



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555

January 22, 2007

COMMISSIONER

MEMORANDUM TO: Chairman Klein
Commissioner McGaffigan
Commissioner Merrifield
Commissioner Lyons

FROM: Gregory B. Jaczko

SUBJECT: TRIP TO THE PEOPLE'S REPUBLIC OF CHINA AND SOUTH KOREA
(9/22/06 through 9/30/06)

From September 22-30, 2006, I traveled to the People's Republic of China and South Korea for meetings with the national safety authorities of each country and visited nuclear power plants and a nuclear component manufacturing facility. The purpose of my trip was to gain a better understanding of the state of nuclear safety regulation in the respective countries, their recent experience with new plant construction, and the capacity of the Korean manufacturing facilities.

Accompanying me on this trip were Terrence Reis, my Assistant for Reactors, and Cindy Rosales-Cooper, International Relations Officer, Office of International Programs. Virginia Curran, Second Secretary, Environment, Science, Technology and Health Section of the U.S. Embassy/Beijing accompanied me for most of my visits in China and Eugene Bae, Second Secretary, U.S. Embassy/Seoul accompanied me throughout my visits in South Korea.

Overall, I found the regulators in both the mainland China and South Korea to be cordial, open, and willing to work with the NRC in the interest of serving nuclear safety and I also found the regulated utilities to be candid and willing to allow full access to their facilities.

The trip was informative and productive and has already resulted in some additional agency collaboration in the area of emergency preparedness.

Information in this record was deleted in accordance with the Freedom of Information Act.
Exemptions 4, out of scope
FOIA/PA 2010-0290

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DATES, LOCATIONS, AND ORGANIZATIONS VISITED

Saturday, September 23 – Beijing, China

- Meet and greet with US Embassy Second Secretary Virginia Curran
- Dinner with Virginia Curran and NRC staff

Sunday, September 24 – Beijing, China

- Tour of Great Wall, Forbidden City, and Tiananmen Square Hosted by State Environmental Protection Administration

Monday, September 25 – Beijing, China

- Country meeting at U.S. Embassy
- Meet with senior officials of the State Environmental Protection Administration
- Meet with senior officials of the National Nuclear Safety Administration (NNSA)
- Travel to Shenzhen, China
- Dinner hosted by NNSA Guangdong Region

Tuesday, September 26 – Shenzhen Region, China

- Visit and Tour of the Daya Bay Nuclear Power Site
- Travel to Hong Kong

Wednesday, September 27 -- Hong Kong, China/Seoul, South Korea

- Travel to Seoul, South Korea
- Meet with U.S. Ambassador to South Korea Alexander

Thursday, September 28 - Jeonam, Korea

- Travel to Jeonam, Korea
- Visit and Tour the Yonggwang Nuclear Power Site
- Travel to Changwon, South Korea

Friday, September 29 - Chagwon, South Korea

- Visit and Tour the Doosan Heavy Industries forging, manufacturing, and fabrication facility
- Travel to Seoul

Saturday, September 30 - Seoul/United States

- Return to United States

DISCUSSION

PEOPLE'S REPUBLIC OF CHINA

Discussion with Regulatory Bodies

I held open and frank discussions with principals of the State Environment Protection Administration and the National Nuclear Security Administration on the following broad topics.

- Bilateral Cooperation with the U.S.
- Nuclear Power Development in China
- Selection Process for Technology for Nuclear Power Expansion
- Possible Cooperation on AP-1000
- Multinational Design Evaluation Program
- License Extension
- Inland Nuclear Power Plant Siting
- Emergency Information Systems
- Radioactive Source Management
- NNSA Growth and Resource Challenges
- Nuclear Waste Disposal
- Recent Construction Experience

