## A Speech by the Director General Nigeria Atomic Energy Commission Dr. F. Erepamo Osaisai, at an interactive session with newsmen on Thursday July 26, 2007

Good morning gentlemen of the press. It is a great opportunity to have you all in audience. It is an occasion we should have held before now but we needed to put certain things in order before we could meet the fourth estate of the realm, as you people are generally called. Besides, the challenges of our mandate had delayed this occasion till now. It is, therefore, very important that we make the best use of the opportunity this meeting would afford us. Let me also use this occasion to thank you for the level of coverage we have enjoyed through your reports and write ups in both electronic and print media, especially within the last few months.

We have decided to call this meeting because of the sensitive nature of our mandate as the focal agency for the development and deployment of nuclear technology for national development and very important role the press have to play in our bid to achieve our objectives.

Gentlemen of the press, you are all aware of the stand-off nuclear technology is generating in some parts of the world. Nigeria does not intend and cannot afford be involved in any of such controversy. We are also conscious of the fact that reckless handling of information could produce unintended results and hamper the overall objective for which our Commission was established. We are confident of your patriotism and capabilities, and would always count on your support as professionals to handle information relating to us in a way that it would not hamper our collective goals and aspiration as a people.

Let me state in unambiguous term that our mandate is for Nigeria to use nuclear technology for purely peaceful purposes for the socio-economic development of her people.

Furthermore, it is imperative that I intimate you with the objectives of the Nigeria Atomic Energy Commission as envisage by the enabling act. The Nigeria Atomic Energy Commission (NAEC) was established through the enactment of Decree 46 (now Act 46) in August 1976 as a specialised focal agency with the mandate to develop and deploy atomic energy for our socio-economic development.

As an affirmation of our commitment to peaceful uses, the activities of the Commission are conducted in a transparent manner, such that the Commission presently enjoys cooperation and collaborative relationships with the International Atomic Energy Agency (IAEA). We also have robust relationships with other multilateral agencies like the Comprehensive Test Ban Treaty Organisation (CTBO), and the Nuclear Energy Agency (NEA).

Due to its non-activation for 30 years by successive administration, after the enactment of the enabling law, there is no doubt that the lofty ideal for which our agency was conceived had suffered a serious set back. Nevertheless, the Federal Government realized the strategic position of the agency, and in July 2006, inaugurated its 10-man Board headed by the President himself.

In order to implement the mandate of the Commission to prosecute a sustainable national nuclear technology programme, a management framework has been developed which would adequately position NAEC to actualize its core mandate, defined by the operational goal and objectives of the Commission which are set as follows:

The Primary goal of the Commission is to develop the framework and technical pathway to explore, exploit and harness atomic energy for peaceful applications in all its ramifications for the socio-economic development of Nigeria in conformity with current economic policies of the Federal Government.

In order to achieve this primary goal, the enhanced policy objectives of the Commission are as follows:

- A. To streamline, harmonise, promote and coordinate R&D activities for capacity building and infrastructure development in nuclear technology.
- B. To fast track and catalyse the process of development and deployment of nuclear power plants for electricity generation in Nigeria, in partnership with the private sector.
- C. To develop a comprehensive manpower programme which include:
  - 1. Developing and introducing core training programmes in nuclear science and engineering in selected institutions of higher learning in Nigeria and to generate the critical mass of the needed manpower for the nuclear industry and to
  - 2. Developing, networking and creating opportunities for fellowships and advanced training in nuclear science and technology in international organisations and advanced facilities in other countries with similar objective and to use nuclear technology for peaceful applications only.
- D. To develop the requisite legal framework for the use of nuclear power plants in Nigeria within a strict regulatory regime as specified by the Nigerian Nuclear Regulatory Authority (NNRA), in compliance with the three cardinal planks of safety, security and safeguards of the IAEA and the nuclear Non-Profliferation Treaty (NPT).
- E. To liaise with the International Atomic Energy Agency (IAEA), the Nuclear Energy Agency (NEA), the Comprehensive Test Ban Treaty Organisation (CTBO) and other international organisations for the implementation of the national programme.

F. To streamline, harmonise, promote, and coordinate the diverse applications of nuclear science and technology in agriculture, water resources management, human health, minerals exploration and manufacturing among others, for the socio-economic development of Nigeria.

