

ASSESSING THE ROLE OF UAE LEGISLATION IN COVERING NUCLEAR DAMAGES A COMPARATIVE STUDY

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Abstract

The use of nuclear energy for peaceful purposes results in serious harm to human beings in their right to life, the safety of their body and the environment in which they live, so the international community has sought to conclude agreements governing those peaceful uses and establishing rules to compensate for their damages, and the United Arab Emirates has recognized the importance of the use of nuclear energy in electricity generation as one of the pillars of sustainable development, and has recognized the importance of passing legislation establishing the rules for compensation for damages for such uses, however. These rules did not guarantee that the injured would receive full compensation in all cases.

Keywords: nuclear law, nuclear energy, nuclear accident, nuclear damage, environmental protection.

I. INTRODUCTION

States' awareness of the right of humanity to live in a healthy environment away from the damage of peaceful nuclear activities has led to its approach to international treaties and conventions, the enactment of national legislation to regulate the peaceful use of nuclear energy, and the specificity of nuclear damage that has produced a special legal system aimed at regulating the civil liability resulting from such damages.

The peaceful uses of nuclear energy have emerged as the uae's ideal choice and as a prerequisite for sustainable overall development, with the launch of the UAE Civil Nuclear Energy Program following a comprehensive assessment of its growing energy needs and energy production capabilities.

1.1. Search Problem:

The use of civilian nuclear energy and through previous experiences in the world have caused serious damage to individuals and the environment, so we will assess in this research the effectiveness and appropriateness of the provisions of uae legislation, represented by the provisions on civil liability for nuclear damage adopted by a decree of a federal law - No. 4 of 2012 on civil liability for nuclear damage to cover the damage of nuclear radiation resulting from civilian uses of nuclear energy.

1.2. Research Methodology:

This research depends on the descriptive and analytical approach based on interpretation and analysis of the legislative texts in the United Arab Emirates related to the subject of the research in comparison with the texts that correspond to them in the comparative legislation and their support with jurisprudential opinions.

1.3. Search Plan:

The research will be divided into three Main Topics, the first of which is dedicated to the legal regulation of the proper uses of nuclear energy and compensation for its damages, the second was allocated to look into the privacy of both error and nuclear damage, and finally the third research will be allocated to the claim of civil liability for nuclear damage and compensation and guarantees.

2.0. The first topic is the legal; regulation of the proper uses of nuclear energy and compensation for its damages.

The legal regulation of compensation for the damages of peaceful nuclear energy uses in the United Arab Emirates requires that the legal basis for peaceful nuclear activities in countries be established and justified.

2.1. The first requirement: is to establish the right to peaceful uses of nuclear energy and to compensate for the damages resulting from those uses.

In view of the expansion of the fields of peaceful use of nuclear energy, we find that countries, through international agreements, have sought to establish a legal framework that gives legitimacy to the employment of nuclear energy in the peaceful field in return for guarantees that guarantee the use of such technology for peaceful purposes only.

Specialized agencies and bodies have been established in the countries of the world to implement these agreements and treaties, and perhaps the statute of the International Atomic Energy Agency (IAEA) is the first global document that article (2) of the said system has decided that countries should be urged to cooperate to harness nuclear energy in peace Health and prosperity worldwide and the 1968 Nuclear Non-Proliferation Convention represent the legal basis for the inalienable right of States to build nuclear technology and employ it for peaceful purposes, with article (1/4) stating that "there is nothing in this treaty that explains what affects the unwavering right of all parties to develop research, production

and use of nuclear energy for peaceful purposes). Some of those conventions and treaties focused in particular on determining the provisions of civil liability for nuclear damage at a time when nuclear energy had not become a new source of energy in the world, as a proactive step by the international community to develop solutions to potential disputes due to the widespread use of nuclear energy in the future, Under the auspices of the European Economic Cooperation Organization (OECD), whose name has now been amended to the Organization for Cooperation and Development (OECD) and the Nuclear Energy Agency, the Paris Agreement on Civil Liability before others was concluded under the peaceful uses of nuclear energy on July 29, 1960, , Several subsequent amendments have been made to that Agreement, most recently the 2004 Protocol, which increased the amount of compensation allocated to cover nuclear damage to (300 million) special withdrawal rights units, and the Vienna Convention on Civil Liability for Nuclear Damage was concluded in 1963, which came into force on November 12, 1977 under the auspices of the Atomic Energy Agency, The difference between this Convention and the Paris Convention lies in the extent to which it is not limited to a particular regional or continental scope by allowing it to be joined by all countries of the world.

