

8th IAEA DEMO Program Workshop August 29 – September 2, 2022 Vienna

Session 3:

Efficiency: coolant selection, cost and delivering time

Session 3 - Outline

- Central Idea: Efficiency
 - Cost efficiency
 - Energy efficiency
- Elements:
 - Plasma Performance
 - Coolant & Balance of Plant
 - Recirculating Power
 - Grid integration
 - Interdependencies

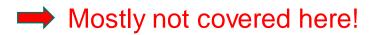


Session 3 - Outline

Cost ???

- Resources
- Manufacturing
- Safety standards
- Lifetime

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Session 3 - Outline



Efficiency vs. Delivery time

- Development time
- Design & construction time
- Urgency
- Parallel Developments

Management of Expectations

Session 3 - Program



- Plasma physics performance and impact on plant efficiency Yoshiteru Sakamoto and Yutaka Kamada
- Thermal power management in view of the coolant choice and the balance of plant Wolfgang Hering and Luciana Barucca
- Electrical power management the path toward energy production Elena Gaio
- Nuclear power plant digital twinning for efficient operation Qing Li
- Fusion plant flight simulator present status

The Fenix flight simulator as a component of the power plant model for DEMO - Emiliano Fable

Digital Twin Technology for Fusion Plant Flight Simulator - Jae-Min Kwon