



GEN II LOW CARBON PROPOSAL

INSTALLER'S GUIDE

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ENERGY EFFICIENT LIGHTING GEN II QUANTUM ADVANTAGE PLAN

Generation 2 incandescent light are named in honor of Thomas Edison who developed a product that endured in its simplicity and value. Neo-light or new light refers to the quantum theory. Although identical in construction to Edison's original light, this second generation light is over 90% efficient and meets today's electrical energy policy standards.

Fin tech

Market resistance to replacement of high level fluorescent lights is constrained by business overhead cost. Extensive sales efforts to replace these archaic devices is in line with green policy specifically prevention of mercury contamination of living and work spaces. Recently it has been accepted as policy, that replacing these luminaires prevents release of Nano grams prior to failure. Shockingly this cannot be achieved due to high cost of commercial area lighting.

Electrodynamic light sources are superior to other forms of consumer lighting products in light output quality, energy efficiency and hygiene. Meets EPA and ISO standards. 100% recyclable lamps cost as little as first generation lamps, however please note these lights last 12 months rather than classic 1000 hours.

Exclusive use of GENII lights in a business establishment benefits consumer in two main venues. KWH cost reduction to illuminate premises and managed utility company fixed cost. Immediate power reduction is in the 85% range. The product delivers a \$2,200 a year advantage when refitting twenty five, T10 dual tube fixtures in commercial buildings.

GENII's varied features combine to deliver a financial advantage to the user.

Features of interest;

Renewable energy system, electric energy reduction, load shifting, load shed, peak load reduction.

Demand side management hardware, individual units feature light level adjust.

Automatic load response reduces GENII power concurrent with utility Co. AC line fluctuations as called for by local utilities.

Mercury pollution prevention is 100%. EPA disposal costs are eliminated.

GENII is capable of real-time IOT monitoring.

Luminaire life is extended 3,000-10,000 hrs. Driver board life is indefinite. Energy Star and Energy Efficiency Initiative act compliant in exceeding 50% and 80% improvement standards.



GENII commercial refit:

Customers drop in 2x4 boxes, replaces dual tube units in wide use today. Commercial demand for higher efficiency replacement is best applied to 24/7 operations. 25 box lighting upgrade is detailed in this proposal as well as energy saved over a multiyear span. Replacing T type tubes with GENII Neolight energy savings advantage is in the 85% range. Collateral improvements are: low refit cost, reduced lamp cost, no disposal costs, and cooler AC.

GENII Specification Briefing

Neolight unit, power ratings:

- 4s' - 8.24 WATTS
- 5s' - 11.49 WATTS
- 6s' - 14.88 WATTS
- 8s' - 20.05 WATTS
- 10s' - 25.66 WATTS
- 12s' - 31.08 WATTS
- 14s' - 37.24 WATTS
- 16s' - 42.61 WATTS
- 24s' - 60.74 WATTS
- 32s' - 79.14 WATTS



GENII low cost luminaires:

8-10 lamps @\$1.25 each and 1 driver unit each. Decorative style sockets can be installed in groups of: four, six, eight or ten lamps, high hat and outdoor string fixtures.

Total install cost is as low as \$2,000.

Energy savings compared to 25 fluorescent dual 40w lights GENII Energy Efficient Advantage plan yields \$2,200 a year when refitting T10 dual tube fixtures in commercial 24/7 buildings.

GenII low cost commercial lighting upgrade.

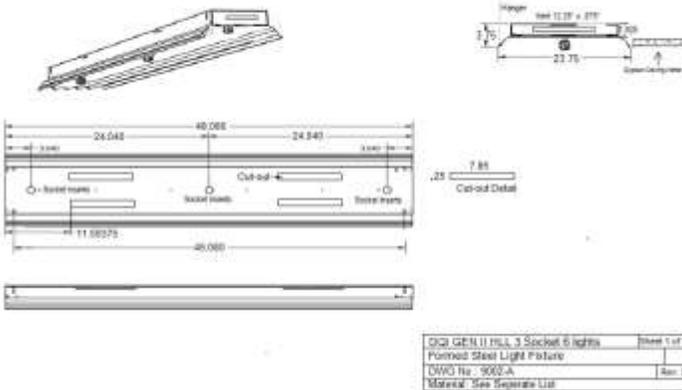
Test Installation Disclosure 2,500 sq. ft. commercial high level lighting

GENII 2X4 UNITS INSTALLED IN DROP CELING





Full spectrum high intensity light



REFIT, RETRO FIT, REPLACE
 GENII is a Quantum electro dynamic system proven to increase efficiency of tungsten incandescent lamps. Vintage 60w lamps are replaced with 2.2w lamps. Coverage .28 watts per sq. ft. KWH power efficiency is over 85% replacing level fluorescent units.

