

September 21, 2000

MEMORANDUM TO: Chairman Meserve
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield

FROM: Janice Dunn Lee, Director */RA/*
Office of International Programs

SUBJECT: VISIT OF MR. YASUSHI MATSUDA, PRESIDENT, NUCLEAR
POWER ENGINEERING CORPORATION (NUPEC),
SEPTEMBER 25, 2000

Mr. Yasushi Matsuda, the President of the Japan Nuclear Power Engineering Corporation (NUPEC), is visiting the U.S. to tour the safety research being conducted at the Sandia Laboratory (SNL) and observe the structural testing of the Pre-stressed Concrete Containment Vessel (PCCV), a joint NUPEC and NRC research program. Before visiting SNL, Mr. Matsuda will meet with the Commission and Office of Research on Monday, September 25, 2000. Attached are the meeting schedule, biographical information, country summary, and talking points for use during the visit.

Attachments: 1. Commission Schedule
2. Biographical Information
3. Country Summary
4. Background Information and Talking Points

cc: SECY
OGC
EDO
OPA
NRR
RES
NMSS

CONTACT: Kevin Burke, OIP
415-2317

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VISIT TO NRC OF
MR. YASUSHI MATSUDA
PRESIDENT
NUCLEAR POWER ENGINEERING CORPORATION
(NUPEC)
SEPTEMBER 25, 2000

SCHEDULE

9:30 a.m. Meeting with Commissioner Dicus
10:00 a.m. Meeting with Commissioner Merrifield
10:30 a.m. Meeting with Commissioner McGaffigan
11:00 a.m. Meeting with Commissioner Diaz
11:30 a.m. Meeting with Chairman Meserve
12:00 noon Lunch hosted by Chairman Meserve
1:15 p.m. Meet with Margaret Federline and RES senior staff
(Note: Ashok Thadani will be in Japan at the time of this visit and will meet with Mr. Matsuda's senior staff at NUPEC.)
1:45 p.m. Depart NRC

BIOGRAPHICAL INFORMATION:

Mr. Yasushi Matsuda (Attachment 2)

PREVIOUS CONTACT WITH THE COMMISSION

This is Mr. Yasushi Matsuda's first visit to the NRC as President of NUPEC.

ACCOMPANYING PERSONS

Mr. Masataka Miyashita, Senior Manager, Office of International Affairs, NUPEC
Mr. Eiji Yamada, General Manager of the Washington Office of the Japan Electric Power Information Center (JEPIC)
Mr. Nashiro Miyazawa, Director, JEPIC (Washington Office)
Ms. Sachiko Maeda, Interpreter

DISCUSSION TOPICS TO BE RAISED

The purpose of Mr. Matsuda's visit to NRC is to have the opportunity to introduce himself to the Commission and recognize the collaboration research work being conducted between NUPEC and the NRC. In his meetings with the Commission and the Office of Research, Mr. Matsuda is interested in learning about the NRC's experiences in developing regulations based on the use of PSA; and, in exploring future collaboration between the NRC and NUPEC. Mr. Matsuda will also be prepared to discuss the ongoing reorganization of Japan's nuclear regulatory bodies.

BIOGRAPHICAL INFORMATION**First & Family Name:** Yashushi MATSUDA**Date of Birth:** November 24, 1928**Educational Background:** Graduated from Tokyo University (Electrical Engineering) in March 1957**Occupational Career:**

April, 1957	Entered Ministry of International Trade & Industry (MITI)
April, 1974	Director of Power Reactor Development Division, Atomic Energy Bureau, Science & Technology Agency (STA)
August, 1975	Director of Reactor Regulation Division, Atomic Energy Bureau, STA
March, 1978	Director of Technology Division, Public Utilities Department, MITI
January, 1981	Deputy Director-General for Research Affairs, Agency of Industrial Science and Technology, MITI
October, 1982	Director-General, Agency of Natural Resources and Energy, MITI
June, 1985	Research Advisor, The Institute of Energy Economics Japan
June, 1988	Managing Director, Tohoku Electric Power Co. Inc.
June, 1988	Vice-President, Tohoku Electric Power Co. Inc.
June, 1997	Executive Advisor, Tohoku Electric Power Co.
April, 1998	President, Nuclear Power Engineering Corporation (NUPEC)

JAPAN

Nuclear Program

Nuclear Power

Ten utilities operate 51 nuclear power reactors (48,278MWe) that generate 33.8% of the electricity in Japan. The government's target for 2010 is to increase this amount to 42%

Nuclear Fuel Cycle

Japan operates a complete fuel cycle that includes 2 enrichment facilities, 6 fuel fabrication facilities and 1 reprocessing facility (1 full-scale reprocessing facility under construction)

Waste

There is one LLW facility. Japan plans to vitrify HLW and store it in surface facilities for 30-50 years before its final deep underground disposal. The Japanese Cabinet has formally declared that a spent fuel facility will be built by 2010.

Research and Development

NRC has an active program of nuclear safety research with Japan. Research with the Ministry of International Trade and Industry (MITI) is conducted through NUPEC and research with the Science and Technology Agency is through the Japan Atomic Energy Research Institute (JAERI). In recent years, collaborative research with NUPEC has included: PRA, Concrete Containment Vessel Seismic Testing, Seismic PRA Margin Studies, Containment Pressure Modeling, and Dry Cask Storage and Transportation.

Nuclear Regulatory Structure

In response to the JCO Company criticality accident and other recent nuclear events in Japan, the government of Japan has begun to take measures to strengthen their nuclear regulation. The government and nuclear industry would prefer to continue a "double-check system" of two regulatory organizations to police the industry and maintain safety. However, some Japanese Diet Members believe the "double-check system" is flawed and might even have been a contributing factor to the recent events and the JCO accident.