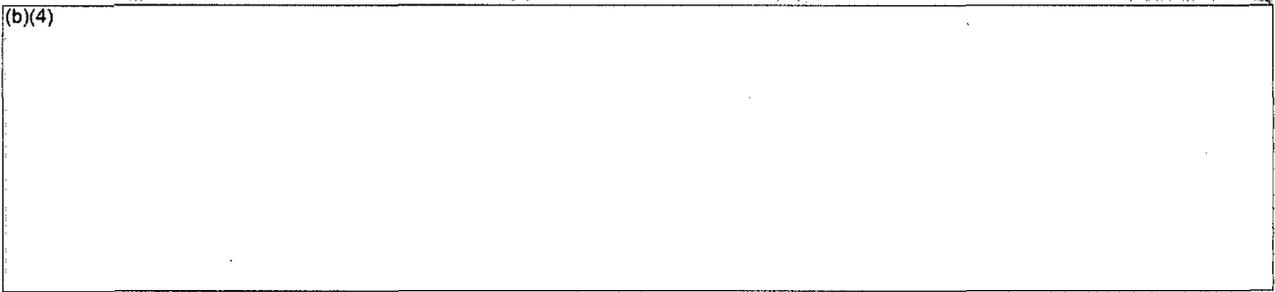
The principals involved in the discussions were:

- Wang Yuqing, Vice Minister of SEPA
- Li Ganjie, Assistant Administrator, Director General, NNSA

Vice Minister Wang Yuqing of SEPA began by identifying the Chinese representatives to the steering committee for bilateral cooperation. Xu Qinghua Director General of the Department of International Cooperation will serve as co-chair and Wang Jun of NNSA will serve as Vice Co-chair, so that both departments can cooperate to enhance bilateral interactions.

I invited SEPA to send staff to participate in NRC training as opportunities arise. Wang responded that the main difficulty was getting us visas; however the last experience was very positive. SEPA highly values cooperation between NNSA and NRC, especially in light of China's active nuclear power development policy. China currently has two Russian-supplied units in the commissioning stage, and gave licenses to four new units in 2005. This year China is considering four additional license applications, and NNSA expects to license four to six new nuclear reactors each year. SEPA considers U.S. reactor technology to be the most advanced in the world, and the two countries have a long history of cooperation on nuclear safety reviews and inspections.

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(b)(4)

Wang inquired about the status of plans to build the AP-1000 in the United States. I replied that companies are preparing to submit applications to the NRC for review, a process which could take approximately three years. (b)(4)

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OK Li hopes to send two to three NNSA delegations to the NRC over the next year. The first delegation, scheduled for November 2006, will investigate inland nuclear power plant construction and visit the Palo Verde nuclear station in the Arizona desert. (b)(4)

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The second delegation will visit the NRC to learn about nuclear emergency information systems and information management systems. (b)(4)

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(b)(4)

The third delegation would seek experience in radioactive source management, a responsibility which just shifted from the Ministry of Health to NNSA several years ago. (b)(4)

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Li hopes the delegation can visit in mid to late 2007.

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NNSA is not only responsible for nuclear power, but also regulates other institutions, research reactors, nuclear technology applications, and waste management including treatment and disposal. Nuclear technology applications previously belonged to the Ministry of Health; NNSA has only been responsible since late 2003. (b)(4)

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Li explained that it is very difficult to hire qualified staff, because they can earn three to five times as much working at a utility. There is no flexibility in government salaries, which is a big problem. One solution (b)(4)

Ex A

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EXA

Visit to Daya Bay Nuclear Power Site

On September 26, 2006 I was provided a tour of the Daya Bay Nuclear Power Site and the accompanying low-level waste site in Shenzhen region (Guangdong Province) of South China. This was a 6 unit PWR facility with 4 units in operation and two under construction. The units are all primarily constructed of components supplied by Framatome or Areva. Mr. Steven Lau, Senior Vice President of the Daya Bay Nuclear Power Operations and Management Co. provided an overview of the project, its history, specifications, and management which was followed by a facility tour. The areas of the facility toured appeared well maintained and Mr. Lau indicated that the facilities have good performance records and performance indicators. Mr. Lau explained that they cannot be INPO members because Taiwan's facilities are members, but they participate in the WANO program and according to Mr. Lau's presentation, the units are above average in all categories.

I found it interesting that their offsite review board is composed primarily of Americans including two former NRC employees - Messrs. Jack Martin, former Regional Administrator of Regions IV and III and Clay Warren, a senior resident inspector at Pilgrim and Arkansas who transitioned to executive management at several licensees.

Out of Scope

Outside of Scope

Outside of Scope

Outside of Scope