Improvement Schedule of Working Environment

### Activities

**Consideration for wearing the appropriate protective equipment**
- Consideration for classifying the controlled areas in 1F site into zones and specifying the protective equipment proper to each zone
  - Start of the practice of wearing the protective equipment specified in each zone (from 9 March 2016)
  - Expansion of G zone (20 March 2017)

**Elimination of various occupational injuries and diseases**
- Information sharing and discussion/review of safety measures
  - To organize safety promotion council meetings (every week) to make well-known the safety measures for preventing the occurrence of occupational injuries and diseases, and others.
  - To implement safety measures for each task (TBM-KY, etc.)
  - To check the occurrence of occupational injuries and diseases in FY2016 and plan for safety activities in FY2017 (announced on 27 April)
  - Information sharing with cooperating firms and discussions/evaluations of safety measures

**Implementation of long-term health care**
- Responses to inquiries from workers subject to medical examinations and from medical institutions, and processing of settlement of medical examination costs
  - Notice of “Cancer Test” of FY2017 (company staff members)

**Continuous improvement of medical professionals and smooth-up of patient transportation**
- Continuous improvement of medical professionals
  - Coordination of medical doctors for the emergency medical treatment room in 1F site for the period from July to Sept.

### Action in the past 1 month and plans for the coming 1 month

- **March**
  - Accomplishments: Consideration for classifying the controlled areas in 1F site into zones and specifying the protective equipment proper to each zone
  - Implementation of preventive measures for heat stroke (May - Sept.)
- **April**
  - Accomplishments: Information sharing and discussion/review of safety measures
  - Implementation of preventive measures for heat stroke (May - Sept.)
  - Information sharing with cooperating firms and discussions/evaluations of safety measures
  - Consideration for classifying the controlled areas in 1F site into zones and specifying the protective equipment proper to each zone (Expansion of applicable areas, etc.)
- **May**
- **June**
- **July**

### Remarks

- To implement preventive measures for heat stroke (May - Sept.)
- To implement safety measures for each task (TBM-KY, etc.)
- To check the occurrence of occupational injuries and diseases in FY2016 and plan for safety activities in FY2017 (announced on 27 April)
- Information sharing with cooperating firms and discussions/evaluations of safety measures
- To organize safety promotion council meetings (every week) to make well-known the safety measures for preventing the occurrence of occupational injuries and diseases, and others.
- To implement safety measures for each task (TBM-KY, etc.)
- To implement preventive measures for heat stroke (May - Sept.)
- To complete the acquirement of medical doctors for the emergency medical treatment room in 1F site for the period up to June
- Completed acquirement of medical doctors for the emergency medical treatment room in 1F site for the period up to June

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1. **Anorak wearing area**

2. Y zone enclosed by yellow dotted line is an area where work involving radioactive contamination such as handling of concentrated salt water is performed, and equipment for G zone shall be used for patrolling and site survey for controlled areas. In addition to those mentioned in the above drawing, when any operation such as work involving highly radioactive dust particles (demolishing of building, etc.) and work relating to transfer line of concentrated salt water to tanks is performed, such work shall be designated as Y zone tentatively.

3. In addition to areas designated as G zone in the drawing, some part of the areas on the second and third floors of the shared pool building shall also be treated as G zone.

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**Layout of Operation Category of Controlled Area**

![Map of Operation Category of Controlled Area](image)
Tokyo Electric Power Company Holdings, Inc.

