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# Tepco's power bidding plan raises warming concerns

Kyodo

Tokyo Electric Power Co. plans to start a bidding process next month to secure long-term electricity supplies from thermal power sources.

The plan is generating concern in some quarters about the effect on greenhouse gas emissions because the system implies the sole use of coal — a major source of the carbon dioxide emissions thought to be driving global warming.

Some experts also question Tepco's presumed need to increase power generation beyond fiscal 2019. This is because the population of its service area is expected to shrink.

Since thermal power plants emit large volumes of carbon dioxide over the course of several decades, building new ones could waste much of the public's efforts to save power since the March 2011 core meltdowns crippled Tepco's Fukushima No. 1 power plant.

Consumers may also have to shoulder the cost of building the costly facilities.

Tepco, the nation's largest utility, was effectively placed under state control in July to prevent its demise from the nuclear crisis. Its new business plan calls for securing an additional 2.6 million kw of electricity supply from fiscal 2019 to 2021.

Financially crippled by the Fukushima disaster, Tepco plans to bid for extra power from suppliers building new generation facilities, instead of building new plants of its own.

The bidding process is expected to start in February and the suppliers are expected to be selected by this summer.

One of the issues drawing attention is the conditions for the bidding, which limit the per kilowatt power generation costs to just ¥9.53. This low threshold effectively limits all fuel choices to coal.

While relatively cost efficient, coal is known as a major carbon dioxide generator. According to the Environment Ministry, the most advanced coal-fired plant discharges more than twice as much carbon dioxide as a gas-powered plant when generating just 1 kwh.

Tepco says it is planning to curb emissions by purchasing carbon credits from other entities to offset the expected rise in discharges. But it will have a lot more to offset if coal is picked in place of cleaner-burning natural gas, for instance.

The utility has formulated a short-term plan to boost power supplies to offset shortages caused by closing all its nuclear plants in light of the Fukushima disaster following the Great East Japan Earthquake almost two years ago.

A government source, however, questioned the need for the long-term plan.

"This coal-fired thermal power project has nothing to do with electricity demand for the immediate period and toward the future, and there should be no need to boost supplies by 2.6 million kilowatts," the official said.

Tepco is assuming a sharp rebound in power sales, which slumped in the aftermath of the 2011 disasters. It even thinks demand will bounce back to prequake levels in 2020.

Since the disasters, however, businesses and households have been reducing power use amid repeated blackout threats from the government and the utility. In the meantime, electricity generated by renewable sources, such as solar and wind power, have been growing thanks to a system that obliges utilities to buy that energy at fixed prices.

It is also projected that the population of the Kanto region, which includes Tokyo and adjacent prefectures — Tepco's core service area — will peak around 2015.

Tepco says that its demand forecast is based on the government's projections for gross domestic product and that it also took the public's power-conservation efforts into account.

"Perhaps they overestimated their projection because Tepco will collapse unless they devise a plan to boost sales by assuming growth in demand," the government source surmised. "At the end of the day, consumers will end up paying for the cost of unnecessary capital investments."

If Tepco's plan is adopted as is, it will have a serious impact on the greenhouse gas balance.

According to an Environment Ministry estimate, even factoring in what Tepco is trying to cover with its emissions quota, there will be a net increase of around 9 million tons of carbon dioxide per year.

This is far greater than the roughly 5.4 million tons of carbon dioxide emissions estimated to have been trimmed in fiscal 2011 via power-saving or other efforts that reduced household power demand.

The government has set a long-term goal of reducing greenhouse gas emissions substantially by 2050. A power-plant normally has a life of around 30 years. If one is built under Tepco's long-term plan, it will be running at least until around 2050 and serve as an impediment to achieving the government's goal.

It could also invite criticism from other countries where people are engaged in discussions on promoting measures to reduce the impact of global warming under the framework of the international convention on climate change.

Some countries have voiced opinions that industrial economies like Japan have not come up with convincing goals for emission cuts despite being the creator of the Kyoto Protocol.

Japan has also lost credibility among developing economies after indicating that it will refuse to honor emission requirements under the Kyoto Protocol after this year.

With Tokyo even considering lowering the medium-term goal of cutting 25 percent of emissions by 2020, if Japan is planning to increase coal-fired power generation, it may draw even stronger criticism.

"If we don't change infrastructure for energies now, we will see a large volume of emissions continue toward the future, and decisions in the next few years will be crucial," said Kimiko Hirata, of Kiko Network, an environmental conservation group. "If we allow coal-fired thermal power generation, we will be considerably narrowing the path for curbing emissions toward the future."

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