# <u>Condensed Transcript of Q&A Session Regarding Consolidated Financial Results</u> <u>Presentation for the Six-Month Period Ended September 30, 2017</u>

Date: October 27, 2017 (Friday) 10:00-11:15

# **Power Electronics Systems**

Q. I understand that strong performance was achieved in the Power Electronics Systems—Industry Solutions segment. It was explained that this strong performance was a result of certain orders being recorded earlier than anticipated as well as the favorable performance of the factory automation business and the process automation business. In addition to such external contributors, were there also benefits from the establishment of the Power Electronics Systems Business Group?

А.

- There has been a rise in orders that entail us supplying all of the equipment, systems, and services needed for customers' factories.
- For example, we have been able to propose sets to certain customers that bundle substation equipment, energy saving equipment, and systems for stabilizing power supplies and tracking energy savings at factories. We are also seeing a rise in customers placing orders that include ongoing service contracts.
- In our plant business, we are transitioning to in-house production for certain components that had previously been procured from other companies. We are also pursuing differentiation with regard to products by integrating switchgears and controlgears, motors, ED&C components, and sensors.
- The standardization and in-house production initiatives we have implemented to date have contributed to year-on-year improvements in the marginal profit ratios of factories along with reductions in lead times.
- Q. Some of Fuji Electric's rivals are experiencing strong performance for servos and controllers. How are conditions in the Company's servo and controller operations and what are your directives for these operations in the future?

# А.

<sup>•</sup> Orders for standalone servos increased 20% year on year in Japan and 50% in China.

- Annual sales of factory automation components, which include servos and controllers, total around ¥20.0 billion at Fuji Electric. At the same time, operations handling these products are growing and contributing to higher income.
- The main issue we face in these operations is low sales of machining equipment and robots. We hope to expand our involvement in this field through the introduction of new products.
- Moreover, it is Fuji Electric's aim to grow sales of overall factory automation systems that combine such components as servos, controllers, and human machine interfaces.
- Q. How were conditions in the application field, which I understand to be an area where Fuji Electric's servos saw favorable orders during the six-month period ended September 30, 2017?

# А.

- In this field, the most significant growth is being seen in the Chinese market. We saw steady increases in orders for conveyance systems and food processing and packing machines, which are traditional areas of strength for Fuji Electric, as well as for machine tools, which benefited from new product launches.
- Q. How does Fuji Electric intend to grow net sales and operating income for servos and controllers going forward? Could you please touch on production systems in your response?

# А.

- In China, our production bases are running at full capacity, but we still cannot produce enough units to meet demand. To address this issue, we aim to complete investments in production augmentations by December 2017 in order to double our current production capacity.
- In addition to servos, sales of controllers and human machine interfaces are also growing in China. We are currently collaborating with customers and factory automation equipment manufacturers with the aim of growing our operations through the sales of entire systems, as opposed to standalone components.
- The scale of our servo operations has roughly tripled over the past three years. Looking ahead, one task we must address is approaching the U.S. market, an area where our efforts are currently lacking. Possible approaches to be examined included M&A activities.
- Q. At the Power Electronics Systems Business Strategies presentation held in May 2017, the Company explained its intent to promote usage of SiC devices. Given the lack of IGBT modules, I suspect that the current environment is conducive to the adoption of SiC devices. What have trends been like with regard to inquiries and starts of projects using SiC

#### devices?

А.

- We are promoting sales of SiC devices through coordination with the Electronic Devices segment based on medium-term sales plans for new products. In addition, development activities are on schedule.
- The railway field is one area where SiC devices are garnering a lot of attention. In this field, we are advancing development together with customers, and certain devices have already been equipped on actual trains or introduced on a trial basis. In addition, we anticipate that SiC devices will become standard on next-generation expressways in the future.
- We are also performing tests of SiC inverters that feature increased resilience to harsh operating conditions.
- Q. Orders are projected to exceed ¥900.0 billion in the fiscal year ending March 31, 2018. What trends is the Company seeing with regard to orders in the Power Electronics Systems—Energy Solutions segment and the Power Electronics Systems—Industry Solutions segment that will translate to sales in the fiscal year ending March 31, 2019?

