

# FY2020 Second Quarter Investors Meeting

(Note) The company's fiscal year (FY) is from April 1 to March 31 of the following year in this material. "2Q" refers to the period from April 1 to September 30.

## JERA Co., Inc.

November 26, 2020

| Consolidated Statemen                                 |            | Unit: Billion Yen) |             |                   |
|---|------------|--------------------|-------------|-------------------|
|   | 2020/2Q(A) | 2019/2Q(B)         | Change(A-B) | Rate of Change(%) |
| Operating revenue<br>(Net sales)                      | 1,252.5    | 1,624.1            | (371.6)     | (22.9)            |
| Operating income                                      | 158.5      | 140.6              | 17.8        | 12.7              |
| Ordinary income                                       | 162.9      | 151.1              | 11.8        | 7.8               |
| Quarterly net income attributable to owners of parent | 108.9      | 137.8              | (28.9)      | (21.0)            |

#### **Consolidated Balance Sheet**

#### (Unit: Billion Yen)

|                                       | 2020/1Q(A) | FY2019(B) | Change(A-B) | Rate of Change(%) |
|---------------------------------------|------------|-----------|-------------|-------------------|
| Assets                                | 3,928.3    | 4,035.3   | (106.9)     | (2.7)             |
| Liabilities                           | 2,271.8    | 2,434.0   | (162.2)     | (6.7)             |
| Net assets                            | 1,656.5    | 1,601.2   | 55.2        | 3.5               |
| Outstanding interest-<br>bearing debt | 1,543.5    | 1,505.9   | 37.5        | 2.5               |
| Equity ratio (%)                      | 40.4       | 38.2      | 2.2         |                   |

# **Key Points of Financial Results**

## Key points of FY2020 2Q Financial Results

- Operating revenue decreased by 22.9% year-on-year to 1,252.5 billion yen primarily due to a decrease of fuel cost adjustment charge.
- ➤ Ordinary income increased by 7.8% year-on-year to 162.9 billion yen due to an increase of a gain incurred by fuel cost adjustment system time lag into income (68.9 billion yen [87.7 billion yen → 156.6 billion yen]), despite the negative impact of COVID-19.
- ➤ Net income decreased by 21.0% year-on-year to 108.9 billion yen due to the negative impact of COVID-19 and extraordinary income associated with the gain on divestiture of the overseas power generation project in last year, despite an increase of a gain incurred by fuel cost adjustment system time lag into income (49.5 billion yen [63.2 billion yen → 112.7 billion yen])

## [Various factors of Consolidated net income]



# **Consolidated Income/Expenditure Comparison**

| (Unit: Billion Ye  |            |            |             |   |
|--|------------|------------|-------------|---|
|  | 2020/2Q(A) | 2019/2Q(B) | Change(A-B) | Main Factors of Changes   |
| Operating revenue<br>(Net sales)                               | 1,252.5    | 1,624.1    | (371.6)     | •Decrease of fuel cost adjustment charge  |
| Operating expenses   | 1,093.9    | 1,483.5    | (389.5)     |   |
| Operating income   | 158.5      | 140.6      | 17.8        | •Increase of a gain incurred by fuel cost<br>adjustment system time lag into income<br>(68.9 billion yen [87.7 billion yen $\rightarrow$ 156.6<br>billion yen])<br>•The negative impact of COVID-19 |
| Non-operating income   | 10.0       | 19.1       | (9.1)       | •Decrease of equity in earnings of affiliates<br>due to loss on fuel upstream projects  |
| Non-operating expenses   | 5.6        | 8.7        | (3.0)       |   |
| Ordinary income  | 162.9      | 151.1      | 11.8        |   |
| Extraordinary income   | -          | 21.1       | (21.1)      | (2019/2Q) Gain on divestiture of the overseas power generation projects   |
| Extraordinary loss   | 5.7        | -          | 5.7         | Loss on fuel upstream projects  |
| Income taxes, etc.   | 40.6       | 26.7       | 13.8        |   |
| Quarterly net income attributable to non-controlling Interests | 7.6        | 7.6        | 0.0         |   |
| Quarterly net income attributable to owners of parent          | 108.9      | 137.8      | (28.9)      |   |