Improvement of Working Environment

27 April 2017

<table>
<thead>
<tr>
<th>Area Name</th>
<th>Category</th>
<th>Activities</th>
<th>Action in the past 1 month and plans for the coming 1 month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>March</td>
</tr>
<tr>
<td>Improvement of working environment</td>
<td>Manpower management and improvement of working environment</td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Start of operation of system to check employment contracts (1 April):</td>
<td>Modify the manual so that TEPCO can check status of employment based on roster of workers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lectures on securement of proper working conditions (14 &amp; 16 March (4 times in total))</td>
<td>Lectures will be continuously organized in the future in collaboration with Fukushima Prefectural Labour Bureau</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surveys/summarizing of status of worker acquirement (accomplishment in March and plan in May) and ratio of local worker employment (accomplishment in March)</td>
<td>Surveys/summarizing of status of worker acquirement (accomplishment in April and plan in June) and ratio of local worker employment (accomplishment in April)</td>
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<td></td>
<td>Surveys/summarizing of status of worker acquirement (accomplishment in May and plan in July) and ratio of local worker employment (accomplishment in May)</td>
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<td></td>
<td></td>
<td>Joint efforts with companies regarding working/living environment and status of employment</td>
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<td></td>
<td></td>
<td>Opinion exchange and fact finding survey on working/living environment and status of employment</td>
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<td></td>
<td></td>
<td>Check and implementation of solution measures based on opinion exchange and fact finding, and feedback of their results</td>
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<tr>
<td></td>
<td></td>
<td>Study and preparation for operation of system to check employment contracts</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Start of operation of system to check employment contracts</td>
<td>Start of operation of system to check employment contracts (1 April)</td>
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<tr>
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<td></td>
<td>Surveys/summarizing of status of worker acquirement (accomplishment in April and plan in June) and ratio of local worker employment (accomplishment in April)</td>
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<td>Request for survey of worker acquirement Compilation of state of worker acquirement Request for survey of status of worker acquirement</td>
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<td>Surveys/summarizing of status of worker acquirement (accomplishment in May and plan in July) and ratio of local worker employment (accomplishment in May)</td>
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<td></td>
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<td>Opinion exchange with cooperating companies (in late July)</td>
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<tr>
<td></td>
<td></td>
<td>Study and preparation for operation of system to check employment contracts</td>
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<td></td>
<td></td>
<td>Start of operation of system to check employment contracts (1 April)</td>
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<tr>
<td></td>
<td></td>
<td>Opinion exchange with cooperating companies (in late July)</td>
<td></td>
</tr>
</tbody>
</table>
Occupational Accident Occurrence in FY2016 and Safety Activity Plan for FY2017 at the Fukushima Daiichi Nuclear Power Plant

27 April 2017

Tokyo Electric Power Company Holdings, Inc.
### 1. Major Efforts for Safety Activity in FY2016 (Injuries)

It has been determined that the safety activities in FY2016 were implemented, while being improved, based on the Action Plan and certain achievements have been made for each objective and task.

<table>
<thead>
<tr>
<th>3 Causes</th>
<th>Purpose</th>
<th>Status of Major Efforts</th>
<th>Assessment</th>
</tr>
</thead>
</table>
| **Human** | Compliance with rules | • Promotion of activities for understanding rules through visits to companies, etc.  
• Check and instruction of status of compliance to unified safety rules | Repeated efforts were made to spread the rules through morning gatherings, risk prevention meetings and other meetings, etc. No occupational accident was caused by violation of rules though there were some minor non-compliance cases. |
| | Thorough elimination of unsafe actions | • Elimination of unsafe actions through management observation | Management observation of work on site was introduced to companies, and the companies that adopted it were provided with instruction. |
| | Improvement of KY (Kiken Yochi; risk prevention) skill | • Training for “Today’s KY (Kiken Yochi; risk prevention) and Today’s Measures” using procedures  
• Intensive use of list of actual status of identified hazardous work points  
• Implementation of KY training using KY video (for TEPCO and primary contractors) | It was confirmed that each company was exercising ingenious risk prevention activities of work on site, which is considered to be effective for prevention of occupational accidents. On the other hand, there were also occupational accidents, which seemed attributable to insufficient risk prediction. Mental approaches to raise consciousness of hazards will be considered. |
| | Improvement of competence of supervisors | • Improvement of managing abilities of TEPCO supervisors through safety coaching | A safety coaching course was conducted for supervisors, focusing mainly on younger, less experienced supervisors. 12 supervisors completed the course and improvements of their abilities were confirmed. 8 study sessions of classroom lectures on safety management were organized. |
| **Equipment** | Thorough elimination of dangerous points | • Thorough elimination of unsafe conditions through patrols  
• Enhancement of SS | Dangerous points were eliminated through a campaign to remove them and carry out various patrols. SS and elimination activities of dangerous points such as designation of priority items for patrols were implemented continuously. Future task is to improve the effectiveness of patrols. |
| **Management** | Enhancement of sharing lessoned learned by verification | • Utilizations of JIT, OE information, etc.  
• Feedback of verification results to primary employers  
• Establishment/development of “Action Plan” for implementation method of sharing lesson learned | • Utilizations of JIT, OE information, etc. were confirmed to be established as tools.  
• Information on items that require improvement was shared through safety checks and mutual observations among companies.  
• It was confirmed that each company had established and has been implementing sharing of lessons learned on occupational accident prevention. On the other hand, however, there were differences among companies in the depth of checking the spread to workers including the fact whether such horizontal development was being promoted or not. |
| | Enhancement of system/organization/structure of safety management | • Implementation of occupational accident prevention measures through horizontal development of lessons learned, analysis of typical occupational accident types and etc.  
• Checks of working procedures and provision of instruction  
• Continuation of activities for factor extraction of near-misses  
• New comer education and checks of education for construction workers/work supervisors | • It was confirmed that horizontal development of lessons learned, use of occupational accident types and establishment of procedures for unsteady work were implemented.  
• Implementation of effective risk prediction activities of near-misses was confirmed.  
• There were still differences in the degree of efforts for utilization of competence evaluation with regards to education for new comers, construction workers and supervisors. |
2. Occurrence of Occupational Accidents in FY2016 (1/4)

