

NRA Presentation  
for  
Haut Comité pour la Transparence et  
l'Information sur la Sécurité Nucléaire(HCTISN)

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# After the TEPCO's Fukushima Daiichi NPS Accident

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Fundamental changes were made for both

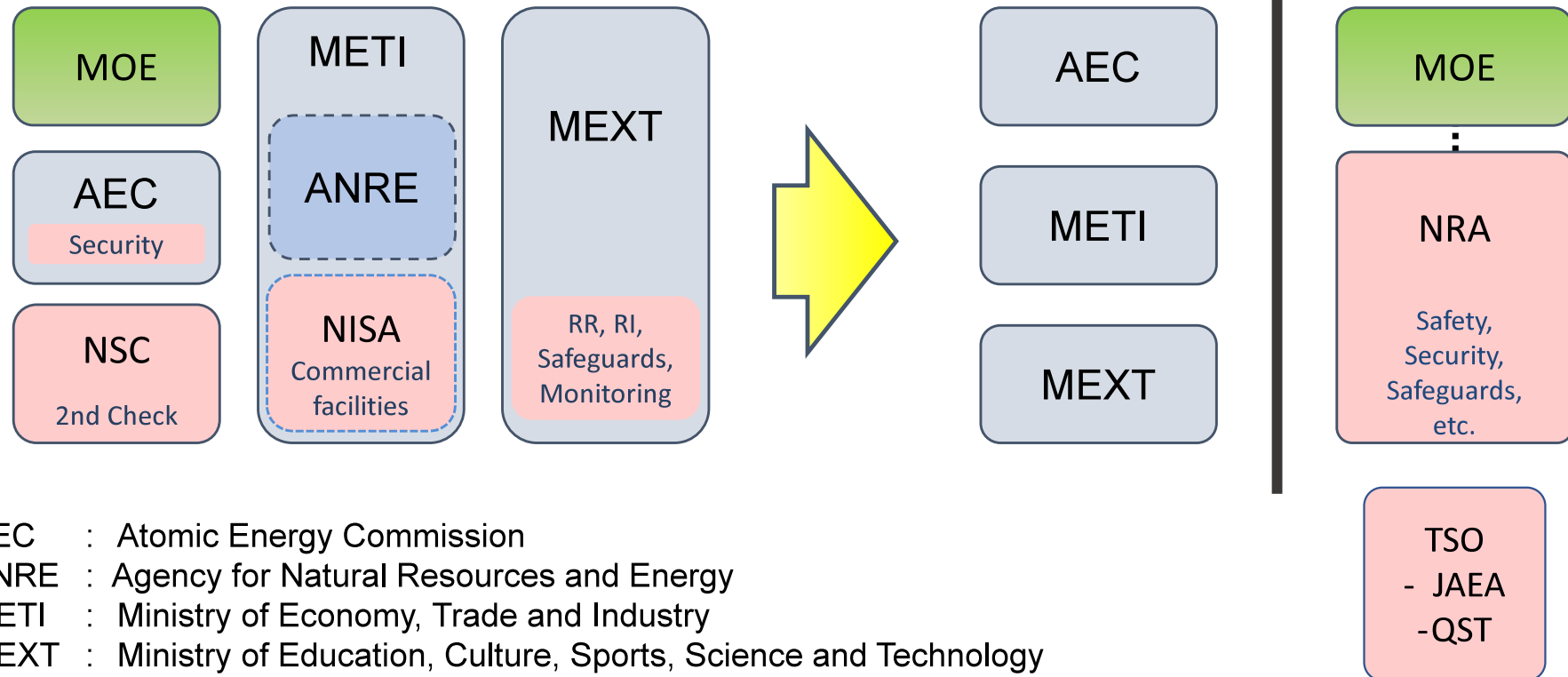
- Regulatory Body
- Regulatory Framework

# Regulatory body - NRA

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- Independence
- Transparency

# Independence



- AEC : Atomic Energy Commission
- ANRE : Agency for Natural Resources and Energy
- METI : Ministry of Economy, Trade and Industry
- MEXT : Ministry of Education, Culture, Sports, Science and Technology
- MOE : Ministry of the Environment
- NISA : Nuclear and Industrial Safety Agency (abolished)
- NSC : Nuclear Safety Commission (abolished)
- JAEA : Japan Atomic Energy Agency
- QST : National Institutes for Quantum Science and Technology

# Transparency

- Committee meetings
- Review meetings with licensees
- Press conference/briefing
  - Chair of commission
  - Director of the secretariate
- Meeting with CEOs of licensees
- Meeting with CNOs of licensees



