

Investigation Insurance Laws of Nuclear

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Abstract: Since first being signed by the Alliance Insurance nuclear treaty, 11 years passes and it seems this time to review and look to insure nuclear power is arrived. This insurance cover can be the smallest and yet the insurance cover considered the fastest in the world and as the most unique and unparalleled in the world where that is the favor. It is important to recognize the fact that between the companies would form a very close partnership and working closely with government agencies to be created, many efforts to foster and encourage a dynamic and growing industry will be done. The rapid growth of nuclear economics between 1976 to 1972 among industrialized countries (with simultaneous formation of OPEC and oil prices being more expensive) hand prolongation Iran's nuclear project, the current explosion in developed countries with insurance Bushehr nuclear power plant (such as 1973 same time expensive oil) on the line was due to an article on this subject should be presented. Here there are two aspects - insurance and property insurance commitment. Sometimes together, sometimes separately, they consider. This is very surprising that so far in 1959, the change has not occurred and if the accident occurred, was minimal.

Key words: Law - Alliance Insurance - Insurance nuclear - Commitment Letter

INTRODUCTION

Diagram 1 shows the use of sources of fossil fuel oil and gas under the influence of extreme crisis, the global is (steep chart for oil and gas for the war in Afghanistan in 1999 and the Iraq war in 2003 in the chart Verification issue), but part of nuclear-independent global crisis

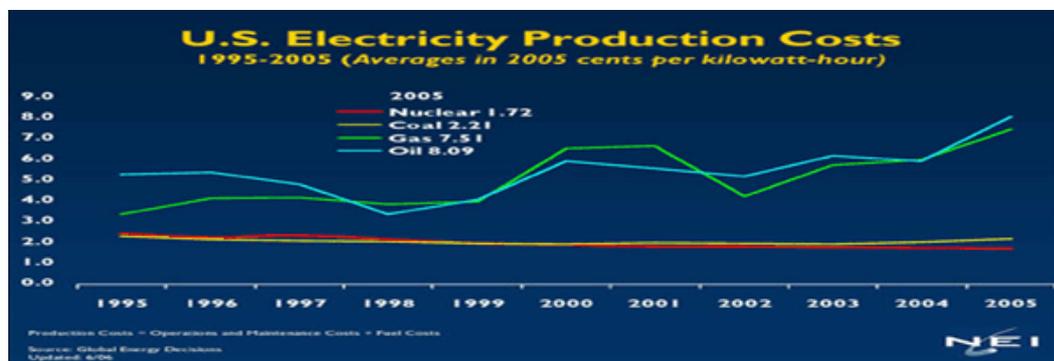


Diagram 1:

Based on the above chart that the United States when the president)Eisenhower(foot contract peaceful uses of nuclear energy signed in fact confirm the peaceful uses of nuclear energy said. All their electricity industries, drug companies and research institutions operating Geophysical invited to test nuclear material losses and profits to pay the check and thus provide for the advancement of Science. Response to this request the President was very slow. Ordinary nuclear power equally with the atomic bomb devastation and saw many new things and was very dangerous.

Was also much faster than the owners and brokers nuclear facilities requires far more commitment limits of what they are given. Insurance commitment amounts to \$ 10 million, \$ 25 million, \$ 50 million or even more of them announced.

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When you start working for the insurance assets equivalent to 20 to 25 dollars was acting, but soon large number of installations and nuclear facilities on the number and varieties were added over the proposed \$ 75 million was provided.

The applications were made in this area, too early to capacity beyond typical insurance companies and insurance companies figure typical of the insurance was introduced, they panic and pulled her aside and corporate alliances necessary insurance to cover nuclear insurance were strong.

2 - Coalition Formation:

In 1956 Tuesday Nuclear Insurance Alliance was formed two alliances between them and the corporate companies also formed a cooperative. (Table 2). Marginal for the above is intended to cover the annual fluctuations.

Table 2:

Insurance capacity (dollars)	Number of members (the company)	Coalition Name
46500000	138	NELIA
50000000	189	NEPIA
Insurance obligations=13500000 assets insurance=10000000	105	MAERP

In 1996, the following restrictions were added

NELIA	--	57,350,000\$
MAERP	--	16,650,000\$
NEPIA	--	60,000,000\$
MAERP	--	14,000,000\$

3 - Mechanism of Policies and Policy Insurance:

an insurance coalition NELIA commitment "shared" will follow, but instead MAELU many companies under one umbrella as a coalition to collect, only composed of six companies which is a cooperative organization have created.