(Monthly variation of occurrence of occupational accidents (injuries and diseases) in FY2015 and FY2016 including heat stroke and near-injuries)

- Compared to FY2015, the number of victims was decreased by 37% (from 38 to 24)
- Frequency rate of lost-work time injuries and diseases was 0.19, which is less than one-third the rate of general contractors in FY2016 (0.64). (Frequency rate: Number of victims of occupational injuries and diseases per total actual working hours of 1 million hours)
- Reason for the fewer victims in FY 2016 is largely attributable to improvements of in-plant working environment of the power plant (wearing of proper radiation protective equipment, reduction of dose rate within the nuclear power plant site, etc.) and various efforts for work safety. Implementation of working environment improvements will be continued.
2. Occurrence of Occupational Accidents in FY2016 (2/4)

**Occurrence according to 3 causes**

(excluding Heat Stroke)

- **Human-related**, 4 workers, 20%
- **Equipment-related**, 8 workers, 40%
- **Management-related**, 8 workers, 40%

**Occurrence according to types of occupational accidents**

(excluding Heat Stroke)

- **Gripped/entrapped**, 5 workers, 25%
- **Stumbling/falling**, 4 workers, 20%
- **Others**, 9 workers, 45%
- **Injury by falling objects**, 1 worker, 5%
- **Cuts/abrasions**, 1 worker, 5%

• Occupational accidents other than heat stroke can be classified into 3 major causes: Human-related 20%; Equipment-related 40%; Management-related 40%.

• Human-related causes are due to non-compliance with rules (inadequate use of handrails, safety belts) and insufficient consciousness of danger in easy work.

• Equipment-related causes are due to ignoring dangerous spots, namely inadequate zoning such as easy access condition to rotating parts.

• Management-related causes are due to inadequate checks for risks before starting work such as insufficient ventilation inside tents and inappropriate design of protective cap structure and minor failures to follow rules such as improper handling method of safety belt ropes.

• Nine workers were injured by being “gripped/entrapped” and “stumbling/falling”, which accounts for 45% of the total (in FY2015 this was 61%).

• Percentage of “cuts/abrasions” was decreased to 5% in FY2016 from 19% in FY2015.

• Causes of occupational accidents seemed to have diversified in FY2016 and the percentage of “others” increased to as much as 45% (4% in FY2015).