# Transparency

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- Meeting with commission members and local governors
- Meeting with public
- Public comments
  - Regulatory requirements, guides
  - Review results for permission

# Transparency

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- Advice from international advisory board
- International arena (multi-lateral), e.g.,
  - IAEA, CSS, INSAG, AdSec, IRRS, IPPAS
  - OECE/NEA, CNRA, CSNI
  - WENRA
  - INRA
- International arena (bi-lateral), e.g.,
  - France
  - US
  - UK
  - Korea/China

# Regulatory Framework

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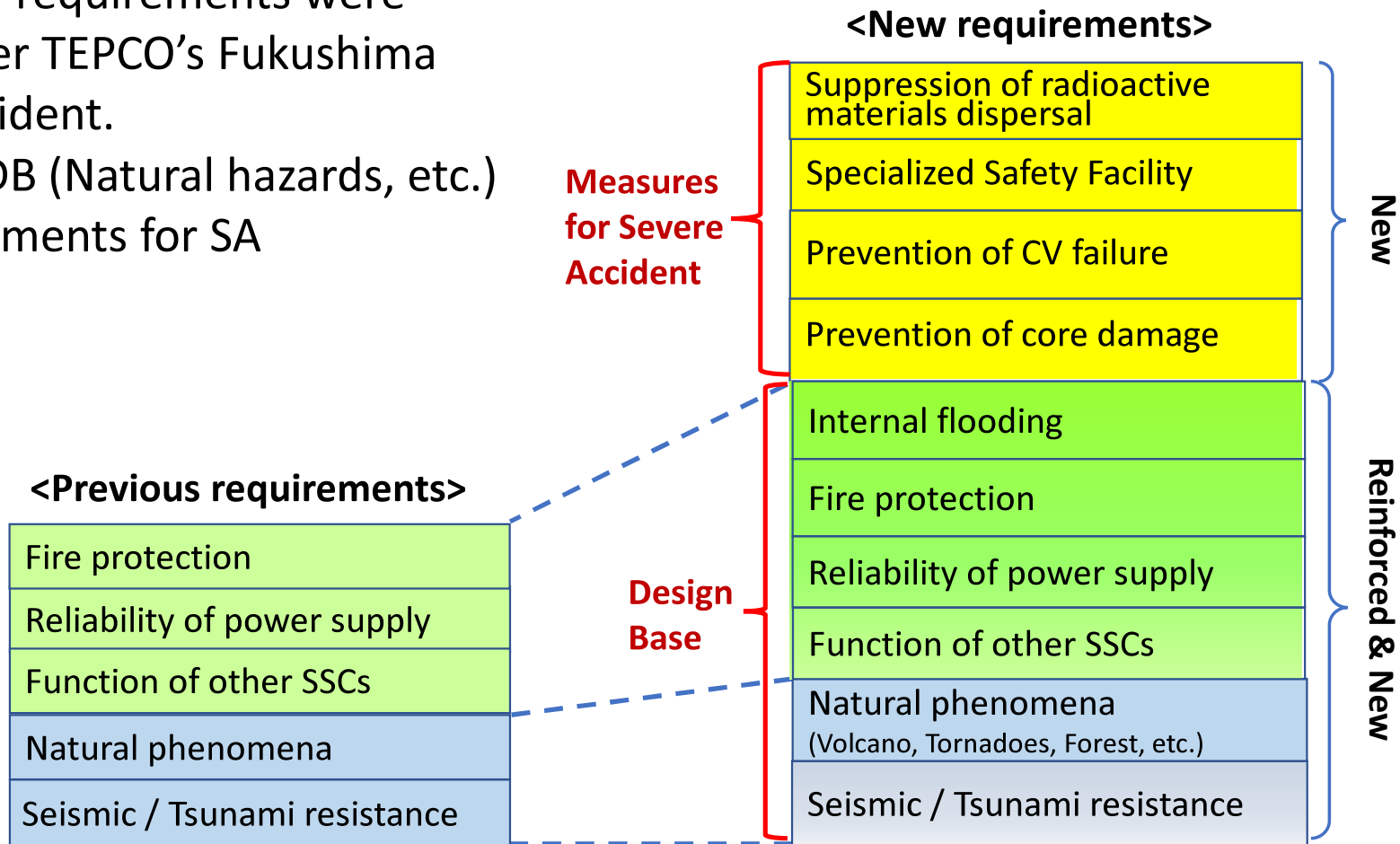
- Strengthen regulatory requirements
- Introduce back-fitting system
- Limit operational period to 40 years, extension up to 60 years



# New Regulatory Requirements

New regulatory requirements were established after TEPCO's Fukushima Daiichi NPS accident.