One of the most important resolutions of the UN General Assembly, which adopted the legality of the peaceful use of nuclear energy, was Resolution 32/50 of 8/ December 1977, as well as Security Council resolutions recognizing nuclear technology by affirming the inalienable right of states to conduct research, production and use of nuclear energy for peaceful purposes, and this right is subject to no restriction other than the obligation not to divert state aid, materials and facilities to military purpose

For the requirements of establishing nuclear power facilities and pursuing their activities and the concerted efforts and support they require, the UAE-U.S. Nuclear Energy Cooperation Agreement allowed the transfer of nuclear technology from the United States of

America and was called the "Gold Standard" () transport agreement.

As the UAE moves towards the peaceful use of nuclear energy, it has taken the initiative to join the IAEA agreements and treaties signed and ratified by the United Arab Emirates: 1987, where the Uae signed the 1987 Early Reporting Agreement on a Nuclear Accident, signed the 1995 Nuclear Assistance Agreement or Radiation Emergency Agreement, and the United Arab Emirates issued Federal Decree No. 33 of 2012 on ratification of 2012. Joint Protocol on the implementation of the Vienna Convention and the Paris Convention of 1988. The state has also taken the initiative to issue internal legislation whose provisions guarantee the regulation of nuclear and radiological activities and their uses for peaceful purposes, as Federal Law No. (6) of 2009 regarding the peaceful uses of nuclear energy, and Federal Decree-Law No. 4 of 2012 regarding civil liability for nuclear damages, were issued. Drafted in accordance with the Vienna Convention on Civil Liability for Nuclear Damage and the amended Protocol 1997, the provisions of Federal Law No. (4) of 2012 are in accordance with the UAE's international obligations and international best practices, IAEA legal experts have advised and reviewed the text and provisions of the decree to ensure that it complies with IAEA guidelines and relevant international obligations.

3.0. The second topic is the specificity of the elements of civil liability for damages caused by peaceful nuclear uses.

Responsibility, the subject of our research, is characterized by its elements that give it privacy that distinguishes it from other elements of civil liability in its traditional conditions.

3.1. The first requirement is the nuclear error.

The error as a basis on which civil liability is based is a deliberate or unintentional() deviation (from a particular conduct that the average person should have taken in accordance with a general legal obligation to

take care and caution in order to prevent harm to others, and in this regard we must ask the question that who is the person who has the obligation to be careful and cautious when conducting nuclear activity so that if he violates his obligation to be responsible for those affected?

To answer this question, a specific concept of the nuclear facility must be defined, as article 1 of the UAE Civil Liability for Nuclear Damage Act adopted the definition of a nuclear facility as:

3.1.1 Any structure that contains nuclear fuel, other than nuclear reactors with sea or air transportation, to be a source of power, whether useful or used for any other purpose.

3.1.2 Any plant that uses nuclear fuel to produce nuclear materials or any nuclear material processing plant, including any post-radioactive nuclear fuel reprocessing plant, I.E. a facility where nuclear materials are stored, other than those where nuclear materials are stored during transport.

3.1.3 Other facilities in which there are nuclear fuel, radioactive products or radioactive waste, as determined by the IAEA Board of Governors from time to time ().

Nuclear facilities of a single operator at a single site are considered a single nuclear facility.

As for the operator, it was defined in the aforementioned law as (the person licensed by the Federal Authority for Nuclear Regulation in the country to operate a nuclear facility named in the license issued in accordance with Federal Decree No. 6 of 9/10/2009 regarding the peaceful uses of nuclear energy ().

