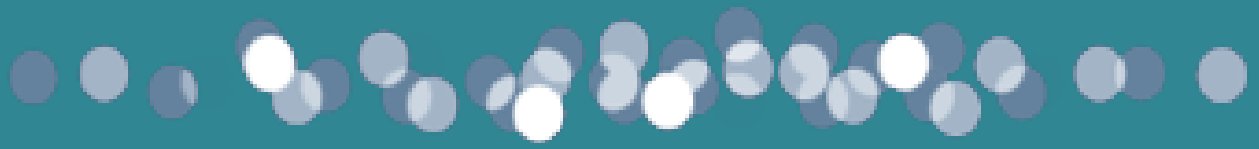


Lightbridge®

Investor Presentation
July 2015

NASDAQ : LTBR

Safe Harbor Statement

With the exception of historical matters, the matters discussed in this presentation are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the Company's competitive position, the timing of demonstration testing and commercial production, the Company's and product and service offerings and the expected market for the Company's product and service offerings.

These statements are based on current expectations on the date of this presentation 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; demand for fuel for nuclear reactors; and the Company's ability to manage its business effectively in a rapidly evolving market, as well as other factors described 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. Readers are cautioned not to put undue reliance on forward-looking statements.

Our patented, metallic fuel technology can help global nuclear utilities achieve improved operating economics through increased power output and enhanced reactor safety.

LTBR can realize significant, high-margin revenue streams from technology licensing fees and royalties from a growing $25 billion global market for nuclear fuel.

1

By listening to NUFAB and other utilities, we designed new fuel that is compatible with existing and new reactors.

2

Lightbridge's proprietary fuel addresses the two overarching issues confronting the nuclear industry.

3

Lightbridge delivers:

- Improved Economics
- Improved Safety

10%

power uprates for existing pressurized water reactors

30%

power uprates for new build pressurized water reactors

+6 months

period between refueling outages increased from 18 to 24 months for existing pressurized water reactors

10+ years

ahead of any potential competitor due to testing and regulatory requirements

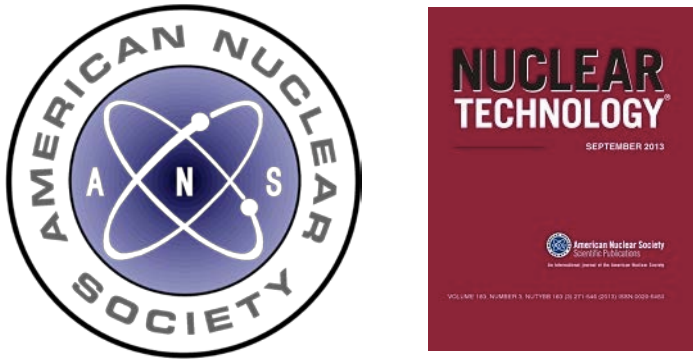
Lightbridge technology has been independently validated by respected industry organizations, confirming its:

1. Technology value proposition
2. US nuclear supply chain issues and implications for Lightbridge metallic fuel
3. Proliferation-resistant properties

Independent validation includes:

SIEMENS

American Nuclear Society's
Nuclear Technology
peer-reviewed journal



World demand for energy is rapidly rising.

