IN THE SECOND MEETING OF THE THIRD SESSION OF THE SIXTH PARLIAMENT OF THE FOURTH REPUBLIC OF GHANA



REPORT OF THE SELECT COMMITTEE ON ENVIRONMENT, SCIENCE AND TECHNOLOGY

ONTHE

NUCLEAR REGULATORY AUTHORITY BILL, 2015

27TH MAY, 2015

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INTRODUCTION 1.0

The Nuclear Regulatory Authority Bill was first introduced in Parliament on Tuesday, 17th June 2014. In view of some challenges with the text of Bill, it was withdrawn on Friday, 20th March, 2015 by the Hon. Deputy Minister for Environment, Science, Technology and Innovations, Mrs. Bernice Heloo.

The Bill was re-introduced to Parliament and read for the first time on Thursday, 14th May, 2015. Rt. Hon. Speaker subsequently referred the Bill to the Committee on Environment, Science and Technology for consideration and report in accordance with article 75 of the Constitution and Order 185 of the Standing Orders of Parliament.

DELIBERATION 2.0

The Committee met on Thursday, 21st May 2015 to consider the Bill. The Hon. Minister for Environment, Science, Technology and Innovations, (MESTI) Mr. Mahama Ayariga and the technical persons from Ghana Atomic Energy Commission (GAEC) were in attendance at the invitation of the Committee to assist in the deliberations on the Bill. The Committee is grateful to them for their attendance and input.

3.0 REFERENCE DOCUMENTS

The Committee had recourse to the under-listed documents during the deliberations:

- a. The 1992 Constitution,
- b. The Standing Orders of Parliament,
- c. The Atomic Energy Commission Act, 2000 (Act 588)
- d. The Nuclear Regulatory Authority Bill, 2015

4.0 BACKGROUND INFORMATION

The Ghana Atomic Energy Commission (GAEC) was established by an Act of Parliament, Act 204 of 1963, as the sole Agency in Ghana responsible for all matters relating to peaceful uses of atomic energy. Act 204 was amended in 1993 by PNDC Law 308 to establish other institutes under the Commission which includes the Radiation Protection Institute (RPI). Act 204 has been subsequently superseded by Act 588 of 2000 to make provision for GAEC to undertake commercialisation of its research and development results.

The Radiation Protection Board (RPB) was established in 1993 under PNDC Law 308 as the regulatory authority and to serve as the Managing Board of RPI. RPB was also established to among other things regulate the development, use and control of radioactive sources, licensing, and inspection, supervision and enforcement of radiation protection and safety practices in compliance with the constitution and other international legal instruments. RPB is mandated to authorise facilities and activities that could give rise to radiation exposure as well as to inspect for authorization and regulation to verify compliance with the terms and conditions of authorisations granted.

GAEC was also established to maintain relations with the International Atomic Energy Agency and other similar international and national organisations, and to

collaborate and liaise with those organisations on matters of research and development of nuclear energy and nuclear technology among others. Presently, GAEC, the promoter of a safe and secured use of nuclear and radioactive materials in medicine, industry, research and teaching is not in compliance with international standards and best practices. However, the International Basis Safety Standards (BSS) under Safety Requirement 2 prescribes the role of governments

to establish and maintain a legal and regulatory framework for protection and safety and to also establish an effective independent regulatory body with specific functions and responsibilities.

The current global challenges and its future uncertainties coupled with the ever growing world population, scarce energy production and disease transmission resulting from uncontrolled pollution have placed governments the world over under intense pressure to develop measures, both internally and externally, to control and protect the environment, ensure food and human security and to promote economic development.

Increasing global demands for peaceful uses of radioactive materials and radioactive substances in the health and agricultural sectors among others has necessitated the establishment of Nuclear Regulatory Authority in the country. It has become imperative to establish an independent regulator for the effective and efficient protection of persons, property and environment from the harmful effects of ionizing radiation and the safety and security of radioactive materials and nuclear installations. This Bill is also to ensure that Ghana is in full compliance of her international obligations.



OBJECT OF THE BILL 5.0

The Bill seeks to establish a Nuclear Regulatory Authority; to provide for the regulation and management of activities and practices for the peaceful use of nuclear material or energy, radioactive material or radiation; to provide for the protection of persons and the environment against the harmful effects of radiation to ensure the effective implementation of the country's international obligations and for related matters.

PROVISIONS OF THE BILL 6.0

Clause 1

The scope of application of provisions of the Bill is spelt out under clause 1. The Bill will apply to the management of radioactive waste resulting from civilian applications in the country among others.