|  | 2020/2Q(A) | 2019/2Q(B) | Change(A-B) |
|--|------------|------------|-------------|
| Electrical Energy<br>Sold(TWh)           | 109.9      | 131.3      | (21.4)      |
| Crude Oil Prices(JCC)<br>(dollar/barrel) | 36.5       | 68.9       | (32.4)      |
| Foreign Exchange Rate<br>(yen/dollar)    | 106.9      | 108.6      | (1.7)       |

Note: Crude Oil Prices(JCC) for 2020/2Q is tentative.

## **Consolidated Balance Sheet**

| (Unit: Billion fen                |                    |                    |             |  |
|-----------------------------------|--------------------|--------------------|-------------|--|
|                                   | Sep 30,<br>2020(A) | Mar 31,<br>2020(B) | Change(A-B) | Main Factors of Changes  |
| Cash and deposits                 | 557.3              | 459.1              | 98.2        |  |
| Property, plant and equipment     | 1,987.2            | 1,989.6            | (2.3)       |  |
| Investment securities             | 586.8              | 613.3              | (26.5)      |  |
| Others                            | 796.8              | 973.1              | (176.2)     | •Decrease of inventories -69.6,etc   |
| Assets                            | 3,928.3            | 4,035.3            | (106.9)     |  |
| Outstanding interest-bearing debt | 1,543.5            | 1,505.9            | 37.5        | •JERA+30.0,Subsidiaries+67.6   |
| Others                            | 728.3              | 928.0              | (199.7)     | •Decrease of income tax payable -42.2<br>•Decrease of account of receivable<br>-41.4,etc |
| Liabilities                       | 2,271.8            | 2,434.0            | (162.2)     |  |
| Shareholders' equity              | 1,648.0            | 1,566.0            | 81.9        | •Dividends paid-27.0<br>•Quarterly net income+108.9                                      |
| Others                            | 8.5                | 35.1               | (26.6)      |  |
| Net Assets                        | 1,656.5            | 1,601.2            | 55.2        |  |

(Unit: Billion Yen)

## **Consolidated Cash Flows**

| (Unit: Billion Yen)                     |  |            |            | it: Billion Yen) |
|---|--|------------|------------|------------------|
|   |  | 2020/2Q(A) | 2019/2Q(B) | Change(A-B)      |
| Cash flows from operation               | ating activities                       | 196.6      | 291.3      | (94.7)           |
|   | Purchase of non-<br>current assets     | (116.0)    | (128.0)    | 11.9             |
| Cash flows from<br>investing activities | Purchase of investment securities      | (2.6)      | (27.1)     | 24.4             |
|   | Other                                  | (4.3)      | (8.5)      | 4.1              |
|   |  | (123.1)    | (163.6)    | 40.5             |
| Free Cash Flows                         |  | 73.4       | 127.6      | (54.1)           |
| Cash flows from                         | Net increase/decrease in loans payable | 34.9       | (377.9)    | 412.9            |
| financing activities                    | Dividends paid%1                       | (27.0)     | -          | (27.0)           |
|   | Other                                  | 16.6       | 1.7        | 14.9             |
|   |  | 24.6       | (376.1)    | 400.8            |

| Net increase/decrease in cash and cash equivalents%2 | 93.5 | 93.4 | 0.1 |
|--|------|------|-----|
|--|------|------|-----|

%1 Excluding Dividends paid to non-controlling interests

%2 Including Increase in cash and cash equivalents due to absorption-type demerger (335.0 billion yen) and Increase in cash and cash equivalents due to change in scope of consolidation (11.7 billion yen) in 2019/2Q.