Utilities offer various rate plans. GENII lighting can improve customer satisfaction with plans and overcharges during user peak demand with a GENII

load shifting installation. Proprietary instrumentation is available in a smart meter windows 10 micro pc design.



GENII Financial breakdown

Large 2,500 Sqft building direct cost reduction for monthly service.

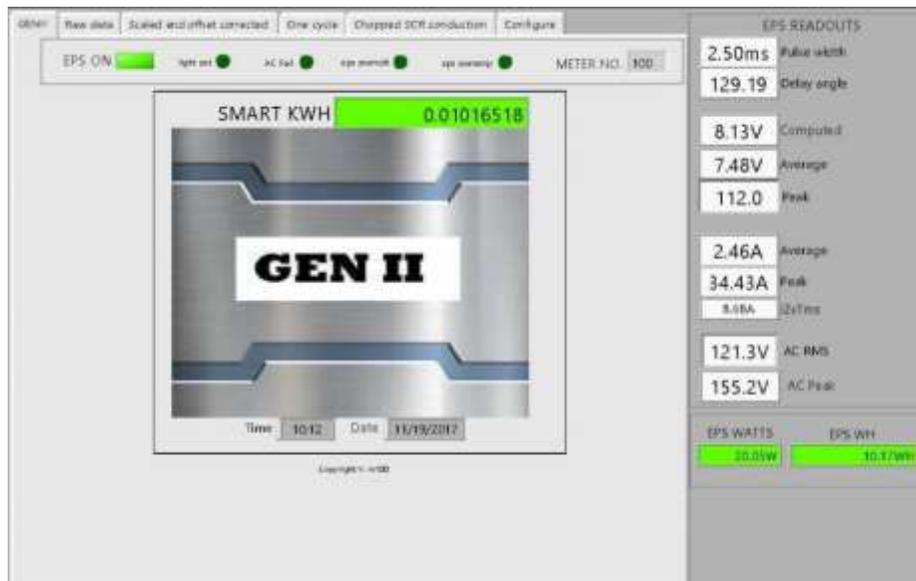
GenII project			
Base line replacing	160w	24w 10s, 8s, 6s	
gen2 calculator data	AC	GENII	
2,550 sq. ft. building	5,500w	700w	Annual
cost per month	\$197	\$25	Savings
1/2 day schedule per yr. savings			\$2,055
24/7 per yr. savings	\$458	\$58	\$4,800

Commercial Lumen performance and energy efficiency

KWH rate reduction results in a ¼ cycle true power KWH rate of .0375. Low voltage can deliver a high peak light intensity, great for commercial overhead lights. Tungsten lamps output light in 360 degrees rather than leds that have a narrow radius. Typical lamp watt are 2.25 watts @800 lumens. Lamps are arranged in stylish Neolight micro grid. An 85% improvement in efficiency can be achieved with GENII.

GENII contractors can quickly build a Neolight micro grid to fit your business space. Optional Smart meter computes DC quarter cycle KWH. IOT application features continuous monitoring, and diagnostics, Android Phone app.