Insurance nuclear assets to achieve their annual targets with line 5, the risk of multiple business (Commercial Multiple Peril) are encoded and commitment to the Insurance Line 17 - Liability Other Than Auto is encoded.

4 - Reinsurance (Reinsurance):

NELIA alliances and MAELU any form of mutual reinsurance to each other and with the same subject and NEPIA MAERP is also true. Because these policies are followed, and coalitions of each other about local hazards drawn reinsurance,

Open percent insurance on each other that they do correspond to their relative share of capacity that has reinsurance Exhibit A trend among the coalition of local and foreign investors with insurance is shown. The whole thing is seen here, so no complexity occurs when the concepts of agreement, its implementation can be done easily.

Nuclear Insurance Association obligations	NELIA
Mutual Atomic Energy committed credit (cooperative)	MAELU
Mutual Atomic Energy Coalition reinsurance	MAERP
Relevant insurance companies factories	AFMIC
Atomic Energy Finance Insurance Association	NEPIA
Cooperative reinsurance company in America	AMRECO

5- Confirm the Possibility of Radioactive Contamination:

Despite all cases, fire insurance companies demand from users with some special nuclear material particular have faced (eg hospitals where there are sources of radiation, or radioisotopes for the plants measure the thickness of its parts are used.) Members of these insurance companies have to request them when the damage caused by this material and equipment services have. The incidents caused by the use of these materials is higher, coverage is limited to the materials requested.

The only solution is that all the damages and losses in an insurance policy rather than just do the things that we isolated from the insurance policy in terms of technical and especially to separate have been some important exceptions are:

- A) the gradual accumulation of radioactive materials
- B) radioactive contamination at any location specified in the notification from the insurance material is released from external sources, the House Insurance and insurance payment is out.
- C) any waiver and neglect ... Maintenance and protection in ...
- D) suspicious and mysterious disappearance of radioactive material or low

An exception clause in there about war that stipulates that: "Any loss directly or indirectly and using weapons of war - whether in wartime or in peacetime - found Fusion systems or be Fusion, out of commitment to the insurance policy and is not covered by the insurance policy. "

However, a clause required to be deducted there is a clear if the failure rate over 50% of the total amount payable is insured, this does not apply to cases. Cases be compulsory deductions include:

1. Manufacturers of fuel processing, fuel, etc. Visitors who work in the capacity of reactor heat is more than a mega watt: \$ 1,500 plus a quarter (¼) 1% insurance fee, which must not exceed \$ 5,000.
2. Power reactor their heat capacity is over 1 MW, except for power reactors: \$ 2,500 plus a quarter (¼) 1% insurance fee, which must not exceed \$ 10,000.
3. Power reactor fuel reprocessing facilities: - \$ 5,000 plus a quarter (¼) 1% insurance fee, which must not exceed \$ 50,000.

Unusual and extraordinary provisions can be subject to these bands: 1. Inspection and suspension. 2. Representation or advocacy. 3. Too dense and commitment by reducing aggregate stated amount of the insurance policy due to damage

6 - Nuclear Assets Insurance Rates:

Calculation of damages in determining the rate of nuclear reactors is very difficult work, with the final counting rate depends on these factors are: (a) type of reactor, (b) that it used to operate comes, (c) the level allowed the production of electricity; (d) material that is poured into it. The host factor depending on the value Boiler Value Units is calculated. And the value units (Value Unite) are multiplied by the reference rate to the rate of nuclear cents (cent) obtain.

Other similar projects for other items that insurance is supposed to be added (such as manufacturers of fuel), runs in the same building process is over. Another application for the transfer of nuclear materials there,

Other programs are made for when the stage production of nuclear material damage and damage type occurs. All these things as an insurance policy applies BUILDER RISK. All mentioned rates that are valid for one year.

8 - Deductible Credit (Deductible Credits):

Insurance can be a higher deductible when required, a kind of insurance for their franchise chooses. Table of credit can be the case as:

Credit (percentage)	Deductible
7.0	1500
9.7	2500
13.2	500
15.0	10,000
20.0	25,000
25.0	50,000
27.5	75,000
30.0	100,000
32.9	250,000

8 - Law PRICE - Anderson:

Price-Anderson Act has been committed to a series of injury compensation pay certain individuals and if these people harming others in connection with nuclear energy or through the work of these people were part of the nuclear facilities was difficult, The government has to pay the costs incurred. Because initial studies showed that while rare losses in nuclear facilities, their volume is high enough to damage the figure even in cases of small head brings millions of dollars.

