	RK2L850	49		100%	3120		$ 21.28		3.1	$ 21
2	Basement	Yes	4	1x4x2	82	2080		4	RK2L850	49		100%	2080		$ 21.28		4.6	$ 85
3	Conference Room	Yes	3	2x4x4	164	1560		3	RK2L850	49		100%	1560		$ 21.28		1.8	$ 64
4	Elevator	Yes	2	1x4x2	82	2080	0	2	RK2L850	49		100%	2080	0	$ 21.28		4.6	$ 43
5	Mailroom	Yes	2	2x4x4	164	2080		2	RK2L850	49		100%	2080		$ 21.28		1.3	$ 43
6	Stairs	Yes	10	1x4x2	82	2080		10	RK2L850	49		100%	2080		$ 21.28		4.6	$ 213

Savings Calculations

kiloWatt hours (kWh) reduction		
Existing kWh	4,435	
Proposed kWh	2,217	
Variance	**2,218**	50%
kWh Rate	$ 0.07	
Savings	**$ 149**	

Refridgeration (BTU) reduction	
kWh Cooled	-
BTU Factor	0.342
kWh Rate	$ 0.07
Cooling Savings	**$ -**
Total Savings	**$ 149**



kiloWatt (kW) reduction		
Existing kW	2.214	
Proposed kW	1.078	
Variance	**1.136**	51%

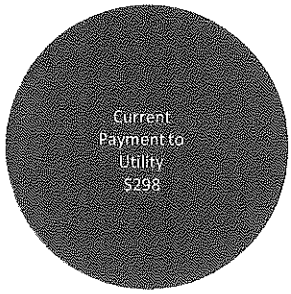
Amperage	
Existing Amp draw	0
Proposed Amp draw	0
Variance	0

Equipment	
Existing Quantity	22
Proposed Quantity	22
Variance	-

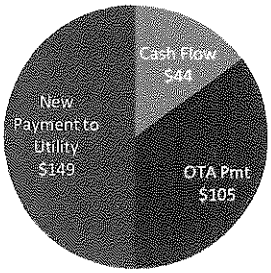
		EXISTING					PROPOSED					SAVINGS	
Area	Included	Qty	Exist KW	Total KW Existing	Existing Hours	Total kWh Existing	Qty	Proposed KW	Total KW Proposed	Proposed Hours (Net)	Total kWh Proposed	kWh Saved	$ Saved
Back Stairs	✓	1	0.082	0.1	3,120	256	1	RK2L850	0.0	3,120	153	103	7
Basement	✓	4	0.082	0.3	2,080	682	4	RK2L850	0.2	2,080	408	275	18
Conference Room	✓	3	0.164	0.5	1,560	768	3	RK2L850	0.1	1,560	229	538	36
Elevator	✓	2	0.082	0.2	2,080	341	2	RK2L850	0.1	2,080	204	137	9
Mailroom	✓	2	0.164	0.3	2,080	682	2	RK2L850	0.1	2,080	204	478	32
Stairs	✓	10	0.082	0.8	2,080	1,706	10	RK2L850	0.5	2,080	1,019	686	46

Orion Throughput Agreement (OTA)

Current Payment to Utility



Proposed System



OTA Cash Flow Analysis

Current	kwh purchased or displaced	Rate		Total Cost
Utility	4,435	$ 0.07	$	298
			$	**298**
Proposed				
Utility	2,217	$ 0.07	$	149
Orion	2,218	$ 0.05	$	105
	4,435	$ 0.06	**$**	**254**
Cash Flow			**$**	**44**

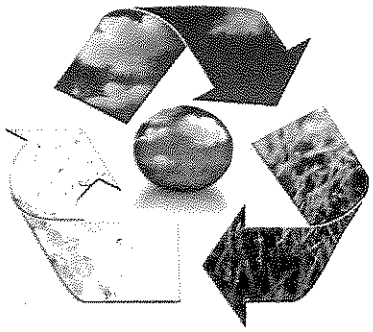
The OTA allows you to replace a portion of your electricity at higher rates with displaced electricity (savings) at lower rates. The combined total is less than your current.

Delay Costs

Delays cost YOU money!

	% of Purchase	Cash Purchase	OTA
1 Month	#VALUE!	*$0,012*	*$ 4*
2 Months	#VALUE!	*$0,025*	*$ 7*
3 Months	#VALUE!	*$0,037*	*$ 11*
4 Months	#VALUE!	*$0,050*	*$ 15*
5 Months	#VALUE!	*$0,062*	*$ 18*
6 Months	#VALUE!	*$0,074*	*$ 22*

ENVIRONMENTAL IMPACT



How Can Lighting Damage the Environment?

