

Summary of Press Conference Comments Made by Kazuhiro Ikebe, FEPC Chairman,
on July 16, 2021

I am Kazuhiro Ikebe, Chairman of the Federation of Electric Power Companies (FEPC).

Today, I will talk about the “Sixth Strategic Energy Plan” and “our initiatives for Japan hosting the Olympic and the Paralympic Games”.

<On the “Sixth Strategic Energy Plan”>

First, I will talk about the “Sixth Strategic Energy Plan”. Prime Minister Suga has declared that Japan will achieve carbon neutrality by 2050 and in FY2030 will reduce greenhouse gas emissions by 46% compared to FY2013 levels. Various government committees are currently engaging in concrete discussions to realize this goal. The Strategic Policy Committee of the Advisory Committee for Natural Resources and Energy of the Ministry of Economy, Trade and Industry met on June 30 to discuss multiple scenarios to achieve carbon neutrality by 2050. We electric power operators, on the demand side will contribute to the “promotion of electrification” and efficient use of energy as a society, and on the supply side, will continue to work to turn renewable energy into one of the main power sources, to utilize nuclear power generation as much as possible on the premise that safety is assured first and foremost, to make thermal power generation even more efficient, and develop technologies for this goal.

It goes without saying that maximal deployment of renewable energy will continue to be an issue to be tackled in 2030 and in 2050. We have designated this issue as a growth area in our mid-to-long term management strategy and will be developing renewable energy as much as possible. To maximally utilize our existing electricity

networks, we have already started using emergency network capacity and trialing non-firm access to networks. In the future, together with the Transmission & Distribution Grid Council, we will participate in discussions to create rules on the use of network systems that contribute to the further deployment of renewable energy such as allowing power sources with low generation costs to access the network system in order to evolve the electricity network into a next-generational system.

At the same time, large-scale deployment of renewable energy still faces challenges that currently cannot be easily solved. We believe we are facing mainly three large challenges. The first challenge is managing the impact of renewable energy on stable supply. Solar power and wind power do not have the inertia and synchronizing capacity that typical synchronized generators, used in hydropower, thermal, and nuclear power generation, have. If things remains as they are, the inertia and synchronizing capacity of the entire electricity system will decline in response to large-scale deployment of renewable energy. When power supply is lost from such a system, the frequency of the system may fall significantly, affecting the stable operation of other generators. Countermeasures such as using a fixed number of synchronizing generators and developing technologies to secure inertia are absolutely imperative as government review boards have identified the possibility that, if solar and wind power comprise on average 30 to 40% of the total power generated peaking at 70% during times when solar and wind power output is high, their risks would materialize. The output of solar power and wind power generation varies according to weather conditions, and balancing capacity to address the variability is also an important issue.

The second challenge is the geographic and societal restrictions unique to Japan. Solar power faces geographic and societal restrictions such as Japan being small in area and Japanese society requiring plants to work in harmony with the surrounding environment; offshore wind power faces restrictions such as Japan only having few areas with both shallow waters and good wind conditions. Japan must deploy renewable energy as much as possible despite these restrictions.

The third challenge is the impact that turning renewable energy into one of the main power sources will have on electricity costs. The costs associated with maintaining a stable electricity system will increase along with the percentage of fluctuating renewable energies such as solar and wind power as a result of factors including the necessity of building and maintaining electricity storage systems and transmission lines that will be used infrequently but are still essential. Considering the geographic restrictions facing Japan, land suitable for renewable energy will dwindle as renewable energy is expanded, and the cost of installing a new power source may increase as a result. As such, innovative technological developments such as highly efficient generation equipment and breakthroughs will be critical to reducing costs going forward.

While maximal deployment of renewable energy remains vitally necessary, there currently are many challenges that need to be overcome to achieve the goal. By using the knowledge and technologies developed in operating our electricity businesses, we will proactively work on and overcome these challenges to contribute to the deployment of renewable energy as much as possible.

Furthermore, nuclear power, as an established decarbonized power generation technology that has inertia capability and can provide stable supply capacity and reduce costs, will also need to be secured. June 23 marked the restart of the Mihama Nuclear Power Station Unit 3 of the Kansai EPCO, the first ever power plant in Japan to be in operation for more than 40 years since the enactment of the new regulatory standards; the review document draft of the application to change reactor installation license was also approved for Shimane Nuclear Power Station Unit 2 of the Chugoku EPCO. To ensure nuclear power will comprise 20 to 22 % of the energy mix in 2030 as stated in the current Strategic Energy Plan, we will be working toward early restart of nuclear power plants and increase availability through long-term cycle operation. We hope that the national government will review the operation period system based on the views indicated by the Nuclear Regulation Authority. To restart plants in the meantime, we

must inspire a sense of safety and trust among the people of the siting areas, and maintain and develop human resources and technologies as part of the nuclear industrial base. Also in thinking about construction lead times, a robust plan on construction, expansion and replacement needs to be formulated as soon as possible. Therefore, we hope that in the next revision of the Strategic Energy Plan that the government will indicate a mid-to-long term vision for construction, expansion and replacement, building of new types of reactors and the development of next-generational reactors while positioning nuclear power as an important power source.

We will make a concerted industry effort to work responsibly and comprehensively to overcome these difficult issues and implement various measures including promoting electrification on the demand side so that we can contribute to balancing global warming prevention with economic progress and the development of Japanese society as a whole.

<On “our initiatives for Japan hosting the Tokyo Olympic and the Paralympic Games”>

Next, I will discuss “our initiatives for Japan hosting the Tokyo Olympic and the Paralympic Games”.

The Tokyo Olympic and Paralympic Games are finally about to start next week. Delegations from various countries have already arrived and preparations are steadily underway. I want to express my respect to those involved in the preparation for the Games who have worked through many difficulties including the Games being postponed in 2020 due to COVID-19.

We as electricity operators are prepared to contribute to the smooth running of the Games by stably supplying electricity. TEPCO Power Grid, Tohoku Electric Power Network, and Hokkaido Electric Power Network, the three operators of transmission and distribution for the areas where Olympians will be competing, will be enhancing equipment patrols and avoiding work that requires shutdown of transmission lines and electricity networks during the Games. Should a natural disaster such as a typhoon occur,

the industry will come together to work on early recovery according to the Disaster Coordination Plan created together by general transmission and distribution operators.

Additionally, preparations for cyberattacks and securing supply reliability is becoming increasingly important as the threat of international cyberattacks on Japanese companies escalates. With that in mind, the Japan Electricity Information Sharing and Analysis Center (ISAC), which shares and analyzes information about cybersecurity, has conducted information transmission training using scenarios that assume the attack came at night or on holidays in addition to weekdays. Utilities and J-Power have also gone over again the system to manage crisis that includes cybersecurity attacks during the Games. Operators of areas that are hosting the Games have established a response headquarters to work on securing stable supply as a company.

We will be working together as an industry to stably supply electricity so that the Games will go smoothly. Each utility will continue to share information regarding cybersecurity attacks and progress made in cybersecurity measures, and will implement specific measures under the leadership of top management.

This concludes my remarks for today.

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