Article (2/2) of the Vienna Convention adopted a concept for the operator that could extend to the transporter of nuclear materials or nuclear waste handlers, and the Federal Nuclear Control Authority of the United Arab Emirates adopted the direction considered, as the nuclear material carrier and nuclear waste handlers could be held civilly responsible for compensating for nuclear damage caused by such materials or waste as a guard for

hazardous objects without having to be granted operator status for the nuclear facility().

The specificity of the responsibility in question has generated the need to consider the responsibility of the operator of the nuclear facility as objective, not based on the wrong corner, and to bear its burden alone, regardless of the multiplicity of minors whose failure caused nuclear damage, article (3) states that: The operator of the nuclear facility is absolutely responsible for damages found to have been caused by a nuclear accident as described in Article II of the Vienna Convention of 1997.

The Authority may exclude any nuclear facility or small quantities of nuclear material from the scope of the application of the provisions of this decree by law, if the small size of the risks involved warrants this provided:

3.1.3.1 Identification of exception criteria for nuclear facilities by the IAEA Board of Governors and a decision by the IAEA to meet the exception to those standards.

3.1.3.2 Determining the maximum limits for excluding small quantities of nuclear materials by the IAEA Board of Governors, and the authority's issuance of a decision that the exception falls within the established limits.

The justification for deciding that objective responsibility is to protect the affected by avoiding them with the burden of proving the commission of the error issued by multiple persons so that it is sufficient for civil liability for nuclear damage to be established to prove the causal relationship between the damage and the nuclear accident without the need to prove that the operator of the nuclear facility committed the error, On the other hand, the operator of the nuclear facility cannot deny responsibility on his part by proving that he did not make a default mistake, which was adopted by the Vienna Convention of 1963 amended in 1997, In article 4/1, that Convention established a rule limiting responsibility for nuclear damage to the operator of the nuclear facility as an absolute objective responsibility, and obliged the nuclear operator to provide sufficient financial guarantees to cover its

liability for nuclear damage compensation, whether it was adequate insurance or any other financial guarantee,

In exchange for the commitment of states that conduct peaceful nuclear activities on their territories to complete the difference between adequate compensation to cover the damages achieved and the financial guarantee provided by the operator of the nuclear facility, a recommendation was issued by the General Conference of the Atomic Energy Agency in 1989 to establish a permanent committee on nuclear responsibility to achieve the objectives of increasing the segment of compensation beneficiaries from the segment affected by nuclear accidents(), The Commission began its work in 1997 under the auspices of the Atomic Energy Agency for the purpose of amending the Vienna Convention, and those international efforts resulted in agreement on the Vienna Convention Amendment Protocol on Compensation for Nuclear Damages(), as well as the Supplementary Compensation Agreement(). those conventions enshrined the idea of abandoning error as a pillar on which civil liability in compensation for nuclear damage was built to provide more space for the protection of those affected by nuclear activity, provided that such legal protection was an obstacle to the peaceful use of nuclear energy that would bring well-being to humanity (). A nuclear error is a nuclear accident related to the activity of a nuclear facility, which consists of any event or series of events of a single origin, causing nuclear damage or creating a serious and imminent threat of such damage in relation to preventive measures(), the UAE legislator adopted the definition of a nuclear accident in the first article as: any event, or series of events of one origin, that cause nuclear damage or create a serious and imminent threat of such damage only with regard to preventive measures. In this regard, the problem of proving nuclear error arises, especially with regard to accidents of leakage of nuclear radiation that are not the result of fire or nuclear explosions, whether the spill occurred once and the dose of nuclear radiation to which the injured person was exposed exceeded the maximum that a person can be exposed to

without harm, Or the radiation dose did not reach the maximum mentioned, but it was the continued exposure to it that caused the damage, and the UAE legislator remedied that situation by including the scope of compensation adopted by the nuclear damage compensation law referred to when the nuclear error was known to be any event or series of events stemming from a single origin as mentioned above().

