



March 21, 2013

Independent Study Validates Non-Proliferation Benefits of Lightbridge's Proprietary Metallic Fuel

MCLEAN, Va., March 21, 2013 (GLOBE NEWSWIRE) -- [Lightbridge Corporation](#) (Nasdaq:LTBR) today announced that an independent analysis by [Pace Global](#), a [Siemens](#) (NYSE:SI) business, confirms the Company's patented metallic fuel design has superior non-proliferation benefits compared to current nuclear fuels.

According to the [report](#), the reasons for the superior non-proliferation benefits include:

- "The amount of residual plutonium [at the end of the fuel's useful life] is significantly smaller in the Lightbridge designs" and there are "large fractions of neutron [absorbing elements] in Lightbridge metallic fuel" that would poison an attempt to make an explosive device from the material;
- Any attempt to reprocess spent Lightbridge fuel would require "additional complex chemical processing of the metallic portion of the fuel," and "it is believed no industrial-scale process has been developed for this purpose;"
- "Current U.S. reactor fuels and the proposed Lightbridge design are all classified as LEU (low enriched uranium)" that "cannot be used directly for the construction of nuclear weapons." "If a diverter had the necessary access to enrichment facilities, it would actually be more efficient and stealthy for the [diverter] to process natural uranium to the highly enriched state," as opposed to processing LEU.

"We are pleased by this independent confirmation of the fuel's significant non-proliferation benefits and by the steady achievement of technical milestones on the way to regulatory approval and commercialization of our fuel," said [Seth Grae, Lightbridge President and CEO](#).

A December 2012 Pace Global analysis of Lightbridge fuel concluded that "Lightbridge's metallic fuel can deliver significantly improved economics to nuclear utilities from increased power output and extended fuel cycles, resulting in highly attractive returns on invested capital, even with conservative assumptions on reactor conversion and regulatory licensing costs, and fuel technology licensing fees paid to Lightbridge," Grae added.

Both analyses can be accessed via the Investor Relations page of Lightbridge's website www.ltbridge.com.

The Pace Global non-proliferation and economic analyses follow the recent publication of a peer-reviewed article that highlights how the Company's next generation fuel is capable of increasing the power output and extending the fuel-cycle length of light water reactors. The article also reviews the unique geometry and composition of the metallic fuel and its application to power uprates in light water reactors. The article was published in the December 2012 edition of [Nuclear Technology](#), a publication of the [American Nuclear Society](#). An abstract of the article is available at http://www.new.ans.org/pubs/journals/nt/v_180:3.

About Lightbridge Corporation

Lightbridge is a US nuclear energy company based in McLean, Virginia with operations in Abu Dhabi, Moscow and London. The Company develops proprietary, proliferation resistant, next generation nuclear fuel technologies for existing and future nuclear reactor systems. The Company also provides comprehensive advisory services for established and emerging nuclear programs based on a philosophy of transparency, non-proliferation, safety and operational excellence. Lightbridge's breakthrough fuel technology is establishing new global standards for safe and clean nuclear power and leading the way to a sustainable energy future. Lightbridge consultants provide integrated strategic advice and expertise across a range of disciplines including regulatory affairs, nuclear reactor procurement and deployment, reactor and fuel technology and international relations. The Company leverages those broad and integrated capabilities by offering its services to commercial entities and governments with a need to establish or expand nuclear industry capabilities and infrastructure.

Lightbridge is on Twitter. Sign up to follow @LightbridgeCorp at <http://twitter.com/lightbridgecorp>.

The Lightbridge Corporation logo is available at <http://www.globenewswire.com/newsroom/prs/?pkgid=17075>

About Pace Global Energy Services, LLC

Pace Global, a Siemens business, is a leading energy consulting and management company. Pace Global combines deep industry knowledge with commercial, technical, financial, and regulatory expertise to help organizations maximize value and manage risk in today's complex energy and environmental markets. For more than 35 years and in over 60 countries, Pace Global teams have worked closely with clients to define strategies and implement solutions. Now a part of the Sustainability and Energy Management business within Siemens, Pace Global helps to provide full end-to-end integrated energy solutions for enterprise clients and governments worldwide. For more information, please visit www.paceglobal.com.

Forward Looking Statements

This news release contains statements that are forward-looking in nature, including statements regarding Lightbridge's competitive position and product and service offerings. These statements are based on current expectations on the date of this news release and involve a number of risks and uncertainties that may cause actual results to differ significantly from such estimates. The risks include, but are not limited to, the degree of market adoption of the Company's product and service offerings; market competition; dependence on strategic partners; and the Company's ability to manage its business effectively in a rapidly evolving market. Certain of these and other risks are set forth in more detail in Lightbridge's filings with the [Securities and Exchange Commission](#). Lightbridge does not assume any obligation to update or revise any such forward-looking statements, whether as the result of new developments or otherwise.

CONTACT: Gary Sharpe

Investor Relations & Corporate Communications

Lightbridge Corporation

571-730-1213

gsharpe@ltbridge.com

Holt Bradshaw

Executive Director

Pace Global

703-818-9100

www.paceglobal.com