NEWS RELEASE

# PowerLight Technologies to Provide Power Beaming Expertise, Solutions and Support as part of the DARPA Lunar Architecture (LunA-10) Power Energy Transmission Infrastructure Initiative

1/31/2024

## Aim is to produce unlimited electricity and power transmission anywhere on the lunar surface

KENT, Wash.--(BUSINESS WIRE)-- **PowerLight Technologies**, the leading developer of commercially viable, safe, long-distance wireless power beaming solutions for kilowatt class power levels over kilometers of distance, will deliver the critical wireless power beaming expertise, solutions and support for the development of lunar power infrastructure, as part of Blue Origin's award under the DARPA Lunar Architecture (LunA-10) initiative. DARPA had previously selected 14 companies, including Blue Origin, to design new integrated system-level solutions that span multiple lunar services. PowerLight Technologies is teamed with Blue Origin on the scalable surface power infrastructure solution that includes generation and transmission of megawatts of electricity utilizing lunar sourced materials and wireless power beaming.

The space industry has witnessed remarkable growth, reaching a **market value of $469 billion in 2021**, with projections of surpassing $634 billion by 2026. PowerLight Technologies, to date the only company who has developed and demonstrated commercially viable, safe wireless power beaming over long distances, has an enviable market position.

Power beaming can provide the means for delivering power to remote devices in the early stages of lunar

development and operations where efficiency of mass, deployment flexibility and ease of implementation are so valued. As those sites become fixed in place, some of those wireless power links can be replaced with dedicated power cable infrastructure, and power beaming infrastructure it replaced can be redeployed.

In most cases, beamed power will continue to enable remote delivery for mobile devices, those operating in the permanently dark or shadowed regions, and potentially safe delivery of power from nuclear reactors which must live at some distance.

“PowerLight’s advanced power beaming technology is uniquely suited to meet the challenges presented by exploration and mining on the moon. Critical is the ability to design new integrated system-level solutions that span multiple lunar services. The goal is to develop the approaches to ‘scalable systems that can operate jointly, creating monetizable services for future lunar users’. Building out energy infrastructure for exploration and mining on the lunar surface is just the first step, and ultimately we look forward toward Mars,” said Richard Gustafson, President and CEO of PowerLight.

The flexibility offered by laser power beaming will significantly improve or enable critical lunar operations, including not only mobile, autonomous rover operations such as those planned in permanently shadowed craters, but also toward providing power to/from orbit to the surface and between orbiting vehicles.

**ISRU ice mining operations**, for example, in the permanently shadowed regions (PSR), from prospecting to full-scale industry, will require power transmitted from isolated regions to mobile assets in the PSR interior.

PowerLight is the world leader in power beaming safety and has a number of patents on this front. PowerLight has developed advanced safety systems for both power beaming and power over fiber (PoF) that have been rigorously tested and approved by multiple governing agencies, enabling large-scale commercialization of the technology. PowerLight is now productizing and commercializing solutions for the global mobile telecoms market and continues to support and expand its business, innovating and delivering new long-distance power beaming solutions for defense and aerospace markets.

In 2021, PowerLight teamed with telecom giant Ericsson to demonstrate the world’s first wireless power beaming to a 5G base station, showcasing the flexibility that power beaming provides to the design and deployment of wireless telecommunications networks.

In 2023, PowerLight was selected to partner with several entities on the DARPA POWER ("Persistent Optical Wireless Energy Relay") Program, which aims to build an airborne energy relay system for high-altitude, long-range transmission of energy for global military operations with contested logistics and/or multi-domain operations.

## About PowerLight Technologies

**PowerLight Technologies** is a leading developer of safe laser power beaming solutions to transmit kilowatt-class power over kilometer-scale distance. PowerLight is ramping developments with commercial partners for both power-over-fiber and wireless power beaming solutions. PowerLight maintains headquarters in Kent, Washington, USA. For additional information visit **www.powerlighttech.com**.

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Source: PowerLight Technologies