

FANR in a Changing Landscape

US NRC RIC 2024

14 March 2024

Christer Viktorsson – Director General

BNPP Update



Barakah Unit 1

Commercial Operation
April 2021

Barakah Unit 2

Commercial Operation
March 2022

Barakah Unit 3

Commercial Operations
Feb 2023

Barakah Unit 4

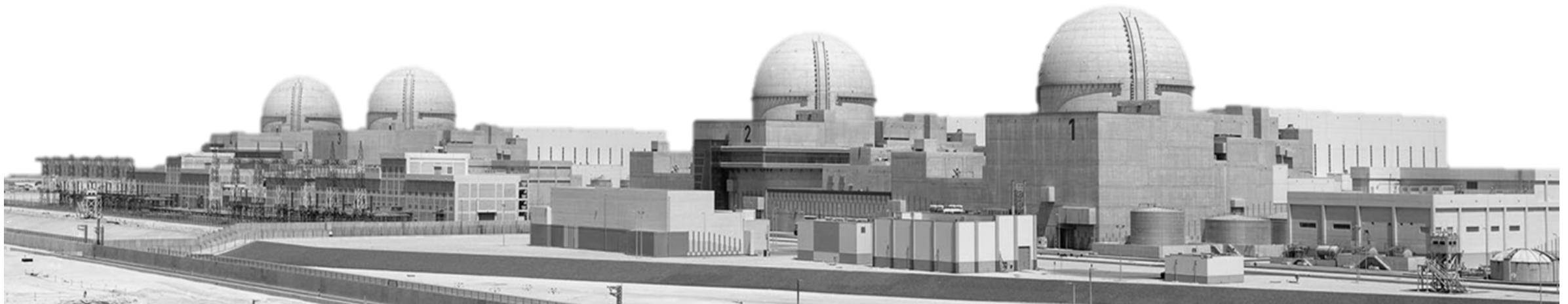
1st Criticality achieved on 1st
Mar 2024.
Continuing Power Ascension
Tests

3rd Refuelling Outage Planned
in Q2 2025

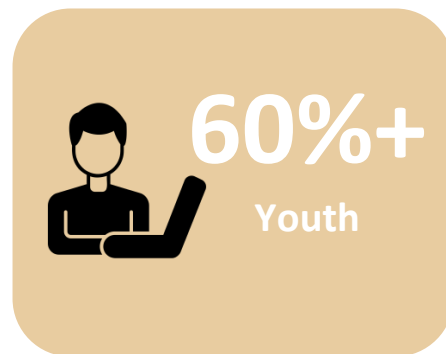
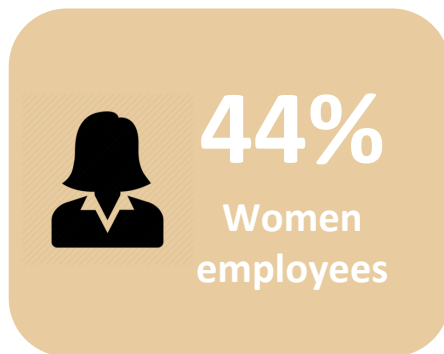
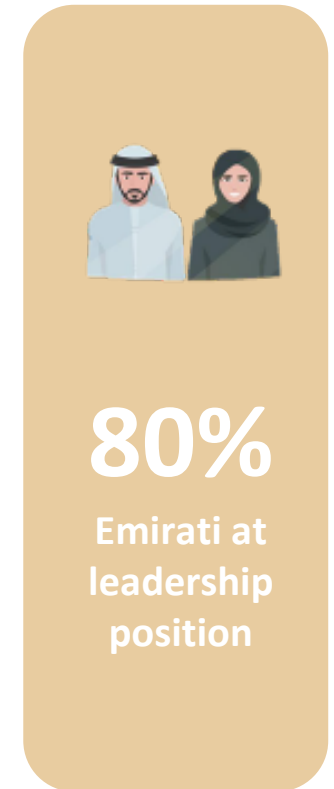
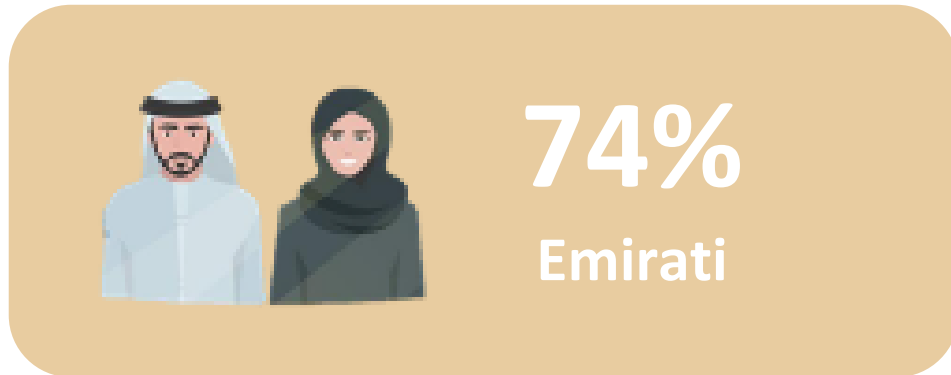
2nd Refuelling Outage Planned
in Q4 2024

