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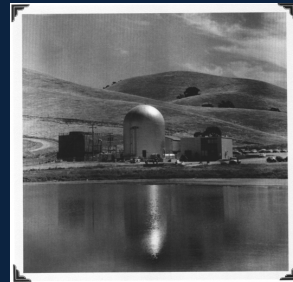
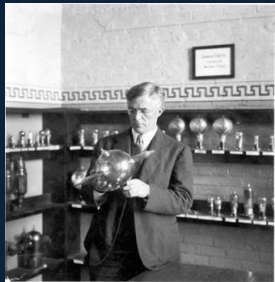
# GE Hitachi BWRX-300

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# History of nuclear innovation and experience



Proven success turning vision into commercial-scale reality, on time and on budget



OVER 80 YEARS OF NUCLEAR EXPERIENCE AND INNOVATION

1939	1955	1957	1962	1974	1986	1996	2014	2017	2020	2021	2022
First GE involvement in nuclear physics	GE Atomic Division established	Vallecitos BWR AEC License #1	NPD achieves full power – 1 <sup>st</sup> reactor in Canada	25 <sup>th</sup> BWR Peach Bottom 3	50 <sup>th</sup> BWR River Bend	1 <sup>st</sup> ABWR built on time on budget	ESBWR NRC Licence	BWRX-300 launched	Natrium™*	OPG & SaskPower select BWRX-300	

67 reactors licensed in 10 countries



## 2023 : BWRX-300

More than 60 years later, GE Hitachi is once again at the forefront of nuclear innovation in Canada.

In partnership with OPG, SNC-Lavalin, and AECON, GE Hitachi is building the first of four planned Small Modular Reactors (SMR) in Canada.





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# BWRX-300 Technology



# Why BWRX-300?



Breakthrough innovation coupled with a proven design reduces cost and risk.

## PROVEN

- 10<sup>th</sup> generation boiling water reactor (BWR)
- Based on a licensed design in the U.S.
- Powered by commercially available fuel with qualified manufacturing facilities in the U.S. and Europe (does not need HALEU)
- Leverages existing supply chain and off-of-the-shelf components

## INNOVATIVE

- Significant capital cost reduction
- Less concrete & steel/MW than competitors
- Small footprint and simple layout
- Underground construction using proven methods from other industries

