

Electric power condition of Wako campus in 2015

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The monthly electrical power consumption data for the RIKEN Wako campus (Wako) and RIKEN Nishina Center (RNC) and the energy supply by the cogeneration systems (CGSs) are shown in Fig. 1. The hourly average electrical power consumption on a day for RNC in 2015 is shown in Fig. 2. The annual data of the electrical power consumption and energy supply in 2015 are listed in Table 1. The total electrical power consumption of Wako in 2015 was 157,905 MWh, which was the same as that in 2014. However, the total electrical power consumption of RNC in 2015 was 75,154 MWh, which was 3% higher than that in 2014. When the RI Beam Factory (RIBF) experiments using the uranium (²³⁸U) beam were conducted, the maximum electrical power supply to Wako from the Tokyo electric power corporation (TEPCO) reached 21.9 MW with a CGS output of 3.9 MW on April 29, 2015, and the maximum electrical power consumption of RNC reached 17.6 MW on October 20, 2015.

A complete overhaul of the gas turbine of CGS #1 after 4,000 h of operation was carried out in September 2015.

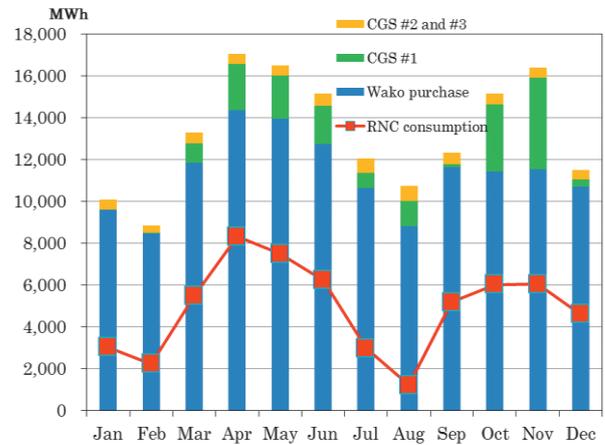


Fig.1. Monthly electrical power consumption and energy supply by CGSs in 2015.



Fig.2. Hourly average electrical power consumption on a day for RNC in 2015.

Table 1. Annual data of electrical power consumption and energy supply in 2015.

	Total (MWh)	Note	% of 2014
Wako purchase	135,577	Total electrical power supply to Wako from TEPCO	97%
Wako consumption	157,905	Wako electrical power consumption (CGSs + TEPCO)	100%
RNC purchase	57,996	Total electrical power supply to RNC from TEPCO	98%
CGS #1	17,158	CGS #1 total electrical power output	128%
CGS #2 and #3	6,345	CGS #2 and #3 total electrical power output	139%
RNC consumption	75,154	RNC total electrical power consumption	103%

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