



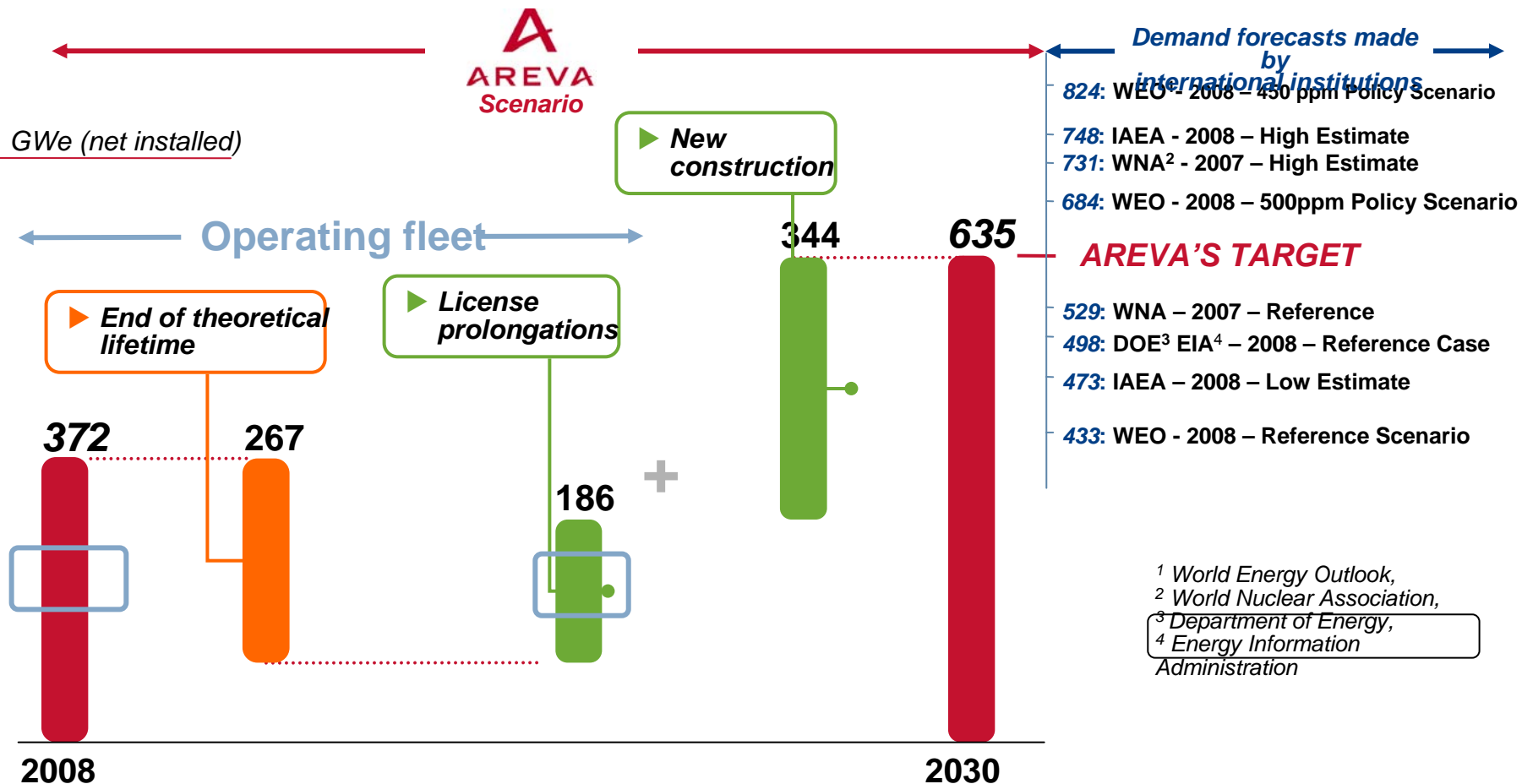
Existing Plants and New Builds: A Resources Dilemma?

