Press Conference by Special Advisor to the Prime Minister Goshi Hosono

Tuesday, June 7, 2011 [Provisional Translation]

Opening Statement by Special Advisor to the Prime Minister Hosono

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: Does everyone have a copy of the report?

The entire report is very long, about 750 pages, so let me explain using the summary version rather than the detailed version. If you can, please take out the summary report.

First, this report consists of 13 chapters. The "Introduction" describes the background leading up to the release of the report.

The second paragraph notes that the situation of the nuclear disaster has become extremely severe because of the large-scale natural disasters of the tsunami and earthquake occurring in parallel with the nuclear accident disaster.

The introduction also expresses Japan's sincere regret that this severe situation has ultimately caused anxiety among the people all over the world as a result of the discharge of radioactive materials.

In terms of what is examined in this report, as written in paragraph 3 of page 2, technical matters related to nuclear safety and nuclear emergency preparedness and responses are examined and are the scope of this report. Regarding the response to the accident, the various activities including those of the Government will be examined by the Investigation and Verification Committee that was launched today.

Although the scope of this report is limited to some extent, I believe the Government carried out a rigorous investigation into the accident as well as an objective assessment.

Moving on to page 5, chapter 4, which is about the occurrence and development of the

accidents, gets to the heart of this report. For details, you can take a look at the section on this chapter in the summary version, or if you're interested, chapter 4 of the actual report. Let me explain a few points regarding the situations of the respective units.

Starting on page 8, the report gives an analysis of the situation of the reactor at Unit 1 and the situation of the power supply.

The cooling of the nuclear reactor core, in particular the issue of the seawater injection, has raised a variety of criticisms and were discussed at the Diet. In this report, the seawater injection is described as follows, that although there was confusion in the lines of communication and command between the Government and the main office of the Tokyo Electric Power Company (TEPCO), the seawater injection was continued based on the decision of the Power Station Director of the Fukushima Daiichi Nuclear Power Station.

Next, regarding the situation of the reactor, the Government conducted a study and made the following analysis. The report states that at the present moment the bottom of the reactor pressure vessel is damaged, and it is thought that there was a core melt and some of the fuel that has melted may have dropped and accumulated on the dry well floor (lower pedestal).

I believe this description is basically consistent with the analysis we have conducted, that there was a possibility of core melt and some of the fuel may have fallen from the pressure vessel to the containment vessel.

Next, starting on page 20, the report explains the communication on the accident. In particular, the discussion goes into detail about the International Nuclear and Radiological Events Scale (INES).

As written on page 21, reports one through three were issued within a few days of the accident. The fourth report was issued on April 12. So nearly one month after the accident occurred, we evaluated that it was Level 7 on the INES.

Chapter 9 states that by responding promptly and accurately, the evaluation could have perhaps been announced a little sooner.

Next, regarding the lessons learned from the accident so far, the lessons learned are divided into mainly four categories.

Page 25 begins with the lessons in category 1, which is to strengthen the preventive measures against a severe accident. The first item is measures against earthquakes and tsunamis. Especially with regards to measures against tsunamis, the International Atomic Energy Agency (IAEA) investigation team has also noted that our measures were inadequate, and this section acknowledges that adequate measures were not in place against the onslaught of large-scale tsunamis.

This is followed by a description of the other major factors which led to the escalation of the accident: securing of power supply; cooling of the nuclear reactor and containment vessel, and cooling of the fuel pool. For each of these factors, the report identifies specific problems and countermeasures.

Next, number (5), "Thorough accident management (AM) measures," this section states that the accident management measures were not able to fulfill their roles in various responses, including ensuring the power supplies and the reactor cooling function.

As one example of this, the report notes that the accident management guidelines, which were developed in 1992 bearing in mind the accidents such as the one in Chernobyl and the one in Three Mile Island (TMI), have not been reviewed since and have not been strengthened or improved.