Although it appears innocuous, lighting causes air pollution. Here's how: Each day, your local power plant will commonly burn coal, oil, and gas to generate electricity for your lighting system as well as for your other electrical needs. While burning, these fossil fuels produces a readily available and instantaneous supply of electricity, it also generates air pollutants.

Air Pollution Causes Global Warming, Acid Rain and Smog

Each of these pollutants causes environmental damage. Carbon dioxide (CO2) causes global warming, sulfur dioxide (SO2) causes acid rain, and nitrogen oxides (NOx) cause both acid rain and smog.

Your Lighting Project will help to decrease air pollution and environmental damage by the following amounts each year:

Polutant*	1 year	20 years
CO2 Removed	1.5 Tons	29.1 Tons
SO2 Removed	0.0 Tons	0.1 Tons
NOX Removed	0.00 Tons	0.04 Tons
Mercury Removed	0.03 gm	0.55 gm

Environmental Equivelant **	1 year	20 years
Acres of Trees Planted	0	8
Cars Removed from the Road	0	7
Gallons of Gas Saved	183	3,662
Barrels of Oil Saved	4	87

* calculated using emission factors per the EPA's eGRID database, as recognized protocol by the World Resource Institute/World Business Council for Sustainable Development (WRI/WBCSD).

** Based on PA Gov't Services for Focus projects

Terms and Conditions

Building and Electrical Code

This proposal assumes that the facility for which the proposed system is to be installed meets all national, state, and local electric and building codes. If upgrades are required due to code requirements, costs for such upgrades are the sole responsibility of the customer.

Voltages

All voltages at the facility for which the proposed system is to be installed are to be assumed to be between 120 volts and 277 volts, unless specifically noted here in as 347 volts of 480 volts. If facility voltages vary from that of the fixtures as described in this proposal, customer is responsible for all the costs associated with correcting the voltage of the facility or fixture.

NEMA Power Supplies

Unless specifically documented herein, Orion will provide standard NEMA power supplies. Other power supplies required by customer will have an added cost.

NEC Compliance and UL Approved Products

The portable luminaire status is a UL approved designation, which Orion achieved for the Mate-N-Loc series. Orion's fixtures with this status are manufactured according to UL protocol. Fixtures manufactured with a portable luminaire designation are tested 100% after the final assembly. The installation of a luminaire, both standard and portable, is subject to compliance with the electrical code, as established by the NEC (National Electric Code). This set of codes which electricians use as guidelines in their work. The interpretation of the NEC is up to the discretion of the electrician or electrical inspector. It is the position of Orion Energy Services that all recommendations for installing luminaires and portable luminaires must be NEC compliant, as approved by an electrician or electrical inspector. Orion's products are to be installed according to the NEC.

Electrical Power Quality

The customers electrical system that supplies power to Orion fixtures and products must meet Power Quality specifications as outlined in IEEE 1159 (Institute of Electrical Engineers). If it is determined that any deviation from these specifications exists, it may void the warranty of Orion's products, or the warranty of other manufacturers' products used within Orion's products. If a correction is required to bring the customer's system within the specifications of the IEEE 1159, any such costs will be the responsibility of the customer.

Controls

All controls such as occupancy, ambient light, peak demand, or otherwise generally require post-installation calibration. Unless costs for calibration are specifically detailed in this proposal, additional charges will apply for on-site calibration. Customer may assume responsibility for calibration to avoid such charges. **Orion does not recommend the use of controls in conditions where shortened lamp/ballast life may occur.** See warranty for details.

Change/Add-on Orders

As part of the pre-sale inspection of customer's facilities, Orion or its agent has conducted a thorough survey and have documented its findings as listed herein. However, due to hidden situations, oversights or changes since the survey, 100% accuracy is not always achievable. Therefore, if it is necessary to add, change or delete material or labor to deliver the result desired by the customer, change orders may be required. If a situation arises where it is necessary to add, change, or delete any material or labor, customer will be presentedwith such situation and costs for any prior approval. Charges or credits for approved changes will be issued to customer under the original purchase order at the completion of the project.

Freight Terms; Special Handling and Storage

Standard freight terms are FOB Orion factory (Manitowoc, WI), prepaid and added to the invoice. Unless specifically documented herein, Orion assumes that the customer will accept complete shipment of material as listed in this proposal. If the shipment is refused or redirected in any manner, customer is responsible for any associated costs. Orion must be notified by customer of any delivery/receiving limitations prior to accepting this proposal. Storage or other special handling costs are the sole responsibility of the customer.

Rebates

Utility rebate figure is an estimate only and is subject to applicable guidelines and requirements. Actual rebate amount received by customer from utility may vary. In no event shall the utility rebate affect Customer's obligation to pay Orion the total proposal amount indicated within the stated payment terms.