(Unit: Billion Yen)

|  |   | Fuel-<br>related <b></b> % | Overseas<br>power<br>generation | Domestic<br>thermal power<br>generation and<br>gas supply | Adjustments | Consolidated |
|--|---|----------------------------|---------------------------------|---|-------------|--------------|
| 2020/2Q(A)                                   | Operating<br>Revenue  | 365.5                      | 1.0                             | 1,167.4   | (281.5)     | 1,252.5      |
| 2020/2Q(A)                                   | Net Income  | 15.9                       | 0.1                             | 108.2   | (15.5)      | 108.9        |
| 2019/2Q(B)                                   | Operating<br>Revenue  | 375.1                      | 0.5                             | 1,479.8   | (231.4)     | 1,624.1      |
| 2019/2Q(D)                                   | Net Income  | 17.5                       | 17.5 30.3 99.                   |   | (9.0)       | 137.8        |
| Change (A B)                                 | Operating<br>Revenue  | (9.6)                      | 0.5                             | (312.4)   | (50.0)      | (371.6)      |
| Change(A-B)                                  | Net Income  | (1.5)                      | (30.1)                          | 9.2   | (6.4)       | (28.9)       |
| *Fuel upstream, Transportation, Fuel trading |   |                            | Time La                         | — Time Lag +49.5  |             |              |
|  | (2019/2Q) Gain on divestiture of<br>the overseas power generation<br>projects -21.1 electricity supply-demand p |                            | crease in                       |   |             |              |

## [Consolidated forecast]

Net income is expected to be 120.0 billion yen. (Net income excluding a gain incurred by fuel cost adjustment system time lag is expected to be 50.0 billion yen.)

|   |                             |                           |               | int. Dimon renj      |
|---|-----------------------------|---------------------------|---------------|----------------------|
|   | FY2020<br>(Forecast)<br>(A) | FY2019<br>(Result)<br>(B) | Change(A-B)   | Rate of<br>Change(%) |
| Net Income attributable to owners of parent | 120.0                       | 168.5                     | (approx.48.5) | (28.8)               |

### [Key data]

|  | FY2020<br>(Forecast) | FY2019<br>(Result) |
|--|----------------------|--------------------|
| Crude Oil Prices(JCC)<br>(dollar/barrel) | Approx.42            | 67.8               |
| Foreign Exchange<br>Rate (yen/dollar)    | Approx.108           | 108.7              |

(Unit: Rillion Yon)

# **Appendix: Financial Results**

## Image of Time Lag



### [Electrical Energy Sold(TWh)]

|        | Apr 1 to Jun 30 | Jul 1 to Sep 30 | 2Q (Apr 1 to Sep 30) |
|--------|-----------------|-----------------|----------------------|
| FY2020 | 47.5            | 62.4            | 109.9                |
| FY2019 | 59.9            | 71.4            | 131.3                |

### [Electrical Power Generated(TWh)]

|        |        | Apr 1 to Jun 30 | Jul 1 to Sep 30 | 2Q (Apr 1 to Sep 30) |
|--------|--------|-----------------|-----------------|----------------------|
| FY2020 |        | 47.0            | 61.7            | 108.7                |
|        | LNG    | 38.4 (82%)      | 52.9(86%)       | 91.3 (84%)           |
|        | Coal   | 8.7(18%)        | 8.8(14%)        | 17.4(16%)            |
|        | Others | 0.0 (0%)        | 0.0 (0%)        | 0.0 (0%)             |
| FY2019 | )      | 59.9            | 71.2            | 131.2                |
|        | LNG    | 48.6 (81%)      | 57.9(81%)       | 106.5(81%)           |
|        | Coal   | 11.1(19%)       | 12.6(18%)       | 23.8(18%)            |
|        | Others | 0.1 (0%)        | 0.7 (1%)        | 0.8 (1%)             |

\*The total may not match due to rounding

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### [Credit Ratings(long-term)]

| S&P | R&I | JCR |
|-----|-----|-----|
| A – | A+  | AA- |

# **Appendix: Management Information**

# JERA Zero CO<sub>2</sub> Emissions 2050

#### JERA Zero CO<sub>2</sub> Emissions 2050

- > JERA's mission is to provide cutting-edge solutions to the world's energy issues.
- > In order to help achieve a sustainable society, JERA, in the course of carrying out its mission, is taking on the challenge of achieving zero  $CO_2$  emissions\* from its business both in Japan and overseas.