3.2. The second requirement is nuclear damage.

It should be noted that during the sixties and early seventies of the last century, international conventions identified compensatable damage, both those affecting people and the environment on a limited zone. other than those that were concluded in the nineties, including the London Convention of 1996 regarding civil liability for damages caused by pollution by hazardous and harmful substances, and the 1997 Vienna Convention on Supplementary Compensation for Nuclear Damage, which expanded the scope of civil liability by increasing the types of damages covered by the aforementioned liability, the national legislation issued in subsequent time periods for concluding the aforementioned agreements followed the expansion of the scope of civil liability resulting from nuclear damage.

Peaceful uses of nuclear energy harm humans, other living organisms, and the surrounding environment with all its elements. Among the peaceful uses of nuclear energy are its uses for human medical treatment. Exposure to radial doses during the diagnosis of certain diseases may be caused by cancerous diseases or complications up to the death limit due to the inability of the human body to resist, in the event of human overdoses (). In this regard, it should be noted that the effects of harmful nuclear radiation are transmitted to the next generation and that if they are not directly exposed to nuclear radiation, they are caused by birth defects and mental retardation in newborns due to the influence of the genetic material (genes) found in sperm and eggs when fertilization occurs(). Environmental damage caused by peaceful nuclear energy uses is considered one of the most severe types of

environmental damage, Nuclear environmental damage was defined under the first article of European Directive No. (35) of 25 April 2004 on civil liability for nuclear damage as "any adverse change that adversely affects the environmental environment with all its components, thereby changing its original state of origin().

In this regard, we find that part of the jurisprudence(considers that the material and moral damage to the human being from nuclear tests and the peaceful uses of nuclear energy is a kind of environmental damage resulting from the activities mentioned, by defining the above-mentioned environmental damage as (every financial loss or psychological pain that affects the person himself or one of his followers or negatively affects the characteristics or components of the environment resulting from each nuclear activity).

The damage caused by nuclear activities is characterized by: gradual and lax damage in its appearance, given the length of time between nuclear activity and the appearance of its harmful effects, So that it is often difficult to limit the damage generated by engaging in a particular nuclear activity when it is engaged or even after a short period of time from the date of its practice based on many factors, including the concentration of nuclear radiation and the nature of the affected element, whether human or environmental, This prompted some national legislation or international conventions to decide on civil liability provisions for nuclear activities to determine long or indefinite statutes of limitations for the loss of the right to claim compensation for damages to nuclear activities based on the progressive nature of such damages, article (ten) of the decree of the federal law in question has set out the statute of limitations for claims for nuclear damages, which we will mention in the next research, as well as article (31) of the Law on Civil Liability in the Area of Moroccan Nuclear Damage referred to earlier, It stipulated that (every person who has confirmed that he or she has suffered nuclear damage and has filed a lawsuit for compensation within the term applicable under this article can prepare his original application when the damage worsens,

even after the expiry of this period, unless a judicial decision is issued with the power of the order), Since nuclear damage is often considered future damage, therefore, according to the general rules of civil liability, compensation may not be awarded unless such damage is certain to occur In any case, the court must use the expertise to prove the inevitable issue of future damage, as future damage is a certain damage that has been caused but has been provoked entirely or in part to the future, and even in relation to the assessment of compensation for future damage, Because it is not logical that the said law requires the availability of means to estimate its true value in advance, because future damages may be possible to estimate compensation before its effects appear or vice versa, In this case, the judge has a choice between awarding compensation on the basis of the means of his assessment in the pending proceedings or, in other words, where the court has elements of assessing future damages, or to preserve the injured person's right to final compensation after the judge has found out the cause of the accident and the appearance of its effects has been relaxed, and the court then shall rule on the defendant's civil liability and postpone the assessment of the compensation to be paid to the plaintiff until the assessment of the seriousness of the damage is available().

One characteristic of the damage, in particular the environmental damage

generated by nuclear activities, is that it is prolife rational damage: nuclear damage often does not stand at certain regional boundaries, and the Chernobyl incident is perhaps one of the evidence of the proliferation nature of environmental damage ().