<Breakdown of “others”>

- Environment-related causes (minor CO poisoning, dehydration): 3 workers
- Inappropriate handing of items (heavy wire, glass bottle, hammer): 3 workers
- Collision with protruding object: 1 worker
- Over-tightening of full-face mask: 1 worker
- Entering of foreign object into the eye: 1 worker
2. Occurrence of Occupational Accidents in FY2016 (3/4)

(Comparison of Occupational Accident Occurrence According to Work Description in FY2015 and FY2016)

(excluding Heat Strokes)

- The rate of occupational accidents during preparation/cleanup work decreased to 25% of the total (46% in FY2015).
- The rate of occupational accidents during the main work increased to 70% (54% in FY2015).
- It is presumed that efforts during KY (Kiken Yochi; risk prevention) activities making it a point to identify potential risks in preparation/cleanup work has led to such a result.
- There is a trend that many occupational accidents during the main work are less severe though the number of such accidents has not decreased (14 cases in both FY2015 and FY2016).
2. Occurrence of Occupational Accidents in FY2016 (4/4)

(Comparison of the Occurrence of Occupational Accidents in 1F for FY2015 and FY2016 by Years of Working Experience)

- Number of occurrences of occupational accidents by workers having less than 1 year of experience in 1F decreased. (16 → 8 workers)
- Percentage of workers having less than 1 year of experience in 1F also decreased. (31% → 19%)
- The above two observations imply that the occurrence of occupational accidents by workers with less than 1 year of experience has not changed much between FY2015 and FY2016.
- Continuous efforts will be made for safety training of new workers at the plant.

* Note: Percentage of in-plant workers in 1F was calculated using 6th and 7th sets of questionnaire results concerning improvement of working environment.
From the 2nd half of the fiscal year, the number of occupational accident occurrences started decreasing and the severity of injuries became less. ⇒ It is assumed that the efforts have started to pay off. Further elimination of risks and firm establishment of efforts will be promoted from now on.

### 3 Major Areas

**Mind**
- Improvement of workers’ consciousness of danger
- Extraction of risks during preliminary study and planning

**Skill improvement**
- Effective KY (risk prevention) through use of workers’ knowledge/skill and enhancement of consciousness of danger
- Training in handling of tools and instruments

**Management**
- Removal of dangerous points
- Establishment of work procedures and compliance with basic rules

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### <Safety Policy in FY2017>

The Fukushima Daiichi Nuclear Power Plant will:
Strive for “Establishment of a Safety-conscious Climate” through “Elimination of Accidents Leading to Injuries and Diseases” by the strong desire for “Safety First”.

- **[Mind]:** Enhancement of safety-conscious mind-set (danger prediction/rule observation)
- **[Skill Improvement]:** Development of human resources having a strong safety-conscious mind-set
- **[Management]:** Enhancement of 5S and communication
4. Safety Activities in FY2017 (3 major areas)

<table>
<thead>
<tr>
<th>3 Major Areas</th>
<th>Items</th>
<th>Action Plan</th>
</tr>
</thead>
</table>
| Mind          | Organization of events about safety | • Collection and display of safety slogans  
• Collection and display of safety posters  
• Campaign for removal of dangerous points, etc. |
| Skill improvement | Safety coaching for supervisors of TEPCO (Training of workers is confirmed through safety checks, etc. of primary contractors) | • Safety coaching that contributes to improvement of supervisors’ competence |
| Management    | Complete removal of dangerous points through site patrols, etc. | • Patrols by Safety Promotion Committee  
• Joint patrols with cooperating companies  
• Area keeper patrols, etc. |
|               | Complete elimination of unsafe actions through safety observations | • Implementation of safety observations utilizing fundamentals (items of anticipation) by specialized managerial personnel |
|               | Verification of improvement after safety checks of companies | • Share information on strong and weak points of safety activities of primary contractors (including worker training) through interviews and on-site checks and suggest improvements |
|               | Organization of safety meetings | • Organize review meetings and debriefing sessions, etc. for common issues of 1F |
5. Heat Stroke Occurrence in FY2016 (1/2)

1. Trend by fiscal year of number of heat stroke occurrences

- Four workers suffered from heat stroke.
- Number of heat stroke occurrences in FY2016 decreased significantly from FY2015.
- Breakdown of degree of injury:
  - Heat stroke involving lost worktime: 0 workers
  - Heat stroke not involving lost worktime: 4 workers
  - Others, minor heat stroke: 3 workers (no medical treatment required, etc.)
- Number of heat stroke occurrences per 1,000 workers decreased significantly from FY2015.