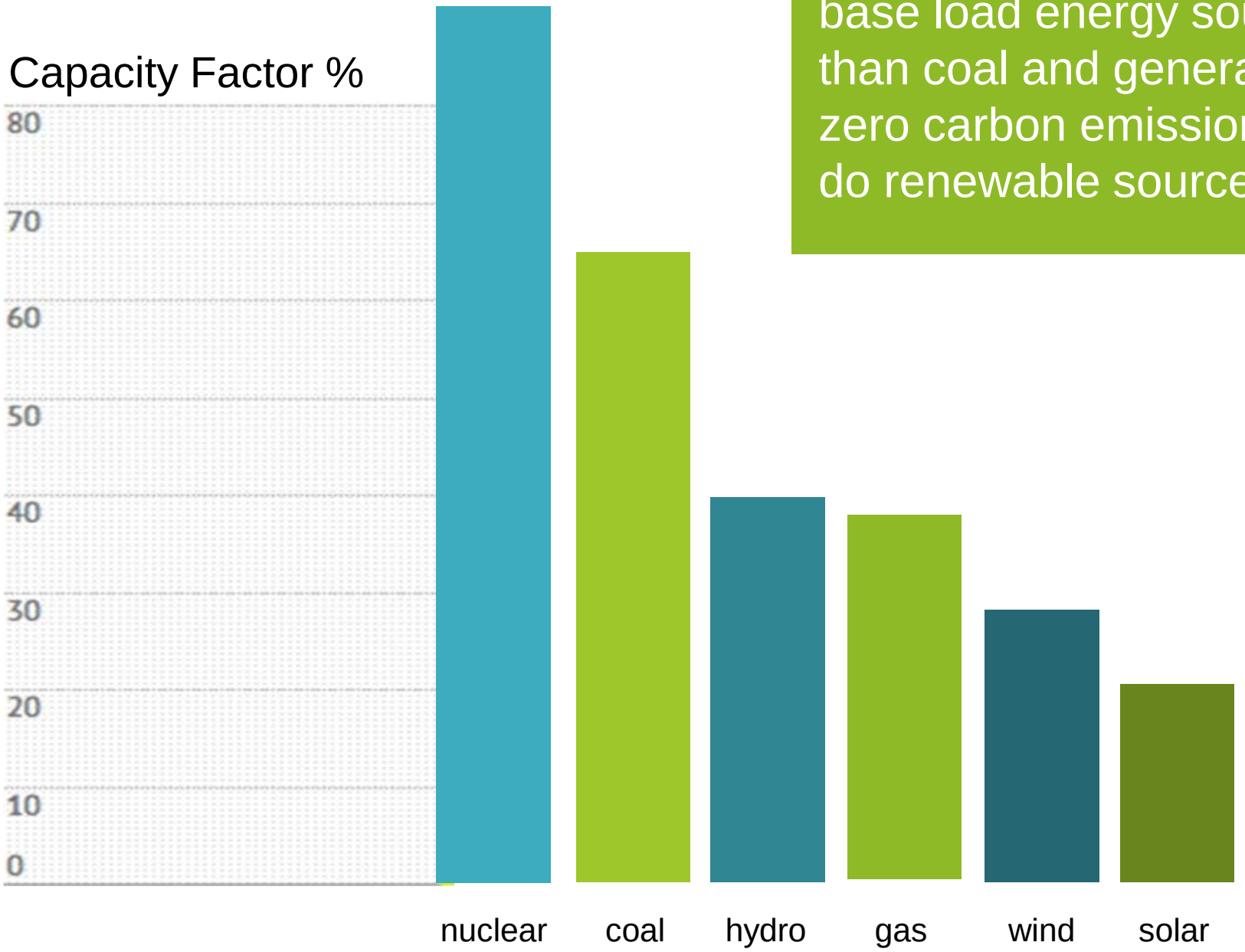
Nuclear energy is the only clean, sustainable and reliable source that addresses increasing demand for base load power.