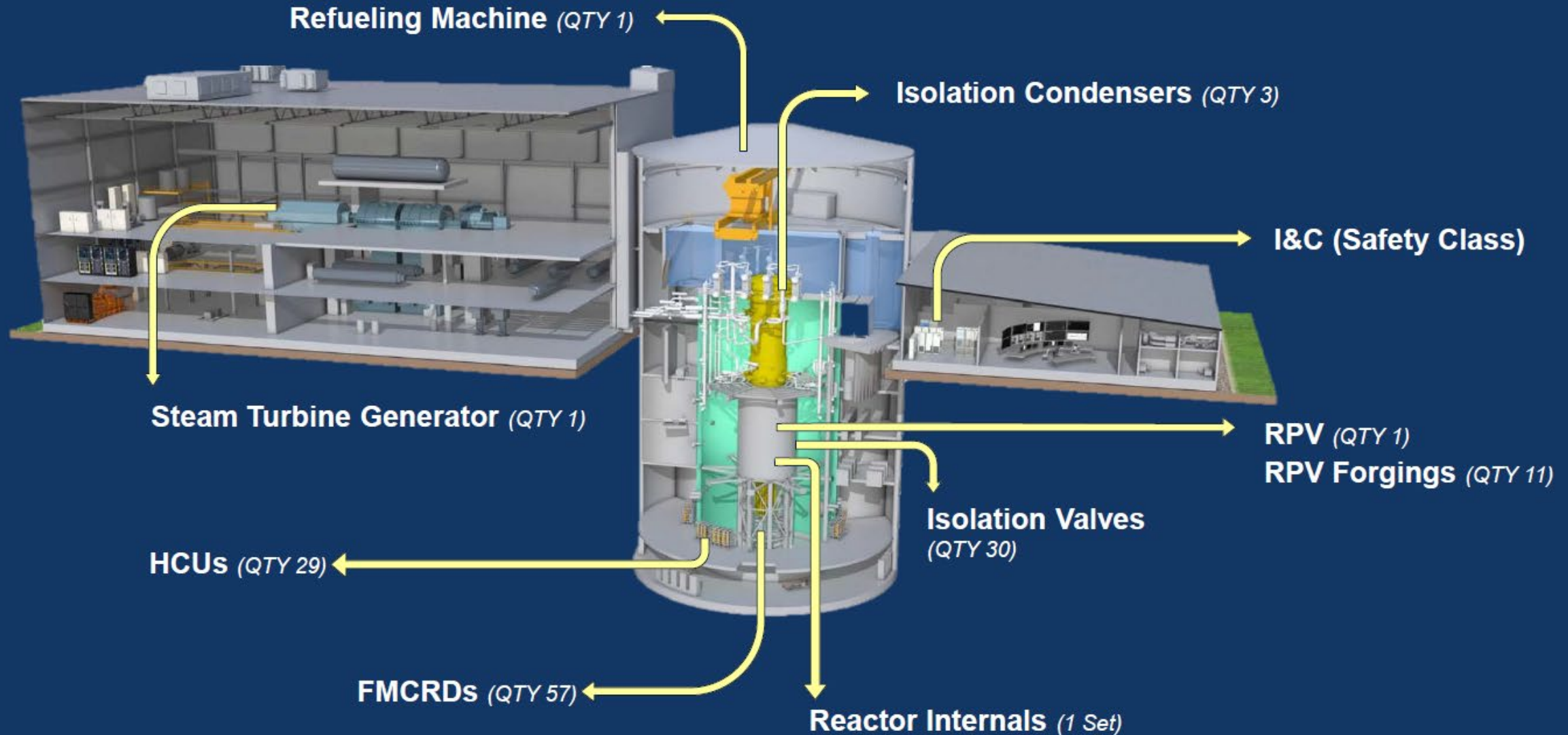
## SIMPLIFIED

- BWR is inherently simple
- Fewer components than other SMR technologies leading to less capital and operating cost
- Patented innovation drives further simplicity

**Ideal for electricity generation and industrial applications, including hydrogen production, desalination and district heating.**