#### The Three Approaches of JERA Zero CO<sub>2</sub> Emissions 2050

**1.** Complementarity between Renewable Energy and Zero CO<sub>2</sub> Emission Thermal Power Generation JERA will achieve Zero CO<sub>2</sub> emissions through a combination of renewable energy and zero CO<sub>2</sub> emission thermal power generation. The adoption of renewable energy is supported by thermal power generation capable of generating electricity regardless of natural conditions. JERA will promote the adoption of greener fuels and pursue thermal power that does not emit CO<sub>2</sub> during power generation.

#### 2. Establishment of Roadmaps Suitable for Each Country and Region

Zero CO<sub>2</sub> emissions will be achieved by establishing roadmaps that show optimal solutions for each country and region. Since the energy situation is different for each country and region—such as the presence of regional transmission lines or pipelines and the types of renewable energy that could be adopted—JERA will work with stakeholders on a country and regional basis to establish roadmaps. We have developed a roadmap for our business in Japan and will extend this approach to other countries and regions.

#### 3. Smart Transition

Zero  $CO_2$  emissions will be achieved through a combination of technologies that are available and reliable at the time adoption decisions are made, lowering technical risk and smoothing the transition to a green society.

\*"JERA Zero CO<sub>2</sub> Emissions 2050" is premised on steady advances in decarbonization technology, economic rationality, and consistency with government policy. JERA is developing its own decarbonization technologies and taking the initiative to ensure economic rationality.

### JERA Zero CO<sub>2</sub> Emissions 2050 Roadmap for its Business in Japan

#### JERA Zero CO<sub>2</sub> Emissions 2050 Roadmap for its Business in Japan



#### JERA Environmental Target 2030 for its Business in Japan

JERA is actively working to reduce CO<sub>2</sub> emissions. In its domestic operations, JERA will achieve the following by FY2030:

- > Shut down all inefficient (supercritical or less) coal power plants and conduct demonstration tests of mixed combustion with ammonia at high-efficiency (ultrasupercritical) coal power plants.
- > Promote the development of renewable energy centered on offshore wind power projects and work to further improve the efficiency of LNG thermal power generation.
- > Reduce carbon emission intensity of thermal power plants by 20% based on the long-term energy supply-demand outlook for FY 2030 as set by the government.

"JERA Zero CO<sub>2</sub> Emissions 2050 Roadmap for its Business in Japan" and "JERA Environmental Target 2030 for its Business in Japan" are premised on steady advances in decarbonization technology, economic rationality, and consistency with government policy. JERA is developing its own decarbonization technologies and taking the initiative to ensure economic rationality.

## Specific Initiatives (1): Ammonia Co-firing in Coal Power Plants

#### Efforts toward Ammonia Co-firing in Actual Plants

- Jointly with IHI Corporation, Marubeni Corporation, and Woodside Energy Ltd., we contracted with NEDO to participate in a feasibility study on the co-firing of ammonia in commercial thermal power plants. We are evaluating possible applications for the co-firing of ammonia including ammonia production and transportation while examining the facility and economic efficiency. It is expected that approx. 20% co-firing will be possible, and the results will be compiled in FY2020.
- In consideration of the period required for the construction of new storage tanks, vaporizer, and the modification of burners, etc., we are proceeding with the introduction of co-firing in actual plants from the early 2020s.

