

# The insurance sector's perspective on market capacity

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**Capacity:** *the maximum amount of liability in the aggregate that an insurer can accept without risking insolvency.*

# The insurance sector's perspective on market capacity

## OECD Paris Convention preamble:

'DESIROUS of ensuring adequate and equitable compensation for persons who suffer damage caused by nuclear incidents'

## Questions:

- Could we all do better in meeting these objectives?
- Is the current NTPL regime restricting the availability of insurance capacity?
- Is the current regime protecting the nuclear industry from the true cost of its catastrophic accidents?

# Objectives of special NTPL regime:

- 1<sup>st</sup> - to ensure **adequate** compensation of damage caused to persons, property and the environment by a nuclear incident;
- 2<sup>nd</sup> - to make sure that nuclear operators assume **full responsibility** for any breach of that safety while not being exposed to an excessive liability burden;
- 3<sup>rd</sup> - to ensure that those associated with the construction, operation or decommissioning of nuclear installations (such as builders or suppliers) are exempt from that liability. (*Draft exposé des motifs Paris Convention - OECD*)

*Or:*

- to ensure prompt & adequate compensation for nuclear damage without...exposing the infant nuclear industry to excessive burdens. (*Explanatory note for 1963 Vienna Convention - IAEA*)

## NTPL indemnity limits - a selection (in \$):

<b>Japan</b>	<b>1,153m</b>	<b>Switzerland</b>	<b>1,102m</b>
<b>U.K.</b>	<b>229m</b>	<b>P.R.China</b>	<b>45m</b>
<b>S Africa</b>	<b>440m</b>	<b>Spain</b>	<b>1,634m</b>
<b>U.S.A.</b>	<b>375m</b>	<b>Revised Paris</b>	<b>953m</b>

*Amounts exclude costs/claims handling limits*

# The special NTPL regime & insurance:

## *The risk...*

- Failure to control the nuclear chain reaction leading to a catastrophic radioactive contamination of a widespread area.

## ***Constraints on insurers' capacity:***

- Nuclear events are '*high severity but low frequency*'.
- The event is concentrated on a single site, due to channelling.
- There are only c. 500 sites globally, with a relatively small premium base.
- Little *actuarial* data as industry loss record is good; mainly *theoretical* calculations.
- Wide scope of old NTPL cover: nuclear damage encompasses gradual & catastrophic events.
- Some aspects of new, wider cover are currently uninsurable (e.g. 30 years period to bring claims).

# Catastrophic nuclear loss history (off-site):

- **Chernobyl 1986:**
  - Economic loss >\$100bn?
  - Still a drain on Government budgets in Ukraine & Belorussia.
  - Material trans-boundary contamination.
- **Fukushima 2011:**
  - Paid compensation: \$31.858bn\*.
  - Site stabilisation, clean-up & decommissioning: \$10-\$20bn +?
- **Industry wide:** 15,500 operating years & 2 catastrophe losses:
  - 1 loss per 7,750 years opex

*\* Sourced from: TEPCO; amounts at 10/01/14; JPY104=\$1*

# Possible improvements to benefit victims:

- Use risk transfer market's existing claims infrastructure for all claims.
- Materially raise the threshold of state intervention in nuclear liability.
- Consider standardising current statutory obligations to (e.g.) c. €3bn to maximise utilisation of existing **full scope** capacity (nuclear mutual/industry schemes, some insurers, governments).
- Use of risk transfer market for providing substantial excess **catastrophe** cover as a greater safeguard for victims & taxpayers.

# What insurers can pay for non nuclear losses:

The top 5 costliest catastrophes (*insured losses*):

- 2005            **\$72bn** Hurricane Katrina wind & flooding
- 2011            **\$35bn** Tohoku earthquake & tsunami (excl. Fukushima)
- 2012            **\$30bn** Hurricane Sandy wind & flooding
- 1992            **\$25bn** Hurricane Andrew wind & flooding
- 2001            **\$23bn** US terrorism attacks WTC, Pentagon etc.

**The size of the global non-life insurance market:**

- 2012            \$1,991,650,000,000 global insurance premium



# The insurance sector's perspective on market capacity

- The risk transfer market could offer substantially more secure catastrophe capacity;
- Can the regimes be changed so that taxpayers & victims can benefit from it?

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