Nuclear

Business Focus

Submarine Nuclear Propulsion

- World-leader in nuclear submarine systems and support services incorporating design, procurement and operation
- Responsible for powering the whole of the UK's Royal Navy submarine fleet

New Build

For more than 40 years we have designed, engineered, manufactured and supplied custom equipment for both new build projects and operations reactors around the world

Instrumentation & Control

World leading provider of nuclear instrumentation and controls, helping customers to improve the safety, availability and reliability of their operational plant while at the same time reducing costs

Nuclear Services

Comprehensive suite of nuclear services and innovative fleet solutions that support critical investment projects and meet customer demands for plant availability, predictability, long-term operation and improvement of existing plant

Market Dynamics

Population growth and improved living standards in emerging markets are driving a rise in demand for electricity

Solid growth in mature markets based on current operations and plant life extensions

Growth in nuclear power generation is predominantly driven by non-OECD countries; strong growth is expected especially in China

Within the future energy mix, low-carbon energy is expected to increase, with nuclear energy accounting for a significant share

£m	2014	Underlying Change	Acquisitions & Disposals	Exchange	2015
Order book	**2,499**	(331)	-	-	**2,168**
Underlying revenue	**638**	56	-	(7)	**687**
Change		+9%	-	-1%	**+8%**
Underlying OE revenue	**230**	27	-	(6)	**251**
Change		+12%	-	-3%	**+9%**
Underlying services revenue	**408**	29	-	(1)	**436**
Change		+7%	-	-0%	**+7%**
Underlying gross margin	**119**	(6)	-	(2)	**111**
Gross Margin %	**18.7%**	-240bps			**16.2%**
Commercial and administrative costs	**(61)**	6	-	2	**(53)**
Restructuring costs	**(1)**	(1)	-	-	**(2)**
Research and development costs	**(7)**	21	-	-	**14**
Underlying profit before financing	**50**	20	-	-	**70**
Change		+40%			**+40%**
Underlying operating margin	**7.8%**	+230bps			**10.2%**

All figures are for Full Year 2015 unless otherwise stated.

Presenters

Harry Holt
President – Nuclear

Harry joined the company in 2011 as Director Global Government Relations following a distinguished career in the British Army. He has since held a number of senior roles in Rolls-Royce, including the Group's Operations Strategy Director, President – Controls and Data Services and Strategy Director for the Aerospace Division. Today Harry is accountable for the Nuclear business across both Civil and Defence markets.

Rick Curtis
EVP Finance – Nuclear

Rick joined Rolls-Royce in 2001 as CFO of the Marine business. Prior to joining he was Group Financial Controller of AWA plc – a paper company which was FTSE 100 for several years. Since 2009 Rick has held the positon of CFO for the Nuclear business. He is a CIMA fellow and a Sloan Fellow of the London Business School.

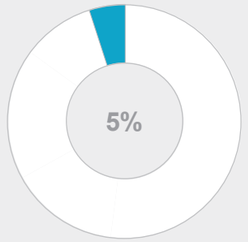
David Orr
Director, Future Programmes and Technology – Nuclear

David joined the company as a professional engineer in 1985, having served a Marine Engineer Cadetship with Shell. He also has a degree and post grad in Nuclear Engineering. Currently David is Director, Future Programmes and Technology for the Nuclear Business. He has previously held several positions in the Nuclear sector and the Submarines business in particular.

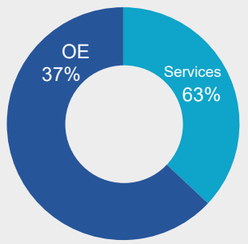
Chrissie Kemp
Digital Partner - Nuclear

Chrissie joined Rolls-Royce in 2009 as a leadership graduate and has worked in Civil, Defence and Marine. In 2016, Chrissie assumed responsibility for 'digitally' enabling Nuclear, to ultimately underpin a strategic transformation of the Nuclear services business, supporting Customers and identifying new areas for growth.