Producing the Equivalent of One Cubic Mile of Oil

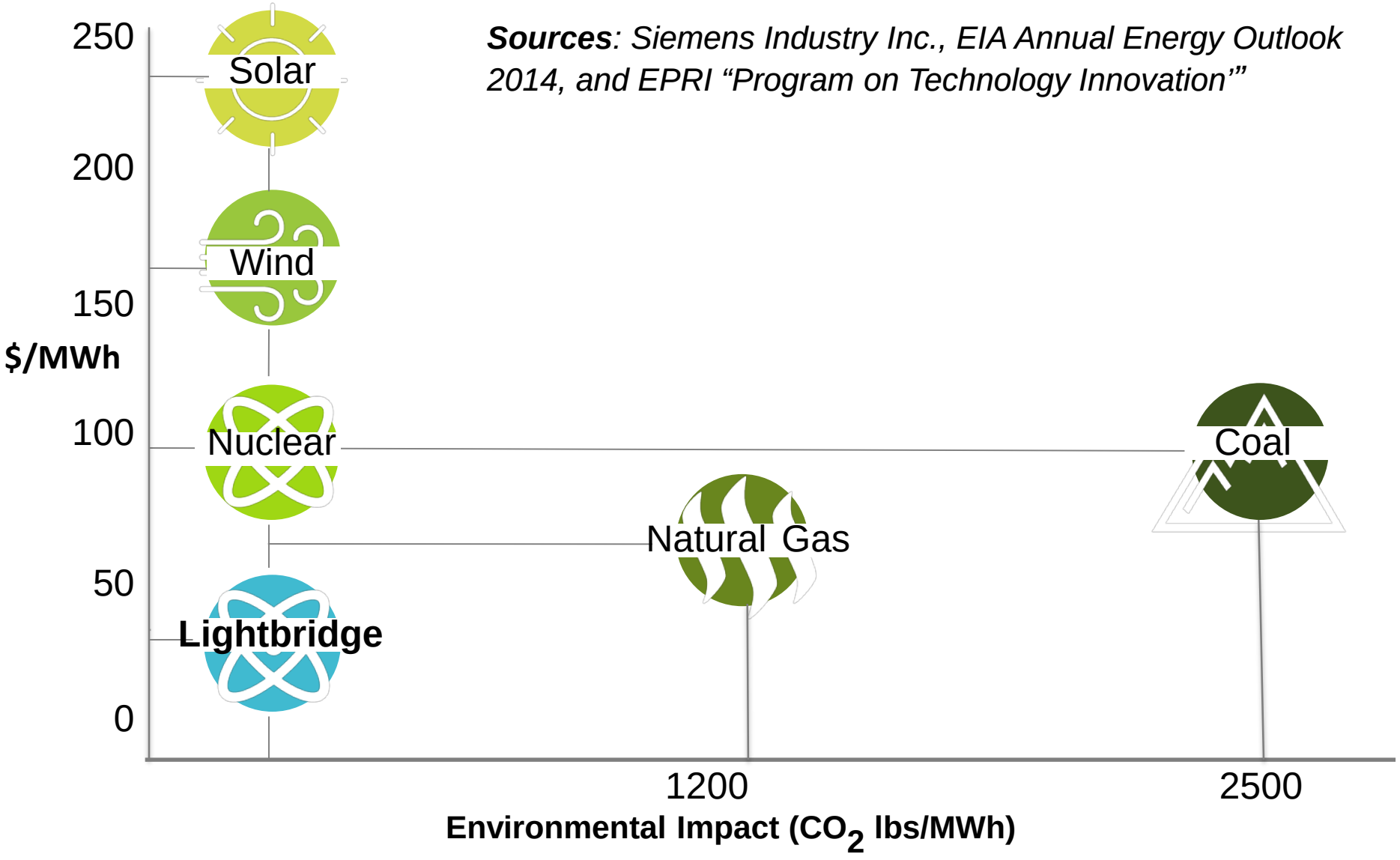
- **Hydro**: **200 dams**
  - 1 every quarter for 50 years
  - 18 GW with 50% availability
- **Nuclear**: **2500 plants**
  - 1 per week for 50 years
  - 900 MW with 90% availability
- **Solar CSP**: **7700 solar parks**
  - 3 per week for 50 years
  - 900 MW with 25% availability
- **Windmills**: **3 million**
  - 1200 per week for 50 years
  - 1.65 MW with 35% availability
- **Solar Roofs**: **4.2 billion**
  - 250k roofs per day for 50 years
  - 2.1 kW with 20% availability

Source: Ripudaman Mahlhotra, Ph.D., SRI International

Nuclear is a more reliable base load energy source than coal and generates zero carbon emissions, as do renewable sources.



Lightbridge Fuel: Lowest Levelized Cost for Incremental Power on the Grid



***Sources**: Siemens Industry Inc., EIA Annual Energy Outlook 2014, and EPRI "Program on Technology Innovation'"*

Lightbridge is advancing nuclear energy

INCREASES ELECTRIC GENERATION

- 10 – 17% power uprate for existing pressurized water reactors
- Up to 30% power uprate for new build pressurized water reactors
- Applicable to boiling water reactors and light water based small modular reactors

IMPROVES SAFETY

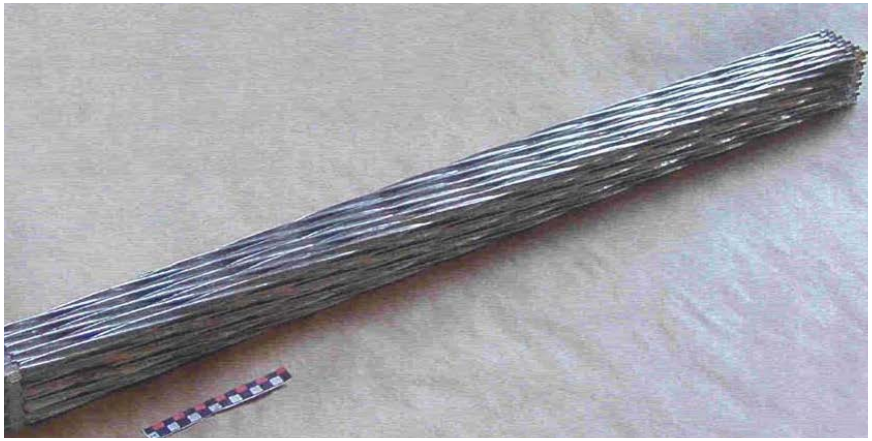
- Improves response to design basis events (Three Mile Island)
- Increases fuel reliability and reduced occupational exposures
- Improves margin to fuel rod safety limits (Fukushima Daiichi)