Nuclear damage is sometimes classified as indirect damage: in particular, for human damage caused by pollution of the environment in which he lives due to a particular nuclear activity, human beings are affected when eating agricultural crops watered by a water source that has been contaminated by nuclear radiation (). Sometimes nuclear damage does not affect a particular person or person, it is a general damage that has an impact on all residents of

the area affected by nuclear damage (), In such cases, we believe that compensation must be in kind rather than monetary, by obliging the person responsible for nuclear damage to restore the damaged environmental environment to what it was before the damage occurred.

All of the above on nuclear damage relates to the material damage caused by nuclear accidents, but this does not mean that the incidents mentioned do not cause Materially and morally damage. From our side, we believe that the laws related to civil liability for nuclear damage, including the UAE legislation in article one, have covered various types of damages, all of which are classified as material damages. Therefore, the UAE legislator should have expressly stated that moral damages should be covered by compensation, as should material damages.

4.0. The third topic: The civil liability lawsuit for nuclear damage

The civil liability claim for nuclear damages requires consideration of the nature of that liability and its penalty for compensation and guarantees for such damages.

4.1. The first requirement is the nature of civil liability for nuclear damage

There is no doubt that the responsibility of the exploiter of the nuclear facility is a default rather than a contract responsibility because there is often no contract link between the nuclear facility and the injured.

nuclear activity must be carried out by a nuclear facility, which is a state institution licensed to engage in the said activity, whether it is nuclear reactors, nuclear fuel plants or every plant designed or adapted to process nuclear materials, including nuclear fuel reprocessing plants. which has been exposed to radiation, or all stockpiles of nuclear materia (), and therefore the civil liability resulting from the damage of nuclear activities is considered to be the responsibility of the State for the actions of its executive authority, Specifically, responsibility for the material work issued by

the said authority, which is non-contract responsibility as it did not arise from the breach of administrative contracts between the management authority and others. The aforementioned meaning was confirmed by article (3) of the UAE legislation and its text (the operator of a nuclear facility is absolutely liable for damages that are proven to be due to a nuclear accident, as set forth in Article tow of the Vienna Convention of 1997). Noting that the State's responsibility for its material actions was not a principle recognized from the outset, however, due to the development of life and state intervention in various individual areas, increased public facilities, and thus increased contact with individuals in these facilities, in addition to the fact that the work of the executive branch is different from that of both the legislative and judicial branches, where it is not surrounded by adequate guarantees for the benefit of individuals().as a result, judicial oversight extended to all such acts, whether by abolishing them if they violated the principle of legitimacy or by deciding to compensate for their harmful effects, or both, and therefore the rule became the state's responsibility for the actions of the executive (material non-contractual), we, support the idea of establishing the state's responsibility for the actions of its executive authority in the exercise of its material work, in particular actions of a dangerous nature, whose practice can result in harm to others even if there is no particular default error or abuse of the right attributed to the administration.

But if the nuclear activity has been practiced outside the jurisdiction entrusted to state institutions or contrary to the instructions regulating the aforementioned activity, then the civil responsibility of the state resulting from the aforementioned activity is indirectly based on the responsibility of the subordinate for the illegal acts of its affiliates.

4.2. The second requirement is the claim for compensation for nuclear damage and its guarantees

The federal courts in Abu Dhabi are competent to hear claims for nuclear damages as stipulated in article (12) of the UAE Nuclear Damage

Liability Act, provided that the competent court applies the provisions of the Vienna Convention in all that is not contained in the special provision in the previously mentioned law, The plaintiff in the case is the injured or inherited in accordance with article (13) of the Vienna Convention, and it is conceivable that the plaintiff is the State in which the injured person is a national or resident provided that the injured person agrees to do so as stipulated in article (11/a) of the Vienna Convention, while the defendant is the operator of the nuclear facility, as well as may be established by the party that has committed itself to providing financial coverage as stipulated in article (10) of the federal act, whether state or an insurance company.