Safekeeping

Customer is responsible for receiving in, counting, and inspecting for damage of all deliveries from Orion. If there is a discrepancy in count, notify Orion within 24 business hours of receipt. If product arrives damaged, note the extent of damage on carrier's paperwork, photograph the damage, and report it to Orion immediately. Orion will not assume responsibility for missing product after receipt by Customer. Customer should take the necessary safekeeping precautions during installation to protect product from theft or damage.

Electrical Savings Guarantee and Emissions Credits -

If customer elects the electrical savings guarantee, and if at any time during the 5-year period from the date of installation the customer does not realize such guaranteed electrical savings over any annual period, customer should notify Orion in writing of such fact. Orion shall, within 90 days of receipt of such written notice and detailed information from customer setting forth the computations supporting such failure to realize the electrical savings that were guaranteed and after having had sufficient opportunity to review all appropriate information relating to an analysis of the savings and the conditions at customer's facility, at Orion's sole option and expense, either (i) install such additional control measures or equipment as reasonably necessary to achieve the guaranteed electrical savings or (ii) remit to customer 100% of the difference between the guaranteed electrical savings and the actual electrical savings realized by customer over the applicable annual period.

If customer elects the electrical savings guarantee, and in consideration for such guarantee, customer agrees with Orion as follows: In the event customer qualifies for emissions reduction credits under applicable federal and/or state law due to the beneficial environmental impact arising from the installation of Orion's energy-efficient lighting and controls technology, it is understood and agreed that customer and Orion shall, for a period of twenty (20) years from the date of installation, share in the net proceeds of the value stream created by such emissions credits on a 50/50 basis. Orion shall, on behalf of the customer, take or cause to be taken all reasonable measures to try to obtain and secure the value arising from the emissions credits, and customer shall cooperate with Orion in such efforts and shall execute and deliver to Orion such documents of instruments and take such further actions as Orion may reasonably request in order to secure and perfect the right to such emissions credits and to share in the net proceeds of such credits as provided herein.

Returns: Non-Defective

After completion of the project, no products may be returned by the buyer without prior written authorization in the form of a Return Goods Authorization or similar form **(RGA)** which has been issued by Orion expressly for the products to be returned. The RGA will be issued at the sole discretion of Orion and must be requested by the buyer within 30 days of the original shipment date. Returned products must be in their original sealed containers. No non-stocking special products, custom-made products, or outdated or modified versions of factory stocking items may be returned by the buyer. The minimum value for which an RGA will be issued is $500.00, except for products considered by Orion to be defective in workmanship or materials. All returns will be subject to a minimum 15% handling and restocking charge, and a charge back will be made for the freight expense of the original shipment. Products accepted for return must be shipped prepaid to the factory. All products returned to Orion must be clearly marked and identified with the RGA number on the bill of lading/packing list. Any/all products that are attempted to be delivered to Orion without proper RGA authorization will be refused at our dock.

Returns: Defective/Damaged

If products are defective or damaged, they may not be returned by the buyer without an RGA which has been issued by Orion expressly for the products to be returned. This RGA will be issued by Orion with explicit instructions regarding the course of action to be followed. Any products damaged during shipment from Orion must be identified as such and noted on the bill of lading immediately upon receipt. All products returned to Orion must be clearly marked and identified with the RGA number on the bill of lading/packing list. Any/all products that are attempted to be delivered to Orion without proper RGA authorization will be refused at our dock.

Limitation of Liability - In no event shall Orion be liable to customer under any legal of equitable theory of liability for any indirect, incidental, consequential or special losses or damages whatsoever arising from or relating to this proposal.

***Warranty:** Orion warrants its products in accordance with the terms, conditions and limitations of its limited warranty policy. Please refer to the attached warranty, which may be modified from time to time by Orion.

Orion Energy Systems
Survey Data

Order and Survey Information Price Level Concept

Area2	Quantity2	Proposed Fixture2	Voltage	Proposed Control	Ballast	Control Wiring	Proposed Lamps	Proposed Cord	Proposed Brackets	Proposed Accessory 1	Proposed Accessory 2	Proposed Accessory 3	Building Height	Light Levels (H/L/A)	Comments
Back Stairs	1	RK2LB50													
Basement	4	RK2LB50													
Conference Room	3	RK2LB50													
Elevator	2	RK2LB50													
Mailroom	2	RK2LB50													
Stairs	10	RK2LB50													

Proposal Department Only

		Type	Notes
Base Price Level:	Concept	2	Concept price allows for Cord and Cables in Fixture Price
Proposal Type:	Concept		
Markup over Base:	0%		

Edit workbook Password:

