

Presentation for Panel on Nuclear Latency, APNHI

November 10, 2016

**“Filling the Gap
—Writing Nuclear History of Japan from Different Angles”**

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1. Overview of History of U.S.-Japan Bilateral Nuclear Cooperation

Dec. 1953: “Atoms for Peace” address by President Dwight Eisenhower

Mar.1954: Lucky Dragon Incident by Bravo Shot: dramatic sea-change of public opinion

Apr.1954: First Atomic Energy Budget, ¥ 235 million, passed by Diet

—Yasuhiro Nakasone was a cheer leader of introducing the budget.



Aug. 1954: U.S.’s Atomic Energy Act

Nov. 1955: U.S.-Japan Nuclear Research Agreement; first bilateral N treaty, but focusing on R&D

Sep. 1956: “Atomic Energy Development and Utility Long-term Plan,” by Japanese AEC

—“**Fuel Cycle, Breeder-R and Reprocessing**” was mentioned for the first time in Japanese national policy paper. Since then, independent nuclear fuel cycle has been Japanese basic national energy policy until today.

▼ *”I always thought about how Japan with scarce natural resource could become independent. A trigger of Japanese initiating a war with U.S was Japanese invasion of Indochina where French control weakened. A fundamental cause of the disaster 70 years ago was the matter of resources.”*
(Yoshinori Ihara, a drafter of 56 Plan, later Deputy Minister of ST Ministry and AEC V.Chair)



Feb.1968: Revision of U.S.-Japan Nuclear Cooperation Agreement

—more comprehensive treaty for bilateral commercial cooperation; permitting Japanese commercial utilities’ access to U.S.-origin enriched uranium; non-proliferation factor, also

Mar.1970: Entry into force of Nuclear Non-proliferation Treaty(NPT)

Jun. 1971: Starting construction of Tokai Nuclear Fuel Reprocessing Plant

Mar.1973: Revision of the U.S.-Japan N-Cooperation Agreement in 1968

—**“Case-by-Case Consent” of the US would be needed for separating plu. from U.S. fuels**

May 1974: India’s Nuclear Explosion

Jun. 1976: Japanese ratification of NPT

Apr. 1977: President Carter’s New Nuclear Non-proliferation Policy

—**indefinite suspension of domestic commercial reprocessing; pressuring allies to follow suit**

Apr.1977: U.S.-Japan Tokai Reprocessing Negotiation started

—**U.S. demanded “Co-Processing” which is more proliferate-resistant, but, construction of Tokai facility is almost finished.**

Sep.1977: Joint Statement by U.S. and Japan on conclusion of Tokai reprocessing

— **for the first 2 year, 99-ton of SF reprocessing was permitted; after initial 2 years, the plant should be converted into Co-Processing facility, only if U.S. and Japan prove that “C-P is technically feasible and effective.” →It was not the case, because of Tokai’s poor operation.**

▼ *Nightmare experience for Japanese Nuclear Village; “It was like a national crisis came!”*
(Tetsuya Endo, a former diplomat, chief negotiator of 1980s revision and later AEC V.Chair)

Nov.1977: First Plutonium extracted at the Tokai Plant

Mar.1978: U.S. Nuclear Non-Proliferation Act (NNPA) taken into effect

May 1981: Pres. Reagan and PM Suzuki agreed to start consultation on revision of the bilateral treaty.

Jun.1982: Japanese Negotiation Guideline established

—to obtain **Comprehensive Advance-Consent** for purex reprocessing from U.S.

Aug.1982: U.S.-Japan negotiation for revision of the 1968 Agreement started

Jul. 1984: Japanese utilities asked Aomori pref. and Rokkasho village to agree to host nuclear fuel cycle facilities(reprocessing, enrichment and low-level waste disposal facility).

—Later, Governor Masaya Kitamura accepted the proposal.

