
Joint Accident Prevention Activities by TEPCO and the Contractors

~ Developing a System for Collecting and Analyzing
Information on Near Misses ~

[Progress Report]

November 20, 2015
Nuclear Power & Plant Sitting Division

Activities so far

■ Collection of near-miss information (2nd Quarter)

No. of cases collected by TEPCO employees: **about 210 cases** (1st Quarter: about 110 cases)

No. of cases collected by contractors: **about 2,800 cases** (1st Quarter: about 3500 cases)

■ Data collection through behavioral survey of the site (2nd Quarter)

No. of cases collected: **about 2,450 cases** (1st Quarter: about 720 cases)

No. of executions: **about 1,200 times**

In September, TEPCO's managers conducted on-site observation on an **average about 1.2 times/month**



“Behavioral survey of the site”
Educational Landscape (KK) 10/1



Implementation status of the behavioral
survey of the site (KK) 10/1

Challenges in Activities, Direction of Improvement

For further promotion of activities, we need to continue to make the following improvements

[Previous Challenge 1]

Activities for collecting near-miss information and effectively analyzing it are inadequate.

<Improvement>

- **Activities to explain** the importance of near-miss information to TEPCO and the contractors **are under way**
 - ⇒ Joint meeting of the contractors on Aug 28 (8 companies), TEPCO Nuclear Safety and Quality Assurance Liaison Committee on Sep 24 (18 companies)
- **A trial analysis** of the near-miss information and site behavioral study information **is being conducted**
 - ⇒ **We will continue to develop effective and common analytical techniques along with expanding the scope of analysis, in the future**

[Previous Challenge 2]

Behavioral study by TEPCO's Management has not been effective and there is lack of knowledge and training for accurately identifying "unsafe practices"

<Improvement>

- **Education and training** for TEPCO managers **is being carried out by WANO experts** for enhancing the behavioral study abilities
 - ⇒ **About 260 managers have attended already** (Head office 88 people, KK 57 people, 1F 93 people, 2F 22 people)
 - ⇒ CFAMs will once again take **professional coaching** for their respective fields from **foreign experts**, **will formulate observation guidelines for each field** and continue to **carry out observation based on those guidelines**

Analysis Results (Examples of Near-misses)

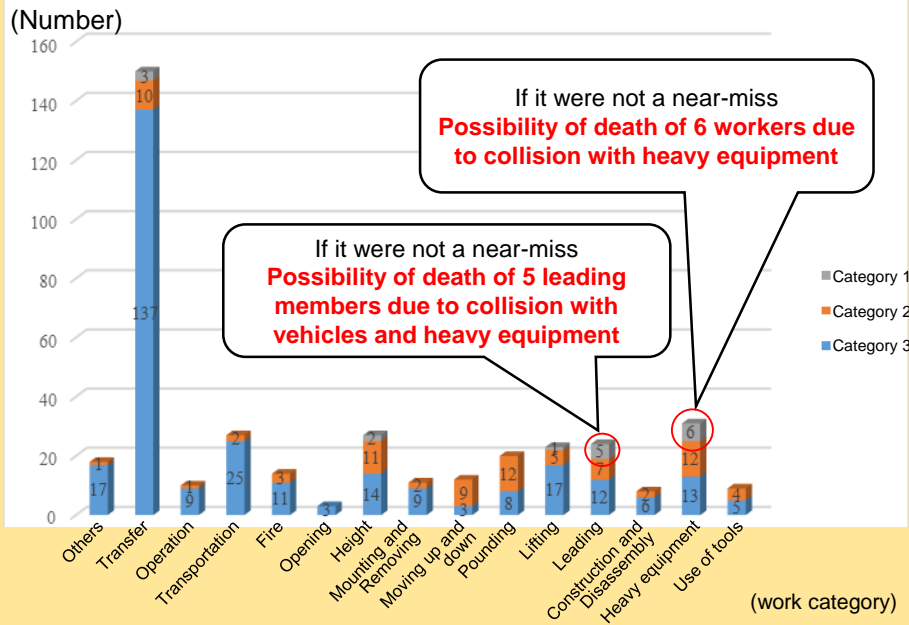
Analysis Technique: The near-miss events were altered (what if it were not a near-miss), and categorized based on the extent of the seriousness of the disaster and analysis was carried out according to the degree of importance.

Example of analysis of information from Company A

Information content: 1F
 Information collection period: 2015 Mar ~ May, Information count: 387 cases

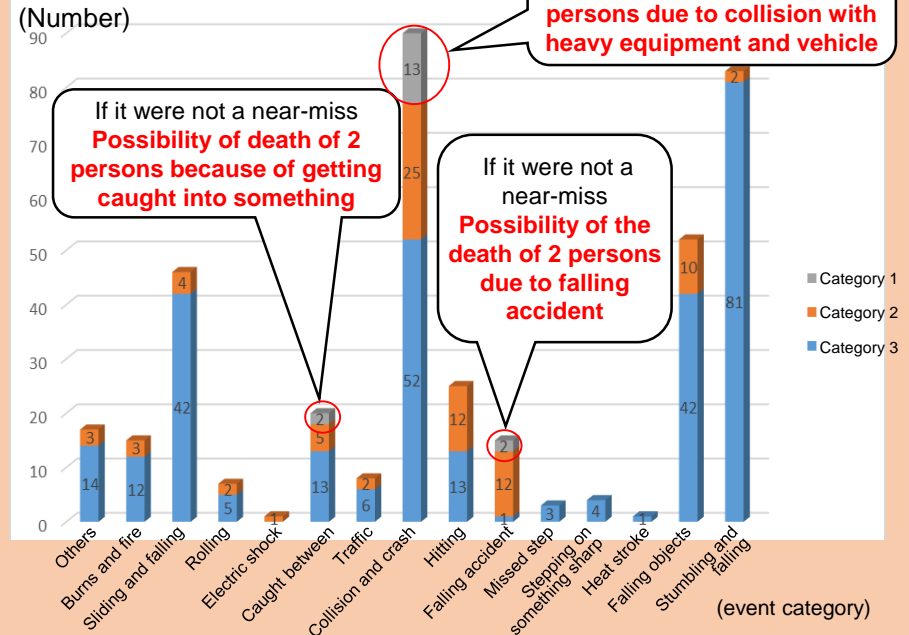
Category 1: Information that can lead to fatal accidents
 Category 2: Information not as serious as category 1
 Category 3: Information that can lead to minor injuries, abrasions, etc.

[Category x Work Category]



- There were as high as 150 cases under 'transfer', with majority of the cases belonging to category 3. Percentage of categories 1 and 2 was less → minor injuries
- There were about 20 cases under heavy equipment operation, altitude and leading, but the percentage of categories 1 and 2 in these cases was more → very likely to result in fatal accidents

[Category x Event Category]



- There were as high as 83 cases under stumbling and falling, with majority of the cases belonging to category 3
- There were as high as 90 cases under minor collisions and crashes, and the percentage of categories 1 and 2 was high as well → very likely to result in fatal accidents
- There were as low as 15 cases under falling accident, yet the percentage of categories 1 and 2 was more. → very likely to result in fatal accidents