Japan

Nuclear Liability and Compensation

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WHY ARE NUCLEAR LIABILITY AND COMPENSATION REGIMES IMPORTANT ?

Resistance to nuclear energy use is largely due to public fear of the potential damage that could result from an accident at a nuclear installation or during the transport of nuclear material

WHY ARE NUCLEAR LIABILITY AND COMPENSATION REGIMES IMPORTANT ?

A nuclear accident can produce damage…

- to human health, property, the environment, the economy
- that does not stop at political or geographical borders
- of a magnitude/complexity that requires special liability rules

Governments have responded by…

- balancing public assurance of adequate compensation for damage with protecting investors/suppliers from ruinous liability claims
- adopting special legal regimes at national/international levels to reflect this balance

NUCLEAR LIABILITY AND COMPENSATION REGIMES ADDRESS EXCEPTIONAL SITUATIONS…

Most national and international legal regimes address:

- liability and compensation for damage from a nuclear incident at a nuclear installation or during transport of nuclear substances
- exceptional risks arising from nuclear activities where common law rules and practice are not suitable (e.g. activities involving high levels of radioactivity, criticality risks, etc.)
- liability and compensation for damage suffered by third parties (including nuclear operator's employees)

NUCLEAR LIABILITY AND COMPENSATION REGIMES ADDRESS EXCEPTIONAL SITUATIONS…

National and international legal regimes do not normally address:

- damage that may be caused by radioactive sources outside a nuclear installation; not deemed to pose "exceptional" risks
  - e.g. radioisotopes ready for use in industrial, commercial, agricultural, medical, scientific or educational applications not covered by special liability and compensation regimes

Liability for this type of damage is normally based on tort, product liability, contractual liability, criminal or other field of law at national level

NUCLEAR LIABILITY AND COMPENSATION REGIMES ADDRESS EXCEPTIONAL SITUATIONS…

For a compensation regime to apply, there must be a "nuclear incident"…

- any occurrence or succession of occurrences with the same origin which causes **damage**, as long as the occurrence, series of occurrences or the damage arises out of the **radioactive properties**, or a combination of radioactive properties with toxic, explosive or other hazardous properties of **nuclear fuel or radioactive products or waste**, or from ionizing radiation emitted by any source of radiation inside a **nuclear installation**…

TEPCO FUKUSHIMA DAIICHI NPP ACCIDENT (the Accident)

11 March 2011: **Level 7** nuclear event due to a massive earthquake (**magnitude 9**) followed by a tsunami on the pacific coast of Japan

15,853 dead, 3,286 missing and 6,013 injured persons from the earthquake and the tsunami (as of 8 February 2012 according to the National Police Agency)

No casualties directly linked to the Accident but an important release of radioactive material and **71,124 evacuated** (as of 11 February 2012 according to the Fire and Disaster Management Agency)

NUCLEAR LIABILITY BASIC PRINCIPLES

They underline the special nuclear liability and compensation regimes at both international and, usually, national levels:

- Strict liability
- Exclusive liability (legal channelling)
- Limited liability in amount
- Compulsory financial security
- Limited liability in time

Japan NOT a party to an international nuclear liability convention but appplies such principles in its national legislation :

- Civil Code
- Act on Compensation for Nuclear Damage (Compensation Act)
- Act on Indemnity Agreements for Compensation of Nuclear Damage (Indemnity Act)
- Order for the Execution of the Compensation Act
- Order for the Execution of the Indemnity Act

International Nuclear Liability Conventions

UNDER THE AUSPICES OF THE OECD/NEA

- 1960 *Paris Convention on Third Party Liability in the field of Nuclear Energy (PC)*

In force 1968 / 16 Contracting Parties (mostly Western Europe)

- *1963 Brussels Convention Supplementary to the Paris Convention (BSC)*

In force 1974 / all 13 Contracting Parties to Paris Convention

- *2004 Protocols amending PC and BSC (RPC / RBSC)*

Not yet in force

UNDER THE AUSPICES OF THE IAEA

- *1963 Vienna Convention on Civil Liability for Nuclear Damage (VC)*

In force 1977 / 38 Contracting Parties (mostly Central/Eastern Europe+++)