▼“History of Betrayal” “We have a history and memory of betrayal in Aomori. The Nuclear Fuel-Cycle policy is still on-going, so I can’t judge whether we are betrayed or not (by the central government).” (Naomichi Fujikawa, a former senior official of Aomori and aide to Kitamura)

Jan.1987: Initial bilateral agreement reached by 2 nations; **Comprehensive Advance-Consent promised**

Nov.1987: **Formal Nuclear Agreement including CAC signed by U.S. and Japan**

Jul.1988: New U.S.-Japan Nuclear Cooperation Agreement taken entry into force

Mar.1992: Enrichment facility in Rokkasho started to be operated

Apr.1993: Construction of the Rokkasho Reprocessing Plant started

Mar.2006: Active Testing of the Rokkasho Reprocessing Plant started

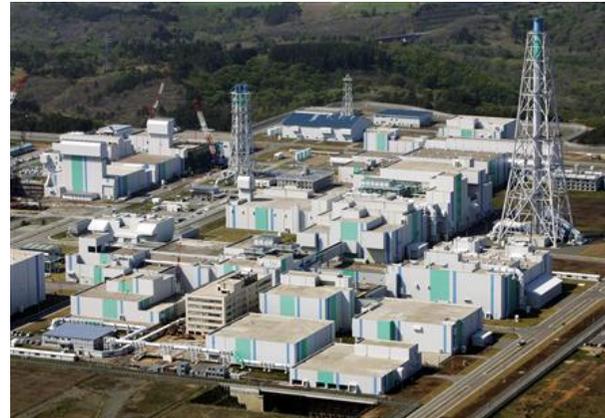
Mar.2011: Fukushima Nuclear Accident taken place

Sep.2012: “Evolutionary Energy and Environment Strategy” decided by DPJ Noda cabinet

—METI Minister Edano and DPJ Policy Chair Maehara tried to change the Fuel Cycle Policy, but failed. The biggest reason is resistance of Aomori which sent “intimidating” message to then DPJ government that it would not receive high-level radioactive wastes to be returned from UK.

Apr. 2014: “Basic Energy Plan” decided by Abe cabinet; GOJ will continue to promote N-fuel cycle.

Mar.2016: Operation of the Rokkasho Reprocessing Plant will start ?



2. “Special Privilege” for Japan—Case Study 1:

Tokai Reprocessing Negotiation in 1977

○Carter-Fukuda Summit in March 22, 1977 in Washington D.C.

▼*“There is no need for reprocessing spent fuels. The US invested \$1billion for constructing the reprocessing facility, but we would restrain ourselves for operating it. Each nation has to participate in restraining of reprocessing with willingness. Reprocessing is needless and economically useless.” (Carter)*

▼*“The plant will be able to be operated in experimental scale. This is the biggest challenge for Japan at this moment as well as the biggest concern for me.”(Fukuda)*

(Japanese Memorandum of Conversation between Fukuda and Carter, Mar. 1977)



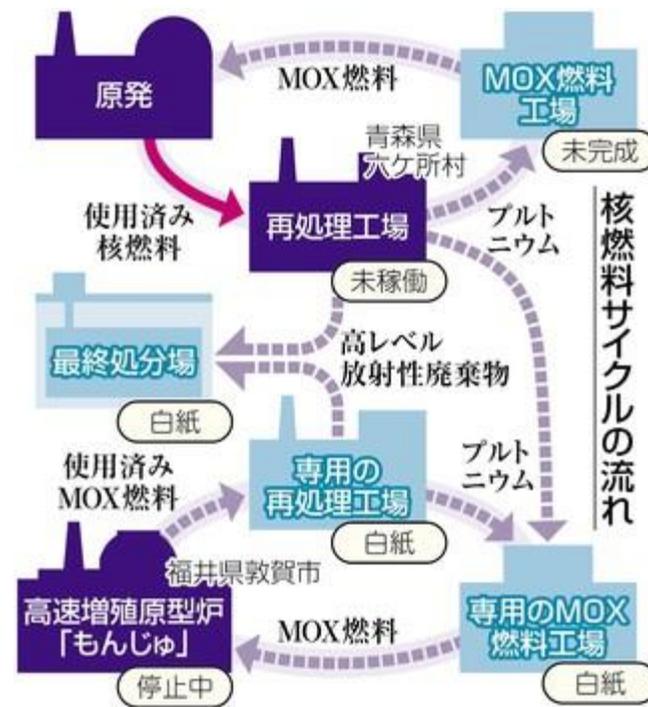
Full-scale collision of two allies

○”Life and Death” Issue for Japan

▼“This is life and death issue.”(Fukuda)