2. Comparison of occurrence rate per 1,000 workers

- Measures for heat stroke:
  - Drawing up a plan for heat stroke safety measures by each company
  - Proper deployment of mobile water stations
  - Provision of soft drinks at each rest station
  - Introduction of salt tablet use
  - Encouragement of work control by the Heat Stroke Supervisor (Health check before work, early rest, early identification of unwell persons, measures for heat adaptation, etc.)
  - Wearing of proper radiation protection equipment (conversion to G-zone)
Heat stroke occurred in June and July just like in FY2015. One occurrence in October was because the worker was heavily clothed due to cold weather when he started working but the temperature rose thereafter and he suffered heat stroke. For FY2017, a severe heat period in June through August will be designated as “caution-needed period for heat adaptation” and the days of high temperature in October will also be designated as “caution-needed days”.

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3. WBGT Value and Monthly Occurrence Status

*WBGT: An index based on 3 factors of humidity, radiation heat and ambient temperature which significantly affect human heat balance.

Implementation of the “Unified Rules for Heat Stroke Prevention” will be continued in FY2017, to start as early as May, and the following points will be enhanced.

**Enhancement of Measures for Heat Adaptation**

- When workers start working, an adaptation period of about 7 days, during which working hours are shorter than usual at the beginning and are extended step by step, etc., shall be secured to ensure adaptation to heat.
- The Heat Stroke Supervisor shall implement meticulous measures for heat stroke (such as reduction of work load, early rest) with considerations made for work right after holidays and temperature rises during work hours.

**Past History of Heat Stroke and Checks of Health Conditions**

- When workers start working, results of their medical examinations, etc. shall be checked and due consideration shall be given to their past medical history to ensure appropriate work details.
- Before workers start working, health conditions shall be checked by using a check sheet and during the rest break, necessary changes, etc. to work details, etc. shall be made accordingly.

**Identification of Unwell Workers at Early Stage**

- The Heat Stroke Supervisor shall check the following state of health conditions as symptoms of heat stroke depending on the working conditions.
  - State of perspiration (check for excessive perspiration, etc.)
  - Check cardiac rate, body temperature and others such as tiredness, dizziness, lapse of consciousness, etc.
- Facilitation of a visit to the Emergency Room at an early stage
Major Preventive Measures for Heat Stroke in FY2017

