



EVT2303969: Technical Meeting on Producing Potable Water Using Small Modular Reactors

24 – 27 November 2025
Rio de Janeiro, Brazil

At the Instituto de Engenharia Nuclear
[Cidade Universitária, R. Hélio de Almeida, 75 - Ilha do, Fundão - RJ, 21941-614, Brazil](#)

Meeting Agenda

Day 1: Monday, 24 November 2025		
Time (CEST)	Topics	Speakers
09:00-09:30	Arrival of Participants	All
09:30-10:00	Opening and Welcoming Remarks	Mr Cristóvão Araripe Marinho, Instituto de Engenharia Nuclear (IEN), Brazil Mr Alan Miranda Monteiro de Lima, Universidade Federal do Rio de Janeiro (UFRJ), Brazil Mr Renato Cotta, IAEA Technical Working Group on Nuclear Desalination Member Ms Molly-Kate Gavello, IAEA
10:00-10:30	Self-Introduction of Participants	All
10:30-10:45	Group Photo	All
10:45-11:15	Coffee Break	
11:15-11:50	Overview of IAEA Activities	Ms Molly-Kate Gavello, IAEA
11:50-12:30	Regulatory Aspects of SMRs for Desalination	Mr Ciro Maestre y Dutra, National Nuclear Safety Authority, Brazil
12:30-14:00	Lunch Break	
14:00-14:35	Nuclear Technology Applications with Social Benefits	Mr Carlos Alberto Matias, Amazul S.A., Brazil
14:35-15:15	Nuclear Engineering Institute: Main Projects and Activities	Mr Cristóvão Marinho, IEN, Brazil
15:15-15:45	Coffee Break	
15:45-16:25	Development of Technologies for Nuclear Micro-Reactors: The IEN Critical Unit	Mr Francisco José de Oliveira Ferreira, IEN, Brazil
16:25-17:00	Nuclear Education at UFRJ	Mr Su Jian, UFRJ, Brazil
17:00	Meeting Adjourned	
	Hospitality Reception	

Day 2: Tuesday, 25 November 2025

Time (CEST)	Topics	Speakers
09:00-09:30	Arrival of Participants	All
09:30-10:05	Kenya's Nuclear Desalination Plant User Requirement	Mr Collins Juma Owino, Nuclear Power and Energy Agency, Kenya
10:05-10:45	Seawater Desalination: The Moroccan Experience	Ms Soukayna Boutazamat, Ministère délégué Chargé de l'Eau, Morocco
10:45-11:15	Coffee Break	
11:15-11:50	Membrane Technologies for Desalination	Mr Cristiano Piacsek Borges, UFRJ, Brazil
11:50-12:30	Nuclear Energy in Brazil	Mr Lucio D. Batista Ferrari, Eletronuclear, Brazil
12:30-14:00	Lunch Break	
14:00-15:15	Technical Visit to the Argonauta Research Reactor	All
15:15-15:45	Coffee Break	
15:45-16:25	Hybrid DCMD And SWRO Desalination Using a Small PWR of 75 MW(th) for Cogeneration of Water and Electricity	Mr Paulo Augusto Berquó de Sampaio, IEN, Brazil
16:25-17:00	Cogeneration of Electricity and Desalinated Water in SMRs Using Low-Grade Heat	Mr Gabriel Caetano, UFRJ, Brazil
17:00	Meeting Adjourned	

Day 3: Wednesday, 26 November 2025

Time (CEST)	Topics	Speakers
09:00-09:30	Arrival of Participants	All
09:30-10:05	Challenges of SMR's in Nuclear Desalination for Sustainable Development	Ms Umaira Siddique, Pakistan Atomic Energy Commission, Pakistan
10:05-10:45	Dispatch Optimization of SMR-Driven Desalination with Reverse Osmosis Using Day-Ahead Electricity Prices	Mr Osman Kutlu, Turkish Energy, Nuclear and Mineral Research Agency, Türkiye
10:45-11:15	Coffee Break	
11:15-11:50	Modeling and Integration of Vacuum-Enhanced Air Gap Membrane Distillation for Nuclear Cogeneration of Electricity and Potable Water	Mr Kleber Marques Lisboa, Universidade Federal Fluminense, Brazil
11:50-12:30	Integrated Strategies for Water Security: From Sustainable Cogeneration to Contaminated Water Treatment	Ms Carolina Palma Naveira Cotta, UFRJ, Brazil
12:30-14:00	Lunch Break	
14:00-15:15	Technical Visit to the LabMEMS Desalination Plant	All
15:15-15:45	Coffee Break	
15:45-16:25	A 55 MWth PWR-Type Microreactor for Hydrogen–Electricity–Desalinated Water Polygeneration	Ms Maritza Rodriguez Gual, Amazul S.A., Brazil
16:25-17:00	IAEA Activities on Nuclear Desalination: The Details	Ms Molly-Kate Gavello, IAEA
17:00	Meeting Adjourned	

Day 4: Thursday, 27 November 2025

Time (CEST)	Topics	Speakers
09:00-09:30	Arrival of Participants	All
09:30-10:05	IAEA CRP: Low-Grade Thermal Energy from Micro Nuclear Reactors in Membrane Distillation for Electricity; Distilled Water and Hydrogen Cogeneration	Mr Renato Cotta, UFRJ, Brazil
10:05-10:45	Radionuclide Stewardship: Science and Sustainability for a Responsible Nuclear Future	Ms Inayá Corrêa Barbosa Lima, UFRJ, Brazil
10:45-11:15	Coffee Break	
11:15-11:45	Planning and Path Forward	All
11:45-12:15	Conclusions and Recommendations	All
12:15-12:30	Closing Remarks	All
12:30-14:00	Lunch Break	
14:00	Meeting Adjourned	