- *1997 Protocol amending Vienna Convention (RVC)*

In force 2003 / 9 Contracting Parties

- *1988 Joint Protocol Relating to the Application of the VC and the PC*

In force 1992 / 26 Contracting Parties

- *1997 Convention on Supplementary Compensation for Nuclear Damage (CSC)*

Not yet in force / 4 Contracting States

NUCLEAR POWER GENERATING STATES & INTERNATIONAL NUCLEAR LIABILITY CONVENTIONS

- Paris Convention (**PC**)
- Revised Paris Convention (**RPC**) *(nif)*
- Brussels Supplementary Convention (**BSC**)
- Revised Brussels Supplementary Convention (**RBSC**) *(nif)*
- Vienna Convention (VC)
- Revised Vienna Convention (**RVC**)
- Joint Protocol (**JP**)
- Convention on Suplementary Compensation (**CSC**) *(nif)*

ARGENTINA	VC ; RVC ; CSC	MEXICO	VC
ARMENIA	VC	NETHERLANDS	PC ; BSC; JP; RPC, RBSC
BELGIUM	PC ; BSC; RPC; RBSC	PAKISTAN	
BRAZIL	VC	ROMANIA	VC ; JP; RVC ; CSC
BULGARIA	VC; JP	RUSSIA	VC
CANADA		SLOVAK REP.	VC; JP
CHINA		SLOVENIA	PC ; BSC; JP; RPC; RBSC
CZECH REP.	VC ; JP	SOUTH AFRICA	
FINLAND	PC ; BSC; JP; RPC; RBSC	SPAIN	PC ; BSC; RPC; RBSC
FRANCE	PC ; BSC; RPC; RBSC	SWEDEN	PC ; BSC; JP; RPC; RBSC
GERMANY	PC ; BSC; JP; RPC; RBSC	SWITZERLAND	PC; RPC; RBSC
HUNGARY	VC; JP	TAIWAN	
INDIA		UKRAINE	VC; JP
IRAN		UNITED KINGDOM	PC ; BSC; RPC; RBSC
JAPAN		UNITED STATES	CSC
KOREA			

NUCLEAR LIABILITY BASIC PRINCIPLES

1. Strict Liability

- operator is liable without proof of fault or negligence
- victims must merely establish a causal link between the nuclear accident itself and the damage suffered; relieved of heavy “proof” burden

2. Exclusive Liability

- all liability channeled to operator; victims need not pursue all others “at fault”

3. Liability Limited In Time

- liability usually limited to 10 years from accident date; must file claims 2-3 years from “discovery” of damage + operator liable
- in Japan: right of action fully extinguished **20 years** following the date of the tort; must file claims within **3 years** from the date the victim has knowledge of both the damage and the person liable

=> Operator = licensee / other recognised entity

NUCLEAR LIABILITY BASIC PRINCIPLES

4. Limited Liability Amount

- operator's liability limited in amount; investor relieved from ruinous liability claims
- in Japan: **unlimited liability**

5. Compulsory Financial Security

- operator to have financial security to ensure funds are available when needed; security must equal liability amount
- in Japan:
  - operator must have financial security (usually **insurance**) up to the amount specified for each category of site or transportation (**¥120 billion for NPPs**) under Compensation Act
  - **Governmental Indemnity** up to **¥120 billion** for non-insurable risks (e.g. earthquakes, tsunami, eruption) pursuant to Indemnity Act

Operator Nuclear Liability Exemptions

*Operator shall be liable … except in case the damage is caused by a **grave natural disaster of an exceptional character** or by an **insurrection** (Section 3 Compensation Act)*

- Accident due to a magnitude 9.0 earthquake followed by a tsunami
- Intensity at the TEPCO Fukushima Daiichi NPP was 6+