- Reinforced DB (Natural hazards, etc.)
- New requirements for SA

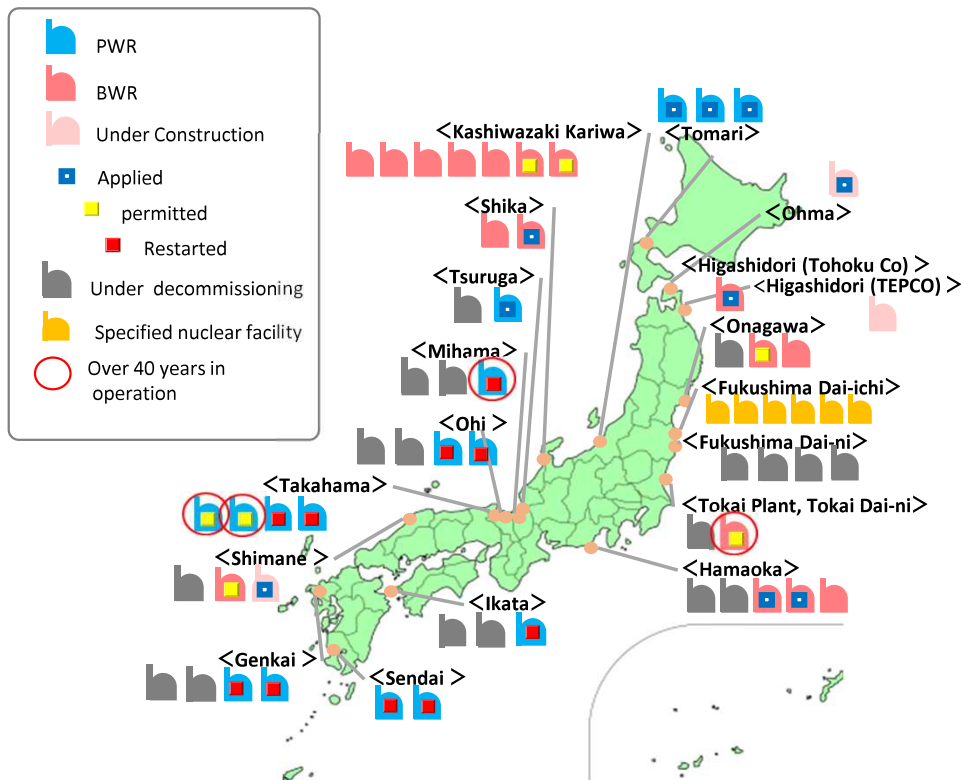


# Back-fitting

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- “Continues improvement” is the most important lesson
- Up-to-date knowledge should always be applied to current fleets
- Apply firstly to new regulatory requirements - all existing reactors are required to satisfy the new requirements before restarting

