

BBC Monitoring Middle East - Political  
Supplied by BBC Worldwide Monitoring

April 11, 2009 Saturday

Iranian nuclear official says the country now has 7,000 centrifuges

LENGTH: 2422 words

The head of Iran's Atomic Energy Organization, Gholam Reza Aqazadeh, has said: "The third stage of the uranium enrichment project is completed in the Natanz region and to date around 7,000 machines have been installed there. This number will increase to 50,000 by the end of the five year development plan." Aqazadeh was speaking at a ceremony in Esfahan on the occasion of the National Nuclear Day on 9 April 2009. The ceremony was broadcast live by Iranian news channel IRINN. The following is the text of a report, subheadings inserted editorially:

Opening remarks

In the name of God, the Compassionate, the Merciful. I am very happy and on the occasion of the third anniversary of the National Nuclear Day, I would like to offer my congratulation to the supreme leader [Ayatollah Seyyed Ali Khamene'i], the honourable president [Mahmud Ahmadinezhad], and all people who wish the progress and glory of our beloved Islamic country.

At the beginning of this glorious ceremony, on behalf of the servants [staff] of the sacred Islamic Republic system in Iran Atomic Energy Organization, I would like to welcome all honourable guests. I would like to thank you all for attending the ceremony, which is held to mark this glorious day.

Undoubtedly, this glorious day is among those days, which will be remembered by the glorious Iranian nation forever. Even if there is no need for my faulty explanations, I take the opportunity in the presence of the Almighty God and the proud nation of Iran to express my sincere gratitude to the esteemed leader of the revolution; since it was due to his wise plans that the Islamic Iran is able today to make use of the achievements of this huge technology.

Undoubtedly, the fact that the Iranian nation has gained the nuclear knowledge and technology is due to the especial attentions of his Excellency.

Also I am grateful for the unsparing supports of former governments to help the fulfilment of this great national wish. However I should offer my especial thanks to Mr

Ahmadinezhad, the honourable president who by showing strength and resistance helped us to go through this trying stage.

Moreover, I should thank the honest people of Iran, the grand clerics, the supreme sources of emulation, the academicians, the elite, the eminent personalities as well as the parties and political groups, the national medium [state TV] and those who serve the media. They created another epical moment with their supports and made a display of national consensus and unity to the world in order to fulfil the dream of a nation. After the completion of the final stage of the nuclear fuel cycle, which will be inaugurated today, all staff and experts of the organization will pray before God to express their gratitude to Him. It is because due to the divine compassion, they have been able to complete this mission in the field of nuclear industry. All of these were achieved at a time when some [countries] had imposed sanctions and limitations in order to create a barrier of ferocity and grudge against the strong waves of our national will. However, the courageous children of Iran, through endeavour and thought, have astonished everyone.

As God is my witness, I have always been committed to fulfil my national and Islamic duties. Since I - a negligible soldier of the Revolution and based on a decision made by the system - have been assigned to fulfil the long-term goals of the Islamic Republic in achieving the peaceful nuclear technology, I have done my best to materialize this national demand. [Reading a verse from the Holy Koran meaning: Allah does not impose upon any soul a duty but to the extent of its ability]. However, our goal is to promote the dignity and authority of the Islamic Iran. Now, as everyone admits, we have been able to promote the status of Iran and Iranians in international level and we have enhanced the self-confidence spirits and national identity.

#### Latest nuclear achievements

I would like to read for you, the honourable audience and Iranian nation, a summary of the latest situation of the national nuclear programme, as a record of the big family of the Atomic Energy Organization.

The first step for completing the nuclear fuel cycle is to prospect and extract uranium ore. Good planning was made in this regard and the first process of yellow cake production began in Bandar Abbas [southern Iran]. Thanks God, based on the next Five Year Plan, the production [of yellow cake] will begin in Saghand in Yazd [central Iran]. Now a huge increase in prospecting operations is on our agenda. The second process is to change the yellow cake to various products. This project is being done through the activities of Esfahan Uranium Conversion Facility (UCF). The aforementioned facility continues its activity with a capacity for 80t of UF<sub>6</sub>, 11t of uranium oxide and 10t of metal uranium. At the end of the five year development plan, God willing, this capacity will increase to 1,000 tons.

