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# Perspectives of IAEA on Stakeholder Involvement in Decommissioning of Nuclear Installations

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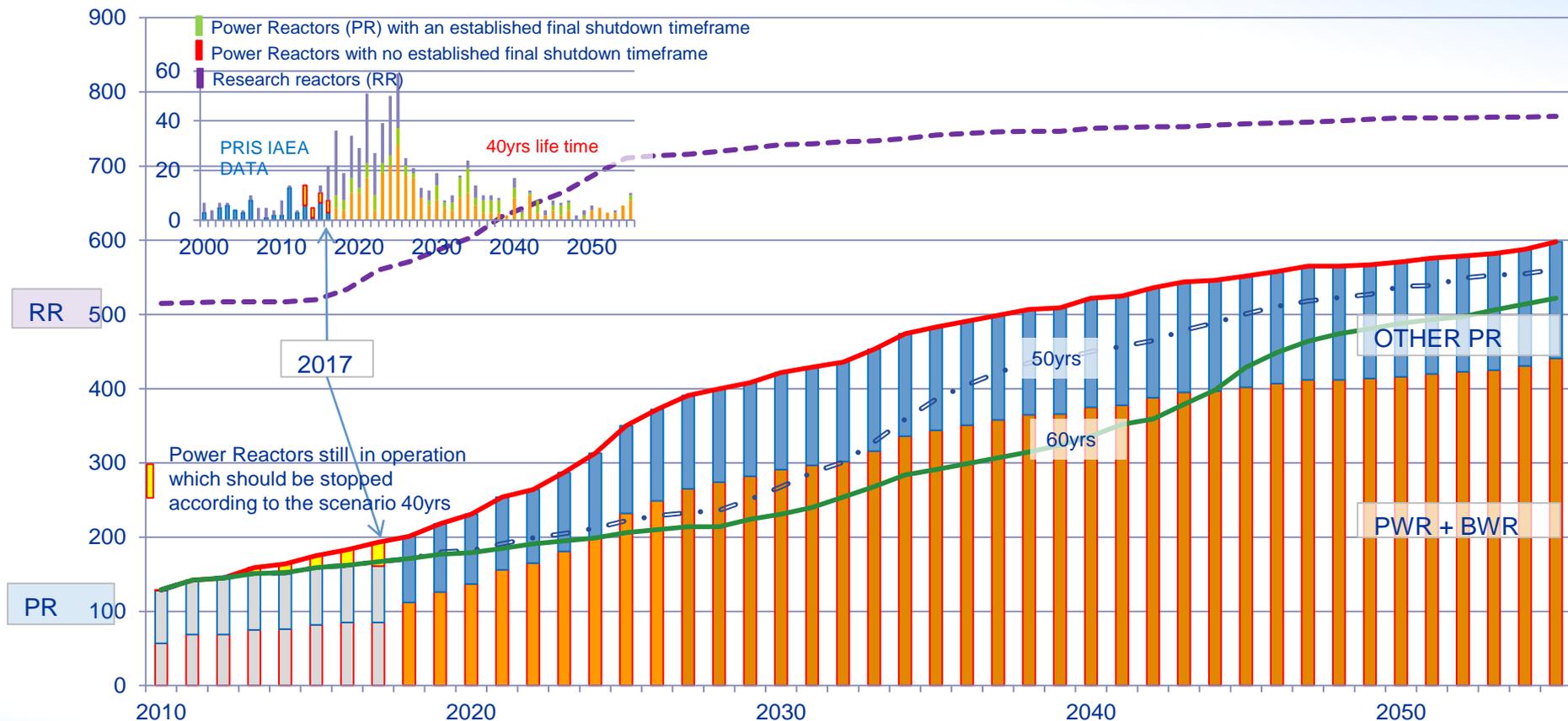
RICOMET 2017

# IAEA Definitions

- ✓ General Safety Requirements Part 6: Decommissioning of Facilities;
- ✓ ‘Decommissioning’ refers to the administrative and technical actions taken to allow the removal of some or all of the regulatory controls from a facility;
- ✓ Decommissioning is undertaken on the basis of planning and assessment to ensure safety, protection of workers and the public, and protection of the environment;
- ✓ Strategies for decommissioning: immediate dismantling vs deferred dismantling + a combination of these two strategies may be considered practicable.

# Worldwide Outlook for Decommissioning of Power and Research Reactors – estimates

## Shutdown scenario (assumption of 40yrs operating lifetime)



- Other non-reactor nuclear facilities will have to be also decommissioned and their sites remediated, especially fuel cycle facilities – industry and research.