World Great Earthquakes

Earthquakes (after 20th century)	Magnitude
Chile Earthquake (1960)	9.5
Alaska Earthquake(1964)	9.2
Sumatra Earthquake (2004)	9.1
Tohoku Earthquake(2011)	**9.0**
Kamchatka Earthquake (1954)	9.0

(Source: United States Geological Survey)

Great Earthquakes in Japan

Earthquakes (after Edo period)	Magnitude	Reference
Tohoku Earthquake(2011)	**9.0**	**Intensity at Fukushima Daiichi Nuclear Power Plant is 6⁺**, which was observed at 7 points in Japan for 2001-2010.
Hoei Earthquake (1707)	8.6	
Ansei Tokai Earthquake (1854)	8.4	
Ansei Nanakai Earthquake (1854)	8.4	
Meiji Sanriku Earthquake (1896)	8.2-8.5	

(Source: The Headquarters for Earthquake Research Promotion)

World Great Tsunami

Places	Height (m)
Shoup Bay (ALASKA) (1964)	67.1
Rhiting (Smatora/INDONESIA) (1930)	48.9
Tohoku Earthquake (Miyako) (2011)	**38.0**
Scotch Cap (ALASKA) (1946)	35.0

(Source: National Oceanic and Atmospheric Administration, Fact-finding Mission of Yokohama National Univ. and Disaster Prevention Research Institute of Kyoto Univ.)

Great Tsunami in Japan

Earthquakes (after Edo period)	Height(m)
Meiji Sanriku Earthquake (Sanriku-cho ryori) (1896)	38.2
Tohoku Earthquake (Miyako) (2011)	**38.0**
Hokkaido Nansei Oki Earthquake (Okushiri) (1993)	31.7
Yaeyama Tsunami (Ishigaki Island) (1771)	約30
Meiji Sanriku Earthquake (Tanohata)(1896)	29.1

(Source: Japanese Tsunami Damage Comprehensive List)

Operator Nuclear Liability Exemptions

- For Government, exoneration must not be triggered as the event was not « huge natural disaster beyond all expectations of humankind » or a « completely unimaginable situation » (Congress, 1951)

- Only the civil courts can legally interpret this exemption clause:
  => TEPCO has not requested the benefit of this exoneration

- Event not covered by private insurance:

  => Nov 2011: ¥120 billion Governmental Indemnity fully drawn

Scope of the Compensation

*"**Nuclear Damage**" means **any damage** caused by the effects of the fission process of nuclear fuel, or of the radiation from nuclear fuel etc., or of the toxic nature of such materials (which means effects that give rise to toxicity or its secondary effects on the human body by ingesting or inhaling such materials); however, **any damage suffered by the nuclear operator** who is liable for such damage pursuant to the following Section, **is excluded***
(Section 2 § 2 Compensation Act)

- Nature, form, extent and equitable distribution of compensation are usually determined by the national applicable law (i.e. where accident occurred)
- Causal link between the occurrence at the nuclear installation and the damage

=> Subject of the Second Part of the Legal Session

GOVERNMENTAL FINANCIAL SUPPORT

Where nuclear damage occurs in excess of the financial security amount, *Government must give the operator such aid as is required for it to compensate the damage and as approved by the National Diet*

(Article 16 Compensation Act)

=> Subject of the Third Part of the Legal Session

Resolving Compensation Related Claims

Under law, the victim may at his/her own discretion, either individually or as part of a group, file a claim

- directly to the operator
- before the Reconciliation Committee (in its role of conciliation committee)
- before the civil courts

Nuclear Damage Compensation Dispute Resolution Center

- Alternative dispute resolution center established under the Reconciliation Committee in Sept 2011
- *From 1 Sept 2011 until 23 Mar 2012:*
  - 1,445 applications accepted
  - 1,372 cases in progress
  - 35 cases settled (including partial/provisional settlements)
  - 46 cases withdrawn/terminated

END OF FIRST PART OF LEGAL SESSION