(Memorandum from Secretary of State Vance to President Carter, July 31, 1977)

→ **Reprocessing is essential issue for Japan in terms of its energy security and independence**



○Dilemma for U.S. =Guardian of NPT

▼*Carter “This bothers me a lot.” (Memorandum of President Carter to Zibgniew Brzezinski, Aug. 15, 77)*

→Facing tremendous pressure from Japan, the U.S. tried to find a middle ground between maintaining its strict non-proliferation principle and satisfying its important ally.

○Hidden Agenda and Technical Compromise

▼*“At that time, Japanese automobile export was a concern for the U.S. government. The U.S. seemed to make a judgment that it is better to cherish bilateral friendship and make its case on trade-conflict with Japan rather than chasing Japan into corner on the reprocessing issue.” (Kumao Kaneko, a former Japanese negotiator)* = ①Auto-mobile trade was a hidden agenda behind the Tokai negotiation.

▼*“During the negotiation, Japan proposed ‘Co-Conversion(Extraction)’ in order to diffuse pressure from the U.S.” (Saburo Kikuchi, a former GOJ engineer)* =②There was a technical alternative which could make a political compromise and save Carter’s face.

▼*“Ambassador to Japan Mike Mansfield played an important role (for persuading Carter)” (Hiroshi Ota, another Japanese negotiator)*=③ Human factor played a significant role in some extent.

→Japan succeeded in achieving its original benchmark thanks to these 3 factors above.

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WASHINGTON

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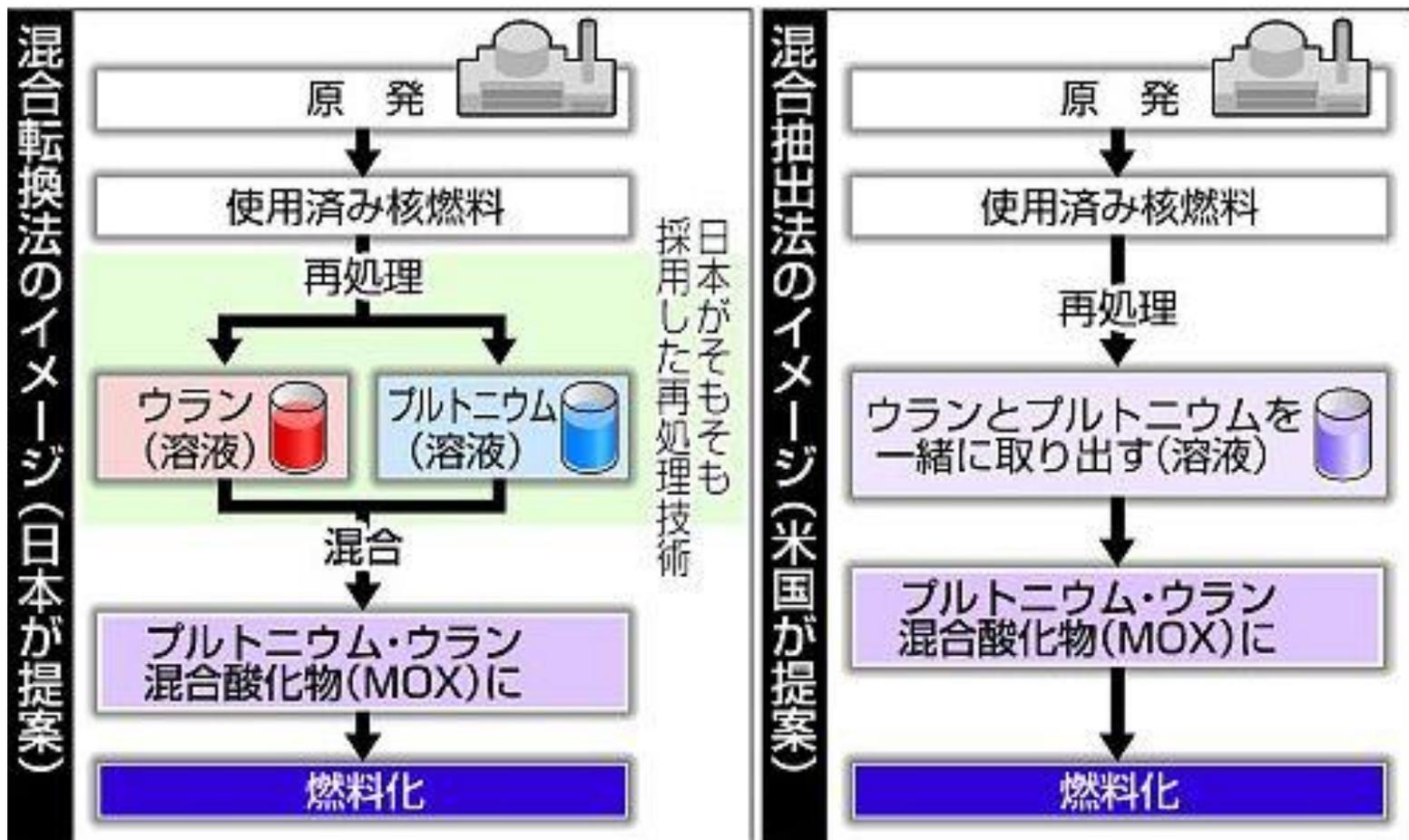
T. Zbig