#### Building a Supply Chain for Ammonia

- In order to promote the introduction and expansion of the use of ammonia for fuel use, we participate in the "Public-Private Conference for the Introduction of Fuel Ammonia" to jointly work with the government and the private sector, sharing technical and economic issues and the timeline for their solutions.
- We are considering expanding our ammonia business fields not only for generating power but also for sales for other uses such as transportation fuel.

Power generation/Sales

Electricit

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Hekinan Thermal Power Station, a potential candidate site for ammonia co-firing demonstration in actual plants

Transportation/Storad

JERA's Value Chain



## Specific Initiatives (2): Progress toward Domestic Development of Offshore Wind Power

## Progress toward Development Off the Coast of Akita Prefecture

- We formed a consortium with J-Power and Equinor to jointly develop offshore wind power projects in 2 sea areas off Akita Prefecture (September 2020)
- The consortium is currently working towards bidding for applications based on the "Act on Promoting the Utilization of Sea Areas for the Development of Marine Renewable Energy Power Generation Facilities."

## Initiatives for Development in Other Areas in Japan

- We started environmental impact assessment procedures off the coast of Ishikari Bay, Hokkaido. The project is expected to be up to 520 MW (Installation of up to 65 windmills).
- We are considering toward development of other candidate sites for promotion areas.
- We are considering the establishment of a business base in Akita Prefecture in preparation for future accelerated development studies in Hokkaido and the Tohoku region
- Formosa 2 project, which is under construction in Taiwan, is under fullscale construction. We are working on piling work at sea. We sent out our 8 employees to operating companies. We will utilize this experience in domestic development.



Pin pile for Formosa 2 unloaded in Taichung Port (Provided by Formosa2)



## Specific Initiatives (3): Efforts toward technological development of storage batteries

#### **Reuse and Recycling of Used Automotive Batteries**

- Jointly with Toyota Motor Corporation, we are working on the construction of a power storage system using used automotive storage batteries.
- We have completed a demonstration test of used nickel-metal hydride batteries used in hybrid vehicles and are currently conducting a demonstration test using used lithium-ion batteries used in electric vehicles in FY2020.
- > The demonstration using both nickel-metal hydride battery and used lithium-ion battery is planned in FY 2021, and the demonstration with large capacity is planned after FY 2022.

#### Battery Energy Storage System Data Platform Demonstration

- We are working to build a membership-based platform that provides services to meet user needs based on operational data collected automatically from storage batteries installed on user premises.
- The main reason users install storage batteries is to provide backup energy in times of disaster, so the batteries have surplus capacity during normal times. To enable users to make the most of this spare capacity, the platform is utilized, and it enables users to optimize their own energy use.
- The demonstration period is about four months from November 25, 2020 to March next year.





# **Composition of Power Sources**

- ✓ Our power generation composition is characterized by a large share of LNG, which emits less CO2.
- ✓ In coal, ultra super critical power generation system(USC), which emits comparatively small CO2, accounts for a large proportion. We will shut down all inefficient (supercritical or less) coal power plants by 2030\*1.

### **Composition of Power sources**\*2

| Fuel                         | Capacity                         |  |
|------------------------------|----------------------------------|--|
| Coal<br>(USC)                | 10.32GW<br>( <sub>8.92GW</sub> ) |  |
| LNG(Liquefied Natural Gas)*3 | 50.07GW                          |  |
| Oil                          | 10.05GW                          |  |
| Total                        | 70.44GW                          |  |



- \*1 Press release on October 13,2020 "Towards Zero CO2 Emissions in 2050" https://www.jera.co.jp/english/information/20201013\_539
- \*2 As of March 31,2020. Includes capacity under construction. Excludes capacity of affiliates.
- \*3 Includes LPG and City Gas.

## **Environment related Data**



## **Overseas Power Generation Business related Data**

- The capacity of power generation is 9.04 GW (corresponding to equity and including under construction).
- Building a balanced regional portfolio.

<Power generation capacity (As of the end of September 2020)>