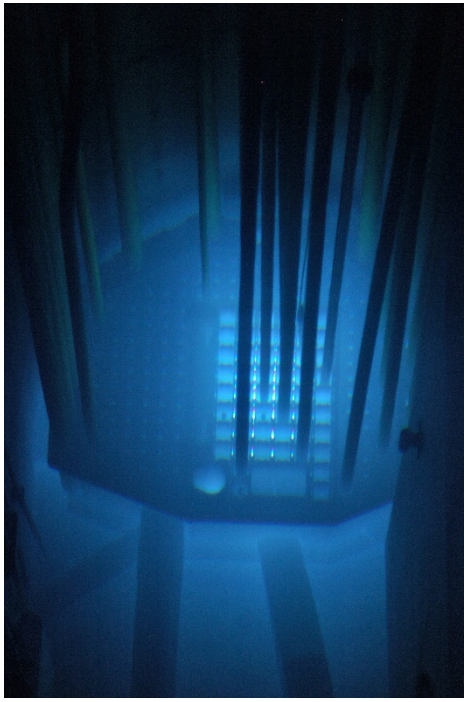
ENHANCES ECONOMICS

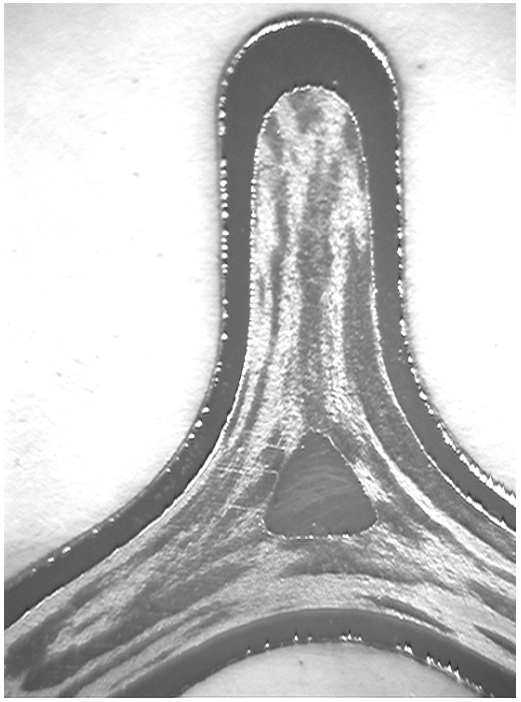
- Period between refueling outages increased from 18 to 24 months for existing pressurized water reactors
- Increases nuclear plant capacity factors
- Allows utilities more flexibility to plan for refueling shutdowns

DECREASES WASTE

- Reduces volume of spent fuel
- Reduces radio-toxicity of spent fuel
- Enhances proliferation resistance of spent fuel