1st Refuelling outage planned in
Q1 2024

Commercial Operations is expected
in 2024



FANR Workforce

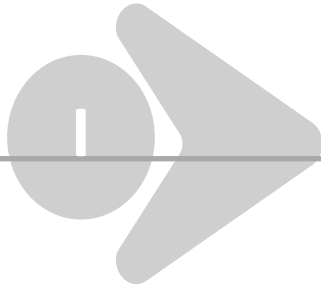


2024 Year of Safety Culture

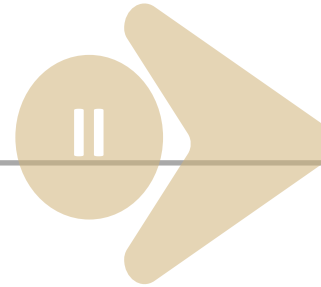


2024 Year of Safety Culture

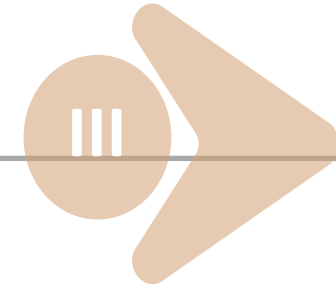
BARAKAH OVERSIGHT ACTIVITIES FOCUSING ON SAFETY CULTURE



In 2024, FANR Oversight Inspection Activities will incorporate Safety Culture as element in the scope of all planned inspections of Barakah NPP in 2024.



FANR's Program Inspection on Nawah's IMS included a stand-alone **Scope on Safety Culture**. Which also include interviews with Nawah Site Senior VPs and VPs to assess the maturity of the operator's safety culture.



Inspectors will conduct random verification activities at Barakah NPP site, in the area of safety culture including unannounced site walk-downs and discussions with plant personnel.

COP 28



- 22 countries, including UAE, launch Declaration to triple nuclear energy capacity by 2050



- FANR in coordination with IAEA hosted a session titled “Climate Change Challenges to the Safety of Nuclear Installations”
- FANR officially announced its transformational project Integrated Operational Nuclear Safety (IONS)

Call for Action

- The 6th IAEA International Conference on Effective Nuclear and Radiological Systems was hosted in **Abu Dhabi** from **13-16 Feb 2023**. More than **600** participants from **95** IAEA Member States and four international organizations have gathered to exchange best regulatory practices

01

Leadership:

invest in people skills and capabilities, develop next generation, be brave and intentional:

02

Organizational Readiness and Agility:

proactive development of frameworks, adaptive management, environmental scans (market, national policies, natural hazards) for course adjustment

03

Trust:

Demonstrate competence, openness, and impartiality

04

Collaboration and capacity building:

joint reviews (harmonization), region-focused capacity building, best practices:

FANR Growth

Phase 1: Look into FANR's readiness with respect to any future government plans for the expansion of the UAE Nuclear Power Plants (Large NPP).