This bothers me a lot.

Assess option 1 + option
2, strict commitments from
BOJ re future restraints
and compliance & INFCE,
our furnishing Plutonium
fuel, etc.

Set up meeting for
early next week & State,
ERDA, NRC, EPA, ACDA,
CEQ, NSC - (one person each) -
with me. Same group
may meet & G. Smith before
he leaves. I'll try to
decide next week -

J.C.



3. “Special Privilege” for Japan—Case Study 2

Revision of U.S.-Japan Nuclear Cooperation Agreement in 1980s

○National Crisis for the Nation with very Poor Natural Resource

“In 1977 when the Tokai facility was finished and ready for operation, the U.S. tried to stop the process. It was like a national crisis came.” (Tetsuya Endo, a former chief negotiator)

→ **Such an antagonistic experience taken by Japanese nuclear village in 1977 on the Tokai reprocessing issue created strong motivation to revise the 1968 US-Japan Nuclear Cooperation Agreement. Also, change of administrations on both sides gave a fresh start for re-setting a new rule.**

○Supportive Attitude of President Reagan

▼A series of economic reform packages proposed by PM Nakasone, which tried to open up the Japanese market and deregulate exports and investments from the U.S., was highly receptive and appreciated by President Reagan himself. (based on my archival research at the Reagan Presidential Library in 2012)



▼ *Besides these effects of Nakasone's economic reform, strengthened bilateral defense relation between the U.S. and Japan like ASW cooperation created an extra following wind for smooth negotiation on the nuclear deal.*

→ **A strong bond of Ron-Yasu brought about a very positive environment for giving a special privilege to Japan.**

○ **Divided Opinion in the U.S. Administration, but...**

▼ *DOS and DOE supported Comprehensive Advance-Consent(CAC) for Japanese reprocessing.*

▼ *DOD and NRC were against CAC for Japan.*

“It would create a bad precedent.”(DOD); “IAEA inspection has no technical method to address MUF problem--800t/y reprocessing result in 300-400 Kg of MUF inside pipes of the Rokkasho plan” (NRC)

(based on my interviews with Endo and Bill Martin)



→ **There were some reasonable reasons for the U.S. government to decline the Japanese request for CAC. The Reagan administration was not united to support the revision which meets the Japanese demand.**

