

Summary of the 1st Meeting of the Investigation Committee on the Accident at the Fukushima Nuclear Power Stations of Tokyo Electric Power Company

1. Meeting Date and Time: Tuesday, June 7, 2011, 10:30 to 12:00

2. Attendees:

Committee members: Dr. Hatamura (Chairperson), Dr. Oike, Dr. Kakinuma, Mr. Takasu, Mr. Takano, Mr. Tanaka, Ms. Hayashi, Mr. Furukawa, Mr. Yanagida, Mr. Yoshioka, Mr. Abe (technical advisor), and Dr. Fuchigami (technical advisor)

Others: Prime Minister Naoto Kan (to deliver the opening statement)
Mr. Sakurada (Deputy Director-General of the Nuclear and Industrial Safety Agency, to give explanations about the current situation pertaining to the accident and the power plants)

3. Address by Prime Minister Naoto Kan

4. Address by Chairperson Yotaro Hatamura

5. Principal opinions expressed by committee members

【Mr. Yoshioka】

- The investigation will broadly be divided into i) the background to and the cause of the accident, and ii) actions taken in the post-accident stages. We should continue to carry on our work in a flexible manner, listening to the voice of the public.
- Future legal regulations on the nuclear safety should be dealt with by all committee members.
- Independence of the committee is of particular importance. I request to ensure that no individual from any related party will serve as a committee member or as a staff member of the secretariat.

【Mr. Tanaka】

- It is of great significance to determine background factors of the accident by examining the existing social system.
- Generally speaking, causes of an accident of this kind can be classified into technical ones, human

errors, and organizational ones. I suggest we should clearly express our intention to include organizational causes; for instance, we should examine structural problems of the organizations in charge of the nuclear power plants, or whether there have been any problems in TEPCO's strategic planning or corporate culture. Another important issue to be examined is the nature of inter-organizational coordination.

- We should review the existing legal as well as institutional regulations; for instance, what kind of a task force for a case of emergency or a whistleblower system they had built prior to the accident.

【Ms. Hayashi】

- One of the important viewpoints applicable to the investigation should be legal compliance. We should investigate not only how TEPCO was complying with domestic laws, but also how the Japanese government was compliant with nuclear-related international treaties, and whether the situation of residents in disaster-stricken areas and radiation-exposed workers is in conformity to the Bill of Human Rights or other similar treaties.

【Mr. Yanagida】

- Collaboration and cooperation are necessary between the Social System Investigation Team and the Accident Causes Investigation Team. For instance, investigation conducted by one team influences that of the other on how the decisions were made to determine the safety standards and how these standards were actually introduced into the plants.
- In the United States, they never failed to have a “human factors team” in place composing accident investigation teams appointed by the Presidents either to investigate the Three Mile Island accident or the Challenger disaster. So I suggest we include some experts in the field of human factors to the committee.
- It is important to clearly define the purposes of the present investigation. Such purposes should not be limited to determining the causes of the accident alone; they should serve to enhance the safety of people in Japan and that of the nuclear power industry. In the report by the JR West accident investigation committee, we took the liberty to define the meaning of “safety.” As we also described key points taken from *Managing the Risks of Organizational Accidents* (written by James T. Reason in the 1990s) in the report, I would like all members of this committee to share them.

- Among these points, I think the following three are particularly important:
 - Decision-making processes: My view is that what we had been moving ahead, bearing bad debt resulting from the past decision-making, at last blew up just as if Pandora's box had been opened. Our discussions are focused only on what to do right now, but we should review the decision-making processes that were in practice 30 or 40 years ago.
 - Ideas and paradigms about safety standards: We should analyze past manuals and other materials to review the paradigm shifts underlying the safety standards.
 - The 5-Why analysis: We should thoroughly investigate "raw testimonies" provided by people involved to make use of the theory described in *Managing the Risks of Organizational Accidents* and the "Study of failure."