Furthermore, these severe accident management guidelines and their specific contents have been developed by the operators. These operator manuals are developed based on the voluntary safety efforts of each operator. This is different from other countries, for example, the United States or France or Germany, where this is a legal requirement. Therefore, the report recommends that Japan formally makes this a legal requirement.

Next, page 28, number (9), the measures listed from here on are ways in which the measures against severe accidents may be strengthened.

The first item listed under this category of lessons is enhancement of prevention measures of hydrogen explosion.

In this accident, a hydrogen explosion occurred at Unit 1 on March 12, at the earliest stage of the accident. Naturally, all possible efforts were made to prevent hydrogen explosions at the other units. However, nothing very new or different could be done and hydrogen explosions occurred in succession at Units 3 and 4. Although the final facts remain to be confirmed with regards to Unit 4, we speculate that the leakage of hydrogen from Unit 3 to Unit 4 caused the explosion.

In order to prevent this situation from happening, rather than simply sticking to the idea that the radioactive material should be trapped inside the nuclear reactor, in times of crises hydrogen needs to be discharged to the outside.

Therefore, the report proposes to enhance measures for the development of systems for the purpose of discharging hydrogen to the outside.

Based on the same idea, there were also problems with the operation of the venting system. Because our minds were focused on trapping the radioactive material inside the reactor, there were problems with the independence of the venting system and its operability. The report proposes that these issues should be resolved.

Next, nuclear disaster... Sorry, let me go back and speak on this a little more.

One other item I would like to reiterate here is number (12). The report also makes mention of the radiation exposure management system at the time of accident.

Already, there is a possibility that one personnel member was exposed to over 250mSv of radiation. While investigations on internal radiation exposure are still ongoing, the report notes that a number of people may become exposed to similar levels of radiation. The radiation exposure management system faces a variety of challenges, including the aforementioned issues, which the report makes note of.

Continuing on to number (16) on page 35, "Response to combined emergency of both large-scale natural disaster and prolonged nuclear accident" – this section again points out the importance of the countermeasures I previously spoke of.

In other words, it states that the countermeasures against nuclear accidents, coincided with tsunamis and earthquakes were not sufficient.

Next, on the reinforcement of environment monitoring, this is something that local governments have been in charge of up until now in times of emergency. However, as the local governments of the region actually suffered devastating damage this time, there was a period in which sufficient environment monitoring was not carried out. Thus, since March 16, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) has been carrying out this monitoring, but this raised a number of issues including future responses

One issue the report points out is the need to have a system in place to ensure accurate and organized environment monitoring by the Government during times of crisis.

Next is number (18), "Establishment of clear division of labor between relevant central and local organizations." This section notes that responsibilities and authority were not clearly defined among the national government's Nuclear Emergency Response Headquarters (NERHQs) and Local NERHQs, or among the Head Office of TEPCO and nuclear power stations. The section calls for improvements in this area.

The next section, (19), discusses the "Enhancement of communication relevant to the accident." Although the Government did work to communicate information – through the press conferences of the Chief Cabinet Secretary, for instance – our efforts have centered on the information that we have confirmed to be accurate, and thus have not done enough to indicate potential risks. The section points out that this has caused some to feel anxiety about the future, and suggests improvements that could be made.

Next, is (20), "Enhancement of response to assistance by other countries and communication to the international community." Although we received many offers of assistance from a number of counties around the world, we had a difficult time matching those offers with domestic needs due to the lack of a sufficient system within Japan to process them.

This section also states that there is a need to reflect on the fact that the process for prior consultations before the discharge of water with low-level radioactivity into the sea was not always sufficient.

Next, the report discusses simulations using the system for Prediction of Environmental

Emergency Dose Information (SPEEDI). On this point, because we could not obtain enough information on the release source, we could not fully utilize SPEEDI. The report points out that it should have been possible to use SPEEDI to estimate diffusion trend of radioactive materials based on the data accumulated outside and use that estimation as a reference for evacuation activities. We have not been able to do this, and the report requests improvements on this point.

