



# Monthly Newsletter



FANR Board of Management approved the issuance of a construction licence for Barakah Nuclear Power Plant Unit 1 and 2 at its meeting on 17 July 2012 in Abu Dhabi

## UAE Nuclear Regulator Approves Construction of Nation's First Nuclear Power Plant

The Federal Authority for Nuclear Regulation (FANR) of the United Arab Emirates has granted the Emirates Nuclear Energy Corporation (ENEC) a licence to construct two nuclear power reactor units at Barakah site in the Western Region of the Abu Dhabi Emirate.

FANR launched a press conference to announce its decision to issue the construction licence to ENEC on Wednesday, 18 July 2012, in Abu Dhabi.

During a press conference, Ambassador Hamad Alkaabi, the UAE's Permanent Representative to the International Atomic Energy Agency (IAEA) and member of FANR's Board of Management said that "the Licence for the Construction of Units One and Two of the Barakah Nuclear Facility and Related Regulated Activities was approved by the nuclear regulator's Board of Management at its meeting on Tuesday, 17 July".

The Licence authorises ENEC to construct two advanced pressurized Korean-designed water reactors (specifically APR1400), each capable of producing 1,400 megawatts of electricity. ENEC must still apply to FANR for a separate operating licence.

The approval is the result of a thorough review by FANR of ENEC's December 2010 application for a construction licence.

"Our comprehensive review of the construction licence application was carried out by more than 200 technical experts over a period of 18 months" said FANR's Director General Dr. William Travers.

In line with its commitment to operational transparency, FANR has also published at its website the [Safety Evaluation Report \(SER\) of Barakah Units 1 and 2](#), which outlines the basis for its decision to issue the construction licence.

Issue: July 2012

### Highlights of the month (July 2012):

- UAE Nuclear Regulator Approves Construction of Nation's First NPP
- UAE Nuclear Operator Starts Pouring Concrete for the First Two Reactors
- GCC Member States Foster Nuclear Security Cooperation in Abu Dhabi
- Experts Address Emergency Preparedness and Response
- Joint Work toward Establishing IMSs in Nuclear Embarking Countries

**Permanent Mission of the  
United Arab Emirates to the  
International Atomic Energy  
Agency, Vienna**

Chimanistrasse 36  
A-1190, Vienna, Austria  
Tel: (+43 1) 715 00 28  
Fax: (+43 1) 715 00 25



## UAE Nuclear Operator Starts Pouring Concrete for the First Two Reactors



*Construction work at the Barakah plant site*

The Emirates Nuclear Energy Corporation (ENEC) officially started the construction of the UAE's first nuclear energy plant on 18 July, pouring the first batch of nuclear safety concrete for the Barakah Unit 1, once the licence was granted.

This significant milestone for the UAE's peaceful civil nuclear energy program follows the receipt of the Construction License from the Federal Authority of Nuclear Regulation (FANR) on 17 July, and

a No Objection Certificate from Abu Dhabi's environmental regulator, the Environment Agency – Abu Dhabi (EAD) on 15 July 2012.

The safety concrete was poured at Barakah on Wednesday, an event which included the presence of ENEC's senior management and site team, as well as ENEC's Prime Contractor, the Korea Electric Power Corporation (KEPCO).

The next phase of construction will include the continued pouring of concrete for the reactor containment building, auxiliary building, turbine building and cooling water structures.

Construction of Barakah Unit 1 will take five years, with the plant expected to become operational in 2017, subject to further regulatory review.

ENEC will apply for an Operating License for Unit 1 in 2015 and will pour concrete for Unit 2 in 2013. ENEC is building a total of four Units at the Barakah site. The first unit will be operational in 2017, with one additional unit becoming operational each year up to 2020.

## GCC Member States Foster Nuclear Security Cooperation in Abu Dhabi



*Ambassador Hamad Alkaabi at the opening of the workshop*

More than 50 participants from the UAE and Member States of the Cooperation Council for the Arab States of the Gulf (GCC) met in the UAE to discuss ways to strengthen nuclear security and enhance partnerships regarding nuclear security between the International Atomic Energy Agency (IAEA) and GCC States.

The *Regional Awareness Workshop on Nuclear Security for the Member States of the Cooperation Council for the Arab States of the Gulf (GCC)*, jointly organized by the IAEA, was held in Abu Dhabi, from 17 to 19 July 2012.

The workshop aimed to increase awareness of the IAEA's Nuclear Security Program among decision makers of the GCC States.

Government officials from the Gulf region such as Kuwait, Qatar, Saudi Arabia, Bahrain, and United Arab Emirates have discussed available approaches to enhance partnerships and cooperation on nuclear security between the IAEA and GCC States. Participants also agreed upon future

regional nuclear security activities.



## About the Permanent Mission

The UAE has been a member of the IAEA since 1976. The Permanent Mission of the United Arab Emirates to the IAEA acts as the main liaison between the UAE government and the International Atomic Energy Agency (IAEA) in Vienna, Austria.

The office of the Permanent Mission was established in 2008. The objective of the Mission is to represent the interests of the UAE Government at the IAEA and to facilitate the UAE's engagement and cooperation with the IAEA in the areas of nuclear safety, nuclear security, non-proliferation and safeguards, technical cooperation and in the implementation of relevant international obligations

## Experts of National Nuclear Power Programs Address Emergency Preparedness and Response (EPR)

UAE Experts participated in a Workshop on Considerations in Emergency Preparedness and Response for Member States Embarking on a Nuclear Power Programme – (Phase 2), held at the IAEA Headquarters in Vienna from 16-20 July 2012.

The meeting introduced a new forthcoming publication in the IAEA's Emergency Preparedness and Response Series, entitled "*Considerations in Emergency Preparedness and Response for a State Embarking on a Nuclear Power Programme*", which provides guidance on the steps to be taken in order to meet international EPR requirements, including the requirements laid down in the relevant IAEA safety standards.

Along with countries currently engaged in preparatory work for the construction of their first NPP, the UAE receives IAEA expertise in developing adequate capabilities for responding to nuclear emergencies before the initiation of the commissioning process for the first NPP.

In addition, the IAEA provides training for maintaining such EPR capacities during the lifetime of the facilities.

## Joint Work toward Establishing Integrated Management Systems in Nuclear Embarking Countries

The UAE's national nuclear regulatory authority FANR has provided its expertise to review and further improve the IAEA's technical document for establishing and continually improving integrated management systems.

The consultancy meeting was conducted to review and revise the IAEA's document "*Transition to Process-Based Integrated Management Systems*", from 23-27 July 2012, at the IAEA's Headquarters in Vienna, Austria.

With a particular focus on countries embarking on nuclear energy, the meeting evaluated the draft of the document and suggested further improvements.

The integration management system approach is recommended by the IAEA to Member States as a part of the set of *IAEA Safety Standards for Management Systems* with the aim of assisting an embarking country to establish management systems for nuclear facilities and activities. In addition, this approach assists countries in comprising the various phases of a nuclear facility, including construction, commissioning, operation, and decommissioning.

According to the IAEA Safety Standards guidance, the basis for safe operation of a nuclear facility is technical competence supported by a well-implemented and established Management System, and a good organizational culture in which all cultural aspects, like safety, maintenance and security culture are also integrated.