

Energy Analysis for Frear Rink in Troy, NY

- Saved 133,041kWh annually
- Related annual savings of \$27,287.00
- Just \$27,990.00 in Rink-Bright™ installation cost
- Incentive payment of 62% - *whopping* \$17,428.00
- Less than 6 months for *full payback*
- Dropped CO₂ by 146,145 lbs. per year

Why not LEDs?

Hint: No LED fixture is designed for rinks because:

- LEDs flicker, causing “strobe effect” that distorts speed and depth perception that can be dangerous
- LEDs glare off the ice, causing visual distortion and interfering with focus and puck-tracking
- LEDs *are not* energy efficient for ice rinks due to very hot ballasts that increase HVAC loads, compressor cycling, and ice maintenance
- LEDs are *highly polluting* due to highly toxic compounds – can have high disposal costs

Rink-Bright™ Science

Rink-Bright™ uses unique LumenTec® spectral tuning to emit the precise wavelengths and intensity to penetrate the ice surface all the way to the undercoating to eliminate glare and increase visual acuity. Nano-reflector technology creates incredibly smooth illumination – eliminating “hot-spots.” Based upon Nikola Tesla’s magnetic induction lighting invented in 1890 as the “Forever Bulb.”

WHY YOU NEED



Rink-Bright™ is the *only* light specifically designed to address all ice rink requirements. It’s not just about the light... it’s about all ice rink systems and characteristics. Consider these essential features:

- Instant on/off with no warm-up or cool-down
- No more buzzing or humming ballasts
- No heat projection onto the ice like metal halide
- *Proven* 100,000-hour lifecycle is 11 years on 24-hours by 365 days... about a quarter century for most rinks
- No flicker – magnetic induction lighting is *totally flicker-free*
- Almost no in-rush current – won’t affect demand charges
- Replace 1,000-watt metal halide with 300-watt Rink-Bright™
- With 2.77 S/P ratio, achieves 3X visual acuity with less light
- .95 color rendition index (CRI) has brilliant color perception
- White balance is perfect for video
- Polycarbonate lens for additional safety
- Less than 30 lbs. for easy installation
- 110V to 277V auto-sensing ballast

The last lighting you’ll ever need!



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The Most Energy-Efficient Rink Lighting...EVER
Magnetic Induction Lighting (HINT: It’s not LED)



- Saves 85% over metal halide
- Lowers maintenance by up to 600%
- Proven 100,000-hour longevity
- Drops HVAC overheads by up to 40%
- Reduces ice sublimation and related maintenance
- Super visual acuity improvement
- Substantially increases light-related safety
- More healthful light spectrum
- Decreases compressor wear & tear

They Pay for Themselves!

Sensational Lighting Improvement – *Seeing Is Believing!*



Before



After

Energy Initiative Custom Measures

Customer Report: CITY OF TROY
Application Number: 14110249
Report Date: 02-06-2023
Report Version: Proposed

Customer Information

Customer Name:	CITY OF TROY	Facility Name:	CITY OF TROY - FREAR PARK ICE RINK - APP# - LIGHT
Billing Acct No:	8413795121	Street Address:	2701 Lavin Ct
Contact Person:	Jeff Wojtowicz	City:	Troy
Telephone:	518-369-8381	State:	New York
Email Address:	wojtowicz.jeffrey@gmail.com	Zip:	12180

Savings Summary

Gross Annual kWh Savings	133,041 kWh	Authorized Incentive:	\$17,428
Estimated Customer Cost per kWh	0.16	Total Cost of Installed Measures:	\$27,990
Annual Electric Cost Savings	\$21,287	Simple Payback	1.3 years
		Simple Payback with Incentive	0.5 years
		System Bonus	\$0
CO2 Savings (lbs)*	146,345 lbs	Total Incentive	\$17,428

Incentive Summary

Installation Contractor Information

Installed By:	INSTALLATION CONTRACTOR	Company Name:	TROY ALBANY HOCKEY ASSN
Contact Person:	NA	Street Address:	NA
Telephone:	123-456-7890 ext.	City:	NA
E-mail Address:	NA@NA.com	State and Zip:	NEW YORK 12345

Application Date:	January 17, 2023
Expected Completion Date:	March 31, 2023
Proposed Incentive Recipient:	OTHER

**ABSOLUTE
PROOF
NEAR
IMMEDIATE
PAYBACK!**

**See Actual
National Grid
Incentive**

Customer Report: CITY OF TROY
Application Number: 14110249

Date: 02-06-2023

Summary of Planned Efficiency Measures

Customer ECM Plan Version: Proposed
Version Create Date: 01-17-2023
Custom Installation Plan Name: Frear Park Ice Rink

Measure Code	LEDS
Measure Description	LED Lighting
Existing Conditions Descriptions	(30) 1000W Metal Halide fixtures, operating, 4,150 hours per year.
Proposed Descriptions	(30) 300W Rink-Bright RB-HB-300WXS magnetic induction lighting, operating 4,150 hours per year.

ECM has VFD(s)?	No
Harmonic Test for Eligibility	
Total VFD Load Supplied by Transformer(HP)	
KVA Rating of Building Transformer	133041
% of VFD Load to Building Transformer	0.00 %

ECM Cost Savings	
Estimated Equipment Cost	\$27,990.00
Estimated Labour Cost	\$5,000.00
Estimated Total Cost	\$27,990.00
Net Present Value of Energy Savings over the life of the energy efficiency application minus the customer contribution	\$0.00

Non-Electric Benefits	
Oil (MMBTU)	0.00
Gas-Space Heating (MMBTU)	0.00
Gas-Non Heating (MMBTU)	0
Water (gal)	0
Wastewater (gal)	0.00
Other Savings	0

L007 - EI Custom