# BWRX-300 Supply Chain | Key Components

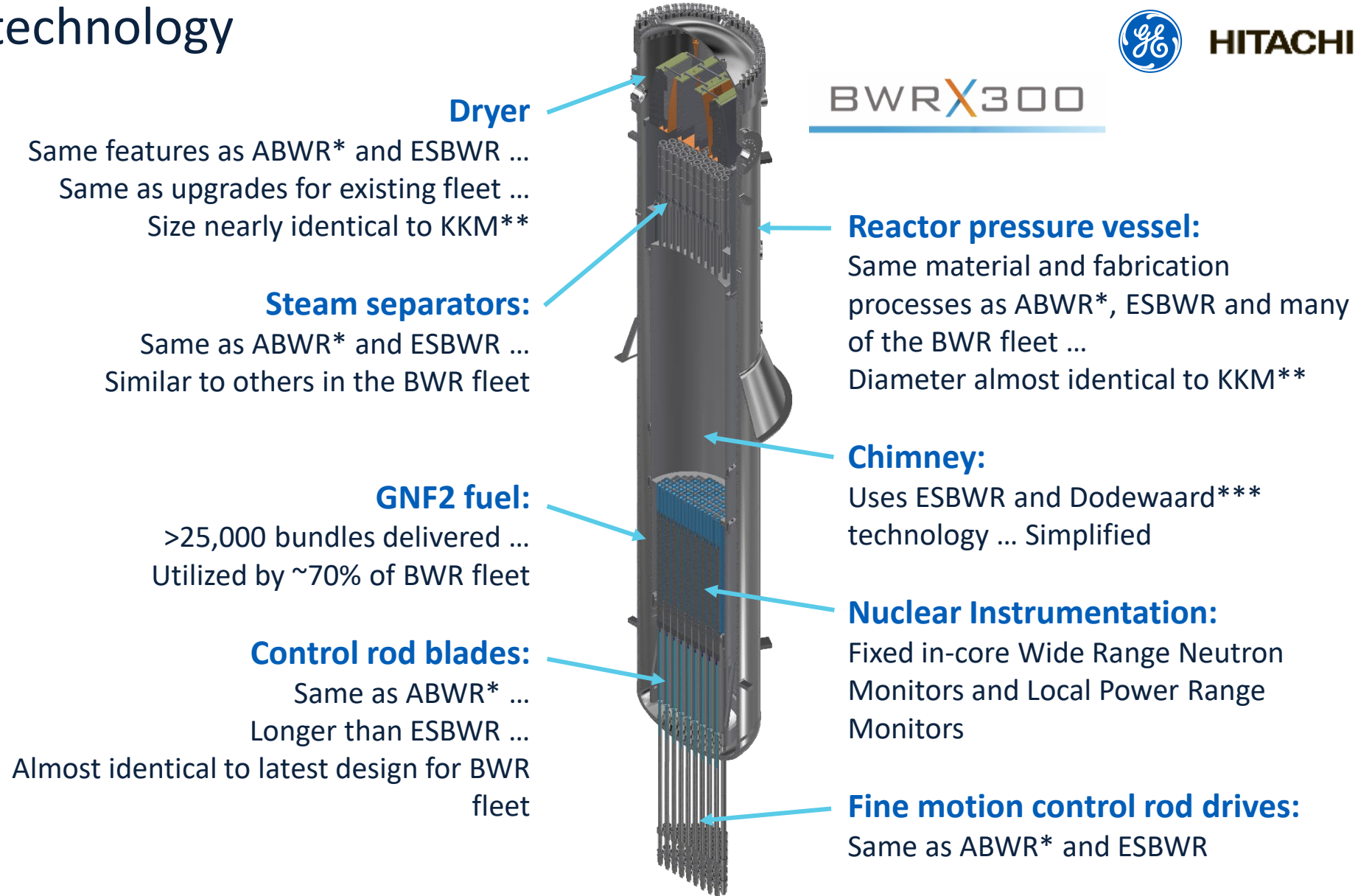


# Utilizing proven technology

PROVEN  
COMPONENTS,  
PRIOR TESTING,  
AND  
OPERATIONAL  
HISTORY  
GREATLY  
ACCELERATE  
DEPLOYMENT



BWRX300





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# BWRX-300 Customers



# GE Hitachi BWRX-300 Commercial activity...



## NORTH AMERICA



**Ontario Power Generation (OPG)**, GEH, SNC-Lavalin and Aecon signed a contract for the deployment of a BWRX-300 small modular reactor at OPG's Darlington New Nuclear Project site.



**Tennessee Valley Authority** began planning and preliminary licensing for potential deployment of a BWRX-300 at the Clinch River Site near Oak Ridge, Tennessee.



## POLAND ... Orlen Synthos Green Energy (OSGE)

OSGE submitted six applications for the issuance of a fundamental decision for the construction of BWRX-300 reactors. Polish regulator's general opinion concludes BWRX-300 design is compliant with Polish nuclear safety.



**SaskPower** selected the BWRX-300 for potential deployment in Saskatchewan in the mid-2030s.

## ESTONIA

Fermi Energia selected GEH's BWRX-300 for potential deployment in Estonia.

## UNITED KINGDOM

GE Hitachi down-selected as one of 6 companies to advance in the UK Competition, supporting the development of innovative technology for greater energy security.

## CZECH REPUBLIC & SWEDEN

GE Hitachi has memoranda of understanding or other agreements in place with companies to support global deployment of the BWRX-300.



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