Next I would like to discuss (23), "Reinforcement of safety regulatory bodies." As Minister Kaieda stated a moment ago, it shows the clear direction that the Nuclear and Industrial Safety Agency (NISA) will be made independent from the Ministry for Economy, Trade and Industry (METI).

As the Minister said, this report proposes that at the same time we should start consideration on reorganizing the Nuclear Safety Commission (NSC) and the monitoring operations conducted by MEXT.

Also, the report discusses the "Establishment and reinforcement of legal structure, criteria and guidelines." It proposes that many of the issues raised by this incident should not just be reflected into resolving domestic problems, but should influence the standards and guidelines of the IAEA as well.

Finally, I want to talk about (28), "Raise awareness of safety culture." This section discusses the need for the thorough encouragement of a culture of safety.

The report basically points out that no one, including experts, gave sufficient consideration to the securing of safety. As is written in paragraph 3. of Conclusion summing up the measures listed in all 28 items, the Government has the recognition that we must fundamentally reconsider our nuclear safety measures.

Those employed in work at the nuclear power stations are risking their lives under extremely difficult condition in order to bring this problem to a conclusion. These workers were also highly praised by the investigation team of the IAEA. The report concludes by highlighting the Government's intention of continuing to fully support these workers.

Finally, this report makes clear that we will have public debate on the role of nuclear

power within Japan moving forward. The report notes that, as a premise to this debate, we need to make clear the actual cost of preserving nuclear power, including the cost of ensuring safety. This is written in the conclusion of the report.

This is all I have to say regarding the summary of the report's content. I would like to take your questions for the remainder of the briefing.

Q&As

REPORTER: I have two questions. The report states that we need to create new measures to deal with complex situations like the current incident. Discussion is now underway on whether nuclear disasters should be included within the Basic Disaster Management Plan of the Central Disaster Management Council or whether separate measures should be created for them. My first question is what kind of approach the Government is going to take based on the release of the report this time.

My second question concerns communication problems. The report points out that not enough was done to disclose possible risks. Is this problem behind us? Or are there still issues regarding the disclosure of information? I think that many in the public, especially the residents in the affected areas are anxious about what will happen in the future, and so I would like to hear about how you intend to improve your way of communication.

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: First of all, regarding our response to combined emergency, I think that there is a need to rethink the current situation in which the responses by Headquarters in charge of natural disasters and nuclear disasters are carried out separately.

This report released just today includes methods for exact investigations, or rather, how to exactly reflect the results of investigations into our response measures. I think that there will be national debate on this from now on, and that we will need to consider the kinds of issues you spoke of.

As for communication about the nuclear incident, the Government did communicate accurate information by, for example, declaring the incident a level 7 event on the International Nuclear and Radiological Event Scale (INES) and by discussing the extent

to which there had been a core melt. The report states that even if we were not able to acquire more sufficient information, we should have done more to analyze possible risks.

Currently, we are working hard to provide a variety of different types of information in consideration of this.

For example, although this is only based on provisional measurements, TEPCO has announced that there have been two people so far among the workers at the nuclear power stations that have received radiation doses exceeding 250mSv.

That said, examinations into internal radiation exposure has still not been carried out for half of the workforce at the nuclear power stations, and detailed examinations have not been conducted on half of the workers as well. So, the number of workers shown to have received radiation doses exceeding 250mSv may increase in the future. Therefore, the similar statements can be found in the report. Also, this is an internal issue, but another example would be about some works related to the Roadmap towards Restoration from the Accident at Fukushima Daiichi Nuclear Power Station. Work to clean up water is supposed to commence next week, on June 15. That is the start date we are aiming for, but what if we cannot make it? We have made an announcement of what the situation regarding accumulated water will be if we cannot start on that date.