Clause 2

Clause 2 binds the Republic to the provisions of the Bill when it is passed into law.

Clauses 3 & 4

These clauses establish the Nuclear Regulatory Authority. It also stipulates the objects of the Authority which is to ensure that radiation and nuclear energy are used by authorised persons only.

Clause 5

Clause 5 provides for the functions of the Authority. The Authority is mandated to develop national policies on the regulation and management of activities and practices with respect to nuclear safety, security of nuclear and radioactive materials, radiation and the implementation of safeguards. 4

Clauses 6 & 7

Clauses 6 and 7 stipulate the powers of the Authority and establish the governing body of the Authority.

Clauses 8-14

Clauses 8 to 14 provide for the tenure of office of members of the Board, functions of the Board, meetings of the Board, disclosure of interest by members of the Board, establishment of committees of the Board, allowances for members of the Board and ministerial directives.

Clause 15 - 19

Under these clauses, a Director-General for the Authority is appointed in accordance with article 195 of the Constitution. The Director-General shall be appointed in accordance with the terms and conditions stipulated in the appointment letter and shall be removed from office for incapacity, malfeasance or incompetence. These clauses also make provision for the appointment of a Deputy Director-General, and other members of staff of the Authority.

Clause 20

Clause 20 authorises the Board to establish directorates for the operation of the Authority.

Clause 21

Under this clause, any activity which contains the use of nuclear material, radioactive material or radiation without express authorisation from the Authority is prohibited.

Clause 22

Clause 22 permits the Director-General or any other person so authorised to have access to relevant books or facilities requested by the Authority to provide some relevant information.

Clause 23 & 24

Clause 23 spells out the obligations of an authorised person whilst clause 24 places an obligation on the Authority to adopt requirements for the protection of persons from the potential harmful effects from exposure to radiation.

Clause 25

This clause criminalises the act of applying a medical diagnosis or therapy that exploits nuclear material, radioactive material on another person, except where that person is authorised to do so.

Clause 26

Clause 26 deals with the protection of a patient by allowing an authorised person to administer a diagnostic or therapeutic exposure of radiation to that patient only on the prescription of a medical officer assigned to that patient.

<u>Clause 27 – 29</u>

These clauses impose an obligation on the Authority to establish and sustain a national register of radiation sources taking cognisance of the potential to cause injury to all and sundry. It further imposes an obligation on the Authority to establish a national register of all exports, imports, trans-shipments and transport of radioactive sources.

Clause 30

This clause mandates an authorised person who is no longer in control of a radioactive source, known as an orphan source to report the incident to the appropriate agency to protect the safety and security of persons and the environment.

Clause 31 - 33

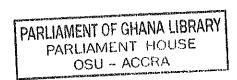
These clauses require an applicant to exhibit appropriate measures before authorisation is granted. The Authority is also mandated to develop and maintain a national emergency plan to respond to nuclear and radiological emergencies. It further places an obligation on the Authority to inform the International Atomic Energy Agency (IAEA) of any nuclear or radioactive emergency that may pose a risk of radioactive contamination in Ghana and beyond.

<u>Clause 34 - 42</u>

These clauses regulate nuclear installations. A person is proscribed from constructing or operating a nuclear installation except where that person is authorised by the Authority to do so. The provisions also require the Authority to establish a process consistent with procedures contained in the nuclear development plan for the evaluation of proposed sites for nuclear installations in Ghana.

<u>Clauses 43 - 50</u>

Under these Clauses radioactive waste management is regulated. The provisions prohibit a person or entity from operating a radioactive waste management facility, unless the person or entity is authorised by the Authority to do so. It further prohibits the importation of radioactive waste generated in another country into this country for any purpose and allows for the exportation of waste



generated within the country for storage or disposal not beyond latitude 60 degrees south.

Clause 51

This clause provides for the transportation of radioactive material. A person who plans to transport radioactive waste is required to obtain authorisation from the Authority. It further provides that pending the passage of Regulations pursuant to clause 91(2) (k), the International Atomic Energy Agency law will apply to the safe transport of radioactive materials.

Clause <u>52 - 55</u>

Clause 52 - 55 addresses the issue of decommissioning. It mandates the Authority to publish in the Gazette the procedures for the decommissioning of a nuclear facility which is to include steps to be taken to resolve any safety and environmental issues and the conditions of the end state of decommissioning. It also details the obligations of an authorised person during decommissioning which includes the submission of a decommissioning plan to the Authority.