			Existing										Proposed									Tonnage						Hanging Hardware			Aids												
Area	Sq/Ft	Qty	Fixture	EW	Total EW	Amps	Watts	Cooling Hours	Cooling Lbs	Cooling Tons	Voltage	Qty Proposed	Fixture Proposed	EW Proposed	Total EW Proposed	Amps Proposed	Watts Proposed	Cooling Lbs Proposed	Cooling Tons Proposed	%	$	Amps Saved	Energy Saved	Lamp Adder	Ballast Adder	Control Cost	Hardware Cost	Accessory Cost	Fixture Cost	Total Material	Other Cost	Total Labor	Total Project Cost	ROI	Payback	Order Part Number
Total		75		0.084	6.318	0.0	2126	0	2,126			37		0.0	3.3	0.0	1126	314	0.0	1,116	1	50%	1	745			0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28			1	21	62%	1.1
Back Vestibule	Yes	1	1x4x4	0.084	0.1	0.0	2126	0	2126			1	8421E30	0.0	0.049	0.0	1126	314		1,116	1	46%	1				0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	21.28			1	21	62%	1.1
Bathroom	Yes	4	1x4x4	0.084	0.3	0.0	2086	0	682			1	8421E30	0.0	0.049	0.2	2080	404		275	1	40%	1	18			0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	85.12			1	85	22%	4.6
Conference Room	Yes	2	1x4x4	0.084	0.5	0.0	1568	0	768			1	8421E30	0.0	0.049	0.1	1568	223		768	1	70%	1	56			0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	63.84			1	64	37%	3.6
Entrance	Yes	2	1x4x4	0.084	0.3	0.0	2040	0	341			1	8421E30	0.0	0.049	0.1	2080	204		137	1	40%	1	8			0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56			1	43	12%	4.6
Hallway	Yes	2	1x4x4	0.084	0.5	0.0	2080	0	682			1	8421E30	0.0	0.049	0.1	2080	204		478	1	70%	1	34			0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	42.56			1	43	75%	1.1
Shop	Yes	14	1x4x4	0.084	0.8	0.0	2080	0	1,706			10	8421E30	0.0	0.049	0.5	2080	1,195		849	1	49%	1	84			0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	212.80			1	214	27%	4.6

Concept Proposal

27-Jul-09

Submitted in Partnership with Cummings Electric

FOR FEASIBILITY DISCUSSION ONLY, NOT FOR ORDERING

Scenario: T8 with out Controls

SUMMARY

For:

City of Menasha
Pool
920-967-5272
Menasha, WI 54952

Adam Alix
920-967-5102
aalix@ci.menasha.wi.us

Financial		
Total Material Cost	$	542
Total Labor Cost	$	-
Total Services	$	-
Total Project Cost	**$**	**542**
Add: Contingency	$	-
Add: Tax	$	-
Less: Rebate	$	264
Net Cost	**$**	**278**
ROI		**30%**
Payback (Years)		**3.3**

Savings			
Lighting Savings	$	85	
Cooling Savings	$	-	
Total Savings	**$**	**85**	**72%**

Orion Throughput Agreement		
Monthly Savings	$	7
Less: Monthly OTA Pmt	$	6
Guaranteed Mo. Cash Flow	**$**	**1**

Electrical		
Existing kWh	1,754	
Proposed kWh	494	
kWh Saved	**1,260**	**72%**

The figures presented herein are for feasibility only. Under no conditions shall these figures be relied upon or used for budgeting or placing orders with Orion.

This Proposal is for purchases through contractors only. No direct sales from Orion permited under this proposal. Any applicable taxes are to be added to the above costs. Additional Terms may apply.

Orion Energy Systems

Assumptions and Miscellaneous Items

COMPANY INFORMATION		ASSUMPTIONS	
Date:	27-Jul-09	Scenario:	T8 with out Controls
Company:	City of Menasha	Rate:	0.0671
Address 1:	Pool	Rebate:	$ 264.00
Address 2:	140 Main Street	Rebate Type:	Prescriptive
City:	Menasha	Incumbent EC:	Cummings Electric
State:	WI	ED:	
Zip:	54952	Roofer:	
Contact:	Adam Alix	Proposal Partner:	Cummings Electric
Phone:	920-967-5102	Utility:	
Fax:	920-967-5272	Sales Rep:	Taylor Kapp
		Proposal Type:	Wholesale
Email:	aalix@ci.menasha.wi.us	Tax Rate:	0.00%

Miscellaneous Materials

Description	Qty	Price	Total
42556 T8 850 HL Ca:	1	$ 82.44	$ 82.44
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ 82.44

Miscellaneous Labor

Description	Qty	Price	Total
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ -