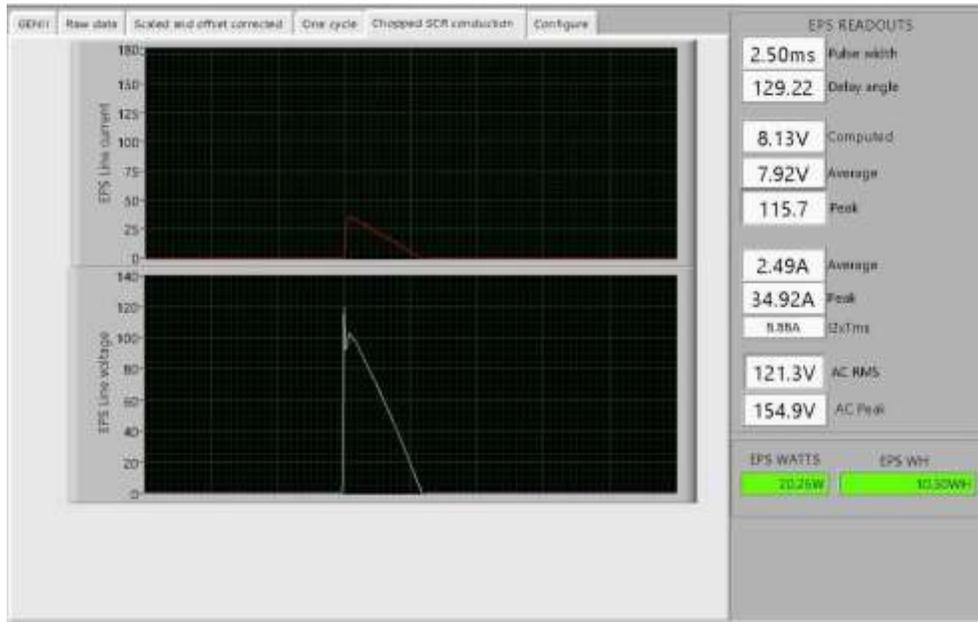
GENII/NEOLIGHT INSTRUMENTATION TECHNICAL DISCLOSURE



GENII Smart Meter

Front screen GENII meter displays all values pertinent to technical management of lighting grid. Presently Class 1 utility meters do not support GENII low voltage micro grid. Gcode virtual instrumentation creates programmable KWH meter/monitoring platform that is state of the art.

Neolight Micro grid voltage and current digital sampling.



The white trace exhibits the initiator pulse and the following expression of the Bohm curve is visible also. Differential integrator sum the data available from the digitized data and computes Kilowatt hour. Customer information available in a useful format, locally or Wi-Fi. Microcomputer and windows 10 software replaces hardware with a virtual data environment. State of the art technology is used throughout. This platform also meets most up to date standards for accuracy and features deemed vital to power monitoring. The grid will operate without the computer tie in most installations. National electrical code permits micro grid systems as low voltage and are also permitted by most Policy makers as Efficiency or low carbon solution.

The software compiled on National Instruments Lab view platform and acquires data with NIST certified components. More information and demo software is available on the website.

More information and free software is available at www.rcdreasearch.com

An electronic circuit board applies the desired Phasor voltage in a reliable, low cost, module.



32 LAMP EPS

Summary of GENII and classic Lumen per watt power ratings

PE	lumens	EPS watt	Lumens pw
GENII	133	1	133
40W	266	1.5	177
34W	399	1.6	249
GENII	533	2.2	242
GENII	666	2.5	266
60W	800	2.9	275
GENII	932	3.1	300
75W	1066	3.4	313
100W	1199	3.6	333
GENII	1332	4	333
GENII	1465	4.3	340
GENII	1599	4.6	347
GENII	1732	4.9	353
GENII	1865	5.2	358
CFL	800	20	40
LED	800	10	80



GEN II

1. GENII PLAN 2X4 CELING UNITS, power ratings @ 8.0 eps volts

4s'- 8.24 WATTS

5s'- 11.49 WATTS

6s'- 14.88 WATTS

8s'- 20.05 WATTS

10s'- 25.66 WATTS

12s'- 31.08 WATTS

14s'- 37.24 WATTS

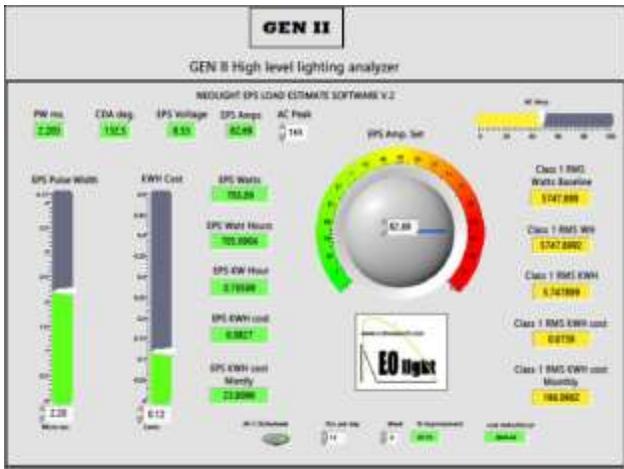
16s'- 42.61 WATTS

24s'- 60.74 WATTS

32s'- 79.14 WATTS

Replacing classic tubes with GENII Neolight is an energy savings advantage in the 80% range. GEN II smart KWH meter records ¼ cycle energy reduction with patented and copyrighted software. This manual is provided to ensure correct operation of GENII lighting system

Calculator helps assure pulse width and calculated voltage corresponds to peak voltage as per formula.