# Status of Conformity Reviews



As of February 2023

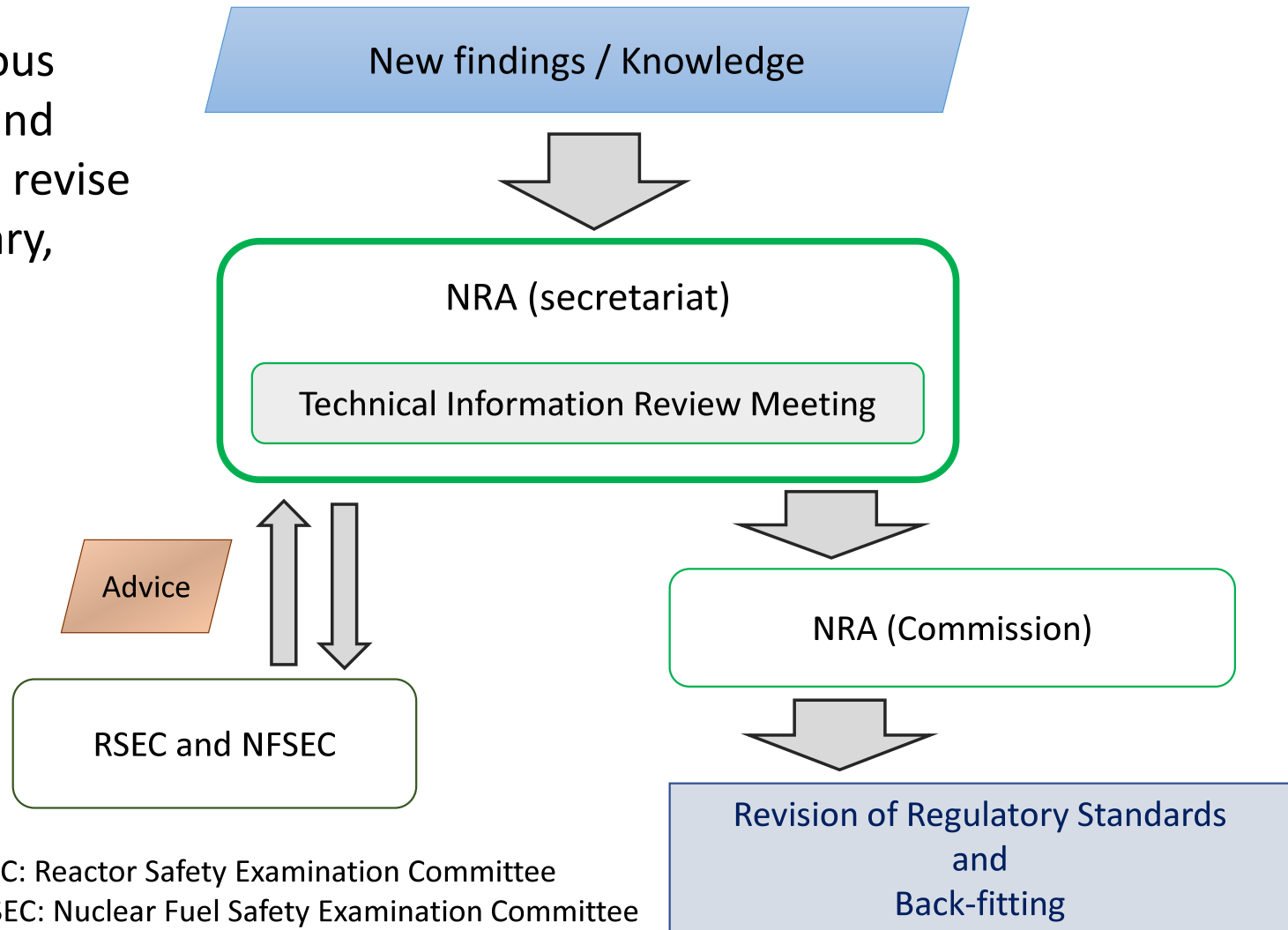
Total <sup>*1</sup>	60	
Applied	27	PWR 16 BWR 11
Permitted	17	PWR 12 BWR 5
<i>Restarted</i>	<i>10</i>	<i>PWR 10</i> <i>BWR 0</i>
Under decommissioning	24	PWR 8 BWR 15 GCR 1
Others	9	PWR 0 BWR 9

\*1 Including NPPs under construction (3 reactors) and Fukushima Daiichi unit 1-6

\* The NRA granted permission of change in reactor installation to comply with the new regulatory requirements in relation to Shimane NPS Unit 2 of Chugoku Electric Power Co., Inc. on September 15, 2021.

# Process for new findings and knowledge

NRA efforts on continuous improvement - collect and review new knowledge, revise requirements if necessary, and require back-fitting



# Operational Period

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After the TEPCO's Fukushima Accident -

- Legally set the limit for NPP's operation up to 40 years after start operation.
- The NRA can give permission to extend operational period, only once, up to 60 years.
- This permission is given only if NPPs comply with the latest technical standards considering aging of nuclear facilities by long time operation.

# Operational Period

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## Recent progress -

- The GOJ announced the "Basic Policy for the Realization GX" in Dec 2022, which included “new system regarding the operation period”.
- While maintaining the current regulation system (40+20 years), additional extensions will be allowed only for a suspension period.
- The period can include the suspended period due to conformity review to new regulatory requirements.

# Operational Period

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## Response of the NRA

- NRA discussed, asked public comments, and decided to stipulate following points in the Nuclear Regulation Act.
  - If licensee continues to operate the plant over 30 years, a technical evaluation of aging degradation must be conducted not exceeding every 10 years.
  - The operator must prepare a long-term facility management plan based on this result and obtain approval from the NRA.
- This revision of the act is discussed in the current Diet session.
- NRA continues to discuss the detail of the regulation under the specific task group, which is open and livestreamed.

Thank you for your attention

<https://www.nra.go.jp/english/index.html>