- Provision of drinking water
- Provision of soft drinks
- Provision of salt tablets
- Provision of cool vests (heat dissipation equipment)
- Deployment of mobile water station
- Deployment of WBGT indicator and clock
<table>
<thead>
<tr>
<th>No.</th>
<th>Month/Day</th>
<th>Summary of Occupational Injuries and Diseases</th>
<th>Type</th>
<th>Severity</th>
<th>No.</th>
<th>Month/Day</th>
<th>Outline of Occupational Injuries and Diseases</th>
<th>Type</th>
<th>Severity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20 April</td>
<td>In the course of tank foundation installation work being done in temporary tent, a worker felt unwell due to breathing exhaust gas of a cutting machine engine during cutting and decontamination work of the tank concrete foundation. (1st victim)</td>
<td>Others</td>
<td>Near injury</td>
<td>13</td>
<td>8 September</td>
<td>For a subcontractor doing work for a volume reduction/storage tank, a worker got his finger caught and injured by a cutter blade when he was cutting disassembled pieces of the tank using a cutting machine in the material storage building.</td>
<td>Gripped/Entrapped</td>
<td>Near injury</td>
</tr>
<tr>
<td>2</td>
<td>20 April</td>
<td>In the course of tank foundation installation work being done in temporary tent, a worker felt unwell due to breathing exhaust gas of a cutting machine engine during cutting and decontamination work of the tank concrete foundation. (2nd victim)</td>
<td>Others</td>
<td>Near injury</td>
<td>14</td>
<td>9 September</td>
<td>In the course of sea bottom soil covering work inside the harbor, when a worker was taking out a long bar (a tool) from the storage case in preparation to work, he pinched his finger between the long bar and material behind him and it was injured.</td>
<td>Gripped/Entrapped</td>
<td>Near injury</td>
</tr>
<tr>
<td>3</td>
<td>20 April</td>
<td>In the course of installation work of a tank water level gauge, a worker who was separating the coating material of waste cables lost his balance when the cutter blade was broken and he injured his leg with the cutter blade.</td>
<td>Cuts/</td>
<td>Near injury</td>
<td>15</td>
<td>10 September</td>
<td>In the course of new construction work of No. 9 building of solid waste storage, a worker lost balance, fell down and injured his ankle during assembling of scaffold.</td>
<td>Injury by falling objects</td>
<td>Near injury</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Abrasions</td>
<td></td>
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<tr>
<td>4</td>
<td>22 April</td>
<td>In the course of foundation work for a gantry crane, when a worker measuring the level of a cutting surface put one of his legs onto the protective cap on a steel pipe, which protruded from the ground, the cap slipped out of place and he suffered a groin injury when his leg went into the steel pipe.</td>
<td>Falling/</td>
<td>Minor injury II</td>
<td>16</td>
<td>1 October</td>
<td>In the course of improvement work of surrounding yards associated with fuel rod removal of Unit 2, a worker injured his leg by contacting an element wire unraveling at the end of a sling wire during slinging work of steel structures.</td>
<td>Others</td>
<td>Near injury</td>
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<td></td>
<td></td>
<td></td>
<td>Stumbling</td>
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<tr>
<td>5</td>
<td>10 June</td>
<td>In the course of installation work of polyethylene pipe and others for rain water transfer or treatment equipment, a worker felt unwell after he finished hose laying work.</td>
<td>Heat</td>
<td>Stroke</td>
<td>17</td>
<td>17 October</td>
<td>In the course of chemical analysis and radioactivity measurements, a glass bottle used in the measurement was broken in the hot lab (a facility for handling of radioactive material) when a worker was closing the lid, and he injured his finger.</td>
<td>Others</td>
<td>Near injury</td>
</tr>
<tr>
<td>6</td>
<td>17 June</td>
<td>For a subcontractor doing work on a water transfer of flange tank, etc., a worker suffered from numbness in the hands after he finished moving water equipment and materials such as hoses associated with transfer of residual water.</td>
<td>Others</td>
<td>Near injury</td>
<td>18</td>
<td>26 October</td>
<td>For a subcontractor doing survey work for leakage from underground water storage tanks, a worker felt unwell during measurement of ambient dose rate in the tank.</td>