How does quantum electro dynamic lights work?

Quantum theory

Virtual particle full spectrum light source

Quantum virtual condensing model.

As it applies to the generation of full spectrum light in a vacuum

A small electronic device initiates an energy cycle pulsed for 2 ms at 105 vdc into a 23 ohm resistance. Square of the peak DC voltage applied is 11,025 instantaneous volts at 132 degree phasor. Light Emitter output discontinuously persists for 16 ms. Pulsed power of this nature attenuates infrared radiation resulting in a lower operating temperature of the filament itself and extends the life of the emitter far beyond what is possible with continuous current flow.

Active diode such as SCR conducts at a static angle gates phasor energy from AC source. This device returns to ground state at the end of any ac cycle, preventing lamp failure. Lamp benefits by reduced infrared band emissions thus longer filament life extended to 10,000 hours

According to Nobel Prize laureate David Bohm, and Richard Feynman, external field is created by the high amperage phasor conduction. This field is theoretical composed of Quarks. Quarks decay into muons and flood K space. The observable effect of muon saturation is mass expansion and radiation of solid steradian light. Although the particles are virtual and cannot be measured commercially the author uses a condensing model to explain a 2:16 ratio.

Rather than a model of solid particles orbiting the nucleus, protons and electrons. The probability of these particles existing is predictable. Energy k levels are measurable sphere shaped boundaries. The challenge is to increase the energy level of the boundaries and the radius of this quantum information.

In order for an electron to go over the boundary quantum state must be excited by the addition of energy. Actually the field boundaries of each level continuously condense quarks muons and other particles in a unified field, in order to be solid metal. Due to the transcendental nature of dark energy conversion into useful light particles, it is assumed it occurs in a cascade fashion from the quark energy level to load base state delay as long as 18 ms. Originating as dark energy these virtual particles condense inside the energy level boundaries increasing protons acceleration/deceleration energy as muons. This results in mass expansion in most molecular structures. Also there is the theory that the muons are in a warp-strange entanglement with the other half of the muon that can exist anywhere in time space according to Einstein. Some energy is absorbed by gravitational properties of the nucleus. However if muon density is exceed the nucleus can lose energy as Hawkins radiation and the time space structure is destroyed, in other words the filament changes state and evaporates.

Nuclear process then radiate virtual particles as gravitational boundary expansion and contraction due to acceleration/deceleration energy increase and decrease nanosecond to base state materials.



Part of process cannot be interrupted in nature and is a viable source of energy based on electrical energy factors. Energy k level spheres are actually continues in information and that when disturbed release spherical information that either is absorbed or reflected by the next “barrier” rain towards the nucleus where they are absorbed and converted into the higher energy state dark energy. Expansion of band gap boundaries intensifies deceleration energy releasing electron pairs. In this model Hawkins radiation allow the nucleus to return to base state rather than disrupting time/space.

In respect of this the Rosenberg cycle methodology tends to minimize over muon saturation of the K space target. This resolves classic electrical problem with burned metal due to muons and quarks going into warp in side K space cycled target. Applies the maximum that can be absorbed by this process in 2 mc by an electric charge! The charge lasts 2 ms to ground state. The resulting amplification of proton base state as the quark field decays or collapses powers the light output. Quark to muon to proton to electron. All resulting from expansion of unified fields due to quantum interference. Hypothetically a muon mass is constant, but as the field expands a condensed proton must accelerate to reach the nucleus in time space. The energy is released into the nucleus in this fashion as a warping of the nucleus as it absorbs this accelerated energy. It is accepted that the condensation of one 5kv muon releases 4 1.25KV photons while k space returns to base state.

Electrodynamic momentum accounts for the time delay as the muon field complete speed reduction from warp or field collapse in classic terms. Condensation of exotic particles such as muons and quarks function in that the as the dimensions of the exotic particle field are able to excite over both electron and proton spheres and nucleus in one pulse. Rather than other classic lighting practice that use peak ac or continuous ac energy or pulsed driven methods all follow the patent date for the technology as it is available for licensing.