○Final Decision by the White House in 1988

▼*“It was a meeting in the White House Situation Room, which is the basement of the White House. There were five people in the room. So – and I can picture it in my mind. So, here’s the Sit. Room. Chairing the meeting was Colin Powell, the famous general... At that particular time, we were coming off the Cold War. We were very concerned about nuclear material globally, we were uncertain of our future with Russia. I mean, it was an awkward time... However, Powell said, ‘But I vote for the agreement, because I know President Reagan’s view’. President Reagan appreciates and trusts Japan, and he is in favor of this agreement.”(Bill Martin, then Deputy Secretary of Energy)*

→**Highest political decision could overcome any technical difficulty.**

Such a strong bond of two leaders strengthened by other crucial agendas like opening-up Japanese market and bilateral military cooperation brought about such a unique result and an exception in terms of non-proliferation diplomacy.

Also, maybe, Republican may tend to put real politics in front of universal principle? (There is such type of notion among some Japanese policy elites, like “Republican treats us better than Democrats”.)

4. Conclusive Points and “What’s the matter in the future?”

- **U.S. –Japan nuclear cooperation has such a long, complicated and unique history, which was influenced by a variety of factors.**
- **A very strong perception still exists in GOJ, especially, MOFA**
—**“The 1988 revision of the U.S.-Japan nuclear agreement is such a great diplomatic success for the Japanese foreign policy history after the WWII.”**
“Comprehensive Advance-Consent is a big diplomatic trophy.”
- **This perception with some complex sentiment toward the U.S. tends to deprive Japanese policy making of flexibility.**
- **This trend is backed and strengthened by unique policy-making culture;**
 - ① **Bureaucratic Inertia=“Followings precedents is the best way to avoid risk .”**
 - ② **No Periodical Policy Review=“Policy Cycle Theory” has never worked in Japan with a small number of exceptions like the DPJ policy review after “3/11”.**
 - ③ **Stove-pipe Policy Making of Nuclear Policy=There are so diverse actors like**

METI, MEXT, AEC, Diet committees, private utilities and lobbyists, and users without real control tower handling key decision-makings.

○But...we still have 48 metric ton of separated plutonium without any MOX reactor running.

○“3/11” should be a fundamental policy-changer, but “they” are still dreaming on “Rosy Scenario,” despite many serious realities and difficulties they face now;

(1)Negative public opinion even on restarting reactors

(2)A few recent court-decisions which ordered to suspend future operation of nuclear reactors including Takahama 3 &4

(3)Governors hosting MOX reactors are so dubious about plutonium-thermal policy which was originally a stop-gap measure



5. Historian's Perspective

- History writings of Japanese nuclear policies have mainly focused on military and security dimensions; policy-making process of the Three Non-Nuclear Principles, realities of U.S. introduction of nuclear weapons into Japanese territory during the Cold War, potential option of nuclear-sharing between the U.S. and Japan, role of nuclear weapons at the time of military contingency surrounding Japan, the secret nuclear-transit arrangement between two allies, and nuclear non-proliferation cooperation of both nations.**
- However, there are an only limited number of books and published papers paying keen and precise attention to civilian dimensions of Japanese nuclear policy-making, especially its unique fuel cycle policy.**
- Since the DPJ governmental investigation on the Nuclear Secret Arrangements in 2009-10, far more official documents have been declassified than before. These documents include internal discussion-papers of MOFA regarding preservation of nuclear option through its nuclear fuel cycle (1969), negotiation records of the**

bilateral SG Agreement with IAEA (1970s), documents related to domestic policy arguments about Japanese signing of the NPT (1969-70) and memos of Prime Minister Sato's comments on the Three Non-nuclear Principles and potential nuclear use by the U.S. military (1960s).

○Some U.S. documents have been also declassified already at the National Archives at College Park and Presidential Libraries in Boston and Austin. Reagan items are still limited.

○Researching, analyzing and writing Japanese civilian nuclear history, especially policy-making of its unique nuclear fuel cycle which is other side of “nuclear coin,” is a challenging but necessary exploratory path for “filling the gap.”