<td>Heat Stroke</td>
<td>Near injury</td>
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<tr>
<td>7</td>
<td>20 June</td>
<td>In the course of inspection and maintenance work of instrumentation of decontamination equipment for radionuclide species, a worker was injured on losing his footing on the stairs and falling during measurement of ambient dose on site.</td>
<td>Falling/</td>
<td>Near injury</td>
<td>19</td>
<td>2 November</td>
<td>In the course of installation work of water-pans (rainwater receiving buckets) on the roof of the waste disposal building of Unit 3, a worker stumbled and fell when he was walking on laid steel plates and injured his leg by colliding with reinforcing bars.</td>
<td>Falling/</td>
<td>Near injury</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Stumbling</td>
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<td></td>
<td></td>
<td></td>
<td>Stumbling</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>22 June</td>
<td>In the course of installation work of polyethylene pipe and others for rain water transfer or treatment equipment, a worker lost his footing on the stairs and was injured by falling when he was moving on a temporary scaffold.</td>
<td>Falling/</td>
<td>Serious injury</td>
<td>20</td>
<td>2 November</td>
<td>In the course of collection and transportation of debris, a worker injured his leg by colliding with a protruding part of the material, which was tentatively placed nearby, when he was moving during maintenance work of heavy equipment.</td>
<td>Others</td>
<td>Near injury</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stumbling</td>
<td></td>
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<tr>
<td>9</td>
<td>27 June</td>
<td>In the course of dismantling work for the cover of the reactor building of Unit 1, a worker got his finger caught in a gap between parts of a hoisting jig for dismantling work and was injured. (Grade of disability: 5 of disability class 12)</td>
<td>Gripped/</td>
<td>Serious injury</td>
<td>21</td>
<td>23 November</td>
<td>In the course of improvement work of surrounding roads, a worker injured his finger when he was driving in a measuring stake with a large hammer. He failed to hit the stake properly and his hand that was holding the hammer collided with the stake.</td>
<td>Others</td>
<td>Near injury</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Entrapped</td>
<td></td>
<td></td>
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<tr>
<td>10</td>
<td>19 July</td>
<td>In the course of repair work of incineration processing equipment of miscellaneous solid waste, a worker felt unwell during removal work of refractory material in the incinerator.</td>
<td>Heat</td>
<td>stroke</td>
<td>22</td>
<td>9 December</td>
<td>In the course of dismantling work for the cover of the reactor building of Unit 1, when a worker moved the latch to close the lid of a container for storing debris, he injured his finger by catching it between the container and latch.</td>
<td>Gripped/</td>
<td>Near injury</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>stroke</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Entrapped</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>19 July</td>
<td>In the course of decontamination/shielding work of the upper part of the reactor building of Unit 3, a worker felt unwell during moving and installing scaffolding.</td>
<td>Heat</td>
<td>stroke</td>
<td>23</td>
<td>16 March</td>
<td>In the course of inside inspection of the containment vessel of the reactor of Unit 1, a worker fell down and was standing by the reactor building after he equipped himself with safety gear such as the full-face mask. (Oxertightening of full-face mask)</td>
<td>Others</td>
<td>Near injury</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>stroke</td>
<td></td>
<td>24</td>
<td>16 March</td>
<td>In the course of installation work of a tank, a worker got a foreign object in his right eye during work using a grinder.</td>
<td>Others</td>
<td>Near injury</td>
</tr>
<tr>
<td>12</td>
<td>8 August</td>
<td>In the course of expansion work on a temporary rest station outside the premises, a worker got his finger caught and injured by an electric saw when he was cutting water supply piping with the saw.</td>
<td>Gripped/</td>
<td>Near injury</td>
<td></td>
<td></td>
<td></td>
<td>Entrapped</td>
<td></td>
</tr>
</tbody>
</table>