2015 Group Revenue

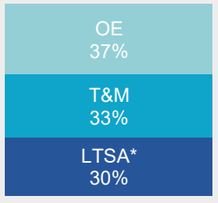


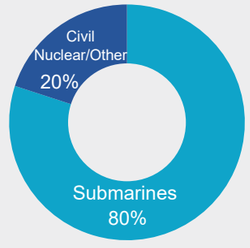
Underlying Revenue



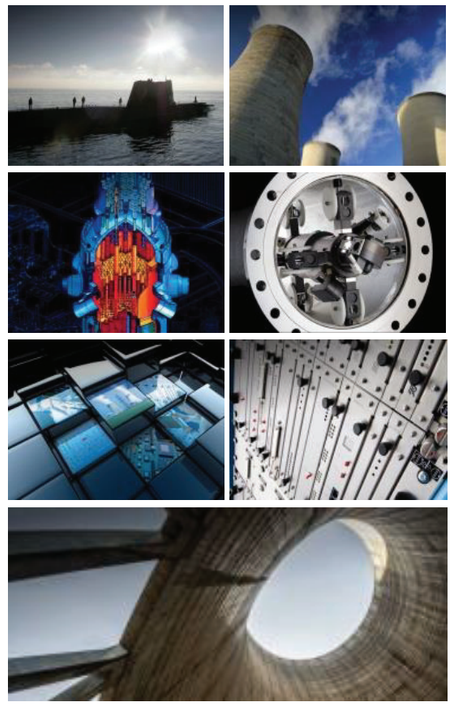
£0.7bn

Revenue Breakdown





*Long Term Service Agreement



Order Book
£**2.0**bn

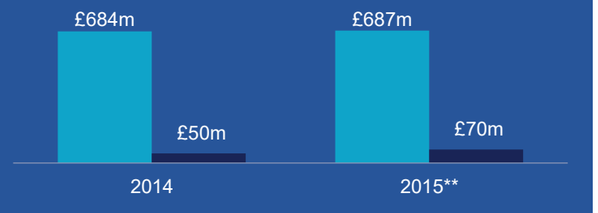
H1 2016 Figure

Employees

4,100*

*FY15 Average

Historic Revenue & Profit



**Includes £19m R&D credit

All figures are for Full Year 2015 unless otherwise stated.

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Nuclear – Engineering Excellence

Rolls-Royce

- Defence capability is unique, providing strategic relevance, stable business model and bedrock for growth in civil nuclear
- Civil Nuclear market is substantial, resilient and growing across all phases of the nuclear lifecycle
- Well positioned to exploit growth in new build, modernisation and in-service markets
- Further optionality for growth

Submarines – strategic national capability

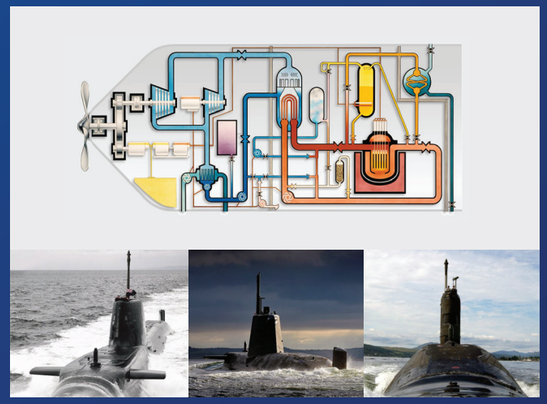
1000x more power dense than a civil nuclear plant, operating in a hazardous environment

RN's nuclear submarines have travelled over **18 million miles** on Rolls-Royce nuclear power

25 years operation without needing to be refuelled

A Trafalgar class submarine can circumnavigate the world on the energy released from **5g of uranium**

Submarine reactor plant emits a similar noise profile as a **car engine at idle**



Unique role as **Technical Authority** for full life-cycle, from design to de-commissioning