Including this issue, we do not intend to only announce optimistic forecasts, but pessimistic forecasts as well. We are thinking about countermeasures to deal with worst-case scenarios for even those situations which appear to be all right, and we intend to communicate these to the public in order to create an environment, to the greatest extent possible, in which the people can truly rest at ease.

REPORTER: Related to the Roadmap, is it correct to understand that the Government intends to disclose information at the stage when certain progress has being made on whether the situation will get worse in the future or whether residences are safe? I understand that it is quite hard to say anything certain about this.

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: We will disclose our predictions about the future as properly as we can. For example, we announced information regarding what we need to do next in order to proceed onward within step 1

or step 2 in the Roadmap. I think that we need to accurately communicate these matters as much as we can. For instance, we are trying to explain exactly what we will do to achieve a cold shutdown in step 2.

This report is meant to communicate our want to exert the maximum effort possible for communications in the future, including related to potential risks.

REPORTER: The report took three months to complete. I would like to confirm one point about what exactly was done during these three months. Minister Kaieda announced today that each power company would be requested to submit additional emergency safety measures to the Government by the middle of June. Was this instruction only directed to the power companies today?

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: First I want to respond to your statement about how long this report took to complete – actual work for this started at the beginning of May, so it really took one month to compile. This report is 750 pages long in total. I think that an appropriate amount of focused work was put into it.

However, I do not think that is entirely sufficient. In fact, I believe that a lot of criticisms could be made about it. In particular, this report does not go into the way individual interviews were handled and the validity of each decision made by respective government officials. I think that it could be criticized on that point. I would like for the Nuclear Incident Investigation and Verification Committee to look into these criticisms moving forward.

On the other hand, there is one thing I want to have your understanding on, which is that although we are moving forward with our work, the incident at the nuclear power stations has still not been brought to a close, and with only limited information available it is still quite hard to predict what will happen in the future. I want to say that this report represents the information we have compiled within such an environment over three months.

Incidentally, during Chernobyl, the accident was under control in a very short time, and a report was compiled three months later. In the case of Three Mile Island, the report took seven months to complete. The reality is that verification processes take such a length of time. In the case of Japan, given the size of the incident we have caused and our responsibility to give an explanation to the international community, the Japanese people and the international community just won't give us that much time. So although we are still in the process of working on this problem, we decided to create a report based on the information that we have gathered up until now.

NISA DEPUTY DIRECTOR-GENERAL NISHIYAMA: I would like to say one thing from the perspective of NISA. I think that right now NISA is preparing instructions to the power companies, but anyway the situation is either this has been already released or it will be released tonight.

REPORTER: Those are dated today then?

NISA DEPUTY DIRECTOR-GENERALNISHIYAMA: I think they are marked with today's date. I am verifying this now. Yes, we did release instructions. The document regarding additional emergency safety measures was issued to each power company and bears Minister Kaieda's signature. I believe that the document will be distributed later on.

REPORTER: You mentioned a moment ago about the melting of the reactor cores (roshin yoyu) by using the words, "core melt". Some experts have said that a "melt through" is an appropriate expression for an event in which reactor cores fall through the bottom of their containment vessels. What is your opinion on such statements?

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: I think that we should use words with clearly defined definitions. I do not believe that the term "melt through" has a clear definition, and I don't want to use words that have unclear meanings. That is why I used the term *roshin yoyu*, which is translated into English as "core melt." The report clearly states that a core melt has caused a portion of fuel to fall from their former positions. By saying that they have fallen, we are attempting to use phrasing that doesn't invite any speculation.

REPORTER: I believe that if all the current nuclear power stations in Japan are to meet the requirements written in the report, it will mean renovation work, which in turn will require time and money. I would like to know whether the recommendations of the report related to power station renovations are realistic possibilities or merely goals

toward which you would like to strive?

