

News Release

Ministry of Economy,  
Trade and Industry (METI)

PRI-07-34

Press Release Information	Nuclear and Industrial Safety Agency (NISA), Ministry of Economy, Trade and Industry (METI)
Consequences of "the Niigataken Chuetsu-oki Earthquake in 2007" at Kashiwazaki-Kariwa Nuclear Power Station, Tokyo Electric Power Company (the 4 <sup>th</sup> report)	

July 20, 2007

NISA/METI

On July 20, 2007, Nuclear and Industrial Safety Agency (NISA) received information from Tokyo Electric Power Company on the situation of Kashiwazaki-Kariwa Nuclear Power Station, as shown below.

(Excerpts from the report submitted by Tokyo Electric Power Company)

TEPCO submitted the report on the status of Kashiwazaki-Kariwa NPP as shown on the attached documents.

The puddle of water was discovered on the 5<sup>th</sup> basement floor of the reactor complex building Unit 1, (as announced on July 17). The water had been spilled from the failed fire protection system piping. The measurement conducted today detected no radioactivity within the water, although the water which had flowed into the 5<sup>th</sup> basement floor of the reactor building did contain radioactivity (as announced on July 19).

Concerning the iodine and other radioactive materials detected in the main stack of Unit 7 (information released on July 17), measurements conducted on July 18 and 19 have detected no iodine or radioactive particulate.

Concerning the puddle of water on the operating floor of Unit 7 (as announced on July 17), no radioactivity had been detected (as announced on July 19). However, due to the findings that the radioactivity had been detected in all the puddles on the operating floor of other units, it has been supposed that the water in Unit 7 had splashed out of the spent fuel pool. Today, measurements have been conducted on several spots and radioactivity has been detected.

While the licensee started the repair of minor damage, they will soon prepare the plan of the reparatory work for the detail check of safety-significant equipment such as the reactor internals. An detail check will be conducted based on that plan.

CH3

(Actions of NISA)

1. The nuclear safety inspectors still stayed on the site today. They checked the data and confirmed that no radioactivity was detected within the puddle of water discovered on the 5<sup>th</sup> basement floor of the reactor complex building, which leaked from the damaged fire protection system piping of Unit 1.

As for the radioactive iodine and other materials detected at the main stack of Unit 7, they inspected the data and confirmed that the measurements conducted on July 18 and 19 had detected no radioactivity.

As for the water leakage in the uncontrolled area of Unit 6, they are now presently corroborating at the site as to the verification of the leak path conducted by the licensee.

2. At present, no significant reading of fluctuation is identified by either the radiation monitoring systems of the main stacks nor the monitoring posts.

Contacts:

Mr. Nei

Nuclear Power Inspection Division, NISA/METI

Phone: +81-3-3501-9547

Mr. Morita

Nuclear Incident Response Office,

Nuclear Emergency Preparedness Division, NISA/METI

Phone: +81-3-3501-1637

## Reference Material

July 20, 2007, TEPCO

### Outline of Enhanced Monitoring following the Radioactive Material Release from the Main Stack of Unit 7

Following the radioactive iodine release from the main stack of Unit 7 after the Chuetsu-oki earthquake on July 16, an enhanced monitoring system has been put in place to measure radioactive iodine and particulate materials near the main stack and the boundaries of peripheral monitoring areas on a daily basis. The measurements started on July 18.

#### Results of Measurements

- Amount of radioactive iodine and particulate materials released from main stack of Unit 7

Period of Measurement	Radioactive iodine	Particulate materials
9 – 17 July	About $3 \times 10^8$ Bq	About $2 \times 10^6$ Bq
17 – 18 July	About $2 \times 10^7$ Bq	Not detected
18 - 19 July	Not detected	Not detected
Total	About $4 \times 10^8$ Bq	About $2 \times 10^6$ Bq

- Amount of Radioactive iodine and particulate materials near the boundaries of peripheral monitoring areas

Period of Measurement	Near Monitoring Post 1		Near Monitoring Post 5		Near Monitoring Post 8	
	RI*	PM**	RI*	PM**	RI*	PM**
18 July	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
19 July	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
20 July	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected
Total	Not detected	Not detected	Not detected	Not detected	Not detected	Not detected

\* RI: Radioactive iodine, \*\*PM: Particulate materials

(Reference)

Results of iodine concentration measurements within the reactor water after the reactor shutdown of Unit 7.

The following facts indicate that the cause of the iodine release is not due to fuel damage. These facts are; 1) the iodine 131 concentration in the reactor water in operation remained at the normal level of  $3 \times 10^{-2}$  Bq/g, 2) the iodine 131 concentration measured after the reactor shutdown gave a low value of  $9 \times 10^{-3}$  Bq/g, 3) and the reading of the high sensitive off-gas monitor was low before and after the emergency shutdown due to the earthquake.