Article 5 of the Federal Decree adopted the maximum operator's responsibility to compensate for nuclear damage for each single nuclear accident by) 450(000Four hundred and fifty million special drawing rights units, and in accordance with the Vienna Convention 1997, article (5/2) of the above decree stipulates that the Federal Nuclear Control Authority may reduce the maximum liability of the operator of the nuclear facility by at least five million special withdrawal rights units for the nuclear facility consisting of nuclear facilities.

For research purposes, low-energy reactors and facilities that process or store nuclear materials, due to their limited nuclear activities and therefore the scarcity of the possibility of nuclear accidents due to the activity of these facilities, for Nuclear Regulation in the UAE to exempt nuclear facilities from being subject to the provisions of the Vienna Convention, provided that the exemption criteria are defined by the IAEA Board of governors and the authority issues a decision to fulfill those criteria to activate the exception. the limits for the exception of small quantities of nuclear materials should be set by the IAEA Board of Governors, and the Authority shall issue a decision that the exception falls within the prescribed limits, which results in the application of the general rules of civil liability established in the UAE Civil Transactions Act on liability for hazardous objects in relation to

compensation for damages resulting from small quantities of nuclear materials or facilities.

we believe that determining the responsibility of the operator of the nuclear facility contained in UAE legislation intersects with the principle of full compensation for damages to loss of life or harm to human safety, especially since resolution No. (7/75) of the European Council of 1975 on compensation for life in cases of death or bodily injury, It has been decided that everyone who was harmed has the right to return to the situation closest to his condition before the damage occurred, which reflects the importance of the injured obtaining Full compensation for damage to his right to life and physical integrity.

In a case where the maximum compensation is five million special withdrawal units, in accordance with article (5/2) of UAE legislation, the state shall bear compensation for all damages in no more than the amount of compensation for the maximum operator's liability and the amount as mentioned (450000) Four hundred and fifty million special drawing rights units. As for the operator's lack of responsibility for nuclear damage by verifying the foreign cause that interrupts the causal relationship between nuclear error and nuclear damage, UAE legislation on civil liability for nuclear damage has decided to absolve the operator of liability if it proves that nuclear damage It has arisen entirely or in part from the gross negligence of the injured, act or omission with the intention of causing harm, and we believe that there is a need to provide for that provision because it is a repetition of the general rules of civil liability that determine the absence of liability in the case where the wrong injured person issued by the official is consumed. as an assessment of the provisions of civil liability for nuclear damage, despite its objectivity, it does not achieve sufficient to protect those affected by nuclear accidents, as long as the legislator has stated that it is an objective responsibility based on the availability of the damaged corner, it is assumed that the operator will not be exempted from civil liability even in those cases that have been mentioned exclusively, As it is not logical to leave those affected by nuclear accidents

without compensation, especially since nuclear damage is very dangerous as we mentioned in the research on the specificity of nuclear damage, so I suggest intensifying international and regional efforts to create innovative methods to compensate for nuclear damage, In addition to the need to insure against the liability of the operator of the nuclear facility in proportion to the severity of the risks in place of insurance, although we doubted the ability of insurance companies to cover nuclear damage because of their high value and scope, which made the insurance companies hesitate to cover nuclear damage, In particular, some nuclear damage is not appreciated, such as the disadvantage of deprivation of the environment and the high costs of lawsuits() because of the huge number of lawsuits, as a result of these reasons, the 1997 Supplementary Compensation Agreement for Nuclear Damages was concluded, which aims to commit contracting states to financing compensation funds, where the operator is obliged to provide financial cover in the range of (300) million special withdrawal rights units, If that financial cover is not sufficient, the state in which the enterprise is located is obliged to provide sufficient funds to complete the difference between the financial cover available to the operator and the maximum level of compensation specified in the said agreement, Note that the said convention did not enter into force because the required number of states for ratification is incomplete because it is difficult to allocate public funds to compensate for nuclear damage(), This problem can be addressed by the existence of an agreement adopting the regulation of civil liability as a supplementary compensation agreement to expand to all countries regardless of whether they are a party to or not to the Vienna or Paris Conventions, and on the other hand we propose the establishment of a grouping of insurance companies in the Arabian Gulf region to provide a financial vessel commensurate with the costs of repairing nuclear damage. As for the statute of limitations for the civil liability claim, the UAE legislator stipulated in article (10) that:

4.2.1 Claims for nuclear damages are brought exclusively against the operator or against the person who provided insurance or financial security under the provisions of article (8) paragraph (1) of this decree by law.