Clause 56

The use of nuclear material for non-peaceful use is banned under this clause. A person is only required to utilise nuclear material solely for peaceful activities in accordance with both national and international treaties and legal instruments.

<u>Clauses 57 - 59</u>

These clauses regulate the extraction, mining and processing of radioactive material. A person is prohibited from conducting an extraction, mining or processing operation that involves any material likely to endanger health and safety risk from the exposure to ionizing radiation. An authorised person is

mandated to be responsible to guarantee the safety and security of any mining and processing activity conducted in accordance with the relevant authorisation.

<u>Clauses 60 – 70</u>

These clauses prescribe the liability for nuclear damage. It provides that an operator of a nuclear installation is liable for nuclear damage incident, if it is proved that the damage arose out of a nuclear incident at the nuclear installation of that operator or involves a nuclear material coming from or originating from the installation of that operator. It further provides that an operator of a nuclear installation shall maintain an insurance policy to cover the liability of the operator in the event of a nuclear damage proven to have been caused by the nuclear installation of the operator.

Clauses 71 - 75

Under these clauses, an inspector and analyst is appointed by the Authority to validate and scrutinise practices and nuclear installations authorised or proposed to be authorised. The provisions also spell out the powers of the inspectors and analysts.

Clauses 76 - 85

Clauses 76 – 85 provides for offences, penalties and appeals. The clauses state that a person who uses or makes a threat to use any radioactive material or device and any nuclear material or device unlawfully or forces any individual, organisation, or state to do or refrain from doing any act commits an offence. A person is also prohibited from damaging a nuclear facility by interfering with the operation of that facility with the knowledge that the damage is likely to cause death or bodily injury or damage to property and the environment. It further provides for the complaint procedure by an aggrieved person.

Clauses 86 - 90

Under these clauses, the funds of the Authority are spelt out and it includes moneys approved by Parliament, loans, loan guarantees and grants. It further authorises the Authority to retain moneys realised in the performance of its functions in accordance with the relevant legislation.

Clause 91

This Clause empowers the Minister, on the advice of the Board, and by a Legislative Instrument, to make Regulations for the effective and efficient implementation of this Act.

Clause 92

This clause permits the Authority to among others; develop guidelines, standards and procedures on notification, authorisation and exemptions of practices and inspection and reporting procedures.

Clause 93

Interpretation clause.

Clause 94

Revocations and Savings.

Clause 95

Transitional provisions.

Clause 96

Consequential Amendments.

7.0 OBSERVATIONS

The Committee observed that the passage of the Bill has become necessary for the safe and secured uses of nuclear and radioactive materials in all sectors of the Ghanaian economy such as medicine, agriculture, oil and gas industry and power management.

The Committee further observed that Ghana is a signatory to the International Basis Safety Standards (BSS) and currently, the status quo which makes Ghana Atomic Energy Commission a promoter of safe and secured use of radioactive materials in medicine, industry research and teaching does not meet the requisite international standards. It has therefore become imperative that Ghana demonstrates her commitment to fulfill all its international legal obligations by enacting the Nuclear Regulatory Authority Law.

The Committee also took note of the fact that the law would establish an effectively independent regulatory body which would ensure protection of humans and the environment from radiation hazards and the safety and security of nuclear and radioactive materials in the country. It would further establish a nuclear regulatory control system for authorisation, inspection and enforcement of radioactive materials as well as the regulation and management of activities and practices for the peaceful use of nuclear material or energy among others.

The Committee observed that in view of the challenges the country is facing with both hydro and thermal energy; there is the possibility that Ghana would consider nuclear power as an option for the production of energy. This law would therefore provide the basic regulatory framework for other pieces of legislation that would emanate when Ghana resolves to explore the option of nuclear energy.

The Committee further observed that, funding of the Authority would include moneys approved by Parliament, fees and charges due to the Authority from services rendered by or through the Authority and other moneys that the Minister responsible for finance may approve. The Authority is also mandated to retain moneys realised in the performance of its functions subject to the Ministries, Departments and Agencies (Retention of Funds) Act, 2007 (Act 735).

8.0 RECOMMENDATIONS AND CONCLUSION

The Committee has carefully examined the provisions of the Bill in the light of its object and purpose and is of the view that they are consistent with the Constitution and other relevant statutes and accordingly recommends its passage by the House.

Respectfully submitted.

HON. SIMON EDEM ASIMAH CHAIRMAN, COMMITTEE ON ENVIRONMENT, SCIENCE

AND TECHNOLOGY

JOANA A. S. ADJEI (MRS) CLERK TO THE COMMITTEE

27TH MAY 2015