The third stage of the project is uranium enrichment. This huge and complex project has been completed in the Natanz region and to date around 7,000 machines have been installed there. This number will increase to 50,000 by the end of the five year development plan.

Here I would like to give you this very important news that researchers of the Iranian Atomic Energy Organization have reached a new phase of uranium enrichment technology know-how. This shows Iran's unique progress in line with the most up-to-date technology in the world. I am glad to announce that today we have been able to build machines with the SW of between five and six. Details of these machines will be announced later.

Based on the next five year development plan, the fuel for generating 2500 MW electricity will be provided from the production of the Natanz uranium enrichment facility.

The fourth stage is activities related to the centre for new alloy production and Iran's facility for atomic reactor fuel.

At this stage, which we witness its completion today, packages of fuel for Iran's nuclear plants will be prepared. Along this line, the ADAPCO complex was designed and built with the aim of meeting the demands of the Bushehr reactor for Zirconium parts which will be packaged under the manufacturing name of the New Alloy Production Company (ZPP)

What makes Zirconium unrivalled for this purpose is a set of strategic nuclear qualities, which gives it an edge over its rivals such as aluminium alloy and rust resistant steel.

The creative forces of the organization have prepared the ground for reaping the benefits of the facilities' processing units in Shahrivar 1387 [month beginning 22 August 2008] and the first fuel consignment for RR40 reactor in Arak was delivered to Iran's atomic reactor fuel company FMP.

It should be noted that despite the fact that the plant is designed to produce parts such as rods, sheets and pipes out of alloy or the Zircaloy family, with a few alterations to the equipment, this facility is capable of producing parts out of Zirconium, Niobium, Titanium alloy and aluminium alloy.

In addition to producing its main product, this facility is capable of producing by-products such as magnesium chloride with 99.9 per cent purity in a special form, Zirconium oxide of trade and nuclear grades and also Hafnium Oxide.

## Fuel manufacturing plant

In order to achieve such abilities, we had to pass dire ways. At the moment, the technical know-how of Zirconium production needed for the nuclear fuel complex is considered as another brilliant achievement of this great industry.

In regard with Fuel Manufacturing Plant (FMP), I should say that it was the last and the most sensitive link of the nuclear fuel production. In addition to the activities of the UCF and ZPP, the production of various fuels needed by research reactors and nuclear power plants, was put on our agenda in this plant [FMP]. Based on the plans that were drawn up, the FMP is able to annually produce 10 tonnes of natural fuel to be used by the Arak 40MW research reactor, and 30 tonnes of enriched fuel with 5 per cent enrichment to be used in pressurized nuclear light water reactors such as 360MW Darkhoveyn power plant or other power plants. Moreover, the manufacturing plant [FMP] is capable to increase its capacity to produce the fuel needed for production of 2360MW electricity specified in the Fifth Year Development Plan. As for our plan to develop nuclear power plants, I should add that Iran's Atomic Energy Organization pursues the issue as one of its main duties. The Islamic Republic of Iran, as a leading developing country considers nuclear plants' development as an essential part of its long-term energy security plan for different reasons. Those reasons include the energy need for development projects, achievement of high technologies, environment issues, the need to diversify Iran's energy sources to provide energy security, and [the nuclear] technical and economic features.

The Peaceful Nuclear Energy Law, approved by the Majlis in Khordad 1384 [June 2005], also reiterates that the government of the Islamic Republic of Iran is bound to provide peaceful nuclear energy. The law also includes provisions for fuel supply for the generation of 20,000MW of nuclear-based electricity.

