Q&A Summary

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Speaker: Akihiko Kato, Executive Vice President and Head of Nuclear Energy Systems

Questioner 1

Q: Regarding revenue levels in FY2023, based on projections from a year ago, I had the impression that the fuel cycle business had peaked out, and revenue would stagnate for a time. I get the feeling that the increasing Boiling Water Reactor (BWR)-related business is the reason that the outlook is more bullish than one year ago, so could you let us know why the forecast for BWR business is better than expected? Also, the fuel cycle business does not really appear to have peaked out. You said that you are aiming for further growth in FY2023, so could you talk about the revenue forecast for this fiscal year?

Kato: Regarding the fuel cycle business, the construction of the main facility at Rokkasho Reprocessing Plant (RRP) is almost finished, whereas the construction of the MOX Fuel Fabrication Plant (J-MOX) is reaching its peak now. RRP is experiencing additional construction as a result of the Japan Nuclear Regulation Authority (NRA) review. Although no official decision has been made yet, there is a significant amount of construction taking place currently. This situation is expected to continue for a while. Also, even after construction is completed, a lot of large-scale maintenance work will be performed, and we hope to continue to secure a certain amount of revenue in the fuel cycle business.

Regarding the existing LWR business, construction of Specialized Safety Facilities (SSFs) at Takahama Nuclear Power Plant Units 1 and 2 will be completed soon, and going forward construction at Tomari Nuclear Power Plant and Tsuruga Nuclear Power Plant will begin. BWRs are actually undergoing various construction projects at Onagawa Nuclear Power Plant (Onagawa) and Shimane Nuclear Power Plant (Shimane) as well, with construction accelerating in the leadup to completion since last year. SSF construction for the BWRs will soon enter full swing, and the size of construction work will be substantial. As revenue will be recognized via the percentage of completion method, the revenue from this business will be spread out over several years. On the graph on page 11 of the presentation materials, the light green bars show projects currently under discussion. As restart efforts at Hamaoka Nuclear Power Plant (Hamaoka) and Shika Nuclear Power Plant (Shika) are about to begin, I expect that these bars will grow even more in the future as BWR work continues to expand.

Q: Based your explanation, I think that revenue is likely to increase in each segment, but your business plan targets just over ¥300 billion. I have the impression that revenue will grow a little more than this, so could you let me know, in a best case scenario, how much revenue could grow beyond ¥300 billion in the lead up to FY2030?

Kato: We are forecasting a gradual and steady increase. Once we have achieved results at Onagawa and Shimane, I believe that we will be able to win a suitable amount of orders for other plants awaiting restart, such as Hamaoka or Shika. However, at this point I cannot say for sure, so we have set a slightly conservative goal. What I can say for sure is that revenue will increase slowly but steadily, and new plant construction will begin in the early 2030s, so we hope to see revenue grow to the ¥400 billion level at that time.

Questioner 2

Q: On page 21 of the presentation materials, it says that the conceptual design of individual plants will begin around 2023. On page 22, it says that there are various candidate sites but no official announcements have been made yet. I do not know at what point in the Nuclear Power business you normally receive formal orders, but does the conceptual design process start even before an order is received? Based on this schedule, at what point will MHI announce receipt of orders?

Kato: The conceptual design of an individual plant depends on its location. For example, the design of the auxiliary cooling water system will change according to the position of the seawater pumps. In terms of the actual procedure, before the conceptual design of an individual plant can start, an environmental study must be performed, during which bedrock and impact on the natural environment are checked. It takes a certain amount of time for the power companies to complete these studies. Once a location is decided and it is determined possible to build a plant there, negotiations on pricing begin, so it is not until a little later that we will receive an official order. In terms of the work that we will perform prior to that, we will consider the plant's layout and decide the plant's framework.

Q: Will the conceptual design be done by several companies and then finally be put out to bid? Or is it the case that, once the conceptual design has started, other manufacturers will not be able to book the project?

Kato: We are jointly developing SRZ-1200 with four power companies (Hokkaido Electric Power Co., Inc., The Kansai Electric Power Co., Inc., Shikoku Electric Power Co., Inc., and Kyushu Electric Power Co., Inc.), and no other company will receive orders for this technology.

Q: Do you expect to start the conceptual design of several plants during this year or so?

Kato: First of all, conceptual design includes a standard design part and a part that depends on the individual plant. I can say that we are moving forward with the standard plant design. Individual plants are designed taking location into consideration. After completing various steps, including receiving consent from the local community, the timing of commencement of individual plant design will be decided by the operator. Although I am not in a position to speak about when work on individual plants' conceptual designs might start, I can say that, in preparation for the future, we are working with those four power companies with the aim to make the standard designs as close in type to each other as possible.