The law stipulates a special case of the AEC is required to support all the companies that directly with the AEC (contractors, not owners) have signed a financial agreement. Coalition on the AEC that they did not do so, This kind of despair is to carry. Many years that coalitions are working in insurance law shall the term may have become bound up in this kind of association forgiven, but so far their efforts did not result in the following.

Compensation - like insurance - only about nuclear reactors hand applied off-site owner has announced to nuclear facilities in the same position that the owners of the adjacent facility has. Note price-Anderson Act has a realm in which the nuclear shipping in the House puts the government indemnities and protection to over 500 million dollars to expand. Law fantastic events only apply to nuclear as the following are known: "Every event leading to the discharge or dispersal of nuclear materials and resources, particularly their products from their original location so that could be said that the off- site has occurred. Or causing radiation levels of radioactive rays to be off-site; specialized commissions so that it is inherent to the Commission or the result of specialized risks inherent to persons or property to identify off-site.

Commission regulations and case law to declare that they have to learn is inherent hazards. In short, a nuclear event only if the super is considered that:

- a) 10 people are killed or injured;
- b) to any of those inflicted damage equivalent to \$ 2,500,000 dollars or the equivalent total damage is \$ 5,000,000,
- c) damage to the 50 individuals totaling \$ 5,000 or more is imposed so The total damages of not less than \$ 1,000,000

9 - Exclusion of Nuclear Energy, Commitment and Entry:

Each person covered by insurance, all insurance policies from the perspective of NIAC, NELIA and MAELU insured person is considered. When a nuclear event occurs, the insurance NELIA that are issued by the company A should give it covered. And the family's car insurance policy it issued to B. Family car insurance policy automatically under your insurance policy NELIA placed, so the exception to the clause stipulated, no insurance car insurance cover, he has the commitment to innovation is not. If the nuclear insurance policy may not be available in between. And no mandatory insurance cover there is no event, companies can be committed, but chances FAB insurance policy so far in getting involved in the matter is that companies are not allowed at all for that place.

Ashes of nuclear waste materials (1) includes materials and byproducts, (2) resulting from the use by one person or a nuclear facility in terms of nuclear facilities within defined under paragraphs (a) and (b) are, so that nuclear facilities can be such a meaning:

- a) All nuclear reactors b) All installations or devices designed or used for (a) separating isotopes of uranium or plutonium, (2) extinct making facilities and nuclear waste (3) ejecting, processing packaging waste nuclear;
- c) any of the facilities or tools for processing, processing, and special nuclear materials under special protection under the insurance are used, where the installations or devices are located, including 25 grams of plutonium or uranium-233 or a combination of them be located, or over 250 grams of uranium 235 is present.
- d) any structures, wells, drilling and similar cases to bury nuclear waste can be used. The site also includes those cases be placed before said, all activities are conducted in one such site and all the cases mentioned above are performed for that location. Words mean nuclear reactor is any device or facility from which to maintain (nuclear fission) in a chain of reactions that form their support will be done, or a crime involves determining which materials can fission nuclear or nuclear fusion surgery. Injury or damage to the word in discussions about nuclear accidents, including all forms of pollution is material and assets. So much of insurance products still remain unsolvable. If any insurance coverage required for the nuclear facilities there is America and Canada; insurance commitment on normal products (even with the exceptions that they are punched) can.

Many to cover physical injuries and if these injuries occurred in the field of nuclear facilities are open this is true. Similarly, this type of insurance covers all claims related to the deterioration of assets (except its own destruction facility that has been entered) insurance will cover.

Suppose we have an insurance policy that covers the valves manufacturer has put the insurance and manufacturing valves productive time to the Atomic Energy Organization Atomic Energy sold and the valves for the petroleum gas tank in a nuclear reactor has been consumed.