The regulatory and related changes that have taken place, and those scheduled to take place in January 2001, are in three areas: new legislation; changes at the Ministry of International Trade and Industry (MITI), the Nuclear Safety Commission (NSC) and the Science and Technology Agency (STA); and establishment of a Nuclear Safety Network (NSnet).

NEW LEGISLATION: Two new laws were put into place shortly after the JCO accident. These are (1) a partial revision of the law on nuclear source material, nuclear fuel material, and reactors, and (2) a special law on emergency preparedness for a nuclear disaster. The latter places more responsibility on the central government and on the nuclear operator and clarifies responsibilities and actions to be taken in the case of a crisis. Other key features of the laws include:

- Authorizing the Prime Minister to declare a state of emergency and dispatch Japan's Self-Defense Forces.

- Designating the central government, not the local governments, as the authority for making decisions on whether to evacuate residents or advise them to stay.
- Establishing Off-Site Centers near nuclear plants and related facilities to serve as information hubs which could be used jointly by the central government, prefectural government, and local municipalities in the case of a nuclear emergency.
- Expanding the central government's regular inspection authority over nuclear facilities to cover fuel processing plants. Experts for nuclear disaster prevention will be designated by NSC and MITI to serve as inspectors at these sites.

REORGANIZATION OF THE MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY (MITI): Beginning in January 2001, MITI will assume a much larger regulatory role. It will be responsible for the primary safety examinations of nuclear power plants, fuel facilities and waste management. To staff up for its new regulatory inspection responsibilities at fuel facilities, MITI is hiring 100 additional inspectors. (Note: in January 2001, MITI's name will be changed to the Ministry of Economy and Industry (MEI). Within MEI there will be the establishment of the Agency of Nuclear Safety and Industrial Safety (ANSIS) to replace the current Agency of Natural Resources and Energy.

EXPANSION OF THE NUCLEAR SAFETY COMMISSION (NSC): The Nuclear Safety Commission (NSC) and its Secretariat have been removed from the Science and Technology Agency (STA), and placed temporarily in the Prime Minister's Office. Following a special transfer of responsibility, they will then be shifted to the Cabinet Office in January 2001. Since the JCO accident, the NSC Secretariat staff has been expanded from 20 to 100 people. Many of the new staff experts are coming from academia and the private sector. The Japanese regulatory process uses a "double check system", and the NSC will be involved in the secondary examination stage. The NSC will also be responsible for the planning and review of safety research in Japan.

CHANGES AT THE SCIENCE AND TECHNOLOGY AGENCY (STA): The STA (which will be combined with the Ministry of Education in January 2001 to form the Ministry of Education, Science and Technology (MEST)) will no longer be responsible for nuclear fuel fabrication facilities, spent fuel reprocessing and nuclear waste disposal. MEST will continue to regulate research reactors, non-commercial reactor development, and the use of nuclear materials. We understand that MEST may also continue to be responsible for safeguards and physical protection issues.

Non-Proliferation

Japan is a member of the International Atomic Energy Agency (IAEA) and became a party to the Treaty on the Non-proliferation of Nuclear Weapons (referred to as the Non-proliferation Treaty) on June 8, 1976. The Safeguards Agreement with the IAEA, required by The Non-proliferation Treaty, entered into force December 2, 1977 and is referred to as INFCIRC/255.

IAEA safeguards are applied in Japan pursuant to the Non-proliferation Treaty. Japan is considered as having full-scope safeguards coverage on its peaceful nuclear activities.

An Agreement for Peaceful Nuclear Cooperation exists between the USA and Japan. This Agreement entered into force June 17, 1988 and the termination date is June 2018. Sensitive Nuclear Technology transfer is not covered under this Agreement. This Agreement is a post-Nuclear Non-proliferation Act (NNPA) type Agreement and meets all of the NNPA requirements.

Japan is also a member of the Nuclear Suppliers Group and the Zangger committee.

Relations with the NRC

Bilateral Arrangements and Agreements

Japan was NRC's first bilateral partner, signing a trilateral (MITI-STA-AEC/REG) in May 1974, and has continued as an active and strong partner in the sharing of safety information and confirmatory safety research.

Commission Visits

Chairman Meserve April 2000

Commissioner Diaz April 2000

Commissioner Dicus May 2000

Foreign Assignees

Japan's regulatory and research institutions have taken full advantage of the Commission's Foreign Assignee program. Each year at least one and usually two assignee's work at NRC for up to 12 months.

BACKGROUND AND TALKING POINTS

SAFETY COLLABORATION

The NRC and MITI, with its safety research partner NUPEC, share a long history of confirmatory safety research. International research cooperation is growing in importance as research budgets have been declining.

Suggested Talking Points:

The Commission may wish to:

- acknowledge the value of NRC's safety collaboration with NUPEC
- inquire about their current budget, and future funding trend

PSA

Japan's nuclear regulatory bodies have incorporated the concept of PSA in the evaluation of accident management, and are working to further its application into all of its regulatory activities.

Suggested Talking Points:

The Commission may wish to:

- inquire about lessons learned in their study of PSA and application to regulations
- inquire about future developments

REORGANIZATION

Japan's nuclear regulatory bodies are in the process of reorganizing (scheduled to be completed by January, 2001) as a government response to strengthen their regulatory regime following the 1999 JCO criticality accident.

Suggested Talking Points:

The Commission may wish to:

- inquire about the division of responsibilities in the reorganization
- inquire if the reorganization will have an impact on NUPEC
- inquire if NUPEC will be reorganizing