Labor Calculator

Base Labor	$	-
☐ Union Labor	$	-
☐ Manufacturing	$	-
☐ Freezer	$	-
☐ Regrid	$	-
☐ Hardwire	$	-
☐ Limited Accessability	$	-
☐ No Deck Penetrations	$	-
Miscellaneous Labor	$	-
Total Labor	$	-

Services

☐ Survey Fee	$	-
☐ Project Management	$	-
☐ Rebate Management	$	-
☐ Recycling	$	-
☐ EPAct05	$	-
Total Services	$	-

Contingency Fee 0% $ -

Concept Proposal

Signature to accept fixture counts:_____ **Date:**_____

Summary

Project Cost	$	278
Savings	$	85
Payback (Yrs)		3.3
ROI		30%

Orion Energy Systems

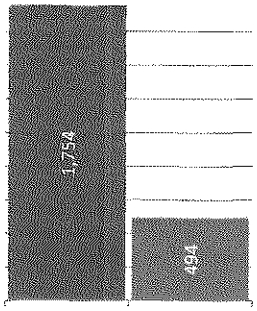
Summary Data Sheet

DATA SHEET			EXISTING					PROPOSED									ANALYSIS	
Line #	Area	Include	Existing Quantity	Existing Equipment	Existing Watts	Existing Hours	Existing Cooling Hours	Proposed Quantity	Proposed Equipment	Proposed Wattage	Proposed Control Device	Demand Control Factor	Proposed Hours	Proposed Daylight Hours	Per Unit Cost "All-in"	Estimated BASE Labor Cost	Line Payback	Total Cost
Totals			**12**					**12**							**$ 38.27**		**5.4**	**$ 459**
1	All Areas-1	Yes	8	1x8x2 CW/HO	220	840	0	8	8CK2LIW	49		100%	840	0	$ 46.76		4.9	$ 374
2	All Areas-2	Yes	4	1x4x2	82	840	0	4	RK2L850	49		100%	840	0	$ 21.28		11.4	$ 85

Savings Calculations

kiloWatt hours (kWh) reduction		
Existing kWh	1,754	
Proposed kWh	494	
Variance	**1,260**	72%
kWh Rate	$ 0.07	
Savings	**$ 85**	

Refridgeration (BTU) reduction	
kWh Cooled	-
BTU Factor	0.342
kWh Rate	$ 0.07
Cooling Savings	$ -
Total Savings	**$ 85**



kiloWatt (kW) reduction		
Existing kW	2.088	
Proposed kW	0.588	
Variance	**1.5**	72%

Amperage	
Existing Amp draw	0
Proposed Amp draw	0
Variance	0

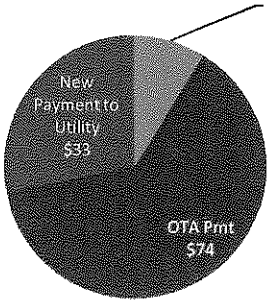
Equipment	
Existing Quantity	12
Proposed Quantity	12
Variance	-

		EXISTING					PROPOSED						SAVINGS	
Area	Included	Qty	Exist KW	Total KW Existing	Existing Hours	Total kWh Existing	Qty	Proposed KW	Total KW Proposed	Proposed Hours (Net)	Total kWh Proposed		kWh Saved	$ Saved
All Areas-1	✓	8	0.220	1.8	840	1,478	8	8CK2LIW	0.4	840	329		1,149	77
All Areas-2	✓	4	0.082	0.3	840	276	4	RK2L850	0.2	840	165		111	7

Orion Throughput Agreement (OTA)

Current Payment to Utility

Proposed System



OTA Cash Flow Analysis

Current	kwh purchased or displaced	Rate		Total Cost
Utility	1,754	$ 0.07	$	118
			$	**118**
Proposed				
Utility	494	$ 0.07	$	33
Orion	1,260	$ 0.06	$	74
	1,754	$ 0.06	**$**	**107**
Cash Flow			**$**	**10**

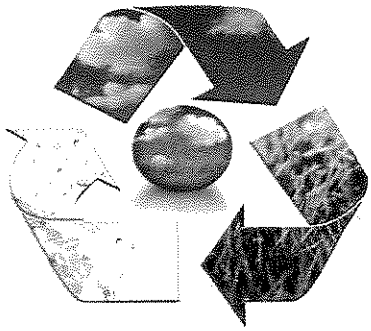
The OTA allows you to replace a portion of your electricity at higher rates with displaced electricity (savings) at lower rates. The combined total is less than your current.

Delay Costs

Delays cost YOU money!

	% of Purchase	Cash Purchase	OTA
1 Month	#VALUE!	*$0,007*	*$ 1*
2 Months	#VALUE!	*$0,014*	*$ 2*
3 Months	#VALUE!	*$0,021*	*$ 3*
4 Months	#VALUE!	*$0,028*	*$ 3*
5 Months	#VALUE!	*$0,035*	*$ 4*
6 Months	#VALUE!	*$0,042*	*$ 5*

ENVIRONMENTAL IMPACT



How Can Lighting Damage the Environment?