We estimate that in addition to the inauguration of Phase 1 of Bushehr power plant and the construction of 360MW Darkhoveyn domestic plant during the Fifth Development Plan [2005-2010], the construction of 5,000MW of nuclear power plants will be on the agenda of the government. As this trend will also continue in the sixth and seventh five-year development plans, by 1404 [2025], Iranian nuclear power plants will be able to provide around 10 per cent of the country's electricity need, using maximum local capabilities in the country.

It should be added that in line with [the objective of] acquiring the technology to build nuclear power plants, the government has signed cooperation pacts with universities of the countries for human resource training and improving its education level. In terms of providing the equipment needed by nuclear plants we have adopted an approach to make maximum use of local capabilities and have drawn up a plan to identify and support local capabilities and producers.

As for providing the human resources needed for the country's nuclear programme, it should be said that the Nuclear Science Research Centre has been tasked to cooperate and interact with universities of the country in order to train expert human resources at high levels and also train researchers, engineers and technicians.

With its faculty members and leading nuclear experts, this research centre conducts various research and practical projects in its different sub-centres. As a result of the efforts by this centre, certain exclusive devices have been built and certain radioactive drugs for diagnosis and curing [diseases] were produced at Tehran research reactor and 120 other laboratories affiliated to the Nuclear Medicine Centre and other hospitals.

In addition to addressing the needs [for drugs], these centres have reached self-sufficiency in terms of diagnosis and curing cancer cases or easing the pain of the patients.

#### Future nuclear plans

It is necessary to say that the Iranian Atomic Energy Organization in line with the 20-year vision of the country and the policies instructed by the supreme leader will implement certain plans during the five-year development programme with the aim of maintaining and institutionalizing the nuclear achievement of the country, achieving advanced nuclear technologies and strengthening the required infrastructures by the use of domestic knowledge in various energy, agriculture, medicine, industry and service sectors. The following is a list of the titles of the most important plans:

1. Developing nuclear power plants and indigenizing their relevant technologies; carrying out activities in relation to setting up 5,000 MW nuclear power plants with the cooperation of foreign partners; starting to develop 360 MW power plant with the use of domestic technology; detailed study and assuming the ownership of lands and preparing the grounds for the setting up of 20,000 MW nuclear power plants.
2. Developing nuclear fuel cycle installations with the aim to produce raw material and the required fuel for 2,360 MW nuclear power plants, and research reactors with the approach to enhance the level of domestic technical know-how and improving the existing technologies and achieving new technologies in the field of nuclear fuel cycle.
3. Developing science and technology, as well as providing research support for the power plant development programmes, nuclear fusion, material needed for nuclear fuel cycle and developing nuclear use in the field of agriculture, medicine and industry by producing items such as required radio-medicines, radio-isotopes, transfer and development of radiation technologies in order to sterilize medical and agricultural

products, as well as the transfer of the technology for the design, manufacture and application of accelerators and lasers in the nuclear industry.

4. Inaugurating the 40 MW Arak research reactor for educational and research objectives and for producing radio-isotopes and developing relevant science and technology.

5. Ensuring the security of nuclear facilities and radiation activities throughout the country by preparing and updating security rules and regulations and supervising facilities at all stages of construction, commissioning and operation of nuclear sites, as well as control and supervision of centres that deal with radiation.

6. Providing security and protection for nuclear facilities and sites according to rules, national obligations and the principles set by the IAEA and based on the country's need.

7. Increasing productivity and developing appropriate and required infrastructures for nuclear programmes, such as organizational, financial and legal ones, as well as information and communication technologies.

8. Education and improving specialized technical and managerial capabilities of the existing manpower and that needed for the development of nuclear programmes in the country.

At the conclusion, I cannot forgo the point that the Iranian nation in order to achieve its historical wishes and desires looks at distant horizons. We are indeed at the beginning of the road. In order to achieve the position that the Iranian nation deserves, we need the

Source: Islamic Republic of Iran News Network, Tehran, in Persian 1410 gmt 10 Apr 09