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Executive Summary

Electrical Power from Hydrogen to Dark Matter Conversion

Founded October 1991
1244 C Delaware Corporation
Headquarters in Newtown PA
1500 shareholders (all accredited, hedge funds, corporate, family offices, personal wealth)
Founder, CEO & President 63%, others 3% or less
10 generations of technology to achieve 1st in class TPV-SunCell
\$140M invested
80+ patents worldwide, 100+ patent applications
10 employees
Last raises \$35M + @ 40,000/share with 139,000 outstanding (\$5.56B market cap)
\$7M cash with a burn rate of \$2M/y

Brilliant Light Power's Autonomous Green Power Source

Brilliant Light Power, Inc. (BLP) has developed a new, zero-pollution, primary energy source based on a proprietary hydrogen plasma reaction that releases 200 times the energy of burning hydrogen that can be obtained from water. Our SunCell® having a capital cost of less than 1/10th that of solar was invented and engineered to harness this new source of power. Specifically, BLP is operating a SunCell® at commercial scale (>100 kW) producing power levels that, upon finalization of engineering and design, can power essentially all power applications with no fuels or grid connection, projected \$20/kW cap cost, \$0.001 kW/h generation cost with no transmission, distribution, or demand charges, no supply chain issues, and zero pollution including CO₂. Our global and significant patent portfolio protects our leading technology position and products.

Scientific Basis of Energy Release from Hydrogen Atoms

Our theoretically predicted energy breakthrough is based on reacting atomic hydrogen with a catalyst to cause the atom's electron to transition to a lower-energy orbital forming Hydrino®, a more stable chemical form of hydrogen. Hydrino® has been trapped in inorganic crystals and as a cryogenically condensed gas permitting independent validation of the existence of Hydrino involving 24 types of methodologies and spectroscopies run at BLP and leading universities showing characteristic signatures that do not match any other known species. The peer-reviewed, enabling, and predictive theory based on classical physical laws has been successful at analytically solving the major problems and mysteries of physics and

chemistry from the subatomic to the cosmological scales including molecules of boundless extent and complexity. BLP has published over 100 peer-reviewed journal articles and preformed many validation studies with independent leading experts.

How the SunCell® Works and How it Will Be Commeically Deployed

The SunCell® comprises a plasma cell that injects hydrogen and catalyst, and two electromagnetic pumps serve as electrodes by injecting intersecting molten tin streams from corresponding reservoirs wherein the connected streams carry a low voltage, high current to form a Hydrino®-reaction plasma in a reaction chamber. The SunCell® is an optical power source that is mated with a commercial dense receiver array (DRA) comprising an ensemble of concentrator photovoltaics cells (CPV) that operate at 1000 times the light intensity of solar-farm PV cells to produce electrical power for total electrification of essentially all power loads. The autonomous SunCell® (i) comprises standard recyclable materials with no expected supply chain issues, (ii) it is manufacturable with known commercial vendor-supplied components, and (iii) upon successful commercialization, it will be able to service all major energy markets: thermal, electrical, and electric motive (e.g. automotive, truck, rail, marine, aviation, aerospace) using existing electrical devices and systems.

Optical power or radiation transfers power at 10 to 100 times the power per area compared to conduction and convection of combustion and nuclear power plants. The 3000-5000K SunCell® plasma emits radiation at a power density of 4.6 to 35 MW/m². With light recycling, the transmitted radiation incident a CPV DRA can be converted from optical to electrical power at over 50% efficiency enabling extraordinary performance, logistics, low capital cost, and projected electricity costs of less than \$0.001/kWh.

Essentially every imaginable power consuming device in the world can be electrified with proven, cost competitive, reliable, safe, UL approved, warranted systems, mass produced and supported by the world's OEMs. The SunCell® can power these devices completely autonomously of fuels and grid infrastructure, operating in essentially any environment at greater power density and power to weight ratio than any prior known power source.

SunCell's® Impact on the Global Net Zero Emission Target for Energy in 2050

With one-year's possible production, the 15TW peak generating capacity of the world can be supplied by 60M, 250kW SunCells® without any pollution including greenhouse gases. As a result, the CO₂-based climate change crisis will be gone. Using the projected capital cost of \$20/kW, the most optimistic case is that the world could produce zero greenhouse gases in less than a year at a cost of \$300B, less than the cost of the US-funded subsidies of the Inflation Reduction Act of 2022.

Brilliant Light plans to make the breakthrough Hydrino green energy and climate change solution widely available by outsourcing manufacturing, installation, and maintenance of the SunCells® provided under a power generator lease. Autonomous SunCells® can be ganged to any scale, and the power conditioned to any characteristic required to serve essentially all thermal, cooling, and stationary and motive electrical markets of all scales to meet industry sustainability goals at vastly lower cost and greater logistical flexibility.

Supporting Documents

Business

Business Presentation

https://brilliantlightpower.com/pdf/Business Presentation.pdf

New Developments

https://brilliantlightpower.com/news/

Patents

https://brilliantlightpower.com/pdf/Global Patent Portfolio.pdf

Power and Engineering

SunCell® 275 kW Continuous Steam Production Validation

https://brilliantlightpower.com/validation-reports/

https://brilliantlightpower.com/pdf/Report on Water Bath Calorimetry (031621) rev.pdf

Additional Validation Reports

https://brilliantlightpower.com/validation-reports/

Exemplary Optical SunCell® Videos

https://brilliantlightpower.com/july-23-reaction-conditions-tests/

Exemplary Steam Boiler Video

https://www.youtube.com/watch?v=hRGAQilVvqA

Hydrino

Hagen EPR paper

https://www.sciencedirect.com/science/article/pii/S0360319922022406

https://assets.researchsquare.com/files/rs-144403/v1 stamped.pdf

The "Hydrino States of Hydrogen" review paper

https://brilliantlightpower.com/hydrino-states-of-hydrogen/

https://brilliantlightpower.com/pdf/Hydrino States of Hydrogen.pdf

Analytical Presentation

https://brilliantlightpower.com/pdf/Analytical Presentation.pdf

Theory

Grand Unified Theory of Classical Physics https://brilliantlightpower.com/GUT/GUT-CP-2020-Ed-Web.pdf

Atomic Theory Presentation

https://brilliantlightpower.com/wp-content/uploads/theory/TheoryPresentationPt1-web-032017.pdf

Molecular Theory Presentation and Millsian

 $\frac{https://brilliantlightpower.com/wp-content/uploads/theory/TheoryPresentationPt2-web-032017.pdf$

Collective Phenomena, High Energy Physics & Cosmology https://brilliantlightpower.com/wp-content/uploads/theory/TheoryPresentationPt3-web-032017.pdf

Millsian Exact Molecular Solutions Software https://brilliantlightpower.com/millsian-inc/

Exemplary Theory Journal Articles

https://www.dropbox.com/sh/qucgggr3sbtnmiw/AAA9g_idEnX74c5YD2l8b1HMa?dl=0

Peer Review Reports

https://brilliantlightpower.com/theory/

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Reviews by Dr. Randy Booker and Dr. Mark Nansteel

Simulations and Support Materials

https://brilliantlightpower.com/atomic-theory/

https://brilliantlightpower.com/molecular-physics/

https://brilliantlightpower.com/cosmology/

Journal Publications

Peer Reviewed Publications List

https://brilliantlightpower.com/pdf/Publications.pdf

Exemplary Peer Reviewed Articles

https://www.dropbox.com/sh/proq7b4ur0vttl5/AACk3xqTrew9A7DyZfAgaGsia?dl=0