Although it appears innocuous, lighting causes air pollution. Here's how: Each day, your local power plant will commonly burn coal, oil, and gas to generate electricity for your lighting system as well as for your other electrical needs. While burning, these fossil fuels produces a readily available and instantaneous supply of electricity, it also generates air pollutants.

Air Pollution Causes Global Warming, Acid Rain and Smog

Each of these pollutants causes environmental damage. Carbon dioxide (CO2) causes global warming, sulfur dioxide (SO2) causes acid rain, and nitrogen oxides (NOx) cause both acid rain and smog.

Your Lighting Project will help to decrease air pollution and environmental damage by the following amounts each year:

Polutant*	1 year	20 years
CO2 Removed	0.8 Tons	16.6 Tons
SO2 Removed	0.0 Tons	0.1 Tons
NOX Removed	0.00 Tons	0.02 Tons
Mercury Removed	0.02 gm	0.31 gm

Environmental Equivelant **	1 year	20 years
Acres of Trees Planted	0	5
Cars Removed from the Road	0	4
Gallons of Gas Saved	104	2,080
Barrels of Oil Saved	2	50

* calculated using emission factors per the EPA's eGRID database, as recognized protocol by the World Resource Institute/World Business Council for Sustainable Development (WRI/WBCSD).

** Based on PA Gov't Services for Focus projects

Terms and Conditions

Building and Electrical Code

This proposal assumes that the facility for which the proposed system is to be installed meets all national, state, and local electric and building codes. If upgrades are required due to code requirements, costs for such upgrades are the sole responsibility of the customer.

Voltages

All voltages at the facility for which the proposed system is to be installed are to be assumed to be between 120 volts and 277 volts, unless specifically noted here in as 347 volts of 480 volts. If facility voltages vary from that of the fixtures as described in this proposal, customer is responsible for all the costs associated with correcting the voltage of the facility or fixture.

NEMA Power Supplies

Unless specifically documented herein, Orion will provide standard NEMA power supplies. Other power supplies required by customer will have an added cost.

NEC Compliance and UL Approved Products

The portable luminaire status is a UL approved designation, which Orion achieved for the Mate-N-Loc series. Orion's fixtures with this status are manufactured according to UL protocol. Fixtures manufactured with a portable luminaire designation are tested 100% after the final assembly. The installation of a luminaire, both standard and portable, is subject to compliance with the electrical code, as established by the NEC (National Electric Code). This set of codes which electricians use as guidelines in their work. The interpretation of the NEC is up to the discretion of the electrician or electrical inspector. It is the position of Orion Energy Services that all recommendations for installing luminaires and portable luminaires must be NEC compliant, as approved by an electrician or electrical inspector. Orion's products are to be installed according to the NEC.

Electrical Power Quality

The customers electrical system that supplies power to Orion fixtures and products must meet Power Quality specifications as outlined in IEEE 1159 (Institute of Electrical Engineers). If it is determined that any deviation from these specifications exists, it may void the warranty of Orion's products, or the warranty of other manufacturers' products used within Orion's products. If a correction is required to bring the customer's system within the specifications of the IEEE 1159, any such costs will be the responsibility of the customer.

Controls

All controls such as occupancy, ambient light, peak demand, or otherwise generally require post-installation calibration. Unless costs for calibration are specifically detailed in this proposal, additional charges will apply for on-site calibration. Customer may assume responsibility for calibration to avoid such charges. **Orion does not recommend the use of controls in conditions where shortened lamp/ballast life may occur.** See warranty for details.

Change/Add-on Orders

As part of the pre-sale inspection of customer's facilities, Orion or its agent has conducted a thorough survey and have documented its findings as listed herein. However, due to hidden situations, oversights or changes since the survey, 100% accuracy is not always achievable. Therefore, if it is necessary to add, change or delete material or labor to deliver the result desired by the customer, change orders may be required. If a situation arises where it is necessary to add, change, or delete any material or labor, customer will be presentedwith such situation and costs for any prior approval. Charges or credits for approved changes will be issued to customer under the original purchase order at the completion of the project.

Freight Terms; Special Handling and Storage

Standard freight terms are FOB Orion factory (Manitowoc, WI), prepaid and added to the invoice. Unless specifically documented herein, Orion assumes that the customer will accept complete shipment of material as listed in this proposal. If the shipment is refused or redirected in any manner, customer is responsible for any associated costs. Orion must be notified by customer of any delivery/receiving limitations prior to accepting this proposal. Storage or other special handling costs are the sole responsibility of the customer.

