

# **Investigation of the Fukushima Nuclear Disaster and Pursuit of Liability**

In order to learn the best lessons from the accident

Safety Committee, Japan Ergonomics Society (Chair: Dr. Shigeru Haga)

This statement sets forth our opinion and provides a proposal from the viewpoint of safety-related human factors.

An organization is to be founded to investigate causes of the accident and review countermeasures taken against it. We are afraid that the investigation of the disaster, which is to be conducted in an atmosphere of severe criticism of the Tokyo Electric Power Company (TEPCO) and the government, will focus on pursuing liability.

The investigation will reveal various factors that caused the disaster, delayed resolution, and/or contributed to the spread of radioactive contamination. It is highly probable that these factors will include errors committed by related organizations and people at many levels and in many roles, such as errors in judgment, delays in decision-making and taking action, slips, lapses, and oversights.

Human errors easily occur when people face confusing situations, receive incorrect information, experience repetitive aftershocks, and are exposed to pressure to act quickly and to sensory and mental overload, tension, and fear. Measures that seemed to be the best at the moment are sometimes found to be the worst afterwards. "To err is human." We must all admit this fact and conduct accident investigations with that as the starting point; otherwise we will fail to reveal the real nature of the disaster. Moreover, we should analyze the human errors that are revealed by the investigation and determine the circumstances and factors involved as precisely as possible. The background for the human errors (including organizational and cultural factors) should also be investigated and analyzed, such as the systems for crisis management by the government and other agencies, safety management practices and the safety culture of the power company and the power station, and the characteristics of decision making by all of these organizations during emergency situations and during normal times. For this analysis, expertise in examination of human factors is indispensable.

Condemning human errors based on hindsight and blaming and punishing individual people will impede us from learning the most valuable lessons from the disaster. Especially, the purpose of the accident investigation must not be for collecting evidence necessary for legal punishment of individual people. This would only distort the information obtained from people involved in the disaster or discourage them from answering questions honestly. Care should be taken that those who tell the truth courageously will not suffer punishment or other disadvantages. It is advised that those who voluntarily admit mistakes should be thanked.

We request accountability by all those involved in the accident. However, the objective of the accident investigation is not to determine "who made mistakes". Investigating "what errors were made and why they occurred" is the sole way to learn the best lesson from the disaster. The information so collected will be very precious for future investigations of safety measures not only for nuclear power plants but also for all industries in Japan and in all parts of the world.

Note:

\*1 The Committee of Investigation and Verification for the Accident at TEPCO's Fukushima Nuclear Power Stations, chaired by Dr. Yotaro Hatamura, was instituted on July 7, 2011.