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JFE Holdings, Inc.

JFE Group Investor Meeting FY 2018 Q3 Financial Report & FY 2018 Earnings Estimates Summary of Investor Questions and JFE Answers at Investor Meeting on February 1, 2019

## Q. Aging of facilities and human factors seem to be the causes of your recent series of problems with blast furnaces. What have you determined to be the causes?

A. We are working on identifying the root causes and do not necessarily consider the aging of facilities itself to be the cause. Given that facility failures were the contributing causes of these problems, and considering that in general blast furnaces have been operated for more than two decades, which is longer compared to the past, it is true that there have been lags in our implementation of effective measures to counter the aging of our facilities and to ensure that our furnaces operate for suitably long periods of time. Just how quickly we can put our blast furnaces back into operation will depend largely on the expertise and skills of our steelmaking specialists. However, considering the extra time that it is taking to resume operating the Kurashiki No. 2 blast furnace, we have room for improving how we deal with problems after they occur. The decrease in our steel output is attributed to the various problems just mentioned. We must think outside the box to consider measures that account for both facilities and human factors.

## Q. Could you detail the operational problems with the blast furnace at Fukuyama?

- A. One of the auxiliary facilities of the blast furnace broke down in early January and this worsened conditions inside the blast furnace. It became difficult to blow in hot air, so operation had to be halted. The blast furnace is partially back in operation and it is scheduled to resume full operation by the end of February. We will need to resume the operation of gradually blowing hot air into the furnace through 40 tuyeres (approx.) to stabilize and normalize conditions inside the furnace.
- Q. Trouble has occurred in three out of eight blast furnaces, so have you checked the other five blast furnaces? I understand that JFE is a steel manufacturer that places great importance on personnel development and education. What initiatives will you take in this regard in the wake this series of operational problems?
- A. The five furnaces, including their auxiliary facilities, have been inspected and necessary action has been taken. No serious abnormality has been found so far. Regarding personnel development and education, we are transferring skills, including with the participation of technical experts. However, education alone will not enough in the face of an accelerated generational shift towards younger employees. We are increasingly adopting AI and IoT not only for anomaly detection but also for measures we take after detecting anomalies. Therefore, we are striving to achieve stable operations on both the human side and the systems side.
- Q. A plan to invest 850 billion yen in facilities over a three-year period was announced in the Sixth Medium-term Business Plan. Is there a risk of having to exceed this planned investment amount due to recent problems?
- A. Our Sixth Medium-term Business Plan includes a plan to invest a certain amount of money to update old facilities, but we haven't decided on any changes in investment strategies regarding the West Japan Works, our core steelworks, or in decisions aimed at maximizing the effects of our investments. Therefore, we are currently undecided about whether to increase or decrease facilities investment under our Sixth Medium-term Business Plan.
- Q. Due to facility upgrades, the number of coke ovens at Chiba was consolidated from three to two. Other coke ovens also might be nearing the stage of requiring repairs. Do you plan

## to repair all of your coke ovens or will you consider a consolidation similar to that carried out at Chiba?

- A. Our coke self-sufficiency has been improving thanks to investments in facility upgrades, so we currently see no need to heavily invest in coke ovens in the foreseeable future. Productivity has increased since we completed our coke oven repairs, so we do not necessarily need to upgrade all of our coke ovens. We will consider our long-term balance of supply and demand for coke to determine future upgrades or consolidations.
- Q. The steel business' Q4 ordinary income is forecasted at 3 billion yen, which is down from the previous quarter. Is this due to vast cost increases, including those related to your operational problems? What is your profit analysis comparing Q3 and Q4?
- A. The estimated decrease in metal spread from Q3 to Q4 is 20 billion yen. This is due to currently weak trends in the export market, which have suppressed export prices, and a rise in the contract price of iron ore. The forecasted profit decline is also due to decline of inventory valuation gains as well as increased depreciation of costs and disposable losses. Our operational problems are inflating costs more than expected, both in Q3 and Q4.
- Q. Did the Vale dam collapse impact JFE's iron ore procurements? Could you also tell us about potential risks in future procurements?
- A. Vale is predicting its total iron ore output will fall approximately 40 million tons per year. However, the global maritime trade volume of iron ore is 1.6 billion tons, so the fall of iron ore output is considered to have limited impact on the supply and demand. Nevertheless, we are closely watching the situation because it currently is not clear how various factors will impact the future.
- Q. Your FY 2018 ordinary income forecast excluding one-off effects seems slightly low even if the effects of the operational troubles were corrected. What factors have contributed to other cost increases, such as for secondary raw materials?
- A. We believe that there were two factors. First, our FY 2018 steel profit outlook includes an increase of 55 billion yen in costs for metals and other materials, which exceeds the estimate in our Sixth Medium-term Business Plan. Second, production output has fallen short of the target we set in the Sixth Medium-term Business Plan. The Plan's estimated non-consolidated crude steel output was 30 million tons, which we have been aiming to achieve. Going forward, we will reflect various price increases in our sales prices of steel products and grow revenue through expanded output.
- Q. JFE announced a dividend payout ratio of close to 35%. What are your thoughts on future dividends?
- A. For dividends, we need to consider our future business environment and cash flow, so we cannot say anything conclusive at the moment. Our basic policy is to continue our payout ratio of about 30%, as stated in the returns policy of our Sixth Medium-term Business Plan.
- Q. What are the factors behind your forecasts for crude steel production to increase and shipments to decrease between Q3 and Q4?
- A. The high level of our Q3 shipments included additions to cover shipment delays due to typhoons during Q2. Our Q4 shipments will return to the level that is in accordance with crude steel output, so shipments are expected to decrease.
- Q. Assuming that deliveries are adjusted for your operational problems, will this impact efforts to increase your sales prices of steel products?
- A. Although decreased production due to the operational problems has affected our customers greatly, and despite the rising prices of various secondary raw materials and others, we are seeing favorable demand in the Japanese market. We will closely communicate with customers to gain their understanding regarding our sales prices.

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