Lightbridge Fuel Is Designed for Safety

360°c

Lightbridge Fuel

1250°c

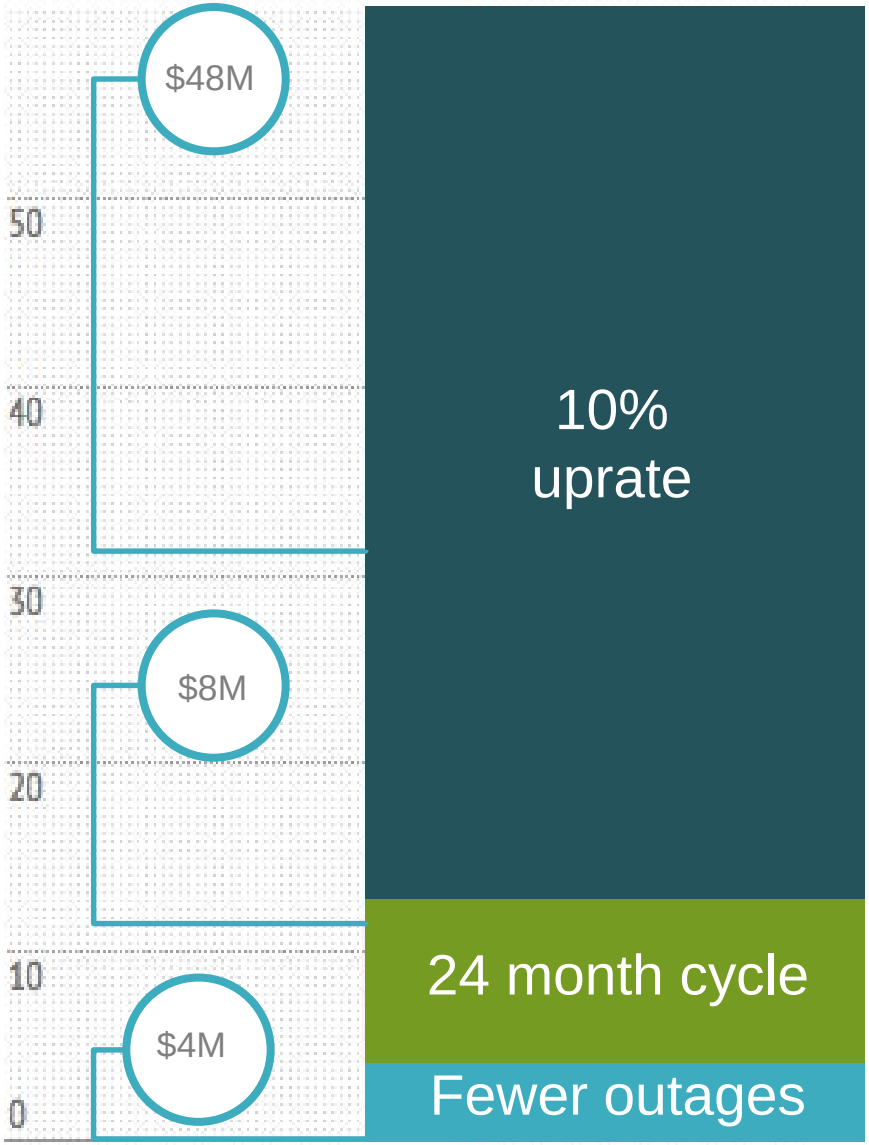
Conventional Fuel

Efficient heat transfer

Enhanced structural integrity

Reduced operating temperature

Financial & economic benefits



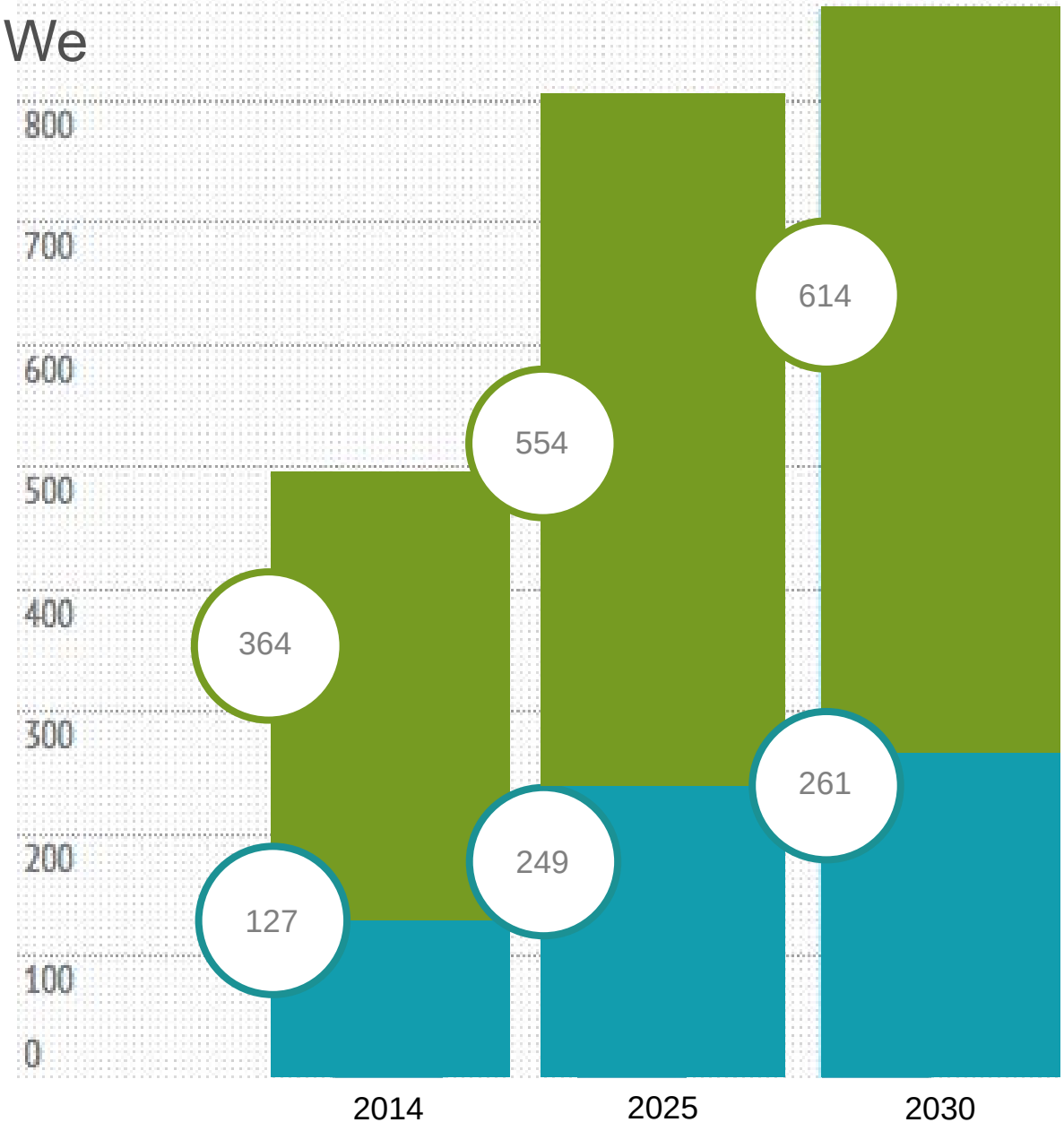
$60M

incremental annual revenue to utility per 1,100 MWe reactor with Lightbridge fuel