* This list was compiled with the aim of further enhancement of work safety.  
* Fatality: Death. Serious injury: Lost worktime of 14 days or more, Minor injury II: Lost worktime of 4 to 13 days, Minor injury I: Lost worktime of 1 - 3 days, Near injury: No worktime lost except on the day of the accident.

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無断複製・転載禁止 東京電力ホールディングス株式会社
Healthcare of Workers at the Fukushima Daiichi Nuclear Power Plant

(Status of compliance with guidelines of Ministry of Health, Labor and Welfare)

27 April 2017

Tokyo Electric Power Company Holdings, Inc.
1. Healthcare Measures at the Fukushima Daiichi Nuclear Power Station

A system to confirm the following has been established and is being operated as measures for healthcare of workers at the Fukushima Daiichi Nuclear Power Plant by each primary contractor and TEPCO.

- **Target:** Workers who have been diagnosed as “more thorough examination required”, “medical treatment required” and “continuous treatment required” as a result of medical examinations.
- **Purpose:** To confirm that the above target is provided with proper support such as visits to medical institutions and supportive measures, including consideration of the present work assignments, by the employer as necessary.

**<Background>**

- To conform to guidelines of Ministry of Health, Labour and Welfare, the said operation was started from July 2016 (completed in August) with cooperation by each primary contractor aiming to follow the guidance given by the University of Occupational and Environmental Health, Japan as a concrete goal to be achieved.
- It has been decided that the confirmation will be made based on quarterly reports from each primary contractor on the status of management for the time being. As the first case, the confirmation was made based on the reports on management status of Q2 (medical examinations during July through Sept.).
  (A summary of the results was presented on 26 Jan. 2017 in the 38th Working Level Meeting of Task Force for Contaminated Water and Decommissioning Issues)
- **This time, management status of Q3 (medical examinations during Oct. through Dec.) and status of follow-up of those of Q2 were confirmed.** ⇒ A summary of the results is shown on pages 2 and 3.

**[Concrete goal to be achieved]**

To achieve the status whereby the following 5 points are reliably implemented by TEPCO and primary contractors for workers of relevant subcontractors.

1) To ensure that all workers receive the regularly required medical examinations.
2) To ensure the workers requiring medical treatment or a more thorough medical examination, as a result of the regular medical examinations, are visiting medical institutions.
3) To ensure the workers requiring medical treatment, after visiting medical institutions, continue to receive the required medical treatment at least while they are working at the Fukushima Daiichi Nuclear Power Plant.
4) To provide appropriate support to workers including consideration for their work assignment based on the result of regular medical examinations.
5) To continuously ensure and review the status of implemented measures in their work.
2. Results of Compilation of Management Status of Medical Examinations in the 3rd Quarter

Results of Compilation of Management Status of Medical Examination Conducted in Q3 (Oct. – Dec.)

(1) Status of medical examinations and results

[Objective of compilation: 49 offices (Number of primary contractors: 46 companies)]

A total of 6713 workers had the regular medical examinations, and 1483 were diagnosed as “more thorough examination required,” “treatment required,” or “continuous treatment required,” representing 22% of the medically examined workers. Among these, 623 (9%) were diagnosed as “more thorough examination required.”

Note: The number of workers is a simple addition of those reported from each company and may include duplication due to change of assignment or duplication in the cases of medical examination type-based counting, etc.

(2) Status of supports provided to workers diagnosed as “more thorough examination required”

At the time of reports from each primary contractor, 52% of the workers were in status-A where a visit to a medical institution had been completed and, if necessary, supportive measures for work assignment by the employer had been received. If those were included who were in status-B where the same will soon be completed, the rate reached about 70%.

• It is considered that each company was in the status that instruction and management were properly implemented under the new system.

• As for 31% of workers who were status-C (no medical institution visit even after instruction), their status will be confirmed in the Q4 report.

Number of workers diagnosed as “more thorough examination required: 623

Provided Support:

A “Completed visit to medical institution and received supportive measures for work assignment by the employer (if necessary)” 328 workers

B “Currently in process” 104 workers

C “Have not visited a medical institution after the instruction” 191 workers

Note: Provided support of “medical treatment required” and “continuous treatment required” other than “more thorough examination required” will be presented in the report of the subsequent quarter after the next.

Status whereby each primary contractor submits appropriate reports, systems established by each company work effectively and state of implementation by relative subcontractors of such systems can also be grasped.
3. Status of Follow-up of Report Regarding the 2nd Quarter

Status of Follow-up Support to Workers of “More Thorough Medical Examination Required” in Q2 Report

Number of workers diagnosed “thorough medical examination required: 269

[At the time of Q2 report] Nov. 2016
A: Completed medical examination and received supportive measures for work assignment by the employer (if necessary): 150 workers
B: Currently in progress 62 workers
C: Have not visited a medical institution after the instruction: 57 workers

[At the time of follow-up status report] Feb. 2017
A: Completed medical examination and received supportive measures for employment by the employer (if necessary): 236 workers
B: Currently in progress 0 workers
C: Have not visited a medical examination after the instruction: 10 workers

Note: The numbers do not include 23 workers who resigned soon after medical examination.

- At the time of this follow-up report, the rate was improved to 96% as a result of continued efforts for workers for whom supports had not been completed at the time of Q2 report. (The numbers do not include workers who left their jobs.)
- Efforts will be continued for confirmation of status for the remaining 4% (10 workers).