Gentlemen, you will agree that to start any agency is not an easy task, however, within the last one year of its existence, the Commission has made some progress by creating a solid platform to achieve the national objectives. The Federal Government had in February, last year, endorsed the roadmap developed by the Commission, which consist of a three-phase technical framework for the deployment of nuclear energy for electricity generation in Nigeria. The framework is designed such that, if meticulously implemented, would lead to the generation of at least 1,000Megawatts of electricity by 2017 and to increase the capacity to 4,000MWe by 2027.

The history of nuclear technology development in Nigeria is a chequered one, with the enactment of the law establishing NAEC in 1976. subsequently in 1978, two university based nuclear energy research and trainings centres were established at the Obafemi Awolowo University, then University of Ife, Ile-Ife and Ahmadu Bello University, Zaria. These centres have the mandates to conduct researches, develop and train manpower in nuclear technology, engineering and sciences. The Nuclear Technology Centre at Sheda, Abuja was established as the third training and research centre in nuclear technology in 1998.

With the current streamlining of the nuclear technology sector by the Federal Government to achieve the national objectives, all of the above three centres have been placed under the supervision and coordination of the Nigeria Atomic Energy Commission. That realignment was meant to achieve effective collaboration and synergy in the country's quest for nuclear technology development. We have within this short period of time moved to our corporate office, albeit a rented office, from the Federal Secretariat where we had earlier shared offices with another sister agencies.

Gentlemen of the press, I have called this meeting to inform you of the importance of this agency and to enlist your support. You will appreciate that a cog in the spoke of progress of our country has been inadequate power supply. Our manufacturing sector had operated at below capacity utilization and sectors had been somewhat stagnated on account of the shortage in power supply.

It is common knowledge that the total installed grid capacity by the Power Holding Company of Nigeria is merely 6,000MWe, out of which less than 4,000MWe is available. With our size and population, it is trite to say that the available capacity is grossly inadequate not only for today but also for the future energy demand. At per capita electricity generation of about 30watts, 30 times less than the 1kilowatt in South Africa, something drastic has to be done to remedy the situation and that is where our Commission becomes relevant.

It might also interest you, gentlemen of the press that electricity demand in Nigeria would be between 28,360MWe and 31,240MWe within the next 10 years. Unfortunately, however, additional capacity that could be added from hydro energy sources within that period would be between 3,000MWe and 5,000MWe. Other conventional sources would be able to add between 7,000MWe and 9,000MWe. This scenario would leave the country with a shortfall of between 11,000MWe and 17,000MWe. Already, we are in an energy crisis situation. With the above scenario, it only means that the situation would get worse with time!

However, the nuclear technology offers a good window of opportunity for the country. At present, there is a global nuclear renaissance for electricity generation. Currently, nuclear power plants generate about 16 per cent of the global electricity supply or 368Gegawatts. There are some 31 countries generating nuclear electricity, and most of these countries are either expanding their installed nuclear capacity or introducing new plants. These developments are pointer to the fact that Nigeria could also seize this golden opportunity to utilize nuclear technology to solve its electricity supply problems.

It is also cheery to know that some of the fears often expressed about nuclear technology are being taken care by improvement in plant designs and introduction of new technologies.

In line with our roadmap towards application of nuclear technology, a committee was set up in May this year to look at the possible sites for nuclear power plant in the country. That committee is making considerable progress in the discharge of its responsibilities. We are hoping that by middle of next year the survey for the selected sites would be concluded. It is also expected that the design certification and requisite regulatory approvals would be concluded in 2009, while actual construction would start by 2011. Power generation from the plant is expected to begin by 2017.

Gentlemen of the press, a sustained long term funding is required to uplift the research facilities and nuclear infrastructures and capacity building during this gestation period of about 10 years. This might appear daunting, but it is gladdening enough that the Federal Government, through President Umaru Yar'adua, on Monday renewed her interest and commitment to use nuclear technology as one of the sources of electricity generation in the country in the long term.

Ladies and gentlemen, may I also reiterate here that the mandate of our Commission is not limited to power generation but include application of nuclear technology in almost every facet of our life, human health, agriculture, water resources management and manpower development. Applications of nuclear technology, using the sterile insect technique (SIT) could assist in providing solutions for the menace of sleeping sickness caused by tsetse fly and possibly for the management of malaria-spreading mosquitoes in our country, and could expand the economy and generate employment opportunities for our teeming youths.

Gentlemen of the press, may I welcome you on board in this noble journey towards making life more meaningful for Nigerians through application of nuclear technology.

Thank you and may God bless us all.

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