Update forms for the milk, explosion occurs, radioactive contamination and pollution Fortunately nuclear does not happen. Insurance product, even with the exception that has been attached to it is required all the consequences resulting from the explosion to the coating, except for breastfeeding failure. Now suppose that the valve is part of the reactor system and will cause considerable damage to the nuclear build. Here, if a compulsory insurance policy in case there is no reactor, similar to insurance policies can make claims relating to injuries and destruction of financial support must compensate, but damages to the facility, not imposed. Note

that in one case only fail to be broken except by the milk itself (ie its insured products) while the second exception is the whole plant.

10 - Commercial Radioactive Isotope Original Material:

A very large range of commercial radioactive isotopes in medicine today, biology, research laboratory and used in industry. For example, the isotope used in industry can be confusing to use them (Assessment) gage length of cigarettes in tobacco plants noted.

Tremendous amount of cobalt used for shining on the foods to be sterilized to them. In none of the signed insurance policies, the use of these isotopes, no insurance cover all the critical scrutiny and provided clear explanations that make it done. Thus, small amounts of insurance cover nuclear material in the laboratory should be under the same insurance coverage or CGL OL & T is located. If the isotope concentration on a matter so much, the insurer may be typical in this regard will be upset and wants to transfer losses to the coalition. Such a coalition can do about the insurance coverage, but they received the compensation will not let him encourage them to be covered by insurance.

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11 - Commitment Insurance Policies of Nuclear Energy:

NELIA and MAELU insurance policies have two forms. The first is the Facility Form for nuclear reactors, fuel processing facilities, fuel and other isolation devices other facilities where the amount of nuclear material there, are issued. They form the second carrier and the supplier for the supplier of nuclear materials and their carriers are issued.

11-1 Form Factory Facility Form:

Insurance is a financial protection under the Price-Anderson Act is issued. This insurance coverage is extensive and very broad and very similar to the grants that are awarded to the government.

In cases where nuclear facilities to take action to get compensation from the government, public opinion due to lack of insurance under the changes are not short, something for which payments are fully discussed and is placed centered thoughts. Since the insurance indemnity payments and compensation are in the hands, it should end without any extortion continue. In such an insurance policy is stated: just in case Johnny damages or compensation (1) during the period due to insurance risks of nuclear power is happening and (2) its cause is discovered and complained about the insured is,

Another unique feature Facility Form is common for your event resulting in the birth of this important and committed member of the Coalition never more than the amount stipulated for sharing, not receiving money. This a joint event to be defined: (a) events are common events. Resulting from nuclear materials and distribution to more than one nuclear center at a time to be included, (b) includes two or more Facility Form policy is that nuclear materials during their transport to send and covers . Sometimes such a common event happens, the clause states that limit applies to the commitment and responsibility that is equal to the total on all policies apply.

11-2 - Provider Form and Transfer:

Although Facility Form to each person insured under their offers, however many companies to present their interest entities covered by your insurance has expressed a willingness have.

Conclusion:

For independence from the global crisis, according to charts provided needed supplies of energy is nuclear. Fulfill the above require long term support when appropriate insurance crisis. And according to the stoning of the world's developed countries to use Iran's peaceful nuclear energy believe it is reached. The insurance company must then interact associated countries and finally to establish a partnership to its nuclear demands having planned to acquire.

REFERENCES

- Koryakin, V. Yu, 2002. *Environs of Nuclear Power Industry of Russia: New Challenges* (Moscow, NIKIET publ).
- Kovalevich, O.M., 2000. *On Some Issues of Expenditures Optimization for Emergency Cases Risk Management, Some Risk Problems. And Risk Management*, (Moscow. VINITI, 2000) pp: 22.
- Kovalevich, O.M., S.D. Gavrilov and V.F. Demin, 2003. *Insurance Liability on Nuclear Damage and Nuclear Energy Use Safety. Problems of safety in Case of Emergency Situations*, 2: 63.
- Mikhailov, V.N., 2002. *Non-Priliferation Regime and Nuclear Threat Reduction*, in: Proc. Conf., "Prospects of Stability on Nuclear Subcontinent", Bangalor, India. <http://www.iss.niiit.ru/pub-eng/pub-07>.
- Voronov, D.B., V.G. Prokhorov, S.D. Garilov and A.A. Derevyankin, 2003. *Insurance of Nuclear and Radiation Risks in Russia as an External Factor of Peasonnel and Third Parties Safety*, In: Proc. 14th Annual Conf. of Nuclear Society of Russia, Udomlya, 2003 (Moscow, NSR Publ, 2003), pp: 87.