#### А.

- We anticipate total orders for both of the power electronics systems segments in the fiscal year ending March 31, 2018, to increase by ¥22.0 billion. Order growth is particularly large in the Power Electronics Systems—Industry Solutions segment. If trends similar to those currently seen with regard to servos and foreign exchange rates continue, it is possible that actual orders may exceed this forecast.
- In the Power Electronics Systems—Energy Solutions segment, orders are currently higher than forecast. The greatest increases in orders are being seen in the transmission and distribution systems business, particularly with regard to substation equipment for factories. We also have high anticipations for orders in Asia, where sales channels in the transmission and distribution systems business are expanding.
- Overall orders in the Power Electronics Systems—Energy Solutions segment are projected to decline year on year in the fiscal year ending March 31, 2018. This decline will largely be the result of the decrease in sales of smart meters seen because the peak introduction period for these devices has passed.

### **Electronic Devices**

Q. Could you please offer information on net sales and operating income of semiconductors and magnetic disks, the number of magnetic disks sold, and the ratio of aluminum disks to glass disks?

## А.

- In the six-month period ended September 30, 2017, semiconductors generated net sales of \$55.7 billion and operating income of just under \$6.0 billion. Our full-year forecasts project net sales of \$104.0 billion and operating income of more than \$10.0 billion from semiconductors.
- Magnetic disk net sales amounted to ¥9.1 billion while operating income was less than ¥1.0 billion in six-month period ended September 30, 2017. On a full-year basis, we forecast net sales of approximately ¥16.3 billion and operating income of roughly ¥1.0 billion.
- In the six-month period ended September 30, 2017, 15 million magnetic disks were sold, 32% of which were aluminum disks while the remaining 68% were glass disks. We expect to sell 30 million disks on a full-year basis, with 40% being aluminum disks and 60% being glass disks.
- Q. What was the utilization ratio of power semiconductor production facilities?

# A.

- The utilization ratio of front-end process production facilities is currently high, at 92%. We plan to increase monthly capacity for front-end processes to around 165,000 disks. In the second half of the fiscal year, this utilization ratio will either be maintained or increased slightly.
- Q. How are trends in the semiconductor market and what is your outlook for the future?

# А.

- During the second half of the fiscal year, we expect circumstances surrounding customers in the industrial field to be relatively unchanged from the first half of the year, and sales will be on the same level as the first half or slightly higher.
- The situation will be similar in the automotive field, with trends from the first half of the fiscal year continuing on into the second half. However, we have been making progress in efforts to have our proposed specifications for automotive IGBT modules accepted by customers in Europe and the United States. As such, our medium-term outlook projects that sales will grow over the period from 2019 to 2020.
- Q. What trends are currently being seen in power semiconductor orders?

А.

• Power semiconductor orders increased by 15% year on year in the first quarter and by 34% in the second quarter. We anticipate year-on-year growth in orders during the second half

of the year.

Q. The full-year forecasts for the Electronic Devices segment were raised from the previously released forecasts. However, it appears as though these revised forecasts simply added the amount to which performance exceeded forecasts in the six-month period ended September 30, 2017, on top of the previous forecasts, and the second-half performance figures projected seem low as a result. I understand that net sales of nearly ¥30.0 billion and operating income of around ¥3.5 billion were generated by this segment during the second quarter. I would think that market conditions might be relatively the same in the second half of the fiscal year or maybe even improve. On what assumptions are your forecasts for the second half of the fiscal year based?

#### А.

- For the second half of the fiscal year, we are anticipating a foreign exchange rate of ¥105 to US\$1, and this rate will result in a decrease of ¥2.9 billion in net sales from the previous forecast. The decrease in operating income will only be in the area of a few hundred million yen. In addition, the forecasts incorporate seasonal factors, which tend to result in second-half performance being lower than first-half performance.
- Q. It was mentioned that power semiconductor-related capital investments totaling ¥17.0 billion will be conducted ahead of schedule. Could you provide some details on the Company's initial capital investment plans for the fiscal year ending March 31, 2018, the relationship between these plans and the investments to be carried out ahead of schedule, and the forecasts for investments in the fiscal year ending March 31, 2019?

#### А.

- In the fiscal year ending March 31, 2018, we plan for capital investments in the Electronic Devices segment of ¥11.4 billion. All of these investments have either already been executed or are part of ongoing investments. In addition, we hope to begin conducting ¥17.0 billion worth of capital investments that were previously scheduled for the fiscal year ending March 31, 2019.
- Q. Could you please offer details to whatever extent is possible with regard to the power semiconductor-related capital investments?