PWR3 has a **new design of reactor core**, new designs for all major components, new materials and manufacturing techniques

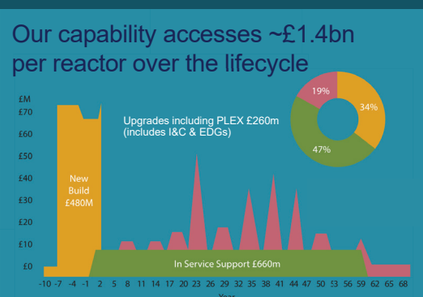
Engineering bill of material for PWR3 is around **86,000 lines**: ~4x the engineering complexity of a large TRENT engine

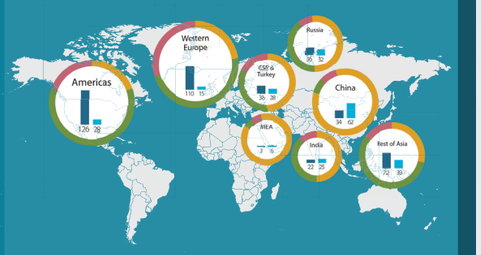
PWR3 has 30% fewer parts than PWR2 to reduce through-life cost

Civil market opportunities

- Slow down in western new build
- Current plants to run longer and more efficiently
- China and Russia dominate domestic new build and export
- Emerging SMR market

Our capability accesses ~£1.4bn per reactor over the lifecycle





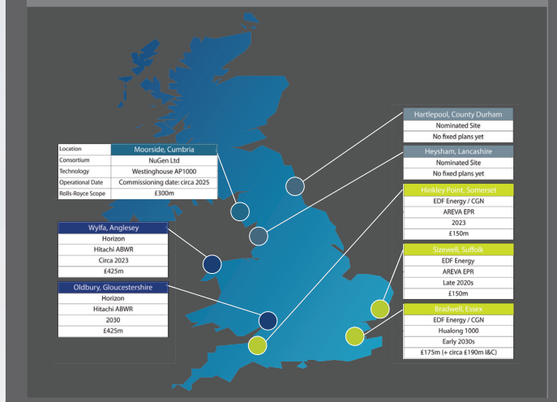
Number of reactors in operation as of Q2 2015, large reactors only
Number of reactors to be built by 2030
Circles represent market size
In-service support
Upgrades including PLEX
New Build

Note: RRPS sell UDGs into Russia.

Across entire lifecycle

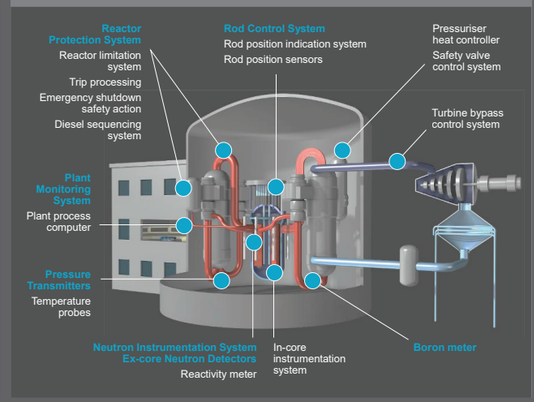
New build

- Up to 8 new sites identified for potential build in next ~25 years
- Rolls-Royce focused on safety critical systems and equipment



Modernisation / upgrades

- Provision of a complete range of safety-critical I&C solutions
- Efficient plant life extensions (PLEX) for all key reactor technologies



In-service support

- Reposition from niche supplier to trusted asset management partner
- Leveraging current expertise and footprint
- Enhanced digital/data analytics

Intelligent operations

- Plant health monitoring
- Plant performance optimisation
- Planned outage management
- Unplanned 'SCRAM' outage management

Intelligent maintenance

- Inventory management
- Obsolescence management
- Equipment reliability improvement
- Field service optimisation
- Condition-based maintenance

Trusted to deliver excellence