Senior Executive Vice Christian Hillrichs
President, AREVA NP
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AREVA's 2030 Scenarios foresee > 500 GWe of Nuclear – Constructed or Extended



¹ World Energy Outlook,
² World Nuclear Association,
³ Department of Energy,
⁴ Energy Information Administration

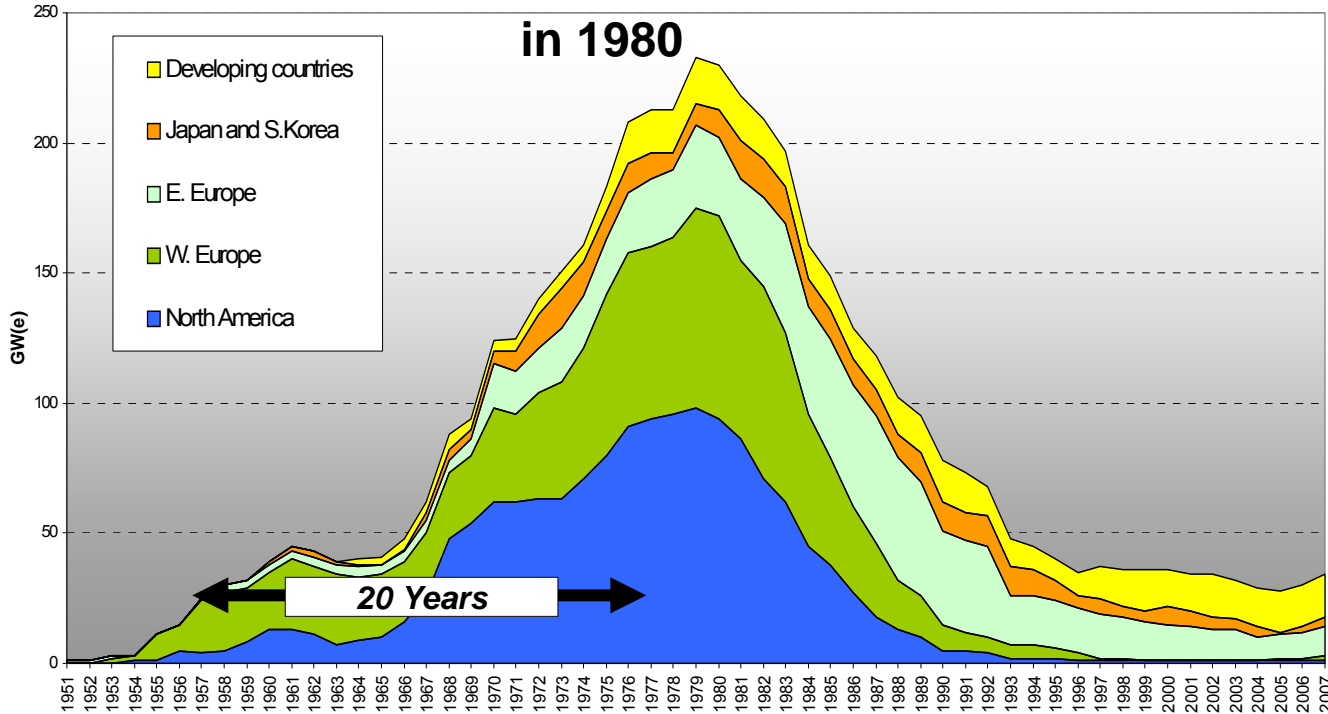


The operating fleet and new builds will require Resources (HR and Capacities)

We have to make the New Wave of New Build and maintain Existing Fleet



Capacity being installed at the same time



- ▶ 50% of worldwide nuclear fleet is 25+ years old
- ▶ 129 of 438 reactors are 30+ years old

Source: IAEA 2008



History shows: An Increase of Capacity is Possible!