Rebates

Utility rebate figure is an estimate only and is subject to applicable guidelines and requirements. Actual rebate amount received by customer from utility may vary. In no event shall the utility rebate affect Customer's obligation to pay Orion the total proposal amount indicated within the stated payment terms.

Safekeeping

Customer is responsible for receiving in, counting, and inspecting for damage of all deliveries from Orion. If there is a discrepancy in count, notify Orion within 24 business hours of receipt. If product arrives damaged, note the extent of damage on carrier's paperwork, photograph the damage, and report it to Orion immediately. Orion will not assume responsibility for missing product after receipt by Customer. Customer should take the necessary safekeeping precautions during installation to protect product from theft or damage.

Electrical Savings Guarantee and Emissions Credits -

If customer elects the electrical savings guarantee, and if at any time during the 5-year period from the date of installation the customer does not realize such guaranteed electrical savings over any annual period, customer should notify Orion in writing of such fact. Orion shall, within 90 days of receipt of such written notice and detailed information from customer setting forth the computations supporting such failure to realize the electrical savings that were guaranteed and after having had sufficient opportunity to review all appropriate information relating to an analysis of the savings and the conditions at customer's facility, at Orion's sole option and expense, either (i) install such additional control measures or equipment as reasonably necessary to achieve the guaranteed electrical savings or (ii) remit to customer 100% of the difference between the guaranteed electrical savings and the actual electrical savings realized by customer over the applicable annual period.

If customer elects the electrical savings guarantee, and in consideration for such guarantee, customer agrees with Orion as follows: In the event customer qualifies for emissions reduction credits under applicable federal and/or state law due to the beneficial environmental impact arising from the installation of Orion's energy-efficient lighting and controls technology, it is understood and agreed that customer and Orion shall, for a period of twenty (20) years from the date of installation, share in the net proceeds of the value stream created by such emissions credits on a 50/50 basis. Orion shall, on behalf of the customer, take or cause to be taken all reasonable measures to try to obtain and secure the value arising from the emissions credits, and customer shall cooperate with Orion in such efforts and shall execute and deliver to Orion such documents of instruments and take such further actions as Orion may reasonably request in order to secure and perfect the right to such emissions credits and to share in the net proceeds of such credits as provided herein.

Returns: Non-Defective

After completion of the project, no products may be returned by the buyer without prior written authorization in the form of a Return Goods Authorization or similar form **(RGA)** which has been issued by Orion expressly for the products to be returned. The RGA will be issued at the sole discretion of Orion and must be requested by the buyer within 30 days of the original shipment date. Returned products must be in their original sealed containers. No non-stocking special products, custom-made products, or outdated or modified versions of factory stocking items may be returned by the buyer. The minimum value for which an RGA will be issued is $500.00, except for products considered by Orion to be defective in workmanship or materials. All returns will be subject to a minimum 15% handling and restocking charge, and a charge back will be made for the freight expense of the original shipment. Products accepted for return must be shipped prepaid to the factory. All products returned to Orion must be clearly marked and identified with the RGA number on the bill of lading/packing list. Any/all products that are attempted to be delivered to Orion without proper RGA authorization will be refused at our dock.

Returns: Defective/Damaged

If products are defective or damaged, they may not be returned by the buyer without an RGA which has been issued by Orion expressly for the products to be returned. This RGA will be issued by Orion with explicit instructions regarding the course of action to be followed. Any products damaged during shipment from Orion must be identified as such and noted on the bill of lading immediately upon receipt. All products returned to Orion must be clearly marked and identified with the RGA number on the bill of lading/packing list. Any/all products that are attempted to be delivered to Orion without proper RGA authorization will be refused at our dock.

Limitation of Liability - In no event shall Orion be liable to customer under any legal of equitable theory of liability for any indirect, incidental, consequential or special losses or damages whatsoever arising from or relating to this proposal.

***Warranty:** Orion warrants its products in accordance with the terms, conditions and limitations of its limited warranty policy. Please refer to the attached warranty, which may be modified from time to time by Orion.