**Assumes wholesale power price of $55/MWh*

Operating pressurized water reactors larger than 900 MWe with more than 20 years

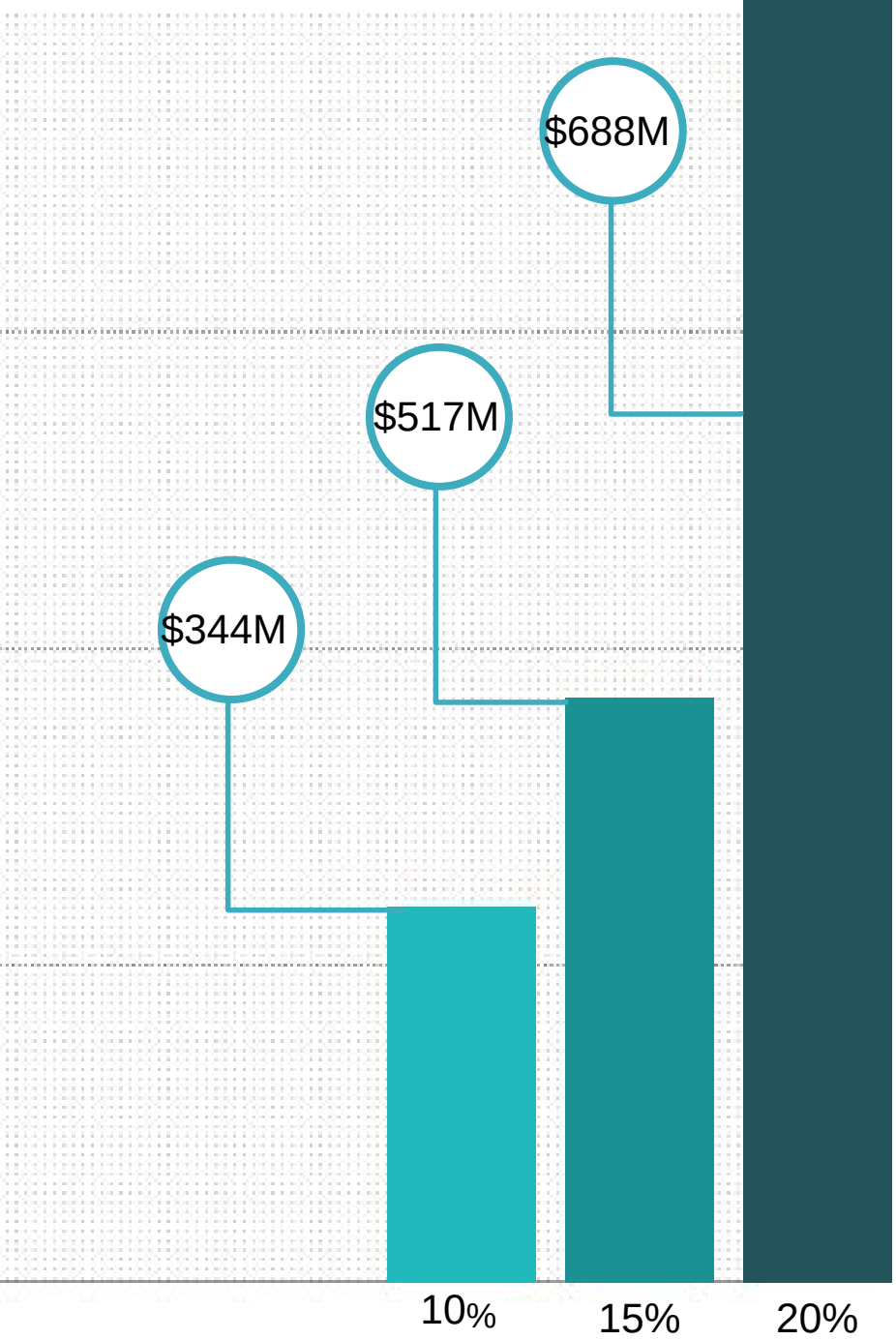
licensed life at 2025



Sources: *The Global Nuclear Fuel Market. Supply and Demand 2011-2030, World Nuclear Association, August 2011 and updated totals from the World Nuclear Association database of nuclear reactors*

