

About the Inappropriate Wearing of APDs that Are to Be Worn to Check Dose Levels when Wearing a Shielding Suit

<Reference Information>
June 5, 2013
Tokyo Electric Power Company

【Overview】 (The fact that was confirmed around 10:00 a.m., June 4, 2013)

· Three TEPCO employees were extracting oil from a transformer of the power station for Unit 3 (Transformer B) wearing a shielding suit to reduce exposure. While they were supposed to be wearing two APDs, with one of them worn inside the suit and the other worn outside the suit, they were working wearing one of the APDs inside the suit and holding the other (the one that was supposed to be worn outside the suit at the evaluation location (= breast area)) in their hands.

【Dose Level Evaluation for Workers Wearing a Shielding Suit】

○ Workers are to wear a shielding suit on a voluntary basis to reduce exposure.

○ Depending on the shape of the suit, there can be differences in the exposure dose level between the parts of the body covered by the suit and the parts not covered by the suit (uneven exposure). To evaluate such differences, workers wearing a shielding suit are to wear a dose level checking APD inside the suit and another outside the suit around the breast area.

· Outside: Used to check the APD value.

· Inside and outside: Used to make APD value comparison to calculate the effective dose level and evaluate the uneven exposure in the trunk of the body.

○ The 3 employees were wearing **a shielding suit covering the entire body, which prevents uneven exposure**. However, our internal rules require workers wearing a shielding suit to wear an APD outside the suit in addition to wearing an APD inside the suit as a precaution.

【Dose level evaluation】

○ **Although the 3 employees did not have any uneven exposure**, an evaluation was made on the assumption that they had uneven exposure.

* Because many shielding suits have been used in the power station since the earthquake, it is possible to evaluate the exposure dose level if an APD is worn inside the suit.

○ **There was no difference between the breast APD value and the evaluation value of effective dose level based on the assumption that uneven exposure had occurred, which led us to conclude that no uneven exposure occurred.**

(Reference Information) Levels of Exposure Dose of the 3 Employees

【May 29】

Worker A APD (inside the shielding suit (measured value)): 1.07 mSv Effective dose level (uneven exposure (evaluation value)): 1.07 mSv

Worker B APD (inside the shielding suit (measured value)): 0.83 mSv Effective dose level (uneven exposure (evaluation value)): 0.83 mSv

【June 4】

Worker A APD (inside the shielding suit (measured value)): 1.09 mSv Effective dose level (uneven exposure (evaluation value)): 1.09 mSv

Worker B APD (inside the shielding suit (measured value)): 0.97 mSv Effective dose level (uneven exposure (evaluation value)): 0.97 mSv

Worker C APD (inside the shielding suit (measured value)): 0.48 mSv Effective dose level (uneven exposure (evaluation value)): 0.48 mSv

Shielding Suits

Shielding suit identical to the ones the 3 employees were wearing



A shielding suit of a different shape