# Global Status of Nuclear Facilities

[Sources: IAEA PRIS; Research Reactor & NFCIS Databases]

Status	Power Reactors	Research Reactors	Fuel Cycle Facilities
Operational	444	243	329 (+ 5 in commissioning phase)
Under Construction	65	8	25
Long-term / temporary Shutdown	2	19	28
Permanent Shutdown	140 <sup>+</sup>	134	96
Under Decommissioning		~50	58
Fully Decommissioned	~20	~300	127

Small industrial facilities using radioactive material : several '000s

# Relevant Considerations

- ✓ Decisions on decommissioning of nuclear facility have to be made with considerable attention to the relevant stakeholders;
- ✓ Technological progress needs to be adequately communicated with the general and professional nuclear & non-nuclear stakeholders displaying increasing interest in the decommissioning initiatives;
- ✓ This ensures that stakeholder needs and concerns are properly addressed which improves the probability of successful implementation of the decommissioning activities towards their completion;
- ✓ It can also provide an improvement in safety and enhance the general acceptability of the decisions made.

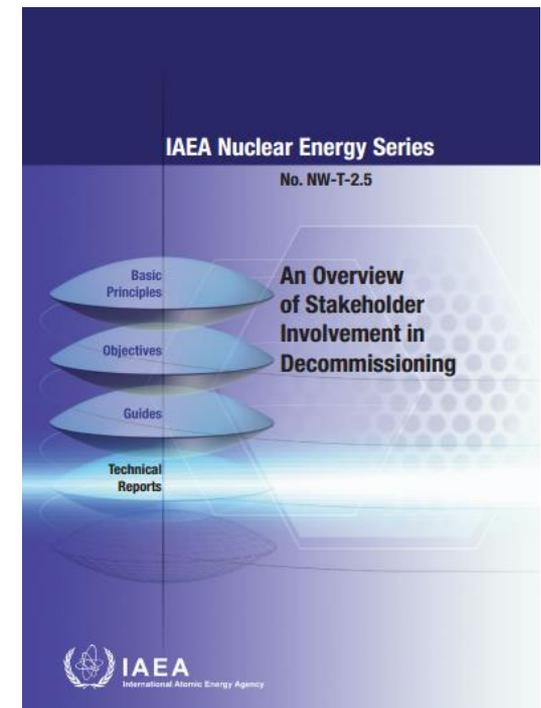
# Stakeholders for decommissioning

Anyone who can affect or be affected by the decommissioning activities:

- ✓ Those dependent on the nuclear facility (staff and their families, trade unions, contractors, suppliers etc.);
- ✓ The owners, investors and fund providers;
- ✓ The regulators, government ...;
- ✓ The local authorities and politicians;
- ✓ The local population and neighboring communities;
- ✓ Local and national industry;
- ✓ The waste management organizations;
- ✓ Those interested in the future of the site;
- ✓ ... and others ...

# IAEA Activities

- ✓ IAEA Nuclear Energy Series report NW-T-2.5 “An Overview of Stakeholder Involvement in Decommissioning” published in 2009;
- ✓ IAEA Nuclear Energy Series report NG-T-1.4 “Stakeholder Involvement Throughout the Life Cycle of Facilities” published in 2011;
- ✓ Managing the Socio-economic Impact of the Decommissioning of Nuclear Facilities, TRS # 464, 2008;



# IAEA Activities

- ✓ A few other IAEA publications also deal with stakeholder interactions in decommissioning, but only as one component within a broader range of activities ... such as the IAEA-TECDOC-1702 on planning, management and organizational aspects of the decommissioning of nuclear facilities published in 2013;
- ✓ Several events (workshops) were organized on this topic;
- ✓ IAEA project CIDER (*already introduced by Horst*).

## Couple of examples

- ✓ Greifswald NPP, Germany: site re-development as a way to minimize social-economic impacts;
- ✓ A1 & V1 Bohunice NPPs, Slovakia: national and international stakeholders, Information Centre on Decommissioning open for public;
- ✓ Decommissioning after an accident – a very special case of an emergency / post-emergency communication (TMI-2, ChNPP, Fukushima Daiichi).

# Conclusions

- ✓ Decommissioning is a major undertaking that will impact many stakeholders;
- ✓ Early communication advantageous;
- ✓ Better conversation – better decision making;
- ✓ Wide participation in stakeholder discussions;
- ✓ Strategic, socio-economic, technical, safety and environmental questions of importance;
- ✓ Senior management support and involvement essential;
- ✓ Lot of experience available, but each country has special challenges.



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*Thank you for your kind attention*