TARGET

ADDITIONAL OPPORTUNITY



Annual Royalty Revenue Projections For 10% Power Uprate Fuel

Wholesale electricity price of $55/MWh

8%

Royalty Fee of Incremental Gross Revenue to Utility

***Note**: Revenue projections include an escalation factor of 3% per year.*

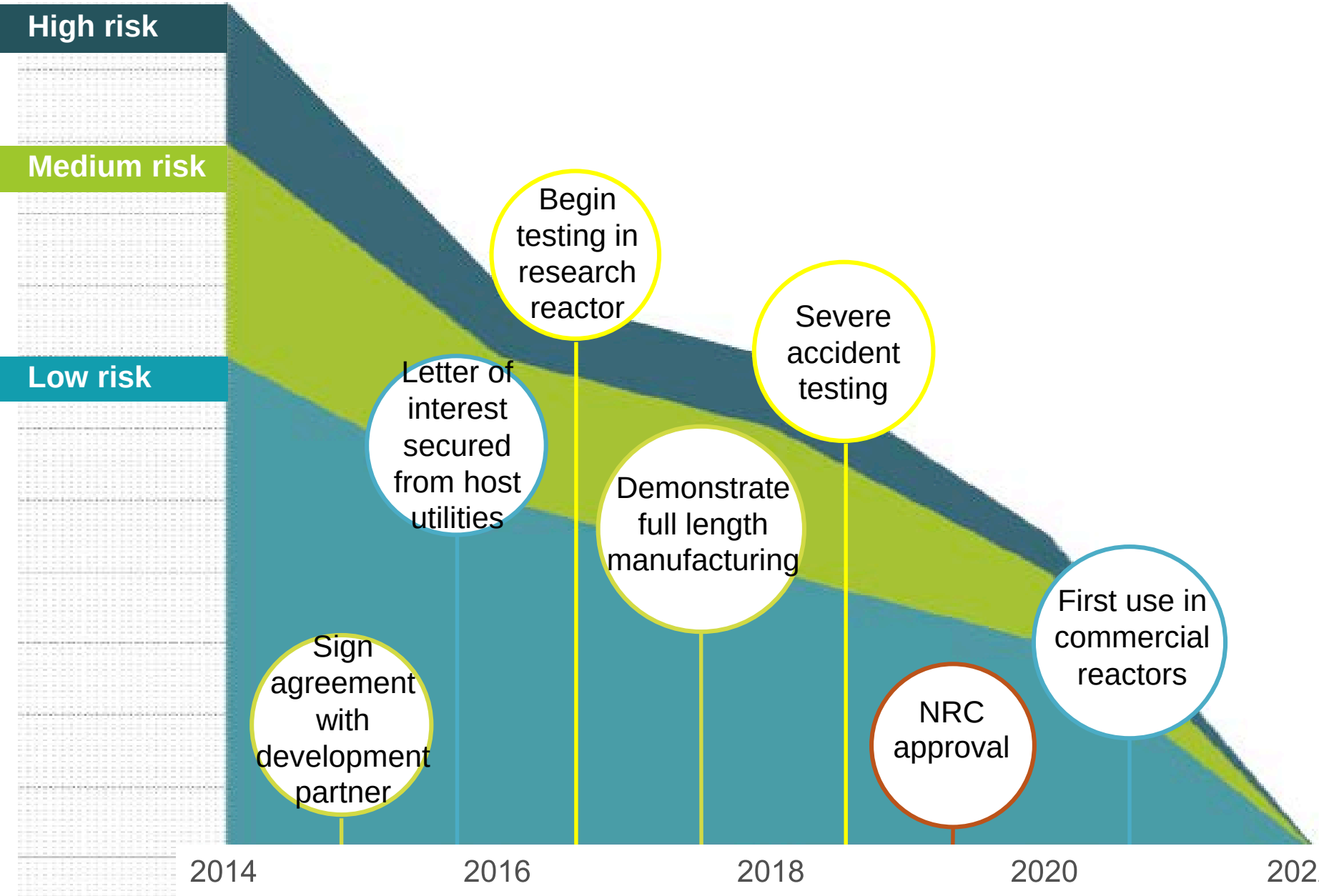
Lightbridge technology facilitates a high return for utilities.