【Mr. Furukawa】

- Kawamata Town is 40 kilometers away from one of the troubled nuclear plant. The municipality has not been provided with any government subsidies, but has been left damaged by radiation.
- Most of the municipalities affected by the nuclear accident continue suffering from supply shortages. If the central government had given sufficient instructions, the shortage could have been properly handled. In the absence of such instructions, they have had no other choice but to depend upon communication between the mayors of the affected municipalities or the aid provided by volunteers.
- Especially inadequate were initial actions taken after the accident. Those affected municipalities learned of the levels of radiation contained in tap water only through media information, not earlier. Therefore, they got delayed in taking actions in dealing with the radiation problem at the local level.

【Dr. Oike】

- Over the past half century, geoscience has made substantial progress. Nuclear administration started even prior to the existence of the now widespread concept of "plate tectonics." So I would like to review the cause of the accident from the viewpoint of how we have adopted the progress in geoscience into our technology.

【Dr. Kakinuma】

- As one of the researchers working at the National Institute of Radiological Sciences, I am aware that my role is providing correct knowledge about nuclear radiation.
- After the occurrence of the earthquake, we have been consulted over the phone about nuclear radiation by the general public, including not only Fukushima residents and those working on the accident sites, but also residents in the Kanto and Kansai region. I would like to examine why necessary actions to ease people's anxiety were not taken in earlier stages of the accident.

【Mr. Takasu】

- As one of those who had been engaged in the IAEA activities in the past, I would like to make contributions from the perspective of the peaceful use of atomic energy, including considering how international nuclear safety standards should be.
- From my experience acquired as a Special Adviser to the U.N. Secretary General, I would like to review the accident also from the viewpoint of human security (people's lives, human dignity, a decent life worthy of man, etc.).
- As the international community is closely watching the committee's activities, we should keep providing them with information in English.

【Mr. Takano】

- With continued participations of excellent experts home and abroad, the committee needs to carry out the investigation in a credible organization that shall be capable of standing up to the critical evaluation of the history.
- I find it agreeable that the committee is not intended to pursue individual responsibility during the accident. The U.S. Aircraft Accident Investigation Committee has a policy of not seeking to hold anyone civilly or criminally responsible in connection with the result of investigation. We are indispensably required to ensure that our investigation will be conducted in the same manner.
- Can't the committee members have authority granted under the Law on the Regulation of Nuclear Source Material, Nuclear Fuel Material and Reactors to conduct an on-site investigation or require reports from the nuclear power plant operators? (The said law grants such authority to the Minister of the Economy, Trade and Industry and some other persons.)

【Mr. Abe】

- As a social technology specialist, I think it is important to maintain the viewpoint of an “organizational accident” in analyzing Japan’s culture of nuclear power safety.

【Dr. Fuchigami】

- In addition to being one of the students of the “study of failure,” I have acquired much experience overseeing technical departments in manufacturing industries. Based on these experiences, I would like to contribute to the committee through the analysis of the history of technology involved in this accident, the comparison of the accident with test accidents, and the review of the benchmarks, as well as by suggesting what kinds of experts in what fields we should approach.

【Mr. Ogawa (Director-General of the secretariat)】

- Committee members may not possibly be granted authority to conduct an on-site inspection; however, theoretically, it may be possible to request the Minister of Economy, Trade and Industry, who has the authority to oversee nuclear power plant operators to exercise his/her power to conduct an on-site investigation.

6. Other issues

- Attendee members approved the committee management procedures.
- Attendee members appointed Mr. Yanagida as vice chairperson of the committee, and Mr. Abe and Dr. Fuchigami as technical advisors.
- The secretariat explained the upcoming schedule as follows:
 - By the end of June, the committee will visit TEPCO’s Fukushima nuclear power stations.
 - The committee will prepare an interim report by the end of the present year and submit the final report sometime after the accident has been settled.

- The committee will utilize subcommittees and workshops, and will meet in accordance with their progress. The second committee meeting will be held in the coming July.

✂This summary was prepared by the secretariat at its own responsibility.