An Increase of Capacity needs

Today's and Tomorrow's Requirements for Existing Fleet

Modernization and
life time extension

Nuclear and
industrial **safety**

Effective and efficient
plant operations

Technology **certainty**

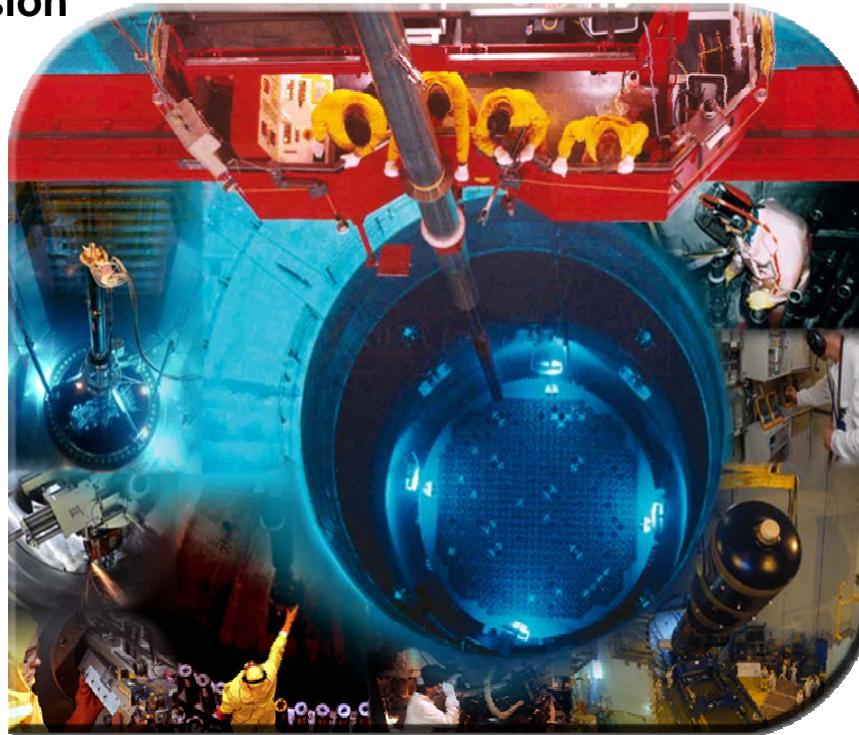
High and consistent
INPO ratings

Security of
**supply chain &
resource** certainty

High **availability**
factor

Minimization of
outage time

Multinational operations by
utilities



New Build and the Installed Base benefit from each other



- ▶ Leverage continuous developments
- ▶ Security of supply chain due to larger qualified supplier network
- ▶ Technical innovations
- ▶ Experiences gained during construction and commissioning for future servicing
- ▶ Experience return from plant operation
- ▶ Transfer of proven technology to new builds
- ▶ Involvement of experienced people in new build projects



Our Challenges

- ▶ **Increase of personnel**
 - ◆ Recruitment of people
 - ◆ Integration of new people
 - ◆ Training and qualification of people

- ▶ **Security of supply chain**
 - ◆ Increase of manufacturing capabilities (own and qualified subcontractors)
 - ◆ Globalization of industrial production capacities
 - ◆ Open-ended international industrial partnerships