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: In creating the report this time, I thought consideration must be given to how its recommendations would affect cost issues and current operations at nuclear power stations. That is why we took the stance of writing as comprehensively as possible on the lessons learned this time in relation to the securing of safety at nuclear power stations. What should be done from now will be left up to the judgment of NISA and METI. I would like the power companies to start with the things that can be done within a short period of time, if there are any. Other than that, I think that there are certain issues that we should take up even though they might require a certain amount of time. I want to start on these after the necessary preparations have been completed.

Including these issues, the report notes in its conclusion that there is a need to estimate all the final costs affecting the operation of nuclear power stations and have a national debate on whether to continue to operate them or not in consideration of this.

REPORTER: The second page of the report says that it was prepared to do "an objective evaluation of countermeasures against the accident." The report contains many harsh statements in relation to power companies, so I would like to know about the background of debate, and which authority took the lead in preparing the report.

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: For the debate, we had personnel from relevant ministries and agencies gather many times, taking an appropriate amount of time each meeting to have a focused debate. We asked each ministry to provide us with information, and they did. Without such information, this report could not have been compiled.

As for the statements made in the report, I was basically involved in every line of it. I think that any statements in it are a reflection of my own feeling of responsibility and want to create a strict report.

That said, I am of course not an expert on nuclear power. That is why we had four people who are nuclear power experts participate in discussions and add information to the report on this topic. In writing the report, we attempted to create a document that was as objective and strict as possible by taking into consideration the opinions of

experts.

REPORTER: You just spent 15 minutes explaining the outline of the report. Although the report itself covers a wide range of issues, it seems a lot of time was devoted for discussing 28 issues for the present and the future. What are your thoughts on this?

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: My thoughts?

REPORTER: What was your intention in creating this report?

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: To put it simply, the intention was to absolutely avoid making the same mistakes in the future. We wrote the report with the thought that we do not just want to have discussion within Japan on the lessons learned, we also want to share them with the whole world. I think that we have given considerable attention to the ordering of each topic in the report as well. For instance, in the section about measures to prevent severe accidents, we have listed the measures that should be implemented in the order of priority: earthquake/tsunami countermeasures, power supply, cooling functions and accident management. Furthermore, countermeasures against severe accidents, we have ranked measures in the order of hydrogen explosion countermeasures, which have caused the most serious problems this time, followed by venting. We clarified the priorities of each topic. I of course don't think it is enough just to write about these issues – we will work to reflect report recommendations into the nuclear power regulations of Japan and will be sharing this information with the international community.

REPORTER: This report primarily deals with responses to be made during times of crisis. I believe that the Japanese Government has also decided on a roadmap for the current issues our country faces. I would like to know what feedback there has been from the IAEA and the G8 about the Roadmap already released by TEPCO.

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: Their evaluation of the Roadmap?

REPORTER: Yes, in terms of feasibility. I assume that an explanation has been made by the Japanese-side to these organizations. How has each country responded to the Roadmap in the IAEA and G8?

SPECIAL ADVISOR TO THE PRIME MINISTER HOSONO: I think that a lot of different feedback has been received. I have heard that the members of US Congress have said they approve about 70% of its content. But I also think there are those who are very critical of it.

I have been in a lot of meetings with members of international atomic safety organizations and the IAEA, and have felt that more than anything, many of the people involved with work on safety regulations want to offer any cooperation they can to help us bring this incident to an end as soon as possible. Even the members of the investigation team of the IAEA, although we thought they came to Japan to conduct a strict investigation, also brought with them the message that their organization wants to do something to cooperate with Japan.

Accordingly, more than opinions stating that the Roadmap isn't feasible or that its implementation is to be postponed to a later date, the atmosphere has been one in which most are requesting to know if there is anything they can do to help us stick to the Roadmap or complete our work faster. I believe that most nuclear experts are of this mindset.

The Japanese Government is extremely grateful for the advice we have received from these experts. We want to accept their assistance to the greatest extent we can and exert every effort to find a solution to the current problems we face.