### А.

• The capital investments will be directed toward equipment for both front-end and back-end processes. Investments in front-end process equipment will be conducted at the Matsumoto,

Yamanashi, and Malaysia factories while investments in back-end process equipment will primarily take place at the Malaysia and Shenzhen factories. We also intend to invest in automotive electronics-related equipment at domestic factories engaged in back-end processes.

Q. The semiconductor industry is currently facing an equipment shortage, and I understand that waiting lists for certain pieces of equipment can be as long as one year. Has Fuji Electric taken the necessary steps to ensure that these additional capital investments can actually be made?

# A.

- For part of these investments, we have placed orders in advance, and we have been otherwise scheduling investments in ahead of time to address the increasingly long waiting times for semiconductor devices.
- Q. What is your forecast for depreciation costs in the semiconductor business? I suspect that profitability will drop slightly after new equipment is first introduced. What are your projections for profit margins going forward?

## А.

- The investments to be carried out ahead of schedule may lead to a temporary decline in profit margins. However, we do not expect to be able to conduct all the planned investments during the fiscal year ending March 31, 2018. Assuming that we did execute ¥17.0 billion worth of investments, depreciation payments would increase by between ¥2.0 billion and ¥3.0 billion year on year in the fiscal year ending March 31, 2019. If the current market conditions persist, profit margins may decline a little, but we expect to be able to compensate for this potential decline to a certain extent.
- Q. It was stated during the Electronic Devices Business Strategies presentation held in May 2017 that you aim to double sales of IGBT module power semiconductors for electric vehicles from the level of the fiscal year ended March 31, 2017, by the fiscal year ending March 31, 2024. At the moment, the trend toward electric vehicles is accelerating. Is there any chance that this sales target may be revised or that the target date may be moved forward?

# А.

• There has been no noteworthy changes to our outlook since May 2017. However, the pace at which projects are being started in China is accelerating.

Q. In light of the expansion of the market for automotive power semiconductors, to what degree do you see Fuji Electric's semiconductor business growing in the future?

### А.

- Our outlook has been that net sales in the semiconductor business, including those of new automotive products, would amount to around ¥120.0 billion. However, we expect the market for automotive power semiconductors to grow substantially going forward. Accordingly, there may be a need to develop systems that can support sales in the area of ¥150.0 billion.
- Q. Am I correct to assume that the additional investments of \$17.0 billion that have been scheduled will enable the Company to achieve semiconductor sales in the area of \$150.0 billion?

# A.

- That is not the correct assumption. The additional investments of ¥17.0 billion are primarily aimed at addressing the expansion of the market for industrial field products. Investments for responding to growth in the market for automotive products will be conducted in the fiscal year ending March 31, 2019, and beyond.
- If we were to aim to increase semiconductor sales from the currently forecast ¥100.0 billion in the fiscal year ending March 31, 2018, to ¥150.0 billion in the future, it would require additional investments to the extent of ¥50.0 billion. The investments of ¥17.0 billion currently slated to be conducted ahead of scheduled would be part of that amount.
- Q. If Fuji Electric's semiconductor business were to pursue sales of ¥150.0 billion, what portion of those sales would come from automotive products?
- А.
- Achieving such a scale would entail an additional ¥50.0 billion in sales on top of the current forecast. Roughly 60% of this amount would come from automotive products.

# Food and Beverage Distribution

Q. Fuji Electric's vending machine business has previously dealt primarily in beverage vending machines. In recent years, however, there has been a rise in various new applications for vending machines, such as in convenience stores. Where do you see this trend heading?

А.

- In Japan, we are seeing increased cases of development of unmanned convenience stores and of vending machines (beverages and other goods) being installed in offices. We expect this trend to continue in the future.
- In China, we are already witnessing the diversification of demand, with new needs arising for cup and goods vending machines alongside can and PET bottle vending machines.
- Q. In the fiscal year ending March 31, 2018, Fuji Electric plans to ship more than 20,000 vending machines in China. How many of these vending machines were shipped in the first half of the fiscal year and how many will be shipped in the second half?
- А.
- •Slightly less than 8,000 vending machines were shipped in the first half of the fiscal year and we plan to ship more than 13,000 vending machines in the second half of the year. Our Chinese subsidiary is targeting sales of more than 30,000 units.