Q: Page 22 of the presentation materials mentions Ohma Nuclear Power Plant (Ohma), but I believe that work on Ohma was suspended partway through. Hitachi, Ltd. still has a nuclear reactor-related business, so if construction on Ohma were to resume, would the turbine system be MHI's scope, and would you also receive an order for the SSF?

Kato: I do not think there is room for us to be involved in the reactor system at Ohma. However, we have already received an order for the waste processing system, so we will provide that. The turbine system is being handled by Toshiba Corporation.

Q: Is there any possibility that you will book some work for Shimane Unit 3?

Kato: Work at Shimane Unit 3 to comply with new regulations has been completed, and the review process will start soon. It is possible that they will not be in compliance with the regulations. If that is the case, and if there is scope that we can address assisting in the additional work needed, then we hope that the customer will approach us.

Questioner 3

Q: Regarding the status of plant restarts, page 8 of the presentation materials mentions Hamaoka Units 3 and 4 and Shika Unit 2. I do not think you used to refer to individual plants, so why did you decide to specifically include them now? Has the restart of Hamaoka and Shika been brought forward? Or has MHI's internal view of the probability of the restart increased?

Kato: There is no ulterior motive. There have been official announcements about when Hamaoka and the other plants may restart, and we decided to include that information here.

Q: Has the schedule for BWR restarts been accelerated compared a year ago? Or is it a little delayed?

Kato: First off, Onagawa and Shimane will restart soon. Construction at Kashiwazaki-Kariwa Nuclear Power Plant is already complete, although it is taking time to obtain the approval

of the NRA and the local community. My understanding is that the seismic review at Hamaoka is progressing, and a schedule is finally starting to come into view. Therefore, there is a move to plan in advance for SSFs and other work. As for Shika, now that the fault issue has finally been settled, I think the power company will accelerate their efforts going forward. The BWR power companies are considering MHI for severe accident (SA) measures and SSF construction, so I think we can expect to see a certain amount of orders in the future.

Q: Please let me know the schedule for new plant construction. Also, since MHI and four power companies have announced the conceptual design of an advanced light water reactor, and inquiries from power companies operating BWRs are increasing, what do you think about the possibility of building new plants with companies other than the four you mentioned?

Kato: I have heard talk suggesting that new plant builds should use Pressurized Water Reactor (PWR) technology. However, right now, we are not in the phase of doing commissioned studies ordered by BWR power companies. The priority for the BWR power companies is the restarts. That said, we do intend to approach them in the future. Notably, one of the differences between BWR and PWR technology is the footprint needed to build a plant. PWRs are more compact including when considering radiological controlled areas. For example, if there is an active fault on the site and there are location-based restrictions, PWR technology has the advantage of being easier to select a site for installation. We would like to consider approaches such as this in the future.

Questioner 4

Q: It appears that not much progress has been made in the international business. As far as I can tell from your presentation, I am sure that there is a lot of potential, but is the construction actually progressing? In the past, there has been a variety of problems, such as nuclear reactors shutting down in France and cost overruns in the UK causing projects to go over budget and become delayed. As you mention on page 35 of the presentation materials, I believe that revenue will continue to grow gradually over the next few years. However, is it the case that you are confident in the domestic business but a bit behind internationally?

Kato: In the international business, inquiries for pumps are showing progress. Currently, we are manufacturing pumps for the Hinkley Point Power Station in the UK, and we have received inquiries for the next project. In addition, although the monetary amount is small, we are receiving constant orders for main coolant piping (MCP), and I think we can expect to continue to do so. Additionally, we have had many inquiries about pumps for the

Chinese market. We have also received inquiries for large equipment for new plants. As such, we are seeing gradual progress in the international business.

Q: I believe that Framatome is an equity method affiliate of MHI. Previously there were reports that not many nuclear reactors are operating in France. How are things going in actuality?

Kato: There were issues with stress corrosion cracking, but this has finally been resolved, and the plants are sequentially coming back online. I believe that the medium-term shutdowns will be promptly remedied. Framatome is now hiring on the order of 1,000 new employees per year, and they are seriously preparing the next new plant builds.

Again, we think that France will likely not be able to manufacture all of the equipment domestically. I think MHI will receive a reasonable amount of orders. As a shareholder of Framatome, we expect to receive a certain volume of work.

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