Orion Energy Systems
Survey Data

Order and Survey Information Fixture Level Concept

Area2	Quantity2	Proposed Fixture2	Voltage	Proposed Control	Ballast	Control Wiring	Proposed Lamps	Proposed Cord	Proposed Brackets	Proposed Accessory 1	Proposed Accessory 2	Proposed Accessory 3	Building Height	Light Levels (H/L/A)	Comments
All Areas-1	8	BCK2L6W													
All Areas-2	4	RK2LB50													

Proposal Department Only

		Type	Notes
Base Price Level:	Concept	2	Concept price allows for Cord and Cables in Fixture Price
Proposal Type:	Concept		
Markup over Base:	0%		

Edit workbook Password:

			Existing									Proposed							Savings					Totals														
Area	Include	Qty	Fixture	KW	Total KW	Amps	Hours	Cooling Hours	kWh	Existing kWh Cooled	Voltage	Qty Proposed	Fixture Proposed	Amps	KW Proposed	Total KW Proposed	Hours Proposed	kWh Proposed	kWh Saved	kWh Cooling Savings	%	$	Amps Saved	Control Cost	Lamp Adder	Cord Cost	Hanging Bracket Cost	Accessory 1 Cost	Accessory 2 Cost	Accessory 3 Cost	Fixture Cost	Total Material	Labor Each	Total Labor	Total Project Cost	ROI	Payback	Order Part Number
Totals		12			[illegible]	0.0			[illegible]			12		0.0		0.6		[illegible]	1,260	$	[illegible]	$ 85										$ 419		$ -	$ 419	[illegible]	[illegible]	
A1 Area1-1	Yes	8	1x4x2 CW	0.22	1.8	0.0	840	0	1,478	-	-	8	ECS32W	0.0	0.049	0.4	840	329	1,149	$ -	78%	$ 77	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.74	174.09	-	-	$ 374	22%	4.5	
A2 Area1-2	Yes	4	1x4x2	0.052	0.2	0.0	840	0	376	-	-	4	ES21S30	0.0	0.049	0.2	840	265	111	$ -	30%	$ 7	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.28	85.12	-	-	$ 85	9%	11.6	

Concept Proposal

27-Jul-09

Submitted in Partnership with Cummings Electric

FOR FEASIBILITY DISCUSSION ONLY, NOT FOR ORDERING

Scenario: T8 with out Controls

SUMMARY

For:

City of Menasha
Memorial Building
920-967-5272
Menasha, WI 54952

Adam Alix
920-967-5102
aalix@ci.menasha.wi.us

Financial		
Total Material Cost	$	338
Total Labor Cost	$	-
Total Services	$	-
Total Project Cost	**$**	**338**
Add: Contingency	$	-
Add: Tax	$	-
Less: Rebate	$	134
Net Cost	**$**	**204**
ROI		**47%**
Payback (Years)		**2.1**

Savings			
Lighting Savings	$	95	
Cooling Savings	$	-	
Total Savings	**$**	**95**	**62%**

Orion Throughput Agreement		
Monthly Savings	$	8
Less: Monthly OTA Pmt	$	5
Guaranteed Mo. Cash Flow	**$**	**3**

Electrical		
Existing kWh	1,620	
Proposed kWh	612	
kWh Saved	**1,009**	**62%**

The figures presented herein are for feasibility only. Under no conditions shall these figures be relied upon or used for budgeting or placing orders with Orion.

This Proposal is for purchases through contractors only. No direct sales from Orion permited under this proposal. Any applicable taxes are to be added to the above costs. Additional Terms may apply.

Orion Energy Systems

Assumptions and Miscellaneous Items

COMPANY INFORMATION		ASSUMPTIONS	
Date:	27-Jul-09	Scenario:	T8 with out Controls
Company:	City of Menasha	Rate:	0.0946
Address 1:	Memorial Building	Rebate:	$ 134.00
Address 2:	140 Main Street	Rebate Type:	Prescriptive
City:	Menasha	Incumbent EC:	Cummings Electric
State:	WI	ED:	
Zip:	54952	Roofer:	
Contact:	Adam Alix	Proposal Partner:	Cummings Electric
Phone:	920-967-5102	Utility:	
Fax:	920-967-5272	Sales Rep:	Taylor Kapp
		Proposal Type:	Wholesale
Email:	aalix@ci.menasha.wi.us	Tax Rate:	0.00%

Miscellaneous Materials

Description	Qty	Price	Total
42556 T8 850 HL Ca:	1	$ 82.44	$ 82.44
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ 82.44

Miscellaneous Labor

Description	Qty	Price	Total
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
	0	$ -	$ -
Total			$ -

Labor Calculator

Base Labor	$ -
☐ Union Labor	$ -
☐ Manufacturing	$ -
☐ Freezer	$ -
☐ Regrid	$ -
☐ Hardwire	$ -
☐ Limited Accessability	$ -
☐ No Deck Penetrations	$ -
Miscellaneous Labor	$ -
Total Labor	$ -

Services

☐ Survey Fee		$ -
☐ Project Management		$ -
☐ Rebate Management		$ -
☐ Recycling		$ -
☐ EPAct05		$ -
Total Services		$ -
Contingency Fee	0%	$ -

Concept Proposal

Signature to accept fixture counts:_____ **Date:**_____

Summary

Project Cost	$ 204
Savings	$ 95
Payback (Yrs)	2.1
ROI	47%