Internal rate of return for a US nuclear power plant:

Wholesale electricity price	Total incremental investment	Incremental gross margin	Internal rate of return
$45/MWh	$85M*	$26M	30%
$55/MWh	$85M*	$35M	41%
$65/MWh	$85M*	$45M	52%

**Siemens Industry Inc. Levelized Cost Model, December 2012*

Commercial Development Timeline



Commercial strategies & footprint

Utilities can pull and fuel manufacturers can push Lightbridge fuel through the supply chain.

Nuclear Utility Fuel Advisory Board

- “Voice of the Customer” in Lightbridge’s nuclear fuel development and commercialization activities;
- Senior fuel managers from utility companies that account for approx. 50% of installed US nuclear capacity;
- In May 2015, NUFAB members submitted a formal expression of interest in a letter to the US NRC asking the NRC to prepare to review our patented metallic fuel design in anticipation of an expected application to the NRC in 2017 for use of Lightbridge fuel lead test assemblies in an "operating U.S. pressurized water reactor as early as 2020."

Lightbridge Near-Term Catalysts for Nuclear Fuel Business

- Fabricate irradiation fuel samples in 2016
- Begin test reactor irradiation of the fuel samples by early 2017
- Enter into a cost-sharing arrangement with an industry partner and/or government by 2017 to support deployment of a pilot-scale fabrication facility, fabrication of lead test assemblies and their operation in a commercial power reactor

Lightbridge

Nuclear generation

Government regulations

Our world class team of consultants generates revenue with solid operating margins and strong credibility from many successful projects.

More than $53M revenue since 2008

Success as independent advisor in the Middle East region and east Asia

Industry leading team of technology designers and suppliers, operators, regulators, and international agencies

Generation services

Feasibility studies & concept development	Strategy development & planning	Procurement design, management, bid evaluation	Program management & technical support	Business systems performance analysis

Nuclear power deployment

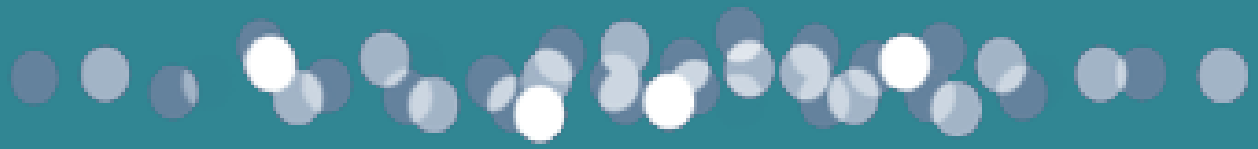
Project feasibility	Detailed planning	Procurement, licensing & construction National infrastructure & organizational development	Operations

Regulatory services

Develop & implement national nuclear regulatory programs	Assist in setup & regulation development	Site & facility inspections	Ongoing assistance for a fully-operational regulatory authority

Lightbridge Value Proposition

1. Patented technology delivers improved operating economics, more power output and enhanced reactor safety
2. Unparalleled combination of nuclear industry intellectual capital and management expertise
3. Nuclear is the only clean, sustainable and reliable energy source that addresses increasing global demand for base load electricity



Lightbridge®

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