

Regarding the treatment of certain areas of the Seismic isolated building of the Fukushima Daiichi Nuclear Power Station as “Uncontrolled area”

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Tokyo Electric Power Company

1. Outline

Maintenance of the working environment is required for the steady implementation of the decommissioning of the nuclear power station hereafter. This time, in order to change the status of certain areas of the Seismic isolated building from “Controlled” to “Uncontrolled”, as part of measures to improve the working environment, we implemented additional measures such as the removal of radioactive materials to reduce radiation dosage levels and prevent the spread of radioactive particles,.

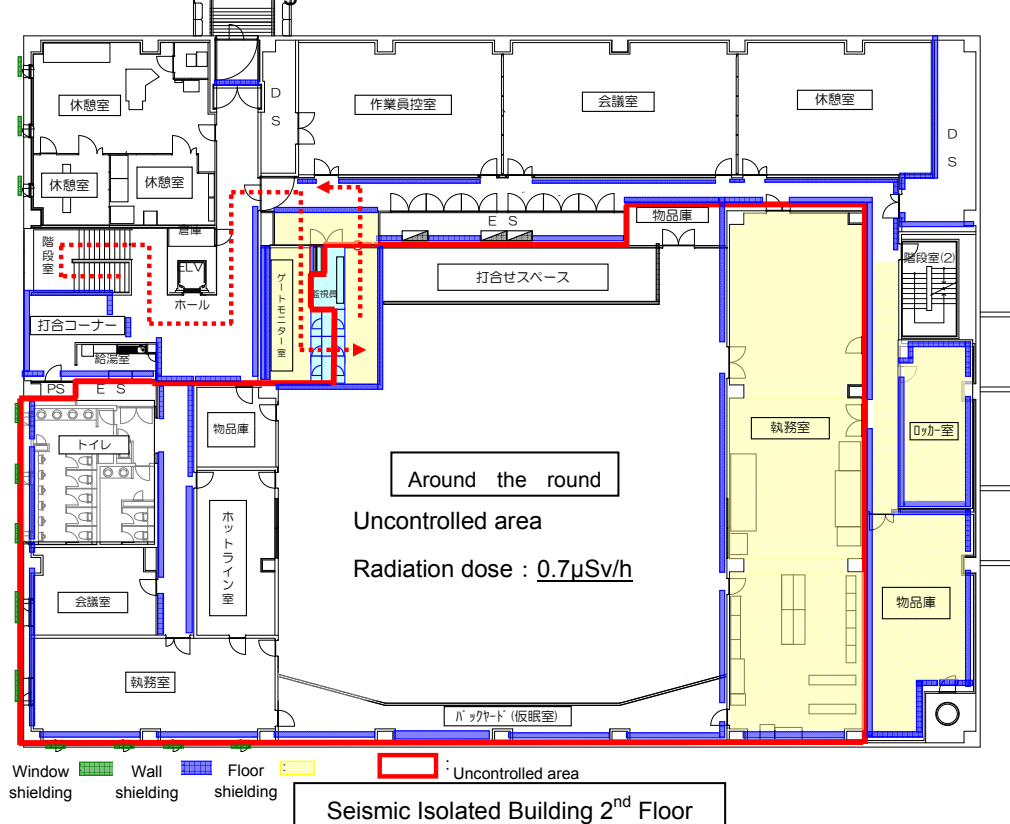
2. Measures to reduce radiation dose levels in the Seismic isolated building and the effects (December, 2011~April, 2012)

Main measures	Effects ^{*1}
Sticking leady board to the inside wall Shielding ceilings and floors with the leady materials ①②	<p>Areas planned to be uncontrolled areas Before : average $1.6 \mu \text{ Sv/h}$ (Locally: more than $2.6 \mu \text{ Sv/h}^2$)</p> <p style="text-align: center;">↓</p> <p>After : average $0.7 \mu \text{ Sv/h}$</p>
Shielding the windows with the leady materials ③	
Air-conditioning equipment/filter replacement, removal of ducts ④	
Removal of concrete of the Rooftop, decontamination, shielding ⑤	
Installment of equipment such as gate monitor *3⑥	

* 1 : Annual radiation exposure under regular works (2,000 hours/year) : $3.2 \text{ mSv} \Rightarrow 1.4 \text{ mSv}$

* 2 : It is required to be under $2.6 \mu \text{ Sv/h}$ to be treated as an uncontrolled area

* 3 : Radiation monitoring to check if radiation materials are not attached



① Sticking lead boards to inside walls



② Shielding of the floor



③ Shielding of windows



④ Removal of ducts



⑤ Removal of roof concrete



⑥ Installment of gate monitors

3. Reference

Past measures to reduce radiation dose of Seismic Isolated Building (March 2011 – April 2012)

Major activities	Effects
Installment of unit houses at the entrance of the Seismic Isolated Building Installment of exhausters with charcoal filters	Removal of contaminated materials in the air
Replacement of the floor material from the carpet to tiles which are easier to be cleaned.	Improvement of reducing radiation dosage and cleaning contamination
Installment of lead shielding for windows etc.	Reduction of radiation dosage levels from the outside

Around the round table
 Before activities : $8.0 \sim 12.0 \mu \text{ Sv/h}$
 ↓
 After that areactivities : $5 \sim 3 \mu \text{ Sv/h}$

In addition to the above activities, we will continue on with regular monitoring and wipe down areas that are highly contaminated.