Phase 2: Consider New Advanced Nuclear Reactor Technologies



1. Assess the applicability of FANR regulatory framework for review and assessment of different technologies
2. The need for revising or updating existing regulatory framework, processes, procedures, and identify any gaps in relation to the use of different technologies based on country of origin.
3. Provide a preliminary PSAR chapters categorization in association with different technologies.
4. Assess the need for early vendor inspections. especially for long lead items.
5. Evaluate if there is a need for organization structure and identify the resources needed.
6. Assess the training needs.
7. Evaluate the Legal Engagement.
8. Assess the current and future national and international cooperation

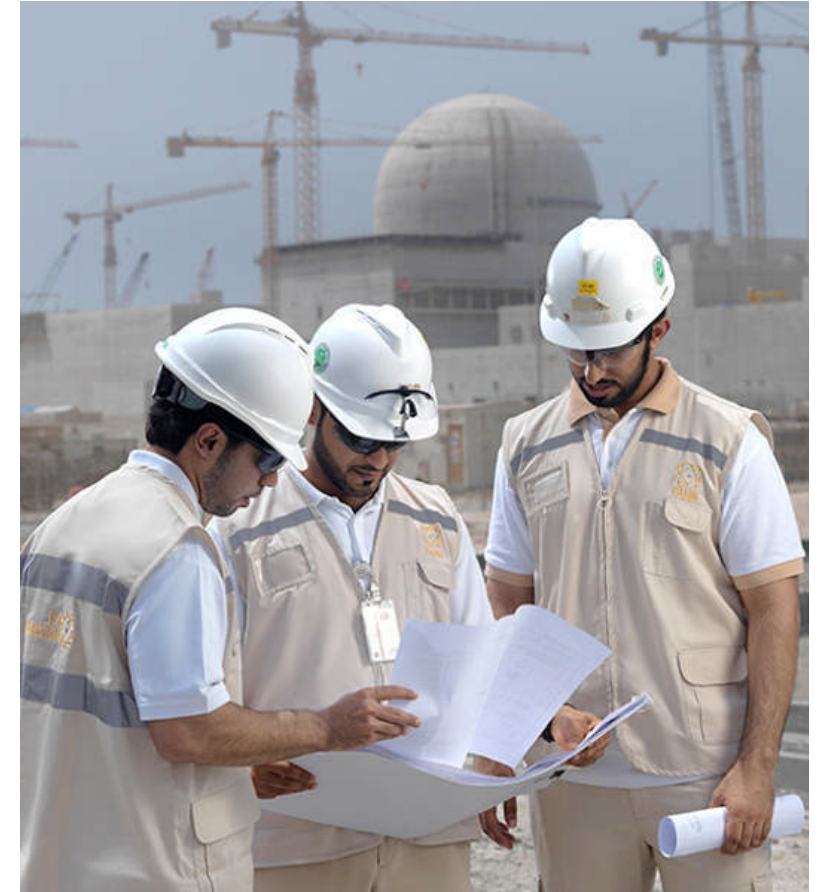
Regulatory Changing Landscape

FANR

الهيئة الاتحادية للرقابة النووية
Federal Authority for Nuclear Regulation



- I. Leveraging the resources of the country-of-origin regulatory bodies during the review of the construction license application.
- II. The big contrast between being a regulator regulating operating power plants and a regulator in the licensing phase.
- III. The actioning the recommendations from the Reg-Conf Held in Abu Dhabi Feb 2023.
- IV. The Adherence to the highest standards of safety, security and non-proliferation echoed under the declaration of tripling nuclear energy by 2050.
- V. The need for the international community to prepare for the tripling initiative in terms of capacity and skills.



THANK YOU