Electrodynamic muon

The muon is an elementary particle similar to the electron, the muon is not believed to have any sub-structure. The muon is an unstable subatomic particle with a mean lifetime of 2.2 μs , much longer than many other subatomic particles. Muons have a mass of $105.7 \text{ MeV}/c^2$, which is about 207 times that of the electron. Due to their greater mass, muons are not as sharply accelerated when they encounter electromagnetic fields, and do not emit as much bremsstrahlung (deceleration radiation). This allows muons of a given energy to penetrate far more deeply into matter than electrons since the deceleration of electrons and muons is primarily due to energy loss by the bremsstrahlung mechanism. They are, however, produced in copious amounts in high-energy interactions in normal matter. These interactions usually produce pi mesons initially, which most often decay to muons.

Observable effects are mass expansion, low infrared (heating) due to evasion of classic school continuous energy devices. Light emission and electronic Bohm curve output waveform is easily measured with a digital oscilloscope. What this all means is that the spectrum of light is in the higher bands. Infrared radiation is minimized by the 18ms gap between energy on state rather than



continuously heating via DC components of AC sine wave power. Solving the problem of excessive heating of Edison lamps, the main cause of low efficiency policy reaction.

Instant superconductor

There is a boson surplus when a muon decelerates into K space.

In unified model the boson fermionic condensate acts as a superconducting coolant in the medium moderating instantaneous transfers of muons throughout the target atom, in this case tungsten. One would think 11kv to immediately melt a 23ohm filament. In theory bosons create an instant superconducting moment when the muons condense, expanding the targets dimensions due to acceleration/deceleration energy transfer. It is interesting to note that the light output curve matches the initiator curve in all specifications except time. This is visible proof of virtual particle field as predicted in skin effect electrical theory. The field of virtual particles, muons act as precursors to electron flow resulting in increased current density during deceleration. A storage effect occurs as the muons decelerate from time/space, extending time to base state ratio. The result is 18ms light output curve following a 2ms charge, solving flicker problem with other pulsed emitters. Proof that this is not a classic system of energy transfer but a true quantum system.

50 Nano second turn on time is the best turn on time modern SCR can deliver so one can assume that full phasor energy is not reached until after that. The following phasor conductions eventually saturate the material with muons. As the source phasors are decreasing in a logarithmic curve to ground state the charging continues full current at a reducing voltage for the time until initiation of the Bohm curve. These two parts of the Rosenberg cycle are separated by a gap in the voltage applied, also visible in oscilloscope images. The second peak illustrated in the sampling diagrams is the output part of the cycle and is repeated at 60HZ. The ground state time is most of the positive half cycle and all of the negative half cycle. This contributes to 95% cooler temperature, as classic thermodynamics would predict.

Policy discussion

In the 80s efforts ostensibly by the industry accepted measurement of effective power of alternating power can be evaluated by the heating effect into a resistor. The result is that a 15% surcharge was added to the cost of consumers with true RMS measurement practices. The portion of the cycle below about 13 volts dc component per half cycle was deemed waste energy that did not contribute to the heating effect. Every ac cycle has 4 of these regions. Rosenberg cycle uses one of these phasor regions to initiate the R cycle. As the electro dynamic part of this cycle lasts as long as one AC cycle the amount of power is reduced to about 2.5 watts per lamp and heat over 90%. In a sense, True RMS waste energy is recycled to power Neolight.

New methods infringe in the respect that a diode is required to bring commercial energy into a usable range. There is no load shift away from Ac mains peak. This adds up to serious complication in the transmission of electricity. Classic design does not benefit power quality and may lead to early failure of high tension line. Fluorescent lamps should be banned as a century of using this



material in homes has total polluted personal living space and is reprehensible to feign ignorance of the deleterious nature to this industrial consumer product hygiene issue.

Banning 100 watt lamps has not helped in managing harmonic distortion in power quality or lower cost to consumers. And yes, new products may require more carbon to construct than GenII/Neolight. Licensing and marketing efforts by the author have had little results. Often the technology is dismissed as impossible or advanced for today's consumers or that only large corporations invent today's high tech innovations. Truth is that many products are the result of one man's determination and diligence in making products the masses enjoy and benefit.

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