- ▶ **Evolution of company processes and structures**

» **Agile AREVA to successfully develop sustainability**

Recruitment of Personnel

“ Every hour, AREVA is recruiting a person worldwide

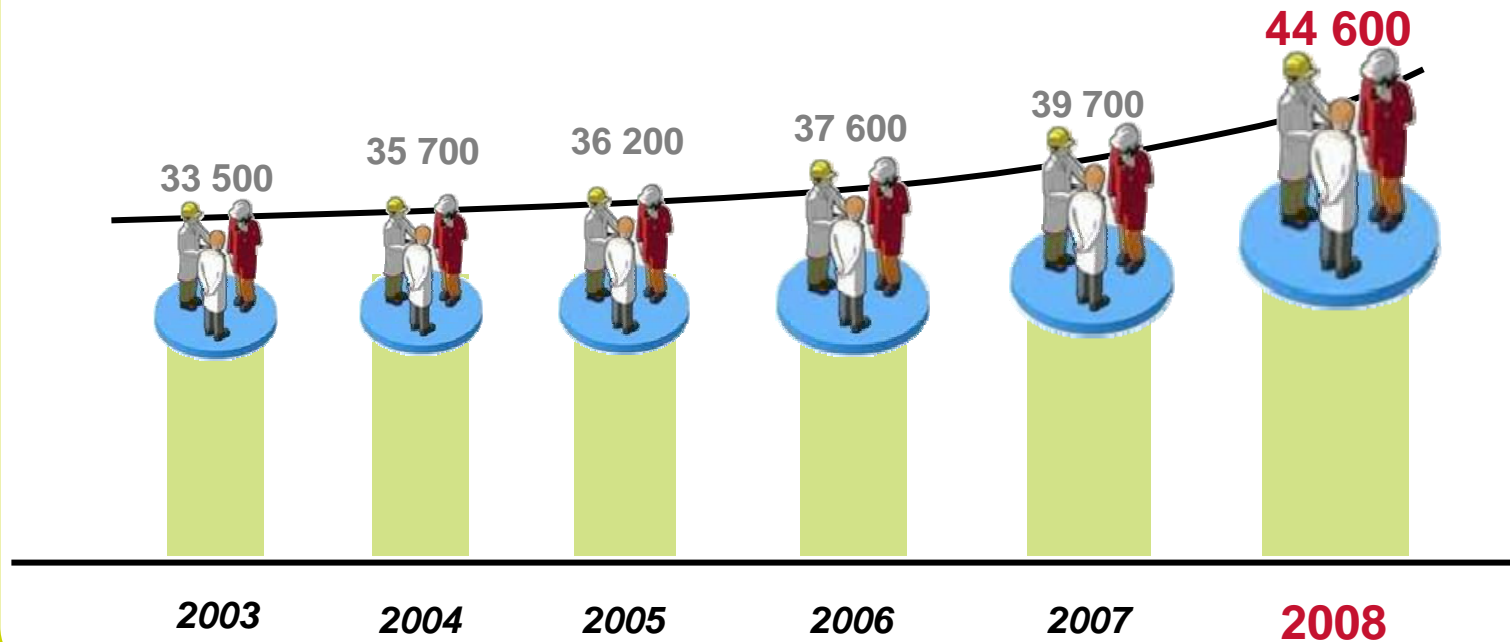


- ▶ AREVA launched a recruitment communications campaign in six strategic areas: France, Germany, North America, China, India and the Middle East
- ▶ Together, these six areas cover 75% of AREVA's worldwide recruitment needs in 2009
- ▶ Since 2006, AREVA invested €550 million in recruiting, integration and training of new hires

AREVA invests in Human Resources in Nuclear



Investment in our Employees: between 4 and 6 weeks of training in the first year for new employees



Hiring and training global and multicultural teams who know and reflect customers' culture and respect industry values

AREVA invests in Manufacturing Capabilities



An integrated manufacturing approach and a worldwide network of qualified subcontractors



▶ Chalon Saint Marcel

- ◆ Workshop: 39,000 sqm
- ◆ 2900m² extension in 2006



▶ Sfarsteel (Creusot Forge)

- ◆ Workshops: 85,000 sqm (4 sites)
- ◆ Upgrade underway



▶ JSPM

- ◆ Workshop: 13,000 sqm
- ◆ €60M plant upgrading underway



▶ Newport News (USA)

- ◆ Workshop: 300,000 ft²
- ◆ Start of operation in 2012, \$363M investment



▶ Agreement with Japan Steel Works

- ◆ Friendly acquisition by AREVA of 1.3% of JSW stock with access to resources until 2016 and beyond

AREVA invests in Technology



Working in our own radiation monitored facilities worldwide, allowing us to react promptly to customer needs

Hot Workshops



- Over 11 000m² of hot workshops in Europe and the U.S.
- Capacities for
 - Shipment & Storage
 - Maintenance & Repairs
 - Decontamination & Dismantling

Global and Regional Technical Centers



- Technical Center in Europe and the U.S. with over 350 scientific engineers and technicians for the development of basic technology
- France (NETEC): Global Center for NDE technologies
- US: 8000ft² Global Chemistry and Material Center, \$ 6.5M investment

Training and Qualification Centers



- France (CETIC): 4000m² dedicated resources, for maintenance preparation and qualification and training
- Germany: Test facility for components and systems of the new BWR KERENA™
- State-of-the-art training facilities which includes over 7600m² in Europe and the U.S.



AREVA invests to maintain its technology leadership, a balance between worldwide and specific regional needs (transferred through global network)

Long Term Partnership with Utilities

Aligning strategic goals:

- ◆ Security of resource for nuclear power plant operators
- ◆ Certainty of use for large investments for AREVA

Performance based solutions provider instead supply of single goods and services

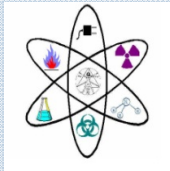
Solutions based on long term partnerships

Long Term Partnership with Utilities



Key Performance Indicators

Safety



- ▶ Low number of accidents
- ▶ Low dose

Allocation of Services Resources



- ▶ Serve long-term partners within the best context
- ▶ Allocate qualified personnel for agreed packages

Cost effectiveness



- ▶ Prevention of waiting times
- ▶ Compliance with planned outage duration



A new customer/supplier relationship to secure resources

A Challenge is not a Dilemma. We are Acting Now!

- ▶ **The existing fleet is the key for our customers and AREVA**
- ▶ **AREVA responds to existing fleet needs, facing the challenges of resources for tomorrow**
- ▶ **AREVA is in a transformation from a services provider to a performance based solutions provider**
- ▶ **History shows: It is possible to build and serve several NPPs at the same time!**



Open-ended partnership model allows AREVA to respond to Resource Challenges with agility