4.2.2 Claims for compensation against the operator are outdated by the expiry of the valid insurance or financial guarantee if it remains in force longer than that period provided for in article (6) (1/a) of the Vienna Convention of 1997.

4.2.3 The rights to claim compensation for any person who sustained nuclear damage shall be forfeit unless the lawsuit is filed within three years from the date on which the injured person became aware, or from the date by which he should have known of the damage and the operator responsible for it, provided that the period specified in paragraph (1/a) of the Article (six) of the Vienna Convention of 1997 or paragraph (2) of this article.

Thus, the establishment of a compensation claim must not exceed (30) thirty years from the date of death or bodily injury, or 10 years from the date of the nuclear accident for other nuclear damages, and these ten years were supposed to begin from the date of the appearance of the damage, which usually slackens for a period of time following the date of the nuclear accident, This defect may be dealt with by paragraph (2) above, which allowed for a prescription period longer than ten years as long as the insurance or financial guarantee is still in force. on the other hand, the compensation claimant who instituted his claim during the period specified in the Vienna Convention may amend his requests by increasing the value of compensation before a final judgment is issued in the case despite the expiry of the limitation period as stipulated in article (6/4) of the Vienna Convention.

Conclusion:

We dedicate this conclusion to recording the most important findings and recommendations:

Results:

1. The legality of the peaceful use of nuclear energy derives its foundation from international conventions and national legislation issued in a manner that does not harm the environment and individuals.
2. Legislation and jurisprudence have established that civil liability for nuclear damage is objective, not based on error but on proof of damage, because of the specificity of the pillars of that responsibility, which entails the difficulty of proving nuclear error and the causal relationship between error and nuclear damage.
3. Inadequate traditional compensation rules in the coverage of nuclear damage, requiring the State to have the role of guarantor in addition to imposing mandatory insurance against the liability of nuclear plant operators.

Recommendations:

1. Determine the state's responsibility for nuclear damage as its responsibility for the material actions of the executive branch, especially since the State could have refused to authorize the nuclear facility or performed its duty to effectively control that project to prevent nuclear damage.
2. Amendment of the Vienna Convention of 1997 to expand the addition of nuclear waste facilities to the list of nuclear facilities, as they could be held accountable for the nuclear damage caused by the start-up of those facilities for their previously mentioned activities.
3. Amending the text of Article (1) of the UAE legislation by adding moral damages to the list of multiple forms of material damages mentioned in Paragraph (4) of the aforementioned article. Nuclear accidents.
4. The United Arab Emirates is sponsoring a project to establish a Gulf consortium of insurance companies to provide financial cover in insurance against nuclear hazards resulting from peaceful uses of nuclear energy in the GCC.

5. Amending the text of Article 5/1, which sets the maximum value of compensation for nuclear damage in UAE legislation, which has pursued an approach that causes moral and moral damage no less serious than material damage. International conventions that have adopted the correlation between liability and a specific value, by amending in such a way as to allow for full compensation for such damages.

6. Increase the statute of limitations for civil liability for nuclear damage contained in Article 10 of UAE legislation in order to take into account the specificity of the nuclear damage represented by the lax appearance of its signs of occurrence in time.

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- [24] According to the report of the Secretary-General of the United Nations submitted to the General Assembly No. 443/60 - Resolution 58/119 of December 2004 " to confirm that after (16) years the three countries, namely Belarus, the Russian Federation and Ukraine, continue to bear the brunt of the legacy of the Chernobyl disaster as the environment in these three countries contains nuclear radiation.